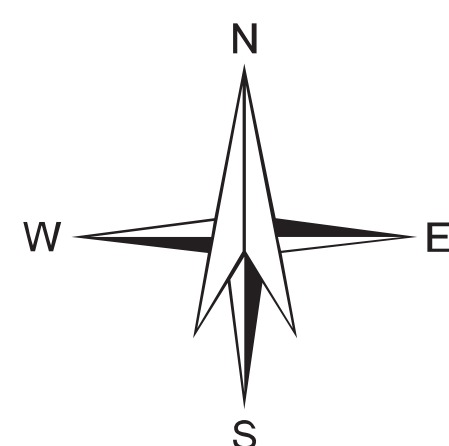
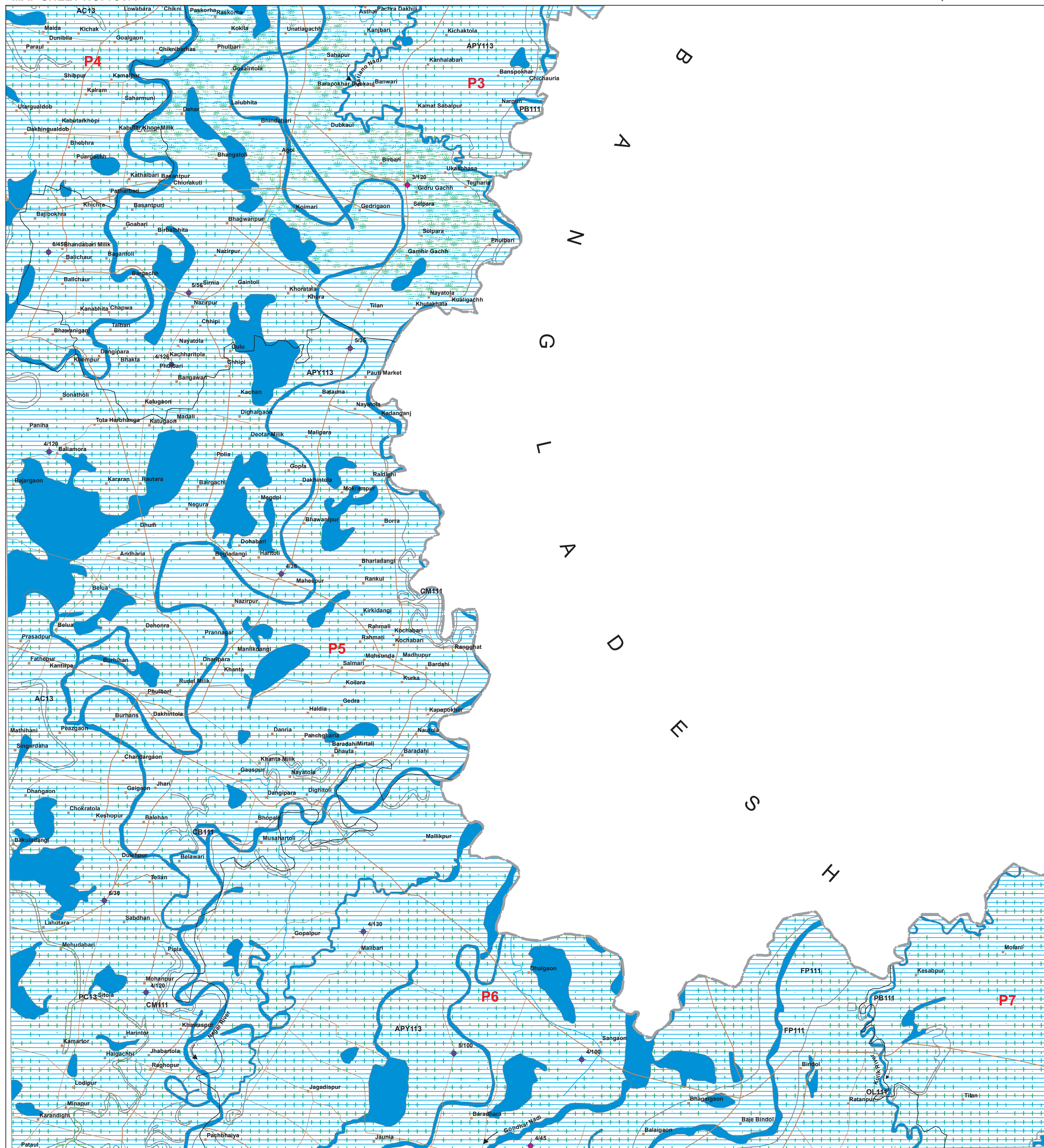


(PREPARED FROM SATELLITE IMAGE INTERPRETATION WITH LIMITED FIELD CHECKS)



MAP SHEET NO. 78C/1

UTTAR DINAJPUR DISTRICT, WEST BENGAL



MAP UNIT (HYDROGEOLOGIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE (COLOUR INDICATES YIELD RANGE AND HATCHING INDICATE DEPTH RANGE)		GEOLOGICAL SEQUENCE / ROCK TYPE (REPRESENTED IN THE MAP WITH NUMERIC CODE)		GEOMORPHIC UNIT / LANDFORM (REPRESENTED IN THE MAP WITH ALPHABETIC CODE)		DEPTH TO WATER LEVEL PRE / POST-MONSOON (AVERAGE IN METERS) NO. OF WELLS OBSERVED		RECHARGE CONDITIONS BASED ON AVAILABILITY OF WATER (RAINFALL & OTHER SOURCES)		GROUND WATER PROSPECTS										RECHARGE STRUCTURES SUITABLE & PRIORITY		REMARKS (PROBLEMS / LIMITATIONS)							
										AQUIFER MATERIAL		TYPE OF WELLS SUITABLE		DEPTH RANGE OF WELLS (SUGGESTED)		YIELD RANGE OF WELLS (EXPECTED)		HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY)		QUALITY OF WATER POTABLE (P) NON-POTABLE (NP)		GROUND WATER IRRIGATED AREA (APPROX. RANGE IN PERCENTAGE)		PT = FERTILIZATION TANK CD = CHECK DAM SW = SAND/SILT WELL ST = DRAINING OF TANK RW = RECHARGE WELL SD = SUBSIDIARY DYE RS = RECHARGE DRAFT ST = STORAGE TANK SCW = SOIL CONSERVATION MEASURES					
				Channel Bar (CB)		No Well Observed		Excellent		LS		TW		5- 10 m		400-500 LPM		Very High		P		Nil		Not Required		Highly productive shallow aquifer with good recharge from the river base flow.			
				Point Bar (PB)		No Well Observed		Very Good		LS		RW TW		5-10 m		300-400 LPM		Very High		P		Nil		Not Required		Groundwater prospects very high with high recharge potential. Recharge structures not required.			
				Oxbow Lake (OL)		No Well Observed		Good		LS		TW		20-30 m		200-300 LPM		Moderate		P		Nil		Not Required		Though occur as water bodies, but highly productive aquifer occurs at depth.			
				Cut-off Meander (CM)		No Well Observed		Very Good		LS		RW TW		10-20 m		300-400 LPM		Very High		p		Nil		Not Required		Potable water available at shallow depth.			
				Flood Plain (FP)		No Well Observed		Very Good		LS		TW		<30 m		250-350 LPM		Very High		P		25		Not Required		Potable water available at shallow depth.			
				Alluvium (Sand Dominant) (111)		Alluvium (Sand Dominant) (111)		6 / 4 13		Good		LS		TW		25-30 m		200- 250 LPM		High		P		70		Not Required		Highly productive aquifer at shallow depth with good recharge.	
				Alluvium (Sand and Silt) (113)		Abandoned Channel (AC)		No Well Observed		Very Good		LS		RW TW		10 - 15m		250 - 300 LPM		Very High		P		Nil		Not Required		Highly productive shallow aquifers with good recharge from base flow.	
				Alluvium (Sand,Silt & Clay) (13)		Palaeo-channel (PC)		No Well Observed		Very Good		LS		RW TW		15-20 m		150-200 LPM		Very High		P		Nil		Not Required		Highly productive shallow aquifers with good recharge.	
F --- F --- / --- --- D --- D --- / --- --- P --- P --- / --- --- Q --- Q --- / --- --- D --- D --- / --- --- P --- P --- / --- --- Q --- Q --- / --- --- These are fault / fracture zones, which generally act as conduits for movement of ground water in hard rocks. Along these zones, the yields are significantly higher and wells are likely to be sustainable for longer duration. However, the inferred fractures need to be confirmed by detailed ground surveys. These are dykes, quartz reefs and pegmatite veins, which generally act as barriers for ground water movement.																													
N.B.-The depth range and yield range of wells may vary within the unit because of certain inhomogeneities. Fractures/Lineaments which are clearly observed / inferred from the satellite image are indicated on the map. There could be some obscured fractures which also influence the ground water prospects. Locations of the recharge structures shown in the map are tentative. This map is useful for narrowing down the target zones, and exact location on the ground for wells and recharge structures should be identified based on follow-up ground hydrogeological/geophysical surveys.																													

[illegible]