

CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IS:1608 Mechanical testing of metals - tensile testing</p> <p>IS:1852 Rolling and Cutting Tolerances for Hot rolled steel products.</p> <p>IS:2016 Specification for Plain washers.</p> <p>IS:2595 Code of practice for Radiographic testing</p> <p>IS:2629 Hot dip galvanising of iron and steel</p> <p>IS:3502 Steel chequered plate.</p> <p>IS:3613 Acceptance tests for wire flux combination for submerged arc welding.</p> <p>IS:3658 Code of practice for liquid penetrant flaw detection.</p> <p>IS:3664 Code of practice for ultra sonic pulse echo testing contact and immersion method</p> <p>IS:3757 High strength structural bolts.</p> <p>IS:4000 High strength bolts in steel structure - code of practice.</p> <p>IS:4353 Sub merged arc welding of mild steel and low alloy steel Recommendation</p> <p>IS:4759 Hot dip zinc coating on structural steel and other allied products.</p> <p>IS:5334 Code of practice for magnetic particle flaw detection of welds.</p> <p>IS:5369 General requirements for plain washers and lock washer</p> <p>IS : 6623 High strength structural nuts.</p> <p>IS:6649 Hardened and tampered washers for high strength structural bolts & nuts.</p> <p>IS:6911 Stainless steel plate, sheet and strip.</p> <p>IS:7205 Safety code for erection of structural steel.</p> <p>IS:7215 Tolerances for fabrication of structural steel.</p> <p>IS:7307 Approved test for welding procedures</p> <p>(Part - I) Fusion welding of steel.</p> <p>IS:7310 Approval test for welders working to approval welding procedure. (Part-I) Fusion welding of steel</p> <p>IS:9178 Criteria for design of steel bins for storage of bulk material. (Part-1to 3)</p> <p>IS:9595 Recommendations for metal arc welding of carbon & carbon manganese steel.</p>

EPC PACKAGE FOR 2 X 660 MW SUPER CRITICAL THERMAL POWER PROJECT, HTPS, KORBA WEST	TECHNICAL SPECIFICATION SECTION-VI, PART-B BID DOC NO.: 03-05/2X660 MW/T-13/2023	SUB-SECTION-D-1-12(A) CIVIL WORKS Annex(A)-LIST OF CODES AND STANDARDS	PAGE 6 OF 16
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CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IS:12843 Tolerances for erection of steel structures.</p> <p>SP:6 ISI Hand book for structural Engineers. (Part 1 to 7)</p> <p>Plastering and Allied Works</p> <p>IS:1661 Code of practice for application of cement and cement lime plaster finishes.</p> <p>IS:2402 Code of practice for external rendered finishes.</p> <p>IS:2547 Gypsum building plaster. (Parts 1&2)</p> <p>Acid and Alkali Resistant Lining</p> <p>IS:158 Ready mixed paint, brushing, bituminous, black, lead free, acid, alkali & heat resisting.</p> <p>IS:412 Expanded metal steel sheets for general purpose.</p> <p>IS:4441 Code of practice for use of silica type chemical resistant mortars.</p> <p>IS:4443 Code of practice for use of resin type chemical resistant mortars.</p> <p>IS:4456 Method of Test for chemical resistant tiles. (Part I & II)</p> <p>IS:4457 Ceramic unglazed vitreous acid resisting tiles.</p> <p>IS:4832 Specification for chemical resistant mortars. (Part - 1) Silicate type (Part - 2) Resin type (Part - 3) Sulfur type</p> <p>IS:4860 Acid resistant bricks.</p> <p>IS:9510 Bitumastic acid resisting grade.</p> <p>Water Supply, Drainage and Sanitation</p> <p>IS:458 Precast concrete pipes (with & without reinforcement).</p> <p>IS:554 Pipe threads where pressure tight joints are made on the threads – dimensions, tolerances and designation.</p> <p>IS:651 Salt glazed stoneware pipes and fittings.</p> <p>IS:774 Flushing cisterns for water closets and urinals.</p> <p>IS:775 Cast iron brackets and supports for wash basins and sinks.</p>

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CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IS:778 Copper alloy gate, globe and check valves for water works purposes.</p> <p>IS:781 Cast copper alloy screw down bib taps & stop valves for water services.</p> <p>IS:782 Caulking lead.</p> <p>IS:783 Code of practice for laying of concrete pipes.</p> <p>IS:1172 Code of basic requirements of water supply, drainage and sanitation.</p> <p>IS:1230 Cast iron rain water pipes and fittings.</p> <p>IS:1239 (Part 1&2) Mild Steel tubes, tubulars and other wrought steel fittings</p> <p>IS:1536 Centrifugally cast (Spun) iron pressure pipes for water.</p> <p>IS:1537 Vertically cast iron pressure pipes for water, gas and sewage.</p> <p>IS:1538 Cast iron fittings for pressure pipe for water, gas and sewage.</p> <p>IS:1703 Copper alloy float valve for water supply fitting.</p> <p>IS:1726 Cast iron manhole covers and frames.</p> <p>IS:1729 Cast iron / Ductile iron drainage pipes and pipe/fittings for over ground non pressure pipeline socket and spigot series.</p> <p>IS:1742 Code of practice for building drainage.</p> <p>IS:2064 Selection, installation and maintenance of sanitary appliances.</p> <p>IS:2065 Code of practice for water supply in buildings.</p> <p>IS:2326 Automatic flushing cisterns for urinals.</p> <p>IS:2548 Plastic seats and covers for water closets.</p> <p>IS:2556 Vitreous sanitary appliances (vitreous china).</p> <p>IS:3114 Code of practice for laying of cast iron pipes.</p> <p>IS:3311 Waste plug and its accessories for sinks and wash basins.</p> <p>IS:3438 Silvered glass mirrors for general purposes.</p> <p>IS:3486 Cast iron spigot and socket drain pipes.</p> <p>IS:3589 steel pipe for water and sewage (168.3 to 2540mm outside diameter)</p> <p>IS:3989 Centrifugally cast (Spun) iron spigot and socket soil, waste and ventilating pipes, fittings and accessories.</p> <p>IS:4111 (Part 1 to 5) Code of practice for ancillary structure in sewerage system.</p>

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CLAUSE NO.	TECHNICAL REQUIREMENTS	
	<p>IS:4127 Code of practice for laying of glazed stone ware pipes.</p> <p>IS : 4733 Methods of sampling and testing sewage effluents.</p> <p>IS:4764 Tolerance limits for sewage effluents discharged into inland surface waters.</p> <p>IS:1068 Electroplated coating of nickel plus chromium and copper plus nickel plus chromium.</p> <p>IS:5329 Code of practice for sanitary pipe work above ground for buildings.</p> <p>IS:5382 Rubber sealing rings for gas mains, water mains and sewers.</p> <p>IS:5822 Code of practice for laying of electrically welded steel pipes for water supply.</p> <p>IS:5961 Specification for cast iron grating for drainage purpose.</p> <p>IS:7740 Code of practice for construction and maintenance of road gullies.</p> <p>IS:8931 Copper alloy fancy single taps combination tap assembly and stop valves for water services.</p> <p>IS:9762 Polyethylene floats for float valves.</p> <p>IS:10592 Industrial emergency showers, eye and face fountains and combination units.</p> <p>IS:12592 Specification for precast concrete manhole covers and frames.</p> <p>IS:12701 Rotational moulded polyethylene water storage tanks.</p> <p>IS:13983 Stainless steel sinks for domestic purposes.</p> <p>SP:35 Hand book on water supply and drainage with special emphasis on plumbing.</p> <p>CPH&EEO Manual on sewage and sewage treatment</p> <p>Publication - as updated.</p> <p>Doors Windows and Allied Works</p> <p>IS:204 Tower Bolts.</p> <p>(Part 1) Ferrous metals</p> <p>(Part 2) Non - ferrous metals</p> <p>IS:208 Door Handles.</p> <p>IS:281 Mild steel sliding door bolts for use with padlocks.</p> <p>IS:362 Parliament Hinges.</p> <p>IS:419 Putty, for use on window frames.</p> <p>IS:451 Technical supply conditions for wood screws</p>	

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CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IS:733 Wrought aluminium and aluminium alloy bars, rods and sections for general engineering purposes.</p> <p>IS:1003 (Part I) Timber panelled and glazed shutters (doors shutters).</p> <p>IS:1003 (Part-1) Timber panelled and glazed shutters door shutters.</p> <p>IS:1038 Steel doors, windows and ventilators.</p> <p>IS:1081 Code of practice for fixing and glazing of metal (steel and aluminium) doors, windows and ventilators.</p> <p>IS:1285 Wrought aluminium and aluminium alloy extruded round tube & hollow section (for general engineering purposes).</p> <p>IS:1341 Steel butt hinges.</p> <p>IS:1361 Steel windows for Industrial buildings.</p> <p>IS:1823 Floor door stoppers.</p> <p>IS:1868 Anodic coatings on Aluminium and its alloys.</p> <p>IS:2202 Wooden flush door shutters (solid core type) particle board face panels and hard board face panels.</p> <p>(Part-2)</p> <p>IS:2209 Mortice locks (vertical type)</p> <p>IS:2553 Safety glass.</p> <p>(Part-1) General purposes</p> <p>IS:2835 Flat transparent sheet glass.</p> <p>IS:3548 Code of practice for glazing in buildings.</p> <p>IS:3564 Door closers (Hydraulically regulated)</p> <p>IS:3614 Specification for fire check doors :</p> <p>(Part-1) plate, metal covered and rolling type.</p> <p>(Part-2)</p> <p>IS:4351 Resistance test and performance criteria.</p> <p>Specification for steel door frames.</p> <p>IS:5187 Flush bolts.</p> <p>IS:5437 Figured, rolled and wired glass.</p> <p>IS:6248 Specification for metal rolling shutters and rolling grills.</p>

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CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IS:6315 Specification for floor springs (Hydraulically regulated) for heavy doors.</p> <p>IS:7196 Hold fast.</p> <p>IS:7452 Hot rolled steel sections for doors, windows and ventilators.</p> <p>IS:10019 Mild steel stays and fasteners.</p> <p>IS:10451 Steel sliding shutters (top hung type)</p> <p>IS:12823 Prelaminated particle boards.</p> <p>Roof Water Proofing and Allied Works</p> <p>IS:3067 code of practice for general design details and preparatory work for damp proofing and water proofing of buildings.</p> <p>ASTM Standard specification for high solid content cold</p> <p>C836-89a liquid applied elastomeric water proofing membrane for use with separate wearing course.</p> <p>ASTM Standard guide for high solid content cold</p> <p>C898-89 liquid applied elastomeric water proofing membrane for use with separate wearing course.</p> <p>Floor Finishes and Allied Works</p> <p>IS:5318 Code of practice for laying of flexible PVC sheet and tile flooring.</p> <p>IS:8042 White portland cement.</p> <p>IS:13755 Dust pressed ceramic tiles with water absorption of 3%, E 6% (Group B11a).</p> <p>IS:13801 Chequered cement concrete tiles.</p> <p>Painting and Allied Works</p> <p>IS:162 Ready mixed paint, brushing fire resisting, silicate type for use on wood, colour as required.</p> <p>IS:428 Distemper, oil, emulsion, colour as required.</p> <p>IS:1477 Code of practice for painting of terrous metals in buildings.</p> <p>(Part -1) (Part -2) Pretreatment. Painting.</p> <p>IS:1650 Specification for colours for building and decorative materials.</p> <p>IS:2074 Ready mixed paint, air drying, red oxide-zinc chrome, priming.</p>

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CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IS:2338 Code of practice for finishing of wood and wood based materials.</p> <p>(Part -1) Operations and Workmanship.</p> <p>(Part -2) Schedule.</p> <p>IS:2395 Code of pratice for painting concrete, masonry and plaster surfaces.</p> <p>(Part-1) Operations and Workmanship.</p> <p>(Part -2) Schedule.</p> <p>IS:2524 Code of practice for painting of nonferrous metals in buildings.</p> <p>(Part -1) Pretreatment</p> <p>(Part -2) Painting.</p> <p>IS:2932 Enamel, synthetic, exterior, (a) under coating and (b) finishing.</p> <p>IS:2933 Enamel exterior, (a) under coating, (b) finishing.</p> <p>IS:4759 Hot dip zinc coatings on structural steel and other allied products.</p> <p>IS:5410 Specification for cement paint.</p> <p>IS:15489 Plastic emulsion paint.</p> <p>IS:6278 Code of practice for white washing and Colour washing.</p> <p>IS:10403 Glossary of term related to building finish.</p> <p>IS:12027 Silicone based water repellent</p> <p>IS:13238 Epoxy based zinc phosphate primer (2 pack)</p> <p>IS:13239 Epoxy surfacer (2 pack)</p> <p>IS:13467 Chlorinated rubber for paints</p> <p>IS:14209 Epoxy enamel, two component glossy.</p> <p>BS:5493 Code of practice for protective coating of iron and steel structures against corrosion.</p> <p>Piling and Foundation</p> <p>IS:1080 Code of practice for design and construction of shallow foundations on soils.</p> <p>IS:1904 Code of practice for design and construction of foundation in Soils : General Requirements.</p> <p>IS:2314 Steel sheet piling sections.</p> <p>IS:2911 Code of practice for design and construction of pile foundations.</p>

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CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>(Relevant Parts)</p> <p>IS:2950 Code of practice for designs and construction of Raft foundation.</p> <p>(Part-1) Design</p> <p>IS:2974 (Part-1 to 5) Code of practice for design and construction of machine foundation.</p> <p>IS:4091 Code of practice for design and construction foundations for transmission line towers and poles.</p> <p>IS:6403 Code of practice for determination of Bearing capacity of Shallow foundations.</p> <p>IS:8009 Code of practice for calculation of settlement of foundation.</p> <p>(Part -1) Shallow foundations.</p> <p>(Part -2) Deep foundations.</p> <p>IS:12070 Code of practice for design and construction of shallow foundations on rocks.</p> <p>ISO 10816 Criteria for assessing mechanical vibrations of machines.</p> <p>ISO 1940 Criteria for assessing the st of balance of rotating rigid bodies.</p> <p>DIN : EN 13906-1 Helical compression spring made of round wire and rod : calculation and design of compression .</p> <p>DIN:2096 Helical compression spring out of round wire and rod : Quality requirements for hot formed compression spring.</p> <p>DIN:4024 Flexible supporting structures for machine with rotating machines.</p> <p>Roads</p> <p>IRC:5 (Section-1) Standard specifications and Code of practice for road bridges, General Features of Design.</p> <p>IRC:14 Recommended practice for 2cm thick bitumen and tar carpets.</p> <p>IRC:15 Standard specifications and code of practice for construction of concrete roads.</p> <p>IRC:16 Specification for priming of base course with bituminous primers.</p> <p>IRC:19 Standard specifications and Code of practice for water bound macadam.</p> <p>IRC:21 (Section-III) Standard specifications and Code of practice for road bridges. Cement concrete (plain and reinforced).</p> <p>IRC:34 Recommendations for road construction in water logged areas.</p>

CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IRC:36 Recommended practice for the construction of earth embankments for road works.</p> <p>IRC:37 Guidelines for the Design of flexible pavements.</p> <p>IRC:56 Recommended practice for treatment of embankment slopes for erosion control.</p> <p>IRC:58 Guidelines for the design of rigid pavements for highways.</p> <p>IRC:73 Geometric Design standards for rural (non-urban) highways.</p> <p>IRC : 86 Geometric Design standards for urban roads in plains.</p> <p>IRC:SP:13 Guidelines for the design of small bridges & culverts.</p> <p>IRC - Publication Ministry of Surface Transport (Road wing), specifications for road and bridge works.</p> <p>IS:73 Paving bitumen.</p> <p>Loading</p> <p>IS:875 Code of practice for design loads (other than earthquake) for (Relevant parts) buildings and structures.</p> <p>IS:1893 Criteria for earthquake resistant design of structures.</p> <p>IS:4091 Code of practice for design and construction of foundation for transmission line towers and poles.</p> <p>IRC:6 (Section-II) Standard specifications & Code of practice for road bridges. loads and stresses</p> <p>Safety</p> <p>IS:1641 Code of practice for fire safety of buildings - General principles of fire grading and classification.</p> <p>IS:1642 Code of practice for fire safety of buildings - Details of construction.</p> <p>IS:3696 (Part-1&2) Safety code for scaffolds and ladders.</p> <p>IS:3764 Excavation work - code of safety.</p> <p>IS:4081 Safety code for blasting and related drilling operations.</p> <p>IS:4130 Demolition of buildings - code of safety.</p> <p>IS:5121 Safety code for piling and other deep foundations.</p> <p>IS:5916 Safety code for construction involving use of hot bituminous materials.</p> <p>IS:7205 Safety code for erection of structural steel work.</p>

CLAUSE NO.	TECHNICAL REQUIREMENTS
	<p>IS:7293 Safety code for working with construction machinery.</p> <p>IS:7969 Safety code for handling and storage of building materials. Indian Explosives (As updated) Act 1940)</p> <p>Architectural Design of Buildings</p> <p>SP:7 National Building Code of India</p> <p>SP:41 Hand book on functional requirements of buildings (other than industrial buildings)</p> <p>ECBC Energy Conservation Building Code</p> <p>GRIHA Green Rating For Integrated Habitat Assessment.</p> <p>Tall Structures, Chimneys</p> <p>IS:4998 Criteria for design of reinforced chimneys</p> <p>IS:6533 Code of practice for design and construction of steel chimneys</p> <p>ICAO International Civil Aviation Organisation (ICAO)</p> <p>DGCA Instruction of Director General of Civil Aviation , India</p> <p>ACI:307 Specification for the design and construction of reinforced concrete chimneys</p> <p>BS:4076 Specification for steel chimneys</p> <p>CICIND Model Code for concrete chimneys Model code for steel chimneys</p> <p>ASCE Code Design and construction of steel chimney liners prepared by Task committee on steel chimney liners. Fossil power committee, Power division published by ASCE - 1975.</p> <p>IS:1554 PVC insulated (heavy duty) electric cables</p> <p>IS:2606 Alloy lead anodes for chromium plating</p> <p>IS:3043 Code of Practice for Earthing</p> <p>IS:9537 Conduits for electrical installations. The Indian Electricity Rules The Indian Electricity Act The Indian Electricity (Supply) Act The Indian Factories Act</p> <p>IS:2309 Practice for protection of buildings and allied structures against lightning</p>

CLAUSE NO.	TECHNICAL REQUIREMENTS		
	<p>Miscellaneous</p> <p>IS:802 (Relevant parts) Code of practice for use of structural steel in overhead transmission line towers.</p> <p>IS:803 Code of practice for design, fabrication and erection of vertical mild steel cylindrically welded in storage tanks.</p> <p>IS:10430 Criteria for design of lined canals and guidance for selection of type of lining.</p> <p>IS:11592 Code of practice for selection and design of belt conveyors.</p> <p>IS:12867 PVC handrails covers.</p> <p>IS 11504 Criteria for structural design of reinforced concrete natural draught cooling towers</p> <p>BS:4485 (IV) British Standard : Code of design for water cooling towers</p> <p>CIRIA Publication IS 4671 Design and construction of buried thin-wall pipes.</p> <p>Expanded polystyrene for thermal insulation purposes.</p>		
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D-1-12(B)	<p style="text-align: right;">ANNEXURE (B)</p> <p style="text-align: center;">CONSTRUCTION METHODOLOGY</p> <p>Construction and erection activities shall be fully mechanized from the start of the work.</p> <p>All excavation and backfilling work shall be done using excavators, loaders, dumpers, dozers, poclains, excavator mounted rock breakers, rollers, sprinklers, water tankers, etc. Manual excavation can be done only on isolated places with specific approval of engineer.</p> <p>For controlled rock blasting specialized agency, equipped with sensors to assess the impact of the blast on the adjoining existing structures, shall be employed.</p> <p>Dewatering shall be done using the combination of electrical and standby diesel pumps.</p> <p>Pile installation equipment suitable for flushing with air lift technique shall be used for construction of bored piles.</p> <p>For concreting, weigh batching plants, transit mixers, concrete pumps, hoists, etc. shall be used.</p> <p>All fabrication and erection activities of structural steel shall be carried out using automatic submerged arc welding machines, cutting machines, gantry cranes, crawler mounted heavy cranes and other equipment like heavy plate bending machines, shearing machines, lathe, milling machines, etc. Use of derricks shall not be permitted. Special enclosures, for blast cleaning of steel structure surface preparation, shall be used.</p> <p>All handling of materials shall be with cranes. Heavy trailers shall be used for transportation.</p> <p>Mechanized modular units of scaffolding and shuttering shall be used.</p> <p>Grouting shall be carried out using hydraulically controlled grouting equipment.</p> <p>Roadwork shall be done using pavers, rollers and premix plant.</p> <p>All finishing items shall be installed using appropriate modern mechanical tools. Manual punching etc. shall not be permitted.</p> <p>Heavy duty hoists for lifting of construction materials shall be deployed. Compressors for cleaning of foundations and other surfaces shall be used.</p> <p>Field laboratory shall be provided with all modern equipment for survey, testing of soil, aggregates, concrete, welding, etc. For testing of steel works, ultrasonic testing machines, radiographic testing machines, dye penetration test equipment, destruction testing equipment, etc. shall be deployed.</p> <p>All persons working at site shall be provided with necessary safety equipment and all safety aspects shall be duly considered for each construction/ erection activity. Moreover, only the persons who are trained in the respective trade shall be employed for executing that particular work.</p>	

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SUB-SECTION-D-1-12

ANNEXURE-C

BORE HOLE DATA, LAB TEST DATA

SUB-SECTION D-1-12

ANNEXURE-C

BORE HOLE DATA, LAB TEST DATA

BORE LOG DATA SHEET**BORE HOLE NO.1**Co-ordinates E=672469.678
N=2479920.110

Field Test	Nos	Samples	Nos	Commencement Date : 18/05/2024
Penetrometer (SPT)	11	Undisturbed (UDS)	5	Completion Date : 19/05/2024
Cone (Pc)		Penetrometer (SPT)	11	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	6	Level Of Ground : 300.035 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 9.30 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m				
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.				
			8 13 11	24
			10 15 13	28
4.50m			9 11 10	21
Medium dense, yellowish brown, silty sand. Obs. kankars.			7 10 12	22
			8 12 13	25
			9 11 12	23
			11 12 14	26
11.00m				
SAMPLES				
			Ref. No	Depth (m)
			DS-1	0.50
			DS-2	1.00
			SPT-1	1.50-1.95
			UDS-1	2.50-2.95
			SPT-2	2.95-3.40
			DS-3	4.00
			SPT-3	4.50-4.95
			*UDS-2	5.50-5.95
			SPT-4	6.05-6.50
			DS-4	7.00
			SPT-5	7.50-7.95
			*UDS-3	8.50-8.95
			SPT-6	9.05-9.50
			DS-5	10.00
			SPT-7	10.50-10.95

BORE LOG DATA SHEET

BORE HOLE NO. 1

Co-

CETEST

Set No:

BORE LOG DATA SHEET			BORE HOLE NO.2			Co-ordinates E=672386.338 N=247989.292			
Field Test	Nos	Samples	Nos	Commencement Date : 17/05/2024 Completion Date : 18/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 301.360 M. Water Struck At : Standing Water Level : 10.80 m.					
Penetrometer (SPT)	10	Undisturbed (UDS)	5						
Cone (Pc)		Penetrometer (SPT)	10						
Vane (V)		Disturbed (DS)	6						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m						Ref. No	Depth (m)		
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankar.						DS-1	0.50		
						DS-2	1.00		
						SPT-1	1.50-1.95		
						UDS-1	2.50-2.95		
						SPT-2	2.95-3.40		
						DS-3	4.00		
						SPT-3	4.50-4.95		
5.50m						UDS-2	5.50-5.95		
Hard, reddish brown, silty clay with sand mixture. Obs. kankar.						SPT-4	5.95-6.40		
						DS-4	7.00		
7.50m						SPT-5	7.50-7.95		
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.						*UDS-3	8.50-8.95		
						SPT-6	9.05-9.50		
						DS-5	10.00		
11.00m						SPT-7	10.50-10.95		

BORE LOG DATA SHEET**BORE HOLE NO.2**Co-ordinates E=672386.338
N=24789.292

Field Test	Nos	Samples	Nos	Commencement Date : 17/05/2024
Penetrometer (SPT)	10	Undisturbed (UDS)	5	Completion Date : 18/05/2024
Cone (Pc)		Penetrometer (SPT)	10	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	6	Level Of Ground : 301.360 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 10.80 m.

DESCRIPTION	SYMBOL	N-VALUE			SAMPLES	
		EACH	DIVN=15CM		Ref. No	Depth (m)
11.00m		13	16	15	31	*UDS-4 11.50-11.95
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.		11	15	17	32	SPT-8 12.05-12.50
		9	14	20	34	DS-6 13.00
15.45m						SPT-9 13.50-13.95
						*UDS-5 14.50-14.95
						SPT-10 15.00-15.45

N.B. - '*' means sample could not be recovered.

BORE LOG DATA SHEET				BORE HOLE NO.3				Co-ordinates E=672288.357 N=2479925.984	
Field Test	Nos	Samples	Nos	Commencement Date : 17/05/2024 Completion Date : 17/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 302.385 M. Water Struck At : Standing Water Level : 11.80 m.					
Penetrometer (SPT)	10	Undisturbed (UDS)	5						
Cone (Pc)		Penetrometer (SPT)	10						
Vane (V)		Disturbed (DS)	6						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m								Ref. No	Depth (m)
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.								DS-1	0.50
				10 12 16 28				DS-2	1.00
								SPT-1	1.50-1.95
2.95m				14 16 20 36				UDS-1	2.50-2.95
								SPT-2	2.95-3.40
								DS-3	4.00
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.				13 15 19 34				SPT-3	4.50-4.95
				15 18 20 38				UDS-2	5.50-5.95
								SPT-4	5.95-6.40
								DS-4	7.00
				9 14 16 30				SPT-5	7.50-7.95
8.50m				8 13 15 28				*UDS-3	8.50-8.95
								SPT-6	9.05-9.50
Medium dense, yellowish brown, silty sand. Obs. kankars.				12 13 14 27				DS-5	10.00
								SPT-7	10.50-10.95
11.00m									

BORE LOG DATA SHEET				BORE HOLE NO.3				Co-ordinates E=672288.357 N=2479925.984	
Field Test	Nos	Samples	Nos	Commencement Date : 17/05/2024 Completion Date : 17/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 302.385 M. Water Struck At : Standing Water Level : 11.80 m.					
Penetrometer (SPT)	10	Undisturbed (UDS)	5						
Cone (Pc)		Penetrometer (SPT)	10						
Vane (V)		Disturbed (DS)	6						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
11.00m				9	12	13	25	Ref. No	Depth (m)
Medium dense, yellowish brown, silty sand. Obs. kankars.				10	9	10	19		
15.45m				11	13	14	27		
									
N.B. - '*' means sample could not be recovered.									

N.B. - '*' means sample could not be recovered.

BORE LOG DATA SHEET		BORE HOLE NO.4		Co-ordinates E=672197.558 N=2479918.193	
Field Test	Nos	Samples	Nos	Commencement Date : 12/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 308.215 M. Water Struck At : Standing Water Level : 10.90 m.	
Penetrometer (SPT)	14	Undisturbed (UDS)	6		
Cone (Pc)		Penetrometer (SPT)	14		
Vane (V)		Disturbed (DS)	9		
		Water Sample (WS)	0		
DESCRIPTION		SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES
0.00m					Ref. No Depth (m)
Filled up with brownish grey, clayey silt with sand mixture, kankars, boulder & brick bats.			3 2 3	5	DS-1 0.50 DS-2 1.00 SPT-1 1.50-1.95 DS-3 2.50 *UDS-1 3.00-3.45
3.50m			9 10 12	22	SPT-2 3.55-4.00
Very stiff, reddish brown, silty clay with sand & kankars.			10 10 14	24	DS-4 4.50 SPT-3 5.00-5.45 UDS-2 6.00-6.40 SPT-4 6.40-6.85 DS-5 7.50
8.00m			10 11 14	25	SPT-5 8.00-8.45
Hard, reddish brown, silty clay with sand & kankars.			11 13 18	31	UDS-3 9.00-9.45 SPT-6 9.45-9.90 DS-6 10.50
11.80m			12 15 21	36	SPT-7 11.00-11.45
Medium dense to dense, light brown, silty sand. Obs. kankars.			13 19 23	42	*UDS-4 11.80-12.25
13.00m			10 12 16	28	SPT-8 12.40-12.85

BORE LOG DATA SHEET			BORE HOLE NO.4			Co-ordinates E=672197.558 N=2479918.193	
Field Test	Nos	Samples	Nos	Commencement Date : 12/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 308.215 M. Water Struck At : Standing Water Level : 10.90 m.			
Penetrometer (SPT)	14	Undisturbed (UDS)	6				
Cone (Pc)		Penetrometer (SPT)	14				
Vane (V)		Disturbed (DS)	9				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES	
13.00m		Medium dense to dense, light brown, silty sand. Obs. kankars.		9 11 18 29		DS-7	13.40
				11 12 18 30		SPT-9	14.00-14.45
				12 12 21 33		*UDS-5	15.00-15.45
				12 13 21 34		SPT-10	15.60-16.05
				19 34 50 >100		DS-8	16.50
		Hard, yellowish grey, silty clay with decomposed rock & sand.		5.0cm Pentn. Refusal		SPT-11	17.00-17.45
				4.0cm Pentn. Refusal		*UDS-6	17.90-18.35
				NX, drilling from 20.80m to 25.00m		SPT-12	18.50-18.95
19.00m						DS-9	19.50
						SPT-13	20.00-20.35
20.80m		Highly weathered, yellowish grey, medium to fine grained, fractured rock.				*SPT-14 R1	20.80-20.84 20.80 CR=21% RQD=NIL
						R2	21.50 CR=22% RQD=NIL
						R3	22.25 CR=25% RQD=NIL
						R4	23.00 CR=30% RQD=NIL
						R5	23.75 CR=42% RQD=NIL
						R6	24.50 CR=56% RQD=NIL
23.00m		Highly to moderately weathered, yellowish grey, medium to fine grained, fractured rock.					25.00
24.50m		Moderately weathered, yellowish grey, medium to fine grained, fractured rock.					
		N.B. - '*' means sample could not be recovered.					

BORE LOG DATA SHEET			BORE HOLE NO.5			Co-ordinates E=672149.926 N=2479914.852			
Field Test	Nos	Samples	Nos	Commencement Date : 12/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 308.255 M. Water Struck At : Standing Water Level : 11.20 m.					
Field Test	Nos	Samples	Nos	Commencement Date : 12/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 308.255 M. Water Struck At : Standing Water Level : 11.20 m.					
Penetrometer (SPT)	16	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	16						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES		
0.00m							Ref. No Depth (m)		
Filled up soil with brownish grey, silty clay with sand mixture, kankar, boulders & brickbats.				2 2 4	6		DS-1 0.50		
3.00m				7	11 12	23	DS-2 1.00		
Very stiff, reddish brown, silty clay with sand mixture & kankars.				9	12 16	28	SPT-1 1.50-1.95		
				10	11 19	30	*UDS-1 2.50-2.95		
				11	13 17	33	SPT-2 3.10-3.55		
				12	14 18	35	DS-3 4.00		
				13	15 20	37	SPT-3 4.50-4.95		
7.50m				14	16 21	36	UDS-2 5.50-5.95		
				15	17 22	38	SPT-4 5.95-6.40		
				16	18 24	43	DS-4 7.00		
				17	19 25	45	SPT-5 7.50-7.95		
Hard, reddish brown, silty clay with sand mixture & kankars.				18	20 26	46	UDS-3 8.50-8.80		
				19	21 27	47	SPT-6 8.80-9.25		
				20	22 28	48	DS-5 10.00		
				21	23 29	49	SPT-7 10.50-10.95		
12.50m				22	24 30	50	*UDS-4 11.50-11.60		
Dense, light brownish, silty sand. Obs. kankars.				23	25 31	51	SPT-8 11.80-12.25		
13.00m				24	26 32	52	DS-6 13.00		

BORE LOG DATA SHEET			BORE HOLE NO.5						Co-ordinates E=672149.926 N=2479914.852	
Field Test	Nos	Samples	Nos	Commencement Date : 12/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 308.255 M. Water Struck At : Standing Water Level : 11.20 m.						
Penetrometer (SPT)	16	Undisturbed (UDS)	7							
Cone (Pc)		Penetrometer (SPT)	16							
Vane (V)		Disturbed (DS)	9							
		Water Sample (WS)	0							
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES		
13.00m				11	13	19	32		SPT-9	13.50–13.95
Dense, light brownish, silty sand. Obs. kankars.				10	12	21	33		*UDS-5	14.50–14.95
				11	13	22	35		SPT-10	15.10–15.55
									DS-7	16.00
									SPT-11	16.45–16.90
18.00m				13	18	23	41		*UDS-6	17.50–17.95
Hard, brownish grey, silty clay with decomposed rock & sand.				12	19	25	44		SPT-12	18.10–18.55
				17	27	50	>100		DS-8	19.00
				31	50	50	5.0cm Pentrn.		SPT-13	19.50–19.95
				00	00	00	>100		*UDS-7	20.50–20.60
							5.0cm Pentrn.		SPT-14	20.80–21.15
22.20m									DS-9	21.50
Highly weathered, yellowish grey, medium to fine grained, fractured rock.									SPT-15	21.80–22.00
									*SPT-16	22.20–22.23 22.20
23.75m									R1	CR=20% RQD=NIL
Highly weathered, yellowish grey, medium to fine grained, fractured rock.									R2	CR=22% RQD=NIL
									R3	CR=30% RQD=NIL
25.00m									R4	CR=32% RQD=NIL
N.B. – '*' means sample could not be recovered.										25.00

BORE LOG DATA SHEET			BORE HOLE NO.6			Co-ordinates E=672120.122 N=2479953.398	
Field Test	Nos	Samples	Nos	Commencement Date : 14/05/2024 Completion Date : 15/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 305.872 M. Water Struck At : Standing Water Level : 12.20 m.			
Penetrometer (SPT)	14	Undisturbed (UDS)	6				
Cone (Pc)		Penetrometer (SPT)	14				
Vane (V)		Disturbed (DS)	10				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
0.00m							Ref. No
Filled up soil consists of brownish grey, clayey silt with kankars, boulder & brickbats.							Depth (m)
1.20m				5 10 11 21			DS-1 0.50
				7 12 14 26			DS-2 1.00
				9 11 15 26			SPT-1 1.50-1.95
				11 14 18 32			DS-3 2.50
				12 13 25			UDS-1 3.00-3.45
				14 16 30			SPT-2 3.45-3.90
				12 16 19 35			DS-4 4.20
				13 18 22 40			SPT-3 4.50-4.95
							DS-5 5.50
							UDS-2 6.00-6.45
							SPT-4 6.45-6.90
							DS-6 7.50
							SPT-5 8.00-8.45
							UDS-3 9.00-9.45
							SPT-6 9.45-9.90
10.00m							DS-7 10.50
							SPT-7 11.00-11.45
							*UDS-4 12.00-12.45
							SPT-8 12.55-13.00
13.00m							

BORE LOG DATA SHEET**BORE HOLE NO.6**Co-ordinates E=672120.122
N=2479953.398

Field Test	Nos	Samples	Nos	Commencement Date : 14/05/2024
Penetrometer (SPT)	14	Undisturbed (UDS)	6	Completion Date : 15/05/2024
Cone (Pc)		Penetrometer (SPT)	14	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	10	Level Of Ground : 305.872 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.20 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.00m			Ref. No	Depth (m)
Dense, brownish grey, silty sand. Obs. kankars.			DS-8	13.50
		11 19 23	42	SPT-9 14.00-14.45
		10 16 21	37	*UDS-5 15.00-15.45
		12 17 29	46	SPT-10 15.55-16.00
16.50m		13 19 32	51	DS-9 16.50
		18 34 50	>100	SPT-11 17.00-17.45
Hard, brownish grey, silty clay with kankars & decomposed rock fragments.		50	5.0cm Pentr.	*UDS-6 18.00-18.10
		00	Refusal	SPT-12 18.25-18.70
		4.0cm Pentr.	DS-10	19.25
20.80m		NX.	SPT-13	20.00-20.35
Highly weathered, whitish pink to grey, fine to medium grained, fractured rock. Obs. boulder.		drilling from 20.80m to 25.00m	*SPT-14 R1	20.80-20.84 CR=27% RQD=NIL
21.50m			R2	21.50 CR=23% RQD=NIL
Highly weathered, whitish pink to grey, fine to medium grained, fractured rock.			R3	22.25 CR=27% RQD=NIL
22.25m			R4	23.00 CR=36% RQD=NIL
Highly to moderately weathered, yellowish brown, medium grained, fractured rock.			R5	23.75 CR=36% RQD=NIL
25.00m			R6	24.50 CR=48% RQD=NIL
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.7				Co-ordinates E=671978.236 N=2479925.465	
Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024 Completion Date : 11/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 307.477 M. Water Struck At : Standing Water Level : 10.60 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
								Ref. No	Depth (m)
0.00m									
Very stiff, reddish brown, silty clay with sand mixture & kankars.									

BORE LOG DATA SHEET

BORE HOLE NO.7

Co-ordinates E=671978.236
N=2479925.465

Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 11/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	11	Level Of Ground : 307.477 M.
		Water Sample (WS)	0	Water Struck At : Standing Water Level : 10.60 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.50m			Ref. No	Depth (m)
Medium dense to dense, light yellowish brown, silty sand. Obs. kankars.			SPT-9	14.00–14.45
			*UDS-5	15.00–15.45
			SPT-10	15.60–16.05
			DS-8	16.50
			SPT-11	17.00–17.45
			*UDS-6	18.00–18.45
			SPT-12	18.55–19.00
			DS-9	19.50
			SPT-13	20.00–20.45
20.50m			*UDS-7	21.00–21.10
			SPT-14	21.30–21.75
			DS-10	22.40
Hard, yellowish grey to grey to brownish grey, silty clay with sand & decomposed rock.			SPT-15	23.00–23.45
			DS-11	24.00
			SPT-16	24.30–24.75
25.45m			SPT-17	25.00–25.45
N.B. – '*' means sample could not be recovered.				

BORE LOG DATA SHEET**BORE HOLE NO.8**Co-ordinates E=671778.402
N=2479968.526

Field Test	Nos	Samples	Nos	Commencement Date : 18/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 19/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 314.420 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.40 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m			Ref. No	Depth (m)
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.			DS-1	0.50
		7 8 10 18	DS-2	1.00
		6 9 13 22	SPT-1	1.50-1.95
		8 10 15 25	UDS-1	2.50-2.95
		10 13 14 27	SPT-2	2.95-3.40
		11 14 12 26	DS-3	4.00
		10 14 15 29	SPT-3	4.50-4.95
		9 11 16 27	UDS-2	5.50-5.95
		11 10 12 22	SPT-4	5.95-6.40
			DS-4	7.00
			SPT-5	7.50-7.95
			*UDS-3	8.50-8.95
			SPT-6	9.05-9.50
			DS-5	10.00
			SPT-7	10.50-10.95
11.50m			*UDS-4	11.50-11.95
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.			SPT-8	12.05-12.50
13.00m			DS-6	13.00

BORE LOG DATA SHEET**BORE HOLE NO.8**Co-ordinates E=671778.402
N=2479968.526

Field Test	Nos	Samples	Nos	Commencement Date : 18/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 19/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 314.420 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.40 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.00m			Ref. No	Depth (m)
→ Medium dense to dense, yellowish brown, silty sand. Obs. kankars.			SPT-9	13.50–13.95
		9 12 11	23	*UDS-5 14.50–14.95
		12 13 14	27	SPT-10 15.05–15.50
		13 11 10	21	DS-7 16.00
		12 13 16	29	SPT-11 16.50–16.95
		11 10 15	25	*UDS-6 17.50–17.95
		12 16 17	33	SPT-12 18.05–18.50
		14 19 22	41	DS-8 19.00
		15 18 23	41	SPT-13 19.50–19.95
		18 22 24	46	*UDS-7 20.50–20.95
→ Hard, yellowish grey, silty clay with sand mixture, kankars & gravel.			SPT-14	21.05–21.50
			DS-9	22.00
→ 22.50m			SPT-15	22.50–22.95
			*UDS-8	23.50–23.60
			SPT-16	23.80–24.25
N.B. – '*' means sample could not be recovered.			SPT-17	25.00–25.45
25.45m				

BORE LOG DATA SHEET				BORE HOLE NO.9				Co-ordinates E=671863.628 N=2479868.815	
Field Test	Nos	Samples	Nos	Commencement Date : 19/05/2024 Completion Date : 20/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 314.751 M. Water Struck At : Standing Water Level : 13.30 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
								Ref. No	Depth (m)
0.00m				9 10 12	22			DS-1	0.50
				8 9 14	23			DS-2	1.00
				11 11 12	23			SPT-1	1.50-1.95
				10 11 15	26			UDS-1	2.50-2.95
				12 13 16	29			SPT-2	2.95-3.40
				11 14 16	30			DS-3	4.00
				13 14 15	29			SPT-3	4.50-4.95
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.				13 14 15	17			UDS-2	5.50-5.95
				6 8 9				SPT-4	5.95-6.40
								DS-4	7.00
								SPT-5	7.50-7.95
								*UDS-3	8.50-8.95
								SPT-6	9.05-9.50
								DS-5	10.00
								SPT-7	10.50-10.95
11.70m								*UDS-4	11.50-11.95
Medium dense, yellowish brown, silty sand with kankars.								SPT-8	12.05-12.50
13.00m								DS-6	13.00

BORE LOG DATA SHEET				BORE HOLE NO.9				Co-ordinates E=671863.628 N=2479868.815	
Field Test	Nos	Samples	Nos	Commencement Date : 19/05/2024 Completion Date : 20/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 314.751 M. Water Struck At : Standing Water Level : 13.30 m.					
DESCRIPTION		SYMBOL		N-VALUE EACH DIVN=15CM				SAMPLES	
13.00m				7	10	11	21	SPT-9	13.50–13.95
				10	12	12	24	*UDS-5	14.50–14.95
				7	8	10	18	SPT-10	15.50–15.95
				9	9	10	19	DS-7	16.00
Medium dense, yellowish brown, silty sand with kankars.				11	13	14	27	SPT-11	16.50–16.95
				9	12	16	28	*UDS-6	17.50–17.95
				13	18	24	42	SPT-12	18.05–18.50
				16	21	23	44	DS-8	19.00
				15	19	26	45	SPT-13	19.50–19.95
22.00m								*UDS-7	20.50–20.95
								SPT-14	21.05–21.50
								DS-9	22.00
								SPT-15	22.50–22.95
Hard, yellowish grey, silty clay with sand mixture, kankars & gravel.								*UDS-8	23.50–23.60
								SPT-16	23.80–24.25
N.B. – '*' means sample could not be recovered.								SPT-17	25.00–25.45
25.45m									

BORE LOG DATA SHEET				BORE HOLE NO.10				Co-ordinates E=672066.947 N=249891.292	
Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024 Completion Date : 11/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.153 M. Water Struck At : Standing Water Level : 10.60 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
				Ref. No	Depth (m)				
0.00m								DS-1	0.50
Very stiff, reddish brown, silty clay with sand mixture & kankars.				7 10 11	21			DS-2	1.00
				9 14 14	28			SPT-1	1.50-1.95
				10 12 15	27			UDS-1	2.50-2.90
				11 14 16	30			SPT-2	2.90-3.35
				10 13 19	32			DS-3	4.00
				10 12 18	30			SPT-3	4.50-4.95
				11 14 16	32			UDS-2	5.50-5.80
				12 14 21	30			SPT-4	5.80-6.25
7.50m				12 14 21	35			DS-4	7.00
Hard, reddish brown, silty clay with sand mixture & kankars.				17 29 33	62			SPT-5	7.50-7.95
				17 29 33	62			UDS-3	8.50-8.80
				17 29 33	62			SPT-6	8.80-9.25
				17 29 33	62			DS-5	9.80
				17 29 33	62			SPT-7	10.40-10.85
11.50m				17 29 33	62			*UDS-4	11.50-11.60
Medium dense to dense, light brownish grey, silty sand. Obs. kankars.				17 29 33	62			SPT-8	11.80-12.25
				17 29 33	62			DS-6	12.80
13.50m									

BORE LOG DATA SHEET**BORE HOLE NO.10**Co-ordinates E=672066.947
N=249891.292

Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 11/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 308.153 M.
		Water Sample (WS)	0	Water Struck At : Standing Water Level : 10.60 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.50m			Ref. No	Depth (m)
Medium dense to dense, light brownish grey, silty sand. Obs. kankars.			SPT-9	13.50-13.95
			*UDS-5	14.50-14.95
			SPT-10	15.10-15.55
			DS-7	16.00
			SPT-11	16.50-16.95
			*UDS-6	17.40-17.85
			SPT-12	18.00-18.45
			DS-8	19.00
			SPT-13	19.50-19.95
			*UDS-7	20.50-20.95
21.00m			SPT-14	21.10-21.55
Hard, brownish grey, silty clay with decomposed rock & sand mixture.			DS-9	22.00
			SPT-15	22.50-22.95
			*UDS-8	23.50-23.60
			SPT-16	23.80-24.25
25.45m			SPT-17	25.00-25.45
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET		BORE HOLE NO.11		Co-ordinates E=672133.246 N=2479864.847	
Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024 Completion Date : 10/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.114 M. Water Struck At : Standing Water Level : 12.90 m.	
Penetrometer (SPT)	17	Undisturbed (UDS)	8		
Cone (Pc)		Penetrometer (SPT)	17		
Vane (V)		Disturbed (DS)	9		
		Water Sample (WS)	0		
DESCRIPTION		SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES
0.00m					Ref. No Depth (m)
Filled up with yellowish brown, clayey silty sand with kankars & gravel.					DS-1 0.50
1.00m			8 10 11 21		DS-2 1.00
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.			6 12 14 26		SPT-1 1.50-1.95
			5 7 12 19		UDS-1 2.50-2.95
			4 8 9 17		SPT-2 2.95-3.40
			9 12 14 26		DS-3 4.00
			13 18 17 35		SPT-3 4.50-4.95
8.95m			10 15 16 31		UDS-2 5.50-5.95
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.			11 13 17 30		SPT-4 5.95-6.40
12.50m			11 13 17 30		DS-4 7.00
Medium dense, yellowish brown, silty sand. Obs. kankars.			11 13 17 30		SPT-5 7.50-7.95
13.50m			11 13 17 30		UDS-3 8.50-8.95
			11 13 17 30		SPT-6 8.95-9.40
			11 13 17 30		DS-5 10.00
			11 13 17 30		SPT-7 10.50-10.95
			11 13 17 30		UDS-4 11.50-11.95
			11 13 17 30		SPT-8 11.95-12.40
			11 13 17 30		DS-6 13.00

BORE LOG DATA SHEET**BORE HOLE NO.11**Co-ordinates E=672133.246
N=2479864.847

Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 10/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 308.114 M.
		Water Sample (WS)	0	Water Struck At : Standing Water Level : 12.90 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.50m			12 13 15	28
Medium dense, yellowish brown, silty sand. Obs. kankars.			13 13 16	29
			14 15 13	28
			12 14 16	30
			13 16 20	36
19.50m			11 19 23	42
Hard, yellowish grey, silty clay with sand mixture, kankars & decomposed rock.			12 20 24	44
			16 19 23	42
25.25m			15 21 27	48
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.12			Co-ordinates E=672112.478 N=2479820.218	
Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024 Completion Date : 09/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 307.094 M. Water Struck At : Standing Water Level : 12.10 m.			
Penetrometer (SPT)	16	Undisturbed (UDS)	7				
Cone (Pc)		Penetrometer (SPT)	16				
Vane (V)		Disturbed (DS)	9				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
0.00m Filled up with yellowish brown, clayey silty sand with kankars, gravel & grass root.							Ref. No Depth (m)
1.00m				6 9 7 16			DS-1 0.50
				5 6 8 14			DS-2 1.00
				6 7 9 16			SPT-1 1.50-1.95
				6 7 9 17			*UDS-1 2.50-2.95
				6 8 9 18			*SPT-2 3.05-3.50
				7 8 10 20			DS-3 4.00
				6 7 13 20			SPT-3 4.50-4.95
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.							UDS-2 5.50-5.95
							SPT-4 5.95-6.40
							DS-4 7.00
							SPT-5 7.50-7.95
							UDS-3 8.50-8.95
							SPT-6 8.95-9.40
							DS-5 10.00
10.50m				10 11 9 20			SPT-7 10.50-10.95
				7 8 9 17			*UDS-4 11.50-11.95
				7 8 9 17			SPT-8 12.05-12.50
13.50m							DS-6 13.00

BORE LOG DATA SHEET

BORE HOLE NO.12

Co-ordinates E=672112.478
N=2479820.218

Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024
Penetrometer (SPT)	16	Undisturbed (UDS)	7	Completion Date : 09/05/2024
Cone (Pc)		Penetrometer (SPT)	16	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 307.094 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.10 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.50m			Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.			SPT-9	13.50-13.95
			*UDS-5	14.50-14.95
			SPT-10	15.05-15.50
			DS-7	16.00
			SPT-11	16.50-16.95
			*UDS-6	17.50-17.95
			SPT-12	18.05-18.50
			DS-8	19.00
			SPT-13	19.50-19.95
			*UDS-7	20.50-20.60
			SPT-14	20.80-21.25
21.50m				
Hard, yellowish grey, silty clay with sand mixture, kankars & decomposed rock.			DS-9	22.00
			SPT-15	22.50-22.70
23.00m			*SPT-16	23.00-23.04 23.00
Highly weathered, pinkish white to yellowish brown, fine to medium grained, fractured rock. Obs. boulder.			R1	CR=24% RQD=NIL
23.75m				23.75
Highly weathered, pinkish white to yellowish brown, fine to medium grained, fractured rock.			R2	CR=29% RQD=NIL
25.00m			R3	CR=40% RQD=NIL
N.B. - '*' means sample could not be recovered.				24.50
				25.00

BORE LOG DATA SHEET			BORE HOLE NO.13			Co-ordinates E=672197.558 N=249850.773			
Field Test	Nos	Samples	Nos	Commencement Date : 11/05/2024 Completion Date : 11/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 307.101 M. Water Struck At : Standing Water Level : 12.40 m.					
Field Test	Nos	Samples	Nos	Commencement Date : 11/05/2024 Completion Date : 11/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 307.101 M. Water Struck At : Standing Water Level : 12.40 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m						Ref. No	Depth (m)		
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.						DS-1	0.50		
						DS-2	1.00		
						SPT-1	1.50-1.95		
						UDS-1	2.50-2.95		
						SPT-2	2.95-3.40		
						DS-3	4.00		
4.50m						SPT-3	4.50-4.95		
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.						UDS-2	5.50-5.95		
						SPT-4	5.95-6.40		
						DS-4	7.00		
7.50m						SPT-5	7.50-7.95		
Medium dense, reddish brown, clayey silty sand. Obs. kankars.						*UDS-3	8.50-8.95		
						SPT-6	9.05-9.50		
						DS-5	10.00		
						SPT-7	10.50-10.95		
11.50m						*UDS-4	11.50-11.95		
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.						SPT-8	12.05-12.50		
						DS-6	13.00		
13.50m									

BORE LOG DATA SHEET**BORE HOLE NO.13**Co-ordinates E=672197.558
N=249850.773

Field Test	Nos	Samples	Nos	Commencement Date : 11/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 11/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	10	Level Of Ground : 307.101 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.40 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.50m			Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.			SPT-9	13.50–13.95
			*UDS-5	14.50–14.95
			SPT-10	15.05–15.50
			DS-7	16.00
			SPT-11	16.50–16.95
			*UDS-6	17.50–17.95
			SPT-12	18.05–18.50
			DS-8	19.00
			SPT-13	19.50–19.95
20.50m			*UDS-7	20.50–20.60
Hard, yellowish grey, silty clay with sand mixture, gravel & decomposed rock fragments.			SPT-14	20.80–21.25
			DS-9	21.80
			SPT-15	22.30–22.75
			DS-10	23.20
24.00m			SPT-16	23.60–23.80
Slightly weathered, yellowish grey, medium grained, fractured rock.			*SPT-17	24.00–24.03
			R1	CR=70% RQD=NIL
25.00m			R2	CR=62% RQD=NIL
N.B. – '*' means sample could not be recovered.				24.50 25.00

BORE LOG DATA SHEET			BORE HOLE NO.14			Co-ordinates E=671920.096 N=2479735.389			
Field Test	Nos	Samples	Nos	Commencement Date : 18/05/2024 Completion Date : 18/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 314.553 M. Water Struck At : Standing Water Level : 13.65 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES		
0.00m				3 4 5	9		DS-1 0.50		
				4 4 7	11		DS-2 1.00		
				2 3 5	8		SPT-1 1.45-1.90		
				3 5 4	9		UDS-1 2.50-2.95		
				3 4 4	8		SPT-2 2.95-3.40		
				5 6 9	15		DS-3 4.00		
				4 6 8	14		SPT-3 4.50-4.95		
				10 13 15	28		UDS-2 5.50-5.95		
				10 15 19	34		SPT-4 5.95-6.40		
Medium / stiff, reddish brown, silty clay with traces of sand mixture.							DS-4 7.00		
							SPT-5 7.50-7.95		
							UDS-3 8.50-8.95		
							SPT-6 8.95-9.40		
							DS-5 10.00		
							SPT-7 10.50-10.95		
							*UDS-4 11.40-11.85		
Very stiff, reddish brown, silty clay with sand mixture & kankar.							SPT-8 12.00-12.45		
							DS-6 13.00		
Hard, reddish brown, silty clay with sand mixture & kankar.							SPT-9 13.50-13.95		
13.50m									
14.00m									

BORE LOG DATA SHEET

BORE HOLE NO.14

Co-ordinates E=671920.096
N=2479735.389

Field Test	Nos	Samples	Nos	Commencement Date : 18/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 18/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	10	Level Of Ground : 314.553 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.65 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
14.00m			Ref. No	Depth (m)
Hard, reddish brown, silty clay with sand mixture & kankar.				
			*UDS-5	14.50-14.75
			SPT-10	14.80-15.25
			DS-7	16.00
			SPT-11	16.50-16.95
			*UDS-6	17.45-17.55
			SPT-12	17.70-18.15
			DS-8	18.50
			SPT-13	19.00-19.45
19.50m			DS-9	20.00
Medium dense, yellowish brown, silty sand. Obs. kankar.			*UDS-7	20.50-20.95
			SPT-14	21.10-21.55
			DS-10	22.00
			SPT-15	22.50-22.95
24.00m			*UDS-8	23.50-23.95
Dense, whitish grey, silty sand.			SPT-16	24.10-24.55
25.00m			SPT-17	25.00-25.45
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.15				Co-ordinates E=672009.549 N=2479678.555	
Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024 Completion Date : 11/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 309.513 M. Water Struck At : Standing Water Level : 11.00 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m				4	8	9	17	DS-1	0.50
Very stiff, reddish brown, clayey silt with sand mixture & kankars.				5	7	9	16	DS-2	1.00
12.00m				6	8	10	18	SPT-1	1.50-1.95
13.50m				5	10	12	22	UDS-1	2.50-2.95
Medium dense to dense, yellowish brown, silty sand with kankars.				7	15	12	27	SPT-2	2.95-3.40
12.00m				10	13	16	29	DS-3	4.00
13.50m				10	13	15	28	SPT-3	4.50-4.95
12.00m				10	14	17	31	UDS-2	5.50-5.95
13.50m								SPT-4	5.95-6.40
12.00m								DS-4	7.00
13.50m								SPT-5	7.50-7.95
12.00m								UDS-3	8.50-8.95
13.50m								SPT-6	8.95-9.40
12.00m								DS-5	10.00
13.50m								SPT-7	10.50-10.95
12.00m								*UDS-4	11.40-11.85
13.50m								SPT-8	12.00-12.45
12.00m								DS-6	13.00

BORE LOG DATA SHEET			BORE HOLE NO.15							Co-ordinates E=672009.549 N=2479678.555	
Field Test	Nos	Samples	Nos	Commencement Date : 10/05/2024 Completion Date : 11/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 309.513 M. Water Struck At : Standing Water Level : 11.00 m.							
Penetrometer (SPT)	17	Undisturbed (UDS)	7								
Cone (Pc)		Penetrometer (SPT)	17								
Vane (V)		Disturbed (DS)	10								
		Water Sample (WS)	0								
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES			
13.50m				10	12	14	26				
Medium dense to dense, yellowish brown, silty sand with kankars.				11	13	15	28				
20.20m				13	12	16	28				
Hard, yellowish grey, silty clay with sand mixture.				11	13	17	30				
25.45m				10	15	16	31				
N.B. - '*' means sample could not be recovered.				9	18	18	36				
20.20m				13	22	32	54				
Hard, yellowish grey, silty clay with sand mixture.				14	21	31	52				
25.45m				15	20	33	53				

BORE LOG DATA SHEET			BORE HOLE NO.16			Co-ordinates E=672052.485 N=2479746.133			
Field Test	Nos	Samples	Nos	Commencement Date : 11/05/2024 Completion Date : 12/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.009 M. Water Struck At : Standing Water Level : 10.25 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m						Ref. No	Depth (m)		
Very stiff, reddish brown, silty clay with sand mixture & kankars.						DS-1	0.50		
						DS-2	1.00		
						SPT-1	1.50-1.95		
						UDS-1	2.50-2.95		
						SPT-2	2.95-3.40		
						DS-3	4.00		
						SPT-3	4.50-4.95		
						UDS-2	5.50-5.95		
						SPT-4	5.95-6.40		
						DS-4	7.00		
						SPT-5	7.50-7.95		
08.50m						UDS-3	8.50-8.95		
Hard, reddish brown, silty clay with sand mixture & kankars.						SPT-6	8.95-9.40		
						DS-5	10.00		
10.75m						SPT-7	10.50-10.95		
Medium dense to dense, yellowish brown, silty sand with kankars.						*UDS-4	11.50-11.95		
						SPT-8	12.10-12.55		
						DS-6	13.10		
13.50m									

BORE LOG DATA SHEET			BORE HOLE NO.16			Co-ordinates E=672052.485 N=2479746.133	
Field Test	Nos	Samples	Nos	Commencement Date : 11/05/2024 Completion Date : 12/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.009 M. Water Struck At : Standing Water Level : 10.25 m.			
Penetrometer (SPT)	17	Undisturbed (UDS)	8				
Cone (Pc)		Penetrometer (SPT)	17				
Vane (V)		Disturbed (DS)	9				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
13.50m				13 16 20	36		SPT-9 13.50-13.95
				13 15 18	33		*UDS-5 14.50-14.95
				15 19 19	38		SPT-10 15.10-15.55
				16 17 19	36		DS-7 16.10
				15 18 18	36		SPT-11 16.50-16.95
Medium dense to dense, yellowish brown, silty sand with kankars.				16 17 19	36		*UDS-6 17.50-17.95
				17 18 19	37		SPT-12 18.10-18.55
				18 20 24	44		DS-8 19.10
				15 23 32	55		SPT-13 19.50-19.95
21.20m				18 24 26	50		*UDS-7 20.50-20.95
							SPT-14 21.00-21.45
							DS-9 21.70
							SPT-15 22.20-22.65
Hard, yellowish grey, silty clay with sand mixture.							*UDS-8 23.50-23.95
							SPT-16 24.10-24.55
25.45m							SPT-17 25.00-25.45
N.B. - '*' means sample could not be recovered.							

BORE LOG DATA SHEET				BORE HOLE NO.17				Co-ordinates E=672080.091 N=2479710.258	
Field Test	Nos	Samples	Nos	Commencement Date : 06/05/2024					
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 07/05/2024				Bore Hole Diameter : 150 mm.	
Cone (Pc)		Penetrometer (SPT)	17	Level Of Ground : 307.268 M.				Water Struck At :	
Vane (V)		Disturbed (DS)	11	Standing Water Level : 11.20 m.					
		Water Sample (WS)	1						
DESCRIPTION			SYMBOL	N-VALUE				SAMPLES	
				EACH DIVN=15CM				Ref. No	Depth (m)
0.00m				7	8	10	18		
9.10m				9	9	10	19		
10.50m				9	9	12	21		
13.50m				8	11	16	27		
14.00m				10	12	15	27		
14.50m				10	12	19	31		
15.00m				10	13	22	35		
15.50m				12	12	21	33		
16.00m									
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73.00m									
73.50m									
74.00m									
74.50m									

BORE LOG DATA SHEET

BORE HOLE NO.17

Co-ordinates

Field Test	Nos	Samples	Nos	Commencement Date : 06/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 07/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	11	Level Of Ground : 307.268 M.
		Water Sample (WS)	1	Water Struck At :
				Standing Water Level : 11.20 m.

DESCRIPTION	SYMBOL	N-VALUE			SAMPLES	
		EACH	DIVN=15CM		Ref. No	Depth (m)
13.50m		12	13	22	35	SPT-9 14.00-14.45
Dense, light brown, silty sand with kankars.		12	15	20	35	*UDS-5 15.00-15.45
		13	14	23	37	SPT-10 15.60-16.05
		14	15	24	39	DS-8 16.50
		11	13	20	33	SPT-11 17.00-17.45
19.20m		15	17	25	42	*UDS-6 18.00-18.45
Hard, brownish grey, silty clay with sand mixture & decomposed rock.		12	16	23	39	SPT-12 18.60-19.05
		15	18	26	44	DS-9 19.50
		14	19	25	44	SPT-13 20.00-20.45
24.00m		15	18	26	44	*UDS-7 21.00-21.10
Dense, brownish grey with blackish spots, silty sand with clay binder, with kankars & decomposed rock.		14	19	25	44	SPT-14 21.20-21.65
		15	18	26	44	DS-10 22.00
25.45m		15	18	26	44	SPT-15 22.60-23.05
N.B. - '*' means sample could not be recovered.		14	19	25	44	DS-11 23.50
		15	18	26	44	SPT-16 24.00-24.45
		14	19	25	44	SPT-17 25.00-25.45

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BORE LOG DATA SHEET

BORE HOLE NO.18

Co-ordinates E=672135.136
N=2479723.071

Field Test	Nos	Samples	Nos	Commencement Date : 08/05/2024			
				Completion Date : 08/05/2024			
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Bore Hole Diameter : 150 mm.			
Cone (Pc)		Penetrometer (SPT)	17	Level Of Ground : 306.665 M.			
Vane (V)		Disturbed (DS)	11	Water Struck At :			
		Water Sample (WS)	0	Standing Water Level : 11.30 m.			
DESCRIPTION		SYMBOL	N-VALUE			SAMPLES	
			EACH	DIVN=15CM		Ref. No	Depth (m)
0.00m							
Very stiff, reddish brown, silty clay with sand mixture & kankars.			9	11 14	25	DS-1	0.50
			9	13 17	30	DS-2	1.00
						SPT-1	1.45–1.90
						UDS-1	2.50–2.95
						SPT-2	2.95–3.40
						DS-3	4.00
4.50m			12	14 21	35	SPT-3	4.50–4.95
			15	21 26	47	UDS-2	5.50–5.80
						SPT-4	5.80–6.25
						DS-4	7.00
Hard, reddish brown, silty clay with sand mixture & kankars.			14	17 23	40	SPT-5	7.55–8.00
			12	16 21	37	UDS-3	8.50–8.80
						SPT-6	8.80–9.25
						DS-5	9.80
10.80m			13	15 24	39	SPT-7	10.30–10.75
Medium dense to dense, light brown, silty sand with kankars.			8	11 12	23	*UDS-4	11.50–11.95
						SPT-8	12.10–12.55
13.50m						DS-6	13.00

BORE LOG DATA SHEET				BORE HOLE NO.18				Co-ordinates E=672135.136 N=2479723.071	
Field Test	Nos	Samples	Nos	Commencement Date : 08/05/2024 Completion Date : 08/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 306.665 M. Water Struck At : Standing Water Level : 11.30 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
13.50m				8	10	15	25		
Medium dense to dense, light brown, silty sand with kankars.				9	11	17	28		
20.30m				10	14	17	31		
Hard, brownish grey to yellowish grey, silty clay with sand mixture & decomposed rock.				12	15	21	36		
25.45m				12	15	24	39		
N.B. - '*' means sample could not be recovered.				14	18	26	44		
20.30m				23	20	25	45		
25.45m				15	21	27	48		
N.B. - '*' means sample could not be recovered.				15	20	29	49		
25.45m									

BORE LOG DATA SHEET				BORE HOLE NO.19				Co-ordinates E=672081.829 N=2479645.992	
Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024 Completion Date : 10/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.249 M. Water Struck At : Standing Water Level : 10.00 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m				2 10 14	24			Ref. No	Depth (m)
Very stiff, reddish brown, clayey silt with sand mixture & kankars.				8 13 16	29			DS-1	0.50
				12 14 13	27			DS-2	1.00
				9 10 14	24			SPT-1	1.50–1.95
				9 12 15	27			UDS-1	2.80–2.95
				10 13 17	30			SPT-2	2.95–3.40
9.75m				10 12 14	26			DS-3	4.00
Medium dense to dense, yellowish brown, silty sand with kankars.				12 13 15	28			SPT-3	4.50–4.95
13.50m								UDS-2	5.50–5.95
								SPT-4	5.95–6.40
								DS-4	7.00
								SPT-5	7.50–7.95
								UDS-3	8.50–8.95
								SPT-6	8.95–9.40
								DS-5	10.00
								SPT-7	10.50–10.95
								*UDS-4	11.45–11.90
								SPT-8	12.00–12.45
								DS-6	13.00

BORE LOG DATA SHEET			BORE HOLE NO.19			Co-ordinates E=672081.829 N=2479645.992	
Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024 Completion Date : 10/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.249 M. Water Struck At : Standing Water Level : 10.00 m.			
Penetrometer (SPT)	17	Undisturbed (UDS)	7				
Cone (Pc)		Penetrometer (SPT)	17				
Vane (V)		Disturbed (DS)	11				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
13.50m				13 15 19	34		Ref. No Depth (m)
Medium dense to dense, yellowish brown, silty sand with kakars.				14 15 17	32		SPT-9 13.50-13.95
20.95m				15 17 18	35		*UDS-5 14.40-14.85
Hard, yellowish grey, silty clay with sand mixture.				16 18 20	38		SPT-10 15.00-15.45
25.45m				16 19 20	39		DS-7 16.00
N.B. - '*' means sample could not be recovered.				17 20 21	41		SPT-11 16.50-16.95
25.45m				17 19 24	43		*UDS-6 17.40-17.85
N.B. - '*' means sample could not be recovered.				15 18 29	47		SPT-12 18.00-18.45
N.B. - '*' means sample could not be recovered.				15 20 31	51		DS-8 19.00
N.B. - '*' means sample could not be recovered.							SPT-13 19.50-19.95
N.B. - '*' means sample could not be recovered.							DS-9 20.50
N.B. - '*' means sample could not be recovered.							*UDS-7 21.00-21.10
N.B. - '*' means sample could not be recovered.							SPT-14 21.30-21.75
N.B. - '*' means sample could not be recovered.							DS-10 22.40
N.B. - '*' means sample could not be recovered.							SPT-15 23.00-23.45
N.B. - '*' means sample could not be recovered.							DS-11 23.80
N.B. - '*' means sample could not be recovered.							SPT-16 24.20-24.65
N.B. - '*' means sample could not be recovered.							SPT-17 25.00-25.45

BORE LOG DATA SHEET				BORE HOLE NO.20				Co-ordinates E=672139.430 N=2479641.012	
Field Test	Nos	Samples	Nos	Commencement Date : 12/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 307.631 M. Water Struck At : Standing Water Level : 10.00 m.					
Penetrometer (SPT)	16	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	16						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
				Ref. No	Depth (m)				
0.00m								DS-1	0.50
				7	7	8	15	DS-2	1.00
				10	11	9	20	SPT-1	1.50-1.95
				9	12	11	23	UDS-1	2.50-2.95
				11	13	12	25	SPT-2	2.95-3.40
				8	12	14	26	DS-3	4.00
				10	13	15	28	SPT-3	4.50-4.95
				9	12	13	25	UDS-2	5.50-5.95
				11	12	15	27	SPT-4	5.95-6.40
				11	12	15	27	DS-4	7.00
				11	12	15	27	SPT-5	7.50-7.95
				11	12	15	27	UDS-3	8.50-8.95
				11	12	15	27	SPT-6	8.95-9.40
				11	12	15	27	DS-5	10.00
				11	12	15	27	SPT-7	10.50-10.95
11.70m				11	12	15	27	UDS-4	11.50-11.95
				11	12	15	27	SPT-8	11.95-12.40
13.00m				11	12	15	27	DS-6	13.00

BORE LOG DATA SHEET BORE HOLE NO.20 Co-ordinates E=672139.430
N=2479641.012

BORE LOG DATA SHEET

BORE HOLE NO.20

Co-ordinates E=672139.430
N=2479641.012

Field Test	Nos	Samples	Nos	Commencement Date : 12/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 307.631 M. Water Struck At : Standing Water Level : 10.00 m.			
DESCRIPTION	SYMBOL	N-VALUE				SAMPLES	
		EACH	DIVN=15CM		Ref. No	Depth (m)	
13.00m		10 13 15	28		SPT-9	13.50–13.95	
		7 12 16	28		*UDS-5	14.50–14.95	
		11 15 14	29		SPT-10	15.05–15.50	
		12 15 20	35		DS-7	16.00	
Medium dense to dense, yellowish brown, silty sand with kankars.		11 14 16	30		SPT-11	16.50–16.95	
		12 16 18	34		*UDS-6	17.50–17.95	
		12 13 18	31		SPT-12	18.05–18.50	
		11 14 19	33		DS-8	19.00	
		12 13 18	31		SPT-13	19.50–19.95	
		12 13 18	31		*UDS-7	20.50–20.95	
		12 13 18	31		SPT-14	20.60–21.05	
		12 13 18	31		DS-9	21.50	
21.80m		12 13 18	31		SPT-15	22.00–22.45	
Hard, yellowish grey, silty clay with sand mixture.		12 13 18	31		UDS-8	23.50–23.95	
		12 13 18	31		DS-10	24.00	
N.B. – '*' means sample could not be recovered.		12 13 18	31		SPT-16	25.00–25.45	

BORE LOG DATA SHEET				BORE HOLE NO.21				Co-ordinates E=672068.049 N=2479612.050	
Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024 Completion Date : 09/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.638 M. Water Struck At : Standing Water Level : 9.00 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m				9	10	13	23	DS-1	0.50
Very stiff, reddish brown, clayey silt with sand mixture & kankars.				10	12	15	27	DS-2	1.00
				12	13	16	29	SPT-1	1.45-1.90
				13	15	18	33	UDS-1	2.50-2.95
				13	15	18	33	SPT-2	2.95-3.40
				12	13	16	38	DS-3	4.00
				12	17	21	42	SPT-3	4.50-4.95
5.80m				12	19	23	42	UDS-2	5.50-5.80
Hard, reddish brown, clayey silt with sand mixture & kankars.				13	15	24	39	SPT-4	5.80-6.25
				13	15	24	39	DS-4	7.00
				12	17	21	38	SPT-5	7.55-8.00
				12	19	23	42	UDS-3	8.50-8.80
				12	19	23	42	SPT-6	8.80-9.25
				13	15	24	39	DS-5	9.80
10.75m				13	15	24	39	SPT-7	10.30-10.75
Medium dense to dense, yellowish brown, silty sand with kankars.				9	11	12	23	*UDS-4	11.50-11.95
				9	11	12	23	SPT-8	12.10-12.55
				13.50m				DS-6	13.00

BORE LOG DATA SHEET				BORE HOLE NO.21				Co-ordinates E=672068.049 N=2479612.050	
Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024 Completion Date : 09/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.638 M. Water Struck At : Standing Water Level : 9.00 m.					
Penetrometer (SPT)		17	Undisturbed (UDS)	7					
Cone (Pc)			Penetrometer (SPT)	17					
Vane (V)			Disturbed (DS)	11					
			Water Sample (WS)	0					
DESCRIPTION			SYMBOL	N-VALUE				SAMPLES	
				EACH DIVN=15CM				Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand with kankars.				9	10	11	21		SPT-9 13.50-13.95
				10	11	15	26		*UDS-5 14.50-14.95
				10	14	17	31		SPT-10 15.00-15.45
				12	15	21	36		DS-7 16.00
				10	14	17	31		SPT-11 16.50-16.95
				12	15	21	36		*UDS-6 17.50-17.95
				10	13	13	26		SPT-12 18.10-18.55
				10	13	13	30		DS-8 19.00
				12	14	16	30		SPT-13 19.50-19.95
				12	14	16	36		*UDS-7 20.50-20.95
Hard, yellowish grey, silty clay with sand mixture.				13	18	18	49		SPT-14 21.00-21.45
				14	25	24	49		DS-9 21.70
				12	21	27	48		SPT-15 22.20-22.65
				14	25	24	49		DS-10 23.00
				12	21	27	48		SPT-16 23.80-24.25
25.45m									DS-11 24.70
									SPT-17 25.00-25.45
N.B. - '*' means sample could not be recovered.									

N.B. - '*' means sample could not be recovered.

Set No:

F=672201 686

BORE LOG DATA SHEET

BORE HOLE NO.22

Co-ordinates E=672201.686
N=2479767.050

Field Test	Nos	Samples		Nos	Commencement Date :	13/05/2024
Penetrometer (SPT)	14	Undisturbed (UDS)		6	Completion Date :	13/05/2024
Cone (Pc)		Penetrometer (SPT)		14	Bore Hole Diameter :	150 mm.
Vane (V)		Disturbed (DS)		8	Level Of Ground :	305.491 M.
		Water Sample (WS)		0	Water Struck At :	
					Standing Water Level :	12.10 m.
DESCRIPTION			SYMBOL	N-VALUE		SAMPLES
				EACH	DIVN=15CM	Ref. No
0.00m						Depth (m)
Filled up with yellowish brown, silty clay with sand mixture, gravel & kankars.						DS-1 0.50
1.00m						DS-2 1.00
				11 14 16	30	SPT-1 1.50-1.95
				6 12 15	27	UDS-1 2.50-2.95
						SPT-2 2.95-3.40
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.				7 10 13	23	DS-3 4.00
				7 10 13	23	SPT-3 4.50-4.95
				8 11 14	25	UDS-2 5.50-5.95
				8 11 14	25	SPT-4 5.95-6.40
						DS-4 7.00
7.50m				7 8 9	17	SPT-5 7.50-7.95
				7 8 9	17	
Medium dense, yellowish brown, silty sand. Obs. kankars.				6 7 8	15	*UDS-3 8.50-8.95
				6 7 8	15	SPT-6 9.05-9.50
				8 10 8	18	DS-5 10.00
				8 10 8	18	SPT-7 10.50-10.95
11.00m						

BORE LOG DATA SHEET BORE HOLE NO.22 Co-ordinates E=672201.686
N=2479767.050

BORE LOG DATA SHEET

BORE HOLE NO.22

Co-ordinates E=672201.686
N=2479767.050

Field Test	Nos	Samples	Nos	Commencement Date : 13/05/2024
				Completion Date : 13/05/2024
Penetrometer (SPT)	14	Undisturbed (UDS)	6	Bore Hole Diameter : 150 mm.
Cone (Pc)		Penetrometer (SPT)	14	Level Of Ground : 305.491 M.
Disturbed (DS)			8	Water Struck At :
Vane (V)		Water Sample (WS)	0	Standing Water Level : 12.10 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
11.00m				
Medium dense, yellowish brown, silty sand. Obs. kankars.				
17.00m				
Hard, yellowish grey, silty clay with sand mixture & decomposed rock fragments.				
20.45m				
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET		BORE HOLE NO.23		Co-ordinates E=672225.512 N=2479725.312	
Field Test	Nos	Samples	Nos	Commencement Date : 13/05/2024 Completion Date : 14/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 305.472 M. Water Struck At : Standing Water Level : 12.20 m.	
Penetrometer (SPT)	14	Undisturbed (UDS)	6		
Cone (Pc)		Penetrometer (SPT)	14		
Vane (V)		Disturbed (DS)	8		
		Water Sample (WS)	0		
DESCRIPTION		SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES
0.00m					Ref. No Depth (m)
Filled up with yellowish brown, clayey silty sand with kankars, gravel & grass root.					DS-1 0.50
1.00m			10 12 15 27		DS-2 1.00
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.			8 14 15 29		SPT-1 1.50-1.95
			8 14 12 26		UDS-1 2.50-2.95
			8 14 12 26		SPT-2 2.95-3.40
			8 14 12 31		DS-3 4.00
5.50m			11 15 16 31		SPT-3 4.50-4.95
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.			11 15 16 31		UDS-2 5.50-5.95
			11 15 16 31		SPT-4 5.95-6.40
7.50m			7 10 16 26		DS-4 7.00
Medium dense, reddish brown, clayey silty sand. Obs. kankars.			7 10 16 26		SPT-5 7.50-7.95
			7 10 16 26		*UDS-3 8.50-8.95
9.50m			6 11 14 25		SPT-6 9.05-9.50
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.			6 11 14 25		DS-5 10.00
11.00m			7 10 12 22		SPT-7 10.50-10.95

Field Test	Nos	Samples	Nos	Commencement Date : 13/05/2024		
				Completion Date : 14/05/2024		
Penetrometer (SPT)	14	Undisturbed (UDS)	6	Bore Hole Diameter : 150 mm.		
Cone (Pc)		Penetrometer (SPT)	14	Level Of Ground : 305.472 M.		
Vane (V)		Disturbed (DS)	8	Water Struck At :		
		Water Sample (WS)	0	Standing Water Level : 12.20 m.		
DESCRIPTION		SYMBOL	N-VALUE		SAMPLES	
			EACH DIVN=15CM		Ref. No	Depth (m)
11.00m			8 9 11	20	*UDS-4	11.50–11.95
			6 9 8	17	SPT-8	12.05–12.50
			7 8 8	16	DS-6	13.00
			8 10 8	18	SPT-9	13.50–13.95
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.			12 16 22	38	*UDS-5	14.50–14.95
			15 18 25	43	SPT-10	15.05–15.50
			16 20 28	48	DS-7	16.00
					SPT-11	16.50–16.95
					*UDS-6	17.50–17.95
					SPT-12	18.05–18.50
18.50m					DS-8	18.80
Hard, yellowish grey, silty clay with sand mixture, kankars & decomposed rock.					SPT-13	19.20–19.65
20.45m					SPT-14	20.00–20.45
N.B. – '*' means sample could not be recovered.						

BORE LOG DATA SHEET				BORE HOLE NO.24				Co-ordinates E=672247.948 N=2479659.368	
Field Test	Nos	Samples	Nos	Commencement Date : 13/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 305.563 M. Water Struck At : Standing Water Level : 11.90 m.					
DESCRIPTION		SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES		
			7	10	12	22	Ref. No	Depth (m)	
Very stiff, reddish brown, silty clay with sand mixture. Obs.kankars.			8	10	10	20	SPT-1	1.50-1.95	
			13	14	18	32	UDS-1	2.50-2.95	
			11	18	25	43	SPT-2	2.95-3.40	
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.			13	14	17	31	DS-3	4.00	
			11	12	18	30	SPT-3	4.50-4.95	
Medium dense, yellowish brown, silty sand. Obs. kankars.			10	9	12	21	*UDS-2	5.50-5.60	
							SPT-4	5.80-6.25	
							DS-4	7.00	
							SPT-5	7.50-7.95	
							UDS-3	8.50-8.95	
							SPT-6	8.95-9.40	
							DS-5	10.00	
							SPT-7	10.50-10.95	

BORE LOG DATA SHEET			BORE HOLE NO.24			Co-ordinates E=672247.948 N=2479659.368			
Field Test	Nos	Samples	Nos	Commencement Date : 13/05/2024 Completion Date : 13/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 305.563 M. Water Struck At : Standing Water Level : 11.90 m.					
Penetrometer (SPT)	10	Undisturbed (UDS)	5						
		Penetrometer (SPT)	10						
Cone (Pc)		Disturbed (DS)	6						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES		
							Ref. No Depth (m)		
Medium dense, yellowish brown, silty sand. Obs. kankars.									
				9 12 14	26		*UDS-4 11.50-11.95		
				8 11 12	23		SPT-8 12.05-12.50		
				10 9 13	22		DS-6 13.00		
							SPT-9 13.50-13.95		
							*UDS-5 14.50-14.95		
							SPT-10 15.00-15.45		
N.B. - '*' means sample could not be recovered.									

N.B. - '*' means sample could not be recovered.

BORE LOG DATA SHEET				BORE HOLE NO.25				Co-ordinates E=672230.827 N=2479574.439	
Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024 Completion Date : 05/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 306.053 M. Water Struck At : Standing Water Level : 12.90 m.					
Penetrometer (SPT)	18	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	18						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
				Ref. No	Depth (m)				
0.00m								DS-1	0.50
				7 8 9	17			DS-2	1.00
				9 9 13	22			SPT-1	1.45-1.90
				9 10 13	23			UDS-1	2.50-2.95
				11 13 17	30			SPT-2	2.95-3.40
Very stiff, reddish brown, silty clay with sand mixture & kankar.				9 12 12	24			DS-3	4.30
				9 10 13 21	34			SPT-3	5.00-5.45
				10 14 22	36			UDS-2	6.05-6.50
				10 14 22	36			SPT-4	6.50-6.95
				10 10 17	30			DS-4	7.50
				8 11 19	27			SPT-5	8.00-8.45
9.10m				10 10 17	30			UDS-3	9.10-9.55
				8 11 19	27			SPT-6	9.55-10.00
Hard, reddish brown, silty clay with sand mixture & kankar.				10 10 17	30			DS-5	10.50
				8 11 19	27			SPT-7	11.00-11.45
11.50m				10 10 17	30			*UDS-4	12.00-12.45
				8 11 19	27			SPT-8	12.60-13.05
Medium dense to dense, light brown, silty sand with kankar.				10 10 17	30			DS-6	13.50
				8 11 19	27			SPT-9	14.00-14.45
				10 10 17	30			*UDS-5	15.10-15.55
15.75m				10 10 17	30				

BORE LOG DATA SHEET

BORE HOLE NO.25

Co-ordinates E=672230.827
N=2479574.439

Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024
Penetrometer (SPT)	18	Undisturbed (UDS)	7	Completion Date : 05/05/2024
Cone (Pc)		Penetrometer (SPT)	18	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)	11	Level Of Ground : 306.053 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.90 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
15.75m			12 13 22	35
			13 14 18	32
			12 15 23	38
			14 16 25	41
20.50m			18 23 29	52
			15 20 26	46
			16 21 27	48
26.00m			100 4.0 cm Penth. Refusal	
			100 3.0 cm Penth. Refusal	
30.00m			NX. rotary drilling from 26.00m to 30.00m	
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.26				Co-ordinates E=672207.730 N=2479488.159	
Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024 Completion Date : 04/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.527 M. Water Struck At : Standing Water Level : 11.50 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
				Ref. No	Depth (m)				
0.00m								DS-1	0.50
Very stiff, reddish brown, silty clay with sand mixture.				7 9 9	18			DS-2	1.00
				6 8 12	20			SPT-1	1.50-1.95
				9 13 19	32			DS-3	2.50
				10 13 20	33			UDS-1	3.00-3.45
				9 12 18	30			SPT-2	3.45-3.90
4.50m				9 12 18	35			DS-4	4.50
				11 13 22	38			SPT-3	5.00-5.45
				12 15 23	39			UDS-2	6.00-6.40
				14 16 23				SPT-4	6.40-6.85
Hard, reddish brown, silty clay with kankars & sand.								DS-5	7.50
								SPT-5	8.00-8.45
								UDS-3	9.10-9.55
								SPT-6	9.55-10.00
								DS-6	10.50
								SPT-7	11.05-11.50
12.20m								*UDS-4	12.20-12.30
								SPT-8	12.50-12.95
Medium dense to dense, light brownish grey, silty sand with kankars.								DS-7	13.50
13.50m									

BORE LOG DATA SHEET**BORE HOLE NO.26**Co-ordinates E=672207.730
N=2479488.159

Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 04/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	10	Level Of Ground : 308.527 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 11.50 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.50m			10 11 16	27
Medium dense to dense, light brownish grey, silty sand with kankars.			11 13 16	29
			10 12	30
			18	
			13 15 23	38
20.00m			12 14 20	34
Hard, brownish grey, silty clay with sand mixture & decomposed rock.			10 13 22	35
			12 14 20	34
			15 16 23	39
22.50m			15 15 22	37
Hard, yellowish grey, silty clay with fine sand.				
25.45m				
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.27			Co-ordinates E=672085.174 N=2479412.276	
Field Test	Nos	Samples	Nos	Commencement Date : 06/05/2024 Completion Date : 07/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.361 M. Water Struck At : Standing Water Level : 13.20 m.			
Penetrometer (SPT)	17	Undisturbed (UDS)	8				
Cone (Pc)		Penetrometer (SPT)	17				
Vane (V)		Disturbed (DS)	9				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
0.00m							Ref. No Depth (m)
Filled up with yellowish brown, clayey silty sand with kankars & gravel.							DS-1 0.50
1.50m				7 10 12	22		DS-2 1.00
				10 13 16	29		SPT-1 1.50-1.95
				9 12 15	27		UDS-1 2.50-2.95
				9 11 16	27		SPT-2 2.95-3.40
				9 12 13	25		DS-3 4.00
				7 12 13	25		SPT-3 4.50-4.95
				6 8 13	21		UDS-2 5.50-5.95
				6 8 13	21		SPT-4 5.95-6.40
				7 8 11	19		DS-4 7.00
				7 8 11	19		SPT-5 7.50-7.95
				8 9 15	24		UDS-3 8.50-8.95
				8 9 15	24		SPT-6 8.95-9.40
							DS-5 10.00
							SPT-7 10.50-10.95
							*UDS-4 11.50-11.95
							SPT-8 12.05-12.50
							DS-6 13.00
13.50m							

BORE LOG DATA SHEET

BORE HOLE NO.27

Co-ordinates E=672085.174
N=2479412.276

Field Test	Nos	Samples	Nos	Commencement Date : 06/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 07/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 308.361 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.20 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.			Ref. No	Depth (m)
13.50m				
			7 9 12 21	SPT-9 13.50-13.95
			6 10 11 21	*UDS-5 14.50-14.95
			8 9 11 20	SPT-10 15.05-15.50
			10 11 11 22	DS-7 16.00
			9 11 12 23	SPT-11 16.50-16.95
			11 13 15 28	*UDS-6 17.50-17.95
			14 18 23 41	SPT-12 18.05-18.50
			16 22 24 46	DS-8 19.00
			15 23 26 49	SPT-13 19.50-19.95
22.00m				*UDS-7 20.50-20.95
				SPT-14 21.05-21.50
				DS-9 22.00
				SPT-15 22.50-22.95
				*UDS-8 23.50-23.60
				SPT-16 23.80-24.25
25.45m				SPT-17 25.00-25.45
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.28				Co-ordinates E=672182.809 N=2479408.195	
Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024 Completion Date : 09/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 308.408 M. Water Struck At : Standing Water Level : 12.20 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m								Ref. No	Depth (m)
Filled up with yellowish brown, clayey silty sand with kankars & gravel.								DS-1	0.50
1.00m				7	8	10	18	DS-2	1.00
				6	7	10	17	SPT-1	1.50-1.95
				11	13	15	28	UDS-1	2.50-2.95
				9	14	15	29	SPT-2	2.95-3.40
				10	14	16	27	DS-3	4.00
				9	13	14	30	SPT-3	4.50-4.95
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.				10	14	16	28	UDS-2	5.50-5.95
				9	13	15	14	SPT-4	5.95-6.40
				7	8	6		DS-4	7.00
				9	13	14		SPT-5	7.50-7.95
				10	14	16		UDS-3	8.50-8.95
				9	13	15		SPT-6	8.95-9.40
				7	8	6		DS-5	10.00
				9	13	15		SPT-7	10.50-10.95
12.00m				7	8	6	14	*UDS-4	11.50-11.95
Medium dense, yellowish brown, silty sand. Obs. kankars.				7	8	6		SPT-8	12.05-12.50
13.50m				7	8	6		DS-6	13.00

BORE LOG DATA SHEET**BORE HOLE NO.28**Co-ordinates E=672182.809
N=2479408.195

Field Test	Nos	Samples	Nos	Commencement Date : 09/05/2024
				Completion Date : 09/05/2024
				Bore Hole Diameter : 150 mm.
				Level Of Ground : 308.408 M.
				Water Struck At :
				Standing Water Level : 12.20 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.50m			8 10 7	17
			9 9 8	17
			6 7 11	18
			8 9 12	21
Medium dense, yellowish brown, silty sand. Obs. kankars.			10 12 14	26
			12 13 16	29
			14 18 23	41
22.50m			16 19 24	43
Hard, yellowish grey, silty clay with sand mixture, gravel & decomposed rock.			18 21 25	46
25.45m				
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.29			Co-ordinates E=672148.470 N=2479381.550	
Field Test	Nos	Samples	Nos	Commencement Date : 08/05/2024 Completion Date : 09/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 309.689 M. Water Struck At : Standing Water Level : 13.10 m.			
Penetrometer (SPT)	17	Undisturbed (UDS)	8				
Cone (Pc)		Penetrometer (SPT)	17				
Vane (V)		Disturbed (DS)	9				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES	
0.00m						Ref. No Depth (m)	
Filled up with yellowish brown, clayey silty sand with kankars & gravel.						DS-1 0.50	
1.00m						DS-2 1.00	
				23		SPT-1 1.50-1.95	
				25		UDS-1 2.50-2.95	
				25		SPT-2 2.95-3.40	
				27		DS-3 4.00	
				27		SPT-3 4.50-4.95	
				29		UDS-2 5.50-5.95	
				29		SPT-4 5.95-6.40	
				27		DS-4 7.00	
				27		SPT-5 7.50-7.95	
				25		UDS-3 8.50-8.95	
				25		SPT-6 8.95-9.40	
				22		DS-5 10.00	
				22		SPT-7 10.50-10.95	
				22		UDS-4 11.50-11.95	
				22		SPT-8 11.95-12.40	
				22		DS-6 13.00	
13.50m							

BORE LOG DATA SHEET**BORE HOLE NO.29**Co-ordinates E=672148.470
N=2479381.550

Field Test	Nos	Samples	Nos	Commencement Date : 08/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 09/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 309.689 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.10 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
Very stiff, reddish brown, silty clay. Obs. sand mixture & kankars.		13.50m	7 11 13	24
			6 5 11	16
			7 7 8	15
			8 9 8	17
Medium dense, yellowish brown, silty sand. Obs. kankars.		18.05m	10 9 10	19
			11 10 11	21
			13 15 18	33
Hard, yellowish grey, silty clay with sand mixture, kankars & decomposed rock.		22.50m	16 18 25	43
			18 18 26	44
25.45m				
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.30				Co-ordinates E=672276.729 N=2479783.184	
Field Test	Nos	Samples	Nos	Commencement Date : 18/05/2024 Completion Date : 18/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.792 M. Water Struck At : Standing Water Level : 12.30 m.					
Penetrometer (SPT)	14	Undisturbed (UDS)	6						
Cone (Pc)		Penetrometer (SPT)	14						
Vane (V)		Disturbed (DS)	8						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m								Ref. No	Depth (m)
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.								DS-1	0.50
				9 10 14 24				DS-2	1.00
								SPT-1	1.50-1.95
2.50m				11 15 16 31				UDS-1	2.50-2.95
								SPT-2	2.95-3.40
				12 16 17 33				DS-3	4.00
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.				15 17 19 36				SPT-3	4.50-4.95
				12 16 26				UDS-2	5.50-5.95
				15 17 24				SPT-4	5.95-6.40
				8 10 16 26				DS-4	7.00
7.50m				8 10 16 26				SPT-5	7.50-7.95
				7 12 12 24				*UDS-3	8.50-8.95
				8 13 15 28				SPT-6	9.05-9.50
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.				8 13 15 28				DS-5	10.00
				9 15 16 31				SPT-7	10.50-10.95
				9 15 16 31				*UDS-4	11.50-11.95
				9 15 16 31				SPT-8	12.05-12.50
13.00m								DS-6	13.00

BORE LOG DATA SHEET			BORE HOLE NO.30			Co-ordinates E=672276.729 N=2479783.184
Field Test	Nos	Samples	Nos	Commencement Date : 18/05/2024 Completion Date : 18/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.792 M. Water Struck At : Standing Water Level : 12.30 m.		
Penetrometer (SPT)	14	Undisturbed (UDS)	6			
Cone (Pc)		Penetrometer (SPT)	14			
Vane (V)		Disturbed (DS)	8			
		Water Sample (WS)	0			
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES
13.00m				12 14 15	29	Ref. No
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.				11 16 19	35	Depth (m)
				16 16 21	37	
17.50m				18 21 25	46	
Dense, yellowish grey, silty sand with clay binder, kankar & decomposed rock fragments.				35 53	>100	
19.00m				100	5.0cm Pentrn. Refusal	
Very dense, yellowish grey, silty sand with clay binder, kankar & decomposed rock fragments.				53	4.0cm Pentrn.	
19.50m				100	NX, drilling from 19.50m to 25.00m	
Highly weathered, yellowish grey, medium grained, fractured rock.						
21.00m						
Highly weathered, yellowish grey, medium grained, fractured rock.						
25.00m						
N.B. - '*' means sample could not be recovered.						

BORE LOG DATA SHEET**BORE HOLE NO.31**Co-ordinates E=672335.090
N=2479811.953

Field Test	Nos	Samples	Nos	Commencement Date : 14/05/2024
Penetrometer (SPT)	10	Undisturbed (UDS)	5	Completion Date : 14/05/2024
Cone (Pc)		Penetrometer (SPT)	10	Bore Hole Diameter : 150 mm.
Vane (V)		Disturbed (DS)	6	Level Of Ground : 302.913 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 11.10 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m			Ref. No	Depth (m)
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.			DS-1	0.50
			DS-2	1.00
			SPT-1	1.50–1.95
			UDS-1	2.50–2.95
			SPT-2	2.95–3.40
			DS-3	4.00
			SPT-3	4.50–4.95
			UDS-2	5.50–5.95
			SPT-4	5.95–6.40
			DS-4	7.00
			SPT-5	7.50–7.95
8.00m			*UDS-3	8.50–8.95
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.			SPT-6	9.05–9.50
			DS-5	10.00
			SPT-7	10.50–10.95
11.00m				

BORE LOG DATA SHEET			BORE HOLE NO.31			Co-ordinates E=672335.090 N=2479811.953			
Field Test	Nos	Samples	Nos	Commencement Date : 14/05/2024 Completion Date : 14/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 302.913 M. Water Struck At : Standing Water Level : 11.10 m.					
Penetrometer (SPT)	10	Undisturbed (UDS)	5						
Cone (Pc)		Penetrometer (SPT)	10						
Vane (V)		Disturbed (DS)	6						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.				9 12 15 27		Ref. No	Depth (m)		
11.00m				11 14 16 30		SPT-8	12.05-12.50		
15.45m				13 17 16 33		DS-6 SPT-9 *UDS-5 SPT-10	13.00 13.50-13.95 14.50-14.95 15.00-15.45		
N.B. - '*' means sample could not be recovered.									

BORE LOG DATA SHEET

BORE HOLE NO.32

Co-ordinates E=672366.363
N=2479726.622

Field Test	Nos	Samples		Nos	Commencement Date : 14/05/2024	
Penetrometer (SPT)	10	Undisturbed (UDS)	5		Completion Date : 14/05/2024	
Cone (Pc)		Penetrometer (SPT)	10		Bore Hole Diameter : 150 mm.	
Vane (V)		Disturbed (DS)	6		Level Of Ground : 303.874 M.	
		Water Sample (WS)	0		Water Struck At :	
					Standing Water Level : 11.40 m.	
DESCRIPTION			SYMBOL	N-VALUE		SAMPLES
				EACH DIVN=15CM		Ref. No
0.00m						Depth (m)
Very stiff to hard, reddish brown, silty clay with sand mixture. Obs. kankars.				8 10 12	22	DS-1 0.50
				7 13 15	28	DS-2 1.00
				9 11 18	29	SPT-1 1.50-1.95
				11 15 17	32	UDS-1 2.50-2.95
				10 14 16	30	SPT-2 2.95-3.40
						DS-3 4.00
						SPT-3 4.50-4.95
						UDS-2 5.50-5.95
Medium dense, yellowish brown, silty sand. Obs. kankars.						SPT-4 5.95-6.40
				6 9 11	20	DS-4 7.00
				7 10 11	21	SPT-5 7.50-7.95
						*UDS-3 8.50-8.95
11.00m						SPT-6 9.05-9.50
						DS-5 10.00
						SPT-7 10.50-10.95

BORE LOG DATA SHEET

BORE HOLE NO.32

Co-ordinates E=672366.363
N=2479726.622

Field Test	Nos	Samples	Nos	Commencement Date : 14/05/2024		
Penetrometer (SPT)	10	Undisturbed (UDS)	5	Completion Date : 14/05/2024		
Cone (Pc)		Penetrometer (SPT)	10	Bore Hole Diameter : 150 mm.		
Vane (V)		Disturbed (DS)	6	Level Of Ground : 303.874 M.		
		Water Sample (WS)	0	Water Struck At :		
				Standing Water Level : 11.40 m.		
DESCRIPTION	SYMBOL	N-VALUE			SAMPLES	
		EACH DIVN=15CM			Ref. No	Depth (m)
11.00m Medium dense, yellowish brown, silty sand. Obs. kankars.		8 11 13	24	*UDS-4	11.50-11.95	
		10 10 13	23	SPT-8	12.05-12.50	
		9 10 14	24	DS-6	13.00	
				SPT-9	13.50-13.95	
15.45m				*UDS-5	14.50-14.95	
				SPT-10	15.00-15.45	
N.B. - '*' means sample could not be recovered.						



BORE LOG DATA SHEET**BORE HOLE NO.33**Co-ordinates E=672336.314
N=2479710.258

Field Test	Nos	Samples	Nos	Commencement Date : 15/05/2024				
Penetrometer (SPT)	14	Undisturbed (UDS)	6	Completion Date : 16/05/2024				
Cone (Pc)		Penetrometer (SPT)	14	Bore Hole Diameter : 150 mm.				
Vane (V)		Disturbed (DS)	8	Level Of Ground : 304.405 M.				
		Water Sample (WS)	0	Water Struck At :				
				Standing Water Level : 12.40 m.				
DESCRIPTION	SYMBOL	N-VALUE					SAMPLES	
		EACH DIVN=15CM					Ref. No	Depth (m)
0.00m								
Filled up with yellowish grey, clayey silty sand, ash & kankars.							DS-1	0.50
1.00m							DS-2	1.00
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankar.		9	10	16	26		SPT-1	1.50–1.95
2.50m		11	14	18	32		UDS-1	2.50–2.95
		12	13	19	32		SPT-2	2.95–3.40
		13	16	20	36		DS-3	4.00
Hard, reddish brown, silty clay with sand mixture. Obs. kankar.		10	14	16	30		SPT-3	4.50–4.95
		13	10	12	22		UDS-2	5.50–5.95
		12	11	10	21		SPT-4	5.95–6.40
7.50m							DS-4	7.00
Medium dense, reddish brown, clayey silty sand. Obs. kankars.							SPT-5	7.50–7.95
							*UDS-3	8.50–8.95
							SPT-6	9.05–9.50
							DS-5	10.00
11.00m							SPT-7	10.50–10.95



BORE LOG DATA SHEET

BORE HOLE NO.33

Co-ordinates E=672336.314
N=2479710.258

				N-24/5/10.250	
Field Test	Nos	Samples	Nos	Commencement Date :	15/05/2024
Penetrometer (SPT)	14	Undisturbed (UDS)	6	Completion Date :	16/05/2024
Cone (Pc)		Penetrometer (SPT)	14	Bore Hole Diameter :	150 mm.
		Disturbed (DS)	8	Level Of Ground :	304.405 M.
Vane (V)		Water Sample (WS)	0	Water Struck At :	
				Standing Water Level :	12.40 m.

DESCRIPTION	SYMBOL	N-VALUE			SAMPLES	
		EACH	DIVN=15CM		Ref. No	Depth (m)
Medium dense, reddish brown, clayey silty sand. Obs. kankars.		11.00m	10 13 17	30	*UDS-4	11.50-11.95
		11.50m	11 14 18	32	SPT-8	12.05-12.50
					DS-6	13.00
					SPT-9	13.50-13.95
Dense, yellowish brown, silty sand. Obs. kankars.			8 17 18	35	*UDS-5	14.50-14.95
			9 16 19	35	SPT-10	15.05-15.50
					DS-7	16.00
					SPT-11	16.50-16.95
		18.00m	11 18 16	34	*UDS-6	17.50-17.95
Hard, yellowish grey, silty clay with sand mixture, kankars & gravel.			10 19 18	37	SPT-12	18.05-18.50
			11 19 22	41	DS-8	18.80
		20.45m			SPT-13	19.20-19.65
					SPT-14	20.00-20.45
N.B. - '*' means sample could not be recovered.						

N.B. - '*' means sample could not be recovered.

BORE LOG DATA SHEET**BORE HOLE NO.34**Co-ordinates E=672428.463
N=2479720.557

Field Test	Nos	Samples	Nos	Commencement Date : 29/04/2024				
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 30/04/2024				
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./N.X				
Vane (V)		Disturbed (DS)	10	Level Of Ground : 303.815 M.				
		Water Sample (WS)	0	Water Struck At :				
				Standing Water Level : 12.60 m.				
DESCRIPTION	SYMBOL	N-VALUE					SAMPLES	
		EACH DIVN=15CM					Ref. No	Depth (m)
0.00m		7	7	13	20	DS-1	0.50	
		6	8	14	22	DS-2	1.00	
Very stiff, reddish brown, silty clay with sand mixture & kankars.		9	10	15	25	SPT-1	1.50-1.95	
		8	15	17	32	UDS-1	2.50-2.95	
		9	14	16	30	SPT-2	2.95-3.40	
5.50m		8	12	15	28	DS-3	4.00	
Hard, reddish brown, silty clay with sand mixture & kankars.		9	13	15	27	SPT-3	4.50-4.95	
		10	14	16	30	UDS-2	5.50-5.95	
		8	11	13	30	SPT-4	5.95-6.40	
7.50m		9	14	16	30	DS-4	7.00	
		10	13	15	28	SPT-5	7.50-7.95	
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.		8	12	15	27	*UDS-3	8.50-8.95	
		9	14	16	30	SPT-6	9.05-9.50	
		11	13	17	30	DS-5	10.00	
		10	14	17	31	SPT-7	10.50-10.95	
		8	14	16	30	*UDS-4	11.50-11.95	
		9	14	16	30	SPT-8	12.05-12.50	
		11	13	17	30	DS-6	13.00	
		10	14	17	31	SPT-9	13.50-13.95	
		8	14	16	30	*UDS-5	14.50-14.95	
		9	14	16	31	SPT-10	15.05-15.50	
		11	13	17	30	DS-7	16.00	
		10	14	17	31	SPT-11	16.50-16.95	
		8	14	16	30	*UDS-6	17.50-17.95	
18.00m								



BORE LOG DATA SHEET

BORE HOLE NO.34

Co-ordinates E=672428.463
N=2479720.557

Field Test	Nos	Samples	Nos	Commencement Date : 29/04/2024			
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 30/04/2024			
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./N.X			
Vane (V)		Disturbed (DS)	10	Level Of Ground : 303.815 M.			
		Water Sample (WS)	0	Water Struck At :			
				Standing Water Level : 12.60 m.			
DESCRIPTION	SYMBOL	N-VALUE				SAMPLES	
		EACH DIVN=15CM				Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand. Obs. kankars.	18.00m	8 13 25 38			SPT-12	18.05–18.50	
		11 16 20 36			DS-8	19.00	
		12 17 22 39			SPT-13	19.50–19.95	
Hard, yellowish grey, silty clay with sand mixture, gravel & decomposed rock.		16 21 26 47			*UDS-7	20.50–20.60	
		18 29 52 >100			SPT-14	20.80–21.25	
		5.0cm Pentrn. Refusal			DS-9	22.00	
		3.0cm Pentrn.			SPT-15	22.50–22.95	
		NX. drilling from 24.60m to 30.00m			DS-10	23.50	
					SPT-16	24.00–24.35	
Highly weathered, yellowish grey to light yellowish brown, medium grained, fractured rock.	24.60m	00			*SPT-17 R1	24.60–24.63 CR=37%/RQD=NIL	
					R2	25.00 CR=25% RQD=NIL	
					R3	25.75 CR=32% RQD=NIL	
					R4	26.50 CR=33% RQD=NIL	
					R5	27.25 CR=39% RQD=19%	
					R6	28.00 CR=31% RQD=NIL	
Highly weathered, blackish grey, medium grained, fractured rock.	28.00m				R7	28.75 CR=51% RQD=22%	
					R8	29.50 CR=54% RQD=34%	
Moderately weathered, blackish grey, medium grained, fractured rock.	28.75m					30.00	
N.B. – '*' means sample could not be recovered.							

BORE LOG DATA SHEET				BORE HOLE NO.35				Co-ordinates E=672467.337 N=2479696.828	
Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024 Completion Date : 03/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 302.450 M. Water Struck At : Standing Water Level : 12.20 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
				Ref. No	Depth (m)				
0.00m								DS-1	0.50
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankar.				9 10 12	22			DS-2	1.00
				8 13 15	28			SPT-1	1.50-1.95
				11 15 16	31			UDS-1	2.50-2.95
				10 18 22	40			SPT-2	2.95-3.40
4.50m								DS-3	4.00
Hard, reddish brown, silty clay with sand mixture. Obs. kankar.								SPT-3	4.50-4.95
								UDS-2	5.50-5.95
								SPT-4	5.95-6.40
7.50m				8 18 13	31			DS-4	7.00
Medium dense to dense, yellowish brown, silty sand. Obs. kankar.				9 17 21	38			SPT-5	7.50-7.95
				10 14 16	30			*UDS-3	8.50-8.95
				11 13 15	28			SPT-6	9.05-9.50
				9 14 15	29			DS-5	10.00
				8 15 15	30			SPT-7	10.50-10.95
				10 14 16	30			*UDS-4	11.50-11.95
				9 13 15	28			SPT-8	12.05-12.50
								DS-6	13.00
								SPT-9	13.50-13.95
								*UDS-5	14.50-14.95
								SPT-10	15.05-15.50
								DS-7	16.00
								SPT-11	16.50-16.95
								*UDS-6	17.50-17.95
								SPT-12	18.05-18.50
18.50m									

BORE LOG DATA SHEET			BORE HOLE NO.35			Co-ordinates E=672467.337 N=2479696.828
Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024 Completion Date : 03/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 302.450 M. Water Struck At : Standing Water Level : 12.20 m.		
Penetrometer (SPT)	17	Undisturbed (UDS)	7			
Cone (Pc)		Penetrometer (SPT)	17			
Vane (V)		Disturbed (DS)	10			
		Water Sample (WS)	0			
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES
18.50m Medium dense to dense, yellowish brown, silty sand. Obs. kankar.				8 10 14 24		DS-8 19.00
20.00m Hard, yellowish grey, silty clay with sand mixture, boulders & decomposed rock fragments.				7 13 18 31 58		SPT-13 19.50-19.95 *UDS-7 20.50-20.95 SPT-14 21.05-21.50 DS-9 22.00 SPT-15 22.50-22.95
24.50m Highly weathered, whitish grey to pinkish grey, fine grained, fractured rock. Obs. boulder.				21 28 30 10.0 cm Penth. Refusal 4.0 cm Penth.		DS-10 23.50 SPT-16 24.00-24.25 *SPT-17 24.50-24.54 R1 CR=28% RQD=NIL R2 CR=25% RQD=NIL R3 CR=36% RQD=NIL R4 CR=40% RQD=NIL R5 CR=29% RQD=15% R6 CR=29% RQD=NIL R7 CR=28% RQD=NIL R8 CR=39% RQD=NIL R9 CR=37% RQD=NIL R10 CR=35% RQD=NIL R11 CR=36% RQD=NIL R12 CR=31% RQD=21% R13 CR=41% RQD=NIL R14 CR=63% RQD=41%
26.00m Highly to moderately weathered, yellowish grey / whitish grey to pinkish grey, fine to medium grained, fractured rock.				NX. rotary drilling from 24.50m to 35.00m		
34.25m Slightly weathered, yellowish grey to blackish grey, medium grained, fractured rock.						
35.00m						
N.B. - '*' means sample could not be recovered.						

BORE LOG DATA SHEET			BORE HOLE NO.36			Co-ordinates E=672412.168 N=2479680.620			
Field Test	Nos	Samples	Nos	Commencement Date : 26/04/2024 Completion Date : 28/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.916 M. Water Struck At : Standing Water Level : 12.20 m.					
Field Test	Nos	Samples	Nos	Commencement Date : 26/04/2024 Completion Date : 28/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.916 M. Water Struck At : Standing Water Level : 12.20 m.					
Penetrometer (SPT)	19	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	19						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m				Ref. No		Depth (m)			
Very stiff, reddish brown, silty clay with sand mixture & kankars.				DS-1		0.50			
				DS-2		1.00			
				SPT-1		1.50-1.95			
02.50m				UDS-1		2.50-2.95			
				SPT-2		2.95-3.40			
				DS-3		4.00			
				SPT-3		4.50-4.95			
Hard, reddish brown, silty clay with sand mixture & kankars.				UDS-2		5.50-5.95			
				SPT-4		5.95-6.40			
				DS-4		7.00			
				SPT-5		7.50-7.95			
				UDS-3		8.50-8.95			
				SPT-6		8.95-9.40			
				DS-5		10.00			
				SPT-7		10.50-10.95			
11.00m				*UDS-4		11.50-11.95			
				SPT-8		12.05-12.50			
				DS-6		13.00			
				SPT-9		13.50-13.95			
Medium dense, yellowish brown, silty sand. Obs. kankars.				*UDS-5		14.50-14.95			
				SPT-10		15.05-15.50			
				DS-7		16.00			
				SPT-11		16.50-16.95			
				*UDS-6		17.50-17.95			
18.00m									

BORE LOG DATA SHEET			BORE HOLE NO.36						Co-ordinates E=672412.168 N=2479680.620	
Field Test	Nos	Samples	Nos	Commencement Date : 26/04/2024 Completion Date : 28/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.916 M. Water Struck At : Standing Water Level : 12.20 m.						
Penetrometer (SPT)	19	Undisturbed (UDS)	7							
Cone (Pc)		Penetrometer (SPT)	19							
Vane (V)		Disturbed (DS)	11							
		Water Sample (WS)	0							
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES		
Medium dense, yellowish brown, silty sand. Obs. kankars.				8	13	17	30		SPT-12	18.05–18.50
18.00m 18.50m				15	18	23	41		DS-8	19.00
Hard, yellowish grey, silty clay with sand mixture. Obs. kankars & decomposed rock.				13	19	28	47		SPT-13	19.50–19.95
				16	20	30	50		*UDS-7	20.50–20.60
				18	22	32	54		SPT-14	20.80–21.25
				18	23	34	57		DS-9	21.25
				32	52		>100		SPT-15	21.50–21.95
				100					DS-10	22.50
									SPT-16	23.00–23.45
									DS-11	24.00
									SPT-17	24.50–24.95
									SPT-18	25.50–25.75
26.00m									*SPT-19	26.00–26.04
Highly to moderately weathered, yellowish brown, medium grained, fractured rock.									R1	CR=29% RQD=NIL
									R2	26.75 CR=35% RQD=NIL
									R3	27.50 CR=43% RQD=NIL
									R4	28.25 CR=51% RQD=21%
									R5	29.00 CR=56% RQD=16%
									R6	29.75 CR=60% RQD=16%
									R7	30.50 CR=51% RQD=16%
									R8	31.25 CR=68% RQD=23%
									R9	32.00 CR=53% RQD=NIL
									R10	32.75 CR=84% RQD=40%
									R11	33.50 CR=69% RQD=31%
									R12	34.25 CR=65% RQD=32%
28.25m										35.00
Moderately weathered, yellowish brown, medium grained, fractured rock.										
30.50m										
Moderately to slightly weathered, whitish grey to light yellowish brown, medium grained, fractured rock.										
32.75m										
Slightly weathered to fresh, light grey to blackish grey, fine grained, fractured rock.										
35.00m										
N.B. — '*' means sample could not be recovered.										

BORE LOG DATA SHEET				BORE HOLE NO.37				Co-ordinates E=672504.942 N=2479679.571	
Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024 Completion Date : 05/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 302.892 M. Water Struck At : Standing Water Level : 12.00 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m								Ref. No	Depth (m)
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankar.								DS-1	0.50
				8 9 14 23				DS-2	1.00
								SPT-1	1.50–1.95
2.95m				12 14 18 32				UDS-1	2.50–2.95
Hard, reddish brown, silty clay with sand mixture. Obs. kankar.				11 15 18 33				SPT-2	2.95–3.40
								DS-3	4.00
6.00m				9 17 22 39				SPT-3	4.50–4.95
Medium dense to dense, reddish brown, silty sand with kankar.				10 14 17 31				UDS-2	5.50–5.95
				10 14 17 28				SPT-4	5.95–6.40
9.00m				9 13 15 26				DS-4	7.00
Medium dense, yellowish brown, silty sand. Obs. kankar.				10 12 14 25				SPT-5	7.50–7.95
				11 13 12 24				*UDS-3	8.50–8.95
				8 10 14 23				SPT-6	9.05–9.50
				7 11 12 23				DS-5	10.00
				8 12 11 23				SPT-7	10.50–10.95
				8 10 14 24				*UDS-4	11.50–11.95
				7 11 12 23				SPT-8	12.05–12.50
				8 12 11 23				DS-6	13.00
				8 10 14 24				SPT-9	13.50–13.95
				7 11 12 23				*UDS-5	14.50–14.95
				8 12 11 23				SPT-10	15.05–15.50
				8 10 14 24				DS-7	16.00
				8 10 14 24				SPT-11	16.50–16.95
				8 10 14 24				*UDS-6	17.50–17.95
				8 10 14 24				SPT-12	18.05–18.50
18.50m									

BORE LOG DATA SHEET

BORE HOLE NO.37

Co-ordinates E=672504.942
N=2479679.571

Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024		
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 05/05/2024		
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./NX.		
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.892 M.		
		Water Sample (WS)	0	Water Struck At :		
				Standing Water Level : 12.00 m.		
DESCRIPTION	SYMBOL	N-VALUE			SAMPLES	
		EACH	DIVN=15CM		Ref. No	Depth (m)
Medium dense, yellowish brown, silty sand. Obs. kankar.	18.50m 19.00m	13 14 16 12 13 15 16 20 27 32 52 5.0 cm Penth. 0.0 4.0 cm Penth.	30 28 47 >100 Refusal	DS-8 SPT-13 *UDS-7 SPT-14 DS-9 SPT-15 SPT-16 *SPT-17 R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15	19.00 19.50–19.95 20.50–20.95 21.05–21.50 22.00 22.50–22.95 23.50–23.70 24.00–24.04 CR=32% RQD=NIL 24.00 R1 CR=31% RQD=NIL 24.75 R2 CR=39% RQD=15% 25.50 R3 CR=39% RQD=NIL 26.25 R4 CR=40% RQD=NIL 27.00 R5 CR=31% RQD=15% 27.75 R6 CR=35% RQD=NIL 28.50 R7 CR=37% RQD=16% 29.25 R8 CR=36% RQD=15% 30.00 R9 CR=39% RQD=13% 30.75 R10 CR=40% RQD=NIL 31.50 R11 CR=43% RQD=NIL 32.25 R12 CR=39% RQD=20% 33.00 R13 CR=40% RQD=27% 33.75 R14 CR=44% RQD=NIL 34.50 R15	19.00 19.50–19.95 20.50–20.95 21.05–21.50 22.00 22.50–22.95 23.50–23.70 24.00–24.04 CR=32% RQD=NIL 24.00 R1 CR=31% RQD=NIL 24.75 R2 CR=39% RQD=15% 25.50 R3 CR=39% RQD=NIL 26.25 R4 CR=40% RQD=NIL 27.00 R5 CR=31% RQD=15% 27.75 R6 CR=35% RQD=NIL 28.50 R7 CR=37% RQD=16% 29.25 R8 CR=36% RQD=15% 30.00 R9 CR=39% RQD=13% 30.75 R10 CR=40% RQD=NIL 31.50 R11 CR=43% RQD=NIL 32.25 R12 CR=39% RQD=20% 33.00 R13 CR=40% RQD=27% 33.75 R14 CR=44% RQD=NIL 34.50 R15
Medium dense, yellowish grey, silty sand with gravels & decomposed rock.	22.50m					
Hard, Yellowish grey, silty clay with sand mixture, gravels & decomposed rock.	24.00m					
Highly to moderately weathered, yellowish brown / blackish grey, medium grained, fractured rock.	35.00m					
N.B. - '*' means sample could not be recovered.						

N.B. - '*' means sample could not be recovered.

BORE LOG DATA SHEET				BORE HOLE NO.38				Co-ordinates E=672555.187 N=2479675.724	
Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024 Completion Date : 05/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 302.776 M. Water Struck At : Standing Water Level : 11.90 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m				10	12	13	25	DS-1	0.50
Very stiff, reddish brown, silty clay. Obs. sand mixture & kankar.				9	10	11	21	SPT-1	1.50-1.95
				8	11	14	25	UDS-1	2.50-2.95
				8	14	16	30	SPT-2	2.95-3.40
				10	12	14	26	DS-3	4.00
				10	12	14	28	SPT-3	4.50-4.95
5.50m				11	13	15	28	UDS-2	5.50-5.95
Very stiff, reddish brown, silty clay with sand. Obs. kankar.				9	11	14	25	SPT-4	5.95-6.40
				8	10	13	23	DS-4	7.00
				7	11	12	23	SPT-5	7.50-7.95
8.50m				8	13	14	27	UDS-3	8.50-8.95
Medium dense, yellowish brown, silty sand. Obs. kankar.				6	10	12	22	SPT-6	8.95-9.40
				7	9	13	22	DS-5	10.00
								SPT-7	10.50-10.95
								*UDS-4	11.50-11.95
								SPT-8	12.05-12.50
								DS-6	13.00
								SPT-9	13.50-13.95
								*UDS-5	14.50-14.95
								SPT-10	15.05-15.50
								DS-7	16.00
								SPT-11	16.50-16.95
								*UDS-6	17.50-17.95
								SPT-12	18.05-18.50
18.50m									

BORE LOG DATA SHEET

BORE HOLE NO.38

Co-ordinates E=672555.187
N=2479675.724

Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 05/05/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.776 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 11.90 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
			Ref. No	Depth (m)
18.50m			DS-8	19.00
Medium dense, yellowish brown, silty sand. Obs. kankar.		8 8 11 19	SPT-13	19.50–19.95
20.50m		7 10 19 29	*UDS-7	20.50–20.95
Medium dense, yellowish grey, silty sand with gravels, decomposed rock & boulders fragments.		23 26 30 56	SPT-14	21.05–21.50
22.50m		39 55 50 cm Penth. Refusal	DS-9	22.00
Hard, yellowish grey, silty clay with sand mixture, gravels, decomposed rock & boulders fragments.		23 26 30 >100	SPT-15	22.50–22.95
24.00m		39 55 50 cm Penth. Refusal	SPT-16	23.50–23.70
Highly weathered, yellowish brown, medium grained, fractured rock. Obs. boulder.		4.0 cm Penth. Refusal	*SPT-17	24.00–24.0424.00
24.75m			R1	CR=27% RQD=NIL
Highly weathered, yellowish brown to light yellowish brown, medium grained, fractured rock.			R2	CR=24% RQD=NIL
27.00m			R3	CR=23% RQD=NIL
NX. rotary drilling from 24.00m to 35.00m			R4	CR=25% RQD=NIL
			R5	CR=27% RQD=NIL
			R6	CR=33% RQD=NIL
			R7	CR=28% RQD=NIL
			R8	CR=29% RQD=NIL
			R9	CR=33% RQD=NIL
			R10	CR=40% RQD=15%
			R11	CR=36% RQD=NIL
			R12	CR=37% RQD=NIL
			R13	CR=35% RQD=NIL
			R14	CR=37% RQD=NIL
			R15	CR=55% RQD=NIL
32.25m				32.25
Highly to moderately weathered, blackish grey, medium grained, fractured rock.				33.00
34.50m				33.75
Moderately weathered, blackish grey, medium grained, fractured rock. 35.00m				34.50
				35.00
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.39				Co-ordinates E=672596.591 N=2479660.386	
Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024 Completion Date : 05/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 302.711 M. Water Struck At : Standing Water Level : 11.25 m.					
Penetrometer (SPT)	16	Undisturbed (UDS)	6						
Cone (Pc)		Penetrometer (SPT)	16						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
				Ref. No	Depth (m)				
0.00m								DS-1	0.50
Hard, reddish brown, clayey silt with sand mixture & kankar.				8 13 18	31			DS-2	1.00
				8 15 24	39			SPT-1	1.50-1.95
				10 13 20	33			UDS-1	2.50-2.95
				15 23 25	48			SPT-2	2.95-3.40
				14 23 26	49			DS-3	4.00
				14 24 27	51			SPT-3	4.50-4.95
				13 17 20	37			UDS-2	5.50-5.95
				14 15 19	34			SPT-4	5.95-6.40
				13 14 16	30			DS-4	7.00
				14 15 17	32			SPT-5	7.50-7.95
9.80m				14 16 17	33			UDS-3	8.50-8.95
Dense, yellowish brown, silty sand with sand mixture & kankar.				15 17 19	36			SPT-6	8.95-9.40
								DS-5	10.00
								SPT-7	10.50-10.95
								*UDS-4	11.50-11.95
								SPT-8	12.00-12.45
								DS-6	13.00
								SPT-9	13.50-13.95
								*UDS-5	14.50-14.95
								SPT-10	15.00-15.45
								DS-7	16.00
								SPT-11	16.50-16.95
								*UDS-6	17.50-17.95
								SPT-12	18.00-18.45
18.50m									

BORE LOG DATA SHEET**BORE HOLE NO.39**Co-ordinates E=672596.591
N=2479660.386

Field Test	Nos	Samples	Nos	Commencement Date : 04/05/2024
Penetrometer (SPT)	16	Undisturbed (UDS)	6	Completion Date : 05/05/2024
Cone (Pc)		Penetrometer (SPT)	16	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.711 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 11.25 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	SAMPLES
				Ref. No Depth (m)
18.50m			14 16 18 34	DS-8 19.00
Dense, yellowish brown, silty sand with sand mixture & kankar.			15 17 20 37	SPT-13 19.50-19.95
Very dense, yellowish brown, silty sand with kankar.			24 80 10.0 cm. Penth. Refusal	DS-9 20.50
22.00m			100 3.0 cm Penth.	SPT-14 21.00-21.45
22.50m				SPT-15 22.00-22.25
Completely to highly weathered, yellow, medium grained, fractured rock.				*SPT-16 22.50-22.53 22.50
23.25m				R1 CR=17% RQD=NIL 23.25
Highly weathered, yellowish grey to grey, medium grained, fractured rock.				R2 CR=23% RQD=NIL 24.00
27.00m				R3 CR=33% RQD=NIL 24.75
Highly weathered, yellowish grey to grey, medium grained, fractured rock.				R4 CR=34% RQD=NIL 25.50
32.25m				R5 CR=21% RQD=NIL 26.25
Moderately weathered, yellowish grey, coarse grained, fractured rock.				R6 CR=23% RQD=NIL 27.00
35.00m				R7 CR=26% RQD=NIL 27.75
N.B. - '*' means sample could not be recovered.				R8 CR=30% RQD=NIL 28.50
				R9 CR=26% RQD=NIL 29.25
				R10 CR=27% RQD=NIL 30.00
				R11 CR=31% RQD=NIL 30.75
				R12 CR=26% RQD=NIL 31.50
				R13 CR=50% RQD=14% 32.25
				R14 CR=60% RQD=55% 33.00
				R15 CR=59% RQD=45% 33.75
				R16 CR=58% RQD=35% 34.50
				R17 CR=46% RQD=NIL 35.00

BORE LOG DATA SHEET

BORE HOLE NO.40

Co-ordinates E=672640.611
N=2479644.912

Field Test	Nos	Samples	Nos	Commencement Date : 27/04/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Completion Date : 28/04/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.188 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 14.50 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m			Ref. No	Depth (m)
Very stiff, reddish brown, clayey silt with sand mixture & kankars.			DS-1	0.50
		9 11 13	DS-2	1.00
		24	SPT-1	1.50-1.95
2.95m		12 15 17	UDS-1	2.50-2.95
		32	SPT-2	2.95-3.40
		13 16 20	DS-3	4.00
		36	SPT-3	4.50-4.95
Hard, reddish brown, clayey silt with sand mixture & kankars.		14 16 21	UDS-2	5.50-5.95
		37	SPT-4	5.95-6.40
		15 17 22	DS-4	7.00
		39	SPT-5	7.50-7.95
		15 16 19	UDS-3	8.50-8.95
		35	SPT-6	8.95-9.40
9.60m		12 13 15	DS-5	10.00
		28	SPT-7	10.50-10.95
		13 15 16	*UDS-4	11.50-11.95
		31	SPT-8	12.00-12.45
		12 13 15	DS-6	13.00
Medium dense to dense, yellowish brown, silty sand with kankars.		28	SPT-9	13.50-13.95
		11 14 16	*UDS-5	14.50-14.95
		30	SPT-10	15.00-15.45
		12 15 16	DS-7	16.00
		31	SPT-11	16.50-16.95
18.00m			*UDS-6	17.50-17.95

BORE LOG DATA SHEET**BORE HOLE NO.40**Co-ordinates E=672640.611
N=2479644.912

Field Test	Nos	Samples	Nos	Commencement Date : 27/04/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Completion Date : 28/04/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.188 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 14.50 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.00m			Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand with kankars.			SPT-12	18.00-18.45
			DS-8	19.00
			SPT-13	19.50-19.95
			DS-9	20.50
21.00m		19 33 50	SPT-14	21.00-21.34
Very dense, yellowish brown, silty sand with kankars.		4.0cm Pentn. Refusal	*SPT-15	22.00-22.03
22.00m		3.0cm Pentn.	R1	22.00 CR=23% RQD=NIL
Highly weathered, brownish grey to greyish yellow, fine to medium grained, fractured rock. Obs. boulder.		NX, drilling from 22.00m to 35.00m	R2	22.75 CR=21% RQD=NIL
22.75m			R3	23.50 CR=22% RQD=NIL
Highly weathered, brownish grey to greyish yellow, fine to medium grained, fractured rock. Obs. boulder.			R4	24.25 CR=25% RQD=NIL
			R5	25.00 CR=22% RQD=NIL
25.75m			R6	25.75 CR=28% RQD=NIL
Highly weathered, brownish grey, fine to medium, grained, fractured rock.			R7	26.50 CR=27% RQD=NIL
			R8	27.25 CR=28% RQD=NIL
28.75m			R9	28.00 CR=26% RQD=NIL
			R10	28.75 CR=31% RQD=NIL
Highly to moderately weathered, grey, medium to coarse grained, fractured rock.			R11	29.50 CR=39% RQD=34%
			R12	30.25 CR=33% RQD=14%
			R13	31.00 CR=30% RQD=NIL
			R14	31.75 CR=39% RQD=15%
			R15	32.50 CR=40% RQD=30%
			R16	33.25 CR=33% RQD=14%
			R17	34.00 CR=28% RQD=NIL
35.00m				35.00
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.41				Co-ordinates E=672691.930 N=2479654.639	
Field Test	Nos	Samples	Nos	Commencement Date : 16/05/2024 Completion Date : 17/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 302.003 M. Water Struck At : Standing Water Level : 14.20 m.					
Penetrometer (SPT)	16	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	16						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m Filled up with light grey, clayey silty sand with boulder.									
1.00m Very stiff, reddish brown, silty clay with sand mixture & kankars.				7	9	15	24	DS-1	0.50
				9	11	15	26	DS-2	1.00
				10	13	16	29	SPT-1	1.45-1.90
				13	17	22	39	DS-3	2.50
6.20m Hard, reddish brown, silty clay with sand mixture & kankars.				12	15	21	36	UDS-1	3.00-3.30
				13	19	23	42	SPT-2	3.30-3.75
10.30m Medium dense, light yellowish brown, silty sand. Obs. kankars.				9	9	10	19	DS-5	7.50
				9	10	10	20	SPT-5	8.00-8.45
				10	13	11	24	*UDS-3	9.00-9.10
				10	10	16	26	SPT-6	9.30-9.75
				12	14	14	28	DS-6	10.30
18.00m								SPT-7	11.00-11.45
								*UDS-4	12.00-12.45
								SPT-8	12.60-13.05
								DS-7	13.50
								SPT-9	14.00-14.45
								*UDS-5	15.00-15.45
								SPT-10	15.60-16.05
								DS-8	16.50
								SPT-11	17.00-17.45

BORE LOG DATA SHEET**BORE HOLE NO.41**Co-ordinates E=672691.930
N=2479654.639

Field Test	Nos	Samples	Nos	Commencement Date : 16/05/2024
Penetrometer (SPT)	16	Undisturbed (UDS)	7	Completion Date : 17/05/2024
Cone (Pc)		Penetrometer (SPT)	16	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	11	Level Of Ground : 302.003 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 14.20 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
			Ref. No	Depth (m)
18.00m				
Medium dense, light yellowish brown, silty sand. Obs. kankars.				
20.50m				
Hard, yellowish grey, silty clay with decomposed rock & sand mixture.				
22.70m				
Highly weathered, yellowish grey, medium grained, fractured rock.				
26.50m				
Highly to moderately weathered, light yellowish grey, medium to fine grained, fractured rock.				
34.00m				
Moderately weathered, light yellowish grey, medium to fine grained, fractured rock.				
35.00m				
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.42				Co-ordinates E=672733.319 N=2479655.253	
Field Test	Nos	Samples	Nos	Commencement Date : 17/05/2024 Completion Date : 17/05/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 294.972 M. Water Struck At : Standing Water Level : 7.10 m.					
DESCRIPTION		SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES		
0.00m							Ref. No	Depth (m)	
Very stiff, reddish brown, clayey silt with sand mixture & kankars.							DS-1	0.50	
							DS-2	1.00	
							UDS-1	1.50-1.95	
							SPT-1	1.95-2.40	
							DS-3	3.00	
Hard, reddish brown, clayey silt with sand mixture & kankars.							SPT-2	3.50-3.95	
3.50m							DS-4	4.50	
4.00m							*UDS-2	5.00-5.45	
							SPT-3	5.60-6.05	
							DS-5	6.50	
							SPT-4	7.00-7.45	
							DS-6	8.00	
Medium dense, light brown, silty sand. Obs. kankars.							*UDS-3	8.50-8.95	
							SPT-5	9.10-9.55	
							DS-7	10.00	
							SPT-6	10.50-10.95	
							DS-8	11.50	
							*UDS-4	12.00-12.45	
							SPT-7	12.60-13.05	
13.00m									

BORE LOG DATA SHEET**BORE HOLE NO.42**Co-ordinates E=672733.319
N=2479655.253

Field Test	Nos	Samples	Nos	Commencement Date : 17/05/2024
Penetrometer (SPT)	11	Undisturbed (UDS)	5	Completion Date : 17/05/2024
Cone (Pc)		Penetrometer (SPT)	11	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	10	Level Of Ground : 294.972 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 7.10 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	SAMPLES
				Ref. No Depth (m)
Medium dense, light brown, silty sand. Obs. kankars.		13.00m 13.20m	11 14 16 30	DS-9 13.50
Medium dense, light brownish grey, silty sand. Obs. kankars.		16.30m	12 14 15 29	SPT-8 14.00-14.45 *UDS-5 15.00-15.45
Hard, yellowish grey, silty clay with sand & decomposed rock.		17.30m	10 31 52 83 Refusal	SPT-9 15.60-16.05 DS-10 16.30
Moderately weathered, yellowish grey, medium grained, fractured rock.		21.00m 21.75m	100 3.0cm Pentr. NX. drilling from 17.30m to 25.00m	SPT-10 16.80-17.25 *SPT-11 17.30-17.33 17.30 R1 CR=47% RQD=NIL R2 CR=45% RQD=NIL R3 CR=49% RQD=NIL R4 CR=49% RQD=NIL R5 CR=45% RQD=29% R6 CR=44% RQD=26% R7 CR=53% RQD=14% R8 CR=64% RQD=42% R9 CR=61% RQD=42% R10 CR=70% RQD=14%
Moderately to slightly weathered, yellowish grey to light grey, medium grained to fine grained, fractured rock.		25.00m		21.00 21.75 22.50 23.25 24.00 25.00
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET**BORE HOLE NO.43**Co-ordinates E=672745.400
N=2479625.528

Field Test	Nos	Samples	Nos	Commencement Date : 15/05/2024
Penetrometer (SPT)	14	Undisturbed (UDS)	6	Completion Date : 16/05/2024
Cone (Pc)		Penetrometer (SPT)	14	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	8	Level Of Ground : 295.121 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 6.80 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m			Ref. No	Depth (m)
Hard, reddish brown, clayey silt with sand & kankars.			DS-1	0.50
2.00m			DS-2	1.00
Medium dense, reddish brown, silty sand. Obs. clay binder & kankars.			SPT-1	1.50-1.95
6.80m			UDS-1	2.65-3.10
Medium dense to dense, brownish grey, silty sand. Obs. kankars.			SPT-2	3.10-3.55
13.00m			DS-3	4.00
			SPT-3	4.50-4.95
			*UDS-2	5.50-5.95
			SPT-4	6.10-6.55
			DS-4	7.00
			SPT-5	7.50-7.95
			*UDS-3	8.50-8.95
			SPT-6	9.10-9.55
			DS-5	10.00
			SPT-7	10.50-10.95
			*UDS-4	11.50-11.95
			SPT-8	12.10-12.55
			DS-6	13.00

BORE LOG DATA SHEET**BORE HOLE NO.43**Co-ordinates E=672745.400
N=2479625.528

Field Test	Nos	Samples	Nos	Commencement Date : 15/05/2024
Penetrometer (SPT)	14	Undisturbed (UDS)	6	Completion Date : 16/05/2024
Cone (Pc)		Penetrometer (SPT)	14	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	8	Level Of Ground : 295.121 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 6.80 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
13.00m			Ref. No	Depth (m)
Medium dense to dense, brownish grey, silty sand. Obs. kankars.			SPT-9	13.50–13.95
			*UDS-5	14.55–15.00
			SPT-10	15.10–15.55
			DS-7	16.00
			SPT-11	16.50–16.95
			*UDS-6	17.45–17.90
18.00m			SPT-12	18.00–18.35
Very dense, yellowish grey, silty sand with clay binder & kankar.			DS-8	18.70
			*SPT-13	18.90–18.93
			*SPT-14	19.10–19.13
Highly weathered, light yellowish grey to yellowish brown, medium grained, fractured rock.			R1	19.10 CR=21% RQD=NIL
19.10m				
19.80m			R2	19.80 CR=28% RQD=NIL
			R3	20.50 CR=30% RQD=NIL
			R4	21.25 CR=25% RQD=16%
			R5	22.00 CR=30% RQD=NIL
			R6	22.75 CR=29% RQD=NIL
			R7	23.50 CR=32% RQD=20%
			R8	24.25 CR=34% RQD=14%
25.00m				25.00
N.B. – '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.44			Co-ordinates E=672620.710 N=2479615.417			
Field Test	Nos	Samples	Nos	Commencement Date : 29/04/2024 Completion Date : 30/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 302.391 M. Water Struck At : Standing Water Level : 14.70 m.					
Field Test	Nos	Samples	Nos	Commencement Date : 29/04/2024 Completion Date : 30/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 302.391 M. Water Struck At : Standing Water Level : 14.70 m.					
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Bore Hole Diameter : 150 mm./N.X Level Of Ground : 302.391 M. Water Struck At : Standing Water Level : 14.70 m.					
Cone (Pc)		Penetrometer (SPT)	15	Level Of Ground : 302.391 M. Water Struck At : Standing Water Level : 14.70 m.					
Vane (V)		Disturbed (DS)	8	Water Struck At : Standing Water Level : 14.70 m.					
		Water Sample (WS)	0	Standing Water Level : 14.70 m.					
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES Ref. No			
0.00m				24 26 30 35		DS-1 DS-2 SPT-1 UDS-1 SPT-2 DS-3 SPT-3 UDS-2 SPT-4 DS-4 SPT-5 UDS-3 SPT-6 DS-5 SPT-7 *UDS-4 SPT-8 DS-6 SPT-9 *UDS-5 SPT-10 DS-7 SPT-11 *UDS-6			
Very stiff, reddish brown, clayey silt with sand mixture & kankars.				9 11 13 10 12 14 10 13 17 11 16 19		0.50 1.00 1.50-1.95 2.50-2.95 2.95-3.40 4.00 4.50-4.95 5.50-5.95 5.95-6.40 7.00 7.50-7.95 8.50-8.95 8.95-9.40 10.00 10.50-10.95 11.50-11.95 12.00-12.45 13.00 13.50-13.95 14.50-14.95 15.00-15.45 16.00 16.50-16.95 17.50-17.95			
5.50m				32 34 38 42 45 48 52 55 58 60 62 65 68 70 72 75 78 80 82 85 88 90 92 95 98 100 102 105 108 110 112 115 118 120 122 125 128 130 132 135 138 140 142 145 148 150 152 155 158 160 162 165 168 170 172 175 178 180		0.50 1.00 1.50-1.95 2.50-2.95 2.95-3.40 4.00 4.50-4.95 5.50-5.95 5.95-6.40 7.00 7.50-7.95 8.50-8.95 8.95-9.40 10.00 10.50-10.95 11.50-11.95 12.00-12.45 13.00 13.50-13.95 14.50-14.95 15.00-15.45 16.00 16.50-16.95 17.50-17.95			
Hard, reddish brown, clayey silt with sand mixture & kankars.				9.80m					
9.80m				DS-4 SPT-5 UDS-3 SPT-6 DS-5 SPT-7 *UDS-4 SPT-8 DS-6 SPT-9 *UDS-5 SPT-10 DS-7 SPT-11 *UDS-6		7.00 7.50-7.95 8.50-8.95 8.95-9.40 10.00 10.50-10.95 11.50-11.95 12.00-12.45 13.00 13.50-13.95 14.50-14.95 15.00-15.45 16.00 16.50-16.95 17.50-17.95			
Medium dense to dense, yellowish brown, silty sand with kankars.				18.00m					

BORE LOG DATA SHEET			BORE HOLE NO.44						Co-ordinates E=672620.710 N=2479615.417	
Field Test	Nos	Samples	Nos	Commencement Date : 29/04/2024 Completion Date : 30/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 302.391 M. Water Struck At : Standing Water Level : 14.70 m.						
Penetrometer (SPT)	15	Undisturbed (UDS)	6							
Cone (Pc)		Penetrometer (SPT)	15							
Vane (V)		Disturbed (DS)	8							
		Water Sample (WS)	0							
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES		
18.00m				12	16	18	34	Ref. No	Depth (m)	
Medium dense to dense, yellowish brown, silty sand with kankars.				13	16	18	34	DS-8	19.00	
20.50m				19	31	50	>100	SPT-13	19.50-19.95	
Very dense, yellowish brown, silty sand with kankars.				100	5.0cm Pentn. Refusal				SPT-14	20.50-20.85
21.30m				3.0cm Pentn. NX. drilling from 21.30m to 35.00m				*SPT-15 R1	21.30-21.33	21.30
Highly weathered, brownish grey, fine to medium grained, fractured rock. Obs. boulder.				CR=23% RQD=NIL				R2	CR=22% RQD=NIL	22.00
22.75m				NX. drilling from 21.30m to 35.00m				R3	CR=26% RQD=NIL	22.75
				CR=35% RQD=NIL				R4	CR=24% RQD=NIL	23.50
				CR=29% RQD=NIL				R5	CR=24% RQD=NIL	24.25
				CR=39% RQD=33%				R6	CR=29% RQD=NIL	25.00
				CR=26% RQD=NIL				R7	CR=39% RQD=25%	25.75
				CR=45% RQD=14%				R8	CR=26% RQD=NIL	26.50
				CR=37% RQD=NIL				R9	CR=39% RQD=25%	27.25
				CR=42% RQD=18%				R10	CR=45% RQD=14%	28.00
				CR=38% RQD=NIL				R11	CR=37% RQD=NIL	28.75
				CR=43% RQD=14%				R12	CR=42% RQD=18%	29.50
				CR=50% RQD=34%				R13	CR=38% RQD=NIL	30.25
				CR=42% RQD=14%				R14	CR=43% RQD=14%	31.00
				CR=54% RQD=30%				R15	CR=50% RQD=34%	31.75
				CR=49% RQD=15%				R16	CR=42% RQD=14%	32.50
				CR=54% RQD=30%				R17	CR=49% RQD=15%	33.25
				CR=49% RQD=15%				R18	CR=54% RQD=30%	34.00
				CR=49% RQD=15%						35.00
33.25m										
Moderately weathered, grey, coarse grained, fractured rock.										
35.00m										
N.B. - '*' means sample could not be recovered.										

BORE LOG DATA SHEET				BORE HOLE NO.45				Co-ordinates E=672613.579 N=2479635.789	
Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024 Completion Date : 03/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 302.527 M. Water Struck At : Standing Water Level : 14.30 m.					
Penetrometer (SPT)	15	Undisturbed (UDS)	6						
Cone (Pc)		Penetrometer (SPT)	15						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m								Ref. No	Depth (m)
Very stiff, reddish brown, clayey silt with sand mixture & kankar.								DS-1	0.50
				9 11 13 24				DS-2	1.00
				10 12 14 26				SPT-1	1.50-1.95
				10 13 15 28				UDS-1	2.50-2.95
				10 13 15 32				SPT-2	2.95-3.40
				10 13 15 36				DS-3	4.00
				10 13 15 36				SPT-3	4.50-4.95
5.50m				11 16 16 32				UDS-2	5.50-5.95
Hard, reddish brown, clayey silt with sand mixture & kankar.				11 16 16 36				SPT-4	5.95-6.40
				13 15 21 36				DS-4	7.00
				13 15 21 36				SPT-5	7.50-7.95
8.95m				18 20 25 45				UDS-3	8.50-8.95
Dense, yellowish brown, silty sand with kankar.				18 20 25 45				SPT-6	8.95-9.40
				15 17 20 37				DS-5	10.00
				15 17 20 37				SPT-7	10.50-10.95
				12 15 16 31				*UDS-4	11.50-11.95
				12 15 16 31				SPT-8	12.00-12.45
				14 16 18 34				DS-6	13.00
				14 16 18 34				SPT-9	13.50-13.95
				15 17 19 36				*UDS-5	14.50-14.95
				15 17 19 36				SPT-10	15.00-15.45
				16 18 20 38				DS-7	16.00
				16 18 20 38				SPT-11	16.50-16.95
				15 16 17 33				*UDS-6	17.50-17.95
				15 16 17 33				SPT-12	18.00-18.45
18.50m									

BORE LOG DATA SHEET**BORE HOLE NO.45**Co-ordinates E=672613.579
N=2479635.789

Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Completion Date : 03/05/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.527 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 14.30 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
			Ref. No	Depth (m)
18.50m			DS-8	19.00
Dense, yellowish brown, silty sand with kankar.		16 18 20	SPT-13	19.50–19.95
21.00m		21 33 50	DS-9	20.50
Very dense, yellowish brown, silty sand with kankar.		4.0 cm	SPT-14	21.00–21.34
22.00m		100 4.0 cm	*SPT-15 R1	22.00–22.04
Highly weathered, greyish yellow, coarse grained fractured rock. Obs. boulder.		Pentn. Refusal	CR=26% RQD=NIL	22.04
22.75m			R2	22.75
Highly weathered, greyish yellow, coarse grained fractured rock.			R3	23.50
24.25m			R4	24.25
Highly weathered, greyish yellow, coarse grained fractured rock.			R5	25.00
26.50m			R6	25.75
highly weathered, brownish grey, medium to coarse grained, fractured rock.			R7	26.50
28.00m			R8	27.25
Highly weathered, greyish yellow, medium to coarse grained fractured rock & sand stone.			R9	28.00
34.00m			R10	28.75
Highly weathered, grey, coarse grained fractured rock conglomeratic sandstone.			R11	29.50
35.00m			R12	30.25
N.B. – '*' means sample could not be recovered.			R13	31.00
			R14	31.75
			R15	32.50
			R16	33.25
			R17	34.00
				35.00

BORE LOG DATA SHEET			BORE HOLE NO.46			Co-ordinates E=672547.566 N=2479637.369	
Field Test	Nos	Samples	Nos	Commencement Date : 25/04/2024 Completion Date : 26/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.091 M. Water Struck At : Standing Water Level : 13.00 m.			
Penetrometer (SPT)	16	Undisturbed (UDS)	6				
Cone (Pc)		Penetrometer (SPT)	16				
Vane (V)		Disturbed (DS)	10				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
0.00m							Ref. No Depth (m)
Very stiff, reddish brown, clayey silt with sand mixture & kankars.				9 10 14	24		DS-1 0.50
				10 12 25	37		DS-2 1.00
				10 13 16	29		SPT-1 1.50-1.95
				11 14 15	29		UDS-1 2.50-2.95
				12 15 16	31		SPT-2 2.95-3.40
				13 15 17	32		DS-3 4.00
				9 12 13	25		SPT-3 4.50-4.95
				10 12 14	26		UDS-2 5.50-5.95
				11 13 16	29		SPT-4 5.95-6.40
				12 14 17	31		DS-4 7.00
				13 15 18	33		SPT-5 7.50-7.95
7.50m							UDS-3 8.50-8.95
Hard, reddish brown, clayey silt with sand mixture & kankars.							SPT-6 8.95-9.40
8.70m							DS-5 10.00
							SPT-7 10.50-10.95
							*UDS-4 11.50-11.95
							SPT-8 12.00-12.45
							DS-6 13.00
							SPT-9 13.50-13.95
							*UDS-5 14.50-14.95
							SPT-10 15.00-15.45
							DS-7 16.00
							SPT-11 16.50-16.95
Medium dense to dense, yellowish brown, silty sand with kankars.							*UDS-6 17.50-17.95
18.00m							

BORE LOG DATA SHEET**BORE HOLE NO.46**Co-ordinates E=672547.566
N=2479637.369

Field Test	Nos	Samples	Nos	Commencement Date : 25/04/2024
Penetrometer (SPT)	16	Undisturbed (UDS)	6	Completion Date : 26/04/2024
Cone (Pc)		Penetrometer (SPT)	16	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	10	Level Of Ground : 303.091 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.00 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.00m			Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand with kankars.			SPT-12	18.00-18.45
			DS-8	19.00
			SPT-13	19.50-19.95
			DS-9	20.50
			SPT-14	21.00-21.45
			DS-10	22.00
Very dense, yellowish brown, silty sand with kankars.			SPT-15	23.00-23.34
Highly weathered, greyish yellow to grey, coarse grained, fractured rock. Obs. boulder.		26 34 50 4.0cm Pentrn. Refusal 3.0cm Pentrn. NX. drilling from 24.00m to 35.00m	*SPT-16 R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15	24.00-24.03 24.00 CR=21% RQD=NIL 24.75 CR=37% RQD=NIL 25.50 CR=36% RQD=NIL 26.25 CR=37% RQD=NIL 27.00 CR=32% RQD=NIL 27.75 CR=37% RQD=NIL 28.50 CR=33% RQD=NIL 29.25 CR=36% RQD=NIL 30.00 CR=39% RQD=14% 30.75 CR=36% RQD=NIL 31.50 CR=39% RQD=NIL 32.25 CR=53% RQD=24% 33.00 CR=49% RQD=NIL 33.75 CR=46% RQD=NIL 34.50 CR=42% RQD=NIL 35.00
Highly weathered, greyish yellow to grey, coarse grained, fractured rock. Obs. boulder.				
Moderately weathered, grey, medium to coarse grained, fractured rock.				
Moderately weathered, grey, medium to coarse grained, fractured rock.				
35.00m				
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET				BORE HOLE NO.47				Co-ordinates E=672525.736 N=2479664.432			
Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024 Completion Date : 03/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 302.915 M. Water Struck At : Standing Water Level : 12.20 m.							
Penetrometer (SPT)	17	Undisturbed (UDS)	7								
Cone (Pc)		Penetrometer (SPT)	17								
Vane (V)		Disturbed (DS)	9								
		Water Sample (WS)	0								
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES			
0.00m								Ref. No	Depth (m)		
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankar.				7 9 11 20	6 10 13 23	9 11 13 24	15 18 20 38	DS-1 DS-2 SPT-1 UDS-1 SPT-2 DS-3 SPT-3 UDS-2 SPT-4 DS-4 SPT-5 *UDS-3 SPT-6 DS-5 SPT-7 *UDS-4 SPT-8 DS-6 SPT-9 *UDS-5 SPT-10 DS-7 SPT-11 *UDS-6 SPT-12	0.50 1.00 1.50–1.95 2.50–2.95 2.95–3.40 4.00 4.50–4.95 5.50–5.95 5.95–6.40 7.00 7.50–7.95 8.50–8.95 9.05–9.50 10.00 10.50–10.95 11.50–11.95 12.05–12.50 13.00 13.50–13.95 14.50–14.95 15.05–15.50 16.00 16.50–16.95 17.50–17.95 18.05–18.50		
5.95m				15 18 20	14 16 19	15 18 15	10 11 12	11 10 13	12 13 15	9 13 14	11 16 22
Dense, reddish brown, clayey silty sand. Obs. kankar.				35	33	23	22	23	28	27	38
9.50m											
Medium dense to dense, yellowish brown, silty sand. Obs. kankar.											
18.50m											

BORE LOG DATA SHEET			BORE HOLE NO.47			Co-ordinates
Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024		
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 03/05/2024		
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./NX.		
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.915 M.		
		Water Sample (WS)	0	Water Struck At :		
				Standing Water Level : 12.20 m.		
DESCRIPTION			SYMBOL	N-VALUE		SAMPLES
				EACH DIVN=15CM		Ref. No
18.50m				Ref. No		Depth (m)
Medium dense to dense, yellowish brown, silty sand. Obs. kankar.				DS-8		19.00
20.20m				SPT-13		19.50–19.95
Dense to very dense, yellowish grey, silty sand with clayey binder, gravel & decomposed rock fragments.				*UDS-7		20.50–20.60
				SPT-14		20.80–21.25
24.00m				DS-9		22.00
Highly weathered, pinkish white, fine grained, fractured rock. Obs. boulder.				SPT-15		22.50–22.95
24.75m				SPT-16		23.50–23.70
Highly to moderately weathered, yellowish brown, medium grained, fractured rock.				*SPT-17		24.00–24.03
				R1		24.00
				CR=27% RQD=NIL		
				R2		24.75
				CR=28% RQD=NIL		25.50
				R3		26.25
				R4		27.00
				R5		27.75
				R6		28.50
				R7		29.25
				R8		30.00
				R9		30.75
				R10		31.50
				R11		32.25
				R12		33.00
				R13		33.75
				R14		34.50
				R15		35.00
34.50m				CR=56% RQD=NIL		
Moderately weathered, blackish grey, medium grained, fractured rock.				N.B. – '*' means sample could not be recovered.		

BORE LOG DATA SHEET			BORE HOLE NO.48			Co-ordinates E=672497.592 N=2479657.168			
Field Test	Nos	Samples	Nos	Commencement Date : 28/04/2024 Completion Date : 30/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.252 M. Water Struck At : Standing Water Level : 12.50 m.					
Penetrometer (SPT)	19	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	19						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m						Ref. No	Depth (m)		
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.						DS-1	0.50		
						DS-2	1.00		
						SPT-1	1.50-1.95		
						UDS-1	2.50-2.95		
						SPT-2	2.95-3.40		
						DS-3	4.00		
						SPT-3	4.50-4.95		
						UDS-2	5.50-5.95		
						SPT-4	5.95-6.40		
						DS-4	7.00		
						SPT-5	7.50-7.95		
						UDS-3	8.50-8.95		
						SPT-6	8.95-9.40		
9.50m						DS-5	10.00		
Medium dense, yellowish brown, silty sand with kankars.						SPT-7	10.50-10.95		
						*UDS-4	11.50-11.95		
						SPT-8	12.05-12.50		
						DS-6	13.00		
						SPT-9	13.50-13.95		
						*UDS-5	14.50-14.95		
						SPT-10	15.05-15.50		
						DS-7	16.00		
						SPT-11	16.50-16.95		
18.00m						*UDS-6	17.50-17.95		

BORE LOG DATA SHEET**BORE HOLE NO.48**Co-ordinates E=672497.592
N=2479657.168

Field Test	Nos	Samples	Nos	Commencement Date : 28/04/2024
Penetrometer (SPT)	19	Undisturbed (UDS)	7	Completion Date : 30/04/2024
Cone (Pc)		Penetrometer (SPT)	19	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 303.252 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.50 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.00m			13 14 16 30	Ref. No
Medium dense, yellowish brown, silty sand with kankars.			41	Depth (m)
19.95m			15 18 23 44	SPT-12 18.05-18.50
Hard, yellowish grey, silty clay with sand mixture, gravel & decomposed rock.			19 21 23 48	DS-8 19.00
24.00m			17 18 30 >100	SPT-13 19.50-19.95
Highly weathered, whitish grey, fine grained, fractured rock. Obs. boulder.			29 52 5.0cm Penth. Refusal	*UDS-7 20.50-20.60
24.75m			100 4.0cm Penth.	SPT-14 20.80-21.25
Completely to highly weathered, yellowish brown / whitish grey, fine to medium grained, fractured rock.			100 Refusal	DS-9 22.00
27.00m			100 3.0cm Penth. Refusal	SPT-15 22.50-22.95
Highly to moderately weathered, yellowish brown, medium grained, fractured rock.			100 2.0cm Penth. NX. drilling from 24.00m to 35.00m	SPT-16 23.50-23.70
32.25m			100 CR=21% R1 Refusal	*SPT-17 24.00-24.04 24.00
Highly to moderately weathered, light yellowish grey to blackish grey, fine grained, fractured rock.			100 CR=10% R2 3.0cm Penth. Refusal	R1 CR=21% RQD=NIL 24.75
35.00m			100 CR=15% R3 2.0cm Penth. Refusal	*SPT-18 25.50-25.53 25.50
N.B. - '*' means sample could not be recovered.			100 CR=21% R4 2.0cm Penth. Refusal	*SPT-19 26.25-26.27 26.25
			100 CR=27% R5 2.0cm Penth. Refusal	R1 CR=21% RQD=NIL 27.00
			100 CR=27% R6 2.0cm Penth. Refusal	R2 CR=10% RQD=NIL 27.75
			100 CR=28% R7 2.0cm Penth. Refusal	R3 CR=15% RQD=NIL 28.50
			100 CR=32% R8 2.0cm Penth. Refusal	R4 CR=21% RQD=NIL 29.25
			100 CR=45% R9 2.0cm Penth. Refusal	R5 CR=27% RQD=NIL 30.00
			100 CR=40% R10 2.0cm Penth. Refusal	R6 CR=32% RQD=NIL 30.75
			100 CR=41% R11 2.0cm Penth. Refusal	R7 CR=45% RQD=15% 31.50
			100 CR=37% R12 2.0cm Penth. Refusal	R8 CR=40% RQD=NIL 32.25
			100 CR=49% R13 2.0cm Penth. Refusal	R9 CR=41% RQD=16% 33.00
			100 CR=40% R14 2.0cm Penth. Refusal	R10 CR=49% RQD=37% 33.75
			100 CR=50% R15 2.0cm Penth. Refusal	R11 CR=40% RQD=NIL 34.50
				R12 CR=50% RQD=24% 35.00

BORE LOG DATA SHEET**BORE HOLE NO.49**Co-ordinates E=672469.592
N=2479642.668

Field Test	Nos	Samples	Nos	Commencement Date : 17/04/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 19/04/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	12	Level Of Ground : 303.519 M.
		Water Sample (WS)	0	Water Struck At : Standing Water Level : 12.70 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m			Ref. No	Depth (m)
Very stiff, reddish brown, silty clay with sand mixture & kankars.			DS-1	0.50
			DS-2	1.00
			SPT-1	1.50–1.95
			DS-3	2.50
			UDS-1	3.00–3.45
			SPT-2	3.45–3.90
			DS-4	4.50
			SPT-3	5.00–5.45
			UDS-2	6.00–6.45
			SPT-4	6.45–6.90
			DS-5	7.50
			SPT-5	8.00–8.45
			UDS-3	9.00–9.45
			SPT-6	9.45–9.90
10.00m			DS-6	10.50
Medium dense to dense, light brown, silty sand with kankars.			SPT-7	11.00–11.45
			*UDS-4	12.00–12.45
			SPT-8	12.60–13.05
			DS-7	13.50
			SPT-9	14.00–14.45
			*UDS-5	15.00–15.45
			SPT-10	15.60–16.05
			DS-8	16.50
			SPT-11	17.00–17.45
18.00m				

BORE LOG DATA SHEET

BORE HOLE NO.49

ordinates E=672469.592
N=2479642.668

CE TEST

Street No:

Field Test	Nos	Samples	Nos	Commencement Date :	17/04/2024		
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date :	19/04/2024		
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter :	150 mm./N.X		
Vane (V)		Disturbed (DS)	11	Level Of Ground :	303.519 M.		
		Water Sample (WS)	0	Water Struck At :			
				Standing Water Level :	12.70 m.		
DESCRIPTION	SYMBOL	N-VALUE				SAMPLES	
		EACH DIVN=15CM				Ref. No	Depth (m)
18.00m Medium dense to dense, light brown, silty sand with kankars.		12	16	23	39	*UDS-6	18.00-18.45
19.30m		11	11	16	27	SPT-12	18.60-19.05
Very stiff to hard, brownish grey, silty clay with kankars & decomposed rock.		11	13	19	32	DS-9	19.50
		13	19	25	44	SPT-13	20.00-20.45
		23	45	55	>100	UDS-7	21.00-21.45
25.00m Highly weathered, pinkish grey to blackish grey, fine grained, fractured rock. Obs. boulder.		00	5.0cm PENTN. Refusal	4.0cm PENTN.	SPT-14	21.45-21.90	
25.75m		NX	drilling from 25.00m to 35.00m		DS-10	22.50	
Highly to moderately weathered, yellowish grey, medium grained, fractured rock.		R1	SPT-15	23.00-23.45			
		R2	DS-11	24.00			
		R3	SPT-16	24.40-24.75			
		R4	*SPT-17	25.00-25.04			
		R5	CR=29%	25.00			
		R6	RQD=NIL	↓			
		R7	CR=28%	25.75			
		R8	RQD=NIL	↓			
		R9	CR=29%	26.50			
		R10	RQD=NIL	↓			
		R11	CR=28%	27.25			
		R12	RQD=NIL	↓			
		R13	CR=46%	28.00			
			RQD=NIL	↓			
			CR=41%	28.75			
			RQD=NIL	↓			
			CR=40%	29.50			
			RQD=NIL	↓			
			CR=40%	30.25			
			RQD=NIL	↓			
			CR=45%	31.00			
			RQD=NIL	↓			
			CR=44%	31.75			
			RQD=NIL	↓			
			CR=52%	32.50			
			RQD=NIL	↓			
			CR=44%	33.25			
			RQD=NIL	↓			
			CR=42%	34.00			
			RQD=NIL	↓			
				35.00			
N.B. - '*' means sample could not be recovered.							

BORE LOG DATA SHEET**BORE HOLE NO.50**Co-ordinates E=672439.164
N=2479652.727

Field Test	Nos	Samples	Nos	Commencement Date : 23/04/2024
Penetrometer (SPT)	18	Undisturbed (UDS)	7	Completion Date : 25/04/2024
Cone (Pc)		Penetrometer (SPT)	18	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	12	Level Of Ground : 304.110 M.
		Water Sample (WS)	1	Water Struck At :
				Standing Water Level : 12.30 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m			Ref. No	Depth (m)
Very stiff, reddish brown, silty clay with sand mixture & kankars.			DS-1	0.50
		9 12 13	DS-2	1.00
		25	SPT-1	1.55-2.00
		10 13 15	DS-3	2.40
		28	UDS-1	3.00-3.45
		9 11 16	SPT-2	3.45-3.90
		27	DS-4	4.50
		41	SPT-3	5.10-5.55
		39	*UDS-2	6.00-6.10
		33	SPT-4	6.30-6.75
		DS-5	DS-5	7.30
6.30m		12 18 23	SPT-5	8.00-8.45
Hard, reddish brown, silty clay with sand mixture & kankars.		12 15 24	UDS-3	9.00-9.45
		13 12 21	SPT-6	9.45-9.90
		27	DS-6	10.50
11.00m		9 12 15	SPT-7	11.10-11.55
Medium dense to dense, yellowish brown, silty sand with kankars.		9 13 17	*UDS-4	12.00-12.45
		30	WS-1	12.30
		32	SPT-8	12.60-13.05
		34	DS-7	13.50
		37	SPT-9	14.00-14.45
		12 18 16	*UDS-5	15.00-15.45
		12 14 23	SPT-10	15.60-16.05
		37	DS-8	16.50
18.00m			SPT-11	17.00-17.45

BORE LOG DATA SHEET

BORE HOLE NO.50

Co-ordinates E=672439.164
N=2479652.727

Field Test	Nos	Samples	Nos	Commencement Date	23/04/2024
Penetrometer (SPT)	18	Undisturbed (UDS)	7	Completion Date	25/04/2024
Cone (Pc)		Penetrometer (SPT)	18	Bore Hole Diameter	150 mm./N.X
Vane (V)		Disturbed (DS)	12	Level Of Ground	304.110 M.
		Water Sample (WS)	1	Water Struck At	
				Standing Water Level	12.30 m.
DESCRIPTION			SYMBOL	N-VALUE	
				EACH DIVN=15CM	SAMPLES
				Ref. No	Depth (m)
18.00m Medium dense to dense, yellowish brown, silty sand with kankars.			11 12 21	33	*UDS-6 18.10-18.55
19.50m Hard, brownish grey, silty clay with sand mixture & decomposed rock.			14 18 24	42	SPT-12 18.70-19.15
			15 23 26	49	DS-9 19.50
			13 18 24	42	SPT-13 20.00-20.45
			15 20 25	45	*UDS-7 21.00-21.10
			24 46 54	>100	SPT-14 21.30-21.75
24.50m Dense, yellowish grey, silty sand with clay binder.			15 20 25	2.0cm Pentrn. Refusal	DS-10 22.30
26.50m Highly weathered, light pinkish grey, fine grained, fractured rock.			24 46 54	4.0cm Pentrn. Refusal	SPT-15 23.00-23.45
27.00m Obs. Boulder			100	NX. drilling from 26.50m to 35.00m	DS-11 24.00
28.50m Highly to moderately weathered, yellowish grey, medium grained, fractured rock.			24 46 54		SPT-16 24.50-24.95
29.25m Moderately weathered, yellowish to blackish grey, medium grained, fractured rock.			100		DS-12 25.50
30.00m Slightly weathered, yellowish to blackish grey, medium grained, fractured rock.			24 46 54		SPT-17 26.00-26.32
30.75m N.B. - '*' means sample could not be recovered.			100		*SPT-18 26.50-26.54
31.50m N.B. - '*' means sample could not be recovered.			24 46 54		R1 CR=38% 26.50
32.25m N.B. - '*' means sample could not be recovered.			100		R2 RQD=NIL 27.00
33.00m N.B. - '*' means sample could not be recovered.			24 46 54		R3 CR=25% 27.75
33.75m N.B. - '*' means sample could not be recovered.			100		R4 CR=26% 28.50
34.50m N.B. - '*' means sample could not be recovered.			24 46 54		R5 CR=29% 29.25
35.00m N.B. - '*' means sample could not be recovered.			100		R6 CR=44% 30.00
			24 46 54		R7 CR=41% 30.75
			100		R8 CR=49% 31.50
			24 46 54		R9 CR=56% 32.25
			100		R10 CR=45% 33.00
			24 46 54		R11 CR=52% 33.75
			100		R12 CR=69% 34.50
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Set No:

$$E=672436.876$$

BORE LOG DATA SHEET

BORE HOLE NO.51

Co-ordinates E=672436.876
N=2479631.236

Field Test	Nos	Samples		Nos	Commencement Date	20/04/2024
		Undisturbed (UDS)		8	Completion Date	22/04/2024
		Penetrometer (SPT)		18	Bore Hole Diameter	150 mm./N.X
		Disturbed (DS)		11	Level Of Ground	303.884 M.
		Water Sample (WS)		0	Water Struck At	
					Standing Water Level	12.30 m.
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		
0.00m				28		DS-1
				36		DS-2
				28		SPT-1
Very stiff to hard, reddish brown, silty clay with sand mixture. Obs. kankars.				29		UDS-1
				32		SPT-2
				32		DS-3
				32		SPT-3
				32		UDS-2
				32		SPT-4
				32		DS-4
7.50m				32		SPT-5
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.				32		UDS-3
9.50m				32		SPT-6
Medium dense to dense, light brown, silty sand with kankars.				23		DS-5
				23		SPT-7
				25		*UDS-4
				25		SPT-8
				34		DS-6
				34		SPT-9
				33		*UDS-5
				33		SPT-10
				40		DS-7
				40		SPT-11
18.00m						*UDS-6

BORE LOG DATA SHEET BORE HOLE NO.51 Co-ordinates E=672436.876
N=2479631.236

BORE LOG DATA SHEET

BORE HOLE NO.51

Co-ordinates E=672436.876
N=2470631.236

BORE LOG DATA SHEET			BORE HOLE NO.52			Co-ordinates E=672393.408 N=2479631.694			
Field Test	Nos	Samples	Nos	Commencement Date : 23/04/2024 Completion Date : 24/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 304.980 M. Water Struck At : Standing Water Level : 12.50 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES Ref. No			
0.00m						DS-1	0.50		
Very stiff, reddish brown, silty clay with sand mixture & kankars.						DS-2	1.00		
						SPT-1	1.50-1.95		
						DS-3	2.50		
						UDS-1	3.10-3.55		
						SPT-2	3.55-4.00		
						DS-4	4.50		
5.00m						SPT-3	5.00-5.45		
Hard, reddish brown, silty clay with sand mixture & kankars.						UDS-2	6.05-6.50		
						SPT-4	6.50-6.95		
						DS-5	7.50		
						SPT-5	8.10-8.55		
						UDS-3	8.90-9.35		
						SPT-6	9.35-9.80		
10.30m						DS-6	10.30		
Dense, yellowish brown, silty sand with kankars.						SPT-7	11.00-11.45		
						*UDS-4	12.00-12.45		
						SPT-8	12.60-13.05		
						DS-7	13.50		
						SPT-9	14.00-14.45		
						*UDS-5	15.10-15.55		
						SPT-10	15.70-16.15		
						DS-8	16.60		
						SPT-11	17.00-17.45		
18.00m									

BORE LOG DATA SHEET			BORE HOLE NO.52			Co-ordinates E=672393.408 N=2479631.694	
Field Test	Nos	Samples	Nos	Commencement Date : 23/04/2024 Completion Date : 24/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 304.980 M. Water Struck At : Standing Water Level : 12.50 m.			
Penetrometer (SPT)	17	Undisturbed (UDS)	7				
Cone (Pc)		Penetrometer (SPT)	17				
Vane (V)		Disturbed (DS)	11				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
18.00m Dense, yellowish brown, silty sand with kankars.				12 15 24	39		*UDS-6 18.00–18.45 SPT-12 18.60–19.05 DS-9 19.50
19.50m Hard, brownish grey, silty clay with sand mixture.				15 18 26	44		SPT-13 20.00–20.45
21.20m Dense, brownish grey, silty sand with decomposed rock & clay binder.				15 22 25	47		*UDS-7 21.00–21.10 SPT-14 21.20–21.65 DS-10 22.20 SPT-15 22.80–23.25 DS-11 24.00
25.00m Highly to moderately weathered, yellowish grey, medium grained, fractured rock.				100	5.0cm Pentr. Refusal 3.0cm Pentr. NX. drilling from 25.00m to 35.00m		*SPT-17 25.00–25.03 R1 CR=32% RQD=NIL 25.00 R2 CR=34% RQD=NIL 25.75 R3 CR=38% RQD=NIL 26.50 R4 CR=30% RQD=14% 27.25 R5 CR=34% RQD=29% 28.00 R6 CR=37% RQD=14% 28.75 R7 CR=33% RQD=NIL 29.50 R8 CR=46% RQD=29% 30.25 R9 CR=54% RQD=41% 31.00 R10 CR=45% RQD=NIL 31.75 R11 CR=46% RQD=NIL 32.50 R12 CR=64% RQD=NIL 33.25 R13 CR=62% RQD=39% 34.00
33.25m Slightly weathered, yellowish grey to blackish grey, medium grained, fractured rock.							35.00
35.00m N.B. — '*' means sample could not be recovered.							

BORE LOG DATA SHEET				BORE HOLE NO.53				Co-ordinates E=672337.974 N=2479634.771	
Field Test	Nos	Samples	Nos	Commencement Date : 15/05/2024 Completion Date : 15/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 305.054 M. Water Struck At : Standing Water Level : 11.90 m.					
Penetrometer (SPT)	10	Undisturbed (UDS)	5						
Cone (Pc)		Penetrometer (SPT)	10						
Vane (V)		Disturbed (DS)	6						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES	
0.00m				7	10	12	22	DS-1	0.50
Very stiff, reddish brown, silty clay with sand mixture. Obs. kankars.				10	13	15	28	DS-2	1.00
				11	14	20	34	SPT-1	1.50-1.95
				12	15	25	40	UDS-1	2.50-2.95
				12	14	23	37	SPT-2	2.95-3.40
				11	18	22	40	DS-3	4.00
4.50m				11	14	20	34	SPT-3	4.50-4.95
Hard, reddish brown, silty clay with sand mixture. Obs. kankars.				12	15	25	40	UDS-2	5.50-5.95
				12	14	23	37	SPT-4	5.95-6.40
				12	14	23	37	DS-4	7.00
				12	14	23	37	SPT-5	7.50-7.95
				11	18	22	40	*UDS-3	8.50-8.60
				10	12	16	28	SPT-6	8.80-9.25
10.00m				10	12	16	28	DS-5	10.00
Medium dense, yellowish brown, silty sand. Obs. kankars.				10	12	16	28	SPT-7	10.50-10.95
11.00m									

BORE LOG DATA SHEET

BORE HOLE NO.53

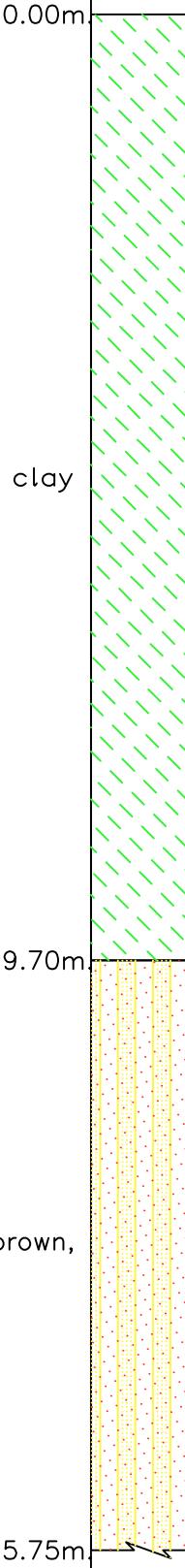
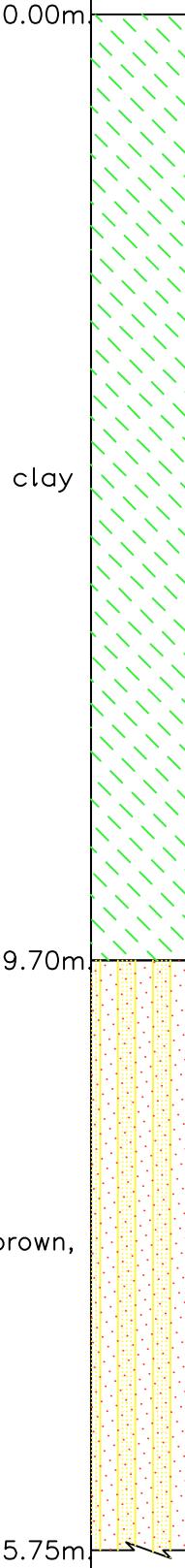
Co-ordinates E=672337.974
N=2479634.771

Field Test	Nos	Samples	Nos	Commencement Date :	15/05/2024
Penetrometer (SPT)	10	Undisturbed (UDS)	5	Completion Date :	15/05/2024
Cone (Pc)		Penetrometer (SPT)	10	Bore Hole Diameter :	150 mm.
Vane (V)		Disturbed (DS)	6	Level Of Ground :	305.054 M.
		Water Sample (WS)	0	Water Struck At :	
				Standing Water Level :	11.90 m.

DESCRIPTION	SYMBOL	N-VALUE			SAMPLES	
		EACH	DIVN=15CM		Ref. No	Depth (m)
11.00m		10	13	14	27	*UDS-4 11.50–11.95
Medium dense, yellowish brown, silty sand. Obs. kankars.		8	12	13	25	SPT-8 12.05–12.50
		9	12	15	27	DS-6 13.00
15.45m						SPT-9 13.50–13.95
						*UDS-5 14.50–14.95
						SPT-10 15.00–15.45

Medium dense, yellowish brown, silty sand. Obs. kankars.

N.B. - '*' means sample could not be recovered

BORE LOG DATA SHEET				BORE HOLE NO.54				Co-ordinates E=672318.957 N=2479594.421																																																																																																															
Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024 Completion Date : 03/05/2024 Bore Hole Diameter : 150 mm. Level Of Ground : 305.895 m. Water Struck At : Standing Water Level : 12.7 m.																																																																																																																			
Penetrometer (SPT)	19	Undisturbed (UDS)	8																																																																																																																				
Cone (Pc)		Penetrometer (SPT)	19																																																																																																																				
Vane (V)		Disturbed (DS)	11																																																																																																																				
		Water Sample (WS)	0																																																																																																																				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES																																																																																																															
				Ref. No	Depth (m)																																																																																																																		
0.00m																																																																																																																							
Very stiff, reddish brown, silty clay with sand mixture & kankar.																																																																																																																							
9.70m																																																																																																																							
Medium dense to dense, yellowish brown, silty sand with kankar.																																																																																																																							
15.75m																																																																																																																							
																																																																																																																							
																																																																																																																							
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DS-1	DS-2	SPT-1	UDS-1	SPT-2	DS-3	SPT-3	UDS-2	SPT-4	DS-4																																																																																																														
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0.50	1.00	1.50–1.95	2.50–2.95	2.95–3.40	4.00	4.50–4.95	5.50–5.95	5.95–6.40	7.00																																																																																																														
SPT-5	UDS-3	SPT-6	UDS-3	SPT-6	SPT-5	UDS-3	SPT-6	UDS-4	SPT-7																																																																																																														
7.60–8.05	8.50–8.95	8.95–9.40	8.50–8.95	8.95–9.40	7.60–8.05	8.50–8.95	8.95–9.40	11.55–12.00	10.50–10.95																																																																																																														
DS-5	SPT-7	*UDS-4	SPT-8	DS-6	SPT-9	*UDS-5	SPT-10	SPT-10	DS-6																																																																																																														
10.00	10.50–10.95	11.55–12.00	12.20–12.65	13.00	13.55–14.00	14.50–14.95	15.10–15.55																																																																																																																

BORE LOG DATA SHEET**BORE HOLE NO.54**Co-ordinates E=672318.957
N=2479594.421

Field Test	Nos	Samples	Nos	Commencement Date : 01/05/2024
Penetrometer (SPT)	19	Undisturbed (UDS)	8	Completion Date : 03/05/2024
Cone (Pc)		Penetrometer (SPT)	19	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)	11	Level Of Ground : 305.895 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.70 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
15.75m			Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand with kankar.			DS-7	16.00
		11 13 22	35	SPT-11 16.50–16.95
		12 15 22	37	*UDS-6 17.55–18.00
		12 17 17	34	SPT-12 18.10–18.55
		13 19 21	40	DS-8 19.00
		12 17 17	28	SPT-13 19.50–19.95
		13 19 21	40	*UDS-7 20.45–20.55
		12 16 24	40	SPT-14 20.70–21.15
		10 15 22	37	DS-9 21.70
22.75m		8 13 15	28	SPT-15 22.30–22.75
Hard, brownish grey, clayey silt with sand mixture & decomposed rock.		12 16 24	40	*UDS-8 23.30–23.40
		10 15 22	37	SPT-16 23.50–23.95
		19 62 5.0 cm	>100	DS-10 24.00
		10 15 22	40	SPT-17 24.50–24.95
		19 62 5.0 cm	>100	DS-11 25.40
		19 62 5.0 cm	>100	SPT-18 25.80–26.00
26.20m		100 4.0 cm	Penth. Refusal	*SPT-19 26.20–26.24
Highly weathered, yellowish grey, medium grained, fractured rock. Obs. boulder.		100 4.0 cm	Penth. Refusal	CR=25% RQD=NIL
27.00m				R1 26.20
Highly to moderately weathered, yellowish grey, medium grained, fractured rock.				R2 27.00
				CR=30% RQD=NIL
				R3 27.75
				CR=36% RQD=14%
				R4 28.50
				CR=50% RQD=NIL
				R5 29.25
				CR=49% RQD=14%
30.00m				30.00
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.55			Co-ordinates E=672381.510 N=2479616.840			
Field Test	Nos	Samples	Nos	Commencement Date : 21/04/2024 Completion Date : 22/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 304.788 M. Water Struck At : Standing Water Level : 12.80 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m						Ref. No	Depth (m)		
Very stiff, reddish brown, silty clay with sand mixture & kankars.						DS-1	0.50		
						DS-2	1.00		
						SPT-1	1.60-2.05		
						UDS-1	2.50-2.95		
						SPT-2	2.95-3.40		
						DS-3	4.00		
						SPT-3	4.60-5.05		
						UDS-2	5.40-5.85		
						SPT-4	5.85-6.30		
5.85m						DS-4	7.00		
Hard, reddish brown, silty clay with sand mixture & kankars.						SPT-5	7.50-7.95		
						UDS-3	8.55-9.00		
						SPT-6	9.00-9.45		
						DS-5	10.00		
10.50m						SPT-7	10.60-11.05		
Medium dense to dense, reddish brown, silty sand with kankars.						*UDS-4	11.50-11.95		
						SPT-8	12.10-12.55		
						DS-6	13.00		
						SPT-9	13.50-13.95		
						*UDS-5	14.55-15.00		
						SPT-10	15.10-15.55		
						DS-7	16.00		
						SPT-11	16.50-16.95		
18.00m						*UDS-6	17.50-17.95		

BORE LOG DATA SHEET			BORE HOLE NO.55						Co-ordinates E=672381.510 N=2479616.840	
Field Test	Nos	Samples	Nos	Commencement Date : 21/04/2024 Completion Date : 22/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 304.788 M. Water Struck At : Standing Water Level : 12.80 m.						
Penetrometer (SPT)	17	Undisturbed (UDS)	7							
Cone (Pc)		Penetrometer (SPT)	17							
Vane (V)		Disturbed (DS)	10							
		Water Sample (WS)	0							
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM				SAMPLES		
18.00m Medium dense to dense, reddish brown, silty sand with kankars.				12	18	23	41		SPT-12	18.20–18.65
19.30m Very stiff, brownish grey, silty clay with sand.				9	11	15	26		DS-8	19.00
20.90m Hard, brownish grey, silty clay with sand.				12	15	21	36		SPT-13	19.50–19.95
23.00m Hard, light greenish grey, clayey silt with decomposed rock.				12	18	24	42		*UDS-7	20.60–20.70
24.30m Highly weathered, whitish grey, fine grained, fractured rock. Obs. boulder.				100			>100		SPT-14	20.90–21.35
25.00m Highly weathered, light grey, medium grained, fractured rock.				100					DS-9	22.00
28.00m Highly to moderately weathered, yellowish grey, medium grained, fractured rock.									SPT-15	22.50–22.95
29.50m Moderately weathered, light greenish grey to blackish grey, medium to fine grained, fractured rock.									DS-10	23.40
32.50m Moderately to slightly weathered, light greenish grey to blackish grey, medium to fine grained, fractured rock.									SPT-16	24.00–24.12
35.00m N.B. – '*' means sample could not be recovered.									*SPT-17	24.30–24.34
									R1	CR=33% RQD=NIL
									R2	25.00
									R3	CR=34% RQD=NIL
									R4	25.75
									R5	CR=33% RQD=NIL
									R6	26.50
									R7	CR=32% RQD=NIL
									R8	28.75
									R9	CR=46% RQD=16%
									R10	29.50
									R11	30.25
									R12	31.00
									R13	31.75
									R14	32.50
										CR=52% RQD=16%
										CR=48% RQD=NIL
										CR=42% RQD=NIL
										CR=48% RQD=NIL
										CR=56% RQD=25%
										CR=66% RQD=NIL
										CR=67% RQD=43%
										35.00

BORE LOG DATA SHEET			BORE HOLE NO.56			Co-ordinates E=672395.500 N=2479598.848			
Field Test	Nos	Samples	Nos	Commencement Date : 19/04/2024 Completion Date : 20/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 304.596 M. Water Struck At : Standing Water Level : 12.80 m.					
Field Test	Nos	Samples	Nos	Commencement Date : 19/04/2024 Completion Date : 20/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 304.596 M. Water Struck At : Standing Water Level : 12.80 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	11						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m				Ref. No		Depth (m)			
Hard, reddish brown, silty clay with sand mixture & kankars.				DS-1		0.50			
				DS-2		1.00			
				SPT-1		1.50-1.95			
				DS-3		2.50			
				UDS-1		3.00-3.45			
				SPT-2		3.45-3.90			
				DS-4		4.50			
5.00m				SPT-3		5.00-5.45			
Very stiff, reddish brown, silty clay with sand mixture & kankars.				UDS-2		6.00-6.45			
				SPT-4		6.45-6.90			
				DS-5		7.50			
				SPT-5		8.00-8.45			
09.00m				UDS-3		9.00-9.45			
				SPT-6		9.45-9.90			
				DS-6		10.50			
				SPT-7		11.00-11.45			
Dense, reddish brown, silty sand with kankars.				*UDS-4		12.00-12.45			
				SPT-8		12.60-13.05			
				DS-7		13.50			
				SPT-9		14.00-14.45			
				*UDS-5		15.00-15.45			
				SPT-10		15.60-16.05			
				DS-8		16.50			
				SPT-11		17.00-17.45			
18.00m									

BORE LOG DATA SHEET

BORE HOLE NO.56

Co-ordinates E=672395.500
N=2479598.848

Field Test	Nos	Samples	Nos	Commencement Date : 19/04/2024		
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 20/04/2024		
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./N.X		
Vane (V)		Disturbed (DS)	11	Level Of Ground : 304.596 M.		
		Water Sample (WS)	0	Water Struck At :		
				Standing Water Level : 12.80 m.		
DESCRIPTION	SYMBOL	N-VALUE			SAMPLES	
		EACH DIVN=15CM			Ref. No	Depth (m)
18.00m Dense, reddish brown, silty sand with kankars.		12	14	23	37	*UDS-6 18.10-18.55
19.50m Hard, brownish grey, silty clay with sand & decomposed rock.		9	13	20	33	SPT-12 18.70-19.15
		11	15	22	37	DS-9 19.50
23.00m Dense, brownish grey, silty sand with clay binder.		16	22	25	47	SPT-13 20.00-20.45
		19	38	56	>100	*UDS-7 21.00-21.30
25.20m Highly weathered, pinkish grey, fine grained, fractured rock. Obs. boulder.		100	2.0cm Pentrn. Refusal	3.0cm Pentrn.	SPT-14 21.45-21.90	
26.00m NX. drilling from 25.20m to 35.00m		100			SPT-15 23.00-23.45	
					DS-10 22.50	
					DS-11 24.00	
					SPT-16 24.50-24.82	
					*SPT-17 25.20-25.23	
					R1 CR=32% RQD=NIL	
					R2 CR=34% RQD=NIL	
					R3 CR=36% RQD=NIL	
					R4 CR=33% RQD=NIL	
					R5 CR=40% RQD=14%	
					R6 CR=41% RQD=NIL	
					R7 CR=50% RQD=NIL	
					R8 CR=45% RQD=17%	
					R9 CR=48% RQD=25%	
					R10 CR=53% RQD=26%	
					R11 CR=50% RQD=14%	
					R12 CR=54% RQD=17%	
					R13 CR=64% RQD=20%	
32.00m Moderately weathered, light greenish yellow, medium grained, fractured rock.					32.00	
32.75m Moderately to slightly weathered, yellowish grey to light blackish grey, medium grained, fractured rock.					32.75	
35.00m N.B. - '*' means sample could not be recovered.					33.50	
					34.25	
					35.00	

BORE LOG DATA SHEET			BORE HOLE NO.57			Co-ordinates E=672428.469 N=2479610.546			
Field Test	Nos	Samples	Nos	Commencement Date : 17/04/2024 Completion Date : 19/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 304.345 M. Water Struck At : Standing Water Level : 13.00 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	8						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES			
0.00m						Ref. No	Depth (m)		
Very stiff, reddish brown, silty clay with kankars & sand mixture.						DS-1	0.50		
						DS-2	1.00		
						SPT-1	1.50-1.95		
						*UDS-1	2.50-2.95		
						SPT-2	3.10-3.55		
						DS-3	4.00		
						SPT-3	4.50-4.95		
						UDS-2	5.50-5.95		
						SPT-4	5.95-6.40		
						DS-4	7.00		
						SPT-5	7.50-7.95		
						UDS-3	8.50-8.95		
						SPT-6	8.95-9.40		
9.50m						DS-5	10.00		
Dense, reddish brown, silty sand with kankars.						SPT-7	10.50-10.95		
						*UDS-4	11.50-11.95		
						SPT-8	12.20-12.65		
						DS-6	13.00		
						SPT-9	13.50-13.95		
						*UDS-5	14.50-14.95		
						SPT-10	15.10-15.55		
						DS-7	16.00		
						SPT-11	16.50-16.95		
18.00m						*UDS-6	17.50-17.95		

BORE LOG DATA SHEET**BORE HOLE NO.57**Co-ordinates E=672428.469
N=2479610.546

Field Test	Nos	Samples	Nos	Commencement Date : 17/04/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	8	Completion Date : 19/04/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 304.345 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.00 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.00m			37	
Dense, reddish brown, silty sand with kankars.		12 15 22	31	SPT-12 18.10–18.55
19.00m		10 13 18	39	DS-8 19.00
		11 16 23	44	SPT-13 19.50–19.95
Dense, brownish grey, silty sand with clay binder, kankars & decomposed rock.		15 21 23	>100	UDS-7 20.50–20.95
		42 58	5.0cm Pentrn. Refusal	SPT-14 20.95–21.40
24.00m		100	4.0cm Pentrn. NX. drilling from 24.00m to 35.00m	DS-9 22.00
Highly weathered, yellowish grey, medium grained, fractured rock. Obs. boulder.				SPT-15 22.50–22.95
24.75m				*UDS-8 23.50–23.58
				SPT-16 23.70–23.90
Highly to moderately weathered, yellowish grey, medium grained, fractured rock.				*SPT-17 24.00–24.04 24.00
				R1 CR=29% RQD=NIL 24.75
				R2 CR=28% RQD=NIL 25.50
				R3 CR=36% RQD=NIL 26.25
				R4 CR=33% RQD=NIL 27.00
				R5 CR=29% RQD=NIL 27.75
				R6 CR=37% RQD=NIL 28.50
				R7 CR=44% RQD=NIL 29.25
				R8 CR=48% RQD=14% 30.00
				R9 CR=49% RQD=NIL 30.75
				R10 CR=42% RQD=NIL 31.50
30.75m				R11 CR=42% RQD=NIL 32.25
Moderately weathered, yellowish grey to blackish grey, medium to fine grained, fractured rock.				R12 CR=50% RQD=NIL 33.00
				R13 CR=44% RQD=14% 33.75
33.75m				R14 CR=53% RQD=29% 34.50
Moderately weathered, yellowish grey to blackish grey, medium to fine grained, fractured rock.				R15 CR=54% RQD=17% 35.00
35.00m				
N.B. – '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.58			Co-ordinates E=672478.183 N=2479605.438			
Field Test	Nos	Samples	Nos	Commencement Date : 22/04/2024 Completion Date : 25/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.718 M. Water Struck At : Standing Water Level : 12.50 m.					
Penetrometer (SPT)	15	Undisturbed (UDS)	6						
Cone (Pc)		Penetrometer (SPT)	15						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES Ref. No			
0.00m				6 9 10 19		DS-1	0.50		
Very stiff, reddish brown, clayey silt with sand mixture.				6 9 11 20		DS-2	1.00		
				9 10 11 21		SPT-1	1.50-1.95		
				8 10 12 22		UDS-1	2.50-2.95		
				12 17 21 38		SPT-2	2.95-3.40		
				14 19 24 43		DS-3	4.00		
				10 12 13 25		SPT-3	4.50-4.95		
7.50m				11 13 15 28		UDS-2	5.50-5.95		
Hard, reddish brown, clayey silt with sand mixture.				12 15 17 32		SPT-4	5.95-6.40		
				12 14 19 33		DS-4	7.00		
9.80m				13 15 17 32		SPT-5	7.50-7.95		
Medium dense to dense, yellowish brown, silty sand with kankars.				12 15 17 33		UDS-3	8.50-8.95		
				12 14 19 32		SPT-6	8.95-9.40		
				13 15 17 32		DS-5	10.00		
				12 15 17 33		SPT-7	10.50-10.95		
				12 14 19 32		*UDS-4	11.50-11.95		
				13 15 17 32		SPT-8	12.00-12.45		
				12 15 17 33		DS-6	13.00		
				12 14 19 32		SPT-9	13.50-13.95		
				13 15 17 32		*UDS-5	14.50-14.95		
				12 15 17 33		SPT-10	15.00-15.45		
				12 14 19 32		DS-7	16.00		
				13 15 17 32		SPT-11	16.50-16.95		
				12 15 17 33		*UDS-6	17.50-17.95		
18.00m				12 15 17 32					

BORE LOG DATA SHEET**BORE HOLE NO.58**Co-ordinates E=672478.183
N=2479605.438

Field Test	Nos	Samples	Nos	Commencement Date	22/04/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Completion Date	25/04/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter	150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground	303.718 M.
		Water Sample (WS)	0	Water Struck At	
				Standing Water Level	12.50 m.
DESCRIPTION			SYMBOL	N-VALUE	
				EACH DIVN=15CM	
18.00m		Medium dense to dense, yellowish brown, silty sand with kankars.	14 16 19 35		SPT-12 18.00-18.45
19.50m		Very dense, yellowish brown, silty sand with kankars.	44 56 >100	5.0cm Pentn. >100	DS-8 19.00
21.00m		Highly weathered, brownish yellow, fine grained, fractured rock. Obs. boulder.	100 100	12.0cm Pentn. Refusal	SPT-13 19.50-19.70
21.75m				3.0cm Pentn. Refusal	DS-9 20.30
				NX. drilling from 21.00m to 35.00m	SPT-14 20.70-20.82
					*SPT-15 21.00-21.03 21.00
					R1 CR=25% RQD=NIL
					R2 CR=39% RQD=16%
					R3 CR=36% RQD=NIL
					R4 CR=37% RQD=14%
					R5 CR=39% RQD=NIL
					R6 CR=34% RQD=NIL
					R7 CR=43% RQD=14%
					R8 CR=36% RQD=NIL
					R9 CR=43% RQD=16%
					R10 CR=37% RQD=16%
					R11 CR=33% RQD=NIL
					R12 CR=41% RQD=NIL
					R13 CR=37% RQD=18%
					R14 CR=44% RQD=37%
					R15 CR=50% RQD=36%
					R16 CR=40% RQD=22%
					R17 CR=38% RQD=14%
					R18 CR=40% RQD=NIL
					R19 CR=44% RQD=NIL
33.75m		Moderately weathered, grey, medium to coarse grained, fractured rock.			33.75
35.00m		N.B. - '*' means sample could not be recovered.			35.00

BORE LOG DATA SHEET			BORE HOLE NO.59			Co-ordinates E=672508.310 N=2479621.631			
Field Test	Nos	Samples	Nos	Commencement Date : 20/04/2024 Completion Date : 23/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.725 M. Water Struck At : Standing Water Level : 11.60 m.					
Penetrometer (SPT)	15	Undisturbed (UDS)	6						
Cone (Pc)		Penetrometer (SPT)	15						
Vane (V)		Disturbed (DS)	9						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES Ref. No			
0.00m						DS-1	0.50		
Very stiff, reddish brown, clayey silt with sand mixture. Obs. kankars.				9 10 13	23	DS-2	1.00		
				10 12 14	26	SPT-1	1.50-1.95		
				10 13 15	28	UDS-1	2.50-2.95		
				11 12 16	28	SPT-2	2.95-3.40		
				13 14 15	29	DS-3	4.00		
				13 14 15	29	SPT-3	4.50-4.95		
				13 14 15	33	UDS-2	5.50-5.95		
				14 16 17	33	SPT-4	5.95-6.40		
				13 15 15	30	DS-4	7.00		
				10 14 14	28	SPT-5	7.50-7.95		
				10 14 14	27	*UDS-3	8.50-8.95		
				10 15 12	30	SPT-6	9.00-9.45		
				10 15 15	29	DS-5	10.00		
				9 17 12	29	SPT-7	10.50-10.95		
Medium dense to dense, light brown, silty sand with kankars.				9 17 12	29	*UDS-4	11.50-11.95		
				9 17 12	29	SPT-8	12.00-12.45		
				9 17 12	29	DS-6	13.00		
				9 17 12	29	SPT-9	13.50-13.95		
				9 17 12	29	*UDS-5	14.50-14.95		
				9 17 12	29	SPT-10	15.00-15.45		
				9 17 12	29	DS-7	16.00		
				9 17 12	29	SPT-11	16.50-16.95		
				9 17 12	29	*UDS-6	17.50-17.95		
18.00m									

BORE LOG DATA SHEET**BORE HOLE NO.59**Co-ordinates E=672508.310
N=2479621.631

Field Test	Nos	Samples	Nos	Commencement Date : 20/04/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Completion Date : 23/04/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 303.725 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 11.60 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
			Ref. No	Depth (m)
18.00m Medium dense to dense, light brown, silty sand with kankars.		10 15 15 30	SPT-12	18.00-18.45
19.00m Hard, brownish grey, silty clay with white spots & sand. Obs. decomposed rock.		49 56 >100 5.0cm Penth. >100	DS-8	19.00
21.00m Highly weathered, greyish yellow, medium to fine grained, fractured rock. Obs. boulder.		100 100 12.0cm Penth. Refusal 3.0cm Penth. NX. drilling from 21.00m to 35.00m	SPT-13 DS-9 SPT-14 *SPT-15 R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R17 R18 R19	19.50-19.70 20.30 20.70-20.82 21.00-21.03 CR=20% RQD=NIL 21.75 CR=30% RQD=NIL 22.50 CR=31% RQD=NIL 23.25 CR=48% RQD=42% 24.00 CR=47% RQD=43% 24.75 CR=41% RQD=22% 25.50 CR=37% RQD=NIL 26.25 CR=35% RQD=14% 27.00 CR=36% RQD=NIL 27.75 CR=41% RQD=24% 28.50 CR=35% RQD=NIL 29.25 CR=36% RQD=20% 30.00 CR=27% RQD=15% 30.75 CR=31% RQD=18% 31.50 CR=30% RQD=NIL 32.25 CR=48% RQD=36% 33.00 CR=45% RQD=32% 33.75 CR=42% RQD=37% 34.50 CR=58% RQD=34% 35.00
21.75m Highly to moderately weathered, greyish yellow, medium to fine grained, fractured rock.				
30.75m Highly weathered, grey, medium to coarse grained, fractured rock.				
34.50m Moderately weathered, grey, medium to coarse grained, fractured rock. 35.00m N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET**BORE HOLE NO.60**Co-ordinates E=672568.014
N=2479613.374

Field Test	Nos	Samples	Nos	Commencement Date : 23/04/2024
Penetrometer (SPT)	16	Undisturbed (UDS)	6	Completion Date : 25/04/2024
Cone (Pc)		Penetrometer (SPT)	16	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 303.049 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 14.20 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m				Ref. No Depth (m)
Very stiff to hard, reddish brown, clayey silt with sand mixture. Obs. kankars.			26	DS-1 0.50
		9 12 14	29	DS-2 1.00
		10 13 16	27	SPT-1 1.50-1.95
		10 12 15	30	UDS-1 2.50-2.95
		11 13 17	31	SPT-2 2.95-3.40
		11 14 17	28	DS-3 4.00
		12 13 15	31	SPT-3 4.50-4.95
		13 14 17	31	UDS-2 5.50-5.95
		13 15 16	31	SPT-4 5.95-6.40
		14 16 18	34	DS-4 7.00
		14 17 19	36	SPT-5 7.50-7.95
		13 15 20	35	UDS-3 8.50-8.95
9.70m			31	SPT-6 8.95-9.40
Dense, yellowish brown, silty sand with kankars.			31	DS-5 10.00
		13 14 17	31	SPT-7 10.50-10.95
		13 15 16	31	*UDS-4 11.50-11.95
		14 16 18	34	SPT-8 12.00-12.45
		14 17 19	36	DS-6 13.00
		13 15 20	35	SPT-9 13.50-13.95
			31	*UDS-5 14.50-14.95
			31	SPT-10 15.00-15.45
			36	DS-7 16.00
			35	SPT-11 16.50-16.95
18.00m			31	*UDS-6 17.50-17.95

BORE LOG DATA SHEET**BORE HOLE NO.60**Co-ordinates E=672568.014
N=2479613.374

Field Test	Nos	Samples	Nos	Commencement Date	23/04/2024
Penetrometer (SPT)	16	Undisturbed (UDS)	6	Completion Date	25/04/2024
Cone (Pc)		Penetrometer (SPT)	16	Bore Hole Diameter	150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground	303.049 M.
		Water Sample (WS)	0	Water Struck At	
				Standing Water Level	14.20 m.
DESCRIPTION			SYMBOL	N-VALUE	
				EACH DIVN=15CM	
18.00m		Dense, yellowish brown, silty sand with kankars.		16 14 20 34	SPT-12 18.00-18.45
				15 17 21 38	DS-8 19.00
				16 18 20 38	SPT-13 19.50-19.95
				>100	DS-9 20.50
22.00m		Very dense, yellowish brown, silty sand with kankars.	22 31 50	2.0cm Pentn. Refusal	SPT-14 21.00-21.45
22.50m			100	3.0cm Pentn. NX, drilling from 22.50m to 35.00m	SPT-15 22.00-22.32
→ Highly to moderately weathered, greyish, yellow, medium to coarse grained, fractured rock. Obs. boulder.					*SPT-16 22.50-22.53 CR=28% RQD=NIL
					R1 22.50
					R2 23.25
					R3 24.00
					R4 24.75
					R5 25.50
					R6 26.25
					R7 27.00
					R8 27.75
					R9 28.50
		Moderately weathered, greyish yellow, medium to coarse grained, fractured rock. Obs. boulder.			R10 29.25
					R11 30.00
					R12 30.75
					R13 31.50
					R14 32.25
		Moderately weathered to fresh, grey, coarse grained, fractured rock.			R15 33.00
					R16 33.75
					R17 34.50
		N.B. - '*' means sample could not be recovered.			RQD=86% 35.00

BORE LOG DATA SHEET			BORE HOLE NO.61			Co-ordinates E=672592.999 N=2479608.381	
Field Test	Nos	Samples	Nos	Commencement Date : 06/05/2024 Completion Date : 07/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 303.633 M. Water Struck At : Standing Water Level : 12.25 m.			
Penetrometer (SPT)	15	Undisturbed (UDS)	6				
Cone (Pc)		Penetrometer (SPT)	15				
Vane (V)		Disturbed (DS)	9				
		Water Sample (WS)	0				
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM			SAMPLES
0.00m				Ref. No			Depth (m)
Filled up with ash.				DS-1 0.50 DS-2 1.00			
3.30m				SPT-1 1.50-1.95			
Very stiff, reddish brown, clayey silt with sand mixture & kankar.				*UDS-1 2.50-2.95 SPT-2 3.00-3.45			
5.95m				DS-3 4.00			
Hard, reddish brown, clayey silt with sand mixture & kankar.				SPT-3 4.50-4.95			
9.70m				UDS-2 5.50-5.95 SPT-4 5.95-6.40			
Dense, yellowish brown, silty sand with kankar.				DS-4 7.00			
				SPT-5 7.50-7.95			
				UDS-3 8.50-8.95 SPT-6 8.95-9.40			
				DS-5 10.00			
				SPT-7 10.50-10.95			
				*UDS-4 11.50-11.95 SPT-8 12.00-12.45			
				DS-6 13.00			
				SPT-9 13.50-13.95			
				*UDS-5 14.50-14.95 SPT-10 15.00-15.45			
				DS-7 16.00			
				SPT-11 16.50-16.95			
				*UDS-6 17.50-17.95 SPT-12 18.00-18.45			
18.50m							

BORE LOG DATA SHEET			BORE HOLE NO.61			Co-ordinates E=672592.999 N=2479608.381
Field Test	Nos	Samples	Nos	Commencement Date : 06/05/2024 Completion Date : 07/05/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 303.633 M. Water Struck At : Standing Water Level : 12.25 m.		
Penetrometer (SPT)	15	Undisturbed (UDS)	6			
Cone (Pc)		Penetrometer (SPT)	15			
Vane (V)		Disturbed (DS)	9			
		Water Sample (WS)	0			
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES
18.50m Dense, yellowish brown, silty sand with kankar.			15 18 19	37		DS-8 19.00
Very dense, yellowish brown, silty sand with kankar.			27 80	>100 2.0 cm Pentn. Refusal		SPT-13 19.50–19.95 DS-9 20.50 SPT-14 21.00–21.17
21.00m 21.50m Highly weathered, whitish grey, medium grained, fractured rock. Obs. boulder			100	3.0 cm Pentn.		*SPT-15 21.50–21.53 R1 CR=30% RQD=NIL 21.50 R2 CR=28% RQD=NIL 22.25 R3 CR=31% RQD=NIL 23.00 R4 CR=26% RQD=NIL 23.75 R5 CR=26% RQD=NIL 24.50 R6 CR=27% RQD=NIL 25.25 R7 CR=27% RQD=NIL 26.00 R8 CR=33% RQD=18% 26.75 R9 CR=35% RQD=NIL 27.50 R10 CR=38% RQD=NIL 28.25 R11 CR=38% RQD=14% 29.00 R12 CR=47% RQD=35% 29.75 R13 CR=35% RQD=NIL 30.50 R14 CR=31% RQD=NIL 31.25 R15 CR=38% RQD=14% 32.00 R16 CR=84% RQD=NIL 32.75 R17 CR=81% RQD=NIL 33.50 R18 CR=46% RQD=NIL 34.25
22.25m Highly to moderately weathered, greyish yellow to yellowish grey, medium to coarse grained, fractured rock.			NX	rotary drilling from 21.50m to 35.00m		
32.75m Fresh, greyish yellow to yellowish grey, medium to coarse grained, fractured rock.						
34.25m Moderately weathered, greyish yellow to yellowish grey, medium to coarse grained, fractured rock.						
35.00m						
N.B. - '*' means sample could not be recovered.						

Set No:

$$E=672677.843$$

BORE LOG DATA SHEET

BORE HOLE NO.62

Co-ordinates E=672677.843
N=2479596.119

Field Test	Nos	Samples		Nos	Commencement Date : 02/05/2024
Penetrometer (SPT)	16	Undisturbed (UDS)		6	Completion Date : 02/05/2024
Cone (Pc)		Penetrometer (SPT)		16	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)		9	Level Of Ground : 302.34 m.
		Water Sample (WS)		0	Water Struck At : Standing Water Level : 13.00 m.
DESCRIPTION			SYMBOL	N-VALUE	
				EACH DIVN=15CM	
0.00m					
Very stiff, reddish brown, clayey silt with sand mixture & kankar.				22	DS-1 0.50
				8 10 12	DS-2 1.00
				11 12 16	SPT-1 1.50-1.95
				28	UDS-1 2.50-2.95
				12 13 16	SPT-2 2.95-3.40
				29	DS-3 4.00
				13 15 16	SPT-3 4.50-4.95
				31	UDS-2 5.50-5.95
				13 15 16	SPT-4 5.95-6.40
5.95m				34	DS-4 7.00
Hard, reddish brown, clayey silt with sand mixture & kankar.				13 16 18	SPT-5 7.50-7.95
				32	UDS-3 8.50-8.95
				12 15 17	SPT-6 8.95-9.40
9.40m				30	DS-5 10.00
Medium dense to dense, yellowish brown, silty sand with kankar.				11 13 17	SPT-7 10.50-10.95
				29	*UDS-4 11.50-11.95
				12 13 16	SPT-8 12.00-12.45
				31	DS-6 13.00
				13 15 16	SPT-9 13.50-13.95
				28	*UDS-5 14.50-14.95
				12 13 15	SPT-10 15.00-15.45
15.75m					

BORE LOG DATA SHEET

BORE HOLE NO.62

Co-ordinates E=672677.843
N=2479596.119

Field Test	Nos	Samples	Nos	Commencement Date : 02/05/2024
Penetrometer (SPT)	16	Undisturbed (UDS)	6	Completion Date : 02/05/2024
Cone (Pc)		Penetrometer (SPT)	16	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)	9	Level Of Ground : 302.340 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.00 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
			Ref. No	Depth (m)
15.75m			DS-7	16.00
Medium dense to dense, yellowish brown, silty sand with kankar.			SPT-11	16.50-16.95
			*UDS-6	17.50-17.95
			SPT-12	18.00-18.45
			DS-8	19.00
			SPT-13	19.50-19.95
			DS-9	20.50
21.45m			SPT-14	21.00-21.45
Very dense, yellowish brown, silty sand with kankar.			SPT-15	22.00-22.18
22.50m			*SPT-16	22.50-22.54
Highly weathered, brownish grey, fine grained, fractured rock. Obs. boulder.		100 3.0 cm Refusal Pentn.	R1	22.50 CR=24% RQD=NIL
23.25m		100 4.0 cm Pentn.	R2	23.25 CR=35% RQD=NIL
Highly weathered, yellowish, medium grained, fractured rock.		NX. rotary drilling from 22.50m to 25.00m	R3	24.00 CR=31% RQD=NIL
25.00m				25.00
N.B. - '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.63			Co-ordinates E=672584.311 N=2479587.420			
Field Test	Nos	Samples	Nos	Commencement Date : 21/04/2024 Completion Date : 22/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 302.922 M. Water Struck At : Standing Water Level : 12.50 m.					
Penetrometer (SPT)	15	Undisturbed (UDS)	6						
Cone (Pc)		Penetrometer (SPT)	15						
Vane (V)		Disturbed (DS)	8						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES Ref. No			
0.00m				10 10 20	30	DS-1	0.50		
				8 14 18	32	DS-2	1.00		
				10 15 18	33	SPT-1	1.50-1.95		
				12 15 16	31	UDS-1	2.50-2.95		
				12 17 20	37	SPT-2	2.95-3.40		
				9 10 13	23	DS-3	4.00		
				10 12 14	26	SPT-3	4.50-4.95		
				10 13 15	28	UDS-2	5.50-5.95		
				11 14 15	29	SPT-4	5.95-6.40		
				12 15 15	30	DS-4	7.00		
				11 16 18	34	SPT-5	7.50-7.95		
Hard, reddish brown, clayey silt with sand mixture. Obs. kankars.						UDS-3	8.50-8.95		
						SPT-6	8.95-9.40		
9.50m						DS-5	10.00		
						SPT-7	10.50-10.95		
						*UDS-4	11.50-11.95		
						SPT-8	12.00-12.45		
						DS-6	13.00		
						SPT-9	13.50-13.95		
Medium dense to dense, yellowish grey, silty sand. Obs. kankars & gravel.						*UDS-5	14.50-14.95		
						SPT-10	15.00-15.45		
						DS-7	16.00		
						SPT-11	16.50-16.95		
						*UDS-6	17.50-17.95		
18.00m									

BORE LOG DATA SHEET**BORE HOLE NO.63**Co-ordinates E=672584.311
N=2479587.420

Field Test	Nos	Samples	Nos	Commencement Date : 21/04/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Completion Date : 22/04/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	8	Level Of Ground : 302.922 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.50 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.00m			12 15 19 34	Ref. No
Medium dense to dense, yellowish grey, silty sand. Obs. kankars & gravel.			13 16 20 36	Depth (m)
21.00m			19 31 50 >100	SPT-12 18.00-18.45
Highly weathered, greyish yellow, coarse grained, fractured rock. Obs. boulder.			5.0cm Pentn. Refusal	DS-8 19.00
21.75m			3.0cm Pentn.	SPT-13 19.50-19.95
→ Highly to moderately weathered, greyish yellow, coarse grained, fractured rock.			NX. drilling from 21.00m to 35.00m	SPT-14 20.50-20.85
28.50m				*SPT-15 21.00-21.03 21.00
Moderately weathered, greyish yellow, coarse grained, fractured rock. Obs. boulder.				R1 CR=27% RQD=NIL 21.00
31.50m				R2 CR=34% RQD=NIL 21.75
Moderately weathered to fresh, yellowish grey, coarse grained, fractured rock.				R3 CR=30% RQD=NIL 22.50
35.00m				R4 CR=39% RQD=NIL 23.25
N.B. - '*' means sample could not be recovered.				R5 CR=43% RQD=14% 24.00
				R6 CR=39% RQD=14% 24.75
				R7 CR=50% RQD=14% 25.50
				R8 CR=43% RQD=NIL 26.25
				R9 CR=43% RQD=NIL 27.00
				R10 CR=50% RQD=14% 27.75
				R11 CR=59% RQD=14% 28.50
				R12 CR=58% RQD=14% 29.25
				R13 CR=50% RQD=NIL 30.00
				R14 CR=58% RQD=50% 30.75
				R15 CR=59% RQD=53% 31.50
				R16 CR=67% RQD=45% 32.25
				R17 CR=67% RQD=42% 33.00
				R18 CR=80% RQD=48% 33.75
				R19 CR=84% RQD=80% 34.50

BORE LOG DATA SHEET**BORE HOLE NO.64**Co-ordinates E=672535.241
N=2479590.385

Field Test	Nos	Samples	Nos	Commencement Date : 25/04/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	6	Completion Date : 28/04/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 304.193 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 13.90 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m				
Very stiff, reddish brown, clayey silt with sand mixture & kankars.			9 10 12	22
			9 11 13	24
			11 13 17	30
				36
5.95m			18 14 22	39
Hard, reddish brown, clayey silt with sand mixture & kankars.			18 19 20	42
			9 16 26	
10.00m			8 11 14	25
Medium dense to dense, yellowish brown, silty sand with kankars.			10 12 15	27
			10 13 17	30
			10 12 15	27
			11 14 17	31
18.00m				

BORE LOG DATA SHEET

BORE HOLE NO.64

Co-ordinates E=672535.241
N=2479590.385

BORE LOG DATA SHEET			BORE HOLE NO.65			Co-ordinates E=672462.871 N=2479577.599			
Field Test	Nos	Samples	Nos	Commencement Date : 26/04/2024 Completion Date : 28/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.975 M. Water Struck At : Standing Water Level : 12.30 m.					
Field Test	Nos	Samples	Nos	Commencement Date : 26/04/2024 Completion Date : 28/04/2024 Bore Hole Diameter : 150 mm./N.X Level Of Ground : 303.975 M. Water Struck At : Standing Water Level : 12.30 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES Ref. No			
0.00m						DS-1	0.50		
Very stiff to hard, reddish brown, silty clay with sand mixture.				5 8 10	18	DS-2	1.00		
				6 12 13	25	SPT-1	1.50-1.95		
				10 12 17	29	UDS-1	2.50-2.95		
				14 19 18	37	SPT-2	2.95-3.40		
				10 13 15	28	DS-3	4.00		
				8 10 10	20	SPT-3	4.50-4.95		
				7 9 10	19	UDS-2	5.50-5.95		
7.00m				8 10 13	23	SPT-4	5.95-6.40		
Very stiff, reddish brown, silty clay with kankars. Obs. sand mixture.				9 13 14	27	DS-4	7.00		
				10 12 16	28	SPT-5	7.50-7.95		
10.50m				11 14 17	31	UDS-3	8.50-8.95		
Medium dense to dense, yellowish brown, silty sand with kankars.						SPT-6	8.95-9.40		
						DS-5	10.00		
						SPT-7	10.50-10.95		
						*UDS-4	11.50-11.95		
						SPT-8	12.05-12.50		
						DS-6	13.00		
						SPT-9	13.55-14.00		
						*UDS-5	14.50-14.95		
						SPT-10	15.10-15.55		
						DS-7	16.00		
						SPT-11	16.50-16.95		
						*UDS-6	17.55-18.00		
18.00m									

BORE LOG DATA SHEET**BORE HOLE NO.65**Co-ordinates E=672462.871
N=2479577.599

Field Test	Nos	Samples	Nos	Commencement Date : 26/04/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 28/04/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	10	Level Of Ground : 303.975 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.30 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.00m			Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand with kankars.			SPT-12	18.20–18.65
			DS-8	19.20
			SPT-13	19.70–20.15
			DS-9	20.60
21.45m			SPT-14	21.00–21.45
Hard, brownish grey, silty clay with sand mixture & decomposed rock.			*UDS-7	22.00–22.10
			SPT-15	22.30–22.75
			DS-10	23.40
			SPT-16	24.00–24.32
24.50m			*SPT-17	24.50–24.52
Highly weathered, light pinkish grey, fine grained, fractured rock. Obs. 25.00m boulder.			R1	CR=32% RQD=NIL
			R2	25.00 CR=37% RQD=NIL
			R3	25.75 CR=40% RQD=NIL
			R4	26.50 CR=46% RQD=NIL
			R5	27.25 CR=44% RQD=NIL
			R6	28.00 CR=52% RQD=NIL
			R7	28.75 CR=44% RQD=NIL
			R8	29.50 CR=46% RQD=14%
			R9	30.25 CR=49% RQD=14%
			R10	31.00 CR=41% RQD=NIL
			R11	31.75 CR=42% RQD=NIL
			R12	32.50 CR=44% RQD=NIL
			R13	33.25 CR=53% RQD=16%
33.25m			R14	34.00 CR=54% RQD=NIL
Moderately weathered, light blackish grey, medium to fine grained, fractured rock.				35.00
35.00m				
Moderately weathered, light blackish grey, medium to fine grained, fractured rock.				
N.B. – '*' means sample could not be recovered.				

Set No:

F=672429.424

BORE LOG DATA SHEET

BORE HOLE NO.66

Co-ordinates E=672429.424
N=2479581.181

Field Test	Nos	Samples		Nos	Commencement Date : 16/04/2024	
Penetrometer (SPT)	15	Undisturbed (UDS)		8	Completion Date : 17/04/2024	
Cone (Pc)		Penetrometer (SPT)		15	Bore Hole Diameter : 150 mm./N.X	
Vane (V)		Disturbed (DS)		9	Level Of Ground : 304.365 M.	
		Water Sample (WS)		0	Water Struck At :	
					Standing Water Level : 12.40 m.	
DESCRIPTION			SYMBOL	N-VALUE		SAMPLES
				EACH	DIVN=15CM	Ref. No
0.00m						Depth (m)
Very stiff, reddish brown, silty clay with sand.				9 10 10	20	DS-1 0.50
				10 11 12	23	DS-2 1.00
				12 15 22	37	UDS-1 1.50-1.95
				10 18 24	42	SPT-1 1.95-2.40
4.80m				11 17 21	38	DS-3 3.00
Hard, reddish brown, silty clay with sand.				6 9 12	21	SPT-2 3.50-3.95
				8 10 12	22	UDS-2 4.50-4.80
				8 10 15	25	SPT-3 4.80-5.25
9.50m				9 12 16	28	DS-4 6.00
Medium dense to dense, reddish brown, silty sand with kankars.				10 13 19	32	SPT-4 6.50-6.95
				12 13 21	34	UDS-3 7.50-7.80
						SPT-5 7.80-8.25
18.00m						DS-5 9.00
						SPT-6 9.50-9.95
						*UDS-4 10.50-10.95
						SPT-7 11.20-11.65
						DS-6 12.00
						SPT-8 12.45-12.90
						*UDS-5 13.50-13.95
						SPT-9 14.10-14.55
						DS-7 15.00
						SPT-10 15.50-15.95
						*UDS-6 16.50-16.95
						SPT-11 17.10-17.55
						DS-8 18.00

BORE LOG DATA SHEET

BORE HOLE NO.66

Co-ordinates E=672429.424
N=2479581.181

Field Test	Nos	Samples	Nos	Commencement Date : 16/04/2024
Penetrometer (SPT)	15	Undisturbed (UDS)	8	Completion Date : 17/04/2024
Cone (Pc)		Penetrometer (SPT)	15	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	9	Level Of Ground : 304.365 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.40 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
			Ref. No	Depth (m)
18.00m Medium dense to dense, reddish brown, silty sand with kankars.		12 14 23	37	SPT-12 18.50–18.95
19.00m Hard, brownish grey, silty clay with kankars & decomposed rock.		10 13 22	35	UDS-7 19.50–19.95 SPT-13 19.95–20.40
22.80m Highly weathered, light pinkish grey, fine grained, fractured rock. Obs. boulder.		22 46 54	≥100 2.0cm Pentrn. Refusal 3.0cm Pentrn.	DS-9 21.00 *UDS-8 21.60–21.68 SPT-14 22.00–22.32
23.50m Highly weathered, yellowish grey, medium grained, fractured rock.		00	NX. drilling from 22.80m to 35.00m	*SPT-15 22.80–22.83 R1 CR=35% RQD=NIL R2 CR=30% RQD=NIL R3 CR=36% RQD=NIL R4 CR=38% RQD=NIL R5 CR=29% RQD=NIL R6 CR=42% RQD=22% R7 CR=52% RQD=16% R8 CR=45% RQD=22% R9 CR=49% RQD=NIL R10 CR=50% RQD=36% R11 CR=41% RQD=NIL R12 CR=44% RQD=NIL R13 CR=40% RQD=NIL R14 CR=42% RQD=NIL R15 CR=44% RQD=NIL R16 CR=53% RQD=11%
26.50m Moderately weathered, light greenish grey to blackish grey, fine grained, fractured rock.				22.80 23.50 24.25 25.00 25.75 26.50 27.25 28.00 28.75 29.50 30.25 31.00 31.75 32.50 33.25 34.00 35.00
34.00m Moderately weathered, light greenish grey to blackish grey, fine grained, fractured rock.				
35.00m N.B. — '*' means sample could not be recovered.				

BORE LOG DATA SHEET			BORE HOLE NO.67			Co-ordinates E=672385.227 N=2479567.572			
Field Test	Nos	Samples	Nos	Commencement Date : 24/04/2024 Completion Date : 26/04/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 304.480 M. Water Struck At : Standing Water Level : 12.80 m.					
Field Test	Nos	Samples	Nos	Commencement Date : 24/04/2024 Completion Date : 26/04/2024 Bore Hole Diameter : 150 mm./NX. Level Of Ground : 304.480 M. Water Struck At : Standing Water Level : 12.80 m.					
Penetrometer (SPT)	17	Undisturbed (UDS)	7						
Cone (Pc)		Penetrometer (SPT)	17						
Vane (V)		Disturbed (DS)	10						
		Water Sample (WS)	0						
DESCRIPTION			SYMBOL	N-VALUE EACH DIVN=15CM		SAMPLES Ref. No			
0.00m						DS-1	0.50		
Very stiff, reddish brown, silty clay with sand mixture & kankar.				9 13 13	26	DS-2	1.00		
				8 12 15	27	SPT-1	1.50-1.95		
				10 13 15	28	UDS-1	2.50-2.95		
				11 12 21	33	SPT-2	2.95-3.40		
				12 12 24	36	DS-3	4.00		
				9 13 23	36	SPT-3	4.50-4.95		
5.95m				11 12 21	33	UDS-2	5.50-5.95		
Hard, reddish brown, silty clay with sand mixture & kankar.				12 12 24	36	SPT-4	5.95-6.40		
				9 13 23	36	DS-4	7.00		
				12 12 24	36	SPT-5	7.50-7.95		
				9 13 23	36	*UDS-3	8.55-9.00		
				12 12 24	36	SPT-6	9.20-9.65		
10.30m				8 9 16	25	DS-5	10.30		
Medium dense to dense, yellowish brown, silty sand with kankar.				9 13 13	26	SPT-7	11.10-11.55		
				10 12 16	28	*UDS-4	12.00-12.45		
				9 13 13	28	SPT-8	12.60-13.05		
				10 12 16	28	DS-6	13.50		
				8 9 16	25	SPT-9	14.10-14.55		
				9 13 13	26	*UDS-5	14.90-15.35		
				10 12 16	28	SPT-10	15.50-15.95		
				9 13 13	34	DS-7	16.50		
				10 14 20	34	SPT-11	17.00-17.45		
				9 13 19	32	*UDS-6	18.00-18.45		
18.50m									

BORE LOG DATA SHEET

BORE HOLE NO.67

Co-ordinates E=672385.227
N=2479567.572

Field Test	Nos	Samples	Nos	Commencement Date : 24/04/2024
Penetrometer (SPT)	17	Undisturbed (UDS)	7	Completion Date : 26/04/2024
Cone (Pc)		Penetrometer (SPT)	17	Bore Hole Diameter : 150 mm./NX.
Vane (V)		Disturbed (DS)	10	Level Of Ground : 304.480 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.80 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.50m			Ref. No	Depth (m)
Medium dense to dense, yellowish brown, silty sand with kankar.			SPT-12	18.60–19.05
19.50m			DS-8	19.50
			SPT-13	20.00–20.45
			*UDS-7	21.00–21.10
			SPT-14	21.30–21.75
Hard, brownish grey, silty clay with sand mixture & decomposed rock.			DS-9	22.40
			SPT-15	23.00–23.45
			DS-10	24.00
25.00m			SPT-16	24.50–24.75
			*SPT-17	25.00–25.04
			R1	25.00–25.04
			R2	25.75
			R3	26.50
			R4	27.25
			R5	28.00
			R6	28.75
			R7	29.50
			R8	30.25
			R9	31.00
			R10	31.75
			R11	32.50
			R12	33.25
			R13	34.00
33.25m				35.00
Moderately weathered, yellowish grey to blackish grey, medium grained, fractured rock.				
35.00m				
N.B. – '*' means sample could not be recovered.				

BORE LOG DATA SHEET**BORE HOLE NO.68**Co-ordinates E=672450.448
N=2479546.324

Field Test	Nos	Samples	Nos	Commencement Date : 23/04/2024
Penetrometer (SPT)	18	Undisturbed (UDS)	8	Completion Date : 25/04/2024
Cone (Pc)		Penetrometer (SPT)	18	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	10	Level Of Ground : 304.311 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.30 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
0.00m				Ref. No
Stiff to very stiff, reddish brown, silty clay. Obs. sand mixture & kankars.				Depth (m)
			4 6 5	DS-1 0.50
			6 7 8	DS-2 1.00
			7 8 10	SPT-1 1.50-1.95
			8 10 13	UDS-1 2.50-2.95
			6 7 10	SPT-2 2.95-3.40
			5 6 9	DS-3 4.00
			7 8 10	SPT-3 4.50-4.95
			8 10 13	UDS-2 5.50-5.95
			6 7 10	SPT-4 5.95-6.40
			6 7 10	DS-4 7.00
			5 6 9	SPT-5 7.50-7.95
			7 8 10	*UDS-3 8.50-8.95
			7 8 10	SPT-6 9.05-9.50
			7 8 10	DS-5 10.00
10.50m			6 8 8	SPT-7 10.50-10.95
Medium dense, yellowish brown, silty sand. Obs. kankars.			7 8 10	*UDS-4 11.50-11.95
			7 8 10	SPT-8 12.05-12.50
			7 7 8	DS-6 13.00
			8 8 9	SPT-9 13.50-13.95
			7 7 8	*UDS-5 14.50-14.95
			8 8 9	SPT-10 15.05-15.50
			7 6 8	DS-7 16.00
			7 6 8	SPT-11 16.50-16.95
18.00m			7 6 8	*UDS-6 17.50-17.95

BORE LOG DATA SHEET**BORE HOLE NO.68**Co-ordinates E=672450.448
N=2479546.324

Field Test	Nos	Samples	Nos	Commencement Date : 23/04/2024
Penetrometer (SPT)	18	Undisturbed (UDS)	8	Completion Date : 25/04/2024
Cone (Pc)		Penetrometer (SPT)	18	Bore Hole Diameter : 150 mm./N.X
Vane (V)		Disturbed (DS)	10	Level Of Ground : 304.311 M.
		Water Sample (WS)	0	Water Struck At :
				Standing Water Level : 12.30 m.
DESCRIPTION		SYMBOL	N-VALUE	
			EACH DIVN=15CM	
18.00m		6	8 7	15
Medium dense, yellowish brown, silty sand. Obs. kankars.		7	8 8	16
19.00m		7	10 11	21
Medium dense, yellowish brown, clayey silty sand. Obs. kankars.		7	10 18 28	46
22.50m		10 18 28	>100	
Hard, yellowish grey, silty clay with sand mixture & decomposed rock. Obs. kankars.		24 39 53	5.0cm Pentrn.	
25.00m		28 54	>100	
Highly to moderately weathered, yellowish grey, medium grained, fractured rock.		100	5.0cm Pentrn.	
32.50m			Refusal	
Moderately weathered, blackish grey, medium grained, fractured rock.			3.0cm Pentrn.	
35.00m			NX. drilling from 25.00m to 35.00m	
N.B. - '*' means sample could not be recovered.				
SAMPLES			Ref. No	
			Depth (m)	
18.05–18.50			SPT-12	
19.00			DS-8	
19.50–19.95			SPT-13	
20.50–20.95			*UDS-7	
21.05–21.50			SPT-14	
22.00			DS-9	
22.50–22.95			SPT-15	
23.50–23.60			*UDS-8	
23.80–24.15			SPT-16	
24.50			DS-10	
24.70–24.90			SPT-17	
25.00–25.03			*SPT-18	
25.00			R1	
CR=27% RQD=NIL			R2	
25.75			R3	
CR=33% RQD=17%			R4	
26.50			R5	
CR=39% RQD=NIL			R6	
27.25			R7	
CR=36% RQD=NIL			R8	
28.00			R9	
CR=36% RQD=NIL			R10	
28.75			R11	
CR=40% RQD=NIL			R12	
29.50			R13	
CR=49% RQD=NIL				
30.25				
CR=47% RQD=27%				
31.00				
CR=43% RQD=24%				
31.75				
CR=41% RQD=NIL				
32.50				
CR=43% RQD=NIL				
33.25				
CR=40% RQD=NIL				
34.00				
CR=50% RQD=15%				
35.00				