

# CHAPTER 1

# INTRODUCTION

# ABOUT THE PROJECT



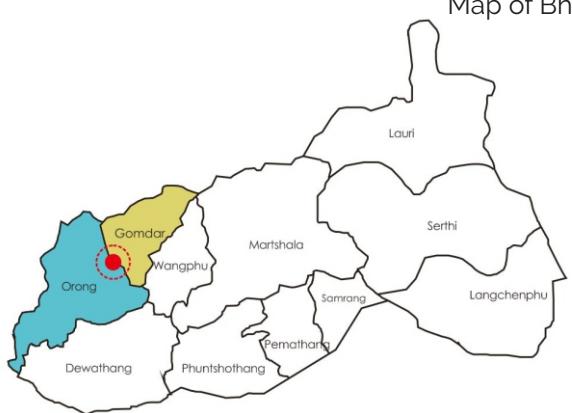
**N**arphung is a popular stopover town located in Samdrup Jongkhar -Tashigang Highway. The main town is spread over two acres of land along the highway.

With the on-going east-west road widening works on the Highway, most structure failed to maintain a distance of 50 feet from the road as mandated by the Road Act. The town was informally decided to cleared for the road widening.

However, to the much relief of the residents of the Narphugn, the dzongkhag officials reached a decision to develop and expand the existing area for township upon the command of His Majesty to develop Narphung into a Sattelite town.



Map of Bhutan



Map of Samdrup Jongkhar Dzongkhag

1.2

## TIMELINE OF NAPHUNG

**1940**

Early Existence with six Households

**1964**

Tashigang- Samdrup Jongkhar National Highway construed via Narphung. Since Then it served as popular stopover for the travellors along the Higway. The number of household grew since then

**2009**

When project DANTAK started road-widening works on the highway, the settlement in Narphung, where most structures failed to maintain a distance of 50ft from the highway

**2010**

Narphung town was connected with electricity

**2015**

The dzongkhag officials reached a decision to develop and expand the existing area for township upon the command of His Majesty to develop Narphung into a Sattelite town. The Developmen plan is initaited on the same year by DHS, MoWSH

1.3

## OBJECTIVES

of Narphung Development Plan

- To create a town that responds to the needs of the travelers along the highway
- To create a town that is vibrant, healthy and inclusive by sustainable planning methods.
- To create a town where the community has access to all the basic infrastructures required to enhance the quality of life.
- To create a town that has the right blend of modern amenities, open space, and recreational facilities.

# CHAPTER 2

# EXISTING SCENIRIO

# SITE INFORMATION



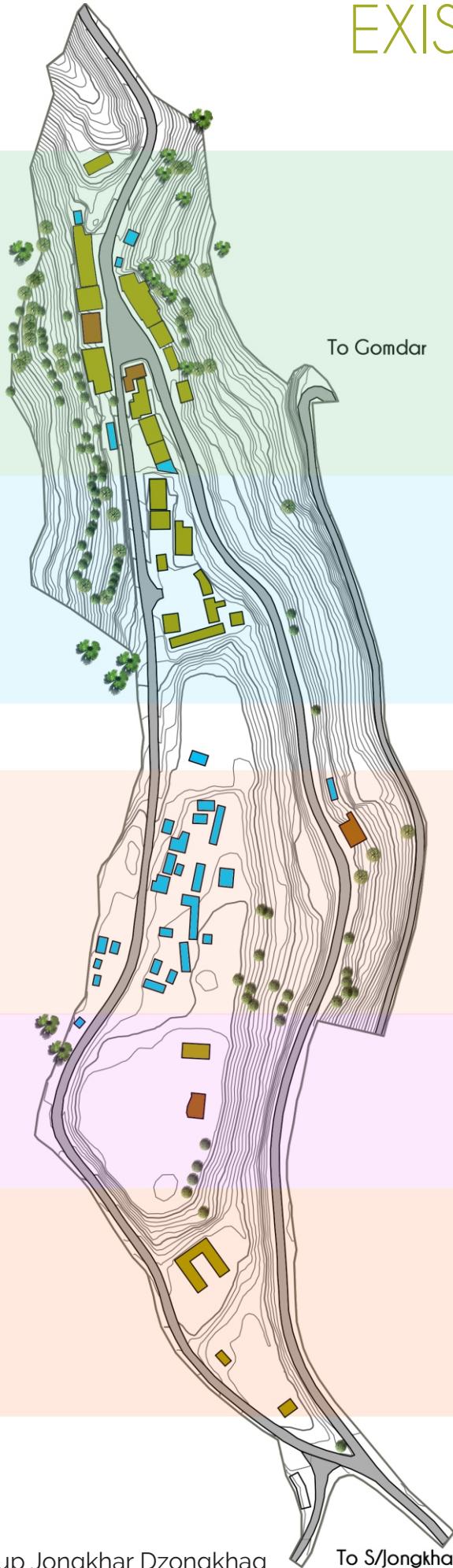
The Narphung village is located on an area of about 13 acres of land. However the main commercial town is only clustered on the small patch of land towards Y-junction towards the north. It is located between Tashigang and Samdrup Jongkhar Highway.

The interesting character of the town is its unique setting right at the Y-junction of the road with the shops at all three sides of the road. All the vehicle is required to pass right through the town in order to get to the other side which attributes to its success as a stopover town for the people travelling on the Highway.

**T**he main commercial area occupies only a small area at the junction to the north. The rest of the areas are mostly occupied by GREF project. A large flat area little further south consist of temporary huts occupied by the GREF labours. This region and the region below it where the guesthouse stands are some of the flat areas where town can be extended or developed.

# EXISTING LAND USE

Commercial area  
GREF Area  
GREF Labour camp  
Guest House  
RBP compound



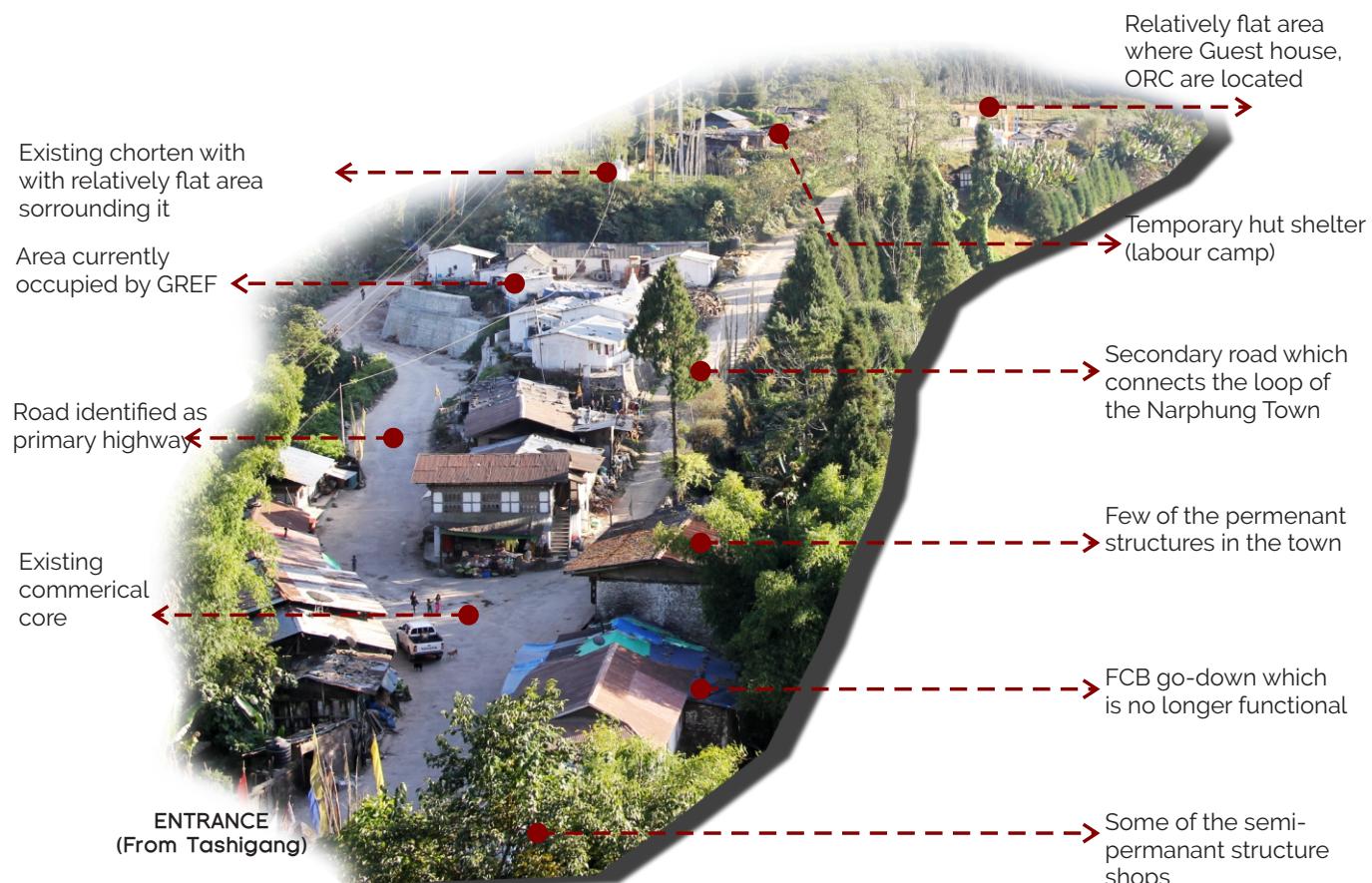
## LEGEND

Semi-permanent	
Hut	
Permanent	
Road	
Pine tree	
General Tree	
Bamboo tree	

It can be seen from the map that the main commercial area is located only at the main junction toward the north. The relatively flat areas below it are mostly occupied by the GREF and its labour Camp. On the highest point on the surveyed area is the guest house and the ORC which operates once in a month. Further towards the southern end is the RBP compound which is no longer operational.

Map of Samdrup Jongkhar Dzongkhag

## 2.3 EXISTING STRUCTURES



Overall view of the existing structures in Narphung town



Existing Town



GREF area

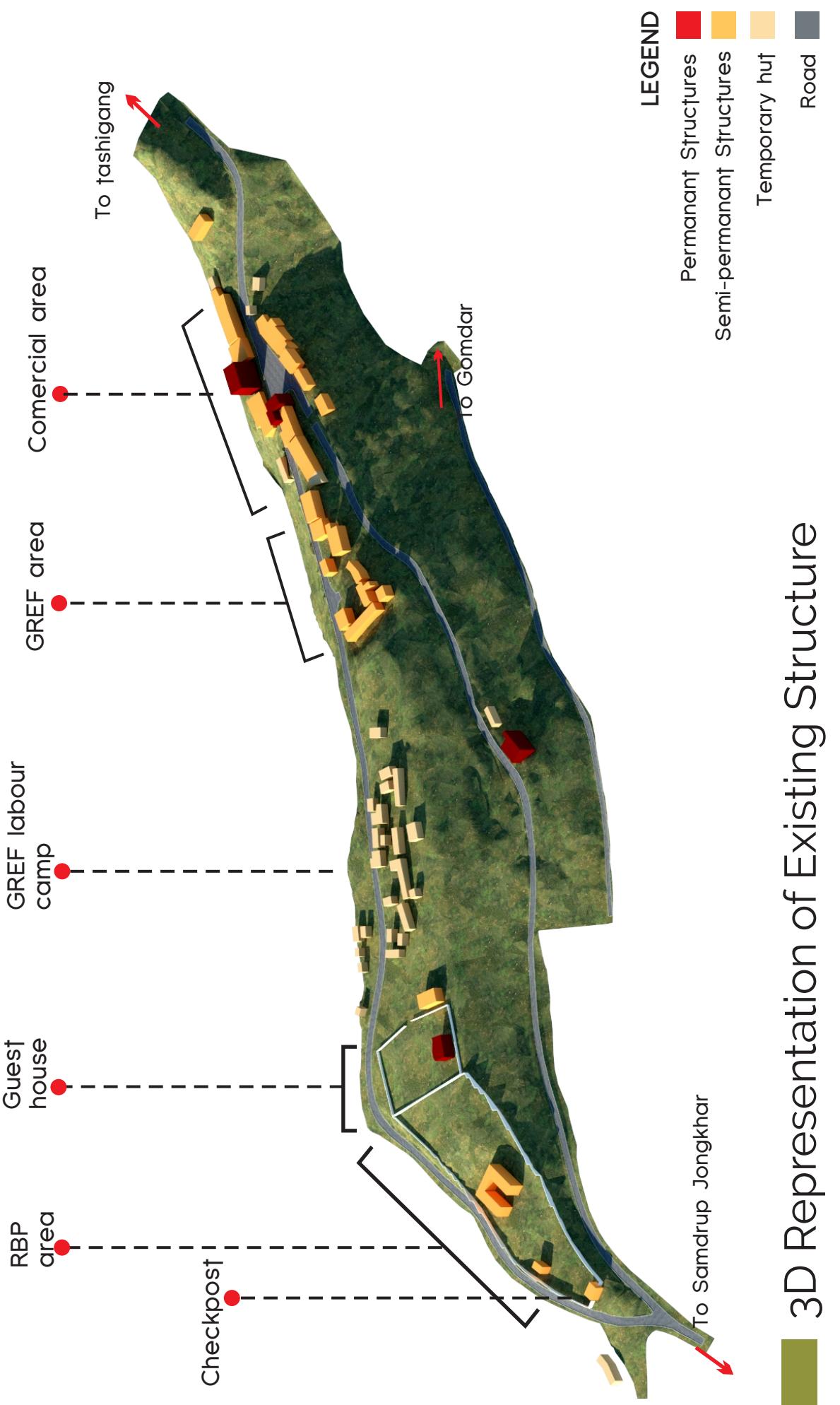


GREF Labour camp

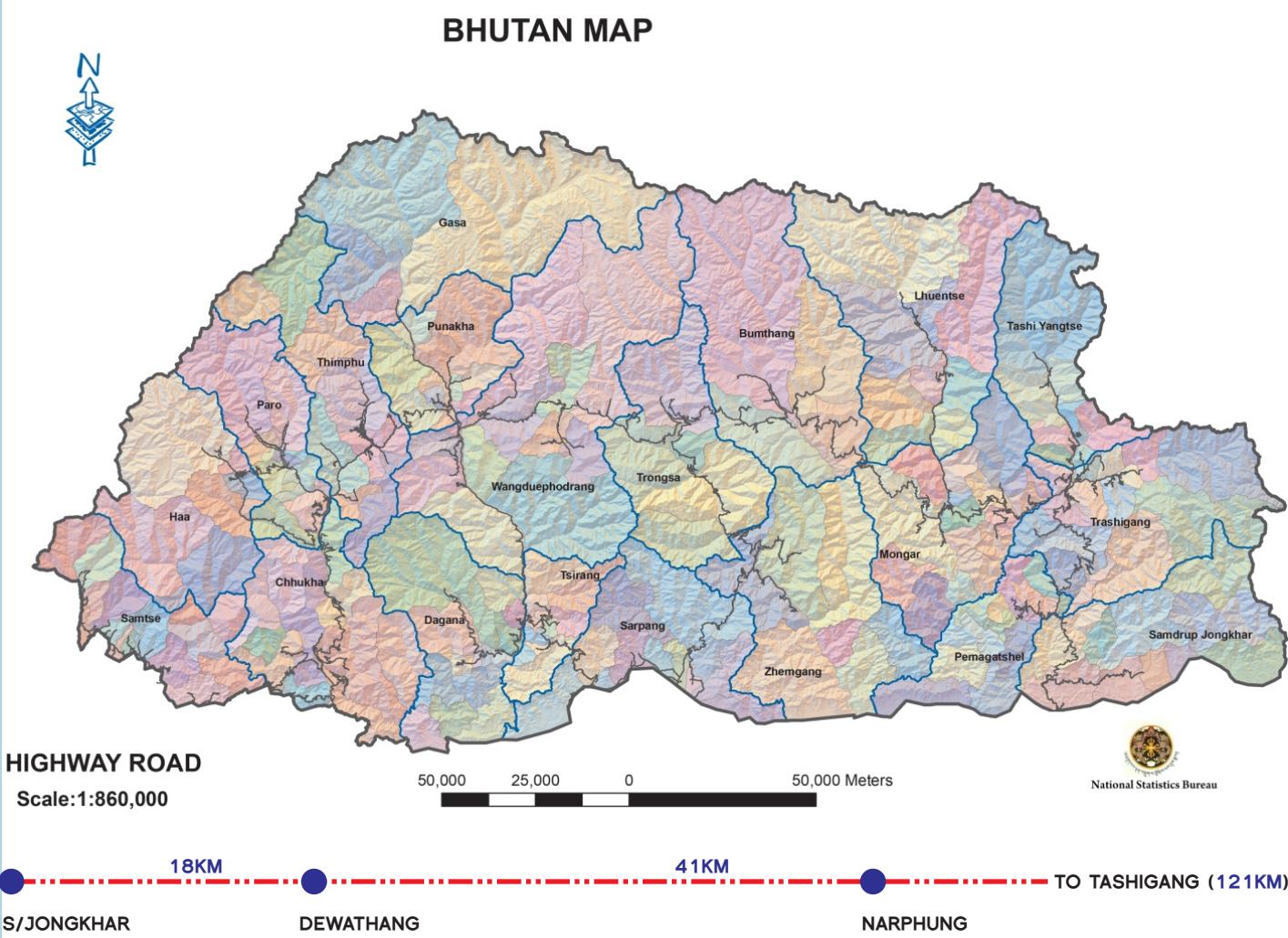


Guest House

# EXISTING STRUCTURES



## 2.4 CONNECTIVITY



Narphung is located at Tashigang-Samdrup Jongkhar Highway.

It is located at a distance of 41 and 59 kilometers from Dewathang and Samdrup Jongkhar respectively. From Tashigang it is located at a distance of 121 kilometers.

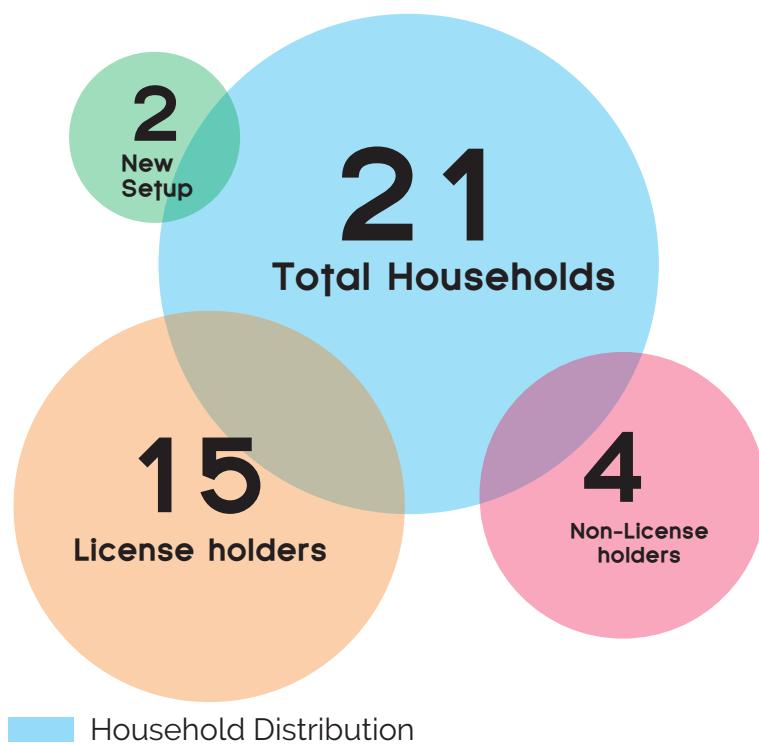


**GOMDAR GC** ----- **NARPHUNG**

Narphung is also connected by Gewog center road to both Gomdar and Orong

**ORONG GC** ----- **NARPHUNG**

# DEMOGRAPHY



There are 21 residents in Narphung town out of which only fifteen of them having a commercial license. The four remaining households doesn't have a commercial license. According to the latest update from the local government, there are two more shopkeepers who established recently.

There are also approximately 20 non permanent residents of GREF living in the semi-permanent hut just above the town. It is understood they constitute the part of the customer group of Narphung town. The general demographic age range was found to be 20-60 years of age (excluding the school going children who stays home only during the schoolvacation)

The main language spoken by the inhabitants is Sharchokpa. The GREF labours speak Hindi and Bengali



The main language spoken by the inhabitants is Sharchokpa. The GREF labours speak Hindi and Bengali

**A**nother interesting characteristic of the Narphung town is the fact that the town is located right at the boundary of the two Gewogs, namely, Gomdar and Orong. The road that passes through the town (one that is indicated in red dotted line in the figure to the right) separates the Gewog. The occupancy on the either side of the road is strictly based on the Gewog they are coming from.

There are ten households from the Orong Gewog and 12 from Gomdar Gewog

# INFRASTRUCTURE

## HEALTH

There is also no clinic or village BHU located in the town. There is however one ORC located at around 100 meters towards the south from the town which operates once in a month



Existing ORC

## INSTITUTION

There is no institution, either government or corporate, located in the town. There was a RBP Checkpost once but it is no longer functional anymore. There hasn't been any information about any plans for the upcoming institutional buildings coming up in the future.



RBP chekpost

## WASTE MANAGEMENT

The waste disposal in the town is not properly managed. The waste from the town is thrown by the roadside at around 100 meters north of the town which happens to be the entrance to the town for the people travelling from Tashigang. The waste is also not segregated.



Existing waste management

## ELECTRICITY

The town is however well connected by electricity which is supplied from Ngerang Hydro Project located in Dewathang. There hasn't been so much issue with the supply so far. There is no street lighting facilities in the town.

## WATER SUPPLY

The water source for the town is at Tishing Brak located at approximately two kilometers from the town. It was learnt that the town has drinking water scarcity. The rain water harvesting is not practiced in the village and there are also no water meter. All the houses have outdoor plumbing.

## EDUCATION

There is no school located in the village. The nearest school is located at Gomdar and Orong which are both 2 hours by walk and approximately 30 minutes by vehicle which is connected to the town by a Gewog Center Road

# ECONOMY



Located on a ridge, the temporary structures in Narphung stands along the highway serves as a popular stopover. They depend on their shops for their livelihood. The shops sells varieties of local products like bamboo products, cereals, fresh vegetables and fruits, mushrooms, and dairy products, among others.

The local people say that the people from the nearby Gewogs bring their local products to Narphung to be sold by them.

In a way the shopkeepers in Narphung act like as broker where they collect the products from the nearby village and supply it to Samdrup Jongkhar. People from the places far as Samdrup Jongkhar town come to Narphung to buy the local products since they get it at much cheaper price.

## TOURISM

As far as tourism is concerned, tourist doesn't deliberately visit Narphung for any cultural, heritage or sightseeing purpose but any tourist passing the town stops at Narphung owing to its strategic and unique setting of the town

# LOCAL PRODUCTS SOLD IN NARPHUNG



■ Vegetable



■ Mushroom



■ Bamboo Products



■ Wooden Products



■ Dairy products



■ Others



## Display Technique Instrumental in success of Narphung Town



The success story of Narphung as a stopover town cannot be solely attributed to its strategic location but equally to its unique display technique of its diverse local product.

It is observed that the local products are all showcased outside, in front of the house covered by either metal sheet or plastic awnings. This not only makes the town look colourful but also helps to attract more number of customers, both local and tourist alike.

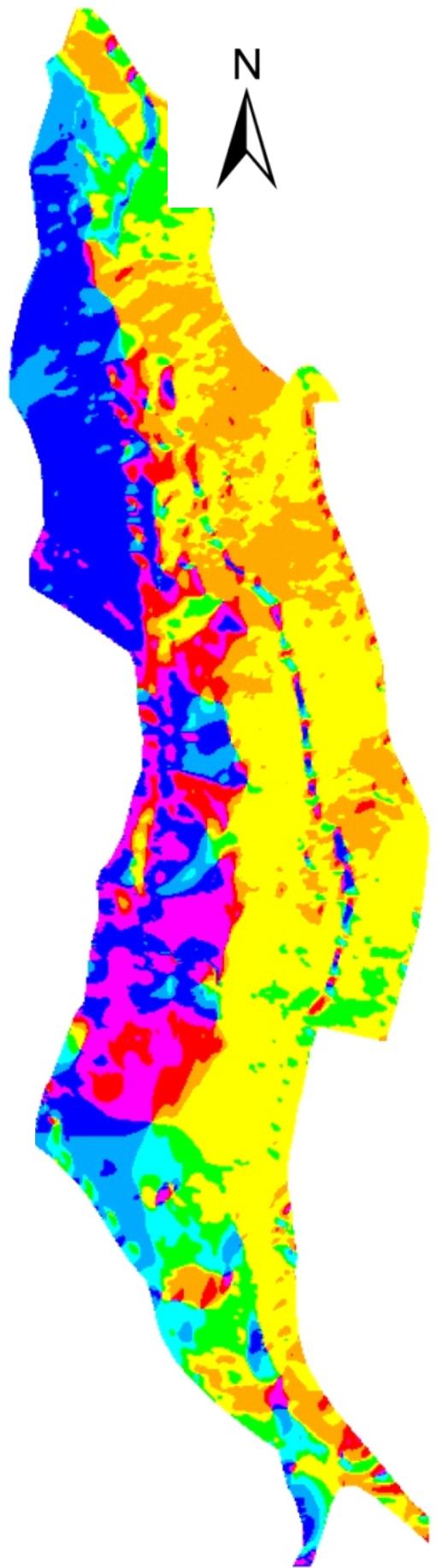
It also makes it easier for the passenger traveling in the vehicle to buy the goods without having to get down from the vehicle.

# CHAPTER 3

# ANALYSIS

# ASPECT ANALYSIS

The whole of the site is orientated along the north-south line which consequently resulted in the most of the site facing either east or west. The majority of the site region is facing towards the east. This would mean the town will receive an early morning sunrise and early sunset.

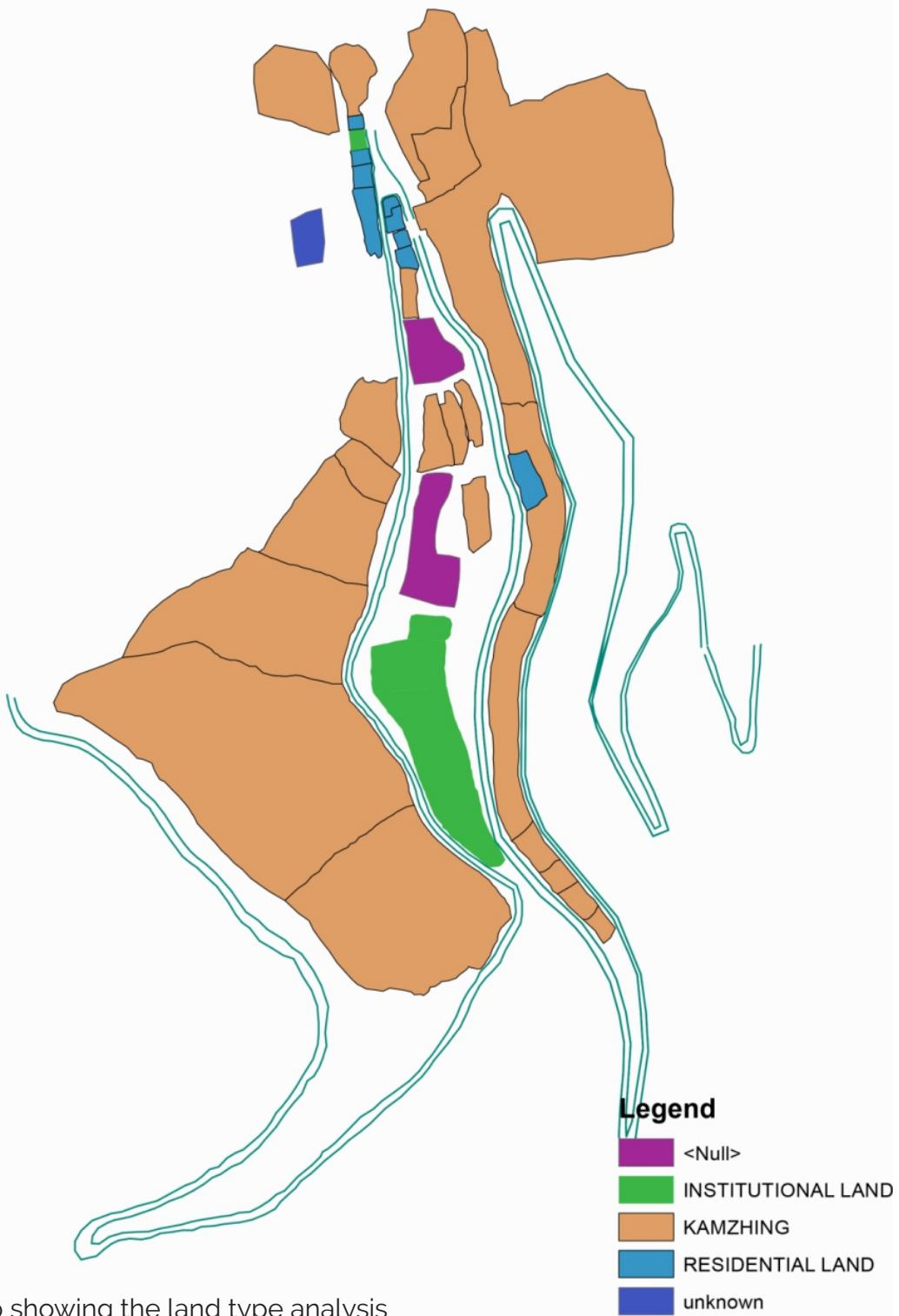


## Legend

	Flat (-1)
	North (0-22.5)
	Northeast (22.5-67.5)
	East (67.5-112.5)
	Southeast (112.5-157.5)
	South (157.5-202.5)
	Southwest (202.5-247.5)
	West (247.5-292.5)
	Northwest (292.5-337.5)
	North (337.5-360)

Map showing the aspect analysis of the surveyed area

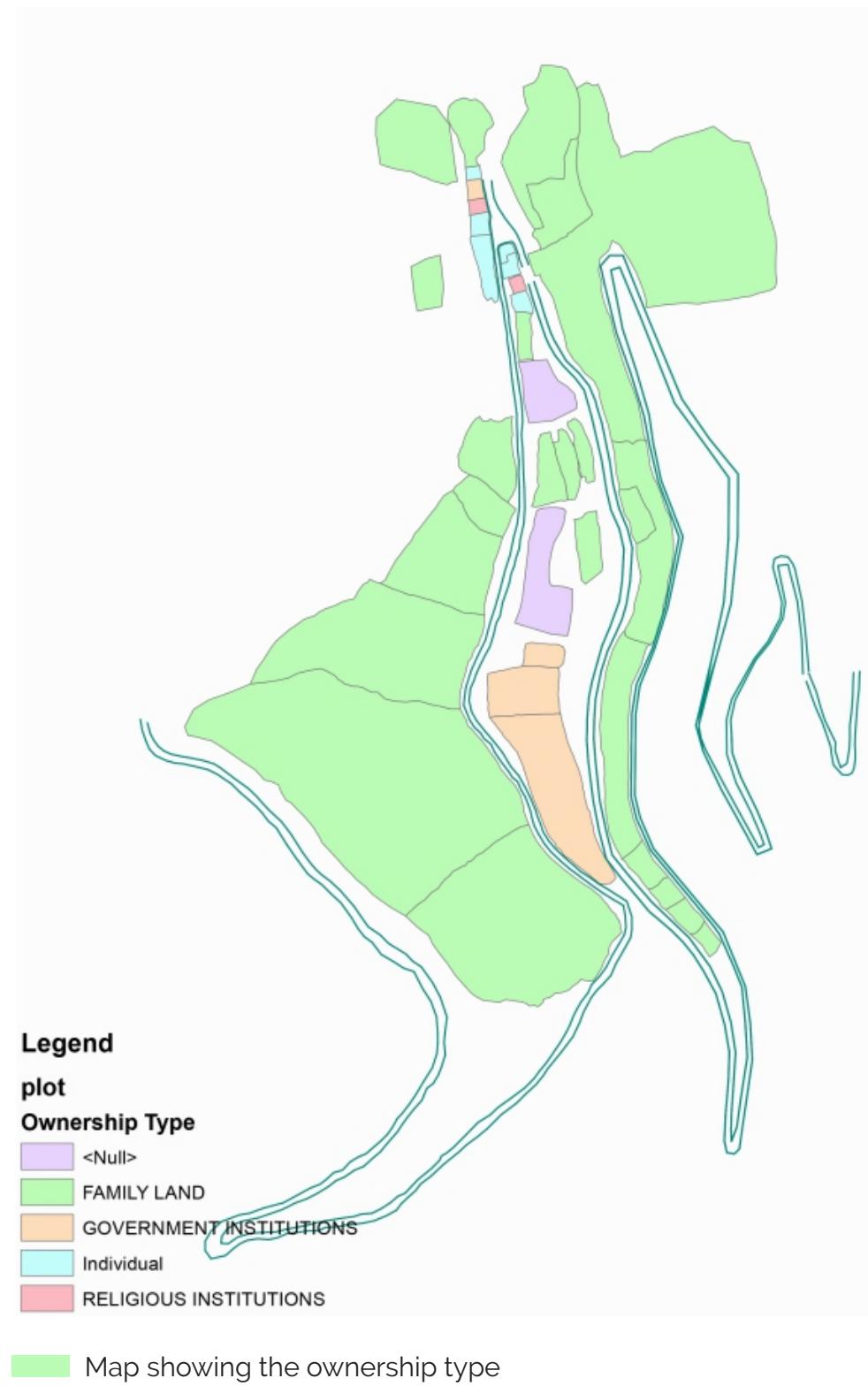
## LAND TYPE ANALYSIS



Map showing the land type analysis

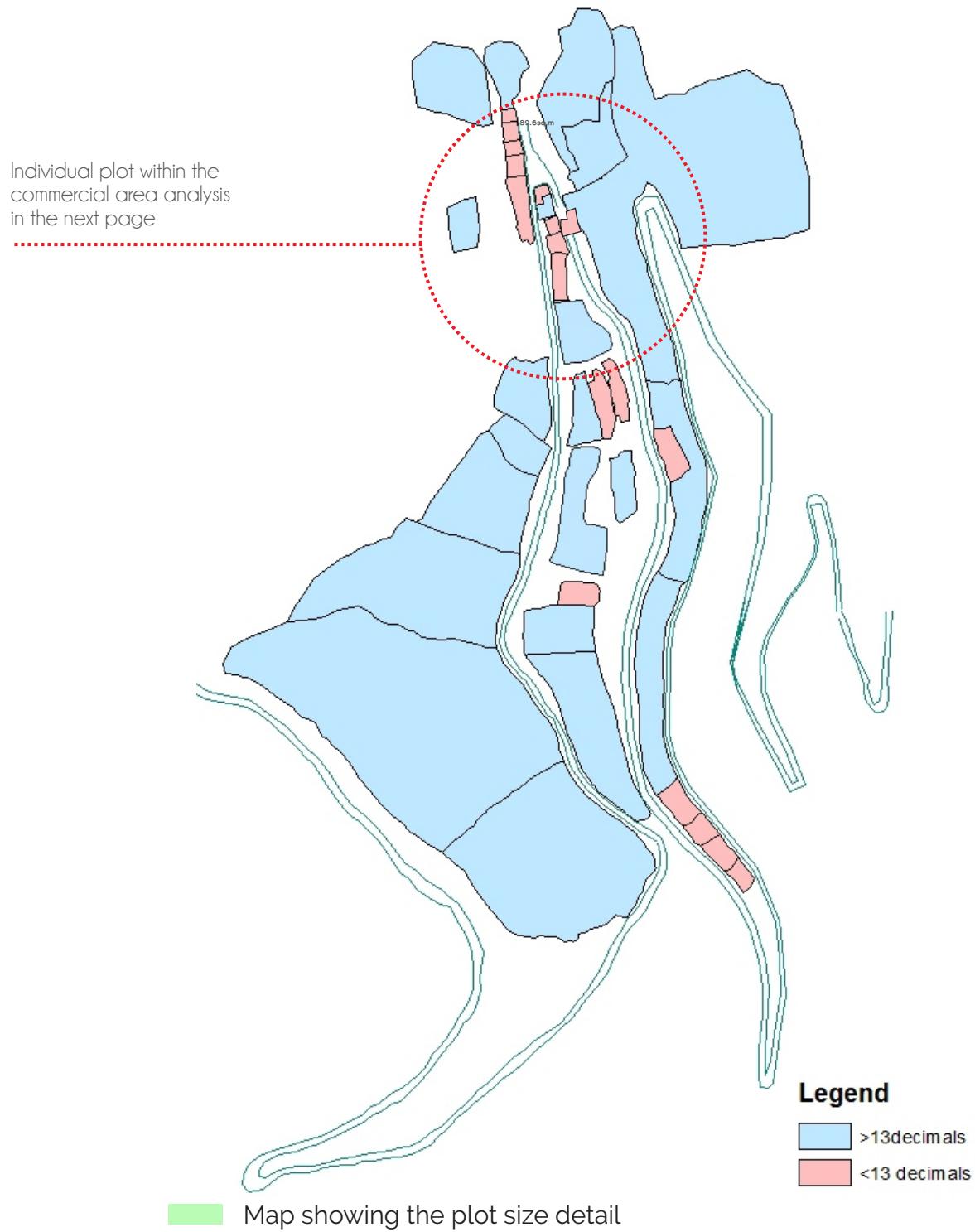
Large part of land falling under the planning boundary are kamzhing. There is also an institutional land where the police checkpost was once located. The guest house, FCB and ORC are also located in the institutional land. Rest are residential land.

# OWNERSHIP TYPE



Most of the land are of family type. The rest are mostly individual plots and government institutions. There are also few patches of land identified as religious institution.

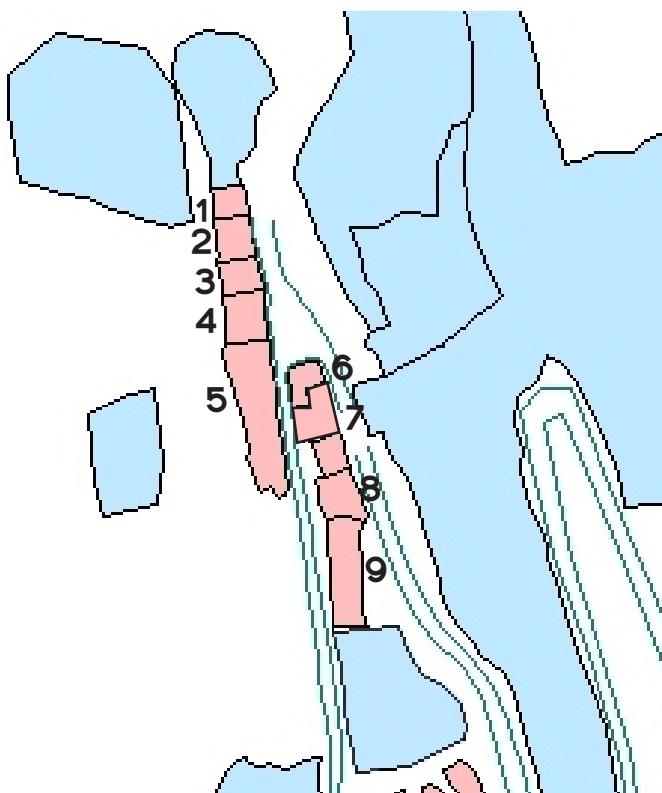
# PLOT SIZE ANALYSIS



Diagrammatically most of the land ownership appears more than 13 decimal. However most of the area within the commercial zone area fragmented and are less than 13 decimal

# Individual plots in commercial area

## Analysis



Map showing the plot size detail in the core area

PLOT NO	AREA (SQ.M)	AREA (DEC)
1	89.6sq.m	2.21
2	140.6 sq.m	3.47
3	116.2sq.m	2.87
4	180.2sq.m	4.45
5	499sq.m	12.33
6	94.2sq.m	2.33
7	147.2sq.m	3.64
8	166sq.m	4.10
9	313.4	7.74

On further analysiing the plot sizes, only nine households own an individual plots within the core area. Rest are mostly family land, government land and a small patch of land identified as a religious instituition.

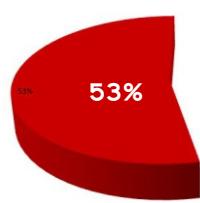
# SLOPE ANALYSIS

Out of the total surveyed area, 53% falls under steep area where construction of any kind of building is not practicable. only remaining 47% falls under gentle slope area where construction is feasible.

Out of 47 percent of the surveyed area where planning is considered feasible, most of this area is largely occupied by GREF, Guest House area, Police Checkpost and road coverage thereby leaving the area remaining for planning to only few acres.

SLOPE RANGE (%)	AREA COVERAG (SQ.M)
0-10	12115.4
10-20	8077
20-30	3688.6
30-40	27256.3

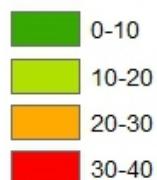
AREA COVERAGE (SQ.M)



## Legend

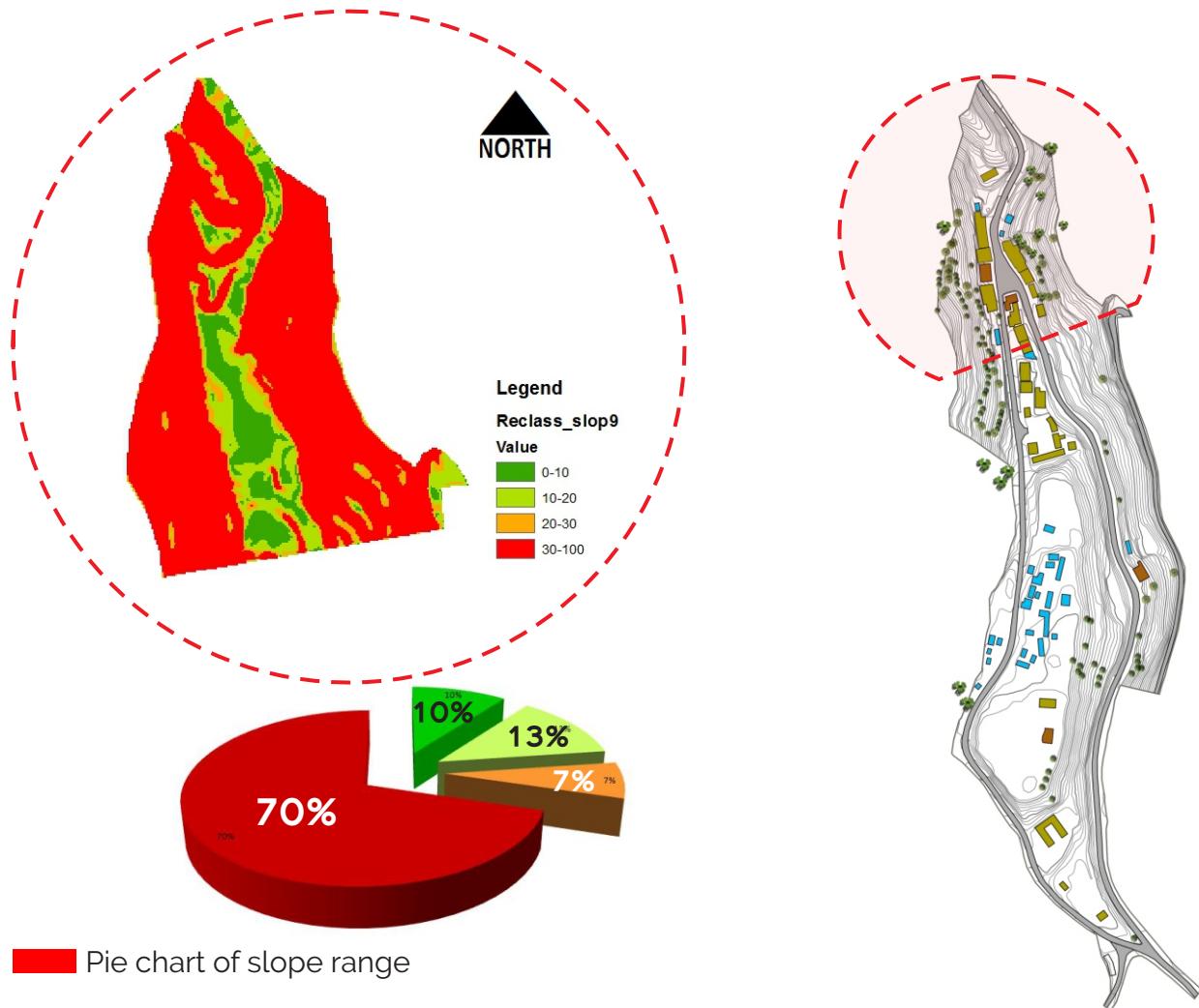
### Reclass\_slop1

#### Value



█ Map showing the slope analysis

# CORE AREA SLOPE ANALYSIS



On further analysis of the core area where the town will be developed it is found that 70% percent of the area are found to be of steep slope and only 30% developable.

Converting that 30% into area, only 3781 sq.m (93 decimal) of land is found feasible for development, out of which the road coverage will occupy 1825 sq.m (45 decimal) of the area which eventually makes the net developable area remaining only to 1956sq.m (48 decimal).

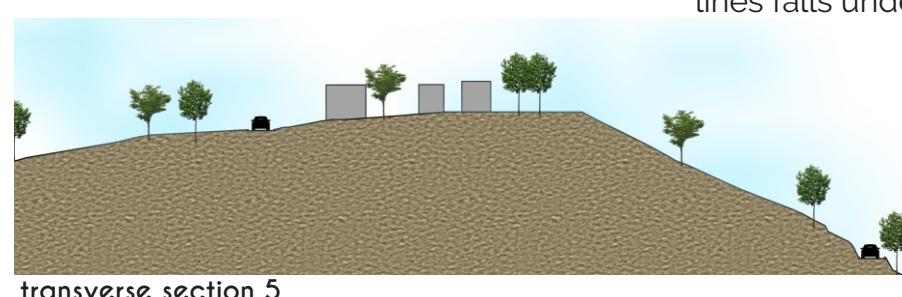
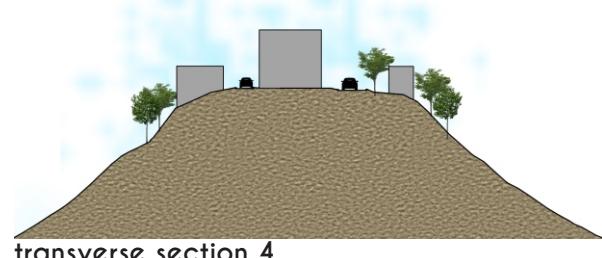
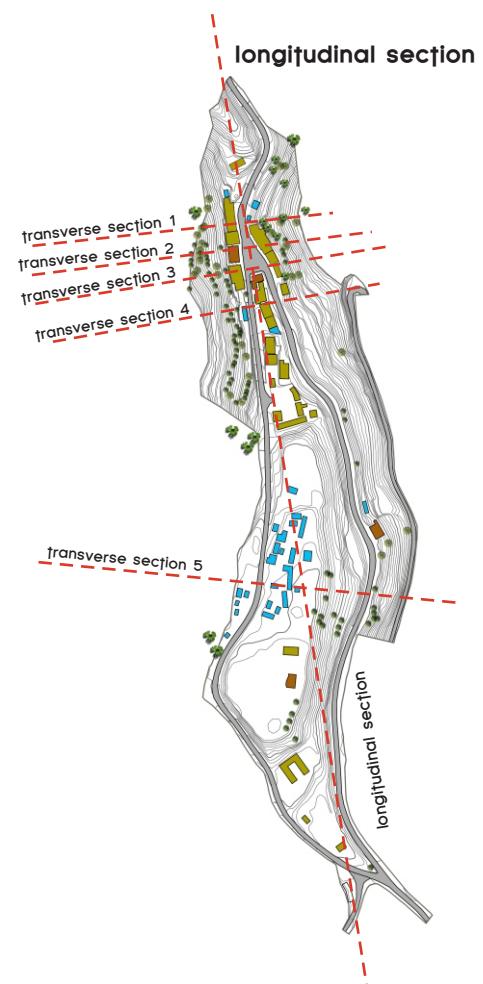
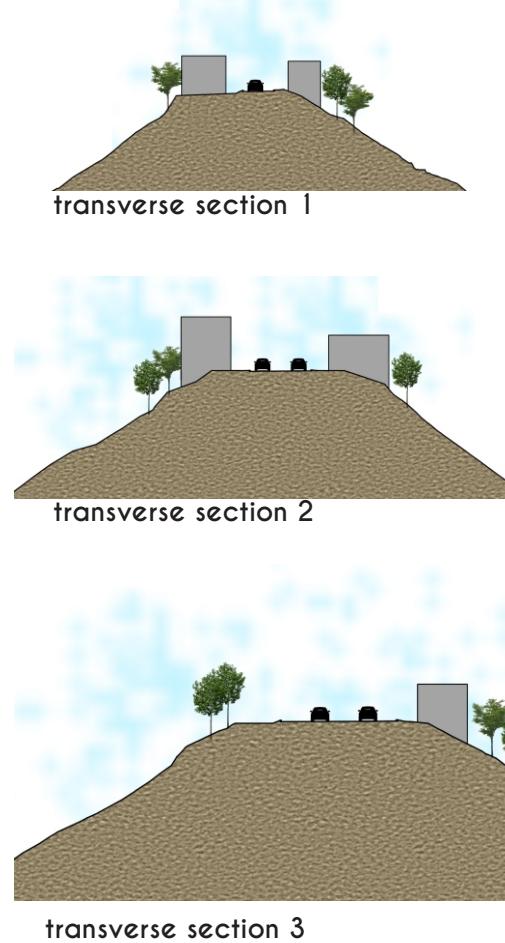
The local government has indicated that total of 19 plots may be required. Now dividing the 48 decimal into 19 plots, only about 2.5 decimal will be available per plot which, according to the planning standards is not feasible.

0-10	1308.5	3781sq.m 93 decimal
10-20	1597.3	
20-30	875.2	
30-100	8962.2	

Total Developable area = 3781 sqm (93 decimal)  
 Road Coverage = 1825 sq.m (45 decimal)  
 Remaining area = 1956 sq.m (48 decimal)

Now dividing the 48 decimal land into 16 permanent licence holders, each plot will get only 3 decimal which according to planning standard is not feasible.

# CORE AREA SLOPE ANALYSIS



## SLOPE ANALYSIS

The diagram shows the section cut of the site from various points. It can be seen from the section cuts that the either side of the roads beyond the existing building lines falls under steep slope.

# CHAPTER 4

# PLANNING APPROACH

4.1

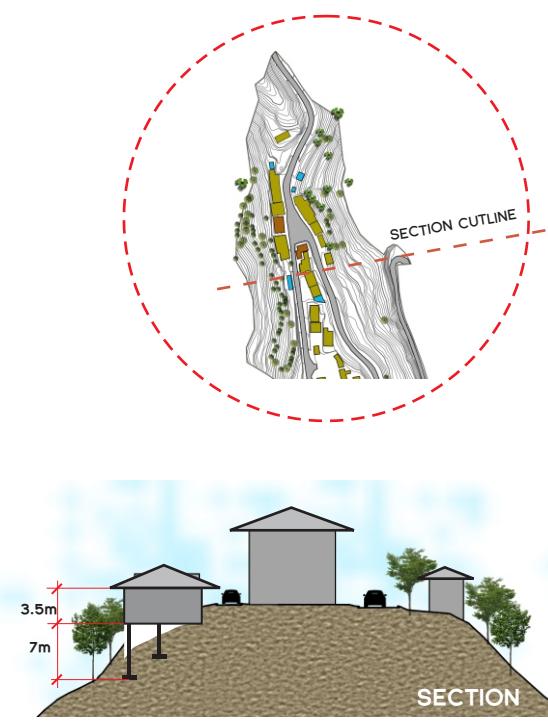
Due to all the aforementioned challenges for the development of Narphung town, various planning options and approaches were explored and its pros and cons discussed with the Local Government.

Four different options were proposed for the Narphung Development Plan

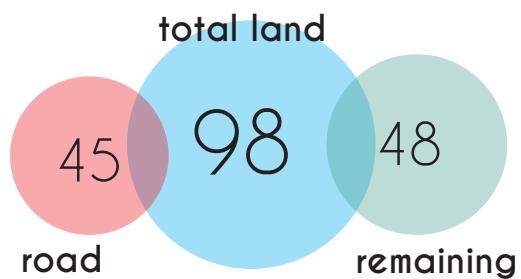
## OPTION 1

(Town remains at the existing location)

The first option in the planning intervention is to develop the town in its existing location. The majority of the households, local leaders and dzongkhag officials find this option more feasible in terms of the economic sustainability of the town. Some of the advantages and disadvantages of this options are :



■ Section cut through the main commercial area



### Disadvantages

- ➡ The developable area is only around 48 decimal. With the road widening the area could get even more small. Plotting won't be possible from planning point of view. If at all plotting has to be done, each plot will get less than 3 decimal which is again not feasible.
- ➡ Owing to its restricted developable area, some public infrastructures like footpath, parking has to be compromised.
- ➡ Most of the buildings on the either side of the road will fall on the steep slope and may have to be lifted from the ground by 6-8 meters either by a column or retaining wall to be able to reach the road level. This approach is not only expensive to construct but also structurally not safe.

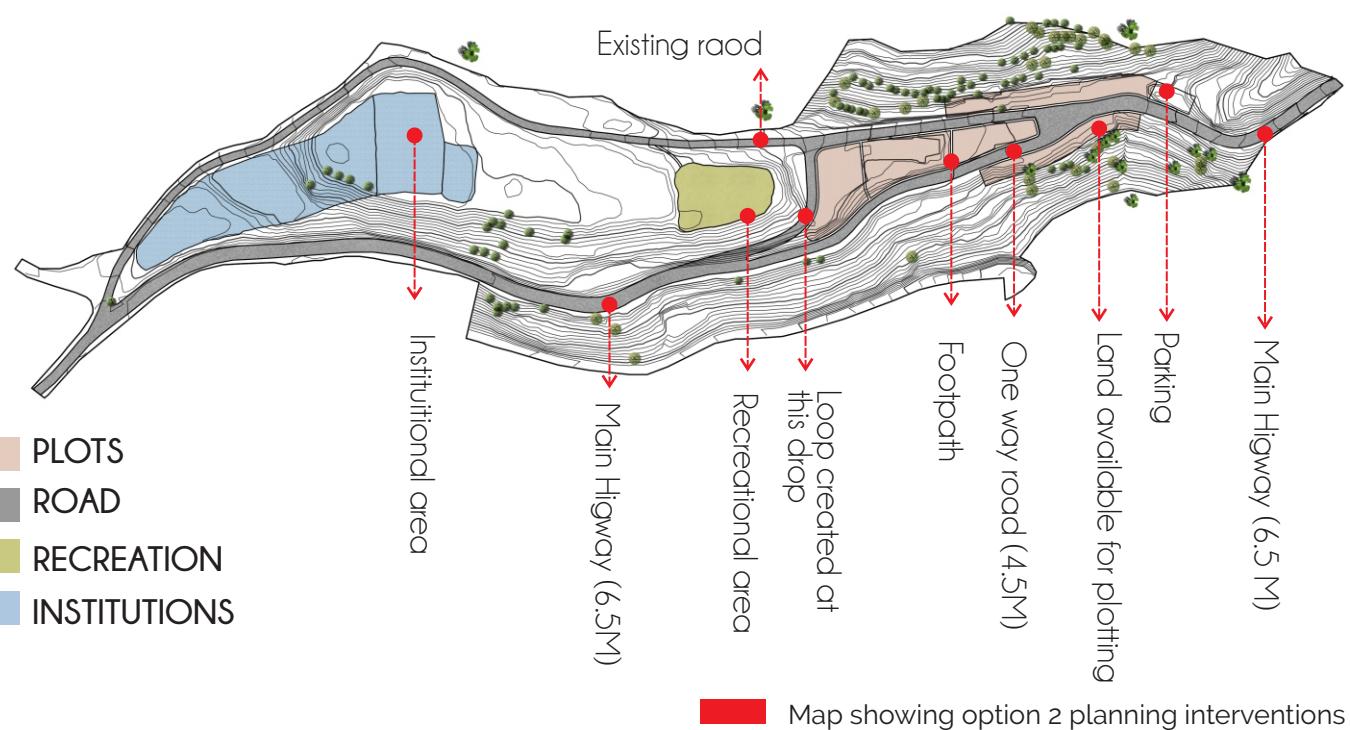
### Advantages

- ➡ The town retains its original setting and location. The business opportunities remain more or less same with improved infrastructure.
- ➡ The town remain easily accessible to the travellers along the highway owing to the fact that road passes right through it.

## OPTION 2

# Town Extended towards GREF

Another option towards the planning approach is to include the area which is currently occupied by GREF. From the planning point of view, this option appears to be the most feasible. The road will be made one way around the commercial core. This area is mainly flat areas where planning intervention and plotting becomes easier. It will not only increase the planning area but also centralize the commercial area within the existing location.



## Advantages

- ➔ Regular and standard plotting will be feasible.
- ➔ Commercial core will be extended.
- ➔ Introducing one way around the commercial core ensures the traffic accessibility at all corners of the town. It will also ease the traffic congestion.
- ➔ The extended commercial area can accommodate all the license holders within the town.

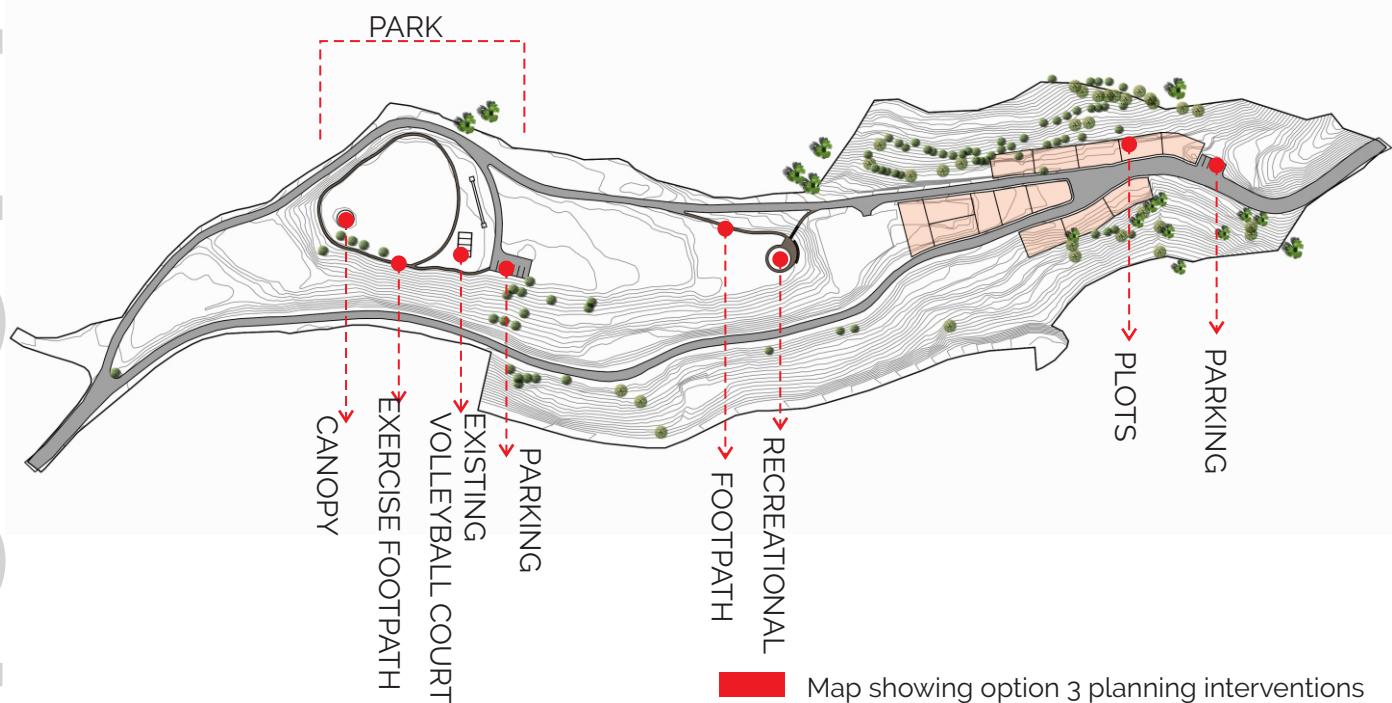
## Disadvantages

- ➔ The availability of the area currently occupied by the GREF for the town development remains uncertain

## OPTION 3

considering whole road loop for development

Another option towards to planning approach would be to include the whole area within the surveyed boundary. This is an holistic approach keeping in mind the potential for future growth of the area as stop-over town. The standard highway road width will discontinue right at the entrance and the exit of the town and one way road as a loop will be introduced around the town.



### Advantages

- Address the planning as holistic approach.
- More areas will be available not only for the commercial and infrastructural development but also to include the parks and other recreational facilities.
- The commercial growth along the left one way road will greatly be enhanced owing to the fact that the whole area along this road align with the road level.

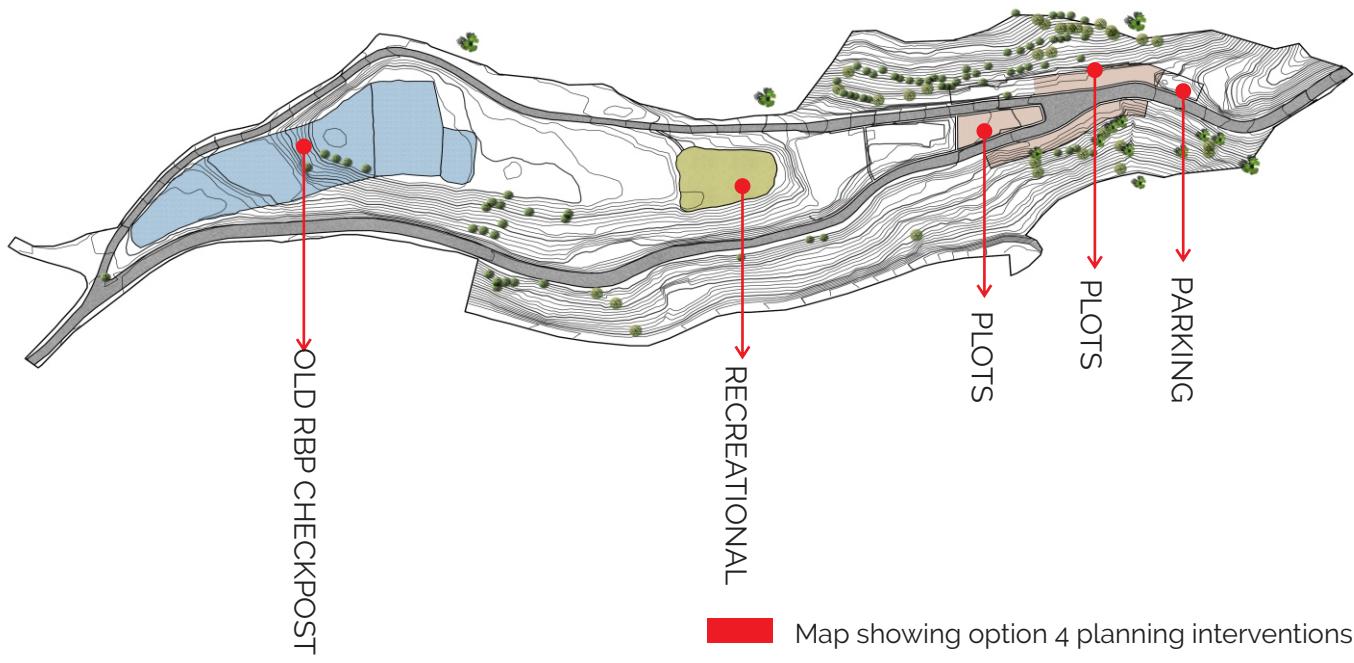
### Disadvantages

- Like the second option planning approach, the availability of the land occupied by the GREF remains uncertain.
- The development along the right side one way road would be difficult owing to fact that the road level will be few meters lower than the planing area.

## OPTION 4

considering the development only along the main highway

There is possibility for another planning option whereby the town development will be focused only along the proposed highway. The existing road on the left will remain as it is and no planning intervention will be done on that side.



Map showing option 4 planning interventions

### Advantages

- The only advantage of this planning approach will be the linear settlement or the development along the main highway will be enhanced and the town approach will be direct and simple without too much traffic confusions.

### Disadvantages

- Land available for the planning will be very limited
- Settlement along the existing road towards the left will be more or less ignored.
- The steep slope along the highway road will pose lots of challenge in terms of planning and development.

# CONSULTATION

## MAIN POINTS DISCUSSED IN PUBLIC CONSULTATION



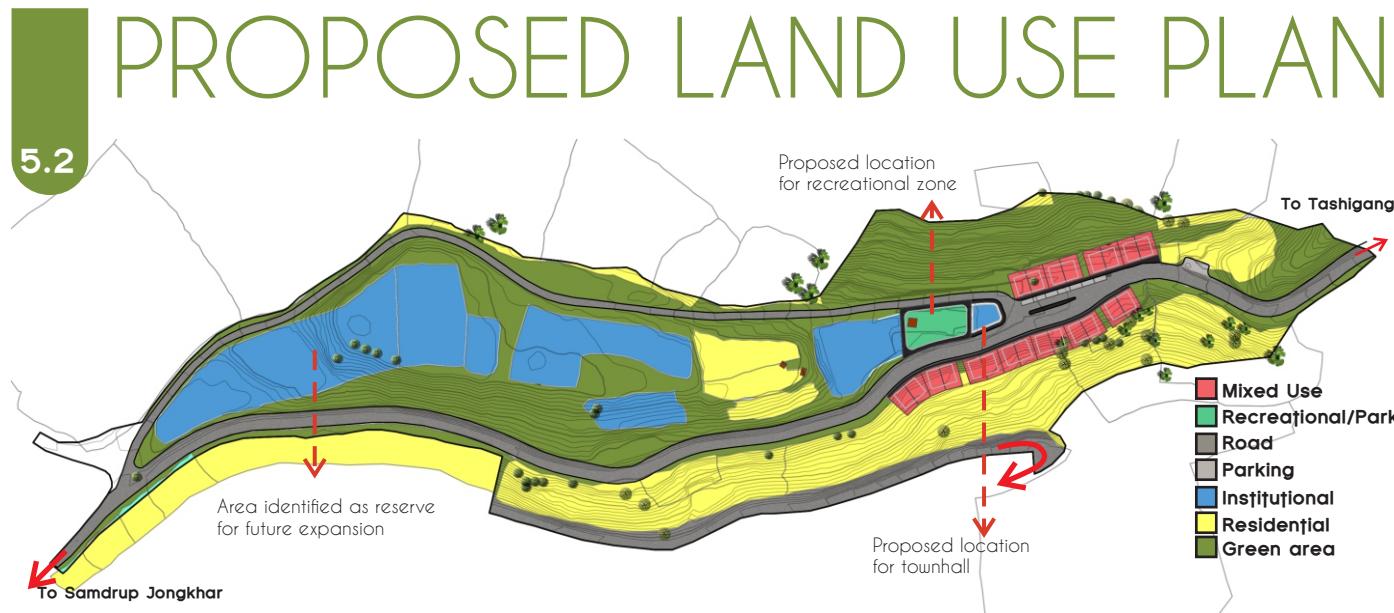
- 1.** Highway Widening to be given Top priority and no compromise on carriage way width as it is of national importance.
- 2.** Possible extensions could be considered along the main highway on Gomdar side towards Samdrupjongkhar.
- 3.** As indicated by GREF, higway widening will affect most of the structure including the permanent structure at the junction.
- 4.** The road on Orong side could be realigned by shifting it towards the main highway as it joins the main highway to create some additional space on the Orong side
- 5.** The existing FCB go-down would be relocated as it does not have to be in the town centre
- 6.** The area immediately next to the existing town, currently occupied by the GREF to be earmarked as the recreational/ public amenity area including the area at the higher level with the chorten on it. The area previously used by the RBP should be marked for future use
- 7.** Solid waste disposal site has been tentatively identified at area located in between Narphung and Tokorong. It however may require professional input from related agency.
- 8.** Common septic tank and soak pit system should be considered to address the limited land

CHAPTER 5

# PLANNING PROPOSAL

# Salient features of the plan

- The main commercial area remained in the same location with the improved structure and standardized plots. The possible expansion is along the main highway towards the Gomdar side.
- Highway Widening given the top priority and no compromise on the carriage way width to ensure minimal interruption to the Highway Traffic flow.
- The road on the Orong side is realigned by shifting towards main highway thereby creating some additional space required for development.
- Other points discussed in public consultation duly incorporated.



### █ Mixed Use

In this land use zone, there will be mixed use of both commercial and residential zones. Due to the limited land for planning, two units of dwelling are combined in one single building structure. Each dwelling will have a commercial shop at the ground floor and a residential at either basement or first floor depending on the topography of the plot location.

### █ Recreational/Park

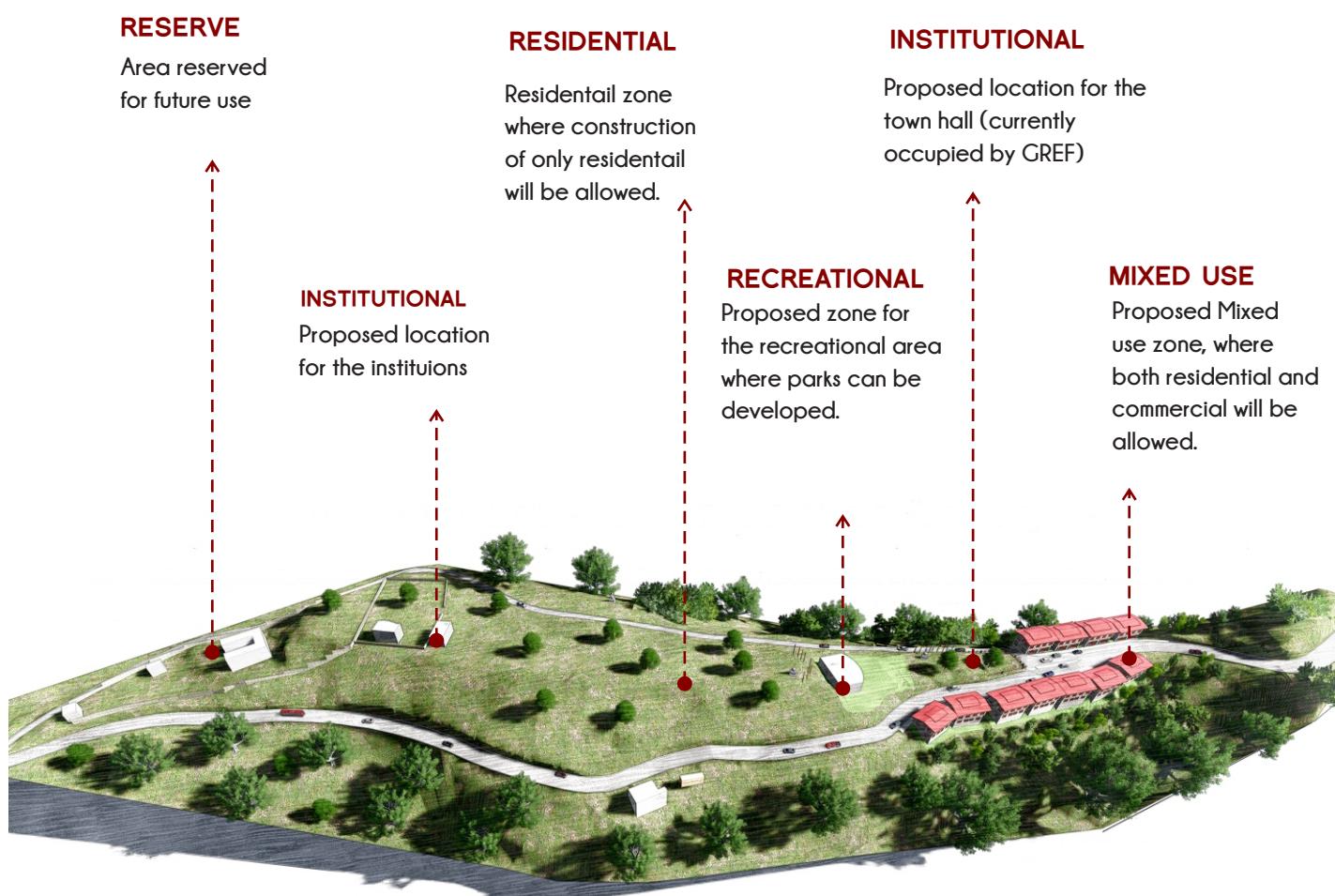
The recreational zone occupies the heart of the town right at the junction between primary and secondary road. A properly designed park at this zone is expected not only to function as social open space as they can accommodate recreational activities but also create activities which is essential in any town to bring the life to the town.

## Institutional

The existing institutions in Narphung town includes a guest house, ORC and old RBP checkpost which is not longer functional. This RBP area as demarcated as institutional zone for this planning purpose is expected to be preserved as a reserve land for future town expansions or other equivalent purposes. The institutional zone demarcated adjoining to the recreational zone is identified as the most feasible location for the town hall to accommodate communal gatherings and community based activities. It is however currently occupied by GREF.

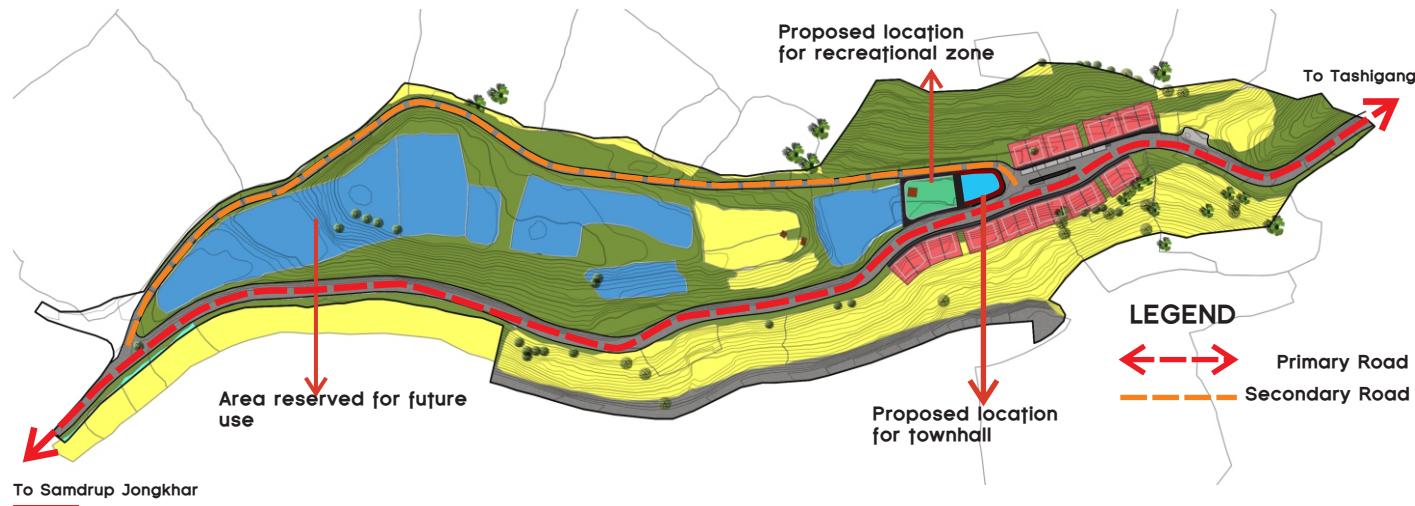
## Residential

As per the cadastral land record, there are few patches of land identified as family land. These areas are demarcated a residential zones where only construction of residential buildings will be allowed. Proposal for any other use shall require special approval of the Dzongkhag Administration who may decide on its own or refer to the competent authority, depending on the nature of the proposal.



3D Representation of proposed land use

# PROPOSED ROAD LAYOUT



The main highway will continue its standard National Highway width throughout the town. The secondary road which creates the loop will be realigned to create extra space and the junction where these two road meet at the core area, the convergence broadens to ease the traffic congestion.

## PRIMARY ROAD SECTION



**Formation Width:** 10.5M  
**Soldier Width:** Irrelevant  
**Carriageway:** 7.5M  
**Footpath:** 1.5M (on both sides)  
**Drainage:** 0.5 M (only on one side)

## SECONDARY ROAD SECTION



**Formation Width:** 4.5M  
**Soldier Width:** 1M  
**Carriageway:** 3.5M  
**Footpath:** 1.5M (Wherever required)  
**Drainage:** (N/A)

# CORE AREA PLANNING

The existing road width of 3.5 is maintained and improved with its layout slightly adjusted.

Standard Highway width of 7.5M is maintained and continued through out the town.

Proposed area for the community town hall where communal gathering and social activities can be conducted.

Proposed area for recreational zone

View shaft is provided at certain interval for not only to ensure the view connection but as preventive measure against in case fire disaster

A footpath is proposed on either side of the road falling within the commercial area. The proposed width of the footpath is 1.5M.

A parallel parking along this side of the road is proposed for lay-by parking.

Proposed combined plots in the core commercial area

Proposed bus parking for the public buses.

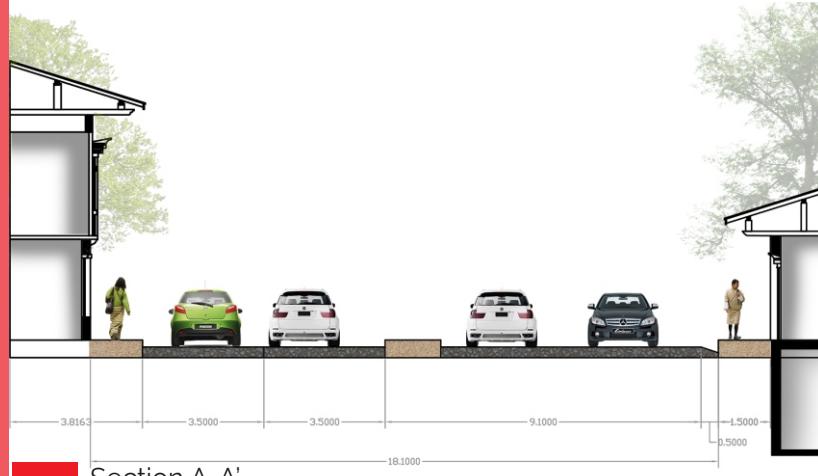
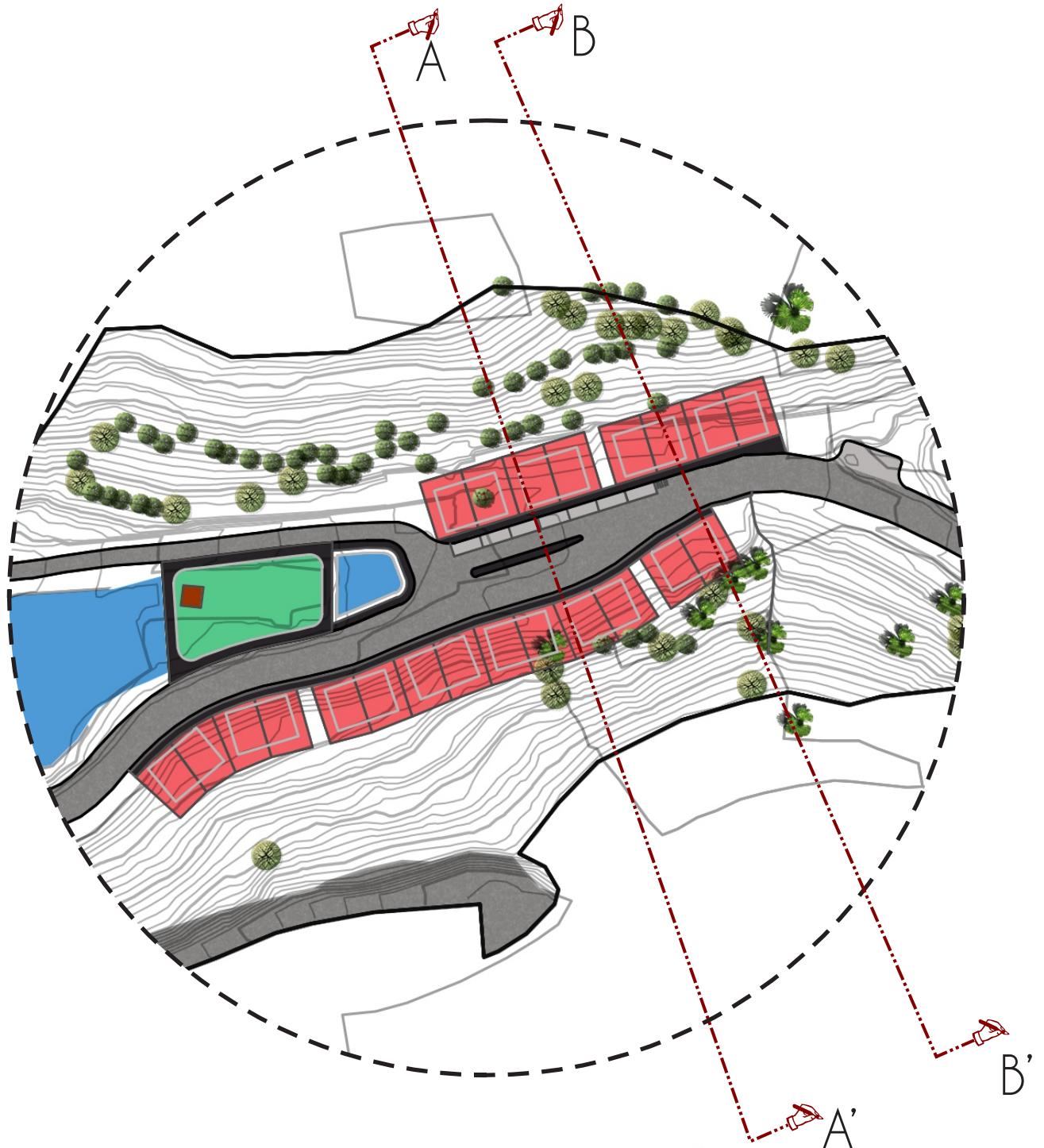
The storm water drain is provided on one side of the road towards the Gomdar.

Median is proposed at the junction where the secondary road meets the main highway. This is to ensure the smooth traffic flow at the highway and least traffic disturbance created by the vehicles from the secondary road.

## LEGEND



# PROPOSED ROAD SECTION IN THE CORE AREA



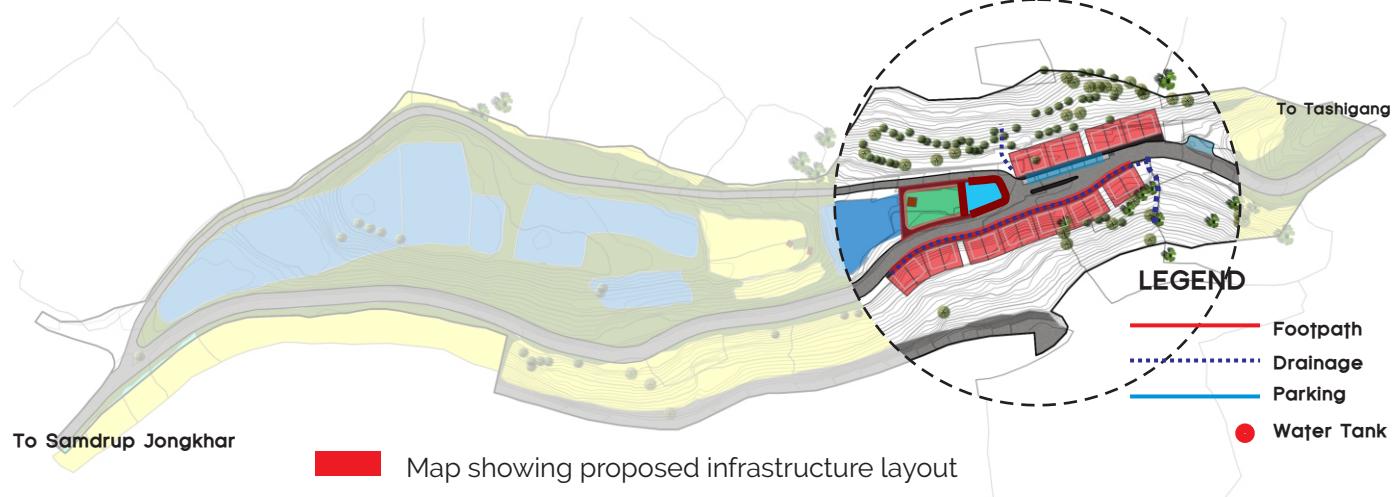
Section A-A'



Section B-B'

# PROPOSED INFRASTRUCTURE LAYOUT

The proposed infrastructure is mainly focused in the more area where major planning intervention has directed. Some of the major infrastructure considerations are footpath, storm water drainage, parking, water tank and solid waste disposal management.



## Footpath

A footpath is proposed on either side of the road falling within the commercial area. Another footpath is also proposed around the area identified as the recreational area. Sloping footpath may be preferred to the stairs in order to make it accessible for the disabled. The proposed width of the footpath is 1.5M.

## Drainage

The storm water drain is provided on one side of the road towards the Gomdar. Proper input from the related professionals will be required to achieve the slope. The proposed width of the drain is 0.5M. The storm water from the road side drain will be fed into the natural drain created due to its topography and ultimately discharged into the earth as natural infiltration.

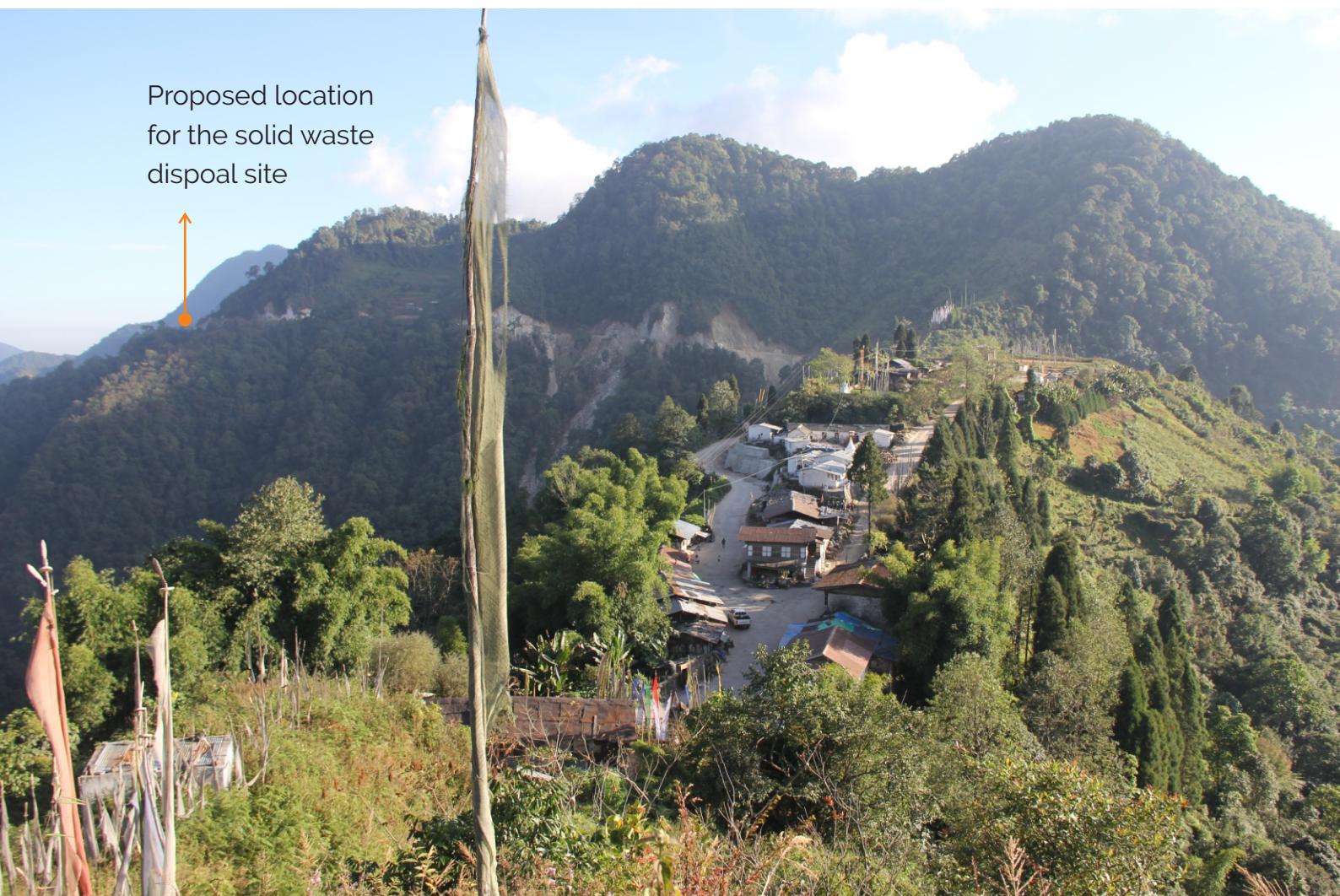
## Parking

Due to the extremely limited land for the plan development, the provision of the parking has become one of the major issue. Some parallel parking for both vehicle and two wheelers are provided as shown in the image along the Gomdar side of the shop lane.

## Water Tank

The planning team who visited the site found out that Narphung town has the drinking water shortage as opposed to what has been informed about its availability. The current water source for the town is Thrishing Brak located about 2 KM toward the north of the town. The proper study about for the alternative water source has to be done if the town has to expand beyond the existing households.

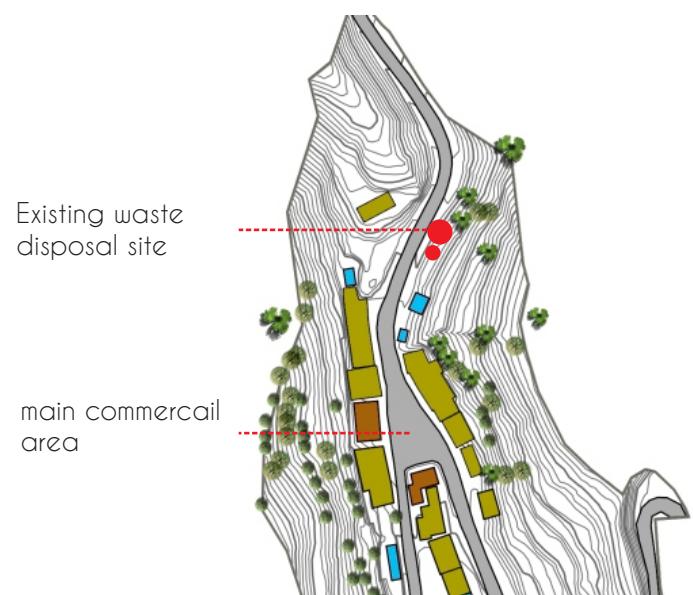
# Waste and Sewarage



Proposed location  
for the solid waste  
disposal site

Narphung doesn't have proper waste disposals and sewerage system. The tentative feasible location of the dumping place has been identified with consultation with the local government. It is located at in between Narphung and Tokorong. It however may need further study by the related professionals about its feasibility and implications.

The sewerage system proposed is a common septic tank for the whole residents as it would require less area as compared to individual septic tank.



Map showing option the existing waste disposal site

# 3D IMAGES



Aerial View of Core town





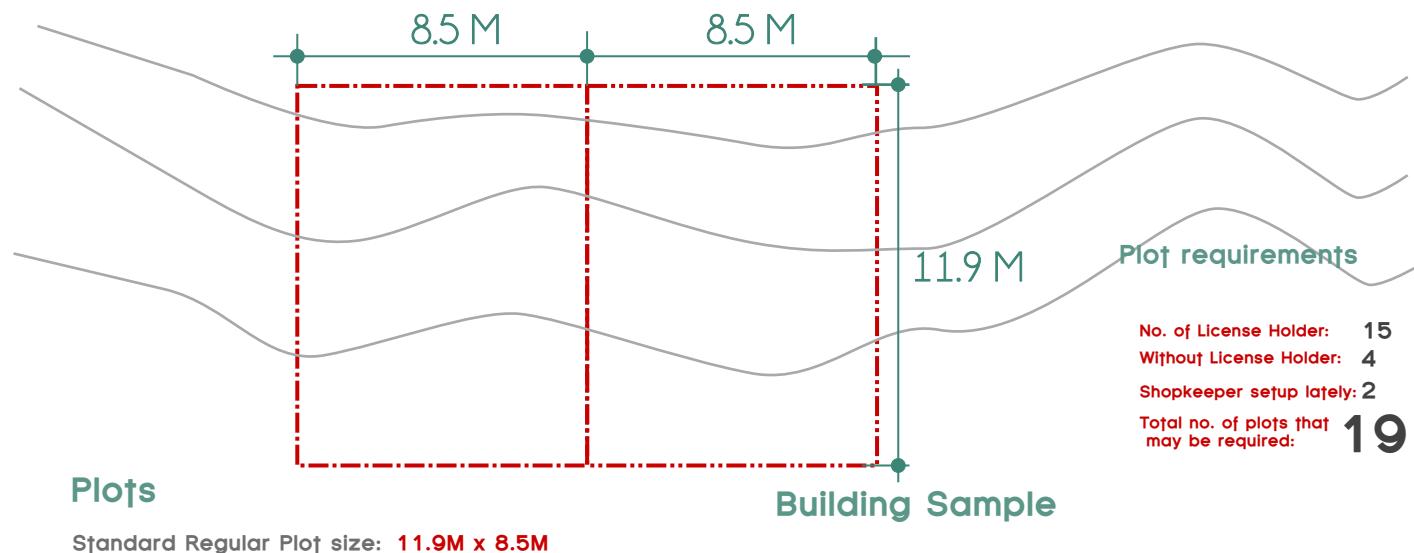


View from Gomdar Side



View from Orong Side

# PLOTS AND BUILDING



## Plots

Standard Regular Plot size: **11.9M x 8.5M**

Area: **101.175 SQ.M (2 DEC)**

Maximum ROADSIDE plot size Length: **8.5 M**

Note.

The linear dimension only applies to regular plot shapes and those plots whose shapes are not rectangularly regular may have different linear dimensions. The Area however remains same.

## Building Sample

No. of Units per building: **2 units**

Building footprint size: **12.5M x 8.5M**

In order to address the acute shortage of land availability for the town development in Narphung, a row housing type is proposed where a single building structure will occupy two individual plots. The building will consequently have two dwelling units, each for the plot owners.

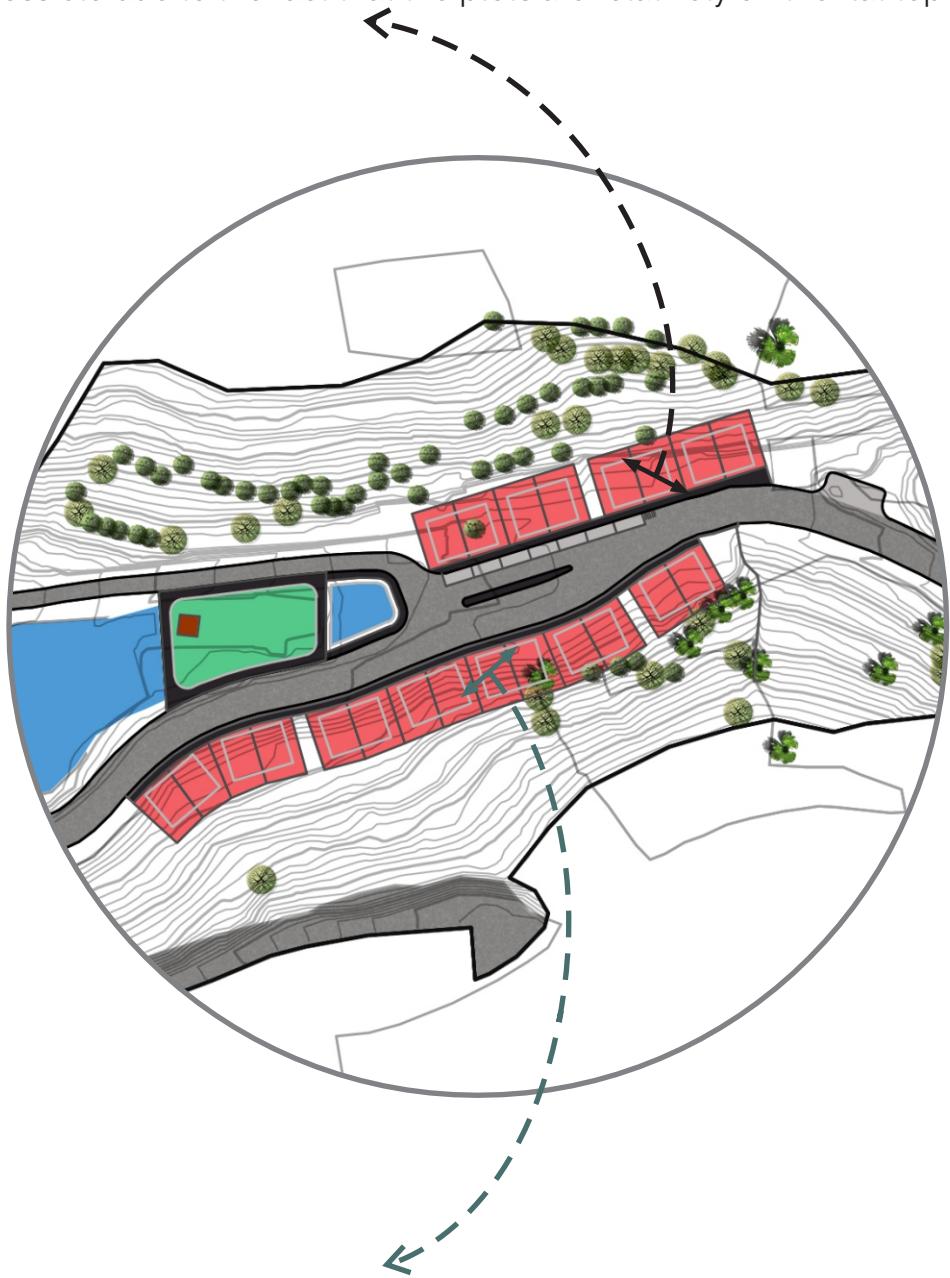
# CHAPTER 6

# ARCHITECTURAL SAMPLE

# ARCHITECTURAL SAMPLE

In order to address the acute shortage of land availability for the town development in Narphung, a row housing type is proposed where a single building structure will occupy two individual plots. The building will consequently have two dwelling units, each for the plot owners.

All the buildings located on the Orong side of the street are proposed to be a type 1. This has been possible due to the fact that the plots are relatively on the flat topography

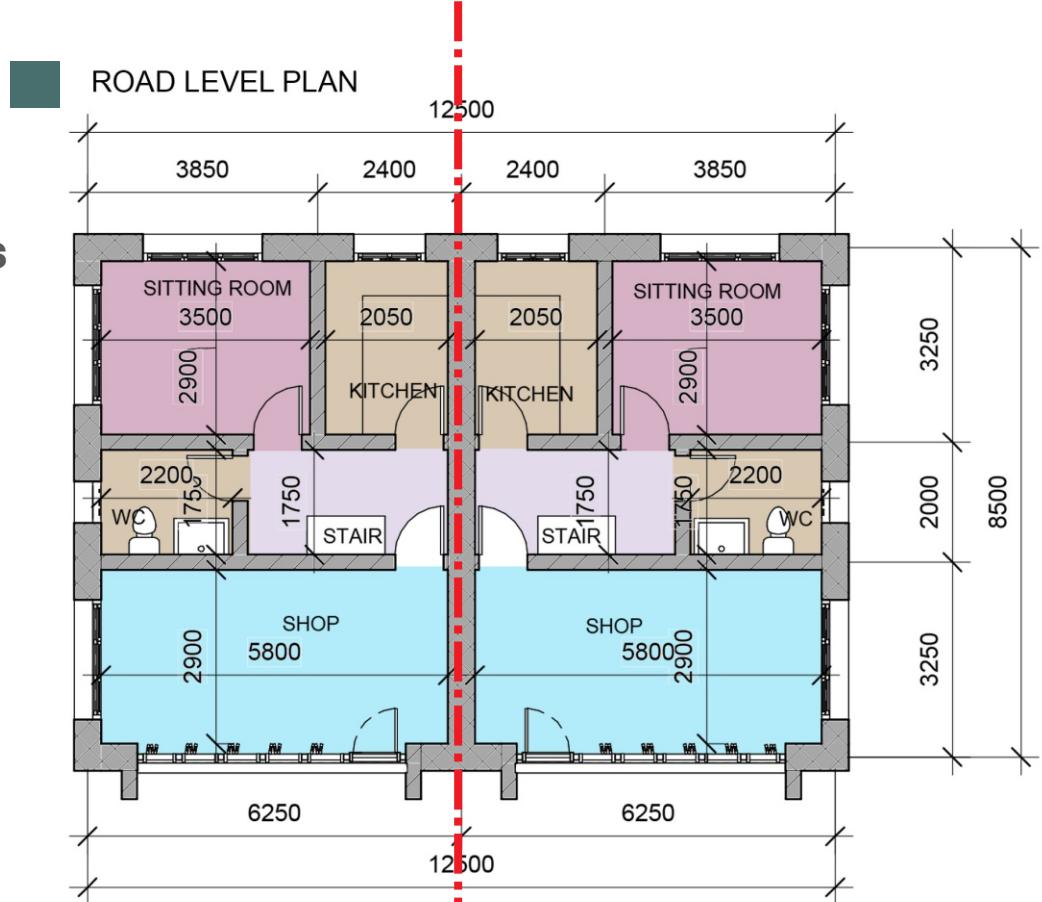


The buildings located towards the Gomdar side of the streets are proposed to be the type 2 owing to the fact that the topography of the site is relatively steep and the split level form of building is the most practicable.

# SAMPLE 1

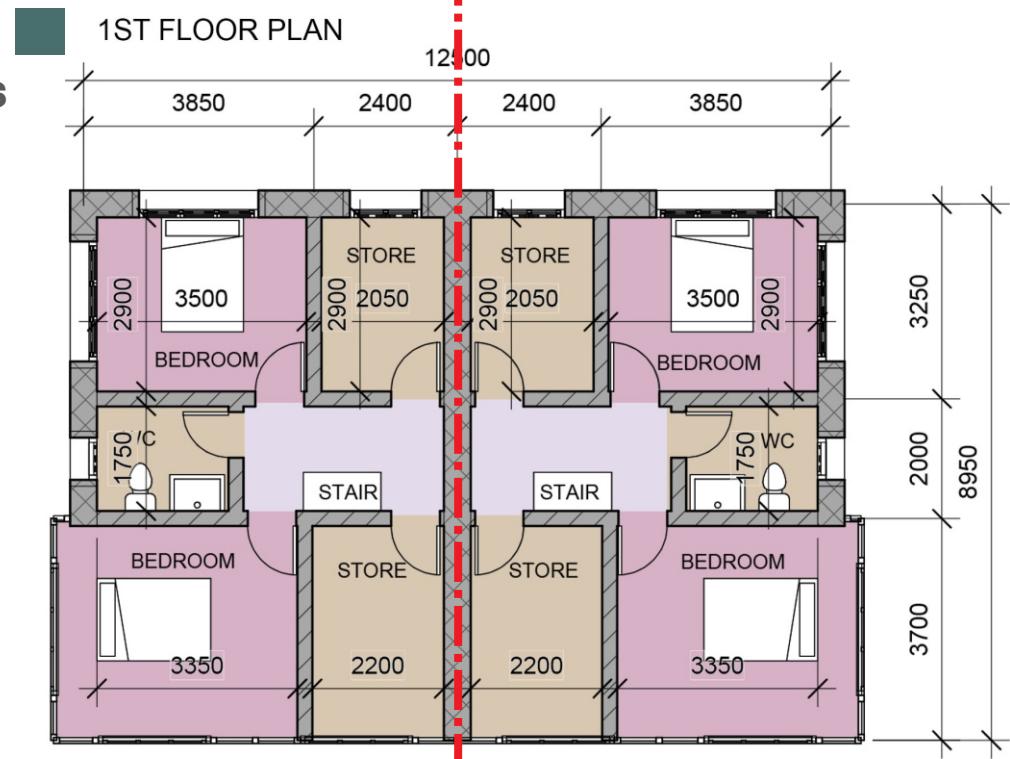
## Key Functions

- Shop
- Sitting Room
- Kitchen
- Toilet



## Key Functions

- Bedrooms
- Toilet
- Store



# SAMPLE 1

In the effort to maintain the existing unique technique of the goods display in Narphung, similar display method has been incorporated



Highway road  
(No setback from the edge of the footpath has been provided to utilize the maximum flat areas near the road)

A vertical element separating the two units are provided. This also helps to clearly demarcate the designated display area of the goods for sale outside the building



Front Elevation

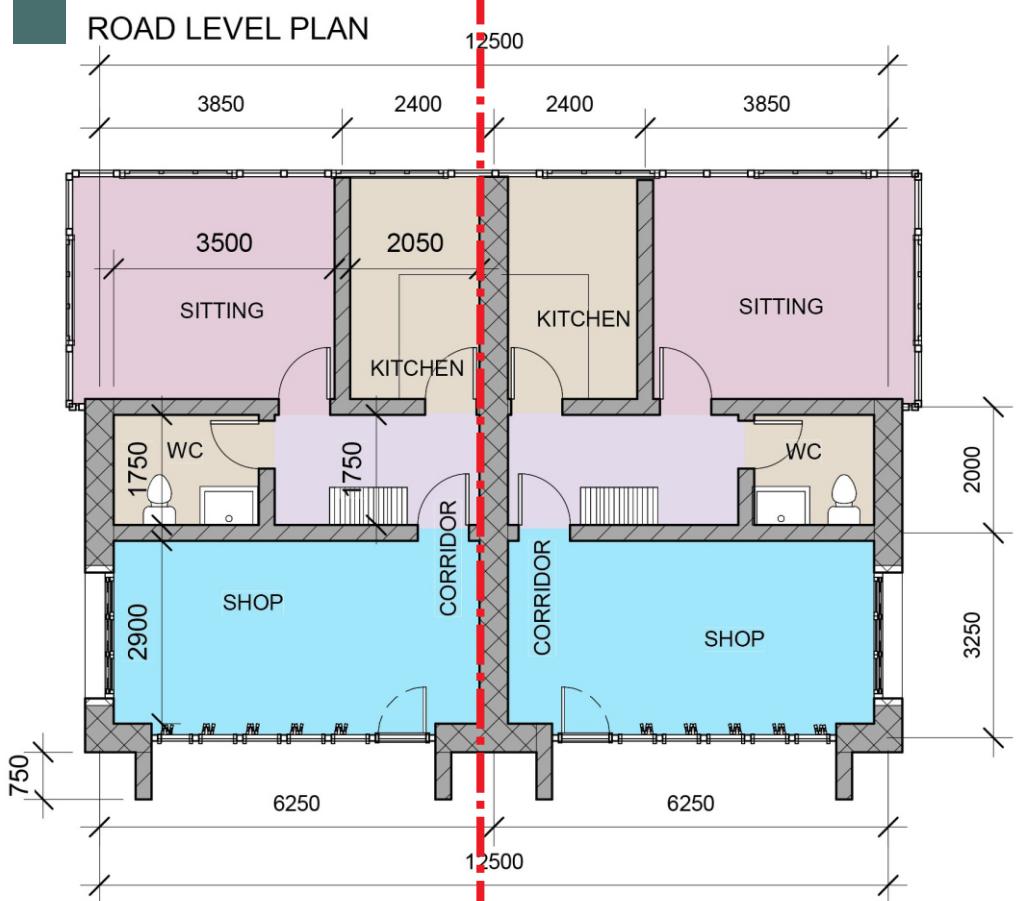


Side Elevation

# SAMPLE 2

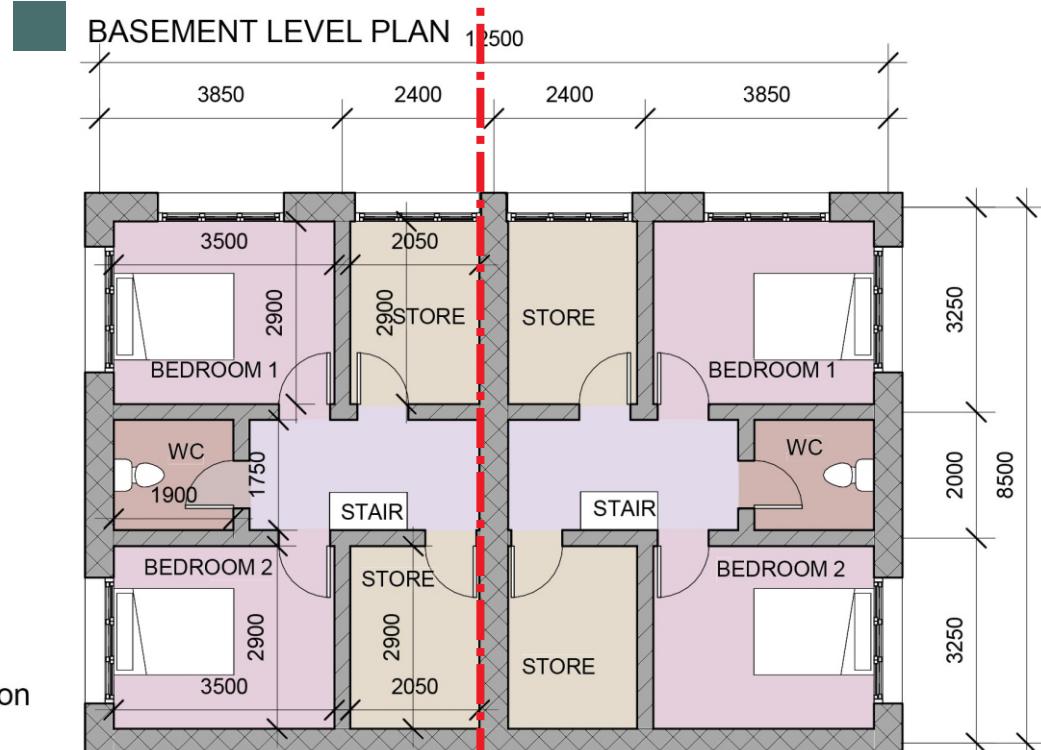
## Key Functions

- Shop
- Sitting Room
- Kitchen
- Toilet



## Key Functions

- Bedrooms
- Toilet
- Store



### LEGEND

- Public
- Private
- Service
- Circulation

# SAMPLE 2

A vertical element separating the two units are provided. This also helps to clearly demarcate the designated display area of the goods for sale outside the building

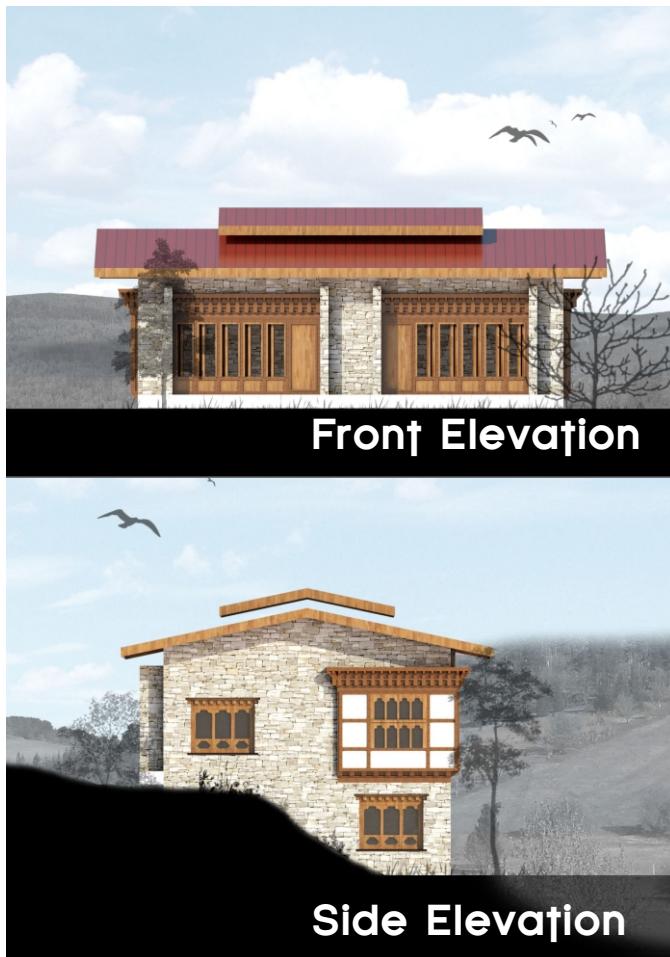


View from the road level

In the effort to maintain the existing unique technique of the goods in Narphung, similar display method has been incorporated



View from the back



Side Elevation

CHAPTER 7

# DEVELOPMENT CONTROL REGULATION

# ADMINISTRATION

## INTERPRETATION

The following guidelines and legislation apply to this development plan unless specifically stated otherwise:

- I.Rural Construction Rules 2013.
- ii.Bhutan Building Rules 2002.
- iii.Bhutanese Architectural Guidelines 2014.
- iv.Guidelines for Planning & Development of Human Settlements 2013.
- v.Land Pooling Rules 2009.
- vi.Land Act 2007.
- vii.Local Government Act 2009.
- viii.Any other relevant rules, regulations & guidelines.

Where there is a conflict or ambiguity between this plan and the above documents, the Dzongkhag Administration is to consult and clarify with the MoWHS.

## PROCEDURE FOR OBTAINING DEVELOPMENT PERMISSION

A person or body intending to carry out layout development as defined in Narphung Development Plan in or to erect a building shall obtain prior permission for the same from the Implementing Authority by applying on the prescribed form and furnishing all information in forms, formats and plans prescribed under these regulations and as may be amended from time to time by the Implementing Authority.

The application shall be signed by the legal owner of the plot or authorized signatory. The applicant shall submit signed plans and drawings along with the application and pay the requisite scrutiny fees, development charges, betterment charges, and other charges and dues if any to be levied under these Regulations.

List of Documents and Particulars to be furnished with the Application.

<b>Land Development</b>	<b>Building Development</b>
<p>1 Copy of the Land Ownership Certificate issued by the Implementing Authority.</p> <p>2 Copy of the Site Plan certified / issued by the Implementing Authority.</p> <p>4 Three copies of proposed layout plan drawn to a readable scale showing all the details of the development.</p> <p>5 Certificate of Architect or Planner who prepared the plans and drawings.</p> <p>6 Copy of No Objection Clearance from relevant Authority wherever applicable.</p>	<p>1 Copy of the Land Ownership Certificate issued by the Implementing Authority.</p> <p>2 Copy of the Site Plan certified / issued by the Implementing Authority.</p> <p>4 Three copies of proposed layout plan drawn to a readable scale showing all the details of the development.</p> <p>5 Certificates of Architect and Engineers who prepared the plans and drawings.</p> <p>6 Copy of No Objection Clearance from relevant Authority wherever applicable.</p>
<p>1. All the drawings shall be prepared in metric system only.</p> <p>2. The applicant shall sign all forms, plans, sections or written particulars or cause them to be signed by his authorized signatory and registered Architect and Engineers.</p> <p>3. One copy of each plans and documents shall be returned, on approval, to the applicant duly signed by the Implementing Authority or authorized officer.</p>	

# REGULATION

## PLOT

Two plots shall be combined together to create one single lot for all the building construction purposes. Possible plot combinations are shown in the image below



## PLOT AND BUILT FORM

I Two individual plots belonging to two different owners shall be combined to create a combined plot and a single building structure having two dwelling units, one each for the plot owners, shall be built.

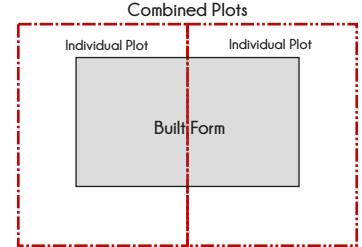


Fig. showing the combined plot and built form

## SET BACK

A single building structure built on a Combined Plot should keep the minimum set back of 0.5M towards the front (one facing towards the street), 3.00M towards the back and 2.00 M towards left and right.

	SETBACK (IN METER)
Front	0.50
Back	3.00
Sides	2.00

Table showing the setback requirements

## NO. OF FLOORS

The maximum number of floors allowed in all the buildings in Narphung town shall be two floors. The buildings towards the Orong side of the street shall have one of the floor below the road. In both cases the shops shall be located at the ground level / road level.

## **BUILDING MATERIAL**

Use of traditional building materials and construction methods IS encouraged. (Existing government policies support this initiatives in the form of subsidies and incentives

## **ROOF COLOUR**

Roof colour of new buildings must be in accordance with the existing regime, ie. red for government buildings, yellow for religious buildings and green for all other buildings (residential, commercial etc).

## **FINISHES AND EXTERIOR COLOUR**

Finishes and exterior colours of all other building surfaces are to complement the scenic feature through use of muted colours. Vibrant colours for walls and highly reflective roofs are not permitted. (Refer the building colour codes approved for Samdrup Jongkhar Dzongkhag).

## **ATTIC**

Human occupancy of attic shall not be permitted

---

# IMPLEMENTATION

- I        The Dzongkhag Administration shall be responsible for the implementation of this plan. They will be responsible for the enforcement and administration of the associated planning rules.
  - ii.      LG will carry out the land mobilization, plot distribution and land compensations exercises in consultation with the relevant stakeholders.
  - iii.     Gewog Administration shall approve the proposal for the constructions. The Drawings, specifications and documents should be well checked
- In view of the limited land, a community sewerage collection system (Common Septic tank) is proposed. The LGs will work on the identification of the site and the subsequent design and development of the facilities.
- iv.     Narphung faces drinking water shortage. LG shall identify the proper water source to address this issue.

