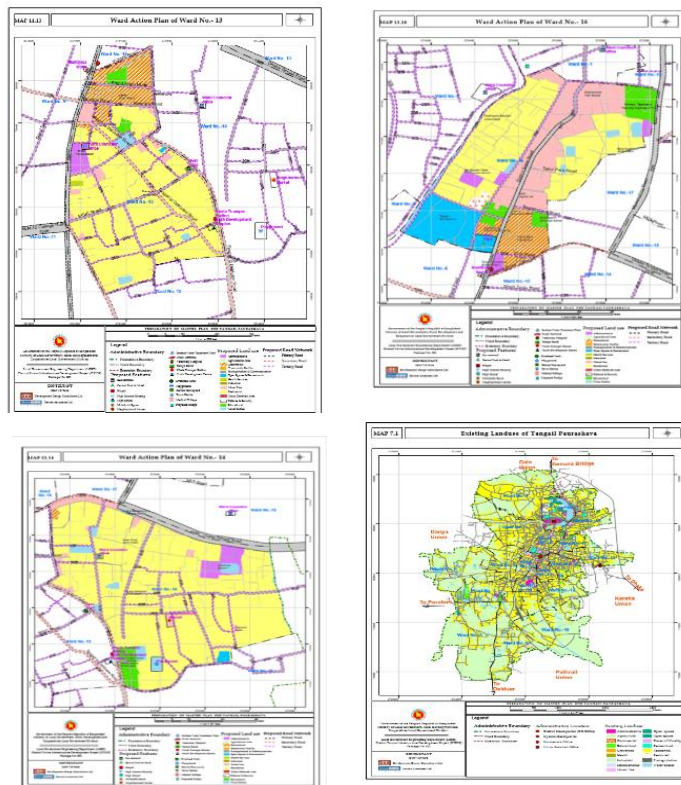




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Risk Reduction Action Plan: Volume 2 Rangamati Municipality



BUET-Japan Institute of Disaster Prevention and Urban Safety (BUET-JIDPUS)

Department of Urban and Regional Planning

Department of Civil Engineering

Bangladesh University of Engineering and Technology (BUET),

Dhaka-1000, Bangladesh.

December, 2021



**National
Resilience
Programme**



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**Earthquake Risk Assessment for Developing Contingency
Plans, Training Modules and Awareness Materials for
Rangpur City Corporation and
Tangail, Rangamati and Sunamganj Pourashavas**



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1. GENERAL GUIDELINES

Action Plan: Short Term

Priority 1		Priority 2		Priority 3		Priority 4	
Actions	Key Targets	Actions	Key Targets	Actions	Key Targets	Actions	Key Targets
Continuation and planned expansion of earthquake program	Public communication and awareness of citizens on DRR	Committees formed as per recommendations and a database on them prepared. A specific number of training sessions must be conducted for capacity building.	Strengthening disaster risk governance	Equitable disaster management activities	Development of local disaster management fund	Facilitating the emergency response activities	Promotion of household preparedness plan
		Capacity building of the members.	Developing Implementing Authority			A minimum specific number of training sessions must be conducted.	Arrangement and capacity building of the selected facilities for effective preparedness and response
		A minimum specific number of training sessions with a specific minimum number of local professionals must be conducted.	Capacity building of the local professionals for DRR				

Action Plan: Mid Term

Priority 1		Priority 2		Priority 3		Priority 4	
Actions	Key Targets	Actions	Key Targets	Actions	Key Targets	Actions	Key Targets
		Development of a system and capacity building for land use clearance and resilient construction of buildings and infrastructures	Ensuring building safety	Ensuring safety measures of facility buildings	Retrofitting immediately required facility buildings	Area-wise proper management of debris	Prepare a plan for debris management identifying debris accumulation points along with necessary capacity building
				Ensuring building safety	Development of a system and capacity building for land use clearance and resilient construction of buildings and infrastructures	Area-wise proper management of dead bodies	Prepare a plan for dead body management
						Proper implementation of the post-disaster	Development of a system and capacity building for post-disaster

						management activities	building vulnerability assessment to ensure recovery, rehabilitation and reconstruction
<i>Continuing Actions</i>							
Continuation and planned expansion of earthquake program	Public communication and awareness of citizens on DRR	A specific number of training sessions must be conducted for capacity building of the committee members.	Strengthening disaster risk governance	Equitable disaster management activities	Development of local disaster management fund		
		A minimum specific number of training sessions with a specific minimum number of local professionals must be conducted.	Capacity building of the local professionals for DRR				

Action Plan: Long Term

Priority 1		Priority 2		Priority 3		Priority 4	
Actions	Key Targets	Actions	Key Targets	Actions	Key Targets	Actions	Key Targets
Ensuring social sustainability of the disaster management activities	Prepare a plan to ensure continuity of awareness and capacity building (public communication and awareness of citizens on DRR; capacity building of the committee members; capacity building of the local professionals for DRR; etc.)			Earthquake resilient development	Density zoning to control further development	Contingency plan revised and updated.	Revision and enhancement of the contingency plan at regular interval
				Minimizing economic vulnerability.	Mandatory insurance policy	Minimizing the earthquake vulnerability	Further arrangement for effective preparedness and response (Road widening, retrofitting of

							facility buildings, etc.)	
				Earthquake resilient land-use planning	Promotion of RSLUP			
				Minimizing the earthquake vulnerability	Preserving and restoring water bodies and open spaces			
				At least one remedy introduced and implemented.	Remedies for liquefiable soils			
<i>Continuing Actions</i>								
Continuation and planned expansion of earthquake program	Public communication and awareness of citizens on DRR	A minimum specific number of training sessions with a specific minimum number of local professionals must be conducted.	Capacity building of the local professionals for DRR	Ensuring safety measures of facility buildings	Retrofitting immediately required facility buildings	Proper implementation of the post-disaster management activities	Development of a system and capacity building for post-disaster building vulnerability assessment to ensure recovery, rehabilitation and reconstruction	

2. ACTION PLAN FOR RANGAMATI POURASHAVA

Action Plan for retrofitting of vulnerable buildings

The buildings specified as Ward Coordination Center and for providing temporary shelter and emergency health facilities need attention in the mid-term based on their status of vulnerability. Those which have undergone Rapid Visual Screening (RVS) and were found to be vulnerable should be assessed via Detailed Engineering Assessment (DEA). If the DEA results assure their status as vulnerable, they must be retrofitted. Table-01 lists the buildings, their detailed information, and actions required accordingly.

Table 01 - List of vulnerable selective buildings with required actions in study areas of Rangamati Pourashava

Information of the building						Action
Ward No.	Label *	Name	Present use	Proposed use	Condition	
06	1	Vedvedi Pour High School Rangamati	Educational	Temporary Shelter	Unsafe according to RVS	1. Detailed Engineering Assessment 2. If vulnerable, retrofitting
	2	Songgharem Buddobiher	Religious			
	3		Administrative office			
	4	Social Wealfare School	Community facilities			
	5	Bhabna Kendro	Religious			
	6		Administrative office			
	7	Monghar High School Hostel	Educational			

Information of the building						Action
Ward No.	Label *	Name	Present use	Proposed use	Condition	
	8	Public library	Community facilities			
	9	Radha Krisno Mondir.	Religious			
	10	Radha Krisno Mondir	Religious			
	11		Educational			
08	1	Raj Noli Nakha Roy Govt. Primary School	Educational	WCC	Unsafe according to DEA	1. Retrofitting
	2	F.P.A.B.Bhaban	Clinic	Emergency Health	Unsafe according to RVS	1. Detailed Engineering Assessment 2. If vulnerable, retrofitting
	3	Lake Site Hospital(Pvt.) & Diagnostic Center	Diagnostic Center			
	4	Alliance Diagnostic Centre	Diagnostic Center			
	5	Parmi Buddha Behar	Religious	Temporary Shelter	Unsafe according to RVS	
	6	Baitul Ijjot Jame Masjid	Religious			
	7	Rangamati Gymnasium	Community Facility			
	8	Rangamati Protibondi School	Educational			
	9	Collectorate Jame Masjid	Religious			
	10	Chakma Rajbari Office	Community Facility	Temporary Shelter		

Information of the building						Action
Ward No.	Label *	Name	Present use	Proposed use	Condition	
	11	Rani Doyamoye Govt. Primary School	Educational		Unsafe according to RVS	
	12	–	Religious			
	13	–	Educational			
09	1	Ancholik Nagar Paribar Parokalpona	Hospital	Emergency Health	Unsafe according to RVS	1. Detailed Engineering Assessment 2. If vulnerable, retrofitting
	2	Textile Vocational Institute	Educational	Temporary Shelter	Unsafe according to RVS	
	3	TTC Jame masjid	Religious			
	4	Grameen Bank	Community Facility			
	5	Technical Training Center Rangamati	Educational			

*Labels are depicted in the respective maps of the vulnerable buildings to be retrofitted of the wards (Ward 06: Figure – 01; Ward 08: Figure – 02; Ward 09: Figure – 03)

Proposal for Retrofitting Public Buildings Selected as WCC, Temporary Shelter and Emergency Health Facility in Ward 06, Rangamati Pourashava

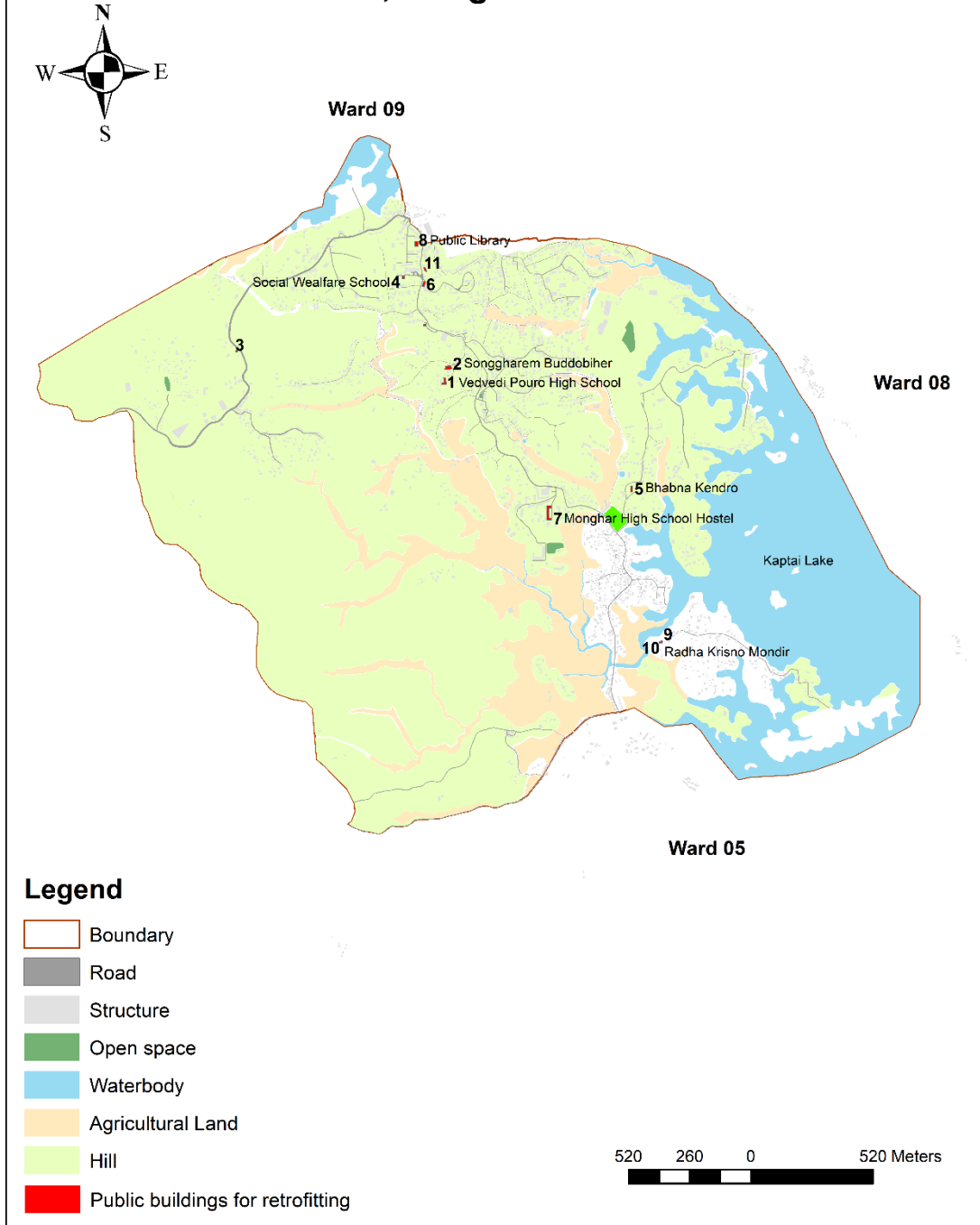


Figure 01 - Proposal for retrofitting of vulnerable buildings
in Ward-06, Rangamati Pourashava

Proposal for Retrofitting Public Buildings Selected as WCC, Temporary Shelter and Emergency Health Facility in Ward 08, Rangamati Pourashava

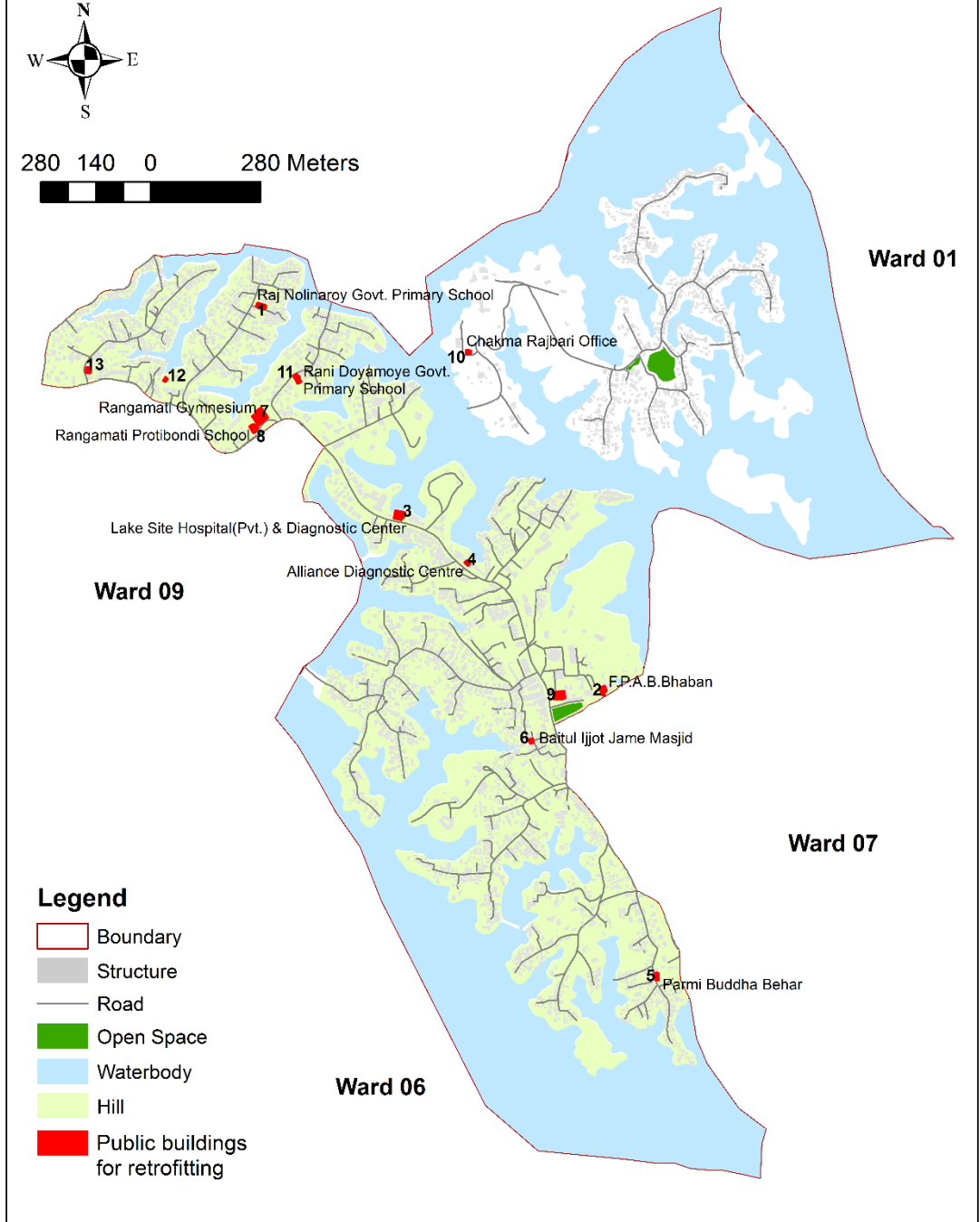


Figure 02 - Proposal for retrofitting of vulnerable buildings
in Ward-08, Rangamati Pourashava

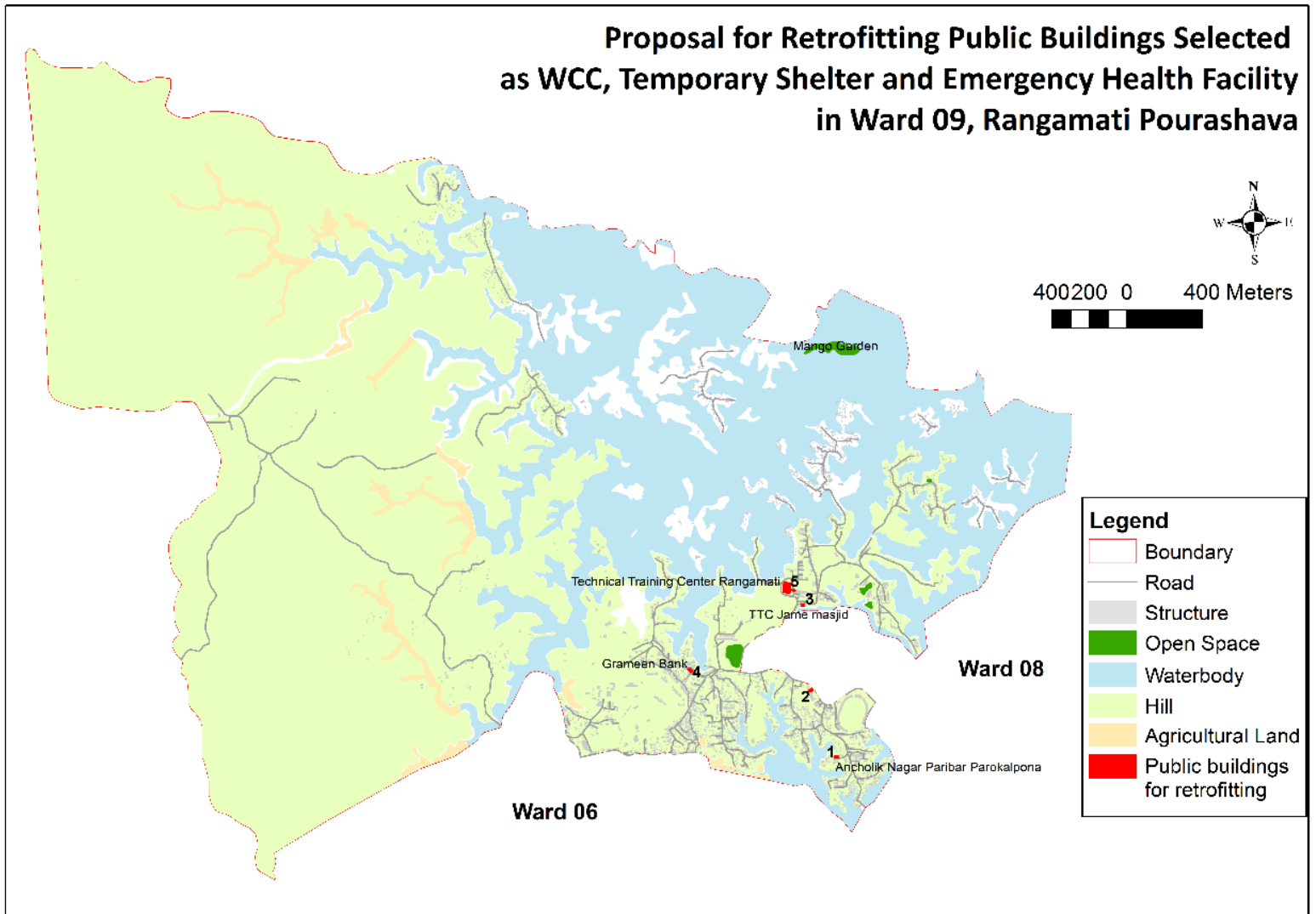


Figure 03 - Proposal for retrofitting of vulnerable buildings
in Ward-09, Rangamati Pourashava

Action Plan for Road Widening

The roads which provide access to the Ward Coordination Center, temporary shelters and emergency health facilities were checked for possible blockages and accordingly proposed for widening in the long-term as shown in Figures 04, 05, and 06. After that, all roads less than 12' wide need to be widened.

Proposal for Road Widening in Ward 06, Rangamati Pourashava



Legend

- Boundary
- Structure
- Open space
- Waterbody
- Agricultural Land
- Hill
- Landmark
- Full Blockage

Road width and accessibility condition

- <4 ft (Walking, One-way Bicycle)
- 4-8 ft (One-way Rickshaw, Van and Motorcycle and Two-way Bicycle)
- 8-12 ft (Two-way Rickshaw, Van, Motorcycle and Bicycle)
- 12-25 ft (Single Carriageway)
- 25-40 ft (Two Lane Carriageway)



Figure 04 - Proposal for road widening
in Ward-06, Rangamati Pourashava

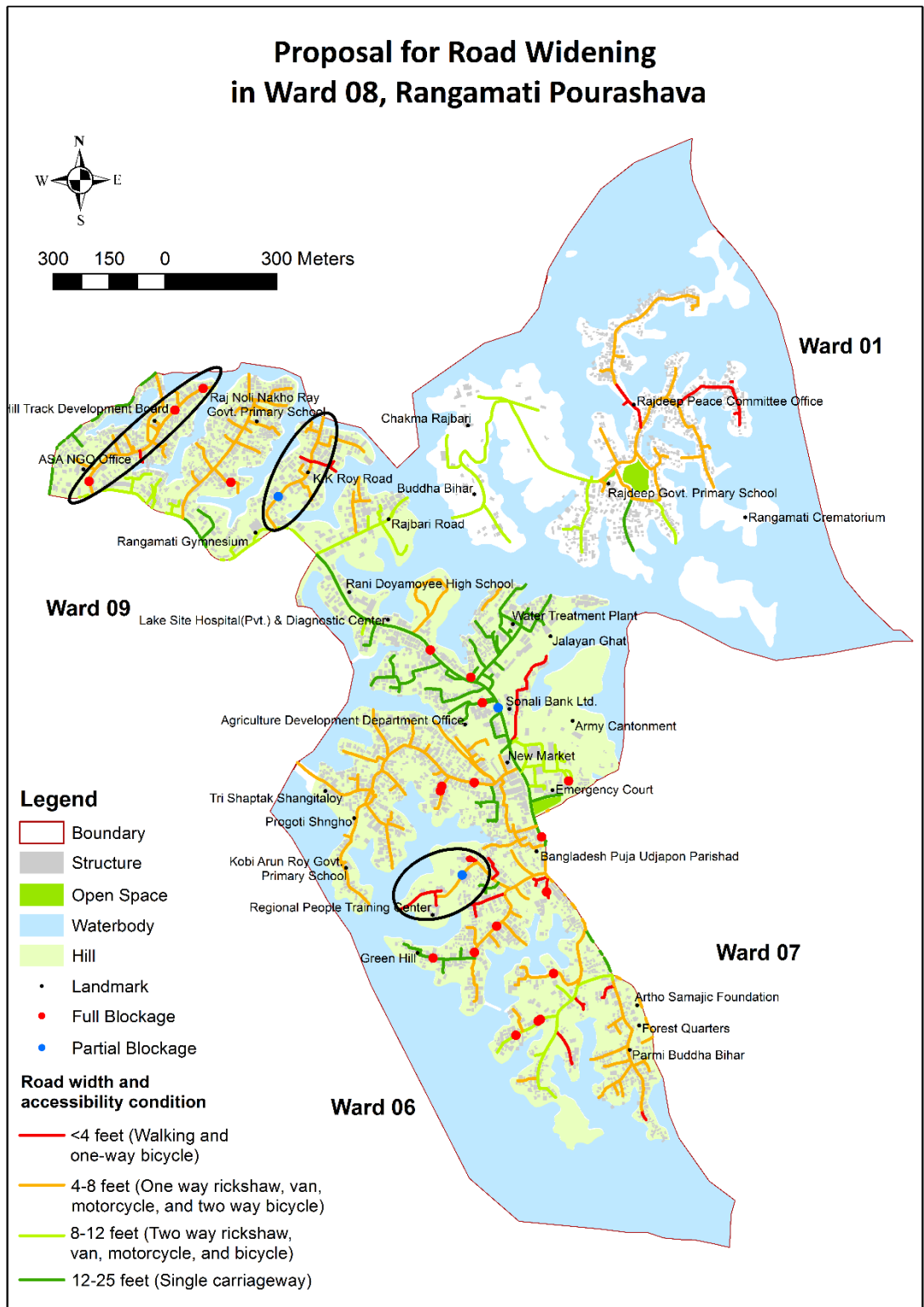


Figure 05 - Proposal for road widening in Ward-08, Rangamati Pourashava

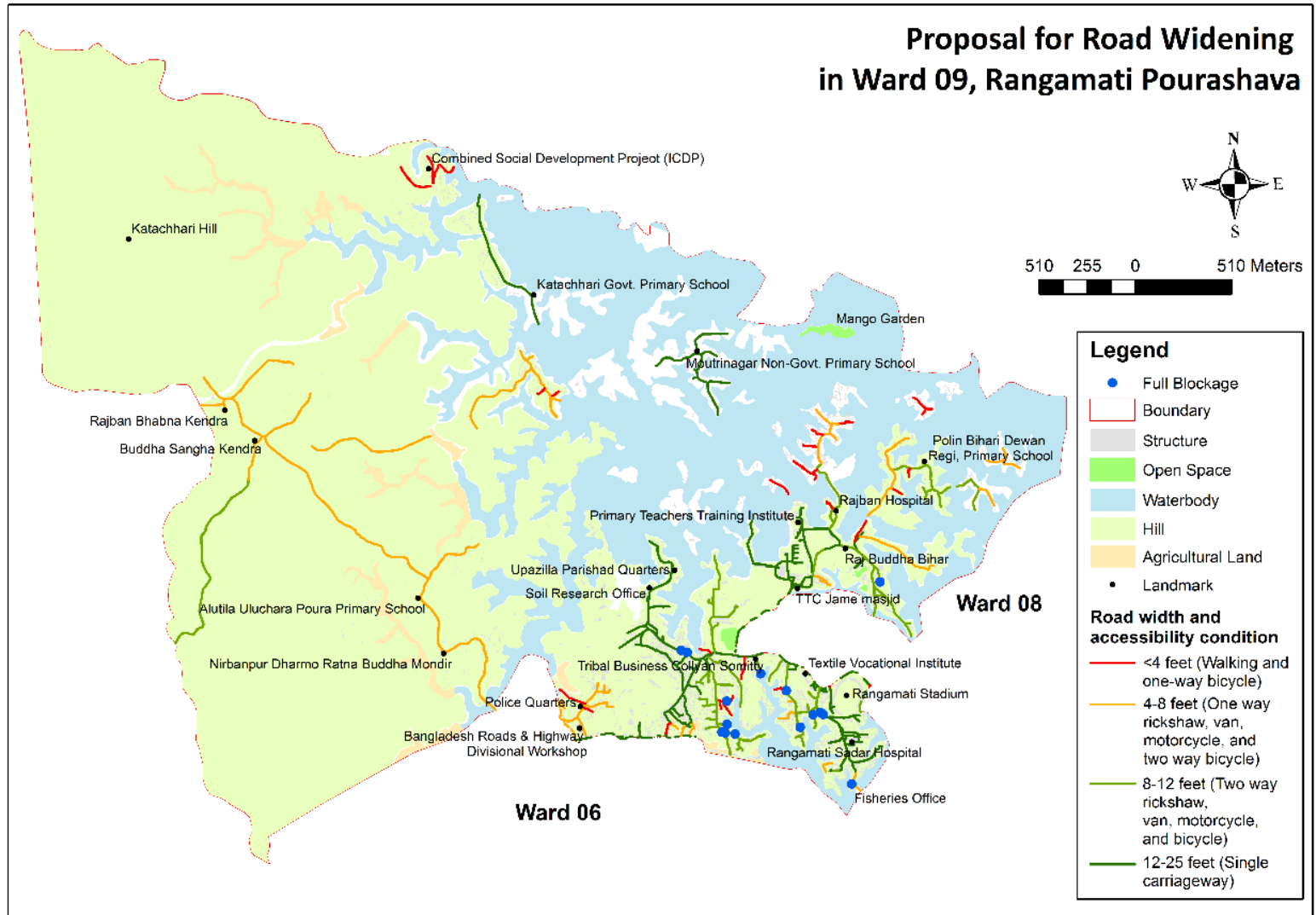


Figure 06 - Proposal for road widening in Ward-09, Rangamati Pourashava