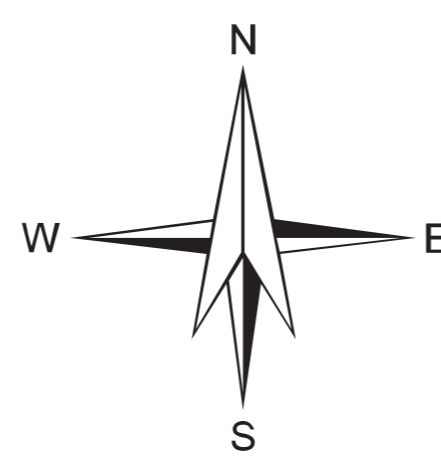
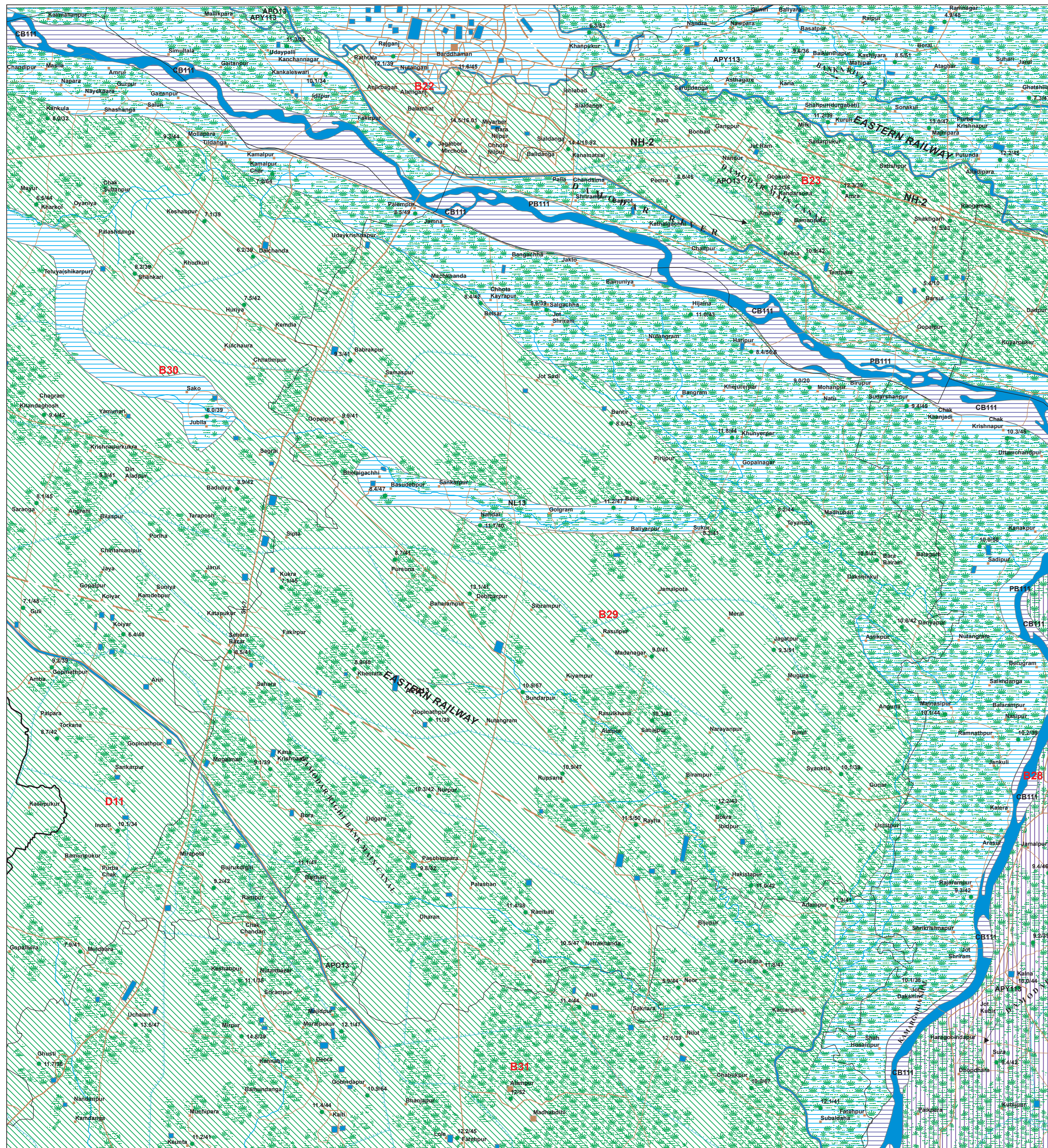


0 1 2 3 4 5 Kilometers

**SCALE - 1 : 50,000**



BANKURA &amp; BARDHAMAN DISTRICTS, WEST BENGAL



MAP UNIT (HYDROGEOLOGIC UNIT) REPRESENTED IN THE MAP WITH ALPHANUMERIC CODE  (COLOR INDICATES WELL-SAND AND WATER PROSPECT 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  LS = LOOSE SEDIMENTS PS = PERMEABLE ROCK FR = FRACTURED ROCK RW = WEATHERED ROCK / SOIL RM = WEATHERED MATERIAL IR = IMPERVIOUS ROCK	TYPE OF WELLS SUITABLE  DW = DUS WELL RW = RING WELL BW = BORE WELL TW = TUBE WELL DWM = DUS CUM BORE WELL / DWM DWS = CUM TUBE WELL	DEPTH RANGE OF WELLS (SUGGESTED)  MIN. MAX. (IN METERS)	YIELD RANGE OF WELLS (EXPECTED)  (IN LPM or m <sup>3</sup> /day)	HOMOGENEITY IN THE UNIT & SUCCESS RATE OF WELLS (PROBABILITY)  VERY HIGH HIGH MODERATE LOW	QUALITY OF WATER  POTABLE (P) NON-POTABLE (NP)  (INDICATE QUALITY IF NON-POTABLE)	GROUND WATER IRRIGATED AREA  (APPROX. RANGE IN PERCENTAGE)	PT = PERCOLATION TANK CD = CHECK DAM NS = NON-SATURATED WELL + = DESLIND OF TANK NP = RECHARGE PIT + = SUBSURFACE DYKE RD = RECHARGE DAMPT ST = STORAGE TANK SCW = SOIL CONSERVATION MEASURES	
	Hugli/Bhagirathi Formation/Present Day Deposits (Present Day)	Alluvium (Sand Dominant) (111)	Point Bar (PB)	<div><div>6</div><div>1</div></div>	Very Good	LS	RW TW	5-10 m	300-400 LPM	Very High	P	7%	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
			Channel Bar (CB)	<div><div>5-6</div><div>2</div></div>	Excellent	LS	TW	5-10 m	400-500 LPM	Very High	P	Nil	Not Required	Groundwater prospects very high with high recharge potential. Recharge structures not required.
	Panshet/Akumbhat Excavation (Early to Late Holocene)	Alluvium (Sand and Silt) (113)	Alluvial Plain Younger (APY)	<div><div>5.5 - 14.6</div><div>DW - 6 HP - 39</div></div>	Very Good	LS	DW TW	10 - 12 m 20 - 30 m	100 - 125 m <sup>3</sup> /day 200 - 250 LPM	Very High	P	74%	Not Required	Aquifer is formed of sandy part of alluvium. Recharge structures are not required as good recharge conditions prevail
				<div><div>12.1 - 23.0</div><div>HP - 23</div></div>	Very Good	LS	TW	100 - 120 m	400 - 500 LPM	Very High	NP (As) [At shallow depth]	42%	Not Required	Potable water available at depth range above 100 m.
	Siltstone/Amphibolite Excavation (Late Pleistocene to Early Holocene)	Alluvium (Sand, Silt and Clay) (13)	Natural Levee (NL)	<div><div>8.4 - 11.7</div><div>HP - 3</div></div>	Good to Very Good	LS	DW TW	10 - 15 m 25 - 30 m	50 - 75m <sup>3</sup> /day 200 - 250 LPM	High	P	4%	Not Required	Aquifer is formed of sandy part of alluvium. Recharge structures are not required as good recharge conditions prevail.
			Palaeochannel (PC)	<div><div>8.0</div><div>HP - 1</div></div>	Very Good	LS	DW TW	5 - 10 m 10 - 20 m	125 -150m <sup>3</sup> /day 300 - 400 LPM	Very High	P	Nil	Not Required	Aquifer is formed of sandy part of alluvium. Recharge structures are not required as good recharge conditions prevail.
			Alluvial Plain Older (APO)	<div><div>5.0 - 14.9</div><div>HP - 71</div></div>	Good	LS	DW TW	10 - 15 m 40 - 60 m	50 - 75m <sup>3</sup> /day 150 - 200 LPM	High	P	Nil	Not Required	Moderate groundwater potential at intermediate depths.
F = 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.														
D = Dyke / 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]