

Government of Nepal

National Reconstruction Authority

Singhadurbar, Kathmandu

**Housing Reconstruction Programme** 

# Technical Inspection Guidelines For Housing Reconstruction

**Kartik 2073 (November, 2016)** 

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## **Technical Inspection Guidelines for Housing Reconstruction, 2073**

#### **Preamble:**

This SOP is prepared to make the inspection easy and systematic for safer and strong construction on the basis of Grant Distribution Guidelines 2015, for reconstruction of houses that were damaged by the earthquake of April 25, 2105 .To facilitate all the stakeholders- House owners, beneficiaries, Local bodies, Technical Inspection Team and to create uniformity in the understanding of procedure the grant distribution for construction of safer houses this SOP was prepared based on the clause 31 of Reconstruction Act,2072.

#### 1. Brief Name and Start:

- 1) The name of this guideline will be "Technical Inspection Guidelines for Housing Reconstruction, 2073"
- 2) This guideline will be effective after the approval from National Reconstruction Authority

#### 2. Definition

Unless otherwise given a meaning, in this guidelines

#### a. Technical Assistance Team

Team comprising of One or more than one Engineer or Sub-engineers or Assistant Sub-Engineers or Trained masons or Social Mobiliser who are mobilized by MOUD-DLPIU or other Partner Organizations for the purpose of providing support like trainings and other technical support to the house owners/beneficiaries to construct the houses regarding earthquake safety and other right measures in VDC/Municipalities.

#### b. Technical Inspection Team

The team one or more than one Engineers, sub-engineers or Assistant Sub-engineers' team mobilized by MOUD-DLPIU in VDC/Municipalities to inspect and certify whether the ongoing construction of the houses are according to the National Building Code or Approved Minimum requirements

#### c. Technical Supervision Team

The team of supervisor engineer from MOUD-DLPIU to provide necessary guidance to the Technical Inspection Team and to re-inspect already inspected houses.

#### d. Third Party Monitoring Team

The engineers or technical team appointed from NRA or related donor agencies to check the overall quality of the reconstruction and the activities of Technical Assistance Team, Technical Inspection Team and Inspection Supervision Team.

#### e. Grant Agreement

The agreement between beneficiary and VDC/Municipality to receive the grant support for housing reconstruction based on grant distribution guidelines, 2072.

#### f. Plinth Band

The RCC, timber, Bamboo or other approved construction material band which is kept after the completion of the foundation covering the complete part of the wall should be understood as plinth band. Locally, it is also called DPC Band. In English it is called Plinth Band.

After the completion of this level, technical inspection-1 is done.

#### g. Roof Level

The upper level of the RCC, timber, Bamboo or other approved construction material band which is kept before keeping the beam for the construction of roof should be understood as roof level.

After the completion of this band, technical inspection-2 should be done. For single story houses, technical inspection-2 is done after the construction of roof band. For two and more than two story houses, the technical inspection-2 is done before the floor construction of the first floor.

#### h. Construction Completion

The status of the completion of the construction according to the approved design/drawings. After the completion of the construction Technical Inspection-3 is done and Construction Completion Certificate is provided.

#### i. Earthquake resilient structure

The earthquake resilient houses constructed according to Nepal National Building code or Minimum Requirement formulated for reconstruction purpose or retrofitted according to the approved guidelines or code.

## 3. Process of drawing approval and inspection of Houses under Housing reconstruction program

#### **Section-1: Drawing Approval Process**

## 3. Process of drawing approval and inspection of Houses under Housing reconstruction program

- While using the resource from Government, donors, NGO and INGOs, personal, institute for housing reconstruction, retrofitting and maintenance the house should be earthquake resilient and according to the building code
- 2) The beneficiary should select the building during the period of enrollment camp and it should be mentioned in the PA
- 3) The design that they have selected could be the design approved by NRA or the earthquake resilient design prepared by the beneficiaries themselves for the reconstruction. The design prepared by the beneficiaries should be within the building act 2055, but these buildings should be earthquake resistant and should follow national building code.
  - (a) Category "A": Modern building to be built, based on the international state-of-the-art, also in pursuance of the building codes to be followed in developed countries.
  - (b) Category "B": Buildings with plinth area of more than One Thousand square feet, with more than three floors including the ground floor or with structural span of more than 4.5 meters.
  - (c) Category "C": Buildings with plinth area of up to One Thousand square feet, with up to three floors including the ground floor or with structural span of up to 4.5 meters.
  - (d) Category "D": Small houses, sheds made of baked or unbaked brick, stone, clay, bamboo, grass etc., except those set forth in clauses (a), (b) and (c)

#### 4. Selected design has to be filled in fixed format

Under the housing reconstruction program, the beneficiaries should fill up the building typology that they are willing to construct during the enrollment camp using the form provided in **annex 3**. If the form was not filled during the enrollment camp then the detail description of the building should be filled during the period of inspection.

#### 5. Drawing approval process for reconstruction

- 1) For section 1, clause (2), if the building typology is within the design catalogue approved by the NRA, then re approval from the VDC is not necessary
- 2) If design submitted design mentioned in section 1, clause (2), but need to be constructed in municipality, the design must be re approved by following **short process** of building permit procedure in annex-4.

#### 6. Certification of the design different than approved design model

1) If the design is other than approved designs that then during the period of the first inspection the inspector should certify that the building is earthquake resistant.

#### Section-2: Inspection procedure up to plinth level.

#### 7. Confirmation of Site selection and Layout

- 1) During the period of construction, of the building (as per the building mentioned in point 2), the inspector should certify that the site is safe regarding geographical and geological aspect. As far as possible the beneficiaries should ask for the inspection of the site to check the suitability for the construction in the geological and geographical aspect. In addition the house owner can ask for support for layout of the construction.
- 2) For these inspection the beneficiaries can fill the application form provided in **annex 5** and the inspector should provide a slip and do necessary check and certify the site filling the form provided in **annex-9**. In case the technical assistance team cannot be available from POs, the inspectors of the inspection team shall provide the technical assistance.

#### 8. Technical Assistance can be requested during construction of foundation

- 1. After signing the grant distribution agreement for those who got approval for the reconstruction can ask for the technical support to construct the foundation by filling up the application form provided in **annex 5**. Similarly, the concerned VDC or municipality should inform the beneficiaries about the arrival date of the Technical Assistance team to the site. The VDC or municipality should send the technical assistance team in the same assigned date in the prioritized order. As mentioned in clause 7 (2), in case the technical assistance team are not available from the POs, the inspectors of the inspection team shall provide the technical assistance.
- 2. The technical assistance team can give the feedback of the under constructed foundation, He/she should fill the form provided in **annex 8** and it shall be the duty of House owner to follow the instruction.
- 3. If the beneficiaries is planning to construct the house in existing foundation he/she should start the construction only after suggestion from the Technical assistance team and approval from the Inspection team.

#### 9. Apply for second tranche

1. After completing the construction of the foundation and plinth level, the beneficiaries should apply for the inspection and second installment. For that he/she should apply in VDC/Municipality or Technical Inspection team using the format of **annex-6**.

#### 10. Inspect and Certify the construction for foundation level

1. The concerned VDC or municipality should allocate the date of inspection and assign the inspection team in prioritized order. The Technical Inspection Team should use the form provided in **annex 6** for the certification. One copy of that certification should be given to the beneficiaries and other copy to VDC/ municipality

#### 11. Correction order if necessary for foundation construction and certification of that

1. If the Technical Inspection Team found that the construction is not within the minimum requirement, then he/she should give the correction order by filling up the form

- provided in **annex 11** and the house owner shall correct taking the help from the technical assistance team.
- 2. After completing the foundation and plinth level by adopting the corrective measures, the beneficiaries should get the construction certified by the inspection team as explained above.

#### 12. Approval necessary for different design

- 1. If the beneficiaries want to construct the building other than the building that they have s during the period of enrollment camp, then they should give the application to the VDC/municipality using the form provided in **annex 7**. Similarly the VDC/Municipality should also give the permission to construct the building by completing the procedure mentioned in point 4.
- 2. But if some beneficiaries has started the construction without giving application, then he/she should follow the procedure mentioned in clause 9, 10 and 11 and get certification by the inspection team

#### 13. House owner must be clear about the construction above foundation

- 1. After completing the construction up to plinth level by following the point mentioned in clause 9, 10 and 11 the beneficiaries should be clear about the complete construction of the earthquake resistant building.
- 2. For this, the Technical Inspection Team should provide the knowledge of the earthquake resistant construction to the house owner. To construct the earthquake resistant building the beneficiaries can get the technical guidance by the technical assistance team.

## 14. In case of technical problems advice can be taken from Inspection supervision team and Technical Standardization Committee

- 1. If the Technical Inspection Team cannot judge and certify the building for the during inspection he/she should inform the Inspection Supervision team in DLPIU by filling the form provided in **annex 10** for necessary consultation. If the building needs to be corrected then the inspection supervision team should give the correction order by filling up the form provided in **annex 11**, if the building can be certified then they should fill up the form provided in **annex 10**.
- 2. If the inspection supervision team of DLPIU cannot certify or recommend the correction then such type of buildings should be submitted to MOUD CLPIU and if CLPIU cannot decide then it should be sent to "Technical Standardization Committee" and should be decided

## ${\bf 15.}\ \ The\ technical\ inspection\ form\ of\ foundation\ construction\ should\ be\ recommended\ by\ MOUD-DLPIU$

- 1. From the above mentioned points, using the form provided in **annex 10** for the certification of the technical inspection, copy of one form should be provided to the MOUD DLPIU for technical approval
- 2. MOUD DLPIU should check the details of documents of the **annex 10** certification, make a list of the beneficiaries using **annex 14**, send it to MOFALD-DLPIU (or DDC) and recommend for the disbursement of second installment
- 3. MOUD-DLPIU should assign the Inspection Supervision team for the inspection of the quality of the construction and progress of the work upon necessity

#### 16. Disbursement of Second Tranche and Deposit in Bank Account

1. The respective MOFALD-DLPIU will send the letter to the DTCO based on the recommendation from MOUD-DLPIU and VDC/Municipality to disburse the second installment amount to the beneficiaries account and the second installment amount will be deposited into bank account based on the recommendation from DTCO.

2. The beneficiary house owner can withdraw the amount as per necessity of construction of the house

#### Section-3: Inspection procedure above plinth level

#### 17. Based on certification construction above plinth level can be done

The beneficiaries can construct the houses under the provided certification based on **annex 10**. The further construction should not be carried out unless the beneficiaries get the certification. But the beneficiaries can start the construction before achieving the second installment

#### 18. Technical assistance can be taken for construction above plinth level

- 1. The beneficiaries can apply for the technical assistance for the further construction. He/she should give the application form using the format provided in annex-5. Similarly, the respective VDC/municipality should also assign the technical Inspection Team for the guidance on the basis of priority.
- 2. For the construction of the house the beneficiaries should use the trained mason and carpenters.

## 19. Technical Inspection and certification after the construction of roof level of one story house and first floor of multistory house

- 1. After completion of the roof band of one story and the first floor of the multistory house, the beneficiaries should apply for the inspection of the house and third installment using the form provided in **annex 6**
- 2. VDC/ Municipality shall inform the date of the prioritized visit of the Technical Inspection Team to the house owner for inspection and manage the inspection.
- 3. Technical Inspection Team should use the form in **Annex-13** to certify the house if the constructed house is according to earthquake resilient design and approved design

## 20. Correction order also can be given for the construction up to roof level of one story and first floor of multistory house.

- 1. If correction has to be made, **annex-11** form is to be used by Technical Assistance Team informing about the things to be corrected.
- 2. The concerned house owner beneficiary shall take a help from the technical assistance team and correct and apply to the VDC/ Municipality using the **annex 6** form.
- **3.** The Technical Inspection Team shall inspect and certify the house using **Annex-13** on the assigned date.
- 4. If the DLPIU engineer cannot decide immediately and are confused in the decision then the inspection should be done from the one step up Inspection Supervision team using the annex-13 form for certification and annex-11 form for correction and inform the house owner.

#### 21. Certification, Recommendation and Disbursement of Third Tranche

- 1. After the process in point 19 and 20 the Technical Inspection Team should provide one copy of the certificate to the house owner and the other copy to VDC/ Municipality
- 2. One copy of the Forms based on **Annex 13** certified by Technical Inspection Team or Inspection Supervision Team shall be sent from concerned VDC or Municipality office for technical approval to Ministry of Urban Development District Project Implementation Unit MoUD-DLPIU.

- 3. MOUD DLPIU should check the details of documents of the certification, make a list of the beneficiaries using **annex 14**, send it to DDC and recommend for the third installment
- 4. MOFALD-DLPIU shall recommend and disburse the grant in the accounts of beneficiaries through DTCO.

#### 22. Field Inspection during in roof level of one story and first floor level of multistory house

- Ministry of Urban Development District Project Implementation Unit-MoUD-DLPIU
  can do field inspection if necessary by Technical supervision team on the basis of
  description based on annex-14 forwarded form.
- 2. During the supervision by Inspection Supervision team if they find that the building is not constructed on the basis of approved drawing and requirement then the team can cancel the certification and can stop the grant.

## 23. Construction above the roof level of single story and first floor level of multistory building can be continued

- 1. After receiving the certification letter in accordance with point no 21 by respective beneficiary house owner can construct the roof of one story building or floor of multistory building as per approved design. In accordance with the certification letter construction of roof or construction of floor can be done before receiving the third tranche
- 2. But According to point no 21 deployed supervision team of Ministry of Urban Development, District Project Implementation Unit (MoUD-DLPIU) or as specified in bottom Section-5 deployed third-party monitoring Authority will inspect the house, if during the inspection or supervision any constructed house of beneficiary house owner is found to be unsafe or not as approved design then the tranche amount will be kept pending and the respective beneficiary will have to correct as specified by that team.

#### **Section-4: Process of Inspection of housing reconstruction completion**

#### 24. Apply for getting the completion certificate after completing the roof of one story house

- 1. For construction of one story house respective house owner should constructed the roof as mentioned in certification as **Annex-13** by the Technical Inspection Team, after that house owner should fill the application form as **Annex-6** for construction completion certificate and submit to the respective VDC or municipality office
- **2.** Respective VDC or municipality office should prioritize the application and manage the time to inspect by the inspection team

#### 25. Certify the house after the completion of roof of one story house

- 1. The Technical Inspection Team should inspect and fill the form as specified in **Annex-15** and if the constructed house is found to be as approved design and earthquake resilient then it is recommended for "House reconstruction completion certificate"
- **2.** Based on the recommendation Inspection supervision team can supervise as needed and provide "House reconstruction completion certificate" as **annex-16**.
- **3.** After issuance of the House reconstruction completion certificate, the VDC/Municipality shall regularly prepare list using **annex 17** and report it to MOFALD and MOUD CLPIU.

#### 26. Correction order can be given if any correction has to be done in the completed hous

- 1. According to above point no (24) inspection teams or inspection supervision team will observes the house but if the house is not reconstructed according to approved design, Ministry of Urban Development, District Project Implementation Unit (MoUD-DLPIU) inspection teams, or Inspection Supervision team will fill the from in accordance to Annex-11 and mention the things that needs to be improved and provide to beneficiary house owner.
- 2. The respective beneficiary house owner can take the help of technical team and improve as suggested then again as mentioned above in Annex-14 form is filled and submitted to the VDC or municipality office, while VDC or municipality will also follow the same procedure immediately and inspect the house if the house is found to be repaired as suggested then as mentioned in Annex-16 "House reconstruction completion certificate" should be provided.

## 27. Apply for the inspection and certification of the multistory house after completing the roof of ground floor and base of first floor

- 1. The house owners who construct multiple story houses should construct the houses based on the approved design and apply to the VDC using the form in **annex 6** to request for certification and approval of construction above it. The VDC/ Municipality shall prioritize and send the Technical Inspection Team for inspection
- 2. If the construction is according to the approved design and safe the certification should be provided using annex-14 and if it is to be corrected annex-11 form is used.

#### 28. Building completion certificate after the completion of multistory house construction

- 1. In case of multistory construction, the procedure on the point 24 needs to be followed and after all the construction is complete, the process on the clause 27 is followed and VDC/ Municipality can provide the construction completion certificate
- 2. During construction of upper story the house owner can take the technical assistance applying to the VDC using the form in Annex- 5 and VDC/ Municipality shall send the Technical Assistance team based on the priority on the assigned date.
- **3.** Based on that completion certificate only, the concerned house owner can receive the recommendation for support through different organizations.
- **4.** After issuance of the House reconstruction completion certificate, the VDC/Municipality shall regularly prepare list using **annex 17** and report it to MOFALD and MOUD CLPIU.

#### **Section-5: Inspection Process for Retrofitting/ Maintenance**

#### 29. Application, inspection and completion certification related to retrofitting/maintenance

- 1. The house owners who do the retrofitting/ maintenance should fill up the application form attached in the **annex 6** and apply to the VDC/ Municipality.
- 2. The concerned VDC/ Municipality shall manage the Technical Inspection Team in priority on the assigned date
- **3.** The Technical Inspection Team should visit the site and recommend for the certification and based on that the technical supervision team shall visit the site and provide the certification.

#### 30. Correction/retrofitting order can be given

1. If house is not repaired or retrofitted based on approved standards after inspection in clause number 29, Technical Inspection Team of MOUD-DLPIU will give instructions by filling form of ANNEX-7

- 2. After improvement on previously done retrofit/repair as per instruction, concerned house owner will get Certificate of completion retrofit/repair as according to clause 29.
- **3.** Only after this certificate, concerned house owner will get the recommendation or facilities provided by VDC or Municipality or Concerned Government Agencies.

#### 31. Technical assistance can be taken for retrofitting/maintenance

- 1. If any earthquake victim house owners give application to concerned VDC or Municipality after realizing the need of repair or retrofit, concerned VDC or Municipality should provide technical support and related advices by mobilizing Technical Assistance Team
- 2. If house owner give application according to **annex-6** after doing retrofit/repair as per advice of technical assistance team, retrofit/repair completion certificate should be provided after fulfilling procedure of clause 30.

#### **Section-6: Process of Third Party Technical Monitoring**

#### 32. Technical Monitoring through Third party for Reconstruction/ Retrofitting

- 1. For monitoring of reconstruct/retrofit or repair of private houses within specified time after fulfilling above mentioned clauses, NRA will manage monitoring of at least 5% of reconstruct/retrofit/repair required houses forming third party technical monitoring team. In which one percentage of the house will be same from Foundation to Completion and four percent house will done through random sampling.
- 2. The technical monitoring as mentioned in clause 32 (1), team can monitor reconstruction/Retrofitting or repair work anytime and concern house owner, VDC or municipality, offices, and other related government agency, concerned person and other organization should support the monitoring team.
- **3.** The formation process and monitoring procedure of the technical monitoring as mentioned in clause 32 (1) will be as per specified by NRA. The technical assistant team, technical inspection team, Technical supervision team and other related agency and person must make necessary improvement in private housing reconstruction work as per the recommendation of above mentioned technical monitoring team.
- **4.** Authority will manage a third party monitoring team in coordination with donor agency or organizations who helped in private housing reconstruction and through them the concern donor agency or organization can monitor to know the situation of their own service operation

#### Section-7: Process of inspecting the houses that are reconstructed before PA

#### 33. Inspection of the houses which were constructed before PA

Reconstruction of the houses that have been done prior to private housing reconstruction grant agreement, inspection of the houses will be done from the same level of construction that have been completed. For this purpose, respective beneficiary house owner should fill the form for the same level and leave an application to related VDC or municipality office for inspection.

#### 34. Certification or correction order for houses constructed before PA

1. Based on the application as mentioned in Point No. 33, Technical Inspection Team will inspect the construction work at all levels. For relevant level, specified form must be

- certified and based on the specified form the team must give direction to the house owner of respective beneficiary regarding the improvement of the house
- 2. Also after the correction of the house by the respective beneficiary house owner, on the basis of application given to VDC, a Technical Inspection Team and if required inspection supervision team concluded that specified improvement have been done, then this team must certify the reconstruction up to the relevant level.
- **3.** Based on Point no 34.1, arrangement will be made on prescribed grant only on the basis of certification as given by the Technical Inspection Team or inspection supervision team

### 35. Grant will be provided based on the level of completion for houses already constructed before PA

1. Based on Point no 34 arrangement will be made on prescribed grant only on the basis of certification as given by the Technical Inspection Team or inspection supervision team.

#### **Section-8: Management and use of information system**

#### 36. Management and Development of Use of information system.

- 1. According to law mentioned above in various bullets to provide technical assistance in the rebuilding of private accommodation or technical inspection, supervision and monitoring of financial assistance, if possible, available information technology to use, and for this management information systems(MIS) shall be developed
- 2. According to the system the recommendations made by correspondence will also be recognized But in the case where there is no possibility to use information technology and information management system, through paperwork process (hard copy) shall not hinder the performance of its functions

#### Section-9: The amendment in Guidelines

#### 37. Guidelines can be amended

1. In the course of the implementation of this procedure, if any amendment is required, Executive Committee of the Authority may amend.

#### 4. Annexes

Annex 1: Procedure of Housing Reconstruction Program under the method of inspection and responsibility of related agencies.

	W 1 D 1 4 1 34		Responsibility of	Responsibilty of	Responsibility	Responsibility of	
S.N	Works Related with	Responsibility of	VDC and	Team of	of MoUD-	Technical	Relevant
	<b>Technical Inspection</b>	Beneficiaries	Municipality	<b>Inspection Team</b>	DLPIU	Assistance Team	Form
A	To ensure the construction	site in terms of geogr	raphical and geologica	al safety and layout o	f foundation.		
1	Before the construction of the foundation, to inspect the construction site from related technical team to ensure the Safety and appropriate in terms of geological and geophysical condition. In addition apply for supporting construction of foundation layout from technical team.	Apply for Inspection	Receive Application				Annex 5
2	Mobilize Technical team for Inspection		Mobilize Technical team			Management of Technical Assistance team	
3	Technical Assistance at construction site for Technical Inspection	Provide the information to Technical Inspection about the construction site and foundation				To ensure technical inspection about construction site and further recommend and necessary direction to move	Annex 8

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
						ahead for construction	
4.1	Technical Assistance team has been on a construction site and using the appropriate form for technical inspection and to ensure that place is safety and appropriate in terms of geographical and geological condition, and also carry out the construction of foundation layout. After that also promote to recommend additional construction.	Receive Inspection and certification				Provide Certificate	Annex 9
4.2	Order to Correction					Order to Retrofitting or Correction	Annex 11
4.3	Get detailed information about the correction from technical support team and then after getting directions household owner have to improve layout and construction site.	Correct/ Retrofit					

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
4.4	After Correction reapply for checking/examine.	To Apply	To receive the application				Annex 5
4.5	After getting reapplication mobilize technical assistance team		Mobilize Technical Assistance Team				
4.6	Inspect the house After Correction	Provide the information to Technical Assistance				Technical inspection and certify	Annex-9
В	<b>House Construction worl</b>	k up to plinth level					
5	Apply for the technical inspection and pass after the completion of the house up to plinth level do technical inspection-1	Apply for inspection	Receive the application				Annex 6
6	Mobilize technical Inspection Team for inspection		Mobilize Inspection team		Manage Inspection team		
7	Technical Inspection Team to be mobilized in construction site using appropriate form for doing technical inspection-1	Provide information about construction technical inspection team		Provide certification and necessary direction after technical inspection			Appropriate form of Annex-10
8.1	The under construction house are according to technical standard and if they can be pass, immediately inspect the	Receive Technical Inspection		Provide Certification for inspection			Appropriate form of Annex-10

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
	house and provide them certificate						
0.2				D / Cu:	C 4		A 11
8.2	Order retrofitting or Correction			Retrofitting or Correction	Support Technical Inspection Team on complex technical subject		Annex 11
8.3	In case of which house are made in completely different type or in different techniques, Preparing the detail technical terms to guide for appropriate feedback send information to district, MOUD-DLPIU			Collects the detail technical and send it MOUD- DLPIU	To guide for to improve the technical decisions	Provide more support MOUD- DLPIU	Annex-7
8.4	Within 7 days after getting guidance from MOUD-DLPIU order household owner for correction and retrofitting			Order house owner for correction and retrofitting	To guide for improvement after technical inspection	Provide more support MOUD- DLPIU	Annex-11
8.5	After get detailed information and instructions about correction from technical team household owner should go ahead with construction of his/her house.	Construction correction and retrofitting					

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
9	After Correction reapply for inspection	To apply	Receive the application				Annex 6
10	After getting re-applied mobilize technical inspection team		Mobilize technical inspection team				
11	Inspect the house after correction	Provide information to technical inspection		Technical Inspection			Appropriate form of Annex-10
12	After certification from technical inspection checked pass from that evidence to direct the second installment grant payment.		Provide the information about grant payment to MOUD-DLPIU	Order the VDC/Municipalit y and MOUD-CLPIU about certify from check pass and grant aid.	To recommend the MOFALD- CLPIU about grant payment.		Annex-14
13	Second installment grant aid for VDC or municipality to receive money through a bank.	Take second installment grant		g. and and			
С	Construction Works above	the plinth band					
14	Do Construction Works above the plinth band						
15	After the completion of up to one floor building or second story floor level apply for technical inspection-2	To apply	Receive the application				Annex-6

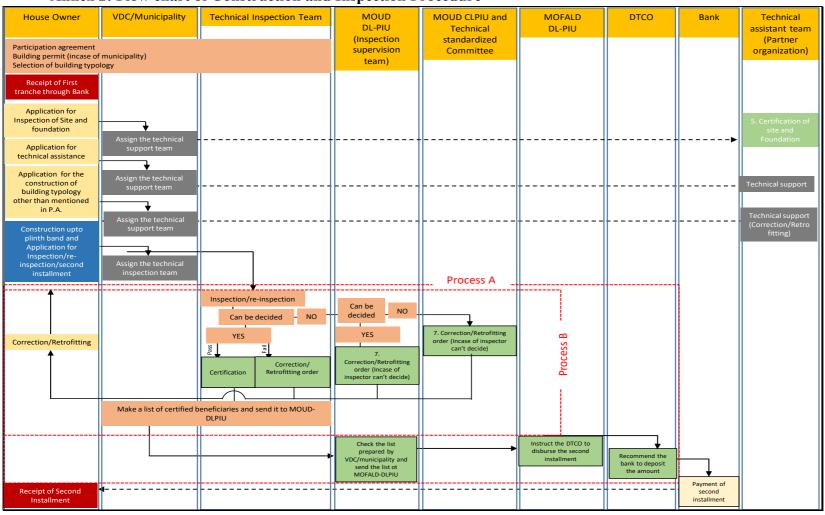
S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
16	Inspection for under construction house mobilize the technical team in priority order form.		Mobilize technical inspection team.				
17	Technical inspection -2 for under construction house. Detailed description of the technical checked was according to the approved layout design or minimum standard whether or not. In that case follow point No. 8 to 11 for necessary and appropriate procedures.	Provide information to technical inspection team		Technical inspection	To guide the technical inspection team		Appropriate form of Annex-13
18	Provide certification to house owner after approve in terms of techniques of up to one floor building or second story floor level completion	Receive certification		Provide certification			Appropriate form of Annex-13
19	After certification from technical inspection checked pass from that evidence to direct the third installment grant payment.		Provide the information about grant payment to MOUD-DLPIU	Order the VDC/Municipalit y and about certification from check pass and grant aid.	To recommend the MOFALD- CLPIU about third grant payment.		Annex-14

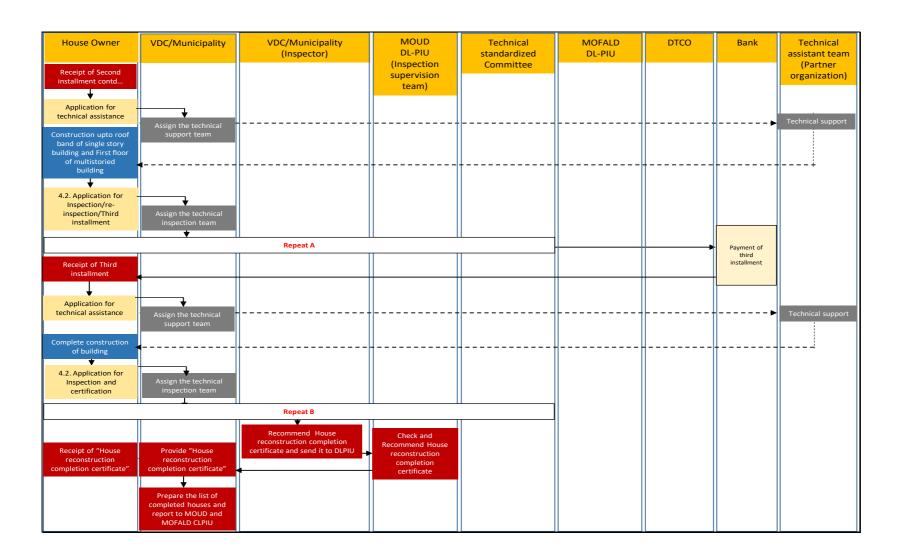
S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
20	Third installment grant	Taken Third					
	aid for VDC or	installment grant					
	municipality to receive money through a bank.						
D	Completion of constructio	n one-floor building					
21	To move ahead with	Do construction					
21	construction works	work					
22	To apply for technical	Apply	Receive the				Annex 6
	inspection-3 of final	1 PP13	application				
	certified of complete		Tr ·····				
	construction work after						
	complete construction						
	one-floor building						
23	Mobilize technical		Mobilize technical				
	Inspection Team for		inspection team				
	complete construction work						
24	Technical inspection-3	Provide the		Do technical	Do technical		Annex 15
24	of construction of the	certification and		inspection	inspection		Aillex 13
	house. From 8.2 to	information about		mspection	mspection		
	11points should be	complete					
	applied the house that	construction work					
	are not state as in	to technical					
	accordance of detail	inspection team					
	technical, map design						
-	and minimum standard.						
Е	To move ahead two story						
25	To apply for technical	To apply	To receive the				Annex 6
	inspection after		application				
	completion of first floor						

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
	level of two story		-				
	building						
26	Mobilize technical		Mobilize			Manage Technical	
	assistance Team to		Technical			Assistance	
	inspect the under		Assistance Team			mobilize team	
	construction house						
27	Technical inspection of	Provide				Do technical	Appropriate
	construction house by	information to				inspection	form of
	Technical assistance	inspection					Annex-13
	team. From 8.2 to 11	assistance team					
	points should be						
	incorporate the house						
	that are not state as in						
	accordance of detail						
	technical, map design						
	and minimum						
	requirements.						
F	Completion of two story b	uilding					
28	To apply for technical	To apply	Receive the				Annex 6
	inspection after		Application				
	completion of two story						
	building for final						
	certification.						
29	Mobilize Technical		Mobilize technical				
	Inspection Team for		Inspection Team				
	complete construction						
30	Technical inspection-3	Provide		Do Technical	Mobilize		Annex-16
	of constructed house.	information to		Inspection	Technical		
	From 9 to 14 points	technical			Inspection		
	should be applied the	inspection team					
	house that are not state						

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD- DLPIU	Responsibility of Technical Assistance Team	Relevant Form
	as in accordance of detail technical, map design and minimum requirements.						
G	Prepare report of Complete	e construction work	of house				
31	Submit overall summary of complete construction work report of house to MOUD CLPIU in quarterly.			Report Preparation and send to VDC/Municipalit y	Coordination for report preparation and submit report to MOFALD-CLPIU and MOUD-CLPIU		Annex 17

**Annex 2: Flow chart of Construction and Inspection Procedure** 





#### Annex-3: Type of house selected by beneficiary



#### **Government of Nepal**

#### Ministry of Federal Affairs and Local Development

......VDC/Municipality Office

#### Type of House selected by Beneficiary

			(Incit	iaea in the P	A)					
	Application form to be filled for the supervision of under construction house.									
	Selected	Design	number	among	the Or	purposed	design:			
	The descrip	otion of the build	ing typology pla	anned by the h	ouse owner:					
1.1 1.2 1.3 1.4 1.5 1.6		Stone masonry Brick masonry Brick masonry Stone masonry R.C.C framed	with mud more with cement m with mud mort with cement m with mud mort	ortar ar ortar ar and wooder	•					
2.1 2.2 2.3 2.4 2.5 2.6 2.7		Tile over wood CGI sheet over Tile over bamb RCC slab	d materials.  r wooden beam, den beam, rafter r bamboo beam, poo beam, rafter poo beam, rafter r metal beam, ra	and purlin rafter and pur and purlin and purlin	rlin					
		ruct the house ac	•			been provided b	y the NRA,			
Be	neficiaries/ r	epresentative:								
Sig	gnature:									
Na	me:									
Ad	dress:									

Annex-4: Simplified process for Building Permit

Steps	Activities	Responsibility and Timeline							
•		Responsibility of House Owner	Timeline	Responsibility of Municipality	Timeline				
First	Apply with Drawing of the house	Submit the drawing and necessary documents	First Day	Register the application	First Day				
Second	Publish Notice for check	Publish notice with Officer	First day	Prepare notice and provide it to House owner/ Officer	First Day				
Third	Check the drawing and consult with the consultant for improvements	Arrange the meeting of consultant with Municipality	First day	Finalise the technical part / inform for correction to the consultat	Seventh Day				
Fourth	Check the site boundary and layout and orientation regarding construction	Layout to be done by the consultant and neighbours to be called for checking of boundary	Within Fifteenth day	Check the site boundary along with the consensus of neighbors and orient	Within Fifteenth day				
Fifth	Certification of drawing	Contact Municipality for approved drawing	With in seventeeth day	Provide certified drawing	Seventeenth day				

#### **Annex- 5: Application form for Technical Assistance**



#### **Government of Nepal**

#### Ministry of Federal Affairs and Local Development

......VDC/Municipality Office

#### **Application form for Technical Assistance**

municipality. Under the hou	sing reconstruction prograr ed level and provide appro	Chief/executive officer of nme, I am writing this applic priate guidance. I have attac	ation to request you
☐ Site Selection and Layou	t		
□Foundation			
□Above Plinth Level			
□Repair/Retrofit			
Name,Surname	of	house	Owner/
Grant			Aggrement
location of under construction VDC/Municipality	Village/tole:		Plot
Building typology of under If design is from Catalogue,			
If design is apart from catalogues	ogue:		
Wall/column typolo	ogy no.:		
Storey/type of roof	no:		
Other:			
Full name of Applicant:			
Signature:		Date:	
For Official use only:			plication registered

Officer	name	(enrolled	to	register	application):	
Post:						
-						Application
ription of th	ne technical mo	bile team enrolle	ed for in	spection:		
·				•		
	Post: Signature: registration	Post:	Post:	Post:	Post: Signature:	Post:

#### Annex- 6: Application form for Inspection and re-inspection



#### **Government of Nepal**

#### **Ministry of Federal Affairs and Local Development**

......VDC/Municipality Office

#### **Application form for inspection**

municipality. Under the hou	using reonstruction programuse under construction or	Chief/executive officer of mme, I am writing this applicatio to provide appropriate guidance. ication letter.	n to request you
Name,Surname	of	house	Owner/
beneficiaries			 Aggrement
location of under constructive VDC/Municipality			Plot
No.:		Land	1 100
Building typology of under If design is from Catalogue,			
If design is apart from catal-	ogue:		
Wall/column typolo	ogy no.:		
Storey/type of roof	no:		
Other:			
Present status of completion	1:		
□ completion of Fo	oundation		
☐ Completion of o	pening and masonry wall a	above opening (below the floor le	evel)
☐ Completion of co	onstruction		
Permitted after completion	of Inspection:		
☐ Permitted after c	ompletion of Foundation		
☐ Permitted after c	ompletion of Roof		
☐ Permitted after C	Construction Completion		
Full name of Applicant:			

For Official use only:				Application registered		
Officer name Post:	`	to	register	application):		
Signature:registration Date:				Application		
ription of the technical m	nobile team enrolle	ed for ins	spection:			
·						

## Annex-8: If the construction of the building is different than that was agreed in ${\bf PA}$



#### **Government of Nepal**

#### **Ministry of Federal Affairs and Local Development**

#### ......VDC/Municipality Office

Application form if the building is different from that was agreed during PA

Application form to be filled for the	Application form to be filled for the							
supervision of under construction house.	supervision of under construction house.							
Selected Design number among the purposed	Selected Design number among the purposed							
design:	design:							
Or	Or							
The description of the building typology	The description of the building typology							
planned by the houseowner:	planned by the houseowner: 3. Technique and construction							
1. Technique and construction materials.	3. Technique and construction materials.							
1.1 Stone masonry with mud mortar	1.1 Stone masonry with mud mortar							
1.2 Stone masonry with cement mortar	1.2 Stone masonry with cement							
1.3 Brick masonry with mud mortar	mortar							
1.4 Brick masonry with cement mortar	1.3 Brick masonry with mud mortar							
1.5 Stone masonry with mud mortar	1.4 Brick masonry with cement							
and wooden post and beam	mortar							
1.6 R.C.C framed structure 1.7 House surrounded with wood or	1.5 Stone masonry with mud mortar							
1.7 House surrounded with wood or CGI sheet in metal or wooden	and wooden post and beam  1.6 R.C.C framed structure							
frame	1.7 House surrounded with wood or							
Hume	CGI sheet in metal or wooden							
2. Construction of roof and materials.	frame							
2.1 CGI sheet over wooden beam,								
rafter and purlin	4. Construction of roof and							
2.2 Tile over wooden beam, rafter and	materials.							
purlin	2.1 CGI sheet over wooden beam,							
2.3 CGI sheet over bamboo beam, rafter and purlin	2.2 rafter and purlin Tile over wooden beam, rafter							
2.4 Tile over bamboo beam, rafter and	and purlin							
purlin	2.3 CGI sheet over bamboo beam,							
2.5 Tile over bamboo beam, rafter and	rafter and purlin							
purlin	2.4 Tile over bamboo beam, rafter							
2.6 RCC slab	and purlin							
2.7 CGI sheet over metal beam, rafter	2.5 Lile over bamboo beam, rafter							
and purlin	and purlin							
	2.6 RCC slab 2.7 CGI sheet over metal beam, rafter							
	2.7 CGI sheet over metal beam, rafter and purlin							
	una parini							

I agree to build the type of the house selected based on the minimum requirements provided by National Reconstruction Authority
Beneficiary or representative:
Signature:
Name:
Address:

## **Annex-8: Correction/ Retrofitting Order and Inspection form for site selection and layout**



#### **Government of Nepal**

#### **Ministry of Federal Affairs and Local Development**

......VDC/Municipality Office

### **Correction/ Retrofitting Order and Inspection form**

	-								
Under Inspection SOP for reconstruction of houses, after the detail inspection of the building under construction on									
Name of house Owner/beneficiary									
71 67 71 67	•								
The following points are found unsatisfactory correction order/ retrofitting order	, so it is recommended to follow below mentioned								
Retrofitting order	Status after retrofitting								

## **Tentative Drawing after Retrofitting** a) After the detail description of the under constructed house, is it satisfactory to give permit for the further construction. Yes . Lit is recommended to move ahead with the construction because it was found that the site selection and the layout is satisfactory ☐ Correction/Retrofitting order is given because it was found to be corrected or retrofitted. b) Acceptation of Description provided agreeing that the technical details during inspection is correct: House owner/Beneficiaries or representative name:.....Signature:.....Signature:.... c) Submit for Approval of the technical inspection:..... MOUD-DLPIU Supervisor:.... Signature...... Date....... d) Approved by:

Signature...... Date.......

Engineer.....

Supervision

MOUD

**DLPIU** 

Designation:....

## Annex 9: Form to be filled by the inspector for the certification of Site Selection and layout for the construction of foundation.



#### Government of Nepal Ministry of Urban Development Central Level Project Implementation Unit

Form to be filled by the inspector for the certification of Site insurance and layout for the construction of foundation.

Inspection sheet											
Informat	ion of House Owne	r/Beneficiary		Inspection	on date	<b>e</b> :	Date	- Month	-	Year	
Name:			Grant aggrement no:								
Address	District	VDC/Municipality		ward		tole		Land plot No			
SECTIO	N-I: DESCRIPTIO	ON PROVIDED IN	THE APPLICA	TION TO S	SURVEY	THE	HOUSE				
If use fix	design from design	catalogue,			Design	n No.					
If free design by house owner Fill construct typology from P.A form			Technique and Construction material  Construction of roof and materials								
	al Assistant	□Yes				l □NGO/	/INCO				
				Organiza	lion			TINGO			
MR No Category Des			Descriptio	ription			<u> </u>			Remarks	
		Geological fault or Ruptured Area				Yes	No -				
4		Steep Slope > 20°	Ruptureu Area								
		Landslide susceptible Area									
	Site selection	River bank and Wat									
1.		Rock-fall Area	er logged Area								
		Liquefaction susceptible Area									
		Filled Area	nible Alea					П			
		No. of bay									
		Area									
2.	Shape of House	Shape									
۷.		Length									
		Breadth									
		East									
	Set back in	West									
3.	land	North									
		South									
		Area to be occupied	d by building								
	Site where	The building occupy	ing the land of	neighbour							
4.	building is to	Public land capture	d by building								
	be errected	Public road capture	d by building								
		Depth						•			
5.	Foundation	Base width									
		Height of plinth leve	el								

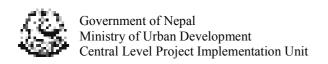
#### Others:

**a.** At least four number of photographs of site with their number......

b.	Tentative drawings of the site and purposed plan of building.
C.	After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.
	□Yes □ No
d.	Acceptation of Description provided agreeing that the technical details during inspection is correct:
Но	ouse owner/Beneficiaries or representative name:Signature:Signature:
Re	elationship with house owner (In case of representative):Date:
e.	Submit for Approval of the technical inspection:
М	OUD-DLPIU Supervisor:
Na	ameDesignation:
Sig	gnature Date
f.	Approved by:
	OUD DLPIU Supervision Engineeresignation:
Sig	gnatureDate

Annex-10: Forms for technical inspection and Certification of buildings after completion of foundation (Technical Inspection-1)

Annex-10.1: Forms for first technical inspection and Certification of Category "A" and "B" buildings



# RCC (Category A and B) First Inspection

			Inspe	ction Shee	t								
	First Inspection of RCC (Category A and B) Buildings												
							,	U-					
				Date of Inspecti									
Name				Grant Agreement No.									
Addres	S District	VDC/Municipality	wa	rd to	ole		Land plot No						
I£ £	d	Aslance		Davisa	Ma								
	design from design ca	taiogue,	Technique	Design I and Construction	NO.								
	sign by house owner		material	and construction									
Fill const	ruction typology from	P.A form	Constructio	n of roof and materia	als								
Techni	cal Assistance	□Yes	□No	Organization	□GoN	l,	□NGO (		)				
Traine	d Masons Used	□Yes□	]No	Soil Type		Hard	d, □Mediun	n, 🗆 Sc	oft				
MR							ccording to						
no	Category		Description				lding permit	Rema	rks				
		Carlarian fault an D			_	'es	No						
		Geological fault or Ru	iptured Area										
		Steep Slope > 20°  Landslide susceptible Area											
1	a	River bank and Wate											
-	Site selection located	Rock-fall Area	i logged Area										
	away from	Liquefaction suscepti	hle Area										
		Filled Area	bic / ii cu										
		No of Bays											
		Area											
2	Shape of	Shape											
	House	Length											
		Breadth											
		Mortar											
3	Materials	Concrete											
		Rebar											
		Туре											
4	Foundation	Depth											
7	Touridation	Size											
		Pohar				п							

		Width		
		Tie Beam		
	Plinth Beam	Height		
_		Size		
5		Rebar		
		Connection		

		Size										
6	Pillar	Rebar										
8	Filiai	Ring										
		Connection										
Others	a. At least for	•	hotographs with	their number								
	b. Tentative of	drawings of buil	iaing:									
	c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.  Yes $\square$ , No $\square$											
	•	-	ion of the first i	•								
□ If w	as found to be o	orrected/retro	fitted so correct	ion order is giv	ven us	ing Annex-6						
	d. Acceptatio is correct:	n of Descriptio	n provided agree	eing that the te	echnica	al details durin	g inspection					
Но	use owner/Bene	ficiaries or rep	resentative name	<u>5</u> :	Sign	ature:						
Re	lationship with h	ouse owner (Ir	case of represer	ntative):		Date:						
	e. Submit for	Approval of the	e technical inspe	ction:								
MO	MOUD-DLPIU Supervisor:											
Na	Name											
Sig	nature		Date									
	f. Approved	ру:										
	OUD DL signation:		pervision	Engineer								
Sig	nature		Date									

Annex-10.2: Forms for technical inspection and Certification of Category "C" buildings after the construction of the foundation (Technical Inspection-1)

Annex-10.2 (A): Form for inspection and Certification for category "C" buildings of Stone Masonry with Mud Mortar

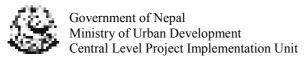
	Government of Nepal Ministry of Urban Development
120 m	Central Level Project Implementation Unit

### First Inspection of SMM

	INSPECTION SHEET OF											
	STON	E MASONR'	WITH MUD	MORTAR FO	OR FIRST	INSPE	CTIC	NC				
				Date of Inspect	tion D	D -	М	М -	Υ	Υ	Υ	Υ
Name:				Grant Agreemen	nt No.							
Addres	ss:											
	District	VDC/Municipality	ward	tole		Land plot	No					
If use fi	x design from desigr	n catalogue,			Design No.		SMM-1.1					
	lesign by house own		Technique and Cor					1.1				
	struction typology fr		Construction of ro		□GoN,		0.1	2.1	<u> </u>			
	cal Assistant	□YES,	□NO □NO	Organization		-						
Traine	d Masons used	□YES,	□NO	Soil type	□Hard,	⊔ие	□Medium,			Soft		
	Co	mply t	· O									
MR Category Description									Remarks			;
No.	,		YES		NO	Remarks						
		Geological fault or	Ruptured Area									
		Steep Slope > 20°										
	6	Landslide suscepti	ble Area									
1	Site selection located away from	River bank and Wa	ater logged Area									
		Rock-fall Area										
		Liquefaction susce	eptible Area									
		Filled Area										
		No. of storey	RC band No Timber band No									
	<b>a</b> . <b>c</b>	Span of Wall	Not more than 12 tim	, D								
2	Shape of	Size of room	, ,	4.5m.(14'9")								
	House	3120 01 100111	Not more than 13.5sq. Simple and regular sha									
		Proportion	The length is not more			+ +		<u> </u>				
		Charac	Avoid round, easily bre									
		Stone		(2"),length/Breadth>15								
			Mud mortar	ee from organic materi aterials.	ials, pebbles, hard			_				
3	Materials	Mortar	Cement mortar	ength is not less than xture	1 cement : 6 sand							
		Concrete	M15grade (1 cement: 2									
		Rebar	fy = 415 Mpa /500 Mpa	a			-					
		Timber	Hard wood									
		Continuous strip	footing									
4	Foundation	Depth below GL	750mm(2'6") for one s	torey								
		Base Width	Soft≥800mm(2′8″),Me	dium≥750mm(2′6″),Ha	rd≥750mm(2′6″)							
		Started right fro	m the foundation									
	Vertical		Rc	Timb								
5	member	Reinforcement	Placed at all corners,	Hard wood. One men x 100mm(4") for core								
		iember Reinforcement ju	junctions of walls and openings	Two member of	75mm(3")			_				
				100mm(4") for oper	nings							

		Alleholage	oo times didineter of relinioree	mene			l					
		Height from GL	Not less than 300mm(1') from	GL								
6		Thickness	150mm(6")for medium and so	ft soil. 75mm(3") for hard soil								
		Width	Not less than wall thickness/35	50mm								
6	Plinth	Reinforcement	RC band  Main: 4-12dia for 150mm(6"), 2-12dia for 75mm(3") height Stirrups: 6mm dia. at 150mm(6"), Concrete cover of 25mm(1")	Timber band  Main member : 2- 75mmx100mm connected with batten 50mmX38mm@500c/ c	0							
a) A	t least four nur	nber of photo	graphs with their nun	nber								
b) T	entative drawir	ngs of building:										
-	c) After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.											
			Yes □ ,	No 🗆								
$\Box$ it	was passed thr	rough the insp	·	spection so the constru	uction ca	an moʻ	ve ahead					
				dures of disbursement								
		-,	, , , , , , , , , , , , , , , , , , , ,									
□ If	was found to b	e corrected/re	trofitted so correction	on order is given using	Annex-6	)						
d) A	acceptation of D	escription prov	vided agreeing that th	e technical details duri	ng inspe	ction is	s correct:					
H	louse owner/Be	eneficiaries or r	representative name:	Signatu	re:							
F	telationship wit	h house owner	(In case of represent	rative):Dat	:e:							
e) S	ubmit for Appro	oval of the tech	nnical inspection:									
N	лоud-dlpiu su	ipervisor:										
١	lame		Designa	tion:								
S	ignature		Date				·····					
f) A	approved by:											
			Supervision	Engineer								
S	ignature		Date									

# Annex-10.2 (B): Form for inspection and Certification for Category "C" building of Stone Masonry with Cement Mortar

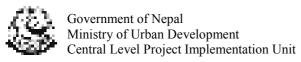


## First Inspection of SMC

				INSPECTION	ON SHEET OF							
	STONE	<b>MASO</b>	NRY W	ITH CEMEN	T MORTAR	<b>FOR FI</b>	RST	INS	SPECT	ION		
					Date of Inspec			D -			ΥΥ	Υ
Name:					Grant Agreemer							
Addres	ss:				-		l					
	District	VDC/	Municipality	ward	tole		Land plot No					
	x design from design		,	Tashnigus and Car	Design No.			SMC-1.1 1.1				
	lesign by house owr struction typology fr		m	Technique and Cor Construction of roo						. <u>1</u> .1		
	cal Assistant			□NO	Organization	□GoN,	□NGO (					
Trained Masons used			ES, I	□NO	Soil type ☐ Hard,				□Mediu	m,	□Soft	
MR	Category		Description					nply	to MRs	R	Remarks	
Nº			Geological fault or Ruptured Area						NO		icinario	
					-							
		Steep Slo				_						
	Site		susceptibl			-						
1	selection			er logged Area				-				
	located	Rock-fall	ion suscep	tible Area								
	away from	Filled Are		tible Area				-	<del>-</del>			
			No. of storey Not more than two plus attic									
		Span of		Not more than 4.5m				-				
2	Shape of House	Size of r		Not more than 13.5s								
_				Simple and regular shape as square and rectangular								
		Proporti	on	The length is not mo	re than 3 times of its w	ridth						
		Stone		Avoid round, easily breakable soft stone Size: Thickness>50mm(2"), length >150mm(6")								
		Mortar		Strength is not less than 1 cement : 6 sand mixture								
3	Materials	Concret	e	M20grade (1cement: 1.5sand: 3aggregate)				-				
		Rebar		fy = 415 Mpa /500 Mpa								
		Timber		Hard wood								
		Continu	ous strip f	ooting								
		Depth b	elow GL	800mm(2'8") for one	storey, 900mm(3') for	two storey						
4	Foundation	Base	1 storey		Medium: >600mm(2')	,						
		Width	2 storey	Hard: >600(2')mm Soft: Not recomm	ended, Medium:>800	Omm(2'8"),						
		Ctartad	L	Hard:>600mm(2')								
	Vertical			the foundation ers, junctions of wa	alls and openings			-+				
5	member	Reinford		, , ,	, 16mm for two storey	,						
	member	Overlap	CITICIT	60 times diameter of								
		Height f	rom GL	Not less than 300mm								
		Thicknes		150mm(6")for medi	um and soft soil. 75r	nm(3") for						
6	Plinth	Width		hard soil  Not less than wall thi	ckness/350mm/1/2"\							
		Plinth Width Not less than wall thickness/350mm(1'2")  Main: 4-12dia for 150mm(6"), 2-12dia for 75mm(3")					<u>'</u>					
		Reinford	ement	height, Stirrups: 6mr Concrete cover of 25								

<ul><li>a. At least four number of photographs with their number</li><li>b. Tentative drawings of building:</li></ul>											
c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.											
Yes $\square$ , No $\square$ it was passed through the inspection of the first inspection so the construction can move ahead											
and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.											
☐ If was found to be corrected/retrofitted so correction order is given using Annex-6											
d. Acceptation of Description provided agreeing that the technical details during inspection is correct:											
House owner/Beneficiaries or representative name:Signature:											
Relationship with house owner (In case of representative):Date:Date:											
e. Submit for Approval of the technical inspection:											
MOUD-DLPIU Supervisor:											
Name Designation:											
Signature Date											
f. Approved by:											
MOUD DLPIU Supervision Engineer  Designation:											
Signature Date											

## Annex-10.2 (C): Form for inspection and Certification for Category "C" building of Brick Masonry with Mud Mortar

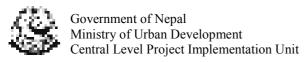


## First Inspection of BMM

			INSPEC	TION SHEET OF							
	BRI	CK MASON	IRY WITH MU	JD MORTAR	FOR 1 <sup>ST</sup> I	<b>NSPEC</b>	TION				
				Date of Inspec	tion	DD-	м м	- Y Y	/ Y Y		
Name:				Grant Agreemer	nt No.						
Addres	ss:										
	District	VDC/Municipa	lity ward	Land plot No							
If use fi	x design from desigi	n catalogue,			Design No.	BMM-1.1					
	lesign by house owr		Technique and Construction material  Construction of roof and materials				1.1 2.1				
	cal Assistant	□YES,		Organization	□GoN,	□NGC		L	١		
	d Masons used	□YES,		Soil type	□ Hard,	□Med					
Traine	u Masons useu	<u> Птез,</u>	Пио	Soli type	шпаги,	□ IVIEC	iluiti,	□Soft			
MR						Comply	to MPc				
No.	Category		Descrip	tion		YES	NO	Rema	arks		
		Geological fau	Ilt or Ruptured Area								
		Steep Slope >		<u> </u>							
		Landslide susc									
1	Site		d Water logged Area								
-	selection	Rock-fall Area									
	located		usceptible Area								
	away from Filled Area										
		No. of storey	RC band N	ot more than one plus l	habitable attic						
		No. or storey		ot more than one store	,	u					
_	Shape of House	Span of Wall	pan of Wall Not more than 12 times thickness of wall and not more than 4.5m.(14'9")								
2											
		Dranartian	Simple and regular sha	pe as square and recta							
		Proportion	The length is not more	than 3 times of its wid							
		Brick	Not using over-burnt, u	under-burnt and deform	ned bricks						
			Mud mortar	ree from organic mat ard materials.	terials, pebbles,						
		Mortar	St	trength is less than 1 o	cement : 6 sand						
3	Materials	ls Cement mortar mixture									
		Concrete	M15grade (1 cement: 2								
		Rebar	fy = 415 Mpa /500 Mpa	3							
		Timber	Hard wood								
		Continuous st		tarau							
4	Foundation	Depth below GL	750mm(2'6") for one s	•	h 550 (2/6/)						
			Soft≥750mm(2'8"),Medi		l≥550mm(2°6°°)						
		Started right f	rom the foundation	Timbe							
	Vertical		Rc		er member of						
5	member	Reinforcement	Placed at all corners, junctions of walls and	75mm(3") x 100mm	(4") for corner.						
	member		openings	Two member of 100mm(4") for open		1	_				
		Anchorage	60 times diameter of rei		-						
		Height from									
		GL	` '								
6	Plinth	Thickness	150mm(6")for medium a		for hard soil						
		Width	Not less than wall thickn	ess/350mm							

					Main: 4-12dia for 150mm(6"), 2- 12dia for 75mm(3") height Stirrups: 6mm dia. at 150mm(6"), Concrete cover of 25mm(1")	Main member : 2- 75mmx38mm connected with batten 50mmX38mm@500c/c						
-	Others:  a. At least four number of photographs with their number  b. Tentative drawings of building:											
				- G.	· Semaning.							
	c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction. Yes $\Box$ , No $\Box$											
[	it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.											
[	□ If v	was f	ound to b	e corrected/ı	retrofitted so correction	on order is given us	ing Anne	ex-6				
		d.	Acceptatis correc		iption provided agreei	ng that the technica	al details	during	inspection			
	Нс	ouse	owner/Be	neficiaries o	r representative name:	Sign	ature:					
	Re	elatic	nship with	n house own	er (In case of represent	cative):	Date:					
		e.	Submit f	or Approval o	of the technical inspect	ion:						
	M	OUD	-DLPIU Su	pervisor:								
	Na	ame.			Designa	tion:						
	Sig	gnati	ure		Date							
		f.	Approve	d by:								
		OUD esign		OLPIU	Supervision	Engineer						
	Sig	gnati	ure		Date							

## Annex-10.2 (D): Form for inspection and Certification for Category "C" building of Brick Masonry with Cement Mortar

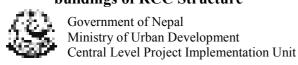


## First Inspection of BMC

				INSPECTION	ON SHEET	OF					
	BRICK	MASO	NRY W	ITH CEMEN	T MORT	AR F	OR F	IRST IN	<b>NSPECT</b>	ΓΙΟΝ	
					Date of In	spect	ion	DD.	- М М	- Y Y	ΥΥ
Name:					Grant Agre	emen	t No.				
Addres	ss:			-							
,	District	VDC/	Municipality	ward		tole		La	nd plot No		
									·		
If use fi	x design from desig	n catalogue,	,			Desig	gn No.		BM	IC-1.1	
If free o	lesign by house owr	ner		Technique and Construction material					1.1		
Fill cons	struction typology fr	om P.A for	m	Construction of roof and materials					2.1		
	cal Assistant		□YES,	□NO	Organizatio	on	□GoN	١, [	□NGO (		)
Trained Masons used □YE			□YES,	□NO	Soil type		□Har	d, [	JMedium	, □Soft	
MR	Category			Description			Comply	to MRs	Remar	ks	
No.	<b>.</b>								NO		
		Geologica	Geological fault or Ruptured Area								
		Steep Slo	pe > 20°								
		Landslide	susceptib	le Area							
1	Site selection located away from	River ban	ık and Wat	er logged Area							
		Rock-fall	Area								
		Liquefact	ion suscep	tible Area							
	away ITOITI	Filled Are	ea								
		No. of st	torey	Not more than two p	olus attic						•
	Shape of	Span of	Wall	Not more than 4.5m	(14'9")						
2	Snape of House	Size of r	oom	Not more than 13.5s	sq.m (145′ 4″sq.:	ft.)					
	House	Proporti	ion	Simple and regular s	hape as square a	and rect	angular				
		Пороги	1011	The length is not more than 3 times of its width							
		Brick		Over burnt, under burnt and deformed brick shall not be used.							
		Mortar		Strength more than 1 cement : 6 sand mixture							
3	Materials	Concret	е	M20grade (1cement: 1.5sand: 3aggregate)							
		Rebar		fy = 415 Mpa /500 Mpa							
		Timber		Hard wood							
		Continu	ous strip 1	footing							
		Depth b	elow GL	800mm (2'8") for or storey	ne storey, 900m	nm (3')	for two				
4	Foundation		1 storey	Soft:>650mm (2'2"),	Medium:>550n	nm (1'10	0"),				
		Base	1 Storey	Hard:>550mm (1'10' Soft:>900mm (3') , N		∞ /2/2″\					
		Width	2 storey	Hard:>550mm (1'10'		11 (2 2 ),	,				
		Started	right from	the foundation							
5	Vertical	Placed a	it all corne	ers, junctions of w	alls and oper	nings					
5	member	Reinford	ement	12mm for one store	y, 16mm for two	storey					
		Anchora	ige	60 times diameter of	f reinforcement						
		Height f	rom GL	Not less than 300mn	` ,						
		Thicknes	SS	150mm (6") for med hard soil	ium and soft soi	il. 75mm	n(3") for				
6	Plinth	Width		Not less than wall th			r one				
		vviatii		storey /350mm (1'2' Main: 4-12dia for 15			75mm				
		Reinford	ement	(3") thick		uia IUI i	, 3111111				
				Stirrups: Emm dia at	+ 1EOmm			I		I	

				Concrete cover of 25mm					
		Others:							
	a. At least four number of photographs with their number								
	b. Tentative drawings of building:								
	C.			ption of the under co	onstructed house,	, is it satis	factory	to give permit	
		for the f	urther constr						
		1.41	1 .1 .	Yes ☐ ,					
				pection of the first	•				
an	a VDC/ I	viunicipali	ty it is certifie	ed for necessary pro	cedures of disburs	sement o	i secono	ı trancne.	
	☐ If was found to be corrected/retrofitted so correction order is given using Annex-6								
	d. Acceptation of Description provided agreeing that the technical details during inspection								
	u.	is correc		ption provided agre	eing that the teel	iiiicai det	lans dui	ng mspection	
	House	owner/Be	eneficiaries or	representative nam	e:	Signature	·······		
	Relatio	nship wit	h house owne	er (In case of represe	ntative):	Date	·		
	e.	Submit f	or Approval c	of the technical inspe	ection:				
	MOUD	-DLPIU Su	pervisor:						
	Name.			Desigr	nation:				
	Signat	ure		Date.					
	f.	Approve	ad hv:						
	1.	Approve	.u by.						
	MOUD	)	DLPIU	Supervision	Engineer				
	Design	ation:							
	Signat	ure		Date.					
	5.61140			Date.					

## Annex-10.2 (E): Form for inspection and Certification for category "C" buildings of RCC Structure



# First Inspection of RCC Buildings (Catetory-C)

	Inspection sheet												
		RCC	Building	s FOF	R FIRST I	NSP	ECTIC	N					
					Date of Ir	spect	ion						
Name:					Grant Agre								Г
Address	s:				-								
	District	VDC/Municipali	ty	ward		tole			Land plot No				
If use fix	design from design of	atalogue,				Desig							
If free de	esign by house owner	r		Techni materi	que and Cons	tructio	n						
Fill const	truction typology from	m P.A form			uction of roof	and							
				materi									
	al Assistant	Organizat			Organizati	on	□GoN,		□NGO (				
Trained	Masons used	□YE	s, □N	0	Soil type		□Har	d,	□Mediu	ım,	L	]Soft	
MR								Compl	y to MRs				
Nº	Category		Description				-	YES	NO		Rer	narks	
142		Geological fault	rea										
		Steep Slope > 20	•										
		Landslide suscep	Landslide susceptible Area										
1	Site selection	River bank and V	Vater logged A	\rea									
	located away from	Rock-fall Area											
	away iroin	Liquefaction susc	ceptible Area										
		Filled Area											
		Storey	Limited up to	o 3 floor									
		bay	Two to six										
		Area	Less than 10 13.5 sq m or		nd area in betw	een 4 pil	lars						
2	Shape of	Height	Less than 11										
•	House	Height of floor	Height of flo	or from 2.	75m to 3.35m								
		Shape	Square or re	ctangular									
		Ratio	Length less t	han 3 time	es the breadth					1			
		Mortar	1:6										
3	Materials	Concrete	M 20 Grade	(1:1.5:3)									
		Rebar	fy = 415 Mpa	a /500 Mp	a								

		Depth	At least !	5 ft				
		·	Corner	Loose soil >2.2 m Soft soil > 1.5 m Medium Soil > 1.25m Hard Soil > 1.2m				
4	Foundation	Width of Foundation	Front	Loose soil >2.4 m Soft soil > 1.65 m Medium Soil > 1.4m Hard Soil > 1.1m			] [	1
				Loose soil >3 m Soft soil > 2.1 m Medium Soil > 1.7 m Hard Soil > 1.5 m				
		Rebar						
		Depth	400 mm other sid	in middle and 300mm in les.				
		Beam	Minimur	n 9"X9" and 4-12 revars		]		
		Height	At least	450 from GL				
5	Plinth beam	Size	9" X 9"					
)	Plinth beam	Rebar	4-12mm	and 8 mm rods in 6 inches		]		
		Connection	Not 50 %	ó overlap				
		The pillar shou	ıld be alig	ned in one line				
		Size	12 " X 1	2 "				
6		Rebar	Ground and first floor 4-16 + 4-12 mm and third floor 8-12mm			]		
	6 Pillar	Ring	Edge and joints 4 inch and 6 inch in others , 8 mm			<b>_</b>		
		Joints		niddle leaving 2 ft from edge more than 50 % and lap of a.		<b>.</b>		
		t four number drawings of bu		ographs with their number				
	for the fur	ther construct	ion. Yes [	under constructed house, is  , No  :he first inspection so the c			·	
	•	-		sary procedures of disburse				
□ ı	If was found to be	corrected/retr	ofitted so	correction order is given (	usin	ıg Ar	nnex-6	

is correct:							
House owner/Beneficiaries or	representative nar	me:Signature:					
Relationship with house owne	er (In case of repres	entative):Date:					
e. Submit for Approval of	of the technical insp	pection:					
MOUD-DLPIU Supervisor:							
Name	Desig	gnation:					
Signature	Date	2					
f. Approved by:							
MOUD DLPIU Designation:	·	Engineer					
Signature	Date	2					

d. Acceptation of Description provided agreeing that the technical details during inspection

#### Annex-11: Correction/ Retrofitting Order and Inspection form



#### **Government of Nepal**

#### **Ministry of Federal Affairs and Local Development**

......VDC/Municipality Office

#### **Correction/ Retrofitting Order and Inspection form**

construction on (Date) it is reco	es, after the detail inspection of the building under mmended that the building under construction of according to the minimum requirements and do not coof level.
Name of house Owner/beneficiary Agreement Serial Number: Citizenship Number:	
Floor/ Roof typology no/typology:	tisfactory, so it is recommended to follow below
Retrofitting order	Status after retrofitting

g.	Tentative	drawings of b	uilding after correcti	on
L	۸ <b>۲</b> ۲ ۲ ا		:	
		er construction		structed house, is it satisfactory to give permit for
			Yes	, No□
	-	_	•	t inspection so the construction can move ahead ocedures of disbursement of second tranche.
If wa	as found to	be corrected	/retrofitted so corre	ection order is given using Annex-6
	Acceptation correct:	on of Descript	tion provided agreei	ng that the technical details during inspection is
Hou	use owner/	Beneficiaries (	or representative na	me:Signature:
Rela	ationship v	vith house ow	ner (In case of repres	sentative):Date:
j.	Submit fo	r Approval of t	the technical inspect	ion:
		·		
				gnation:
Sign	nature		Dat	e
k.	Approved	by:		
MO Des		DLPIU	Supervision	S
				e
٠.				***************************************

#### Annex 12: Inspection for under construction house



#### **Government of Nepal**

#### **Ministry of Urban Development**

**Central Level Project Implementation Unit** 

#### **Technical Inspection Sheet for Construction**

(If the house under construction is found completely different than the approved technologies)

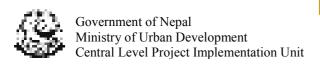
Houseowner /		me, surname	•	Grant a	greement no
Address: VDC/Municipa	District:				
no:	<u></u>				
Number 2. Status     Under construction construction construction up     Construction up     3. Descrip		n:	 		
Tentitive	depth	of		(Below	ground
level): Tentitive			m/ft/inch width		of
				m/ft	_
Height	of	fou		above	ground
	ption of ground flo				
Construction technique:					
•••••					

Detail
description:
5. Description of roof in ground floor:
Materials:
Construction
technique:
Detail
description:
6. Description of first floor:
Materials:
······································
Construction
technique:
Detail
description:
7. Description of roof:
Materials:
Construction
technique:
Detail
description:
0 04
8. Others:
g. At least four number of photographs with their number
h. Tentative drawings of building:

9.	After the detail	ruction.	e under constru Yes		is it satisfactory	/ to give permit for
	vas passed through C/ Municipality it i					n can move ahead econd tranche.
If w	vas found to be cor	rected/retrofit	ted so correction	on order is g	ven using Anne	ex-6
10.	Acceptation of D correct:	escription prov	vided agreeing	that the tech	nnical details d	uring inspection is
Ηοι	use owner/Benefic	iaries or repre	sentative name	·	Signature:	
Rel	lationship with hou	ise owner (In c	ase of represen	tative):	Date:	
11.	. Submit for Appro	val of the techi	nical inspection	·		
MC	DUD-DLPIU Supervi	sor:				
Nar	me		Designa	ntion:		
Sign	nature		Date			
12.	. Approved by:					
	OUD DLPIU	J Supe		Engineer		
Sign	nature		Date			

Annex- 13: Forms for technical inspection and Certification of buildings after construction up to roof level(Technical Inspection-2)

Annex- 13.1: Forms for technical inspection and Certification of category "A" and "B" buildings (Technical Inspection-2)



## RCC (Category A and B) Second Inspection

Inspection Sheet								
	Second I	nspection				A an	d B) Buil	dings
	<u> </u>	пэрссион	01 110			, t all	a b, ban	411163
				Date of Inspec			1	
Name				Grant Agreeme	nt No.			
Addres	SS District	VDC/Municipality		ward	tole		Land plot No	
If use fix design from design catalogue,				Desig	n No.			
If free de	esign by house owner			and Construction				
Fill const	truction typology fron	n P.A form	material Construction	on of roof and mate	rials			
Techni	ical Assistance	□Yes	□No	Organization	□Go	DN.	□NGO (	
	d Masons Used	□Yes □		Soil Type		□Hard,	□Mediun	n. □Soft
				,,,				,
MR no	Category		Descripti	escription			ording to ling permit	Remarks
110	110						5}g	
		No of storey						
	Shape and	No of bays						
		Area						
1	size of	Total height						
_	Building	Height of floor						
		Shape						
		Length						
		Breadth						
		Mortar						
2	Materials	Concrete						
		Rebar						
		In same line						
		Short column						
3	Pillar	Size						
3	rillai	Rebar						
		Ring						
		Joints						
		Position						
4	Beam	Size						
		Dobor						

	Ring		
	Joints		

	Interest of the same	Size of beam should be less than pillar					
5	Joint of beam and pillar	Joint					
	and piliai	Ring					
		Position of wall					
		Wall straight or not					
	NI m m	Joints missed or not					
6	Non structural wall	Width					
	Structural wall	Joints					
		Sill Band					
		Lintel Band					
		Level					
		Openings					
-	Floor	Size					
7	Floor	Rebar					
		Cover					
		Overhang					
	a. At least four number of photographs with their number     b. Tentative drawings of building:						
□ it w	for the fur	letail description of the under constructed how ther construction. Yes , No , gh the inspection so the construction can mo		·			
		ry procedures of disbursement of third tranch					
	☐ If was found to be corrected/retrofitted so correction order is given using Annex-6						
	d. Acceptation of Description provided agreeing that the technical details during inspection is correct:						
Но	use owner/Ben	eficiaries or representative name:	Signatuı	re:			
Rel	ationship with I	nouse owner (In case of representative):	Dat	e:			
		Approval of the technical inspection:					
MC	MOUD-DLPIU Supervisor:						

Name		Desig	nation:
Signature		Date	
f. Appro	oved by:		
MOUD Designation:		Supervision	Engineer
Signature		Date	

# Annex- 13.2: Forms for technical inspection and Certification of category "C" buildings after the construction of the plinth (Technical Inspection-2)

# Annex-13.2(A): Form for inspection and Certification for category "C" buildings of Stone Masonry with Mud Mortar

٧	Government of Nepal Ministry of Urban Development Central Level Project Implementation	Second	Inspection	of SMM
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			INSPE	CHO	N SHEET OF								
	STONE	MASONRY V	VITH MUI	D M	ORTAR FC	R SECON	ID IN	SPE	CTIC	N			
					Date of Inspe	ction	D D	- 1	и м	-	ΥΥ	′ Y	/ Y
Name:	:				Grant Agreeme	ent No.							
Addres	ss:												
	District	VDC/Municipality	wa	ard	tole		Land	d plot No					
	x design from desig		Design No.					SMM					
	design by house owr struction typology fi		Technique and Construction material  Construction of roof and materials					1.1 2.1					
		□NO		Organization	□GoN,		NGO		_			_	
	d Masons used		□NO		Soil type	□ Hard,		Medi	`		Soft		
		,					·						
MR	Cata		D				Com	ply to	MRs		D		
No.	Category		Descr	ription			YES		NO		Rema	arks	
		No. of storey	RC band Timber band	+	nore than one plus nore than one store								
		Span of Wall	Not more than	12 time	es thickness of wal								
2	Shape of	Size of room	than 4.5m (14's		/1 45/4" ft)								
House		Height of wall	Not more than 13.5sq.m (145'4"sq.ft)  Not be more than 3.0m (9'10").				븝		=				
		-			e than 1.8m (5'11"	)							
		Height of attic			e than 1.0m(3'10' akable soft stone	')							
		Stone		>50mm(	(2"),length/Breadth								
			Mud mortar	Free from organic materials, pebbles, hard materials.			_		_				
3	Materials	Mortar	Cement Strength is not less than 1 cement : 6										
Ū	.viateriais	Concrete		mortar sand mixture M15grade (1 cement: 2 sand: 4 aggregate)									
		Rebar	fy = 415 Mpa /5			,							
		Timber	Hard wood										
			RC		Timb								
	Mantiaal	Reinforcement	Placed at all co	orners,	Hard wood. Or 75mm (3") x 10								
5	Vertical member	Reinforcement	junctions of wa openings	lls and	corner. Two member o	f 75mm/3") x							
	member		ореннь		100mm(4") for								
		Anchorage	60 times diame	eter of re	einforcement	-							
		layering	Interlocked at of Avoid vertical jo		•								
		Thickness	Not less than 3										
		Through stones	Not more that horizontally.	an 600	mm (2'), vertica	ally 1.2m (4')							
7	Walls	Mortar Joint	· ·	20mm(0	0.8") and less than	10mm (0.4")							
		Buttresses		n the w	vall length is long	er than above							
		Gable wall	mentioned.  Using light mat	erial									
	Dog				ast 600 mm (2' )or	1/4 <sup>th</sup> of height							
8	Doors / windows	Location	of opening.						<u> </u>				
	willdows	Total length	Not less than 3	0% of th	ne wall length for si	ngle storey.							

		Distance	1400 1033 (11411 000 111111 (2 ).				1
			Rc	Timber			
		Sill band	Continuous band through all walls Not less than 75mm (3") thick.				
	Horizontal	Lintel band	Not less than 75mm(3") thick,if opening width<1.0m(3'3") and masonry height above opening 0.9m.(3') Not less than 150mm(6") thick,if opening width<1.5m(5') and masonry height above opening 1.2m(4')	Main member, 2-75mmX38mm			
9	band	stitch	At corners and junctions, length>1.2m (4') Not less than 75mm (3") thick	properly connected with batten, 50mmX30mm			
		Roof band	Continuous band through all walls. Not less than 75mm(3") thick	@ 500c/c.			
		Reinforcement	Main: 4-12dia for 150mm (6"), 2- 12dia for 75mm (3") height Stirrups: 6mm dia. at 150mm (6"), Concrete cover of 25mm (1")				
		Overlap	60 times diameter of reinforcement				
Others	a. At least t	four number of e drawings of bu	photographs with their nu uilding:	ımber			
	for the f	urther construct	Yes 🗌 , No				
	•		cion so the construction can be disbursement of third so		ad and V	DC/ Mu	nicipality it
□ If v	vas found to b	e corrected/retr	ofitted so correction orde	er is given usi	ng Anne	ex-6	
	d. Acceptatis correc	•	on provided agreeing that	the technica	al details	during	inspection
Но	ouse owner/Be	eneficiaries or re	presentative name:	Signa	ature:		
Re	lationship with	n house owner (	In case of representative):		Date:		
	e. Submit f	or Approval of t	he technical inspection:				
М	OUD-DLPIU Su	pervisor:					
Na	ıme		Designation:				

Signature		Date	2
f. Appro	ved by:		
MOUD Designation:	DLPIU	Supervision	Engineer
Signature		Date	2

# Annex-13.2 (B): Form for inspection and Certification for category "C" building of Stone Masonry with Cement Mortar



	INSPECTION SHEET OF									
	STONE	MASONRY W	ITH CEMENT	MORTA	R FO	OR SEC	CONDI	NSPEC	TION	
				Date of Ins	spect	ion	DD-	- M M	- Y Y Y	Υ Υ
Name:				Grant Agree	ement	t No.				
Addres	ss:									
	District	VDC/Municipality	ward		tole		Land plot No			
If use fi	x design from desi	ign catalogue,	Design No.				SMC	-1.1		
	lesign by house ov		Technique and Construction material				1.			
	struction typology			of roof and materials				2.	1	
	cal Assistant	□YES,	□NO	Organizatio	n	□GoN,		NGO (		)
Traine	d Masons used	□YES,	□NO	Soil type		□Hard,	Ш	Medium,	□Soft	
MR	Category		Description	1				to MRs	Remarks	
No							YES	NO		
		No. of storey	Not more than two plu							
	Shape of	Span of Wall Size of room	Not more than 4.5m(14							
2	House		Not more than 13.5sq.							
	Floor to Ridge: Not more than 1.8m/6')									
		Height of Attic	Floor to Eave: Not mor	loor to Eave: Not more than 1.0m(3'3")						
		Stone	Avoid round, easily bre Size: Thickness>50mm			)				
3		Mortar	Strength is not less tha							
	Materials	Concrete	M20grade (1cement: 1	5sand: 3aggrega	ate)					
		Rebar	fy = 415 Mpa /500 Mpa	a						
		Timber	Hard wood							
	Vertical	Placed at all corne	rs, junctions of wall	ls and openin	gs					
5	member	Reinforcement	12mm for one storey, 16mm for two storey							
	Пешре	Overlap	60 times diameter of re	einforcement						
		Layering	Interlocked at corner a Avoid vertical joint and	-						
		Thickness	Not less than 350mm(1							
_		Mortar joint	Not more than 20mm(	0.8") and less tha	an 10m	m(0.4")				
7	Walls	Through stone	Not more than 6 horizontally	600mm(2') vert	ically,	1.2m(4')				
		Buttresses	Provided for the longer	r wall						
		Gable wall	Light weight material							
		Location	Away from corner at le	ast 600mm(2')						
8	Doors/ Windows	Total length	Not less than 50% and and two storey	42% of the wall	length	for single				
	Williaows	Distance	Not less than 600mm(2	2')						
		Sill band	Continuous band throu Not less than 75mm(3"							
9	Horizontal band	Lintel band	Continuous band throu Not less than 75mm(3 and masonry height ab Not less than 150mm(6 and masonry height ab	3") thick, if open bove 0.9m(3") 5")thick, if openir						
		Stitch	At corners and junction Not less than 75mm(3"	, ,	4′)					
		Roof band	Continuous band throu							

	Reinforcement	Main: 4-12dia for 150mm( height, Stirrups: 6mm dia. @ Concrete cover of 25mm(1")				
	Overlap	60 times diameter of reinforce	cement			
	t four number o ve drawings of l	f photographs with	their number			
b. Tentati	ve drawings of i	ounding:				
for the $\Box$ it was passed th	further constru	otion of the under co ction. Yes  , ection so the constru es of disbursement o	No 🗆 action can move ah			
☐ If was found to	be corrected/re	trofitted so correct	on order is given u	ısing Anı	nex-6	
d. Accept is corre		tion provided agree	ing that the techni	cal deta	ils durin	g inspection
House owner/E	Beneficiaries or i	representative name	:Sig	nature:.		
Relationship wi	th house owner	· (In case of represer	itative):	Date:		
		the technical inspec				
MIOUD-DLPIU S	supervisor:					
Name		Designa	ation:			
Signature		Date				
f. Approv	ed by:					
MOUD  Designation:		Supervision	Engineer			
Signature		Date				

# Annex-13.2 (C): Form for inspection and Certification for category "C" building of Brick Masonry with Mud Mortar



			INSPEC	CTION SHEET O	F				
	BRICK	MASONRY \	MITH MUD	MORTAR F	OR SECON	D INSF	PECTIO	N	
				Date of Inspe	ection	DD-	м м	- Y Y Y	Υ
Name:				Grant Agreem	ent No.				
Addres	ss:	s:							
	District	VDC/Municipality	war	d 1	tole	Land plo	ot No		
If use fi	x design from design	n catalogue,			Design No.		BMM	-1.1	
	lesign by house owr			Construction mater			1.:		
	struction typology fr		Construction of roof and materials				2.:	1	
·		□YES,	□NO	Organization	□GoN,	□NGC	•		
Traine	Trained Masons used ☐YES, ☐NO Soil type ☐Hard,		☐ ☐ Hard,	□Med	ium,	□Soft			
MR	Category		Descri	ption			to MRs	Remarks	
No.			RC band	Not more than one p	lus habitable attic	YES	NO		
		No. of storey	Timber band	Not more than one s					
	cı c	Span of Wall	Not more than 12 t 4.5m .(14'9")	imes thickness of wall	and not more than				
2	Shape of	Size of room	, ,	5sq.m (145′4″sq.ft)					
House		Height of wall	Not be more than						
		Height of attic	_	more than 1.8m (5'11	*				
				more than 1.0m(3'10	,				
		Brick		nt, under-burnt and de	ganic materials,				
		Mortar	Mud mortar	pebbles, hard mat	erials.				
3	Materials	- Wiertan	Cement mortar	Strength is less the sand mixture	nan 1 cement : 6	_	_		
		Concrete	M15grade (1 cement: 2 sand: 4 aggregate)						
		Rebar	fy = 415 Mpa /500	Мра					
		Timber	Hard wood						
			Rc Placed at all	Tim Hard wood. One m					
_	Vertical	Reinforcement	corners, junctions	(3") x 100mm (4")					
5	member		of walls and	Two member of 75	` '				
		Anchorage	openings 60 times diameter	100mm(4") for op	enings -				
		layering	Interlocked at corn						
		, ,	Avoid vertical joint						
		Thickness	Not less than 35mr	. ,					
7	Walls	Mortar Joint		nm(0.8") and less than					
		Buttresses	mentioned.	ne wall length is lo	nger than above				
		Gable wall	Using light materia	I					
	Danie /	Location	Away from corner	at least 600 mm(2')					
8	Doors /	Total length	Not less than 30%	of the wall length					
	windows	Distance	Not less than 600 r	mm(2')					
				RC	Timber				
	Horizontal	Sill band	Continuous band t Not less than 75mr	-	Main member,				
9	band		Not less than 75mr	m (3") thick, if	2-75mmX38mm properly				
		Lintel band	opening width<1.0 masonry height ab	m(3′3″) and ove opening 0.9m.	connected with				
			Not loss than 1E0m	m/6"\ thick if	batten,	l	ı	i	

			opening width<1.5m and masonry height above opening 1.2m(4')	50mmX38mm @ 500c/c.			
		stitch	At corners and junctions, length>1.2m(4') Not less than 75mm(3") thick				
		Roof band	Continuous band through all walls. N less than 75mm(3") thick	ot			
		reinforcement	Main: 4-12dia for 150mm (6"), 2-12d for 75mm(3") height Stirrups: 6mm dia.@ 150mm (6")c, Concrete cover of 25mm (1")				
		overlap	60 times diameter of reinforcement				
Others	a. At least f	four number of e drawings of b	f photographs with their puilding:	number			
	b. Tentative	e drawings of b	ouilding:				
		e detail descrip urther constru	tion of the under constru	cted house, is i	t satisfac	tory to g	şive permit
	TOT LITE IN	artifici construi	Yes $\square$ ,	No□			
			ction so the construction es of disbursement of thi		ad and V	'DC/ Mu	nicipality it
□ If v	vas found to be	e corrected/re	trofitted so correction or	der is given us	ing Anne	ex-6	
	d. Acceptat	-	tion provided agreeing t	nat the technic	al details	s during	inspection
Но	ouse owner/Be	neficiaries or r	epresentative name:	Sign	ature:		
Re	lationship with	n house owner	(In case of representativ	e):	.Date:		
	e. Submit f	or Approval of	the technical inspection:				
M	OUD-DLPIU Su	pervisor:					
Na	ıme		Designation				
Sig	gnature		Date				
	f. Approve	d by:					
			Supervision Eng	neer			
Sig	gnature		Date				

# Annex-13.2 (D): Form for inspection and Certification for category "C" building of Brick Masonry with Cement Mortar

٩	Government of Nepal Ministry of Urban Development Central Level Project Implementation Un	Second	Inspection	of BMC
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					INSPECTIO	ON SHE	ET O	F						
	BR	ICK M	<b>IASONRY W</b>	ITH C	EMENT	MOR <sup>-</sup>	ΓAR	FOR SE	COND	INSPE	CTION			
						Date o	f Insp	ection	D D	- M N	1 - Y	ΥΥΥ		
Name	:					Grant A	greer	nent No						
Addre	ss:													
		District	VDC/Mun	icipality	ward tole				Land plot No					
			r catalogue,		Design No.						IC-1.1			
	design by h				Technique a						1.1			
			om P.A form	NO	Constructio		and ma				2.1			
	ical Assist d Masons		,	NO NO	Organizatio	on		□GoN,		edium,	□Soft	)		
Traine	u iviasoris	useu	□YES, □	IYES, □NO Soil type □Hard,				ШΜ	ealum,	⊔SOIL				
MR									Comply	to MRs				
No	Cate	gory			Description				YES	NO	Ren	narks		
			No. of storey	Not mor	re than two plus	attic								
			Span of wall		re than 4.5m (14									
2	Shap	e of	Size of room	Not mor	re than 13.5 sq.	m. (145'4"	sq.ft.)							
House		ıse	Height of wall	Floor height shall not be more than 3.0m (9'10")										
			Height of Attic		oor to ridge: Not more than 1.8m (6'), oor to eave : Not more than 1.0m(3'3")									
			Brick		ot using over-burnt, under-burnt and deformed brick									
			Mortar		h is not less than									
3	Mate	rials	Concrete	M20gra	de (1cement: 1.	5sand: 3ag	gregate	)						
			Rebar	fy = 415	Mpa /500 Mpa									
			Timber	Hard wo	ood									
	Mant	:!	Placed at all cor	ners, jur	nctions of wa	alls and c	penin	gs						
5	Vert		Reinforcement	12mm f	or one storey, 1	6mm for t	vo store	ey .						
	mem	iber	Overlap	60 times	s diameter of re	inforceme	nt							
			layering		ked at corner ar ertical joint and	,								
7	Wa	lls	Thickness	350mm	ss than 230mr (1'2") and 230 or of two storey	mm(9") fo	r groun							
·			Mortar Joints	Not mor	re than 20mm a	nd less tha	n 10mn	١						
			Buttresses	Provide	d for the longer	wall.								
			Gable wall	Lightwe	ight materials									
	<b>D</b>		Location	· ·	om inside corne			•						
8	Doo wind	•	Total length		s than 50% and nd two storey	42% of t	he wall	s length for						
			Distance	Not less	than 600mm (2	<u>'</u> ')								
	Horiz	ontal	Sill band		ous band throu than 75mm (3"	-								
9	baı		Lintel band	Not less	ous band throu s than 75mm nd masonry hei	(3"), if op								

			Not less than 150mm (6"), i 4'1") and masonry above ope				
		Stitch band	At corner and junction, no				
		Roof band	length<1.2m(4') Continuous bands through al	l walls,			
		NOOI Dallu	Not less than 75mm (3")  Main: 4-12mm dia for 150n	om (6") 2 12mm dia for	Ц	Ц	
		Reinforcement	75mm (3"), stirrups:6mm dia Concrete cover of 25mm (1")				
		Overlap	60 times diameter of reinford	cement.			
Other	a. At least		f photographs with	their number			
	b. Tentativ	e drawings of b	ouilding:				
		e detail descrip urther constru			is it satis	factory	to give permit
□ . <u>.</u> .			Yes ,		la a a al a sa	-1.400.44	N 4 : - :   : ± : ±
			ction so the constru		head an	a VDC/ I	Viunicipality it
is cert	ified for neces	ssary procedure	es of disbursement of	of third tranche.			
□ If	was found to b	e corrected/re	trofitted so correct	on order is given	using A	nnex-6	
	d. Accepta		tion provided agree	ing that the tech	nical det	ails dur	ing inspection
Ш	ouse owner/Re	aneficiaries or r	epresentative name	,. C	ignature		
111	Juse Owner/ De	rienciaries or i	epresentative name		ignature		, • • • • • • • • • • • • • • • • • • •
Re	elationship wit	n house owner	(In case of represer	itative):	Date	:	
	e. Submit f	or Approval of	the technical inspec	tion:			
M	OUD-DLPIU Su	pervisor:					
N	ame		Design	ation:			
Si	gnature		Date				
	f. Approve						
			Supervision	Engineer			

Signature...... Date.....

#### Annex-13.2 (E): Form for inspection and Certification for category "C" building of RCC Structure

Government of Nepal Ministry of Urban Development Central Level Project Implementation Uni
Central Ecvel Froject Implementation On

Beam

in the beam

### Second Inspection of RCC Buildings (Category-C)

		<i>J</i>				<u>unc</u>	<u> </u>	3 C	att	<u> 50</u>	<u>' I y </u>	
				Inspe	ection s		_					
		R	CC Buil	dings F	OR FIRST	INSF	PECTIC	N				
					Date of Ins	pection						
Name:			Grant Agreement No.									
Address	District	VDC/Mu	inicipality	v	vard	tole		La	and plot No			
, , , , , , ,												
If use fix	design from design (	catalogue,			D	esign No.						
If free de	esign by house owne	r			e and Construc	tion						
Fill const	truction typology fro	m P.A form		material Construct	ion of roof and							
				materials								
Technic	al Assistant	Organ	nization		Organizati	□GoN	ι, [	⊐NGO (				
Trained	Masons used		YES,	□NO	on Soil type		□Hard,		Medium,		□Soft	
			,		/ 1							
MRNº	Category		Γ	Description				mply to M			Remarks	
	outage. y	Chaman	ı				YES	N	_			
	Shape and size of Building	Storey	Limited up	to 3 floor								
		bay	Two to six	1000 sg ft and	d area in between 4				_			
		Area	pillars 13.5		area iii beeiiieeii							
1		Height	Less than 1	11m					]			
		Height of floor	Height of f	loor from 2.75	5m to 3.35m				]	<u></u>		
		Shape	Square or i	rectangular					]			
		Ratio	Length less than 3 times the breadth									
	Materials	Mortar	1:6									
2		Concrete	M 20 G	M 20 Grade (1:1.5:3)								
		Rebar	fy = 415 Mpa /500 Mpa									
	Pillar		The pillar should be aligned in one line									
		Short col										
		Size	12 " X 1				Ш		J			
3		Rebar	Ground and first floor 4-16 + 4-12						]			
			mm and third floor 8-12mm  Edge and joints 4 inch and 6 inch									
		Ring	_	in others , 8 mm					]			
					aving 2 ft from							
		Joints	edge and not more than 50 %			%						
			and lap of 60 X dia.									
		The joint	s of the b	oned		_	,					

		Size		X14 " and less than size of				
		Dobor	рп	pillar				
		Rebar	E4	go and joints 4 inch and 6 inch		Ш		
		Ring		ge and joints 4 inch and 6 inch others, 8 mm				
			Uŗ	oper rod to be connected in				
		Joints		iddle and lower rod after				
		Joines		aving 2 feet from edge and lap				
				60 dia.				
				should be less than pillar				
-	Joint of beam and pillar			be bent downwards and lower				
5				nt upwards lapping 60 dia				
				rings in the joints nstructed equally from two	Ц	Ш		
		sides	e co	instructed equally from two				
			uld l	oe straight				
		Joints mi						
		Width		0 mm or 110 mm				
	NI	Joints	<u> </u>	mm to 20 mm				
6	Non structural wall	6:11	М	inimum depth 75 mm and 2-		<del></del>		
	Structural wall	Sill		nm rebars should be connected				
		Band	to	pillar				
		Lintel		inimum depth 75 mm and 2-				
		Band		nm rebars should be connected				
			to	pillar				
	Floor	Level		Floor should not be in different levels				
		Openings	•	Maximum 25 %				
		Size		Minimum 125 mm				
7		Rebar		Minimum 8 mm rod 6 inch cc				
		Cover		Minimum 15mm				
				1 m maximum from center of	-			
		Overhan	g	pillar				
Others:								
				photographs with their numb	er			
	b. Tentative	drawings	of b	ullding:			-	
c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.								
	for the fur	ther cons	ıruc					
□ ··	1.1	1 11 .		Yes ☐ , No ☐		1 1,4504	A	
				ction so the construction can r		ead and VDC/ N	/iunicipality it	
is certif	led for necessa	ary proced	TULL	es of disbursement of third tran	iche			

If was f	ound to be corrected	d/retrofitted so corre	ection order is given using Annex-6
d.	Acceptation of Des	cription provided ag	reeing that the technical details during inspection
House	owner/Beneficiaries	or representative na	me:Signature:
Relatio	nship with house ow	ner (In case of repre	sentative):Date:
e.	Submit for Approva	al of the technical ins	pection:
MOUD	-DLPIU Supervisor:		
Name.		Desi	gnation:
Signati	ure	Dat	re
f.	Approved by:		
MOUD Design		Supervision	Engineer
Signatı	ure	Dat	re

## Annex-14: For grant disbursement of second/third tranche Recommendation form to be filled by the VDC/ Municipality and MOUD-DLPIU

**Government of Nepal** 

**Government of Nepal** 

MOFALDVDC/Municipality  Recommenda				MOUD DLPIU,							
				ation form fo	or grant o	lisburseme		che			
Name of Bank:			Branch Name: Date				Date:	e:			
SN	MIS_Batch	PA_NO	Name of Recipient	VDC/MUN	Ward	Citz_No	Mobile	A/C No	Tranche	Amount	Remar
1											
2											
								_			
Prepared by VDC/Municipality			Certified by VDC/Municipality					Recommende	d by MOUD-	DLPIU	
Name:			Name:				Name:				
Designation:			Designation:		Designation:						
Name of VDC/ Municipality:			Name of VDC/ Municipality: Name of VDC/ Municipality:					ty:	:		

Annex- 15: Forms for technical inspection and Certification of construction completed buildings (Technical Inspection-3)

Annex- 15.1: Forms for technical inspection and Certification of category "A" and "B" buildings (Technical Inspection-3)

nit

## RCC (Category A and B) Final Inspection

	hispection sheet												
	Final In	spection c	of RCC	(Cat	egor	γА	and	dB)	Build	ling	S		
				Date of	Inspecti	ion							
Name				Grant A	greement	No.							
Addres	SS District	VDC/Municipality		ward		tole			Land plot No				
If use fix	design from design ca	atalogue			Design	No							
	esign by house owner	Technique	and Constr		110.								
	•	material											
FIII COIISI	truction typology fron	TP.A IOIIII	Construction	on of roof a	nd materi	als							
Techni	cal Assistance	□Yes	□No	Organia	zation	□G	οN,	, □NGO (					
Traine	d Masons Used	□Yes□	No	Soil Ty	эе		□Hard	l,	□Mediu	m,	□So	ft	
MR							According to						
no	Category		Descripti	ion				lding	permit		Remar	ks	
0							Yes		5}g				
	_	No of storey											
		No of bays											
		Area											
1	Shape and size of	Total height											
-	Building	Height of floor											
	Dullullig	Shape											
		Length											
		Breadth											
		Mortar											
2	Materials	Concrete											
		Rebar									-		
		In same line											
		Short column											
_		Size											
3	PIllar	Rebar											
		Ring											$\exists$
		Joints											
		Position											
4	Beam						=			1			

Rebar		
Ring		
Joints		

	Joint of beam	Size of beam should be less than pillar			
5	and pillar	Joint			
	and pinai	Ring			
		Position of wall			
		Wall straight or not			
6	Non	Joints missed or not			
	structural wall	Width			
		Joints			
		Sill Band			
		Lintel Band			
		Level			
7		Openings			
	Floor	Size			
	11001	Rebar			
		Cover			
		Overhang			
•	least four numb	er of photographs with their number s of building:			
•	ter the detail de	escription of the under constructed house,		sfactory to giv	e completion
		Yes $\square$ , No $\square$ ugh the inspection of the third inspection sertificate from VDC/Municipality.		onstruction car	n be provided
		corrected/retrofitted so correction order is scription provided agreeing that the technical	_	•	ion is correct:
Н	ouse owner/Ben	eficiaries or representative name:	Sig	nature:	
Re	elationship with I	nouse owner (In case of representative):		Date:	
e) Su	bmit for Approv	al of the technical inspection:			
М	OUD-DLPIU Supe	ervisor:			
NI:	ame	Designation:			

	Signature		Dat	e
f)	Approved by:			
	MOUD  Designation:	DLPIU	Supervision	Engineer
	Signature		Dat	70

Annex- 15.2: Forms for technical inspection and Certification of category "C" buildings after completion of construction (Technical Inspection-3)

Annex-15.2(A): Form for inspection and Certification for category "C" buildings of Stone Masonry with Mud Mortar

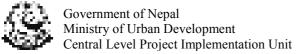
Ministry of Urban Development Central Level Project Implementation Unit	٩	Government of Nepal Ministry of Urban Development Central Level Project Implementation Unit
Central Level Project Implementation Unit		Central Level Project Implementation Unit

## Final Inspection of SMM

				INSPECTION	SHEET OF								
	STON	NE MAONRY V	NITI	H MUD M	ORTAR FOR I	FINA	AL IN:	SPE	CTIO	N			
				D	ate of Inspection		D D	-	ММ	-	Υ ١	/ Y	Υ
Nam	e:			G	rand Agreement No	0.							
Addr													
	District VDC/Municipality				tole		L	Land plot No					
If use	fix design from desig	n catalogue.	Design No. SMC-1.1										
	e design by house ow			Technique and	Construction materia				1.				
	onstruction typology f				f roof and materials				2.	1			
Technical Assistant Trained Masons used		DYES, DNG		Organization	☐GoN,				Пс-4		_)		
ıraır	ned Masons used	□YES, □N	)	Soil type	☐ Hard,	ЦΜ	ledium,		□Soft				
MR Category			Description			Com	ply to	MRs		Rem	arks		
Nº	,						YES		NO	Hemana			
7	Walls	Gable wall	Light	weight materials									
		Material	1	ght roof									
10	Roof	Connection		ember connected p	roperly  Diagonal bracing sha	all be							
Bracing For the consider				Diagonal bracing site	all be								
•	at least four nur	nber of photogr ngs of building:	aphs	with their n	umber								
□ It	c) After the detail description of the under constructed house, is it satisfactory to give completion certificate  Yes , No .  It was passed through the inspection of the third inspection so the construction can be provided building completion certificate from VDC/Municipality.												
∐ If	was found to b	e corrected/retr	ofitte	ed so correct	ion order is giv	en us	sing A	nnex	<b>&lt;-</b> 6				

a)	Acceptation of Description provided agreeing that the technical details during inspection is correct:									
	House owner/	Beneficiaries (	or representative na	ame:Signature:						
	Relationship w	ith house ow	ner (In case of repre	esentative):Date:						
e)	Submit for App	Submit for Approval of the technical inspection:								
	MOUD-DLPIU Supervisor:									
	Name		Des	signation:						
	Signature		Dat	te						
f)	Approved by:									
	MOUD Designation:	DLPIU	Supervision	3						
	Signature		Dat	ite						

## Annex-15.2 (B): Form for inspection and Certification for category "C" building of Stone Masonry with Cement Mortar

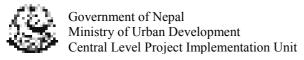


## Final Inspection of SMC

Name:  District  Note of Inspection  Date of I	MC-1.1 1.1 2.1
Name: Grand Agreement No. D D - M I Address:	MC-1.1
Name: Grand Agreement No.	MC-1.1 1.1
Address:	1.1
	1.1
District VDC/Municipality ward tole Land plot No	1.1
	1.1
If use fix design from design catalogue, Design No.	1.1
If free design by house owner Technique and Construction material	2.1
Fill construction typology from P.A form  Construction of roof and materials	1
Technical Assistant	)
Trained Masons used ☐YES, ☐NO Soil type ☐Hard, ☐Medium, ☐So	oft
MR No Category Description Comply to MRs	Remarks
YES NO	
7 Walls Gable wall Lightweight materials	
Material Use light roof   Connection All member connected properly	
For flevible diaphragm Diagonal bracing shall be	
Bracing Considered.	
Others:  a) At least four number of photographs with their number  b) Tentative drawings of building:	
c) After the detail description of the under constructed house, is it satisfactory to give certificate  Yes , No .  It was passed through the inspection of the third inspection so the construction ca building completion certificate from VDC/Municipality.  If was found to be corrected/retrofitted so correction order is given using Annex-6	

a)	Acceptation of Description provided agreeing that the technical details during inspection is correct:									
	House owner/	Beneficiaries or	representative nan	ne:	Signature:					
	Relationship w	vith house owne	er (In case of repres	entative):	Date:					
e)	Submit for App	oroval of the te	chnical inspection:							
	MOUD-DLPIU	MOUD-DLPIU Supervisor:								
	Name		Desig	nation:						
	Signature		Date	<u> </u>						
f)	Approved by:									
	MOUD Designation:	DLPIU	Supervision	=						
	Signature		Date	<b>.</b>						

## Annex-15.2 (C): Form for inspection and Certification for category "C" building of Brick Masonry with Mud Mortar

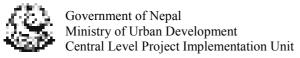


### Final Inspection of BMM

				ON SHEET OF						
	Brick	k MASONRY V	VITH MUD N	MORTAR FOR FINA	· ·		١			
				Date of Inspection	D D	- M M	- Y Y	<u>Υ</u>		
Name				Grand Agreement No.						
Addre	District	VDC/Municipality	ward	tole	Land	plot No				
	31001100	Voymanopancy	Wara		23170	piocito				
If use f	ix design from desig	n catalogue,		Design No.	No. BMM-1.1					
If free design by house owner Fill construction typology from P.A form			Technique and Construction material 1.1						_	
FIII CON	struction typology i	rom P.A form	Construction of roof and materials 2.1							
MR No	Category		Description	n	Comply	to MRs	Rema	rks		
7	Walls	Gable wall	Using light material						_	
		Material	Use light roof							
10	Roof	Connection	All member connecte							
		Bracing	For flexible diaphra considered.	agm, Diagonal bracing shall be						
b) Те	entative drawir	nber of photogr								
ce  It v buildir	rtificate was passed the ng completion was found to b	rough the inspec certificate from e corrected/retr	Yes  ction of the thi VDC/Municipa ofitted so corre	No No I rection so the color order is given unant the technical detail.	construct	ion can	be provid	ded		
Нα	ouse owner/Re	eneficiaries or re	nresentative n	ame: Sid	nature.					

	Relationship w	vith house owne	er (In case of repres	entative):Date:
e)	Submit for App	proval of the te	chnical inspection:.	
	MOUD-DLPIU	Supervisor:		
	Name		Desią	gnation:
	Signature		Date	2
f)	Approved by:			
		DLPIU	Supervision	
	Signature		Date	2

## Annex-15.2 (D): Form for inspection and Certification for category "C" building of Brick Masonry with Cement Mortar



### Final Inspection of BMC

				INSPECTIO	N SHEET OF					
	BRICK	MASONRY W			MORTAR FC	R FII	ΙΔΙ ΙΝ	SPECTI	ON	
	Briter	IVII ISOTUTE VE		CLIVILITI	Date of Inspection		D D -		- Y Y Y	
Name	:				Grand Agreement N			101 101		
Addre										
	District	VDC/Municipality		ward	tole		Land	plot No		
	ix design from design			I	Design			BMC		
	design by house owr estruction typology fr			·	nd Construction mater of roof and materials			1. 2.		
	ical Assistant	□YES, □N	IO	Organizatio			GO (	۷.	1	
	ed Masons used	□YES, □N		Soil type	☐ Hard,		edium,	□Soft		
				7,1			,			
MR	Category			Description			Comply	to MRs	Remarks	
No							YES	NO	Remarks	
7	Walls	Gable wall	+ -	weight materials						
		Material	+	ght roof						
10	Roof		Connection All member connected properly  For flexible diaphragm, Diagonal bracing shall be							
		Bracing		dered.	in, Diagonal bracing si	idii be				
b) Te	entative drawir	ngs of building:								
ce  It v buildir	ertificate was passed thr ng completion	rough the inspe certificate from	Yoction VDC/	es   of the thir  Municipali	d inspection so	the c	onstructi	ion can		
d) Ad	cceptation of D	Acceptation of Description provided agreeing that the technical details during inspection is correct:								

	House owner/Beneficiaries or representative name:Signature:Signature:									
	Relationship wi	ith house owne	r (In case of repre	sentative):Date:						
e)	Submit for App	proval of the tec	hnical inspection							
	MOUD-DLPIU Supervisor:									
	Name		Des	ignation:						
	Signature		Da	.e						
f)	Approved by:									
	MOUD Designation:	DLPIU	Supervision							
	Signature		Da	re						

## Annex-15.2 (E): Form for inspection and Certification for category "C" building of RCC Structure

Government of Nepal
Ministry of Urban Development Central Level Project Implementation Unit

# Final Inspection of RCC Buildings (Category-C)

	Inspection sheet														
	RCC Buildings FOR FINAL INSPECTION														
						Date of Ir	spection								
Name:						Grant Agre	•								
ivame:						No.									
Address	District	i	VDC/Mu	nicipality	W	ard	tole	•		Lai	nd plot No				
If use fix	design from	design cata	logue,				Design No.								
If free de	esign by hous	se owner			Technique material	and Constru	ction								
Fill const	ruction typo	logy from P	.A form			ion of roof ar	ıd								
			Organ	nization	materials	Organizati									
Technic	al Assistant	•	Organ	iization		on	□GoN	□GoN, □NGO (							
Trained	Masons us	ed		YES,	□NO	Soil type		□Hai	rd,		/ledium,		Soft		
MRNº	Catego	ory			Description					ply to MF		Re	emar	ks	
			Storey	Limited up	to 3 floor			YES		NO D					
		_	ay	Two to six	10 3 11001				-						
			-	Less than 1	en 4										
	Shape	and 📙	Area	pillars 13.5											
1	size o	J	leight	Less than 1	.1m										
	Buildi	"Ъ	Height of floor	Height of floor from 2.75m to 3.35m						l					
		Shape Square		Square or r	uare or rectangular										
		F	Ratio	Length less	than 3 times	the breadth									
		ľ	Mortar	1:6											
2	Mater	ials	Concrete	M 20 G	irade (1:1.5:3)	)									
2	iviatei	F	Rebar	fy = 41	5 Mpa /500 M	1pa									
		1	he pillar	should b	e aligned	in one line	(I)								
		9	Short col	umn											
3	PIlla	r [5	Size	12 " X 1	.2 "										
J	I IIIai		Rebar			floor 4-16 or 8-12mn									

Ring							
			Ring				
Size			Joints	ed	ge and not more than 50 %		
Rebar   Rebar   Rebar   Rebar   Rebar   Rebar   Rebar   Rebar   Ring   Edge and joints 4 inch and 6 inch in others, 8 mm   Ring   Rebar   Ring   Edge and joints 4 inch and 6 inch in others, 8 mm   Ring   Rebar   Ring   Ring   Rebar   Ring   Ri			_		the beam should be positioned		
Ring			Size	_			
Seam			Rebar				
Size of beam should be less than pillar	4	Beam	Ring				
Sound of beam and pillar			Joints	mi lea	iddle and lower rod after aving 2 feet from edge and lap		
Floor   Floo			Size of be	eam	should be less than pillar		
At least two rings in the joints  Should be constructed equally from two sides  Wall should be straight  Joints missed or not  Width 230 mm or 110 mm  Joints 10 mm to 20 mm  Sill Band Sill Band Winimum depth 75 mm and 2-8mm rebars should be connected to pillar  Lintel Band Winimum depth 75 mm and 2-8mm rebars should be connected to pillar  Lintel Band Sill Winimum depth 75 mm and 2-8mm rebars should be connected to pillar  Level Floor should not be in different levels  Openings Maximum 25 %  Size Minimum 125 mm  Rebar Minimum 8 mm rod 6 inch cc  Cover Minimum 15mm  Overbang 1 m maximum from center of  Overbang 1 m maximum from center of	5						
Sides		allu pillai	At least t	wo	rings in the joints		
Non structural wall  Sill Band  Minimum depth 75 mm and 2- 8mm rebars should be connected to pillar  Lintel Band  Minimum depth 75 mm and 2- 8mm rebars should be connected to pillar  Level  Floor should not be in different levels  Openings  Maximum 25 %  Size  Minimum 125 mm  Rebar  Minimum 8 mm rod 6 inch cc  Cover  Minimum 15mm  Overhang  1 m maximum from center of				e co	nstructed equally from two		
Non structural wall   Sill   Band   Minimum depth 75 mm and 2-8 mm rebars should be connected to pillar   Intel Band   Floor should not be in different levels   Openings   Maximum 25 %   Size   Minimum 125 mm   Overhang   Immaximum from center of   Overhang   Immaximum from center of   Im			Wall sho	uld l	pe straight		
Non structural wall   Sill   Minimum depth 75 mm and 2-8 mm rebars should be connected to pillar							
Sill Band   Minimum depth 75 mm and 2-8mm rebars should be connected to pillar   Intel Band   Minimum depth 75 mm and 2-8mm rebars should be connected to pillar   Intel Band   Floor should not be in different levels   Intel Band   Intel Ba			Width	23	0 mm or 110 mm		
Sill Band   Minimum depth 75 mm and 2-8 mm rebars should be connected to pillar		Non	Joints	10	mm to 20 mm		
Band   Smm rebars should be connected to pillar	6		•	8n	nm rebars should be connected		
7 Floor   Cover   Cove				8n	nm rebars should be connected		
Size   Minimum 125 mm			Level				
7 Floor Rebar Minimum 8 mm rod 6 inch cc			Openings	s	Maximum 25 %		
Cover Minimum 15mm			Size		Minimum 125 mm		
Overhang 1 m maximum from center of	7	Floor	Rebar		Minimum 8 mm rod 6 inch cc		
Overhang			Cover		Minimum 15mm		

### Others:

a)	ı A	t	least	tour	num	ber o	t p	ho'	tograp	hs	with	their	num	bei
----	-----	---	-------	------	-----	-------	-----	-----	--------	----	------	-------	-----	-----

b)	Tentative drawings of building:

C)	certificate $\square$ , $\square$ , $\square$
	res , NO L  It was passed through the inspection of the third inspection so the construction can be provided ilding completion certificate from VDC/Municipality.
 d)	If was found to be corrected/retrofitted so correction order is given using Annex-6 Acceptation of Description provided agreeing that the technical details during inspection is correct:
	House owner/Beneficiaries or representative name:Signature:
	Relationship with house owner (In case of representative):Date:
e)	Submit for Approval of the technical inspection:
	MOUD-DLPIU Supervisor:
	Name
	Signature Date
f)	Approved by:
	MOUD DLPIU Supervision Engineer  Designation:
	Signature Date

### **Annex- 16: Building Completion Certificate**



#### **Government of Nepal**

### **Ministry of Federal Affairs and Local Development**

......VDC/Municipality Office

### **Construction Completion Certificate**

Under Inspection SOP for reconstruction of houses, after the detail inspection of the building under construction on (Date), it is certified that the building under construction was completed and technical inspection is also completed and this certificate is provided.
Name of house Owner/beneficiary
Survey Slip Number:
Citizenship Number:
Description provided during the application to survey the house:  Designed no (If design is selected from catalogue):  Flexible Design:  Wall/Column typology no/typology:  Floor/ Roof typology no/typology:
Inspection mobile team:
Head of inspection:  Signature:  Position:
Member: Date:
Acceptation of Description provided after technical supervision:
Houseowner/Beneficiaries or representative name, surname:
Relationship with houseowner(In case of representative):

### **Annex-17: Details of Construction completed Houses**



### **Government of Nepal**

### **Ministry of Federal Affairs and Local Development**

......VDC/Municipality Office

### **Details of Construction completed Houses**

District:													
VDC/ Mur	nicipaliy:												
Ward no:													
Serial No:	Beneficiary Name	Agreement Serial No.	Type of House	Date of completion Certiciate									
		<b>':</b>											
Certifying	Authority:												
Name:													
Designatio	n:												
Signature:													
Date:													