

RAJASTHAN METRO RAIL CORPORATION					ADDENDUM -04	
Name of Work: ICB:2C-04; Design and Construction of Elevated Viaduct and 12 Elevated Stations (including Architectural finishing) viz. Collectorate, Panipech, Ambabari, ChomuPuliya, Vidhya Nagar Sec-2, Vidhya Nagar, VKI Road No5, VKI Road No 9, VKI Road No. 14, Harmada, HarmadaGhati&Todi Modunder Jaipur Metro Phase- II MRTS						
Addendum- 04 Summary Sheet						
S. N.	Section / Part	Document Name	Page No.	Clause No. / Item No.	Addendum / Corrigendum	Remarks
1	Part- 1, Section 4B	Bidding Forms (Bill of Quantity)	Page No. 1	Bill of Quantities	The Summary to Bill of Quantity (1 Page), has been further revised and replaced.	Page -1 of Bill of Quantity (Page 107 of Part-1, previously revised under Addendum -03) has been further revised and replaced.
2.	Part- 1, Section 4B	Bidding Forms (Bill of Quantity)	Page No. 11 to 13	Bill of Quantities	Summary Sheet Schedule -C of Bill of Quantities have been modified.	Page No. 11 to 13 of Bill of Quantities (Page 117 to 119) of Part-1 have been revised and replaced.
3	PART-II, Section-6 Employer's Requirements	Employer's requirements: Functional	1R	Clause -2 SCOPE OF WORKS GENERAL	Clause -2 SCOPE OF WORKS GENERAL has been modified.	Page -1R of Revised Employer's requirements: Functional introduced vide Addendum -03 has been revised and replaced with Page -1RR.
4	PART-II, Section-6 Employer's Requirements	Employer's requirements: Functional	12R	2.1.4 Scope of Works for Metro cum Integrated Flyover (Double-Decker) structure	Sub clause xxxxxii to Clause 2.1.4 has been introduced to clarify the Scope Covered in Lump Sum Scope.	Page -12R of Revised Employer's requirements: Functional introduced vide Addendum -03 has been revised and replaced with Page -12RR.
5	PART-II, Section-6 Employer's Requirements	Employer's requirements: Functional	14R	2.1.5 NOTES FOR VIADUCT & STATIONS	Subclause 11(xiv) has been modified to clarify the payments to Barricading and Traffic Marshals.	Page -14R of Revised Employer's requirements: Functional introduced vide Addendum -03 has been revised and replaced with Page -14RR.
6	PART-II, Section-6 Employer's Requirements	Employer's requirements: APPENDIX	2R	APPENDIX 2A WORKS AREAS	APPENDIX 2A, WORKS AREAS has been further revised and replaced.	Page -2R of Employer's requirements: APPENDIX has been revised and replaced with 2RR.

7	PART-II, Section-6 Employer's Requirements	Employer's requirements: APPENDIX			APPENDIX -17: CENTRAL PROJECT OFFICE OF ENGINEER/EMPLOYER has been introduced.	APPENDIX -17: CENTRAL PROJECT OFFICE OF ENGINEER/EMPLOYER has been introduced as Page -77 to Page 81 of Employer's requirements: APPENDIX.
8	PART-II, Section-6: Outline Design Specification	Outline Design Specification, Chapter-2 for Viaduct	Page No. 3	Clause 5.2 PRESTRESSING STEEL FOR TENDONS	Clause 5.2 has been modified.	Page no. 3 of Outline Design Specification, Chapter-2 for Viaduct (Page No. 464 of Section 6-part 1 previously revised under Addendum -03) has been further revised & replaced.
9	PART-II, Section-6: Outline Design Specification	Outline Design Specification, Chapter-2 for Viaduct	Page No. 8	Clause 6.4.5 Centrifugal Forces Due to Curvature of Superstructure	Clause 6.4.5 has been modified.	Page no. 8 to 10 of Outline Design Specification, Chapter-2 for Viaduct (Page No 469 to 471 of Section 6-part 1) have been revised & replaced
10	PART-II, Section-6: Outline Design Specification	Outline Design Specification, Chapter-2 for Viaduct	Page No. 8 to 10	Clause 6.5 TEMPERATURE EFFECTS	Clause 6.5.1, 6.5.2 have been modified.	
11	PART-II, Section-6: Outline Design Specification	Outline Design Specification, Chapter-2 for Viaduct	Page No. 11	Clause 6.6 WIND LOAD (WL)	Clause 6.6 has been Modified to correct wind loading factor.	Page no. 11 of Outline Design Specification, Chapter-2 for Viaduct (Page No. 472 of Section 6-part 1, previously revised under Addendum -03) has been further revised & replaced
12	PART-II, Section-6: Outline Design Specification	Outline Design Specification, Chapter-2 for Viaduct	Page No. 27	Clause 12 DESIGN METHODOLOGY	"Clause 12.5 Reserve Structural Capacity in Viaduct Structures" has been introduced vide Addendum - 02 has been deleted.	Page no. 27 of Outline Design Specification, Chapter-2 for Viaduct (Page No. 488 of Section 6-part 1 previously revised under Addendum -03) has been further revised & replaced

13	PART-II, Section-6: Outline Design Specification	Outline Design Specification, Chapter-3 for Elevated stations	Page No. 10	Clause 2.7.5 WIND LOAD (WL)	Clause 2.7.5 has been Modified to correct wind loading factor. .	Page no. 10 of Outline Design Specification, Chapter-3 for Elevated stations (Page No. 499 of Section 6-part 1 previously revised under Addendum -03) has been further revised & replaced
14	PART-II, Section-6: Outline Design Specification	Outline Design Specification, Chapter-3 for Elevated stations	Page No. 16	Clause 2 DESIGN SPECIFICATION	Clause 2.13 Reserve Structural Capacity in Elevated Station has been introduced vide Addendum - 02 has been deleted.	Page no. 16 of Outline Design Specification, Chapter-3 for Elevated stations (Page No. 505 of Section 6-part 1 previously revised under Addendum -03) has been further revised & replaced
15	PART-II, Tender Drawings	Tender Drawings		Drawing with Title "Drawing List"	Drawing with Title "Drawing List" (R1) has been replaced with (R2)	Drawing with Title "Drawing List" (R1), revised vide Addendum -03 has been further revised and replaced with (R2)
16	PART-II, Tender Drawings	Tender Drawings		Alignment Drawing	Sheet No. 22 of 31 of Drawing No. VID-JMRC-STR-TD-0701-017 has been revised and replaced to show the L- Section of Chainage 39840 to Chainage 40540. Sheet No. 23 to 29 of 31 of Drawing No. VID-JMRC-STR-TD-0701-017 have been revised and replaced to show the L- Section of NHA I Underpass/Elevated Road.	Sheet No. 22 to 29 of 31 of Drawing No. VID-JMRC-STR-TD-0701-017 has been revised and replaced.
17	PART-II, Tender Drawings	Tender Drawings		'Types of Station'	Drawing/List at S.N. 26, for Types of Stations has been revised and replaced with R1.	Drawing/List at S.N. 26, for Types of Stations has been revised and replaced with R1.

18	PART-II, Tender Drawings	Tender Drawings		Type- 02 Station Drawings	Drawings at S.N. 32A has been introduced to include Tender Drawings of Type -02 Stations (6 Sheets).	Drawings at S.N. 32A has been introduced to include Tender Drawings of Type -02 Stations (6 Sheets).
19	PART-II, Section 6E	Geotechnical Investigation Report			Additional Geotech Investigation Reports have been included.	Additional Geotech Investigation Reports have been included.
20	Replies of Pre-Bid Queries.					

REVISED (R2)

“Contract ICB:2C-04; Design and Construction of Elevated Viaduct and 12 Elevated Stations (including Architectural finishing) viz. Collectorate, Panipech,Ambabari, Chomu Puliya, Vidhya Nagar Sec-2, Vidhya Nagar, VKI Road No 5, VKI Road No 9, VKI Road No. 14, Harmada, Harmada Ghati & Todi Mod under Jaipur Metro Phase- II MRTS”					
SUMMARY SHEET					
Item No	Description		Basic Amount (₹) (Excl. GST)	GST Amount (₹)	Amount (₹) (incl. GST)
1	Schedule -A				
1A	SCHEDULE - A1	Price of Lump-Sum Portion work for construction of Elevated Viaduct including special spans from Ch. 26240 to Ch. 35841.041 and 8 nos. of Elevated Stations viz Collectorate, Panipech,Ambabari, Chomu Puliya, Vidhya Nagar Sec-2, Vidhya Nagar, VKI Road No 5, VKI Road No 9 and Viaduct Superstructure works i.e. all works above pier level in Viaduct from Ch. 35841.041 to Ch. 40433 and above pier level works in 4 stations i.e. VKI Road No. 14, Harmada, Harmada Ghati & Todi Mod. (all concourse and platform level including Entry/Exit works of these 4 stations)	9,69,88,45,236.16	1,74,57,92,142.51	11,44,46,37,378.67
1B	SCHEDULE - A2	Price of Lump-Sum Portion work for Construction of 1st Level Six Lane Elevated Road including solid RAMP from CH: 37473.853 to CH: 40469.759, four lane underpass from CH: 35841.041 to CH: 36848.742 and Pier above Elevated Road, Underpass including Ramp upto superstructure from Ch.35841.041 to Ch. 40 433 and Pier above Elevated Road, Underpass including Ramp upto Concourse level at 4 stations i.e. VKI Road No. 14, Harmada, Harmada Ghati & Todi Mod.			
	A2(a)	Cost of Construction of Road Works, including propotionate cost in integated Strcutures (Foundation, Pile Cap and Pier)	3,98,30,50,847.46	71,69,49,152.54	4,70,00,00,000.00
	A2(b)	Cost of Construction of Metro Works, including propotionate cost in integated Strcutures (Foundation, Pile Cap and Pier)	1,13,71,01,694.92	20,46,78,305.08	1,34,17,87,000.00
	Total of Schedule -A2 (A2(a)+A2(b))		5,12,01,52,542.37	92,16,27,457.63	6,04,17,87,000.00
	Total of Schedule -A (A1+A2)		14,81,89,97,778.53	2,66,74,19,600.14	17,48,64,24,378.67
3	SCHEDULE-B	Miscellaneous Work like Tree Cutting/pruning/transplantation etc	8,47,45,762.71	1,52,54,237.29	10,00,00,000.00
4	SCHEDULE-C	NDSR Civil Items for PEB works	24,07,80,707.61	4,33,40,527.37	28,41,21,234.98
5	SCHEDULE-D	Utility Diversion for Civil & Miscellaneous works	42,37,28,813.56	7,62,71,186.44	50,00,00,000.00
6	SCHEDULE-E	Any other DSR items (Civil and Horticulture)	25,84,74,576	4,65,25,423.73	30,50,00,000.00
7	SCHEDULE-F	Architectural Finishing works	57,80,11,066.72	10,40,43,319.63	68,20,54,386.35
Grand Total			16,40,47,38,705.40	2,95,28,52,966.97	19,35,76,00,000.00

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SCHEDULE-C (NDSR Civil Items for PEB works)					
S. No	Description of Item	Unit	Rate (₹)	Qty.	Amount (₹)
	SCHEDULE-C (PEB works for Station under NDSR Items)				
	Station works				
1	Designing, providing, fabricating, painting, transporting, erecting and securing in position prefabricated structural steel PEB Envelope & façade system for Elevated station buildings complete as per specifications, approved shop drawings and / or instructions. Work under this item would generally cover all structural steel works for PEB Envelope & Façade system in the stations, including roof portals, Purlins, Girts/runners, Façade sub-frame, gutters,OHE,RC,OPC,Cable Brackets arrangements including covering with MS sheet, lightning arrangement as per system agency requirement etc. in the station steel roof structure (but excluding down take pipes (installation only included) and sheeting on roof as per specification) along with provision for attachment and support for all fixing E&M, OHE and Signalling / Telecommunication equipment, solar panels in the station steel roof structure and entry/exit. The purlin, Girts/Runner, Façade Sub-frame spacing to be as per the approved Sheeting manufacturer’s, Façade panel manufacturer’s technical specifications & detail design drawings. The rate shall include the cost of painting as per approved technical specification (The rate shall also include required surface preparation like sand blasting, application of one coat of Zinc Silicate (DFT 75µm) and epoxy Zinc Phosphate (DFT 35µm) primer and one coat of Epoxy Zinc Phosphate (DFT 35µm) paint Epoxy high build micaceous iron oxide coating polyamide cured DFT-90µm and two coats of Acrylic polyurethane finish aliphatic isocyanate cured DFT-30µm as per technical specifications)				
1.1	Roof for platforms station for Eleven Twelve station	SQM	6,150.11	33,600.00	20,66,43,566.23
	Stage Payment		-	-	
i	Procurement & Testing of steel quantities on receipt in fabrication workshop against documentary evidence of purchase from approved supplier subject to a minimum of quantities as indicated in approved fabrication drawing & also as indicateble in schedule. (40% of BOQ Item rate)		-	-	
ii	On completion of fabrication of steel work quantities and testing of fabricated members including painting as per specification and its approval by Engineer Incharge.(25% of BOQ Item rate)		-	-	
iii	On transportation & receipt of fabricated material in good condition at site , approval of engineer incharge regardng physical receipt of fabricated material in good condition.(10 % of BOQ Item rate)		-	-	
iv	Erection of roof portals, purlins,gutters & provision for fixing of OHE & Signalling/ Telecommunication equipments in the stations steel roof structure steel building at designated site locations in all respect by the contractor & aligning them in proper position over the respective supports and its approval by the Engineer In-charge. (20 % of BOQ Item rate)		-	-	
v	Final alignment of roof Portal, purlin , Gutter, raceway provision for other fixtures & Painting in all respect by the contractor and approval by the Engineer In-charge(5 % of BOQ Item rate)		-	-	
	NOTE:1) Providing, fabricating and supplying Hot - Dip Galvanized Holding down bolts including all assemblles and accessories that are required to be embedded in concrete work by other agencies are included in the rate quoted by the tenderer In item nos, 1.0, Bolts shall be of sufficient length to ensure that a minimum 40mm length of threaded portion is threaded embedded in concrete. Threaded portion to be left projecting outside the concrete surface shall be as per requirment of supplier's design and approved drawings.		-	-	
	2) Cost of fabricated, assembled and supplied bolts shall Include all necessary expenses Incurred, Including costs of all washers, nuts, lock nuts and pins that may be required for securing the structural member with the embedded bolts.		-	-	
	3)Work of actual fastening of the structural components with the embedded bolts shall have to be carried out by the tenderer of the steel structure. However the foundation bolts shall be Installed in foundation by civil contractor for construction of Elevated Stations.		-	-	
	4)Tenderer's quoted rate for the Item shell Include cost of executing the work for bolts of all diameters end lengths.		-	-	
2	Sheeting works		-	-	

SCHEDULE-C
(NDSR Civil Items for PEB works)

S. No	Description of Item	Unit	Rate (₹)	Qty.	Amount (₹)
2.1	Providing, bending to required curved profile and fixing single skin Clip lock concealed system Profiled Sheeting 500-770 mm cover width, 43 rnm crests @ 188-333 mm do manufactured out 0.45 mm BMT (base metal thickness) Hi-tensile Zincalume/Gaivalume Steel. The sheets shall have wide peris with stiffening ribs for effective water shedding & strength. Special male/female ends With full return legs on side laps for Puriln supports and antl-capillary flute in side lap „The sheets shall have hot-dipped metallic Zlnc-Aluminium alloy coaling (150 gms l eqm, Zinc 45%, Aluminium 65%). Coating mess total on both aides AZ-150 or equivalent' as per AS 1397-1993 Minimum 550 Mpa yield strength with Super durable Polyester XRWI SMP quality paint coat of approved colour. Coating shall be es per AS/NZS-2725-1997, Category 3-4 Total Coating thickness of 35 mlcront, comprising of 20 microns exterior of Super Durable Polyester XRW/ SMP on top surface and 5 micron polyester reverse on baCk surface over 5 micmin'pr(Ter coats on both surfaces Including side and end laps.		-	-	
	The Sheets shall be fixed using approved continious clip KL-70 or equivalent manufaured from HI-tensile Zincalume / Galvalume steel base and galvanised hooks as approved by Engineer- In- Charge, The clip shall be fastened by polymer coated hot dip galvanized hex head self drilling fasteners as per AS 3568 class 3 with EPDM washers on each crest of sheets for connection with Purlins and polymer coated hot clipped stitching fasteners @ regular Interval on all sides and end laps,		-	-	
	Measurement shall be based on per unit of finished / laid surface area. Item to include curved sheets also wherever required. Approved sealing tapes shall be used on side laps and end laps of sheets end closers to be provided at the last end of sheets. The Contractor shall give a minimum 20 year guarantee for sheets against deterioration, disintegration loss of lusture, variation In colour etc. and leakages across laps, fasteners etc. All types of steel sheets shall be load tested to safely carry 110 times the design wind loads and coating thickness to the satisfaction of the Engineer-in-charge. Fasteners shall also be load tested. The Contractor is to submit design end shop drawing.		-	-	
2.1.1	As per item 2 for roof sheeting / side cladding including for flashing etc In complete for paltform	SQM	1,056.55	31,752.00	3,35,47,561.52
3.0	MULTI LAYERED TRANSLUCENT FACADE SYSTEM:Providing and Fixing of Multi cell Polycarbonate Panels 12mm thick with 3 cells - 4 walls. Panel Width shall be 600 – 900 mm to ensure best performance for wind uplift. The panels shall be uniform in color with an integral Multi-Cell core. In a cross section, the core shall be constructed of Microcell of max 4.5mm x4.5 mm and soft light DG both side . The appearance should be either rectangular or honeycomb like to give highest resistance to impact and hail damage . The weight of the panel only shall not be less than 1550 gram per square meter. panel should have co-extruded UV protection with U value 2.4 W/M2.K and UV transmission less than 0.1% with UV filtration test AS No.1067- 1990 . Panel and system should have impact and shock resistance with D1-10j -M 50 ,300 J -M 50 400 J . Polycarbonate panels also shall have Yellowness Index as per ASTM D 1925 and sample exposed to UV for minimum 2000 Hrs . Panel should have fire test – Bs1do . Panels having Vertical Standing Seam 15mm on both sides, snap-on connector to interlock the panels . Panels shall have a grip-lock 2 tooth locking mechanism to ensure maximum uplift capability. Panels shall be fixed on structure with Expansion fastener, with aluminum connector on top of U/2 polycarbonate connector to give Impact strength and seamless façade. Panels shall be manufactured with approved quality assurance as per ISO 9001 & ISO 14001 .The panels shall be fixed over structural steel / MS framework (paid separately) and be secured with Snap-On connectors at all levels including all accessories like screws, trims & end caps etc. complete to make a water- tight screen system conforming to specifications and directions of Engineer-in-Charge. Measurement shall be based on per unit of finished / laid surface area. Item to include curved sheets also wherever required. Approved sealing tapes shall be used on side laps and end laps of sheets and closers to be provided at the last end of sheets. The Contractor shall give a minimum 20 year guarantee for sheets against deterioration, disintegration loss of lusture, variation in colour etc. and leakages across laps, fasteners etc. All types of steel sheets shall be load tested to safely carry 110 times the design wind loads and coating thickness to the satisfaction of the Engineer-in-charge. Fasteners shall also be load tested_ The Contractor is to submit design and shop drawing	sqm	2,667.05	3,528.00	94,09,346.08

SCHEDULE-C (NDSR Civil Items for PEB works)					
S. No	Description of Item	Unit	Rate (₹)	Qty.	Amount (₹)
4	Providing, fabricating to required profile and shape, transporting, erecting and fixing in position Structural steel (conforming to IS:2062 Grade B0 or equivalent) including procurement of all raw steel materials, bolts, nuts & washer incl. its testing, allowance for all types of wastages, straightening, cutting, bending of section wherever specified, drilling holes, bolting, provision of necessary tools, testing etc. The rate shall also include required surface preparation for application of all coats of shop and site primers and paints as specified. The rate Shall also include preparation of complete detailed fabrication drawings base on the design drawings, required for all permanent and temporary structures and their approval from Engineer - in - charge prior to execution. The rate shall also include provision and installation of base plate, anchor bolts (measured in tonnes) etc as per drawings and specifications. The rate shall aslo includes supporting structure required for flashing. Any temporary support, Staging braces, strutting, tying or anchor bolt, black bolts, fasteners, welding required to withstand the stresses of erection and carrying of plant and equipment's are to be included in the rate.		-	-	
4.1	As per above item for entry/exit structures and FOBs or any additional structural connections and for signage's, Steel framing for support of facade finishing, MS Gates, Lift Structure or required by the system contractors using standard plate sections welded & built-up sections, tubes, square, rectangular pipe section, rolled sections such as angle, channels etc.	MT	1,45,458.14	<u>120.00</u>	<u>1,74,54,976.43</u>
5	Drainage Work.				
5.1	Rain Water Drainage Pipe				
	Providing, fabricating and fixing rain water drainage pipe from gutter at roof level to gutter at platform and from staircase roof to local drain in proper line and level.				
5.1.1	GI pipe 200 mm	RMT	2,757.09	<u>672.00</u>	<u>18,52,765.08</u>
5.1.2	GI pipe 150 mm	RMT	1,498.52	<u>3,816.00</u>	<u>57,18,369.08</u>
5.1.3	GI pipe 100 mm	RMT	999.02	<u>9,504.00</u>	<u>94,94,650.55</u>
	Total Amount of Schedule-C (₹)				28,41,21,234.98

EMPLOYER'S REQUIREMENTS – FUNCTIONAL (REVISED)**OBJECTIVE**

The objective of the contract is the design, construction, completion, testing and commissioning of the permanent works by the Contractor (including without limitation, the design, construction and removal of the Temporary Works) and the rectification of defects appearing in Permanent Works in the manner and to the standards and within the time stipulated by the Contract. In full recognition of this objective and with full acceptance of the obligations, liabilities and risks which may be involved, the Contractor shall undertake the execution of the Works.

1. GENERAL

- 1.1 The design and performance of the Permanent Works shall comply with the specific core requirements contained in these Employer's Requirements -Functional.
- 1.2 The design of the Permanent Works shall be developed in accordance with these Employer's Requirements - Functional, the Contractor's Technical Proposals and the other requirements of the Contract.
- 1.3 The Permanent Works shall be designed and constructed to the highest standards available using proven up-to-date good engineering practices. The Specification shall in any case not specify standards which, in the Engineer's opinion, are less than or inferior to those described in the Outline Design Specifications of RMRC (Design Criteria) {hereinafter mentioned as Outline Design Specifications (ODS)} and Outline Construction Specifications of RMRC {hereinafter mentioned as Outline Construction Specifications (OCS)} contained in the bid Documents. Construction shall be carried out employing the procedures established by the Contractor in his Quality, Safety Health and Environmental management plans.
- 1.4 The Contractor shall be responsible for obtaining all necessary approvals from the relevant Public/Government/Local/Statutory or any agencies in the design and construction of the works.

2. SCOPE OF WORKS**GENERAL**

Scope of work which relates to “**Contract ICB:2C-04; Design and Construction of Elevated Viaduct and 12 Elevated Stations (including Architectural finishing) viz. Collectorate, Panipech, Ambabari, Chomu Puliya, Vidhya Nagar Sec-2, Vidhya Nagar, VKI Road No 5, VKI Road No 9, VKI Road No. 14, Harmada, Harmada Ghati & Todi Mod under Jaipur Metro Phase- II MRTS**”

The work also include Design and Construction of Metro cum Integrated Flyover (Double-Decker) structure: Design and construction of 1st Level Six Lane Elevated Road including solid RAMP CH: 37473.853 to CH: 40469.759 ensuring a minimum statutory vertical clearance of 5.5 metres to the Metro/ Elevated Road, four lane underpass from CH: 35841.041 to CH: 36848.742 and Pier above Elevated Road including all structures above pier level in the viaduct and above concourse-pier level in the stations, in accordance with the Tender Drawings & in co-ordination with NHAI.

The work also includes construction of Depot Entry/Exit Line up to Todi Mod Depot, as shown in the General Alignment Drawings.

2.1 SCOPE UNDER LUMP SUM PRICE

The scope of work in brief is given below but the scope includes all other requirements stipulated in various parts/volumes of the contract document including appendices and annexure thereto. Entire scope of work for Viaduct section including Viaduct in stations, elevated ramp (Ch. 26240.000m to Ch.40434.317m), special spans, all structural works of stations & Entry exit with connection to stations and Metro Cum Integrated Flyover and Underpass as shown in General Alignment & Arrangement Drawing (GAD), bid drawings shall be included in Lump Sum price (Schedule A of BOQ) except those items which have been included in the Schedule B to F.

The Scope of work listed at clause 2.1.1 to 2.1.5, 2.2 to 2.9 and 3 to 15, unless otherwise specified, is included in lump sum price i.e. Schedule A of BOQ.

elevated section and over the road section between the underpass and the elevated approaches.

- xxxxvi. The Contractor while widening of road and construction of Service road in entire stretch design the covered stormwater drain and demolish /modify and/or reconstruct covered drain as per the approved alignment, drawings, and specifications
- xxxxvii. The Contractor shall submit and take the approval of competent authorities the Traffic management plan before execution of work.
- xxxxviii. The Contractor shall provide and install street lighting facilities for the underpass, approaches, at-grade sections, service road and areas beneath the elevated structure as per applicable standards, and specifications and tender drawings
- xxxxix. The Contractor shall provide the median plantation beneath the double-deck elevated section as per applicable standards.
- xxxxx. All major and minor Road junctions are to be maintained and restored as per applicable codes and in coordination with NHAI.
- xxxxxi. The scope of works defined above for Metro cum Integrated Flyover (Double-Decker) structure/ Underpass/ Overpass shall be read, constructed and designed in conjunction with **Technical Schedules A, B, C & D . attached with Employer's Requirement (Functional).**

xxxxxii. The approaches to underpass should be suitably covered as provided in Technical Schedules with the approval of Engineer and the Proper arrangement for Water drainage from the Underpass shall be suitably designed and provided by the Contractor with the approval of Engineer. Cost of these items are included in lump sum cost quoted.

2.1.5 NOTES FOR VIADUCT & STATIONS

- 1) Pile foundation shall be of minimum of 1000mm dia with or without permanent liners with hydraulic rotary piling rigs.
- 2) Earth filling of pile cap area falling off the road to be done with proper compaction with Contractor's own good earth wherever required. For the area falling on the road, backfilling shall be done with sand as per Outline Construction Specifications (OCS).
- 3) It is obligatory for the contractor to provide a single pier structure in the viaduct of minimum dia 1.80 M and the dimensions of station pier across the alignment shall not be more than 2.20 M.
- 4) Contractor has to maintain a minimum vertical clearance of 5.5m from road surface to bottom of any structure.
- 5) The location of piers has been shown in GAD. However, if there is a need for change in location of any pier, it should be decided in such a way that they do not disturb the road geometry and also should not obstruct the traffic flow for which the decision of Employer/Engineer shall be final. The accuracy of alignment and interface with adjoining contractor shall be responsibility of the contractor.
- 6) Upstand at expansion joint for viaduct shall have to be casted in casting yard only to have monolithic construction to avoid seepage at expansion joint. Similarly, any proposed girders to be used in station must have slope to drain water as shown in bid drawing.
- 7) There is possibility of some of the items not getting mentioned in the above list of works of viaduct/stations. Contractors are requested to go through the bid drawings also in details as the works mentioned at clause 2.1.1 & 2.1.2 above as well as indicated in the bid drawings would be considered inclusive in the scope of work under lump sum quoted price. Employer decision shall be final in this regard in case of dispute.
- 8) The contractor shall have to conduct the investigation of the utilities before execution of the work independently. Some of the major utilities cannot be diverted. Contractor shall take into consideration the existence of these utilities and design the foundations at these locations accordingly, if required, the pile cap top level shall be fixed at the bottom of the utilities without any extra cost. This is included in lump sum price. No payment shall however be made for supporting the utilities during course of work.
- 9) The shifting of the utility(s) would be undertaken only in exceptional circumstances where in the opinion of the Employer no other option is available. The utilities are to be diverted with proper liaising and approval of the utility owning agencies and will be paid under BoQ items of relevant Schedule. For the utilities which are not to be diverted, proper supporting shall be done to prevent any damage. No payment shall however be made for supporting and protecting the utilities during execution of the work. Cost of such utility shifting (i.e. permanent diversion) unless otherwise specified will be paid separately under relevant item of BOQ. No claim on account of delay in execution of utility diversion will be entertained. All temporary diversion of any utilities done to facilitate the construction activity shall be the part of the lump sum price.

- (xiii) The contractor shall have to provide barricading board as per the specification as provided in bid drawing at all the land to be used for Construction Depot, store, site office & casting yard. The total working space within the barricading along the viaduct shall not be more than 9m. Requirements of Safety, Health & Environment as specified in condition of contract on SHE of RMRC.
- (xiv) The contractor shall provide & maintain barricading as per the drawing provided in the bid drawing at the locations where road vehicles / pedestrians are moving, along the Viaduct / Stations / Construction sites as directed by Engineer. The payment of the same is included in lump sum head. ~~The payment of the same shall be made as per the relevant items of Schedule 'B' and the rates of~~ this item includes shifting and maintaining barricading at new location during the currency of the project. Illumination of these barricades/ areas including adjacent road along barricade and providing suitable number of Traffic marshals to guide the road users and to avoid traffic congestion around the clock as per approved diversion plan & instructions of the engineer is included in the lump sum price. is included in the lump sum price.
- (xv) Results of the sub surface investigations conducted at the project site are enclosed with the bid document. The information about the soil and sub soil water conditions is being made available to the contractor in good faith and the contractor is advised to obtain results independently as may be considered necessary by him before quoting rates in the bid. Provisions made in Outline Design Specifications of RMRC will prevail in case of difference in results of two reports. No claims whatsoever on account of any discrepancy between the sub surface conditions that may be actually encountered at the time of execution of work and those given in these bid documents shall be admissible to the contractor under any circumstances.
- (xvi) **Road Construction / Maintenance / Reinstatement to the original position**
- a. Maintaining roads & Footpaths within the barricades **(Viaduct & station area):** -
Maintaining roads, road signage's, central verge, drainage, Footpaths and any other services within the barricade is in the scope of lump sum part of contract till contract period / handing over to the owning agencies. Reinstatement of roads, road signage's, central verge, drainage, Footpaths and any other services to the original shape/ position is also included in lump sum scope of work. Final wearing course of road within barricading area i.e. area affected by construction to be done before handing over to road owning agencies is also included in lump sum price of Schedule 'A'..
 - b. Maintenance of roads, road signage's, central verge, drainage, Footpaths and any other services outside the barricaded area: -
Maintenance of road signage's, central verge, drainage, Footpaths and any other services outside the barricaded area for entire road width during contract period / handing over to road owning agencies is in scope of contract. Maintenance of roads outside the barricade area shall be paid under relevant head of BOQ.
 - c. Road and footpath outside barricade- Diversion / Widening: -
Construction of road diversion, footpath, widening & laying of drainage lines if required to facilitate traffic movement / diversions as directed by Engineer in Charge. The expenditure incurred for construction of road diversion / widening will be paid to contractor under relevant head of BOQ.
Maintenance of the constructed diversion, footpath during the contract period / up to handing over to road owning agencies shall be responsibility of contractor. Contractor has to maintain diverted road /widened road and footpath free of cost during contract period/ handing over to road owning agencies. No separate maintenance charges will be payable.
Contractor has to maintain a minimum clearance of 5.5 m from road surface to bottom of structure. Any earth work, subgrade work, levelling or other such works for facilitating the movement of the vehicles/ trailers crane positioning etc. is included in the lump sum price.
- (xvii) The construction work shall include loading, unloading and transportation of precast elements and other materials with all lead and lift and erection/launching with cranes/launchers of appropriate capacity.
- (xviii) Any other item of work as may be required to be carried out for completing the construction of elevated structure of specified length including all necessary interfaces works with station and system-wide Contractors in all respects in accordance with the provisions of the Contract and/or to ensure the structural stability and safety during and after construction Works to be performed shall also include all general works, preparatory works of any kind necessary for satisfactory construction, completion and maintenance of the works to the intent and meaning of the drawings adopted and Outline Construction specifications (OCS), to best Engineering standards and orders that may be issued by the Engineer from time to time, compliance

EMPLOYER'S REQUIREMENTS**APPENDIX 2A****WORKS AREAS**

The employer will provide the work areas of ~~upto 10-25~~ Approx. 20 hectares within 20 Km radius of work site (in maximum One/Two/Three parts) on as is where is basis as per availability for construction of precast elements of viaduct & stations & Elevated Road & stacking Depot. All the work areas (land for Batching Plant & site office) are to be handed over back to the Employer within 2 months from the date of issue of Take over Certificate.

EMPLOYER'S REQUIREMENTS**APPENDIX 17****CENTRAL PROJECT OFFICE OF ENGINEER/EMPLOYER**

1. In addition to site offices mentioned in Appendix -16, The Contractor under Lump-Sum Cost of Work will construct/provide a Central Project Office at Land/Space Provided by the Employer.
2. The contractor shall prioritize the construction of the Central Project Office and complete it within a maximum of 6 months from the date the land/space is made available, or as per the timeline specified by the Engineer.
3. In the interim, the contractor shall provide an alternative/rented office with full-scale facilities within 4 weeks of the award, subject to prior approval by the Engineer. All costs for the alternative/rented office shall be borne by the contractor.
4. Land for the construction of the Central Project Office will be provided to the contractor by the Employer. In case the land is not made available, the Engineer will continue to operate from the alternative/rented office space provided by the contractor, and all associated charges will be borne by the contractor.
5. If the contractor fails to provide the alternative/rented office or complete the Central Project Office within the specified timeline, the Employer may arrange for its construction or hire alternative office space at its discretion. All costs incurred by the Employer in such case, plus 15% incidental charges and any additional administrative or supervision charges, shall be recovered from the contractor. Contractor shall submit the Central Project Office plan to the Engineer for approval, including the material specification & make of equipments/ appliances to be used in the office. Contractor shall start purchase/ construction of any material etc. only after receiving approval from the employer.
6. The contractor shall be responsible for the maintenance and upkeep of all office Spaces until the completion of the Defect Liability Period (including any time extensions, if applicable).
7. Upon completion of the defect liability period, the Contractor shall handover the Central Project Office to the Employer in good condition, meeting the Employer's satisfaction (including any time extensions, if applicable in case it is constructed on the land provided by the Employer).
8. The central project office should be located near the employer's main office to the extent possible and provide following rooms and corresponding areas of approx. Size as below:

Table-A

S.No	Principal Site Office	Space Requirement			Remarks
		Total no.	Unit Area per Staff (Sq.m)	Total Area Required (Sq.M)	
1	Project Director or HoD	1	30	30	Room + Toilet with high end accessories + Rest Room
2	Visiting HOD	0	20	0	Room
3	Chief Resident Engineer (CRE)	6	15	90	Room
4	Visiting Dy.HoDs	1	15	15	Room
5	Resident Engineer	23	10	230	Room

6	Visiting Resident Engineer	2	10	20	Work Station
7	JE	4	6	24	Work Station
8	Architect Assistant	1	6	6	Work Station
9	Survey Expert/Surveyor	2	6	12	Work Station
10	Safety & Environment Engineer	1	6	6	Work Station
11	Office Manager	1	6	6	Work Station
12	BIM-cum-AutoCAD Operator	1	6	6	Room
13	Personal Assistant	3	6	18	Work Station
14	Driver's Rest Room	1	8	8	Room
15	Meeting Room (Large)	1	50	50	Room
16	Drawing Storage	3	10	30	Room
17	File & Document Storage	3	10	30	Room
18	Toilets with Changing Room	1	10	10	Room
19	Mess room	1	40	40	Room
20	Pantry	1	8	8	Room
21	Misc. Space			61	

9. Materials used for the construction of the offices shall be new and of good quality Materials shall be chosen such that the buildings when erected shall give good heat and sound insulation, and when combined with the heating and air condition equipment installed by the Contractor will enable interior temperatures to be maintained at within a range of 20-24 deg. C. at all times.
10. Windows to each room shall be of an area not less than 10% of the floor area. API windows to ground floor offices shall be fitted with burglar bars firmly attached to the structure of the building. All windows shall be fitted with mosquito netting. All opening windows shall be fitted with locks and all sets of keys shall be delivered to the Engineer. All windows shall be fitted with Venetian blinds.
11. External doors shall have barrel bolts both at top and bottom of one leaf and a Yale lock on the other leaf. External doors shall be of solid external quality and hung with heavy-duty hinges.
12. All building shall be supplied with continuous (24 hour) running potable cold water to the kitchens and wash rooms. The toilets may use raw water for flushing, shall be equipped with water closets and sitting type stools and shall be adequately ventilated through the ceiling. The Contractor shall also arrange for the constant and hygienic disposal of all effluent, sewage and rubbish from the buildings. Storage tanks will be required due to restricted hours of water supply in the Jaipur Area.
13. All buildings shall be supplied with electricity at 240voltage and 50 Hz shall be distributed to each room in accordance with the Regulations. Lighting and electrical power points shall be provided in each room. The disposition and location of light and power points will be as directed by the Engineer. A backup generator is required to be provided to meet the full power load in case of power disruption.
14. Pantry shall be provided with worktops, a 2-drainer stainless steel double sink, cupboards beneath the worktop and mounted on the walls, a cooker with 2 no. 2 gas rings and a microwave

oven, refrigerator & Coffee making facilities for 25 persons shall be provided. Tiling shall be provided to the walls above the sink, cooker and worktops.

15. The Contractor shall provide, erect and maintain appropriate name boards as specified for each of the offices. The wording on each name board and its location shall be agreed by the Engineer before it is erected.
16. The Contractor shall provide and maintain 15 new desktop computers along with 10 black and white laser printers for use of secretaries, JE's, Architects and other supervisors.
17. The furniture provided shall be of good make, as agreed upon by the engineer.
18. The Contractor shall provide and maintain 1 Xerox machines, 1 Plotter, 3 color network printers cum photocopy machine of A-3 size along with photocopy machine operator.
19. Drawing Storage, File & Document Storage rooms shall be provided with storage racks, cupboards etc, as per the satisfaction of Engineer.
20. All rooms & workstations mentioned shall be provided with sufficient cupboards, chairs, lighting arrangement etc.
21. Contractor shall ensure the availabilities of 07 Nos. of Personal assistants for CRE and above , 01 Bim-cum-Cad operator within one month of date of commencement to till six months beyond the date of completion of project for the office of Engineer.
22. Contractor shall ensure high speed Wi-fi for all the offices i.e. Central Project Office, site offices.
23. The contractor shall be responsible to bear all office and site miscellaneous expense admissible to Engineer upto the completion of Defect Liability Period (including time extensions, if any) without any Cost to Employer.
24. The Contractor shall supply the following new furniture and equipment to the Engineer's offices in the manner required by the Engineer:

- Conference table (2400 x 900)	01 Set
- Conference chairs	30 Nos
- Communication Facility	As per requirement

Other office stationary (Consumables to be resupplied, when required)

- Waste paper baskets	40 Nos
- 4-hole document punches	02 Nos
- Desk mounted pencil sharpeners	20 Nos
- Desk tray sets	40 Nos
- Plan meter set	02 Nos
- 5L kettles	02 Nos
- 2L kettles	04 Nos
- Potable water dispenser with hot/cold	
Caps and paper/plastic cups	06 Nos
- Cups and saucers	80 Nos

- Side plates	80 Nos
- 15-piece dinner Service	01 Set
- 15 Piece cutlery service	01 Set
- Fire extinguisher	4 Nos
- Office Boy	10 Nos
- Messenger	03 Nos
- Security Guards	06 Nos

Note:

1. The above facilities shall be provided and maintained by the contractor for the entire duration of contract (including any time extensions) and the Defect liability period. If the contractor fails to provide the same, Employer shall arrange the above-mentioned facilities on his own and the cost incurred shall be deducted from contractor's bills along with an expense of 15 percent over and above the cost incurred.
2. The detailed services requirement under the tender includes the following: -
3. Maintenance of office includes providing plumber, mason and electrician etc. as and when required, Providing and installation of defected items, without any extra cost. Refurbishment of consumables
4. The contractor shall be responsible for management of the manpower supplied by him including arranging timely arrival at duty place, punctuality, payments to the manpower in compliance with statutory requirements and other terms & conditions of the contract.
5. **All above facilities, services, equipments etc. including construction, operation and maintenance of office is included in the lumpsum portion of cost of this contract. Nothing extra shall be paid on this account.**
6. 4 LEDs Television (3 nos. 55 inch TV ,1no. 75 inch TVs) of acceptable brand shall be provided by the contractor to the Engineer for the central project office, under the lumpsum contract cost.
7. Furniture for rooms shall be as per direction of the Engineer. Details of common Furniture for reference is given below for reference (The nos. are tentative, the actual required number and model as per approval of Engineer are to be provided:

S.no.	Type of Furniture	Model	Photograph	Nos.	Remarks
1	Self-Chair	ACE High Back with Headrest		As per requirement	
2	Table	Aristo Table 1800 LH RU 1200 PDL Size 1800 x 2100 x 750 with ERU		As per requirement	
3	Visitor Chair	ACE Mid Back or ACE visitor		As per requirement	
					
4	Storage	HDU with legs HDU 922x1190 IND WT size- 922x1200x460		As per requirement	
5	Sofa	Pisa – 3 Seater Sofa Or Pisa – 2 Seater Sofa		6	Visitors and office
6	Centre Table	Pisa Centre table Or Osaka Small coffee table			
	Self-Chair	Premier Visitor with Arm		1	Messroom
				45	Workstation
8	Table	Wish Work Station Recta (1.2 m height) with Pedestal, KBPT, CPU Trolley of Size 1200 x 600		45	Workstation
9	Participant Chair	Premier		20	Conference chairs
10	Participant Chair	Premier Visitor with Arms		10	Conference chairs
11	Mingle Modular Conference Table	Mingle Modular PLT_2 STR Main PT Size-1350 X 600 X740		1	Conference table
		Mingle Modular PLT_1 Str Shared ST Size-675 X 600 X740			
		Mingle Modular PLT 1800W ST Size-1800 X 850 X 740			

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II. Grade of Concrete & Cover

Minimum grade of concrete should be as per clause-5.4.4 of IRS-CBC. For exposure condition referred in Clause-5.4.1 of IRS-CBC. The cover should be as per clause 15.9.2 of IRS-CBC.

In case of foundation, cover shall be taken as 75mm for all conditions of exposure.

III. Cement

As per Clause 4.1 of IRS-CBC.

The minimum cementitious material content shall be as per clause-5.4.5 & Table-4 (c) of IRS-CBC.

The maximum water-cement ratio shall be as per clause 5.4.3 & Table-4(a) of IRS-CBC. The total chloride content by weight of cement shall be as per Clause 5.4.6 of IRS-CBC.

IV. Density

Density of concrete shall be 25 kN/m³ for PSC and RCC, ~~24~~ 25 kN/m³ for Plain cement concrete and 26 kN/ m³ for Wet concrete.

V. Poisson's Ratio

Poisson's ratio for all grades of concrete shall be 0.15.

VI. Thermal Expansion Coefficient

Coefficient of thermal expansion (a) has been considered as 11.7 x10⁻⁶ °C in accordance with Clause-2.6.2 of IRS-Bridge Rules.

VII. Time-Dependent Characteristics of Materials

- i) Long-term losses should be calculated in accordance with Clause-16.8.2 of IRS- CBC.
- ii) The design shall be done according to construction sequence to be adopted in site.

5.2 PRESTRESSING STEEL FOR TENDONS

Prestressing steel shall be as per clause 4.6 of IRS-CBC. Characteristic strength of prestressing tendons shall be as per clause 16.2.4.3 of IRS-CBC.

- i) **Prestressing Units** (as per Table-2, ~~Class-II~~ Strand Designation 15.2 -1860-P of IS 14268)

~~All Prestressing steel units shall be of 0.6" strands type (Nominal diameter =15.2mm, Area=140 mm²)~~ should be diameter 15.2 mm of C/S area 139 mm².

- ii) **Breaking Strength & Breaking Stress** (as per Table-~~1~~ 2, ~~Class-II~~ of IS 14268)

Breaking strength of strand	= 260.7 <u>259</u> kN
0.2% Proof Load	= 234.6 <u>228</u> kN
0.1% proof Load (85% of UTS)	= 221.6 <u>220.15</u> kN
Minimum breaking stress	= 1860 MPa

will not be critical for any design except the parapet. The parapet will be designed for this loading.

6.4.4 Longitudinal Force

Braking load is taken as 18% of the unfactored Axle load.

Traction load is taken as 20% of the unfactored Axle load.

Since both the tracks are supported by a single girder, hence tractive force of one track and braking force of another track will be taken in the same direction to produce worst condition of loading.

As per Clause-2.8.5 of IRS-Bridge Rules, in transverse / longitudinal seismic condition, only 50% of gross tractive effort/braking force will be considered.

Dispersion of longitudinal forces is not allowed as per Clause-2.8.3.4 of IRS Bridge Rules except during checking of Rail stress.

6.4.5 Centrifugal Forces Due to Curvature of Superstructure

The horizontal centrifugal force due to moving load in curved superstructure is to be considered as per clause 2.5 of IRS: BR.

$$C = \frac{W v^2}{127 R}$$

Where W is Live load reaction & C is Centrifugal force (unit of C & W shall be same), v is maximum design speed in km/h and R is radius of curvature in m. This force is assumed to act at a height of 1.830 m above rail top level on safer side.

Design Speed of Live load of ~~95~~ **90** km/h will be considered for computation of centrifugal force for curvature up to 450m radius. For sharper curves, speed restrictions as per SOD shall be followed.

6.4.6 Racking Force

The horizontal transverse loading due to racking specified in IRS-Bridge Rules Clause-2.9 is applicable to design of lateral bracing.

6.5 TEMPERATURE EFFECTS

6.5.1 A) Overall Temperature (OT)

The loads shall be considered as per Clause-2.6 of IRS-Bridge Rules and Clause-215 of IRC:

~~6. Temperature variation of $\pm 36^\circ\text{C}$ will be considered details of which are given below~~

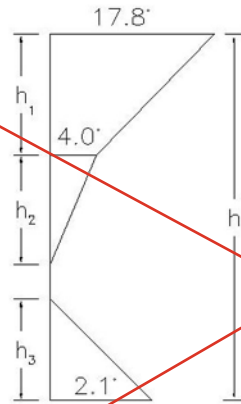
Maximum Temperature considered as per Annex. F of IRC 6: $+49^\circ\text{C}$

Minimum Temperature considered as per Annex. F of IRC 6: -2.2°C

~~Temperature variation as per clause 215.2 of IRC 6 will be $-(49 - (-2.2))/2 + 10 = \pm 35.6^\circ\text{C}$ say~~
 36°C .

B) Differential Temperature (DT)

The provision given in clause 215.4 of IRC 6, shall be considered to compute effect of differential temperature gradient in absence of any provisions in IRS code. ~~The differential gradient of temperature along depth of superstructure has been reproduced below for ready reference.~~ Short term modulus of elasticity as per Table given under clause 5.1 of DBR shall be used to calculate the effects.



Positive Temperature Difference

$$h_1 = 0.3h < 0.15m$$

$$h_2 = 0.3h > 0.1m$$

$$< 0.25m$$

$$h_3 = 0.3h < 0.15m$$



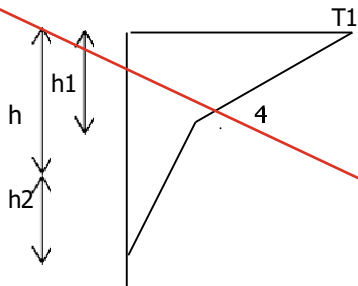
Negative Temperature Difference

$$h_1 = h_4 = 0.2h < 0.25m$$

$$h_2 = h_3 = 0.25h < 0.25m$$

Note: For Purpose of these calculations no reduction shall be made for presence of track plinths.

Temperature Difference for Concrete Bridge Decks

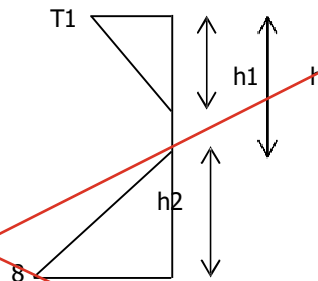


Positive Temperature Difference

$$h_1 = 0.6h$$

$$h_2 = 0.4h$$

H(m)	T1°C
0.2	18
0.3	20.5



Negative Temperature Difference

H(m)	T1°C
0.2	4.4
0.3	6.8

Temperature Difference across Steel and Composite Sections

Note: For Purpose of these calculations no reduction shall be made for presence of track plinths.

6.5.2 Resistance to Movement of Elastomeric Bearings (BS)

Elastomeric bearing will resist movement/deformation of superstructure other than applied load i.e. due to variation of temperature/creep strain/shrinkage strain etc. The bearing resistance shall be calculated as per Clause-211.5.1.3 of IRC: 6.

The bearing resistance will produce lateral force on the substructure and foundation. The bearing resistance shall be calculated as $(V_L I_L - V_R I_R)$, where V_L and V_R are the shear rating of the left and right elastomeric bearings respectively and I_L and I_R are the deck movement at elastomeric bearing location. The above force will be zero when both side spans & supporting bearings are identical, in such case 10% of $V_L I_L$ shall be considered for design of substructure and foundation.

6.5.3 Rail Structure Interaction (LWR Forces)

Guidelines vide BS Report No. 119 "RDSO Guidelines for carrying out Rail-Structure Interaction studies on Metro System (version-2)" shall be followed.

A rail structure interaction [RSI] analysis is required because the continuously welded running rails are continuous over the deck expansion joints. The interaction occurs because the rails are directly connected to the decks by fastening system.

1. Rail structure interaction studies shall be done as per provisions of "RDSO Guidelines for carrying out Rail-Structure Interaction studies on Metro System (version-2)". The following shall be adhered to:

- a) Track resistance in loaded and unloaded conditions shall be obtained from cl. 3.2.6 Track Stiffness of "RDSO Guidelines for carrying out Rail-Structure Interaction studies on Metro System (version-2)". As per the clause, the recommended values for track stiffness for ballasted tracks are 60kN/m and 20kN/m for loaded and unloaded track respectively and recommended values of track stiffness for ballast less tracks are 60kN/m and 40kN/m for loaded and unloaded tracks respectively. The elastic limit is 2 mm for ballasted tracks and 0.5 mm for ballast less tracks. No change in track stiffness is permitted on account of actual track behavior.

- b) The temperature variations, to be used for analysis, shall be taken as per provisions of cl. 3.2.8 Temperature Variations of "RDSO Guidelines for carrying out Rail- Structure Interaction studies on Metro System (version-2)". The following shall be used for analysis:

- The temperature of the bridge does not deviate from the reference temperature by more than $\pm 35^\circ\text{C}$

- The temperature of the rail does not deviate by more than $\pm 50^\circ\text{C}$.

- The difference in temperature between deck and track does not exceed $\pm 20^\circ\text{C}$.

- The reference temperature is the temperature of the deck and the rail when the rail is fixed.

- c) Maximum additional stresses in rail in tension as well as compression on account of rail-structure interaction shall be within the permissible limits as prescribed in cl. 3.3.1 Additional Stresses in Rails of "RDSO Guidelines for carrying out Rail-Structure

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Interaction studies on Metro System (version-2)". The limit prescribed in the document shall be used as it is and no benefit on account of lesser axle load of actual rolling stock shall be permitted.

- d) The provisions of cl. 3.3.2 Displacements of Bridge Elements of "RDSO Guidelines for carrying out Rail-Structure Interaction studies on Metro System (version-2)" shall be adhered to.
 - e) Checks must be performed for break in rail continuity due to unusual conditions such as fractures or for maintenance purposes. The provisions of cl. 4.8 "Rail Gap Analysis of RDSO Guidelines for carrying out Rail-Structure Interaction studies on Metro System (version-2)" shall be followed.
 - f) Minimum (unfactored) LWR force of 1.6t/m of span length shall be considered for design irrespective of number of tracks.
2. Software and general methodology to be used for carrying out Rail Structure interaction analysis must be validated before adopting the same. A well-established document such as UIC 774-3R may be used for validation.
3. Representative stretches must be chosen for carrying out Rail-Structure interaction which shall include special spans. The same shall be got approved from the engineer.
4. LWR forces shall be considered in appropriate load combinations as specified in cl. 7.0 Load Combinations (Ground IIIB) of the DBR.

6.6 WIND LOAD (WL)

The wind load shall be calculated as per clause 2.11 of IRS: BR and IS: 875 (Part

3). As per clause 5.3 of IS: 875 (Part 3)

Design Wind Speed, $V_z = V_b \cdot k_1 \cdot k_2 \cdot k_3 \cdot k_4$

Where

V_b = Basic wind speed = 47 m/s for Jaipur Zone (as per National Building code).

$K_1 =$ ~~1.08~~ **1.07** for class IV type structure (§ table 1 of IS: 875 (Part 3)) **for 100 Years mean Probable Life**

$k_2 = 1.07$ for category 2 (§ table 2 of IS: 875 (Part 3)) for 20m Height.

$k_2 = 1.12$ for category 2 (§ table 2 of IS: 875 (Part 3)) for 30m Height

$k_3 = 1.0$ (§ 6.3.3.1 of IS: 875 (Part 3)).

$K_4=1.0$ (for non-cyclonic zone as per clause 6.3.4)

However, a bridge shall not be considered to be carrying any live load when the wind pressure at deck level exceeds 150kg/m² as per clause 2.11.2 of IRS Bridge rule, however as it is a long viaduct therefore there is fair possibility that once wind pressure exceeds 150kg/m² train may be standing static over viaduct due to close of operation therefore in case of wind pressure above 150kg/m², train will be considered as static load i.e. no longitudinal loads or impact loads.

Wind load on train in transverse direction will be calculated based on exposed surface & intensity as per above given values& reference. These are computed for length of train as

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- c) Pile cap shall be designed based on clause 15.8.3.1 of IRS –CBC 1997. No support from soil below pile cap shall be considered.
- d) The thickness of the pile cap shall be kept minimum 1.5 times diameter of the piles for multiple-pile group as per IRC 78.
- e) The structural design of the pile cap shall be carried out as per clause 10.2.2 & clause 15.4 and clause 15.8.3 of IRS CBC. Crack width shall be checked for load combination 1 as per clause 15.9.8.2 IRS CBC.
- f) Minimum reinforcement in pile caps at top shall be at least 0.12% in each direction in case of compression and in case of tension, it shall not be less than 0.2%.

12.4.2 Soil Structure Analysis

When designing element forces or estimating displacements the soil stiffness and other parameters shall be assessed based on clause 5.7 of the DBR considering the design ground water table as per clause 5.5 of the DBR.

12.4.3 Well Foundation & Open foundation

Well Foundation & Open foundation shall be designed as per IRS Bridge Substructure & Foundation Code/ IRC: 78.

12.5 Reserve Structural Capacity in Viaduct Structures

An additional design margin shall be considered in the design to accommodate any future revision or modification in the structural arrangement at a later stage. The following additional design margins shall be adopted:

- 1) Structural Design Verification: An additional design margin of 5% shall be considered in all applicable structural verifications, including but not limited to, ULS checks (Moment, Shear, Torsion, bond etc.), SLS checks (stress, cracks, deflection, vibration etc.) and Equilibrium check (like overturning, uplifting etc.).**
- 2) Geotechnical Design Verification: An additional design margin of 5% shall be considered in all applicable geotechnical verifications, including but not limited SBC, vertical load on pile, overturning, sliding checks, lateral deflection at pile, etc.**
- 3) Bearing Design Verification: An additional design margin of $\pm 5\%$ shall be considered for bearing design with respect to design loads and movements. The verification shall be carried out for all governing load combinations, including but not limited to maximum vertical and maximum horizontal loads, maximum vertical and minimum horizontal loads, minimum vertical and maximum horizontal loads etc**

13 CODAL PREFERENCE

The IRS Codes shall be followed in principle. Although main clauses have been mentioned in the DBR, the other relevant clauses as available in the IRS codes shall also be followed, whenever applicable. If provisions are not available in IRS, the order of preference shall be as follows, unless specified otherwise:

For railway loading related issues:

- i. UIC Codes
- ii. Euro Codes
- iii. Any other code, which covers railway loading.

For other Design/ detailing related issues:

- i. IS
- ii. IRC
- iii. EURO
- iv. AASHTO
- v. Any international code with approval of RMRC.

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ii) For other structures as per IS: 4326

2.7.5 Wind Loads (WL)

Wind Loads (longitudinal & transverse) shall be calculated as stated in IS 875: Part 3.

Wind loads will be calculated in accordance with IS 875: Part 3.

$$\text{Design wind speed } V_z \text{ (m/s)} = V_b * K_1 * K_2 * K_3 * K_4$$

$$V_b \text{ (basic wind speed in m/s)} = 47 \text{ m / sec (As per NBC)}$$

$$K_1 \text{ (risk coefficient)} = \text{1.08, 1.07 (for 100 years mean probable design life) \& 1.00 (For 50 Years mean probable design life), Table-1}$$

$$K_2 = \text{as per table2 based on terrain category and structure height}$$

$$K_3 \text{ (Topography factor)} = 1.0, \text{ as per Cl.6.3.3.1}$$

$$K_4 = 1.0 \text{ for Non cyclonic zone as per Cl.6.3.4}$$

Based on the above, Design wind pressure at height z , $(P_z) = 0.6 \times V_z \times V_z$ Cl. 7.2

$$\text{Design wind pressure, } P_d = P_z * K_d * K_a * K_c$$

K_d = wind directionality factor = 0.9 for buildings

$$K_a = \text{area averaging factor} = 0.8 \text{ Table 4 (for contributory area } > 100 \text{ m}^2 \text{)}$$

$$K_c = \text{combination factor} = 0.9$$

2.7.6 Construction and Erection Loads (ER)

The weight of all temporary and permanent materials together with all other forces and effects which can operate on any part of structure during erection shall be taken into account. Allowances shall be made in the permanent design for any locked in stresses caused in any member during erection.

2.7.7 Temperature Load (TL)

As per Cl. 19.5 of IS: 456. Temperature gradient shall be considered as per CL. 215 of IRC-6, if applicable.

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being high in the area, horizontal pressure due to it shall also be considered. Stability of water tank shall be checked against buoyancy and foundation raft shall be designed for the worst of buoyant force and soil pressure. The tank shall also be designed for surcharge loading if any. Water proofing treatment shall be done on the external surface as well as in the internal surface.

2.12 MASONRY WALLS

All Masonry walls shall be treated as non-structural infill panels and shall be treated as one way / two way slab panels spanning between adjoining beams and columns to check structural safety. Masonry walls shall be designed as un-reinforced masonry as per IS: 1905 and IS: 4326. Shear connector reinforcement between walls & upper beams and walls & sides of columns shall be provided for external walls, while the internal partition walls shall be connected with roof slabs/beams using dry packing mortar between top of walls and soffit of slab / beam.

~~2.13 Reserve Structural Capacity in Elevated Station~~

~~An additional design margin shall be considered in the design to accommodate any future revision or modification in the structural arrangement at a later stage. The following additional design margins shall be adopted:~~

- ~~1) **Structural Design Verification:** An additional design margin of 10% shall be considered in all applicable structural verifications, including but not limited to, ULS checks (Moment, Shear, Torsion, bond etc.), SLS checks (stress, cracks, deflection, vibration etc.) and Equilibrium check (like overturning, uplifting etc.).~~
- ~~2) **Geotechnical Design Verification:** An additional design margin of 10% shall be considered in all applicable geotechnical verifications, including but not limited SBC, vertical load on pile, overturning, sliding checks, lateral deflection at pile, etc.~~
- ~~3) **Bearing Design Verification:** An additional design margin of $\pm 10\%$ shall be considered for bearing design with respect to design loads and movements. The verification shall be carried out for all governing load combinations, including but not limited to maximum vertical and maximum horizontal loads, maximum vertical and minimum horizontal loads, minimum vertical and maximum horizontal loads etc.~~

3. CODAL PREFERENCE

The design shall be carried out as per provision of these design specifications. Reference shall be made to the following codes for any additional information:

Order of preferences of codes shall be as follows:

- i. IS
- ii. IRS
- iii. IRC
- iv. BS or Euro Codes
- v. AASHTO
- vi. Any international code with approval of RMRC.

DESCRIPTION	S. No	DRAWING NUMBER	REV. NO.	DRAWING TITLE
GENERAL	1	VID-JMRC-STR-TD-0101	R4 R2	JAIPUR METRO (DRAWING LIST)
T-GIRDER	2	VID-JMRC-STR-TD-0201	R1	TYPICAL DRAWING OF NORMAL PIER & PRESTRESSED PIER CAP (T-GIRDER SUPPORTING)
	3	VID-JMRC-STR-TD-0202	R1	TYPICAL DRAWING OF PORTAL PIER WITH PRECAST PORTAL BEAM (T-GIRDER SUPPORTING)
	4	VID-JMRC-STR-TD-0203	R1	TYPICAL DRAWING OF CANTILEVER PIER & PRECAST PRESTRESSED PIER CAP
	5	VID-JMRC-STR-TD-0204	R1	TYPICAL DRAWING OF PRESTRESSED T-GIRDER SUPERSTRUCTURE (STRAIGHT ALIGNMENT)
	6	VID-JMRC-STR-TD-0205	R1	GAD OF ELEVATED RAMP
	7	VID-JMRC-STR-TD-0206	R1	DIMENSION & REINFORCEMENT DETAILS OF PIER PROTECTION CRASH BARRIER AROUND CIRCULAR AND RECTANGULAR PIER
	8	VID-JMRC-STR-TD-0207	R1	TYPICAL DETAIL OF STEEL GRILL FOR ELEVATED RAMP
	9	VID-JMRC-STR-TD-0208	R1	TYPICAL DETAIL OF STEEL RAILING AND CABLE BRACKET
	10	VID-JMRC-STR-TD-0209-001	R1	DRAINAGE PRINCIPLE SHEET 1 OF 3
	11	VID-JMRC-STR-TD-0209-002	R0	DRAINAGE PRINCIPLE SHEET 2 OF 3
	12	VID-JMRC-STR-TD-0209-003	R0	DRAINAGE PRINCIPLE SHEET 3 OF 3
	13	VID-JMRC-STR-TD-0210	R0	TYPICAL DETAILS OF EXPANSION JOINT AND UP STAND
	14	VID-JMRC-STR-TD-0212	R1	TRACK PLINTH STARTER BAR
	15	VID-JMRC-STR-TD-0301	R1	TYPICAL DRAWING OF NORMAL PIER & PRESTRESSED PIER CAP (U-GIRDER SUPPORTING)
	16	VID-JMRC-STR-TD-0302	R1	TYPICAL DRAWING OF PORTAL PIER WITH PRECAST PORTAL BEAM (U-GIRDER SUPPORTING)
	17	VID-JMRC-STR-TD-0303	R1	TYPICAL DRAWING OF CANTILEVER PIER & PRECAST PRESTRESSED PIER CAP
	18	VID-JMRC-STR-TD-0304	R1	TYPICAL DRAWING OF PRESTRESSED U-GIRDER SUPERSTRUCTURE (STRAIGHT ALIGNMENT)
	19	VID-JMRC-STR-TD-0211-001	R0	EARTHING ARRANGEMENT SHEET 1 OF 2
	20	VID-JMRC-STR-TD-0211-002	R0	EARTHING ARRANGEMENT SHEET 2 OF 2
	21	VID-JMRC-STR-TD-0213		DETAILS OF TEMPORARY BARRICADING (1m.HEIGHT)
	22	VID-JMRC-STR-TD-0214		DETAILS OF TEMPORARY BARRICADING (2m.HEIGHT)
SPECIAL SPAN	23	VID-JMRC-STR-TD-0601	R1	TYPICAL DRAWING FOR STEEL COMPOSITE GIRDER SPECIAL SPAN
ALIGNMENT	24	VID-JMRC-STR-TD-0701-017 (31 Pages)	R4	ALIGNMENT DRAWING GAD (Including Depot Line which is included in the scope of this contract)
	25	VID-JMRC-STR-TD-0701-017 (1 Sheet)	R2	ALIGNMENT DRAWING GAD Curve Details

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	27	RMRC-CLC-TED-ARP-10000-R0	R0	TYPE 1 STATION
	28	RMRC-CLC-TED-ARP-10001-R0	R0	
	29	RMRC-CLC-TED-ARP-10002-R0	R0	
	30	RMRC-CLC-TED-ARP-10003-R0	R0	
	31	RMRC-CLC-TED-ARP-10004-R0	R0	
	32	RMRC-CLC-TED-ARP-10011-R0	R0	
	32A	RMRC-HRM-TED-ARP-01	R0	TYPE 2 STATION
		RMRC-HRM-TED-ARP-02	R0	
		RMRC-HRM-TED-ARP-03	R0	
		RMRC-HRM-TED-ARP-04	R0	
		RMRC-HRM-TED-ARP-05	R0	
		RMRC-HRM-TED-ARP-06	R0	
	33	RMRC-PNP-TED-ARP-10000-R0	R0	TYPE 3 STATION
	34	RMRC-PNP-TED-ARP-10001-R0	R0	
	35	RMRC-PNP-TED-ARP-10002-R0	R0	
	36	RMRC-PNP-TED-ARP-10003-R0	R0	
	37	RMRC-PNP-TED-ARP-10004-R0	R0	
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	44	RMRC-HMD-TED-ARP-06	R0	
	45	RMRC-HMD-TED-ARP-06	R0	
FOB	46	VID-JMRC-STR-TD-0901-001	R0	TYPICAL FOB
Pway Plan	47		R1	PROPOSED LAYOUT PHASE-II JAIPUR METRO
Site Office	48		R0	SITE OFFICE LAYOUT

TENDER DRAWING

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						Sr. DGM/BD		CA/BD			
						CRE/Civil/JP		PD-II / JP			
								ED/E/DG-2			
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DATE	REV.	DESCRIPTION				DRAWN	CHK.	APPVD.			

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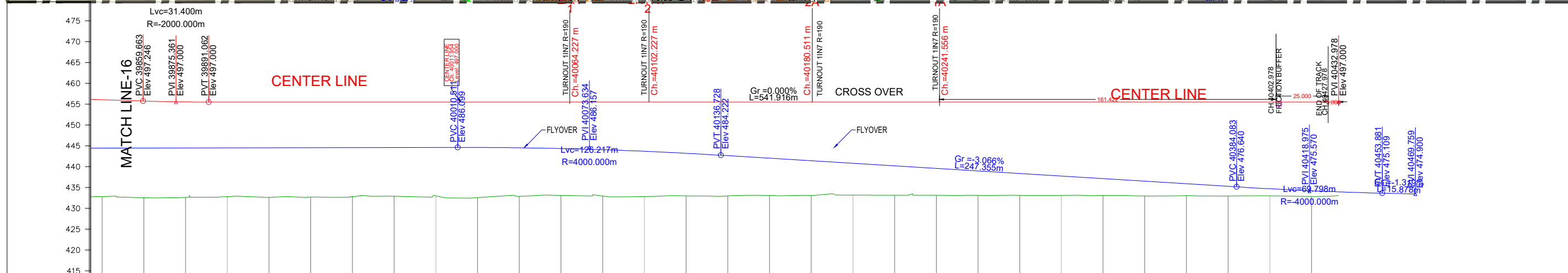
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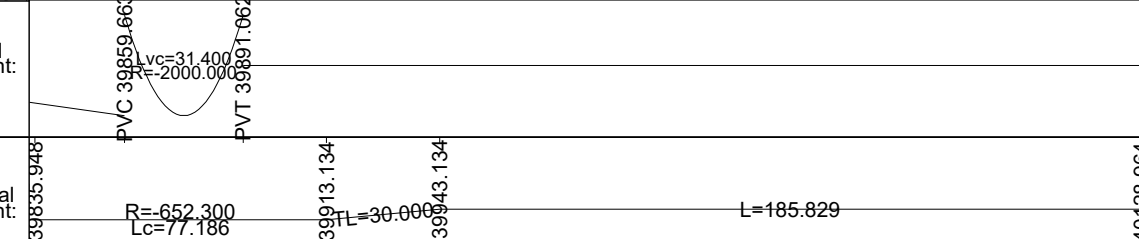
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JAIPUR METRO PHASE-2 CORRIDOR:
COLLECTORATE TO TODI MOD

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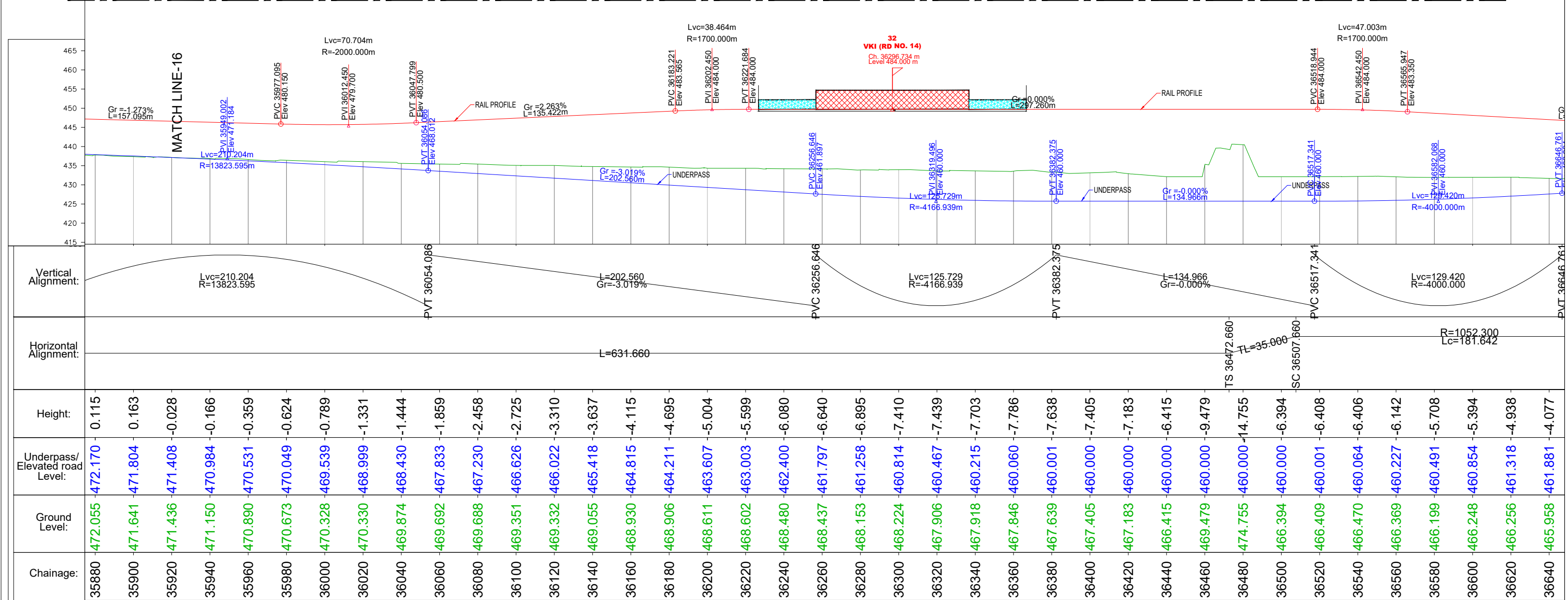
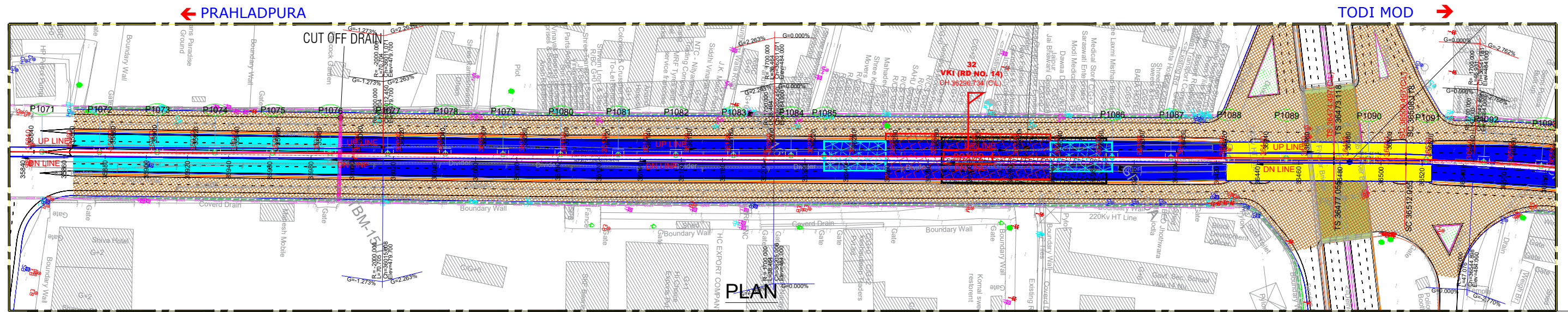
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DRAWING NUMBER: VID-JMRC-STR-TD-0101			SHEET NO: 1 OF 1	

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39860	474.037	497.241	23.204		
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39900	474.289	497.000	22.711		
39920	474.129	497.000	22.871	CS 39913.134	
39940	474.198	497.000	22.802	ST 39943.134	
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40160	474.574	497.000	22.426	SC 40158.964	
40180	474.574	497.000	22.426		
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40240	474.606	497.000	22.394		
40260	474.594	497.000	22.406	R=-652.300 Lc=191.380	
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40340	474.465	497.000	22.535	CS 40350.344	
40360	474.533	497.000	22.467	TL=30.000	
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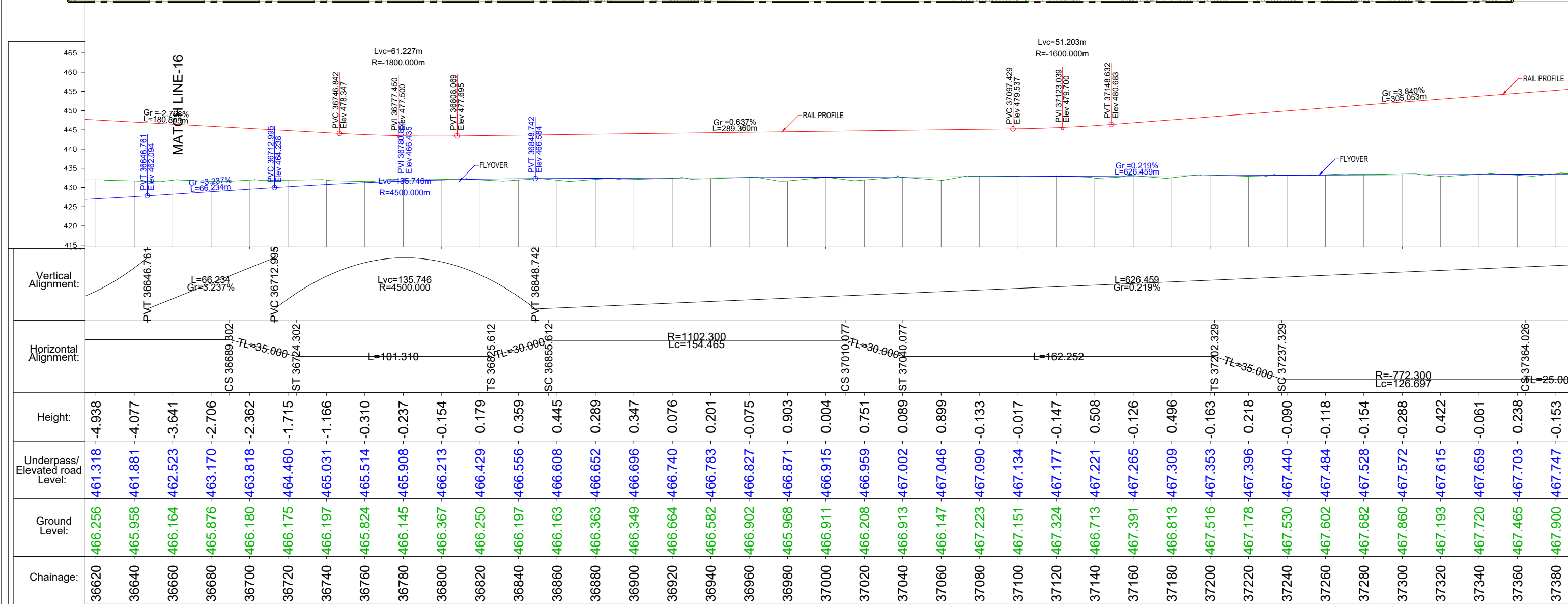
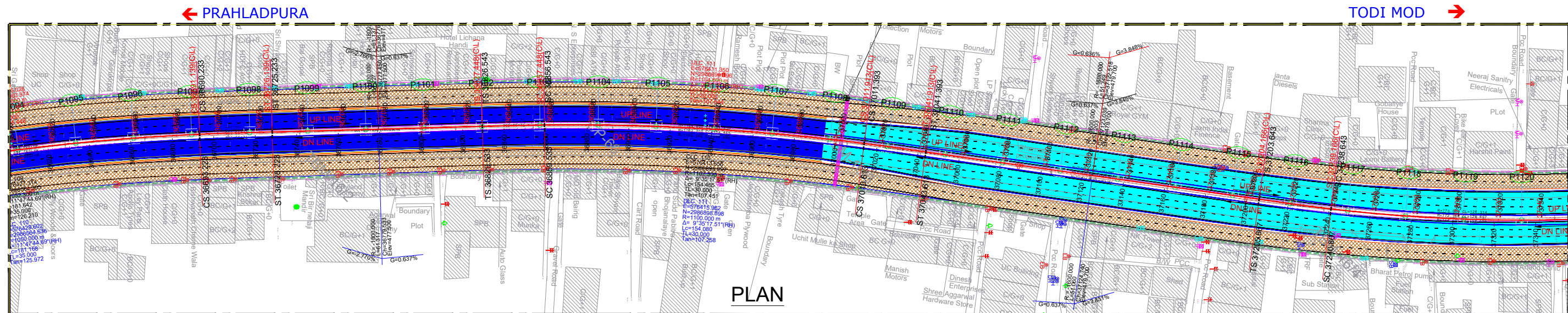
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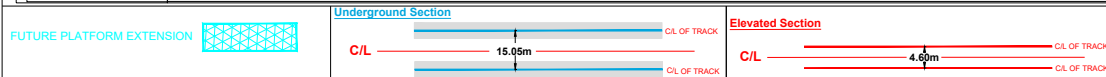
L-SECTION OF NHAI STRUCTURE (Underpass / Elevated Road)

TENDER DRAWING

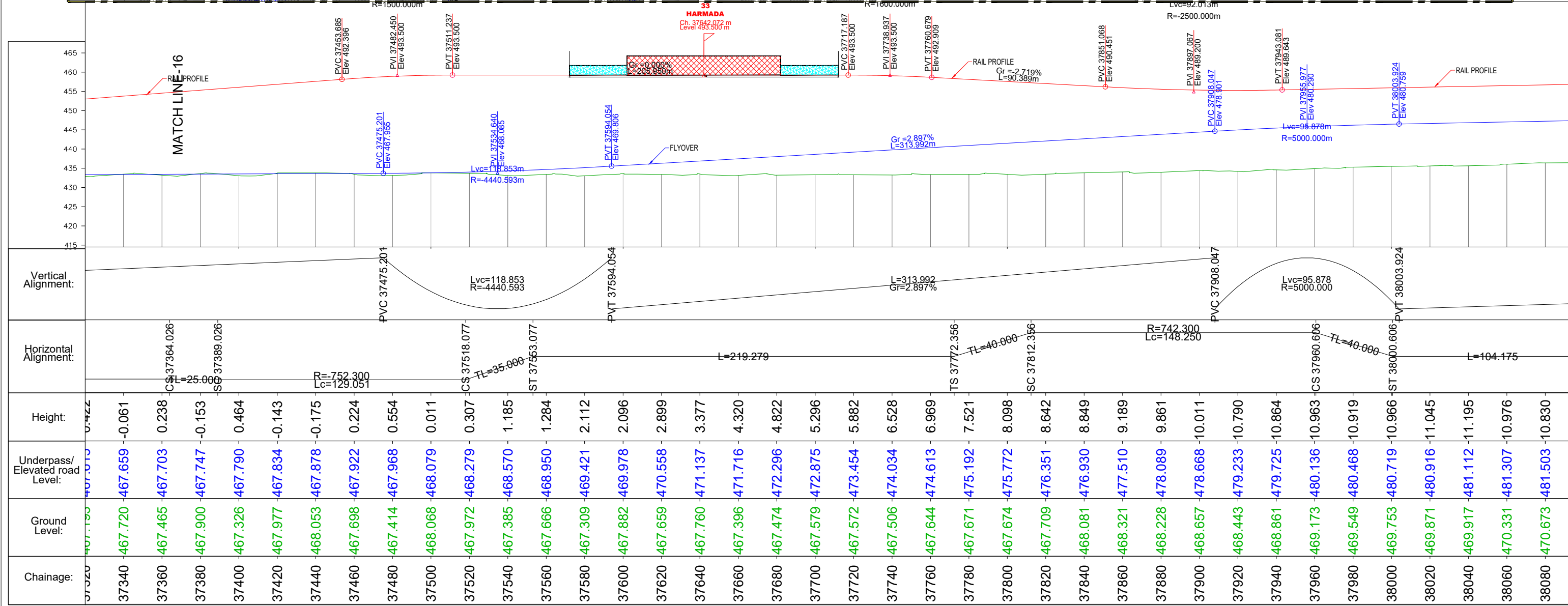
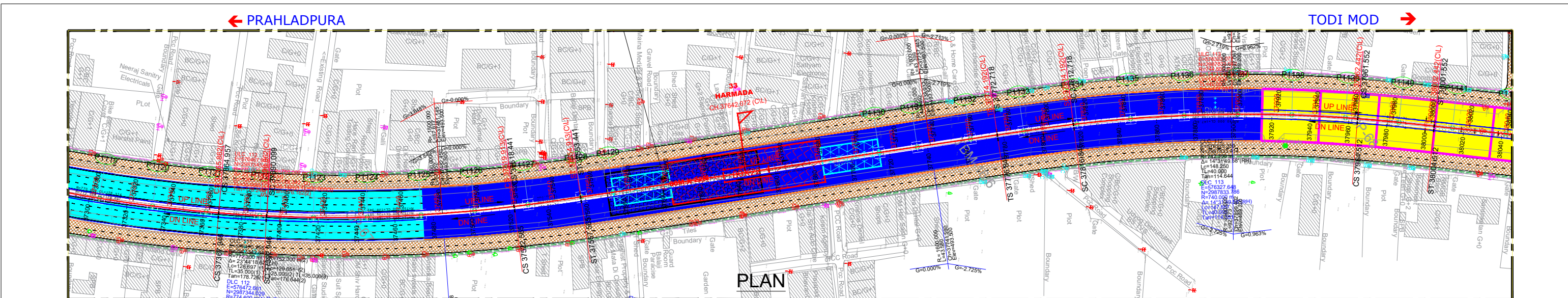
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					GENERAL CONSULTANT:-																
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					("Definition OF TERMS NOC/APPROVAL to be read as per terms outlined in respective Contracts, Notice of no objection from employer is being accorded for design principal only.)																
								STATION NAME : JAIPUR METRO													
								DRAWING TITLE: ALIGNMENT DRAWING													
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Chainage:	Ground Level:	Underpass/ Elevated road Level:	Height:	Horizontal Alignment:	Vertical Alignment:
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37400	467.326	467.790	0.464		
37420	467.977	467.834	-0.143		
37440	468.053	467.878	-0.175		
37460	467.698	467.922	0.224		
37480	467.414	467.968	0.554		
37500	468.068	468.079	0.011		
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37600	467.882	469.978	2.096		
37620	467.659	470.558	2.899		
37640	467.760	471.137	3.377		
37660	467.396	471.716	4.320		
37680	467.474	472.296	4.822		
37700	467.579	472.875	5.296		
37720	467.572	473.454	5.882		
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37760	467.644	474.613	6.969		
37780	467.671	475.192	7.521		
37800	467.674	475.772	8.098		
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37840	468.081	476.930	8.849		
37860	468.321	477.510	9.189		
37880	468.228	478.089	9.861		
37900	468.657	478.668	10.011		
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DELHI METRO RAIL CORPORATION LTD.

PROJECT:-

RAJASTHAN METRO PHASE-2 CORRIDOR:

STATION NAME : JAIPUR METRO

DRAWING TITLE: ALIGNMENT DRAWING

DATE : 31-08-26

REV : R 4

HORIZONTAL SCALE: 1:1000

VERTICAL SCALE: 1:500

STATUS : TENDER

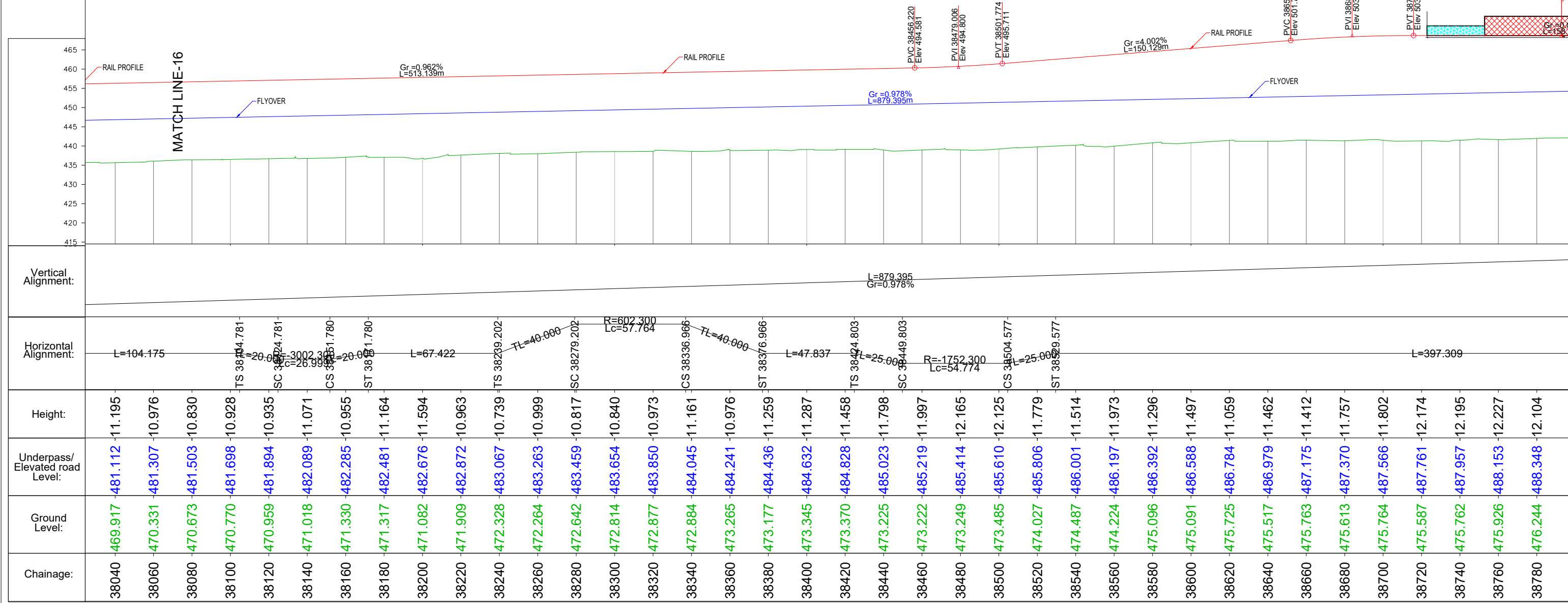
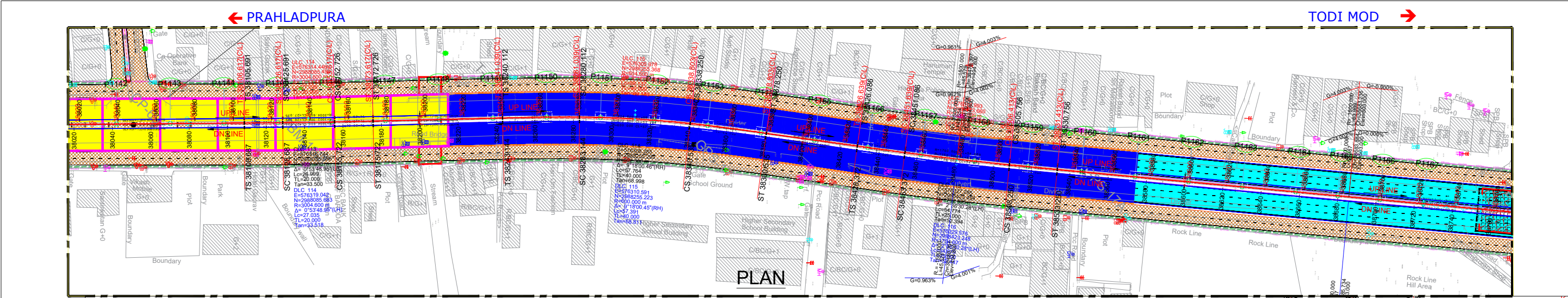
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									HODs			DRAWING TITLE: ALIGNMENT DRAWING	
									Sr. DGM/BD			DATE : 31-08-26	
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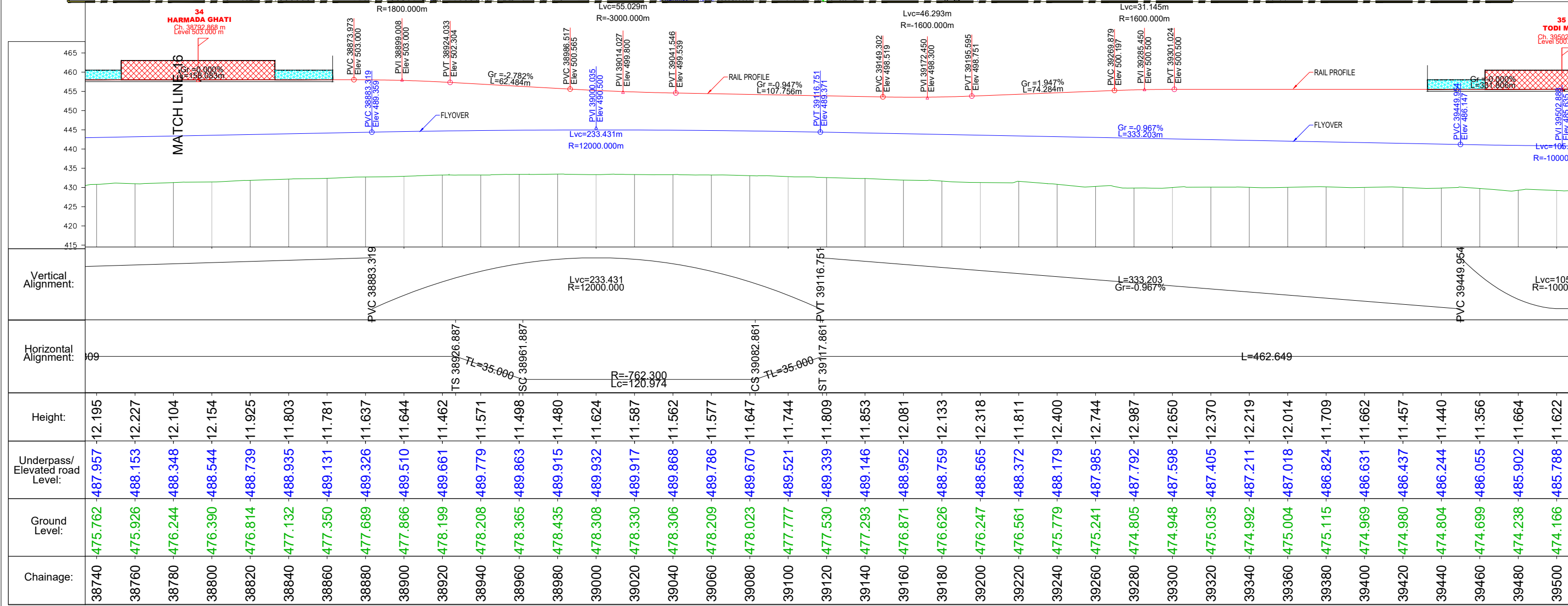
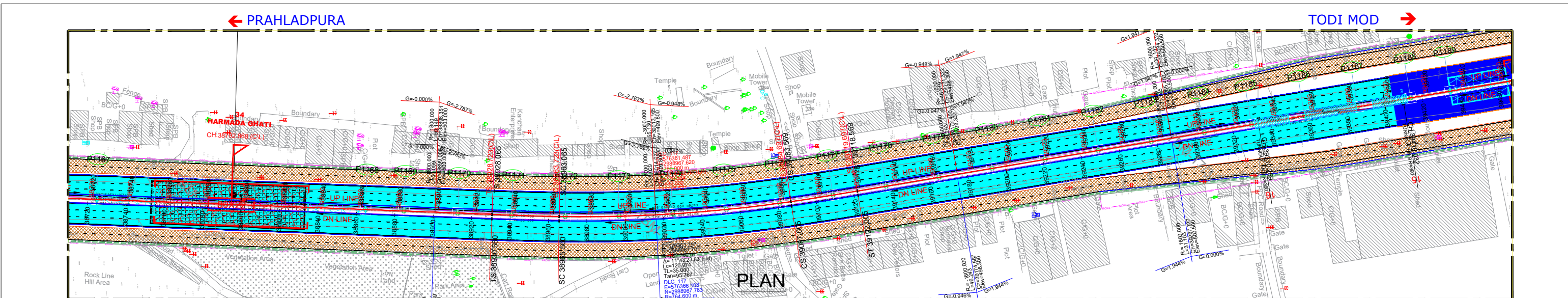
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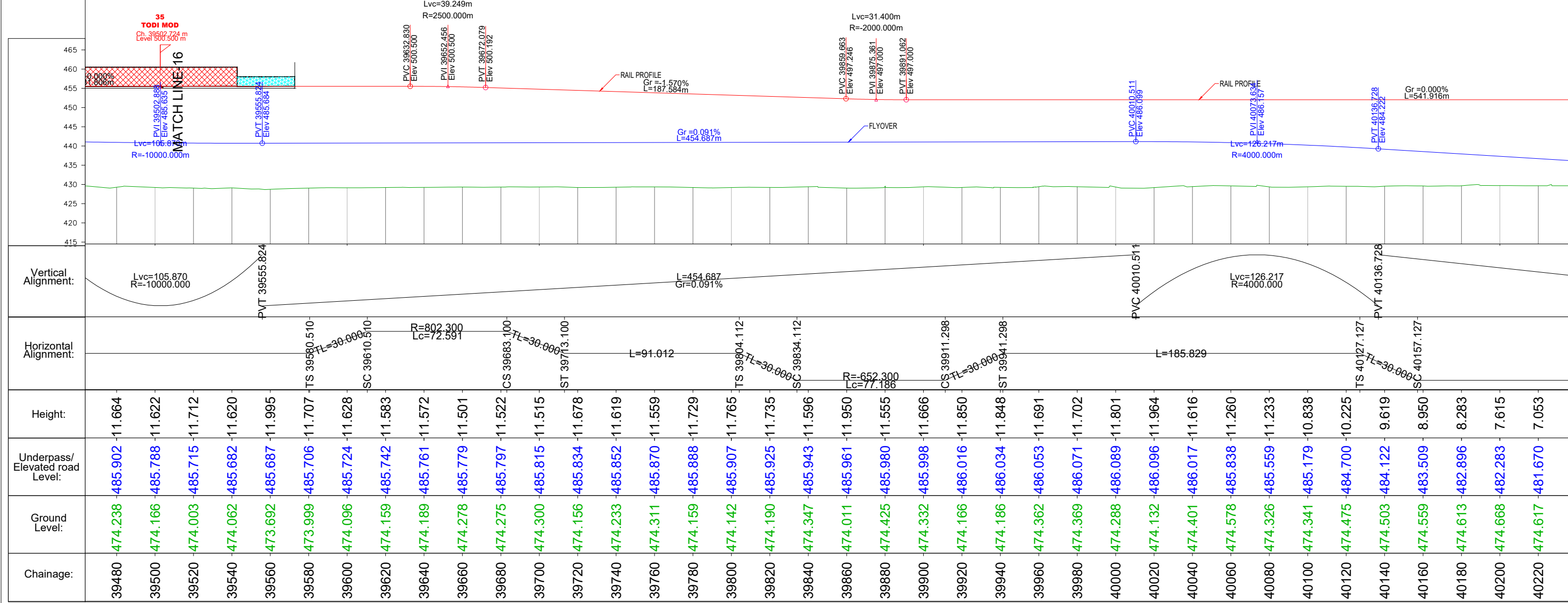
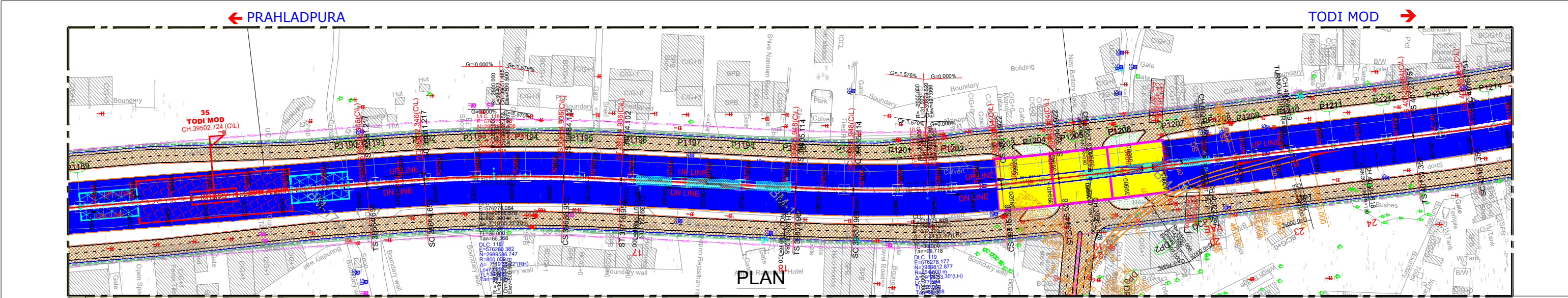
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																		STATION NAME : JAIPUR METRO				
																		DRAWING TITLE: ALIGNMENT DRAWING				
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																		DRAWING NUMBER: VID-JMRC-STR-TD-0701-017		SHEET NO: 27 OF 31	SHEET SIZE: A1	ARCHITECTURE
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Underground Section		Elevated Section	

L-SECTION OF NHA1 STRUCTURE (Underpass / Elevated Road)

ISSUED DRAWINGS

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CRE/Civil/UP	PD-II/UP	
	ED/IE/DG-2	
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CLIENT:-

RAJASTHAN METRO RAIL CORPORATION LTD.

GENERAL CONSULTANT:-

DELHI METRO RAIL CORPORATION LTD.

PROJECT:-

RAJASTHAN METRO PHASE-2 CORRIDOR:

STATION NAME : JAIPUR METRO

DRAWING TITLE: ALIGNMENT DRAWING

DATE : 31-08-26

REV : R 4

HORIZONTAL SCALE: 1:1000
VERTICAL SCALE: 1:500

STATUS : TENDER

SHEET NO: 28 OF 31

SHEET SIZE: A1

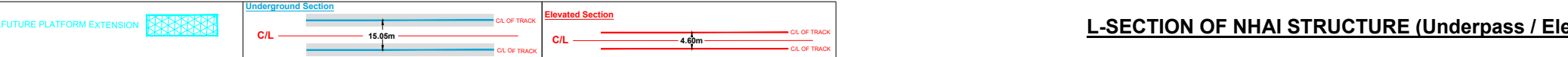
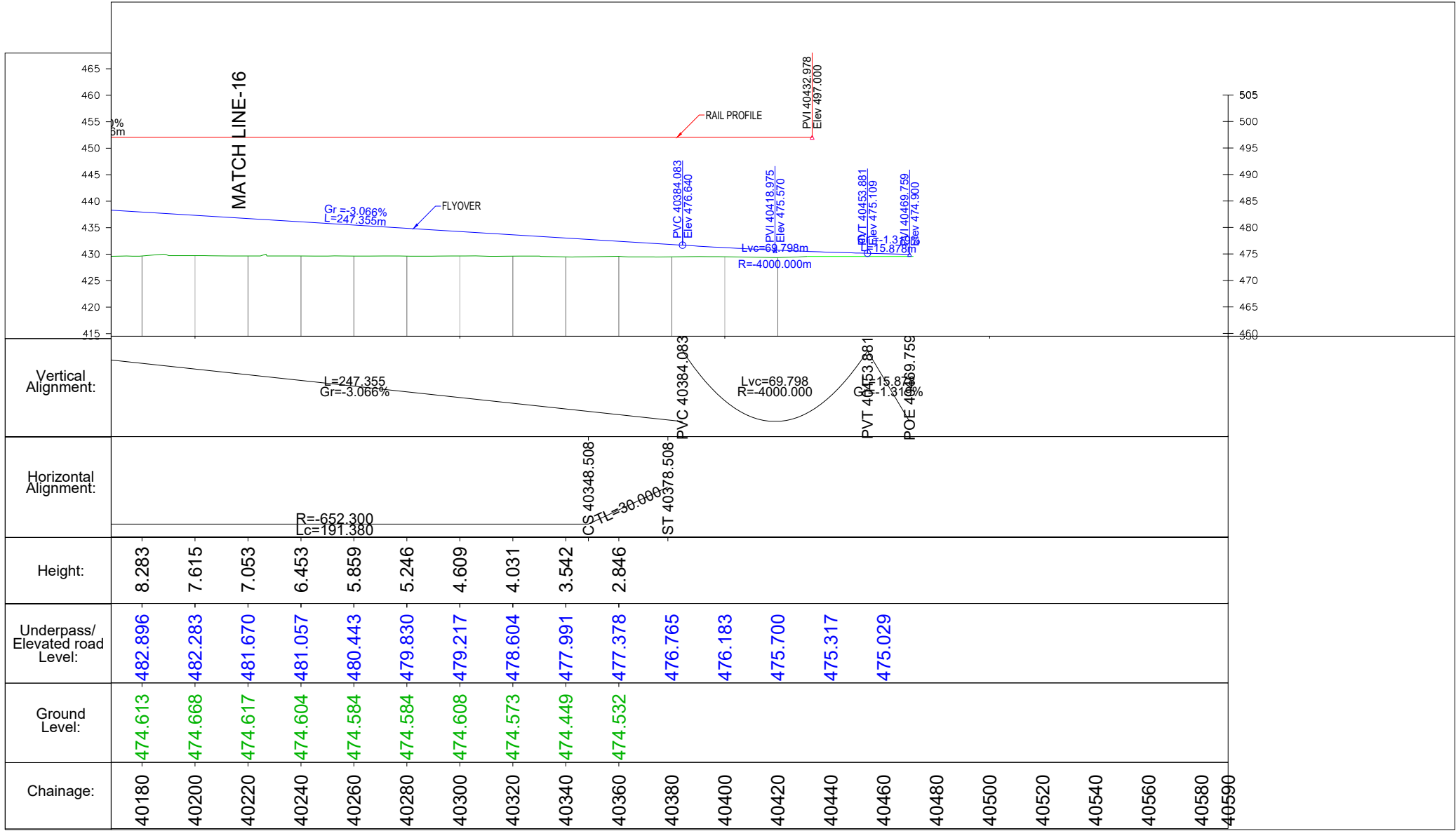
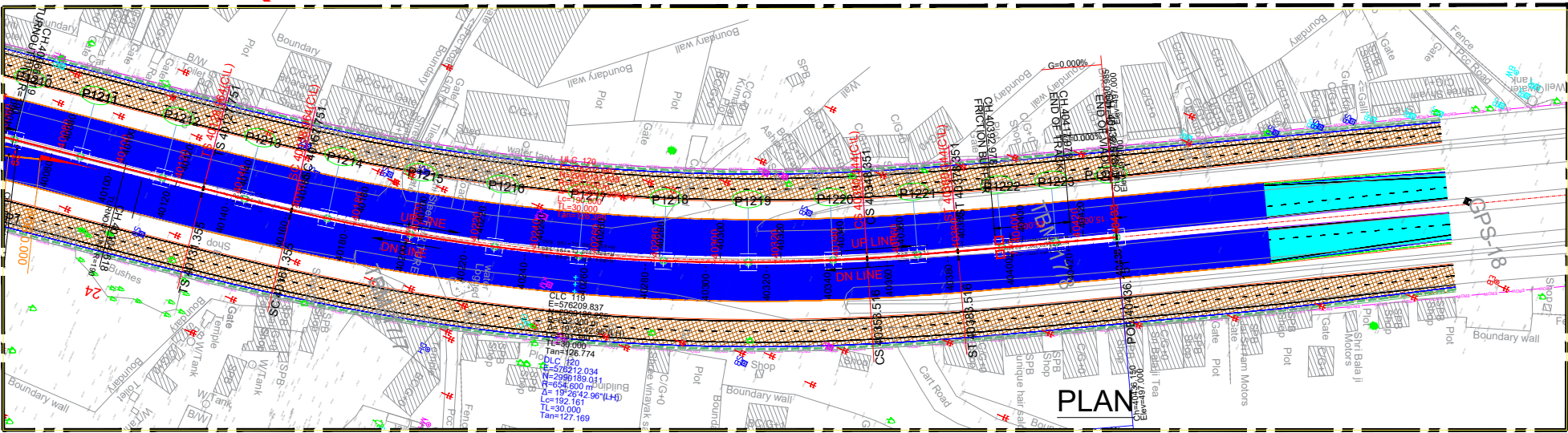
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TENDER DRAWING

← PRAHLADPURA

TODI MOD →



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VERSION “R1”

STATION SCHEDULE (PACKAGE-4)			
S. No.	STATION PROTOTYPE	STATION NAME	RAIL LEVEL
			MINIMUM (M)
1	TYPE 01 (80m X 22.5m)	Collectorate	453.500
		Ambabari	454.900
		Chomu Puliya	457.400
		Vidyadhar Nagar Sector 2	457.800
		VKI Road No. 5	474.500
		VKI Road No. 9	484.400
		VKI Road No. 14	484.000
2	TYPE 02 (Integrated station above NHAI Solid Ramp)	Harmada	493.500
3	TYPE 03 (80 X 22.5m with PD)	Panipech	459.450
		Vidyadhar Nagar	462.800
4	TYPE 04 (Integrated station above NHAI Elevated Road)	Harmada Ghati	503.000
		Todi Mod	500.500

Dated: 31.08.2026

Drawing Title - Types of Station

DRAWING LIST								
	Drawing Number							Description / Title
Count	P.Code	Building/Station Code	Stage	Stream	Number	Revision	File Name	
TYPE-2 STATION								
TENDER DRAWINGS								
1	RMRC	HRM	TED	ARP	10000	R0	RMRC-HRM-TED-ARP-01	DRAWING LIST
2	RMRC	HRM	TED	ARP	10001	R0	RMRC-HRM-TED-ARP-02	GROUND LEVEL PLAN
3	RMRC	HRM	TED	ARP	10002	R0	RMRC-HRM-TED-ARP-03	CONCOURSE LEVEL PLAN
4	RMRC	HRM	TED	ARP	10003	R0	RMRC-HRM-TED-ARP-04	PLATFORM LEVEL PLAN
5	RMRC	HRM	TED	ARP	10004	R0	RMRC-HRM-TED-ARP-05	ROOF LEVEL
6	RMRC	HRM	TED	ARP	10005	R0	RMRC-HRM-TED-ARP-06	CROSS SECTION X

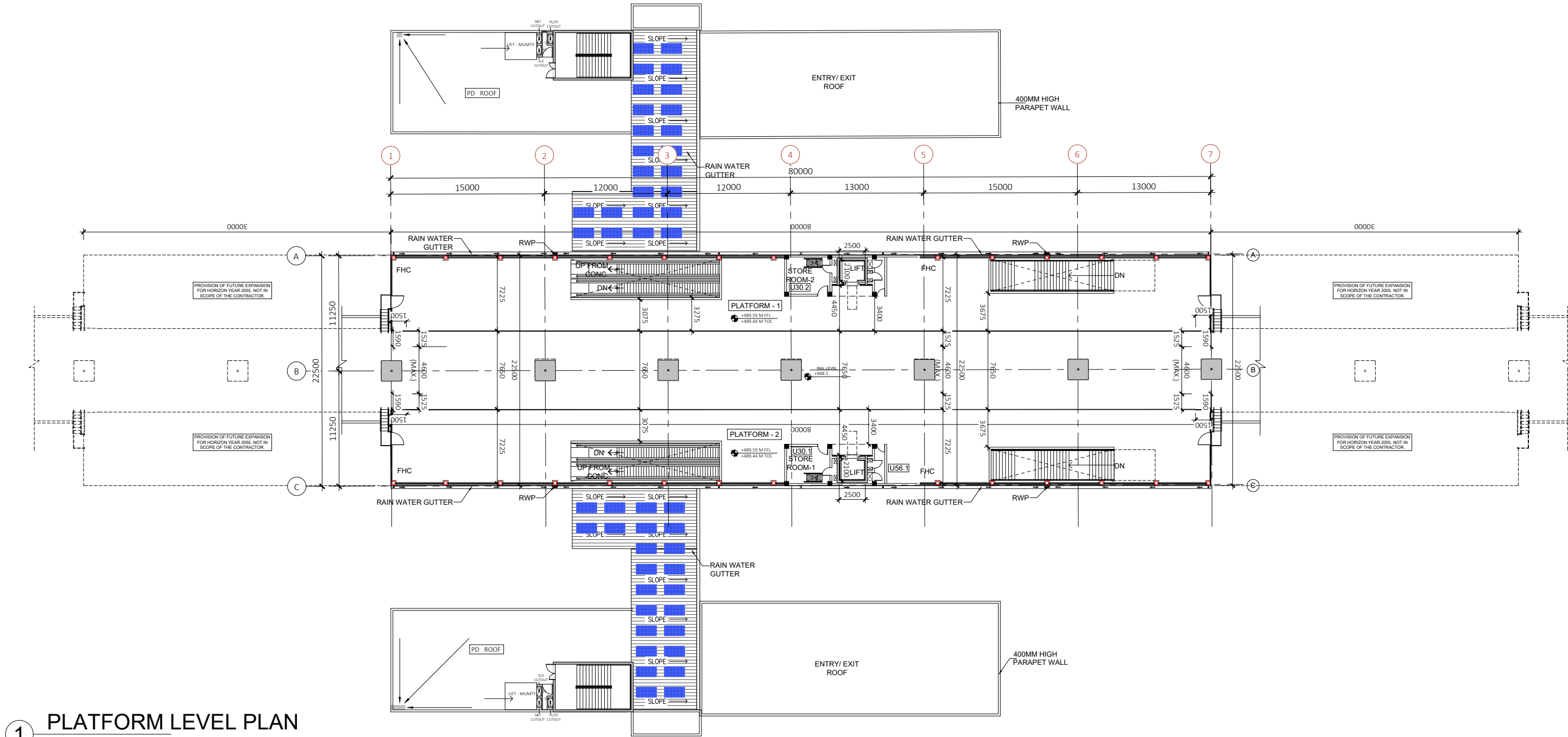
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										Sr. DGM/BD		CA/BD				
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												ED/E/DG-2				
												CE/Design				
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										</						



LEGEND		
	200 MM PRECAST CC SOLID BLOCK	
	RCC COLUMNS/ MULLIONS	
	PARAPET / TOE WALL	
	FILLED FLOOR	 RAISED FLOOR

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															DATE : 31-08-26		
															REV :R0		
															GRAPHICAL SCALE:1:200		
															STATUS : TENDER		
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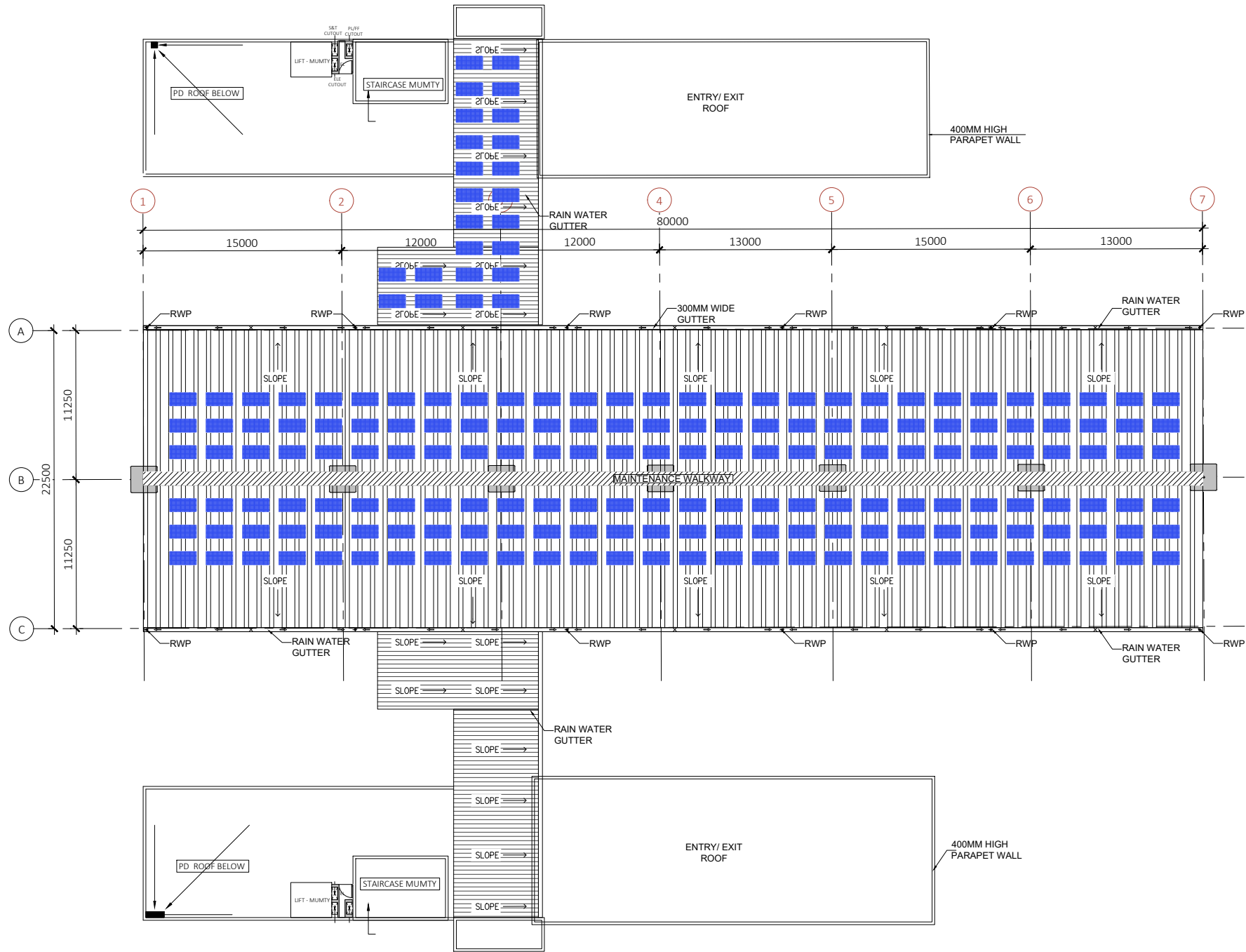


1 PLATFORM LEVEL PLAN
Scale: 1:200

SPECIAL NOTES:-
ALL THE DIMENSIONS OF STRUCTURAL ELEMENTS ARE INDICATIVE. STRUCTURAL DESIGN TO BE AS PER LATEST "IS CODES". STRUCTURAL DIMENSIONS TO BE CONFIRMED BY STRUCTURAL DESIGN/DDC BEFORE EXECUTION
NOTE:-
1. GRID DIMENSIONS MAY VARY AS PER DESIGN
2. STATUTORY CLEARANCE ABOVE ROAD SHALL BE PROVIDED AS PER IRC
3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS MENTIONED.
4. ANY DISCREPANCY MUST BE BROUGHT TO THE NOTICE OF THE JMRC BEFORE EXECUTION OF WORK AT SITE.
5. THIS DRAWING MUST BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, PLUMBING & FIRE FIGHTING, ELECTRICAL AND TRAFFIC MANAGEMENT DRAWINGS.
6. THE CENTRE TO CENTRE TRACK DISTANCE MAY VARY DEPENDING UPON SITE CONDITIONS AND CONSTRAINTS.
7. THE MAX. C/C DISTANCE OF TRACKS FOR U-GIRDERS IS 4600MM DUE TO WHICH STATION WIDTH IS 22.5M. IF ANY OTHER GIRDER IN PLACE OF U-GIRDER IS USED, THEN THE STATION WIDTH WILL BE 22M AS THE C/C DISTANCE OF TRACKS WILL REDUCE.
8. ENTRY/EXIT STRUCTURES MAY VARY AS PER SITE CONDITION AND SITE CONSTRAINTS.

LEGEND	
	200 MM PRECAST CC SOLID BLOCK
	RCC COLUMNS/ MULLIONS
	PARAPET / TOE WALL
	FILLED FLOOR
	RAISED FLOOR

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									Dy.HODs	HODs		STATION NAME : TYPE-02 STATION	
									Sr. DGM/BD	CA/BD		DRAWING TITLE: PLATFORM LEVEL PLAN	
									CRE/Civil/JP	PD-II/JP		DATE: 31-08-26 REV :R0 GRAPHICAL SCALE:1:200 STATUS : TENDER	
										ED/E/DG-2		DRAWING NUMBER:RMRC-HRM-TED-ARP- 04	
										CE/Design		SHEET NO: 4 OF 6 SHEET SIZE: A1	
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1 ROOF LEVEL PLAN
Scale: 1:200

SPECIAL NOTES:
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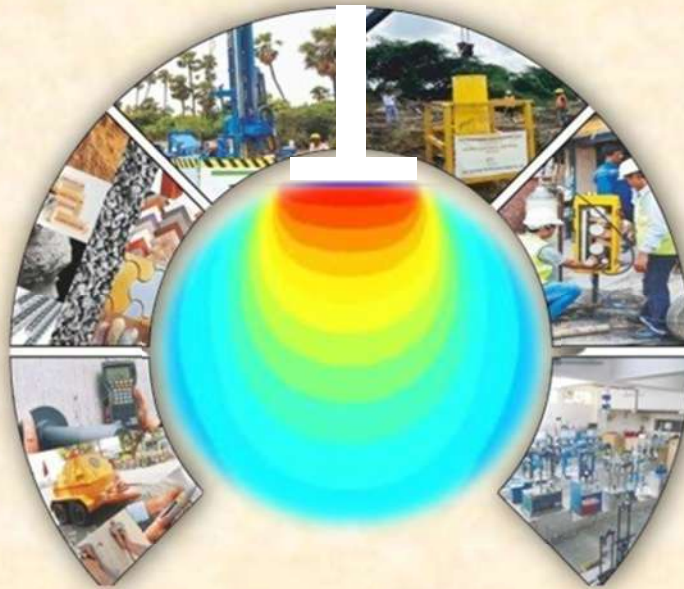
LEGEND	
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										Sr. DGM/BD	CA/BD		CLIENT:- RAJASTHAN METRO RAIL CORPORATION LTD.	GENERAL CONSULTANT:-  DELHI METRO RAIL CORPORATION LTD.	STATION NAME : TYPE-02 STATION								
										CRE/Civil/UP	PD-II/UP					DRAWING TITLE: ROOF LEVEL PLAN							
											ED/E/DG-2						DATE : 31-08-26	REV : R0	GRAPHICAL SCALE: 1:200	STATUS : TENDER			
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																	ARCHITECTURE						
	DATE	REV	DESCRIPTION	XX	XX	XX																	
	DATE	REV.	DESCRIPTION	DRAWN	CHECKED	APPROVED																	

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

E-mail: info@cegtesthouse.com

www.cegtesthouse.com

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/344_19 BHs	00	31.08.2026

Submitted to:
Delhi Metro Rail Corporation Ltd



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Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.
B-11(G), Malviya Industrial Area, Jaipur-302017
Tel.: 91-141-4046599, Fax: 91-141-2751806
E-mail: info@cegtesthouse.com
www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/344

Date:- 31.08.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-IV**

Dear Sir,

We are pleased to submit this report of 19 boreholes carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-



Pratibha Bagaria
Sr Geotechnical Engineer



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Both Field & Lab Tests

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B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,**.

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 50.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 19 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Pier no.	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)		+(R.L.)
					E	N	
1.	BH-384	P1091	Not encountered	50.00	576433.000	2986514.000	-
2.	BH-385	P1095	Not encountered	50.00	576421.000	2986594.000	-
3.	BH-386	P1098	Not encountered	50.00	576411.000	2986676.000	-
4.	BH-387	P1102	Not encountered	50.00	576411.000	2986778.000	-
5.	BH-388	P1105	Not encountered	50.00	578403.000	2986852.000	-
6.	BH-389	P1109	Not encountered	50.00	576413.000	2986964.000	-
7.	BH-420	P1205	Not encountered	33.00	576256.000	2989868.000	-
8.	BH-421	P1209	Not encountered	19.50	576239.000	2989960.000	-
9.	BH-422	P1213	Not encountered	27.00	576218.000	2990062.000	-
10.	BH-423	P1216	Not encountered	29.00	576198.000	2990154.000	-
11.	BH-424	P1219	Not encountered	49.00	576171.000	2990235.000	-
12.	BH-425	DCP1	Not encountered	34.00	576278.000	2989946.000	-
13.	BH-427	DP5	4.50	13.50	576360.000	2989869.000	-
14.	BH-428	DP8	6.50	16.53	576430.000	2989878.000	-
15.	BH-429	DP12	2.00	13.50	576535.000	2989913.000	-
16.	BH-430	DP15	2.85	16.50	576610.000	2909944.000	-
17.	BH-431	DP19	3.25	15.00	576725.000	2989957.000	-
18.	BH-432	DP22	3.10	15.00	576819.000	2989984.000	-
19.	BH-433	DP25	2.50	13.50	576901.000	2990018.000	-

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and

gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

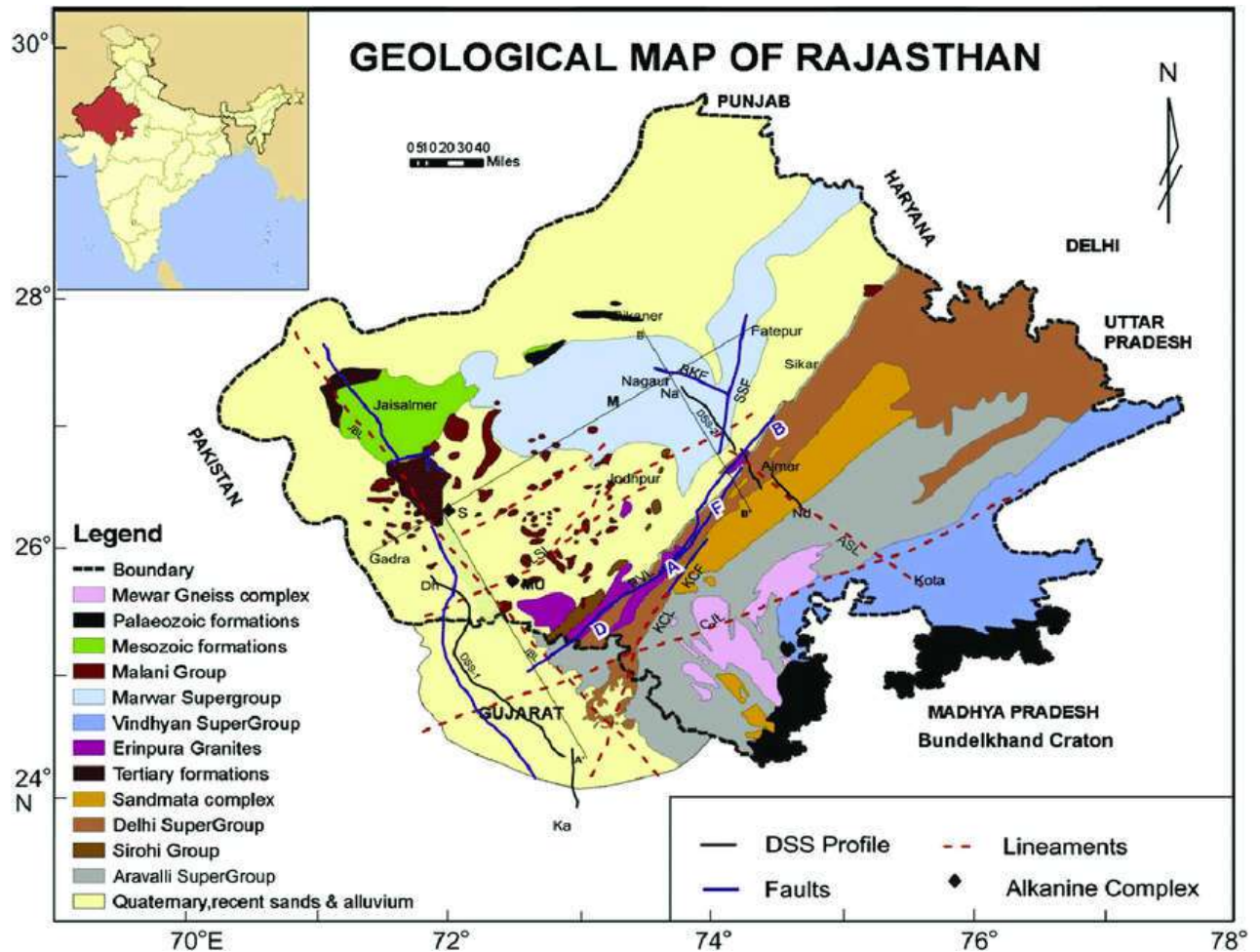


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

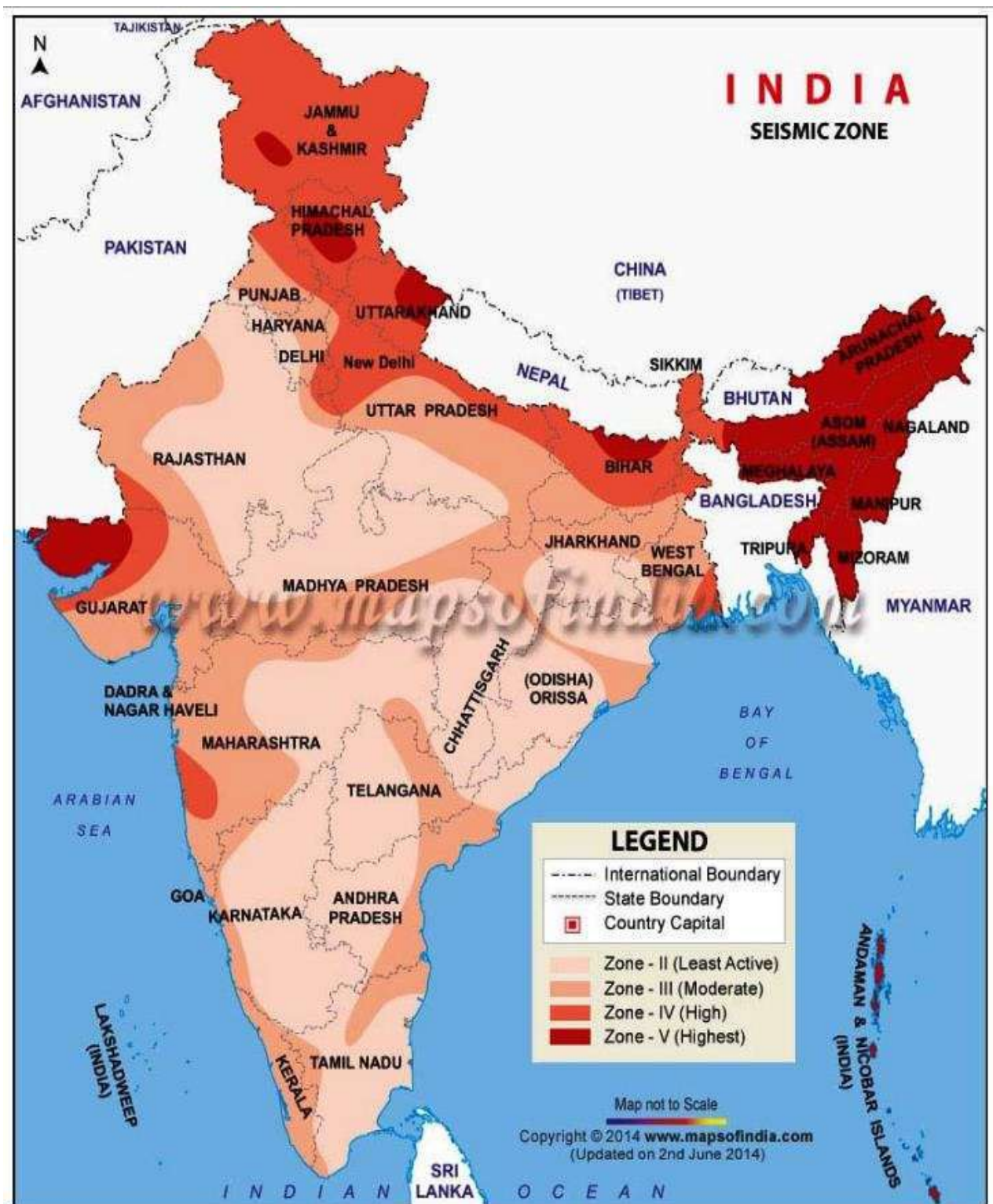


Fig. 2: Seismicity Map of India



Figure 3 : - Site Location Plan.

The field and laboratory test described in Chapter 3.

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in June July 2026, the groundwater table 2.00m to 6.50m was encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbing at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 19 BHs, the soil and rock stratification is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH No.	Depth (m)		Description
	From	To	
BH-384	0.00	2.35	Filled Up soil
	2.35	18.00	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt
	18.00	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-385	0.00	2.50	Filled Up soil
	2.50	27.00	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt
	27.00	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-386	0.00	2.50	Filled Up Soil
	2.50	12.00	Medium Dense to Dense, Brownish, Silty Sand
	12.00	19.50	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt
	19.50	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-387	0.00	2.50	Filled Up Soil
	2.50	25.50	Medium Dense to Dense, Brownish, Silty Sand
	25.50	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-388	0.00	2.50	Filled Up Soil
	2.50	19.50	Medium Dense to Dense, Brownish, Silty Sand
	19.50	50.00	Very Dense, Brownish, Silty Sand
BH-389	0.00	2.50	Filled Up Soil
	2.50	24.00	Medium Dense to Dense, Brownish, Silty Sand
	24.00	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-420	0.00	2.50	Filled Up soil
	2.50	12.00	Medium Dense to Dense, Brownish, Silty Sand
	12.00	18.00	Hard, Brownish, Clay of Low Plasticity
	18.00	22.55	Very Dense, Brownish, Silty Sand
	22.55	33.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-421	0.00	2.50	Filled Up soil
	2.50	9.08	Medium Dense to Very Dense, Brownish, Silty Sand
	9.08	19.50	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-422	0.00	2.50	Filled Up soil
	2.50	15.07	Medium Dense to Very Dense, Brownish, Silty Sand
	15.07	27.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-423	0.00	2.50	Filled Up soil
	2.50	16.60	Medium Dense to Very Dense, Brownish, Silty Sand
	16.60	29.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-424	0.00	2.50	Filled Up soil
	2.50	13.50	Loose to Medium Dense, Brownish, Silty Sand
	13.50	39.05	Dense to Very Dense, Brownish, Silty Sand
	39.05	49.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder

BH No.	Depth (m)		Description
	From	To	
BH-425	0.00	2.50	FILLED UP SOIL
	2.50	22.50	Loose, Medium Dense to Dense, Brownish, Silty Sand
	22.50	37.50	Very Dense, Brownish, Silty Sand
	37.50	43.50	Very Dense, Brownish, Clayey Sand
	43.50	50.00	Hard, Brownish, Clay of Low Plasticity
BH-427	0.00	2.50	Filled up soil
	2.50	3.05	Very Dense, Brownish, Silty Sand
	3.05	13.50	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-428	0.00	2.50	Filled up soil
	2.50	6.03	Very Dense, Brownish, Silty Sand
	6.03	16.53	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-429	0.00	2.50	Filled up soil
	2.50	3.05	Very Dense, Brownish, Silty Sand
	3.05	13.50	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-430	0.00	2.50	Filled up soil
	2.50	6.05	Very Dense, Brownish, Silty Sand
	6.05	16.50	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-431	0.00	2.50	Filled up soil
	2.50	4.53	Very Dense, Brownish, Silty Sand
	4.53	15.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-432	0.00	2.50	Filled up soil
	2.50	4.53	Very Dense, Brownish, Silty Sand
	4.53	15.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-433	0.00	2.50	Filled up soil
	2.50	3.08	Very Dense, Brownish, Silty Sand
	3.08	13.50	Completely to Highly Weathered, Brownish, Very Poor, Boulder

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986514 m	Easting :576433 m
Reduced Level (m):(+-)	BH. No. :BH-384	BH Depth (m):50
Proposed/Existing Structure :BH-384 (P1091)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :28-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0				Filled Up soil	FILL				
1.5									
2.0									
2.5	2.35	UDS*							
3.0	3	SPT-1	15						
3.5									
4.0									
4.5	4.5	SPT-2	18						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	22	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5	8.5	UDS-1							
9.0									
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986514 m	Easting :576433 m
Reduced Level (m):(+) -	BH. No. :BH-384	BH Depth (m):50
Proposed/Existing Structure :BH-384 (P1091)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :28-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	37	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
11.0									
11.5									
12.0	12	SPT-7	33						
12.5									
13.0				Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
13.5	13.5	SPT-8	32						
14.0									
14.5									
15.0	15	SPT-9	37						
15.5				Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
16.0									
16.5	16.5	SPT-10	45						
17.0									
17.5									
18.0	18	SPT-11	50	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
18.5									
19.0									
19.5	19.5	SPT-12	40	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986514 m	Easting :576433 m
Reduced Level (m):(+-)	BH. No. :BH-384	BH Depth (m):50
Proposed/Existing Structure :BH-384 (P1091)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :28-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	40						
21.5									
22.0									
22.5	22.5	SPT-14	43						
23.0									
23.5									
24.0	24	SPT-15	46						
24.5									
25.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
25.5	25.5	SPT-16	47						
26.0									
26.5									
27.0	27	SPT-17	42						
27.5									
28.0									
28.5	28.5	SPT-18	57						
29.0									
29.5									
30.0	30	SPT-19	62						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986514 m	Easting :576433 m
Reduced Level (m):(+-)	BH. No. :BH-384	BH Depth (m):50
Proposed/Existing Structure :BH-384 (P1091)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :28-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	66						
32.0									
32.5									
33.0	33	SPT-21	55						
33.5									
34.0									
34.5	34.5	SPT-22	60						
35.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.5									
36.0	36	SPT-23	63						
36.5									
37.0									
37.5	37.5	SPT-24	66						
38.0									
38.5									
39.0	39	SPT-25	71						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986514 m	Easting :576433 m
Reduced Level (m):(+) -	BH. No. :BH-384	BH Depth (m):50
Proposed/Existing Structure :BH-384 (P1091)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :28-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	83						
41.0									
41.5									
42.0	42	SPT-27	86						
42.5									
43.0									
43.5	43.5	SPT-28	90						
44.0									
44.5									
45.0	45	SPT-29	94	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	97						
47.0									
47.5									
48.0	48	SPT-31	68						
48.5									
49.0									
49.5	49.5	SPT-32	78						
50.0	50	SPT-33	85						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986594 m	Easting :576421 m
Reduced Level (m):(+) -	BH. No. :BH-385	BH Depth (m):50
Proposed/Existing Structure :BH-385 (P1095)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	16						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	22	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
6.5									
7.0									
7.5	7.5	SPT-4	25						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	28						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986594 m	Easting : 576421 m
Reduced Level (m) : (+)-	BH. No. : BH-385	BH Depth (m) : 50
Proposed/Existing Structure : BH-385 (P1095)	Water Table (m) : Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 25-07-2026	Date of Completion : 26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5									
11.0									
11.5									
12.0	12	SPT-7	34						
12.5									
13.0									
13.5	13.5	SPT-8	36						
14.0									
14.5									
15.0	15	SPT-9	36	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
15.5									
16.0									
16.5	16.5	SPT-10	36						
17.0									
17.5									
18.0	18	SPT-11	36						
18.5									
19.0									
19.5	19.5	SPT-12	40						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986594 m	Easting :576421 m
Reduced Level (m):(+)-	BH. No. :BH-385	BH Depth (m):50
Proposed/Existing Structure :BH-385 (P1095)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	41						
21.5									
22.0									
22.5	22.5	SPT-14	39						
23.0									
23.5				Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
24.0	24	SPT-15	44						
24.5									
25.0									
25.5	25.5	SPT-16	48						
26.0									
26.5									
27.0	27	SPT-17	52						
27.5									
28.0									
28.5	28.5	SPT-18	55	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
29.0									
29.5									
30.0	30	SPT-19	46						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986594 m	Easting : 576421 m
Reduced Level (m):(+)-	BH. No. : BH-385	BH Depth (m): 50
Proposed/Existing Structure : BH-385 (P1095)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 25-07-2026	Date of Completion : 26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	56						
32.0									
32.5									
33.0	33	SPT-21	60						
33.5									
34.0									
34.5	34.5	SPT-22	63						
35.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.5									
36.0	36	SPT-23	57						
36.5									
37.0									
37.5	37.5	SPT-24	60						
38.0									
38.5									
39.0	39	SPT-25	60						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986594 m	Easting :576421 m
Reduced Level (m):(+) -	BH. No. :BH-385	BH Depth (m):50
Proposed/Existing Structure :BH-385 (P1095)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	61	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
41.0									
41.5									
42.0	42	SPT-27	54						
42.5									
43.0									
43.5	43.5	SPT-28	65						
44.0									
44.5									
45.0	45	SPT-29	70						
45.5									
46.0	46	SPT-30	74						
46.5									
47.0									
47.5	47.5	SPT-31	77						
48.0									
48.5									
49.0	49	SPT-32	82						
49.5									
50.0	50	SPT-33	88						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986676 m	Easting : 576411 m
Reduced Level (m):(+)-	BH. No. : BH-386	BH Depth (m): 50
Proposed/Existing Structure : BH-386 (P1098)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 25-07-2026	Date of Completion : 26-07-2026	

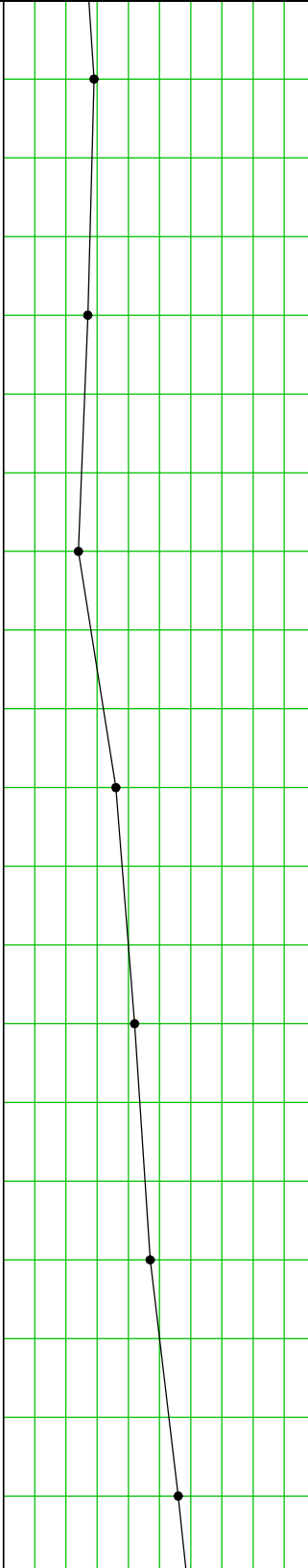
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	13						
3.5									
4.0									
4.5	4.5	SPT-2	20						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	18	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	23						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	24						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986676 m	Easting :576411 m
Reduced Level (m):(+) -	BH. No. :BH-386	BH Depth (m):50
Proposed/Existing Structure :BH-386 (P1098)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	27	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
12.5									
13.0									
13.5	13.5	SPT-8	24						
14.0									
14.5									
15.0	15	SPT-9	36						
15.5									
16.0									
16.5	16.5	SPT-10	42						
17.0									
17.5									
18.0	18	SPT-11	47						
18.5									
19.0									
19.5	19.5	SPT-12	56	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986676 m	Easting :576411 m
Reduced Level (m):(+-)	BH. No. :BH-386	BH Depth (m):50
Proposed/Existing Structure :BH-386 (P1098)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	64						
21.5									
22.0									
22.5	22.5	SPT-14	50						
23.0									
23.5									
24.0	24	SPT-15	54						
24.5									
25.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
25.5	25.5	SPT-16	56						
26.0									
26.5									
27.0	27	SPT-17	50						
27.5									
28.0									
28.5	28.5	SPT-18	64						
29.0									
29.5									
30.0	30	SPT-19	70						



FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986676 m	Easting : 576411 m
Reduced Level (m):(+)-	BH. No. : BH-386	BH Depth (m): 50
Proposed/Existing Structure : BH-386 (P1098)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 25-07-2026	Date of Completion : 26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	74						
32.0									
32.5									
33.0	33	SPT-21	69						
33.5									
34.0									
34.5	34.5	SPT-22	66						
35.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.5									
36.0	36	SPT-23	69						
36.5									
37.0									
37.5	37.5	SPT-24	74						
38.0									
38.5									
39.0	39	SPT-25	75						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986676 m	Easting : 576411 m
Reduced Level (m) : (+)-	BH. No. : BH-386	BH Depth (m) : 50
Proposed/Existing Structure : BH-386 (P1098)	Water Table (m) : Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 25-07-2026	Date of Completion : 26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	83						
41.0									
41.5									
42.0	42	SPT-27	79						
42.5									
43.0									
43.5	43.5	SPT-28	86						
44.0									
44.5									
45.0	45	SPT-29	90	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	94						
47.0									
47.5									
48.0	48	SPT-31	97						
48.5									
49.0									
49.5									
50.0	50	SPT-32	94						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986778 m	Easting : 576411 m
Reduced Level (m):(+)-	BH. No. : BH-387	BH Depth (m): 50
Proposed/Existing Structure : BH-387 (P1102)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 24-07-2026	Date of Completion : 25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	15						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	17	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	22						
8.0									
8.5	8.5	UDS -1	UDS						
9.0	9	SPT-5	21						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986778 m	Easting :576411 m
Reduced Level (m):(+) -	BH. No. :BH-387	BH Depth (m):50
Proposed/Existing Structure :BH-387 (P1102)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	28						
11.0									
11.5									
12.0	12	SPT-7	32						
12.5									
13.0									
13.5	13.5	SPT-8	34						
14.0									
14.5									
15.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0	16	SPT-9	33						
16.5	16.5	SPT-10	31						
17.0									
17.5									
18.0	18	SPT-11	35						
18.5									
19.0									
19.5	19.5	SPT-12	37						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986778 m	Easting :576411 m
Reduced Level (m):(+-)	BH. No. :BH-387	BH Depth (m):50
Proposed/Existing Structure :BH-387 (P1102)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	42						
21.5									
22.0									
22.5	22.5	SPT-14	44	Medium Dense to Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0	24	SPT-15	47						
24.5									
25.0									
25.5	25.5	SPT-16	51						
26.0									
26.5									
27.0	27	SPT-17	45						
27.5									
28.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
28.5	28.5	SPT-18	47						
29.0									
29.5									
30.0	30	SPT-19	51						



FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986778 m	Easting : 576411 m
Reduced Level (m):(+)-	BH. No. : BH-387	BH Depth (m): 50
Proposed/Existing Structure : BH-387 (P1102)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 24-07-2026	Date of Completion : 25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	54						
32.0									
32.5									
33.0	33	SPT-21	57						
33.5									
34.0									
34.5	34.5	SPT-22	50						
35.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.5									
36.0	36	SPT-23	62						
36.5									
37.0									
37.5	37.5	SPT-24	64						
38.0									
38.5									
39.0	39	SPT-25	63						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986778 m	Easting : 576411 m
Reduced Level (m) : (+)-	BH. No. : BH-387	BH Depth (m) : 50
Proposed/Existing Structure : BH-387 (P1102)	Water Table (m) : Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 24-07-2026	Date of Completion : 25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	68	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
41.0									
41.5									
42.0	42	SPT-27	63						
42.5									
43.0									
43.5	43.5	SPT-28	67						
44.0									
44.5									
45.0	45	SPT-29	79						
45.5									
46.0									
46.5	46.5	SPT-30	82						
47.0									
47.5									
48.0	48	SPT-31	86						
48.5									
49.0									
49.5	49.5	SPT-32	90						
50.0	50	SPT-33	88						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2986852 m	Easting : 578403 m
Reduced Level (m):(+)-	BH. No. : BH-388	BH Depth (m): 50
Proposed/Existing Structure : BH-388 (P1105)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 25-07-2026	Date of Completion : 26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	13						
3.5									
4.0									
4.5	4.5	SPT-2	20						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	18	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	23						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	24						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986852 m	Easting :578403 m
Reduced Level (m):(+) -	BH. No. :BH-388	BH Depth (m):50
Proposed/Existing Structure :BH-388 (P1105)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	27						
12.5									
13.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	24						
14.0									
14.5									
15.0	15	SPT-9	36						
15.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	32						
17.0									
17.5									
18.0	18	SPT-11	47	Medium Dense to Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	56						
20.0				Very Dense, Brownish, Silty Sand	SM				



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986852 m	Easting :578403 m
Reduced Level (m):(+-)	BH. No. :BH-388	BH Depth (m):50
Proposed/Existing Structure :BH-388 (P1105)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	64						
21.5									
22.0									
22.5	22.5	SPT-14	50						
23.0									
23.5									
24.0	24	SPT-15	46						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	54						
26.0									
26.5									
27.0	27	SPT-17	66						
27.5									
28.0									
28.5	28.5	SPT-18	50						
29.0									
29.5									
30.0	30	SPT-19	64						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986852 m	Easting :578403 m
Reduced Level (m):(+)-	BH. No. :BH-388	BH Depth (m):50
Proposed/Existing Structure :BH-388 (P1105)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	67						
32.0									
32.5									
33.0	33	SPT-21	70						
33.5									
34.0									
34.5	34.5	SPT-22	73						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	76						
36.5									
37.0									
37.5	37.5	SPT-24	78						
38.0									
38.5									
39.0	39	SPT-25	82						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986852 m	Easting :578403 m
Reduced Level (m):(+) -	BH. No. :BH-388	BH Depth (m):50
Proposed/Existing Structure :BH-388 (P1105)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :25-07-2026	Date of Completion :26-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	84						
41.0									
41.5									
42.0	42	SPT-27	87						
42.5									
43.0									
43.5	43.5	SPT-28	89						
44.0									
44.5									
45.0	45	SPT-29	92	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	97						
47.0									
47.5									
48.0	48	SPT-31	99						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986964 m	Easting :576413 m
Reduced Level (m):(+-)	BH. No. :BH-389	BH Depth (m):50
Proposed/Existing Structure :BH-389 (P1109)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	15						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	22	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	28						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

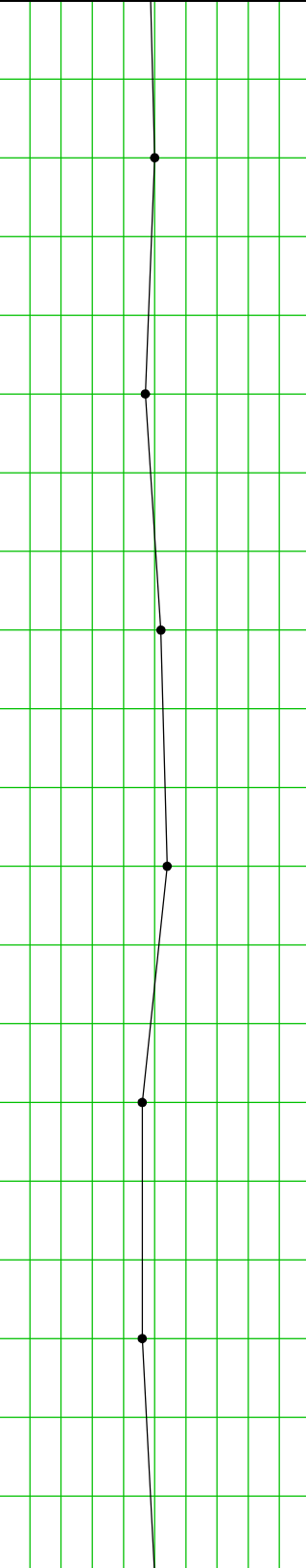
BH Location/Chainage :-	Northing :2986964 m	Easting :576413 m
Reduced Level (m):(+) -	BH. No. :BH-389	BH Depth (m):50
Proposed/Existing Structure :BH-389 (P1109)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29						
11.0									
11.5									
12.0	12	SPT-7	22						
12.5									
13.0									
13.5	13.5	SPT-8	23						
14.0									
14.5									
15.0	15	SPT-9	39	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	42						
17.0									
17.5									
18.0	18	SPT-11	46						
18.5									
19.0									
19.5	19.5	SPT-12	48						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986964 m	Easting :576413 m
Reduced Level (m):(+) -	BH. No. :BH-389	BH Depth (m):50
Proposed/Existing Structure :BH-389 (P1109)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
20.5										
21.0	21	SPT-13	50	Medium Dense to Dense, Brownish, Silty Sand	SM					
21.5										
22.0										
22.5	22.5	SPT-14	47							
23.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM					
23.5										
24.0	24	SPT-15	52							
24.5										
25.0										
25.5	25.5	SPT-16	54							
26.0										
26.5										
27.0	27	SPT-17	46							
27.5										
28.0										
28.5	28.5	SPT-18	46							
29.0										
29.5										
30.0	30	SPT-19	50							

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986964 m	Easting :576413 m
Reduced Level (m):(+-)	BH. No. :BH-389	BH Depth (m):50
Proposed/Existing Structure :BH-389 (P1109)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	55						
32.0									
32.5									
33.0	33	SPT-21	58						
33.5									
34.0									
34.5	34.5	SPT-22	62						
35.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.5									
36.0	36	SPT-23	65						
36.5									
37.0									
37.5	37.5	SPT-24	71						
38.0									
38.5									
39.0	39	SPT-25	77						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2986964 m	Easting :576413 m
Reduced Level (m):(+) -	BH. No. :BH-389	BH Depth (m):50
Proposed/Existing Structure :BH-389 (P1109)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :26-07-2026	Date of Completion :27-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	85						
41.0									
41.5									
42.0	42	SPT-27	94						
42.5									
43.0									
43.5	43.5	SPT-28	99						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989868 m	Easting :576256 m
Reduced Level (m):(+) -	BH. No. :BH-420	BH Depth (m):33
Proposed/Existing Structure :BH-420 (P1205)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :08-07-2026	Date of Completion :09-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-1	12						
3.5									
4.0									
4.5	4.5	SPT-2	14						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	18	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	20						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	26						
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989868 m	Easting :576256 m
Reduced Level (m):(+) -	BH. No. :BH-420	BH Depth (m):33
Proposed/Existing Structure :BH-420 (P1205)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :08-07-2026	Date of Completion :09-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
10.0							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
10.5	10.5	SPT-6	33	Medium Dense to Dense, Brownish, Silty Sand	SM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989868 m	Easting :576256 m
Reduced Level (m):(+-)	BH. No. :BH-420	BH Depth (m):33
Proposed/Existing Structure :BH-420 (P1205)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :08-07-2026	Date of Completion :09-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	>100	Very Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14 RC-1	>100						
23.0	22.55								
23.5									
24.0	24	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.34	0	
24.5									
25.0									
25.5	25.5	RC-3					10.66	0	
26.0									
26.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
27.0	27	RC-4					10	0	
27.5									
28.0									
28.5	28.5	RC-5		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.66	0	
29.0									
29.5									
30.0	30	RC-6					10.66	0	



<i>BH Location/Chainage :-</i>	<i>Northing :2989868 m</i>	<i>Easting :576256 m</i>
<i>Reduced Level (m):(+)-</i>	<i>BH. No. :BH-420</i>	<i>BH Depth (m):33</i>
<i>Proposed/Existing Structure :BH-420 (P1205)</i>	<i>Water Table (m):Not encountered</i>	<i>Inclination : Vertical</i>
<i>Boring type :Rotary</i>	<i>Dia. of Boring :150/76 mm</i>	<i>Depth of Casing (m) :-</i>
<i>Date of Start :08-07-2026</i>	<i>Date of Completion :09-07-2026</i>	

[illegible]

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989960 m	Easting :576239 m
Reduced Level (m):(+) -	BH. No. :BH-421	BH Depth (m):19.5
Proposed/Existing Structure :BH-421 (P1209)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :07-07-2026	Date of Completion :08-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-1	22						
3.5									
4.0									
4.5	4.5	SPT-2	30						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	68	Medium Dense to Very Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	>100						
8.0									
8.5									
9.0	9 9.08	SPT-5 RC-1	>100						
9.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989960 m	Easting :576239 m
Reduced Level (m):(+) -	BH. No. :BH-421	BH Depth (m):19.5
Proposed/Existing Structure :BH-421 (P1209)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :07-07-2026	Date of Completion :08-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.56	0	
11.0									
11.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
12.0	12	RC-3					10	0	
12.5									
13.0									
13.5	13.5	RC-4		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.33	0	
14.0									
14.5									
15.0	15	RC-5					12	0	
15.5									
16.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
16.5	16.5	RC-6					10	0	
17.0									
17.5									
18.0	18	RC-7		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		12	0	
18.5									
19.0									
19.5	19.5						11.33	0	

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2990062 m	Easting : 576218 m
Reduced Level (m):(+)-	BH. No. : BH-422	BH Depth (m): 27
Proposed/Existing Structure : BH-422 (P1213)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 07-07-2026	Date of Completion : 08-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	14						
3.5									
4.0									
4.5	4.5	SPT-2	17						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	21	Medium Dense to Very Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	24						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	27						
9.5									
10.0									



FIELD BOREHOLE LOG

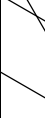
Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990062 m	Easting :576218 m
Reduced Level (m):(+) -	BH. No. :BH-422	BH Depth (m):27
Proposed/Existing Structure :BH-422 (P1213)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :07-07-2026	Date of Completion :08-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29						
11.0									
11.5									
12.0	12	SPT-7	>100						
12.5				Medium Dense to Very Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	>100						
14.0									
14.5									
15.0	15 15.07	SPT-9 RC-1	>100						
15.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
16.0									
16.5	16.5	RC-2					10.48	0	
17.0									
17.5									
18.0	18	RC-3					10.66	0	
18.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
19.0									
19.5	19.5	RC-4					11.33	0	
20.0									



BH Location/Chainage :-	Northing :2990062 m	Easting :576218 m
Reduced Level (m):(+)-	BH. No. :BH-422	BH Depth (m):27
Proposed/Existing Structure :BH-422 (P1213)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :07-07-2026	Date of Completion :08-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)				
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100				
20.5	21	RC-5		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.66	0					
21.0													
21.5	22.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V		10	0					
22.0													
22.5													
23.0													
23.5	24	RC-7		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.66	0					
24.0													
24.5													
25.0													
25.5	25.5	RC-8					11.33	0					
26.0													
26.5													
27.0	27						16.66	0					

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990154 m	Easting :576198 m
Reduced Level (m):(+) -	BH. No. :BH-423	BH Depth (m):29
Proposed/Existing Structure :BH-423 (P1216)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-06-2026	Date of Completion :06-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-1	16						
3.5									
4.0									
4.5	4.5	SPT-2	25						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	34	Medium Dense to Very Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	40						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	45						
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990154 m	Easting :576198 m
Reduced Level (m):(+) -	BH. No. :BH-423	BH Depth (m):29
Proposed/Existing Structure :BH-423 (P1216)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-06-2026	Date of Completion :06-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	63						
11.0									
11.5									
12.0	12	SPT-7	>100						
12.5									
13.0									
13.5	13.5	SPT-8	>100	Medium Dense to Very Dense, Brownish, Silty Sand	SM				
14.0									
14.5									
15.0	15	SPT-9	>100						
15.5									
16.0									
16.5	16.5	SPT-10	>100						
16.6	16.6	RC-1							
17.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
17.5									
18.0	18	RC-2					10.7	0	
18.5									
19.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
19.5	19.5	RC-3					10	0	
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990154 m	Easting :576198 m
Reduced Level (m):(+-)	BH. No. :BH-423	BH Depth (m):29
Proposed/Existing Structure :BH-423 (P1216)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-06-2026	Date of Completion :06-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	RC-4					10	0	
21.5									
22.0									
22.5	22.5	RC-5					10	0	
23.0									
23.5									
24.0	24	RC-6					10	0	
24.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
25.0									
25.5	25.5	RC-7					10	0	
26.0									
26.5									
27.0	27	RC-8					10	0	
27.5									
28.0									
28.5									
29.0	29						10	0	



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990235 m	Easting :576171 m
Reduced Level (m):(+) -	BH. No. :BH-424	BH Depth (m):49
Proposed/Existing Structure :BH-424 (P1219)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-07-2026	Date of Completion :07-07-226	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	8						
3.5									
4.0									
4.5	4.5	SPT-2	10						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	14	Loose to Medium Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	17						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	22						
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990235 m	Easting :576171 m
Reduced Level (m):(+) -	BH. No. :BH-424	BH Depth (m):49
Proposed/Existing Structure :BH-424 (P1219)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-07-2026	Date of Completion :07-07-226	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	26	Loose to Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	30	Loose to Medium Dense, Brownish, Silty Sand	SM				
12.5									
13.0									
13.5	13.5	SPT-8	33						
14.0									
14.5									
15.0	15	SPT-9	36						
15.5									
16.0									
16.5	16.5	SPT-10	40	Dense to Very Dense, Brownish, Silty Sand	SM				
17.0									
17.5									
18.0	18	SPT-11	44						
18.5									
19.0									
19.5	19.5	SPT-12	48						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990235 m	Easting :576171 m
Reduced Level (m):(+-)	BH. No. :BH-424	BH Depth (m):49
Proposed/Existing Structure :BH-424 (P1219)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-07-2026	Date of Completion :07-07-226	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	52						
21.5									
22.0									
22.5	22.5	SPT-14	55						
23.0									
23.5									
24.0	24	SPT-15	58						
24.5									
25.0				Dense to Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	62						
26.0									
26.5									
27.0	27	SPT-17	70						
27.5									
28.0									
28.5	28.5	SPT-18	74						
29.0									
29.5									
30.0	30	SPT-19	80						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990235 m	Easting :576171 m
Reduced Level (m):(+-)	BH. No. :BH-424	BH Depth (m):49
Proposed/Existing Structure :BH-424 (P1219)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-07-2026	Date of Completion :07-07-226	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	84						
32.0									
32.5									
33.0	33	SPT-21	90						
33.5									
34.0									
34.5	34.5	SPT-22	>100	Dense to Very Dense, Brownish, Silty Sand	SM				
35.0									
35.5									
36.0	36	SPT-23	>100						
36.5									
37.0									
37.5	37.5	SPT-24	>100						
38.0									
38.5									
39.0	39 39.05	SPT-25 RC-1	>100						
39.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990235 m	Easting :576171 m
Reduced Level (m):(+-)	BH. No. :BH-424	BH Depth (m):49
Proposed/Existing Structure :BH-424 (P1219)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :05-07-2026	Date of Completion :07-07-226	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.34	0	
41.0									
41.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
42.0	42	RC-3					0	0	
42.5									
43.0									
43.5	43.5	RC-4					11.33	0	
44.0									
44.5									
45.0	45	RC-5					12	0	
45.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
46.0									
46.5	46.5	RC-6					11.33	0	
47.0									
47.5									
48.0	48	RC-7					13.33	0	
48.5									
49.0	49						18	0	

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2989946 m	Easting : 576278 m
Reduced Level (m):(+)-	BH. No. : BH-425	BH Depth (m): 34
Proposed/Existing Structure : BH-425 (DCP1)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 18-07-2026	Date of Completion : 19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				FILLED UP SOIL	FILL				
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-1	9						
3.5									
4.0									
4.5	4.5	SPT-2	13						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	17	Loose, Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	21						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	25						
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989946 m	Easting :576278 m
Reduced Level (m):(+) -	BH. No. :BH-425	BH Depth (m):34
Proposed/Existing Structure :BH-425 (DCP1)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :18-07-2026	Date of Completion :19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	28						
11.0									
11.5									
12.0	12	SPT-7	31						
12.5									
13.0									
13.5	13.5	SPT-8	33						
14.0									
14.5									
15.0	15	SPT-9	36	Loose, Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	39						
17.0									
17.5									
18.0	18	SPT-11	41						
18.5									
19.0									
19.5	19.5	SPT-12	45						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989946 m	Easting :576278 m
Reduced Level (m):(+) -	BH. No. :BH-425	BH Depth (m):34
Proposed/Existing Structure :BH-425 (DCP1)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :18-07-2026	Date of Completion :19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	50	Loose, Medium Dense to Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	54						
23.0									
23.5									
24.0	24	SPT-15	60						
24.5									
25.0									
25.5	25.5	SPT-16	64						
26.0									
26.5				Very Dense, Brownish, Silty Sand	SM				
27.0	27	SPT-17	68						
27.5									
28.0									
28.5	28.5	SPT-18	72						
29.0									
29.5									
30.0	30	SPT-19	76						



<i>BH Location/Chainage :-</i>	<i>Northing :2989946 m</i>	<i>Easting :576278 m</i>
<i>Reduced Level (m):(+)-</i>	<i>BH. No. :BH-425</i>	<i>BH Depth (m):34</i>
<i>Proposed/Existing Structure :BH-425 (DCP1)</i>	<i>Water Table (m):Not encountered</i>	<i>Inclination : Vertical</i>
<i>Boring type :Rotary</i>	<i>Dia. of Boring :150 mm</i>	<i>Depth of Casing (m) :-</i>
<i>Date of Start :18-07-2026</i>	<i>Date of Completion :19-07-2026</i>	

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FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2989946 m	Easting : 576278 m
Reduced Level (m):(+) -	BH. No. : BH-425	BH Depth (m): 34
Proposed/Existing Structure : BH-425 (DCP1)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 18-07-2026	Date of Completion : 19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
	40.5	SPT-26	>100	Very Dense, Brownish, Clayey Sand	SC				
	42	SPT-27	>100						
	43.5	SPT-28	>100						
	45	SPT-29	>100	Hard, Brownish, Clay of Low Plasticity	CL				
	46.5	SPT-30	>100						
	48	SPT-31	>100						
	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2989869 m	Easting : 576360 m
Reduced Level (m):(+)-	BH. No. : BH-427	BH Depth (m): 13.5
Proposed/Existing Structure : BH-427 (DP5)	Water Table (m): 4.50	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 15-07-2026	Date of Completion : 16-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1 RC-1	>100	Very Dense, Brownish, Silty Sand	SM				
3.5	3.05								
4.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
4.5	4.5	RC-2				4.50m	10.34	0	
5.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
5.5									
6.0	6	RC-3					10.66	0	
6.5									
7.0									
7.5	7.5	RC-4					10	0	
8.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
8.5									
9.0	9	RC-5					10	0	
9.5									
10.0									



<i>BH Location/Chainage :-</i>	<i>Northing :2989869 m</i>	<i>Easting :576360 m</i>
<i>Reduced Level (m):(+)-</i>	<i>BH. No. :BH-427</i>	<i>BH Depth (m):13.5</i>
<i>Proposed/Existing Structure :BH-427 (DP5)</i>	<i>Water Table (m):4.50</i>	<i>Inclination : Vertical</i>
<i>Boring type :Rotary</i>	<i>Dia. of Boring :150/76 mm</i>	<i>Depth of Casing (m) :-</i>
<i>Date of Start :15-07-2026</i>	<i>Date of Completion :16-07-2026</i>	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
10.5	10.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V		10	0		
11.0										
11.5										
12.0	12	RC-7		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10	0		
12.5										
13.0										
13.5	13.5						12	0		

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989878 m	Easting :576430 m
Reduced Level (m):(+) -	BH. No. :BH-428	BH Depth (m):16.53
Proposed/Existing Structure :BH-428 (DP8)	Water Table (m):6.50	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :12-07-2026	Date of Completion :13-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	79						
3.5									
4.0									
4.5	4.5	SPT-2	>100	Very Dense, Brownish, Silty Sand	SM				
5.0									
5.5	5.5	UDS-1							
6.0	6 6.03	SPT-3 RC-1	>100						
6.5						▼ 6.50m			
7.0									
7.5	7.5	RC-2					11.56	0	
8.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
8.5									
9.0	9	RC-3					12	0	
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989878 m	Easting :576430 m
Reduced Level (m):(+-)	BH. No. :BH-428	BH Depth (m):16.53
Proposed/Existing Structure :BH-428 (DP8)	Water Table (m):6.50	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :12-07-2026	Date of Completion :13-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-4					12.66	0	
11.0									
11.5									
12.0	12	RC-5					12	0	
12.5									
13.0									
13.5	13.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		12.66	0	
14.0									
14.5									
15.0	15	RC-7					12	0	
15.5									
16.0									
16.5	16.53						11.11	0	

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2989913 m	Easting : 576535 m
Reduced Level (m) : (+)-	BH. No. : BH-429	BH Depth (m) : 13.5
Proposed/Existing Structure : BH-429 (DP12)	Water Table (m) : 2.00	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 12-07-2026	Date of Completion : 13-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up soil	FILL				
2.0						2.00m			
2.5	2.5	UDS-1							
3.0	3			Very Dense, Brownish, Silty Sand	SM				
3.05	3.05	SPT-1 RC-1	>100						
3.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
4.0									
4.5	4.5	RC-2					11.03	0	
5.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
5.5									
6.0	6	RC-3					10	0	
6.5									
7.0									
7.5	7.5	RC-4					10.66	0	
8.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
8.5									
9.0	9	RC-5					11.33	0	
9.5									
10.0									



BH Location/Chainage :-	Northing :2989913 m	Easting :576535 m
Reduced Level (m):(+)-	BH. No. :BH-429	BH Depth (m):13.5
Proposed/Existing Structure :BH-429 (DP12)	Water Table (m):2.00	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :12-07-2026	Date of Completion :13-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)		
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100		
10.5	10.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV			0			
11.0											
11.5											
12.0	12	RC-7								0	
12.5											
13.0											
13.5	13.5							0			

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2909944 m	Easting :576610 m
Reduced Level (m):(+) -	BH. No. :BH-430	BH Depth (m):16.5
Proposed/Existing Structure :BH-430 (DP15)	Water Table (m):2.85	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :12-07-2026	Date of Completion :13-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	>100			▼ 2.85m			
3.5									
4.0									
4.5	4.5	SPT-2	>100	Very Dense, Brownish, Silty Sand	SM				
5.0									
5.5	5.5	UDS*							
6.0	6 6.05	SPT-3 RC-1	>100						
6.5									
7.0									
7.5	7.5	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.03	0	
8.0									
8.5									
9.0	9	RC-3					11.33	0	
9.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
10.0									



<i>BH Location/Chainage :-</i>	<i>Northing :2909944 m</i>	<i>Easting :576610 m</i>
<i>Reduced Level (m):(+) -</i>	<i>BH. No. :BH-430</i>	<i>BH Depth (m):16.5</i>
<i>Proposed/Existing Structure :BH-430 (DP15)</i>	<i>Water Table (m):2.85</i>	<i>Inclination : Vertical</i>
<i>Boring type :Rotary</i>	<i>Dia. of Boring :150/76 mm</i>	<i>Depth of Casing (m) :-</i>
<i>Date of Start :12-07-2026</i>	<i>Date of Completion :13-07-2026</i>	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-4		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V		10	0	
11.0									
11.5									
12.0	12	RC-5					10.66	0	
12.5									
13.0									
13.5	13.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		12	0	
14.0									
14.5									
15.0	15	RC-7					12.66	0	
15.5									
16.0									
16.5	16.5						11.33	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989957 m	Easting :576725 m
Reduced Level (m):(+-)	BH. No. :BH-431	BH Depth (m):15
Proposed/Existing Structure :BH-431 (DP19)	Water Table (m):3.25	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :15-07-2026	Date of Completion :16-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	>100	Very Dense, Brownish, Silty Sand	SM	3.25m			
3.5									
4.0									
4.5	4.5 4.53	SPT-2 RC-1	>100						
5.0									
5.5									
6.0	6	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.88	0	
6.5									
7.0									
7.5	7.5	RC-3					12.66	0	
8.0									
8.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
9.0	9	RC-4					10	0	
9.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
10.0									



<i>BH Location/Chainage :-</i>	<i>Northing :2989957 m</i>	<i>Easting :576725 m</i>
<i>Reduced Level (m):(+) -</i>	<i>BH. No. :BH-431</i>	<i>BH Depth (m):15</i>
<i>Proposed/Existing Structure :BH-431 (DP19)</i>	<i>Water Table (m):3.25</i>	<i>Inclination : Vertical</i>
<i>Boring type :Rotary</i>	<i>Dia. of Boring :150/76 mm</i>	<i>Depth of Casing (m) :-</i>
<i>Date of Start :15-07-2026</i>	<i>Date of Completion :16-07-2026</i>	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-5		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.66	0	
11.0									
11.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
12.0	12	RC-6					10	0	
12.5									
13.0									
13.5	13.5	RC-7		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.33	0	
14.0									
14.5									
15.0	15						12.66	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :29899 m	Easting :576819 m
Reduced Level (m):(+) -	BH. No. :BH-432	BH Depth (m):15
Proposed/Existing Structure :BH-432 (DP22)	Water Table (m):3.10	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-07-2026	Date of Completion :15-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	>100	Very Dense, Brownish, Silty Sand	SM	▼ 3.10m			
3.5									
4.0									
4.5	4.5 4.53	SPT-2 RC-1	>100						
5.0									
5.5									
6.0	6	RC-2					12.24	0	
6.5									
7.0									
7.5	7.5	RC-3		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.33	0	
8.0									
8.5									
9.0	9	RC-4					12.66	0	
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 29899 m	Easting : 576819 m
Reduced Level (m):(+)-	BH. No. : BH-432	BH Depth (m): 15
Proposed/Existing Structure : BH-432 (DP22)	Water Table (m): 3.10	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 14-07-2026	Date of Completion : 15-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-5					12	0	
11.0									
11.5									
12.0	12	RC-6					11.33	0	
12.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
13.0									
13.5	13.5	RC-7					12	0	
14.0									
14.5									
15.0	15						12.66	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2990018 m	Easting :576901 m
Reduced Level (m):(+) -	BH. No. :BH-433	BH Depth (m):13.5
Proposed/Existing Structure :BH-433 (DP25)	Water Table (m):2.50	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-07-2026	Date of Completion :15-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up soil	FILL				
2.0									
2.5	2.5	UDS*				2.50m			
3.0	3 3.08	SPT-1 RC-1	>100	Very Dense, Brownish, Silty Sand	SM				
3.5									
4.0									
4.5	4.5	RC-2					11.97	0	
5.0									
5.5									
6.0	6	RC-3					12	0	
6.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
7.0									
7.5	7.5	RC-4					11.33	0	
8.0									
8.5									
9.0	9	RC-5					12	0	
9.5									
10.0									



BH Location/Chainage :-	Northing :2990018 m	Easting :576901 m
Reduced Level (m):(+) -	BH. No. :BH-433	BH Depth (m):13.5
Proposed/Existing Structure :BH-433 (DP25)	Water Table (m):2.50	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :14-07-2026	Date of Completion :15-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)		
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100		
10.5	10.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		0				
11.0											
11.5											
12.0	12	RC-7							0		
12.5											
13.0											
13.5	13.5						0				

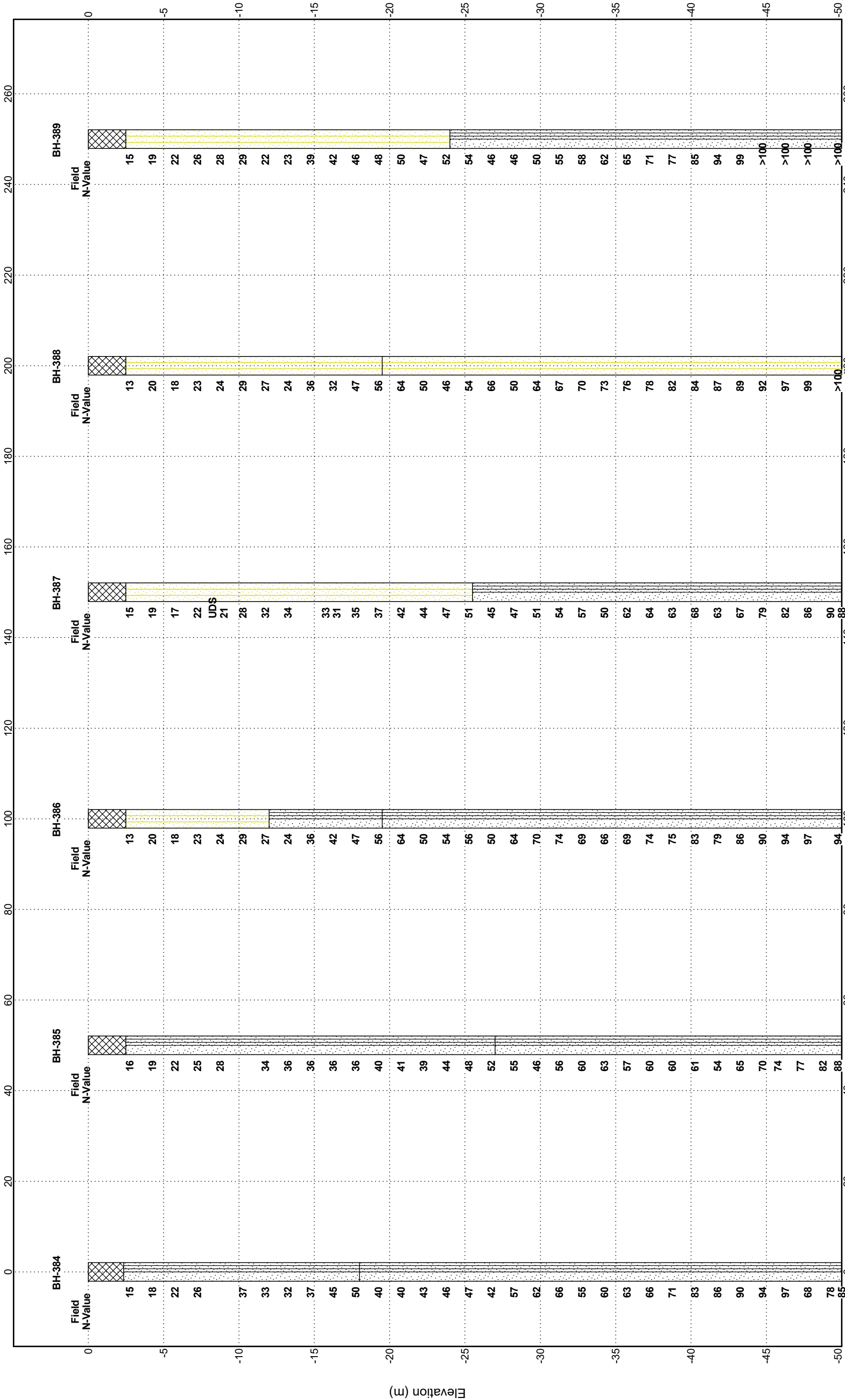
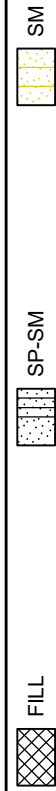
SUB SOIL PROFILE DIAGRAM -

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



Distance Along Baseline (m)

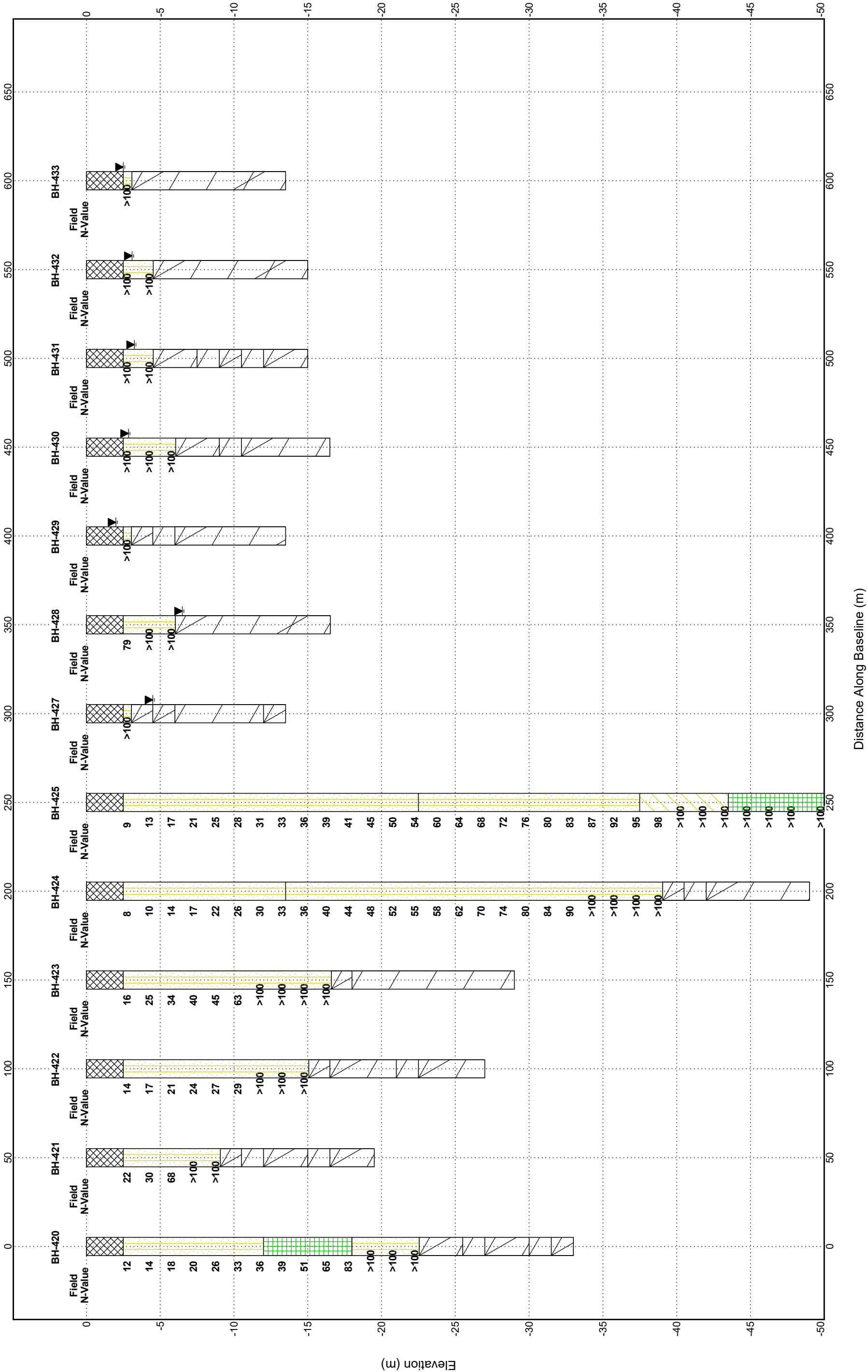
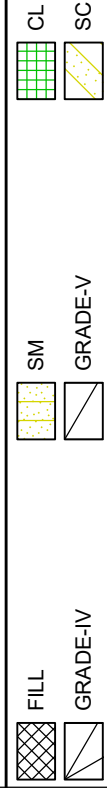
SUB SOIL PROFILE DIAGRAM -

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL & ROCK CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code									
	Date of Boring		Grain Size Distribution % wt retained						Atterberg Limits %				50.00 m			576433.000 m				2986514.000 m												
	26-07-2026	to	28-07-2026	P-1091	BH-384	NOT ENCOUNTERED	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)			Angle of Friction (φ°)	Free Swell Index (%)		Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e₀)	Pressure (kg/cm²)	C _y x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)			Compression Index (C _p)								
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e₀)	Pressure (kg/cm²)	C _y x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)	Compression Index (C _p)	
DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.35	-	-	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	15	18		SP-SM		0	11	78	7	3	0	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	18	19		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS*	5.50	-	-		SP-SM		0	9	79	8	2	0	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	22	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	26	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	8.50	-	-		SP-SM		0	12	76	10	0	0	2	-	NIL	NP	-	1.75	11.75	1.57	2.64	DST	0.00	30	-	-	-	-	-	-	-	-
SPT-5	90.00	31	14		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	37	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	33	25		SP-SM		0	9	76	14	0	1	0	-	NIL	NP	-	1.79	12.00	1.60	2.63	DST+	0.00	31	-	-	-	-	-	-	-	-
SPT-8	13.50	32	23		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	37	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	45	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-11	18.00	50	31		SP-SM		0	11	70	13	4	2	0	-	NIL	NP	-	1.82	12.50	1.62	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-
SPT-12	19.50	40	23		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	40	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-14	22.50	43	23		SP-SM		0	7	79	8	2	4	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-15	24.00	46	24		SP-SM		0	11	78	7	1	2	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-16	25.50	47	23		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"										Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Depth of Water Table	Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Date of Boring		Chainage/Location	B.H. No.	NOT ENCOUNTERED		50.00 m	576421.000 m		2986594.000 m				-	SR-1241_26-27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	25-07-2026	to			26-07-2026	P-1095		BH-385	Bulk Density (g/cm³)							Natural Moisture Content (%)		Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)		Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Medium Dense to Dense, Brownish, Poorly Graded Sand with Silt												-	Filled Up soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code												
	25-07-2026		to		26-07-2026		P-1095		BH-385	NOT ENCOUNTERED		50.00 m	576421.000 m		2986594.000 m		-	SR-1241_26-27													
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %			Shear Strength			Consolidation Parameters													
							Silt		Sand		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _c)
SPT-17	27.00	52	27	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM		0	10	80	8	2	0	0	-	NIL	NP	-	1.84	13.00	1.63	2.62	DST+	0.00	32	-	-	-	-	-	-	
SPT-18	28.50	55	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	30.00	46	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-20	31.50	56	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-21	33.00	60	28		SP-SM		0	6	79	10	4	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-22	34.50	63	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-23	36.00	57	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-24	37.50	60	28		SP-SM		0	8	75	12	3	2	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-25	39.00	60	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-26	40.50	61	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-27	42.00	54	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	43.50	65	30		SP-SM		0	11	82	5	2	0	0	-	NIL	NP	-	1.86	13.50	1.64	2.62	DST+	0.00	33	-	-	-	-	-	-	-
SPT-29	45.00	70	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.00	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	47.50	77	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	49.00	82	38		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-33	50.00	88	40		SP-SM		0	10	81	6	3	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)”										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code					
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %			NOT ENCOUNTERED		50.00 m	576411.000 m	2986676.000 m			-	SR-1241_26-27								
							Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index			Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)			Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)
SPT-17	27.00	50	24	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM		0	9	70	11	5	4	1	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-18	28.50	64	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-19	30.00	70	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-20	31.50	74	34		SP-SM		0	11	77	8	3	0	1	-	NIL	-	1.86	13.50	1.64	2.62	DST+	0.00	33	-	-	-	-	-	-	-	-
SPT-21	33.00	69	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-22	34.50	66	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-23	36.00	69	32		SP-SM		0	9	68	15	4	3	1	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-24	37.50	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-25	39.00	75	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-26	40.50	83	38		SP-SM		0	7	76	13	2	2	0	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-27	42.00	79	36		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	43.50	86	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	45.00	90	41		SP-SM		0	7	72	14	3	3	1	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.50	94	43		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	48.00	97	45		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	50.00	94	43		SP-SM		0	8	70	12	5	3	2	-	NIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”PKG-IV										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code						
	Date of Boring		NOT ENCOUNTERED	33.00 m	576256.000 m	2989868.000 m	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)			Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters															
	08-07-2026	to 09-07-2026													Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)											
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description		IS Classification					IS Symbol				Grain Size Distribution % wt retained				Atterberg Limits %		Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)
DS-1	0.00	-	-	Filled Up soil		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	2.50	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-1	3.00	12	15			SM																								
SPT-2	4.50	14	15			-																								
UDS*	5.50	-	-			-																								
SPT-3	6.00	18	18	Medium Dense to Dense, Brownish, Silty Sand		SM																								
SPT-4	7.50	20	18			-																								
UDS*	8.50	-	-			-																								
SPT-5	9.00	26	22			SM																								
SPT-6	10.50	33	26			-																								
SPT-7	12.00	36	36			CL																								
SPT-8	13.50	39	39	Hard, Brownish, Clay of Low Plasticity		-																								
SPT-9	15.00	51	51			CL																								
SPT-10	16.50	65	65			CL																								
SPT-11	18.00	83	50			SM																								
SPT-12	19.50	>100	-	Very Dense, Brownish, Silty Sand		-																								
SPT-13	21.00	>100	-			-																								
SPT-14	22.50	>100	-			-																								

Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS+UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+-Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PK G-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			NOT ENCOUNTERED		29.00 m		576198,000 m		2990154,000 m		Consolidation Parameters				-	SR-1241_26-27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)			Swelling Pressure (kg/cm³)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _x x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL AND ROCK CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.	Ref. Code										
	05-07-2026		to		07-07-226		P-1219		BH-424		NOT ENCOUNTERED				49.00 m		576171.000 m		2990235.000 m																
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters						
Clay								Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Pressure (kg/cm ²)				C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ² (cm ² /Kg)	Compression Index (C _c)				
	DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	2.50	-	-	Loose to Medium Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-1	3.00	8	10		SM		0	30	58	9	3	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	10	11		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	5.50	-	-		SM		0	39	52	5	3	1	0	-	NIL	NP	-	1.71	11.23	1.54	2.63	DST	0.00	29	-	-	-	-	-	-	-	-	-	-
	SPT-3	6.00	14	14		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	17	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-5	9.00	22	19		SM		0	39	46	5	5	3	2	-	NIL	NP	-	1.76	12.00	1.57	2.62	DST+	0.00	30	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	26	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	30	23		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	33	24	SM		0	20	54	14	7	4	1	-	NIL	NP	-	1.79	12.50	1.59	2.62	DST+	0.00	31	-	-	-	-	-	-	-	-	-		
	SPT-9	15.00	36	25	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-10	16.50	40	26	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-11	18.00	44	27	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-12	19.50	48	28	SM		0	34	52	7	4	1	2	-	NIL	NP	-	1.82	13.00	1.61	2.61	DST+	0.00	32	-	-	-	-	-	-	-	-	-		
	SPT-13	21.00	52	29	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-14	22.50	55	30	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-15	24.00	58	30	SM		0	25	57	8	3	4	3	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-16	25.50	62	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disurbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV						Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.	Ref. Code												
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Shear Strength			Free Swell Index			Permeability (cm/sec)	Consolidation Parameters										
								Clay	Silt	Fine		Medium	Coarse	Fine	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit				Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	(%)	Swelling Pressure (kg/cm ²)	(cm/sec)	Void Ratio (e ₀)
SPT-17		27.00	70	34	Dense to Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-18		28.50	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-19		30.00	80	37		SM		0	35	47	6	7	2	3	2	-	NIL	NP	-	1.86	13.50	1.64	2.61	DST+	0.00	33	-	-	-	-	-	-	-	
SPT-20		31.50	84	39		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-21		33.00	90	41		SM		0	37	50	5	4	2	2	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-22		34.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-23		36.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-24		37.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-25		39.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-1		39.05	-	-	Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		C. R. = 10.34 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-2		40.50	-	-		GRADE-V		C. R. = 0 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-3		42.00	-	-		GRADE-IV		C. R. = 11.33 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-4		43.50	-	-		GRADE-IV		C. R. = 12 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-5		45.00	-	-		GRADE-IV		C. R. = 11.33 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-6		46.50	-	-		GRADE-IV		C. R. = 13.33 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-7		48.00	-	-		GRADE-IV		C. R. = 18 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todt Mod (Total approximate length -42.8 km)"										Chainage/Location	B.H. No.	Depth of Water Table			Termination Depth	Coordinates (E,N)						R.L.	Ref. Code								
	Date of Boring			Grain Size Distribution % wt retained			Atterberg Limits %			Specific Gravity			Shear Strength				Free Swell Index			Permeability												
	05-07-2026	to	06-07-2026	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit			Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)		Natural Moisture Content (%)	Dry Density (g/cm ³)	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	(%)			Swelling Pressure (kg/cm ²)	(cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)	
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description			IS Classification	IS Symbol	Clay	Silt	Fine	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)
DS-1	0.00	-	-	FILLED UP SOIL	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	2.50	-	-	Loose, Medium Dense to Dense, Brownish, Silty Sand	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-1	3.00	9	11		-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	13	14		SM		0	14	66	8	2	10	0	-	NIL	NP	-	1.72	11.50	1.54	2.63	DST+	0.00	29	-	-	-	-	-	-	-	-
UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	17	17		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	21	19		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-5	9.00	25	21		SM		0	16	77	5	1	1	0	-	NIL	NP	-	1.77	12.00	1.58	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-
SPT-6	10.50	28	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	31	23		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	33	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	36	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	39	25		SM		0	15	76	9	0	0	0	-	NIL	NP	-	1.81	12.50	1.61	2.62	DST+	0.00	31	-	-	-	-	-	-	-	-
SPT-11	18.00	41	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-12	19.50	45	27		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	50	28		SM		0	19	74	7	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)”										Soil Description	IS Classification	IS Symbol	Date of Boring						Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code
	05-07-2026		to		06-07-2026		P-1223		BH-425					NOT ENCOUNTERED		50.00 m		576116.000 m				2990322.000 m											
	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _p)	Grain Size Distribution % wt retained			Atterberg Limits %			Bulk Density (g/cm ³)				Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)			Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)			
Sample Type				Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit																				
SPT-14	22.50	54		0	28	62	8	2	0	0	-	NP	-	1.84	13.00	1.63	2.61	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-			
SPT-15	24.00	60	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-16	25.50	64	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-17	27.00	68	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-18	28.50	72	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-19	30.00	76	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-20	31.50	80	37	0	18	72	9	0	1	0	-	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-21	33.00	83	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-22	34.50	87	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-23	36.00	92	42	0	33	47	10	3	7	0	-	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-24	37.50	95	44	8	35	40	8	2	4	3	28	11	-	1.89	15.50	1.64	2.65	DST+	0.10	33	-	-	-	-	-	-	-	-	-	-			
SPT-25	39.00	98	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-26	40.50	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-27	42.00	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-28	43.50	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-29	45.00	>100	-	12	53	26	2	1	6	0	33	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-30	46.50	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-31	48.00	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-32	50.00	>100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"						Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _a)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %			Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity	Shear Strength				Free Swell Index (%)		Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
								Clay	Silt	Fine		Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit			Plasticity Index	Shrinkage Limit			Bulk Density (g/cm ³)	Angle of Friction (φ°)			Cohesion C (kg/cm ²)	Type of Test	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	DS-1	0.00	-	-	Filled up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code								
							12-07-2026	to	13-07-2026	DP-8	BH-428	6.50 m	16.53 m	576430.000 m	2989878.000 m	-	SR-1241_26-27										
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters			
							Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit					Plastic Limit	Plasticity Index	Shrinkage Limit				Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)
DS-1	0.00	-	-	Filled up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-1	3.00	79	95		SM		0	19	57	15	4	4	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	
SPT-2	4.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	5.50	-	-		SM		0	18	45	18	8	7	4	-	NIL	NP	-	1.86	1.65	2.61	0.00	33	-	-	-	-	
SPT-3	6.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-1	6.03	-	-	Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		C. R. = 11.56 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
RC-2	7.50	-	-		GRADE-IV		C. R. = 12 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
RC-3	9.00	-	-		GRADE-IV		C. R. = 12.66 %	R.Q.D. = 0 %	Sp.Gr. = 2.60	R.Q.D. = 0 %	W.A. = 1.70 %	Density = 2.59 (g/cc)	Porosity = 4.42 %	-	-	-	-	-	-	-	-	-	-	-	-		
RC-4	10.50	-	-		GRADE-IV		C. R. = 12 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
RC-5	12.00	-	-		GRADE-IV		C. R. = 12.66 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
RC-6	13.50	-	-		GRADE-IV		C. R. = 12 %	R.Q.D. = 0 %	Sp.Gr. = 2.62	R.Q.D. = 0 %	W.A. = 1.55 %	Density = 2.60 (g/cc)	Porosity = 4.06 %	-	-	-	-	-	-	-	-	-	-	-	-		
RC-7	15.00	-	-		GRADE-IV		C. R. = 11.11 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table				Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)			Specific Gravity	Type of Test	Cohesion C (kg/cm ²)		Angle of Friction (φ°)	Free Swell Index (%)			Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										IS Classification	IS Symbol	Soil Description	Corrected SPT Value (N)	Observed SPT Value (N)	Depth from G.L. (m)	Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table			Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	12-07-2026	to	13-07-2026	DP-15	BH-430	2.85 m	16.50 m	576610.000 m	2909944.000 m	Free Swell Index (%)							Swelling Pressure (kg/cm ²)	Permeability (cm/sec)			Shear Strength			Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Sample Type	DS-1	0.00	-	-	Filled up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										IS Classification	IS Symbol	Soil Description	Observed SPT Value (N)	Corrected SPT Value (N _c)	Sample Type	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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	15-07-2026	to 16-07-2026			DP-19	BH-431		3.25 m	15.00 m	576725.000 m							2989957.000 m	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)			C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

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SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)				Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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GRAIN SIZE DISTRIBUTION CURVES

Project Name

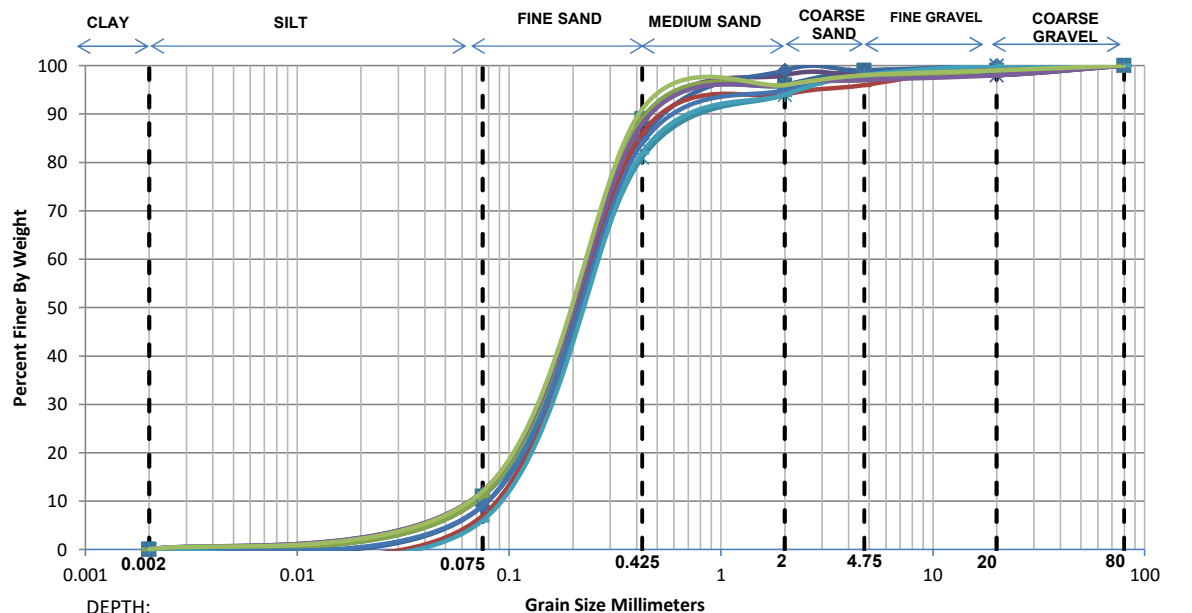
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1091

B.H. No.

384



— 3.00 m — 5.50 m — 8.50 m — 12.00 m — 18.00 m — 22.50 m — 24.00 m — 30.00 m — 36.00 m — 43.50 m — 50.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	11.00	78.00	7.00	3.00	0.00	1.00	0.0689	0.1546	0.2514	3.65	1.38
5.50 m	0.00	9.00	79.00	8.00	2.00	0.00	2.00	0.0806	0.1654	0.2599	3.22	1.31
8.50 m	0.00	12.00	76.00	10.00	0.00	0.00	2.00	0.0623	0.1504	0.2517	4.04	1.44
12.00 m	0.00	9.00	76.00	14.00	0.00	1.00	0.00	0.0808	0.1679	0.2691	3.33	1.30
18.00 m	0.00	11.00	70.00	13.00	4.00	2.00	0.00	0.0686	0.1598	0.2757	4.02	1.35
22.50 m	0.00	7.00	79.00	8.00	2.00	4.00	0.00	0.0928	0.1775	0.2705	2.92	1.25
24.00 m	0.00	11.00	78.00	7.00	1.00	2.00	1.00	0.0689	0.1546	0.2514	3.65	1.38
30.00 m	0.00	9.00	75.00	11.00	3.00	2.00	0.00	0.0808	0.1682	0.2711	3.35	1.29
36.00 m	0.00	6.00	76.00	12.00	4.00	2.00	0.00	0.1000	0.1866	0.2854	2.85	1.22
43.50 m	0.00	12.00	76.00	8.00	1.00	1.00	2.00	0.0623	0.1503	0.2511	4.03	1.44
50.00 m	0.00	12.00	79.00	5.00	2.00	1.00	1.00	0.0625	0.1486	0.2435	3.90	1.45

GRAIN SIZE DISTRIBUTION CURVES

Project Name

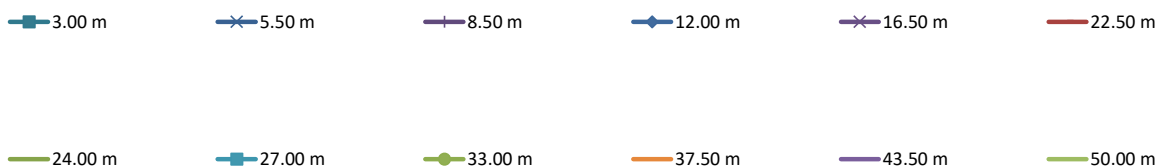
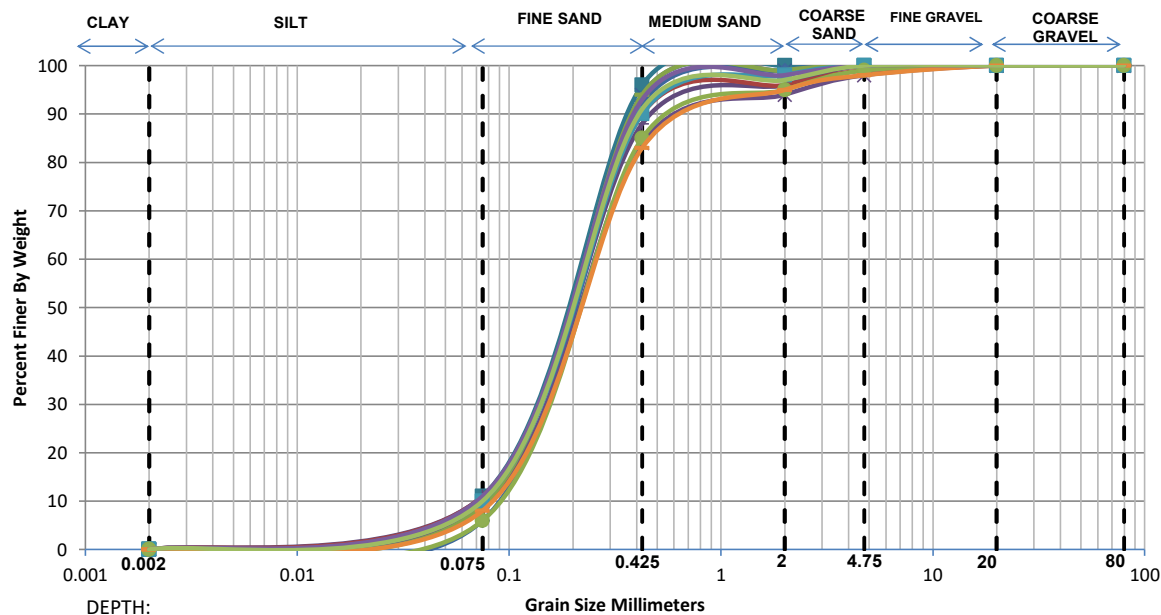
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1095

B.H. No.

385



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	11.00	85.00	4.00	0.00	0.00	0.00	0.0691	0.1510	0.2370	3.43	1.39
5.50 m	0.00	10.00	84.00	5.00	1.00	0.00	0.00	0.0750	0.1568	0.2438	3.25	1.35
8.50 m	0.00	11.00	77.00	8.00	4.00	0.00	0.00	0.0688	0.1552	0.2540	3.69	1.38
12.00 m	0.00	6.00	86.00	7.00	1.00	0.00	0.00	0.0980	0.1790	0.2604	2.66	1.26
16.50 m	0.00	9.00	75.00	10.00	4.00	2.00	0.00	0.0808	0.1681	0.2708	3.35	1.29
22.50 m	0.00	11.00	79.00	6.00	3.00	1.00	0.00	0.0689	0.1540	0.2489	3.61	1.38
24.00 m	0.00	9.00	85.00	5.00	1.00	0.00	0.00	0.0804	0.1618	0.2469	3.07	1.32
27.00 m	0.00	10.00	80.00	8.00	2.00	0.00	0.00	0.0750	0.1591	0.2524	3.37	1.34
33.00 m	0.00	6.00	79.00	10.00	4.00	1.00	0.00	0.0994	0.1841	0.2765	2.78	1.23
37.50 m	0.00	8.00	75.00	12.00	3.00	2.00	0.00	0.0870	0.1744	0.2770	3.19	1.26
43.50 m	0.00	11.00	82.00	5.00	2.00	0.00	0.00	0.0690	0.1524	0.2426	3.51	1.39
50.00 m	0.00	10.00	81.00	6.00	3.00	0.00	0.00	0.0750	0.1584	0.2498	3.33	1.34

GRAIN SIZE DISTRIBUTION CURVES

Project Name

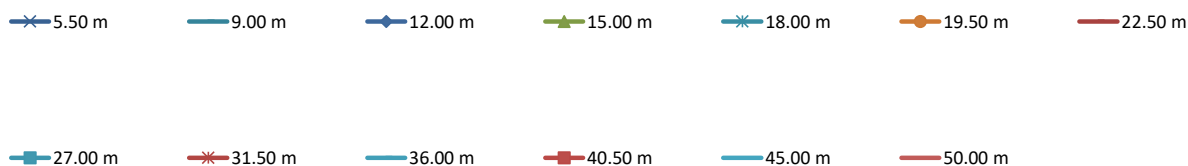
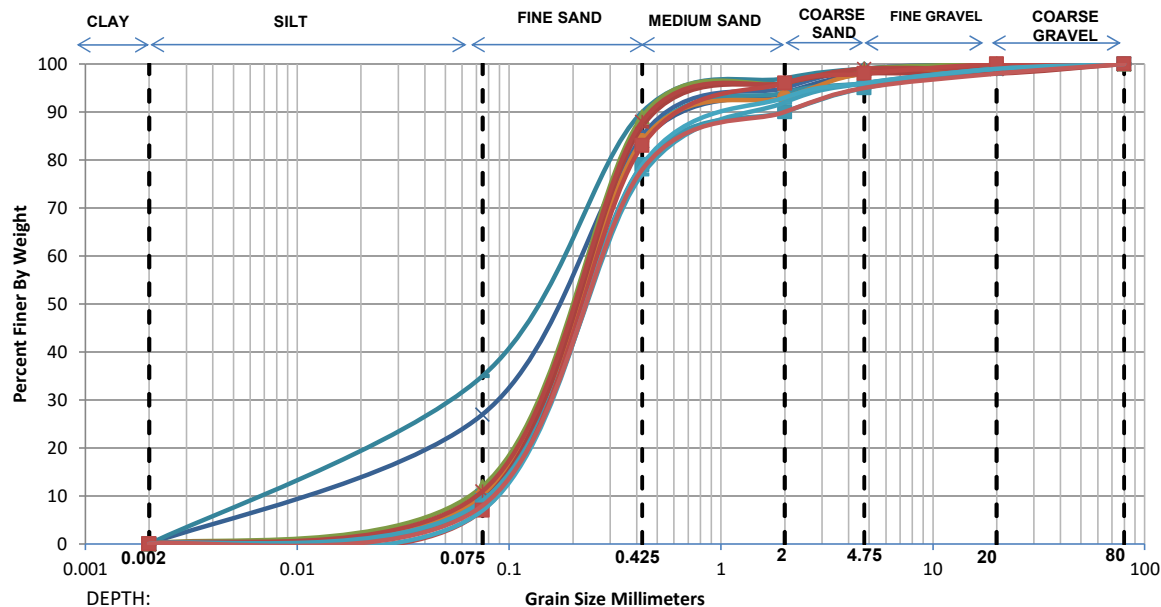
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1098

B.H. No.

386



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	27.00	57.00	10.00	4.00	2.00	0.00	0.0159	0.0861	0.2180	13.74	2.15
9.00 m	0.00	35.00	55.00	7.00	2.00	1.00	0.00	0.0101	0.0594	0.1729	17.18	2.03
12.00 m	0.00	10.00	75.00	10.00	4.00	1.00	0.00	0.0750	0.1622	0.2652	3.54	1.32
15.00 m	0.00	12.00	77.00	7.00	3.00	1.00	0.00	0.0624	0.1497	0.2485	3.98	1.45
18.00 m	0.00	10.00	74.00	10.00	2.00	3.00	1.00	0.0750	0.1628	0.2680	3.57	1.32
19.50 m	0.00	10.00	74.00	9.00	5.00	1.00	1.00	0.0750	0.1627	0.2677	3.57	1.32
22.50 m	0.00	9.00	78.00	9.00	2.00	0.00	2.00	0.0807	0.1661	0.2625	3.25	1.30
27.00 m	0.00	9.00	70.00	11.00	5.00	4.00	1.00	0.0811	0.1716	0.2874	3.54	1.26
31.50 m	0.00	11.00	77.00	8.00	3.00	0.00	1.00	0.0688	0.1552	0.2540	3.69	1.38
36.00 m	0.00	9.00	68.00	15.00	4.00	3.00	1.00	0.0812	0.1737	0.2965	3.65	1.25
40.50 m	0.00	7.00	76.00	13.00	2.00	2.00	0.00	0.0933	0.1802	0.2800	3.00	1.24
45.00 m	0.00	7.00	72.00	14.00	3.00	3.00	1.00	0.0939	0.1834	0.2933	3.12	1.22
50.00 m	0.00	8.00	70.00	12.00	5.00	3.00	2.00	0.0875	0.1781	0.2940	3.36	1.23

GRAIN SIZE DISTRIBUTION CURVES

Project Name

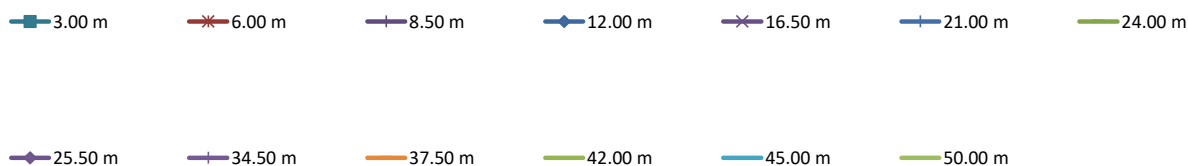
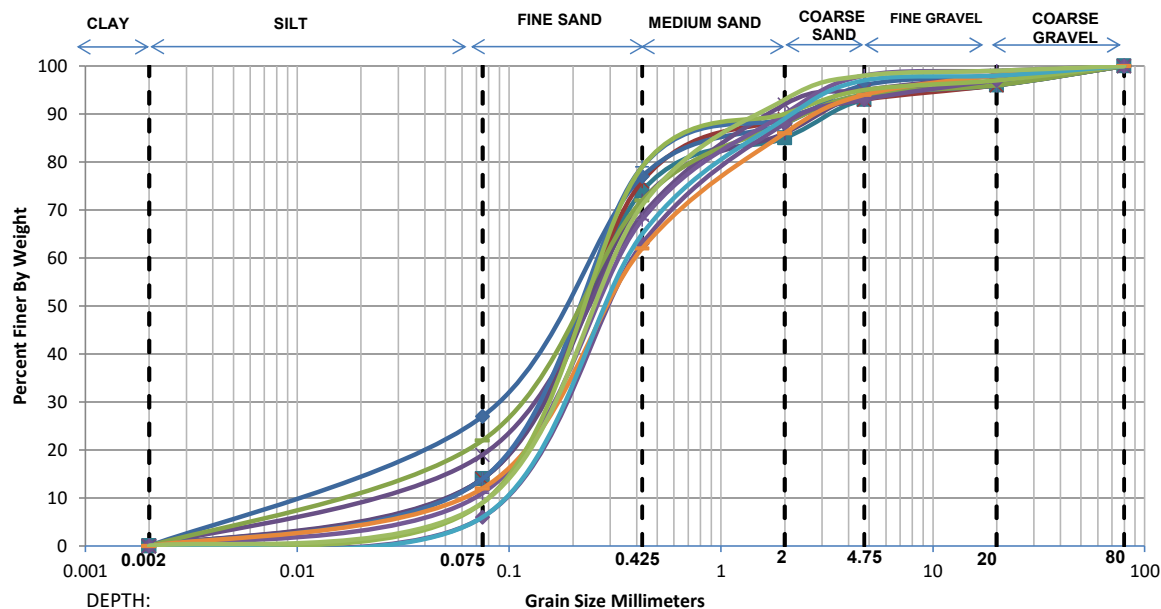
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1102

B.H. No.

387



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	14.00	60.00	11.00	8.00	3.00	4.00	0.0493	0.1487	0.2983	6.05	1.50
6.00 m	0.00	14.00	62.00	13.00	4.00	3.00	4.00	0.0495	0.1476	0.2887	5.84	1.53
8.50 m	0.00	14.00	58.00	14.00	8.00	2.00	4.00	0.0491	0.1505	0.3108	6.33	1.48
12.00 m	0.00	27.00	50.00	11.00	8.00	2.00	2.00	0.0155	0.0867	0.2472	15.92	1.96
16.50 m	0.00	19.00	50.00	23.00	3.00	3.00	2.00	0.0290	0.1276	0.3248	11.20	1.73
21.00 m	0.00	14.00	65.00	10.00	5.00	2.00	4.00	0.0497	0.1454	0.2745	5.52	1.55
24.00 m	0.00	22.00	50.00	16.00	6.00	2.00	4.00	0.0224	0.1104	0.2935	13.12	1.86
25.50 m	0.00	6.00	57.00	25.00	5.00	4.00	3.00	0.1052	0.2091	0.3933	3.74	1.06
34.50 m	0.00	11.00	57.00	22.00	8.00	1.00	1.00	0.0680	0.1718	0.3455	5.08	1.26
37.50 m	0.00	12.00	50.00	24.00	8.00	4.00	2.00	0.0606	0.1739	0.4005	6.61	1.25
42.00 m	0.00	9.00	70.00	11.00	5.00	2.00	3.00	0.0811	0.1716	0.2874	3.54	1.26
45.00 m	0.00	6.00	59.00	24.00	8.00	1.00	2.00	0.1046	0.2060	0.3754	3.59	1.08
50.00 m	0.00	9.00	62.00	22.00	5.00	1.00	1.00	0.0815	0.1802	0.3287	4.03	1.21

GRAIN SIZE DISTRIBUTION CURVES

Project Name

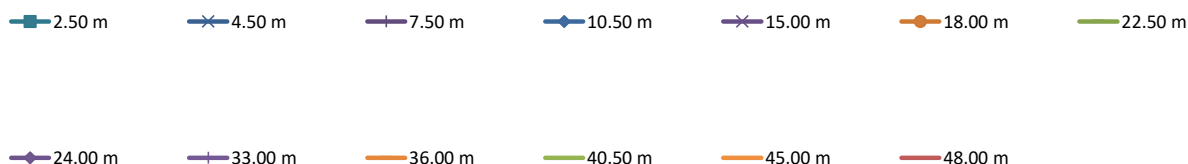
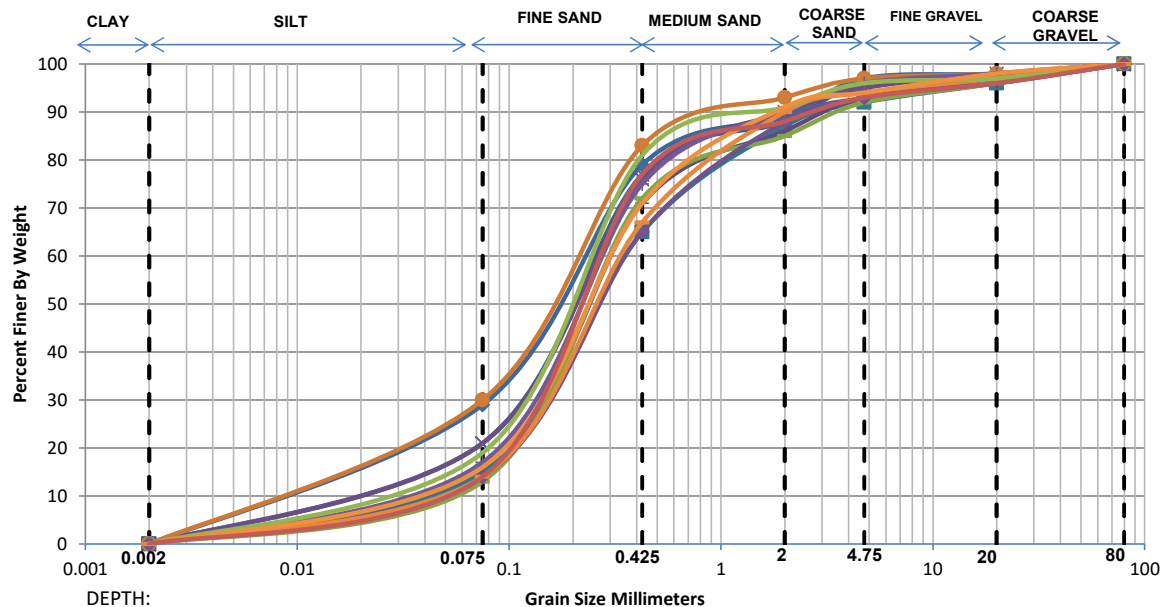
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1105

B.H. No.

388



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	15.00	50.00	22.00	5.00	4.00	4.00	0.0433	0.1526	0.3661	8.45	1.47
4.50 m	0.00	21.00	56.00	11.00	8.00	1.00	3.00	0.0248	0.1130	0.2651	10.71	1.95
7.50 m	0.00	14.00	57.00	15.00	7.00	3.00	4.00	0.0490	0.1515	0.3175	6.48	1.47
10.50 m	0.00	29.00	50.00	10.00	8.00	1.00	2.00	0.0137	0.0787	0.2305	16.84	1.96
15.00 m	0.00	21.00	55.00	14.00	5.00	3.00	2.00	0.0247	0.1135	0.2713	10.99	1.92
18.00 m	0.00	30.00	53.00	10.00	4.00	1.00	2.00	0.0130	0.0750	0.2111	16.21	2.05
22.50 m	0.00	13.00	59.00	13.00	7.00	4.00	4.00	0.0549	0.1557	0.3125	5.69	1.41
24.00 m	0.00	14.00	51.00	23.00	5.00	4.00	3.00	0.0484	0.1584	0.3674	7.59	1.41
33.00 m	0.00	17.00	58.00	15.00	6.00	2.00	2.00	0.0359	0.1333	0.2872	8.00	1.72
36.00 m	0.00	14.00	53.00	23.00	4.00	3.00	3.00	0.0486	0.1563	0.3495	7.19	1.44
40.50 m	0.00	19.00	62.00	10.00	5.00	1.00	3.00	0.0300	0.1207	0.2532	8.44	1.92
45.00 m	0.00	16.00	55.00	20.00	3.00	4.00	2.00	0.0394	0.1416	0.3151	7.99	1.61
48.00 m	0.00	14.00	63.00	11.00	5.00	3.00	4.00	0.0495	0.1467	0.2834	5.72	1.53

GRAIN SIZE DISTRIBUTION CURVES

Project Name

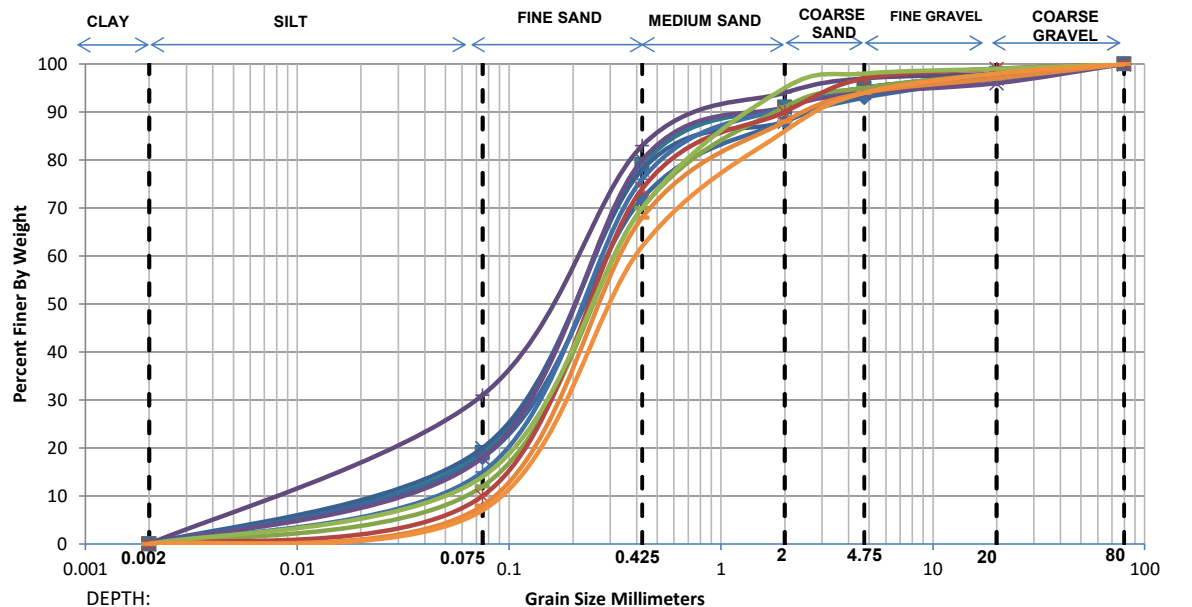
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1109

B.H. No.

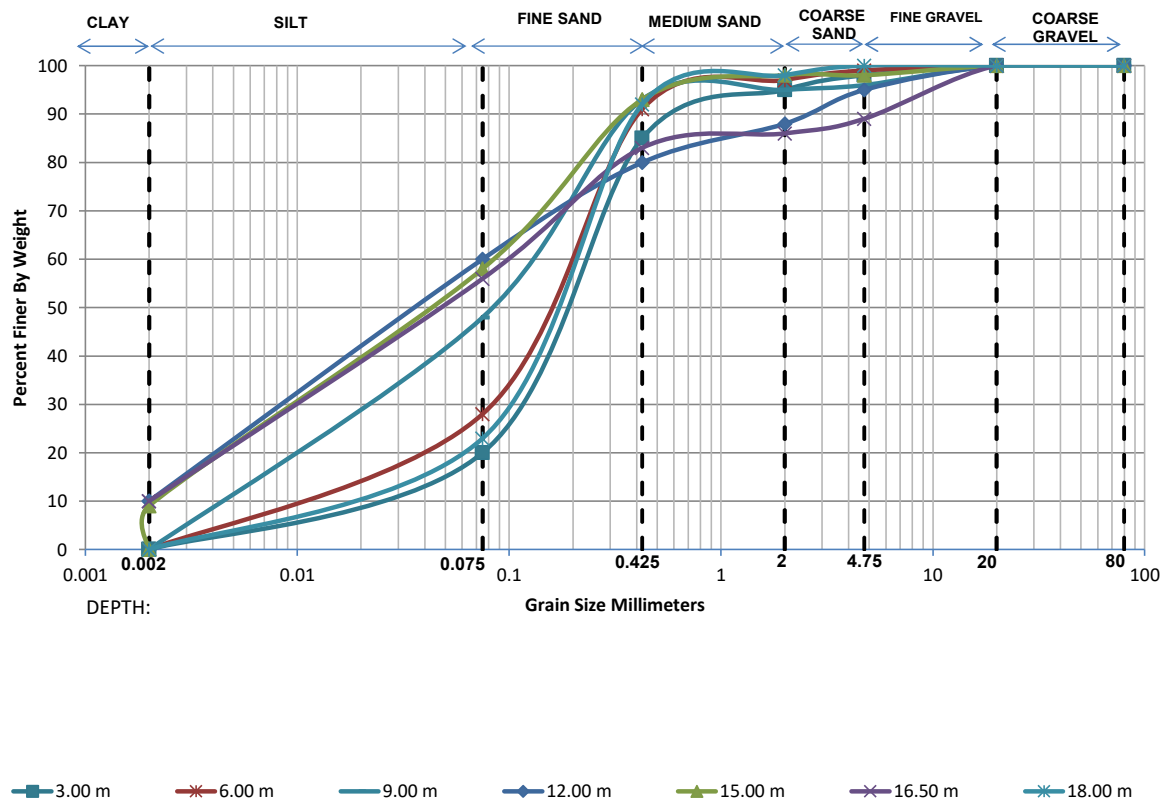
389



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	19.00	60.00	12.00	4.00	3.00	2.00	0.0298	0.1216	0.2619	8.78	1.89
5.50 m	0.00	20.00	58.00	10.00	7.00	2.00	3.00	0.0271	0.1172	0.2628	9.69	1.93
8.50 m	0.00	31.00	52.00	11.00	3.00	1.00	2.00	0.0123	0.0715	0.2080	16.96	2.00
12.00 m	0.00	18.00	54.00	16.00	5.00	4.00	3.00	0.0322	0.1302	0.3029	9.40	1.74
16.50 m	0.00	18.00	62.00	11.00	3.00	2.00	4.00	0.0329	0.1258	0.2602	7.91	1.85
21.00 m	0.00	15.00	61.00	15.00	4.00	2.00	3.00	0.0444	0.1427	0.2870	6.47	1.60
24.00 m	0.00	12.00	58.00	21.00	4.00	3.00	2.00	0.0612	0.1640	0.3295	5.39	1.33
31.50 m	0.00	10.00	64.00	16.00	7.00	2.00	1.00	0.0750	0.1708	0.3085	4.11	1.26
37.50 m	0.00	8.00	60.00	20.00	6.00	3.00	3.00	0.0887	0.1890	0.3493	3.94	1.15
42.00 m	0.00	14.00	56.00	25.00	3.00	1.00	1.00	0.0489	0.1537	0.3271	6.69	1.48
46.50 m	0.00	7.00	55.00	24.00	8.00	4.00	2.00	0.0974	0.2040	0.4027	4.13	1.06

GRAIN SIZE DISTRIBUTION CURVES

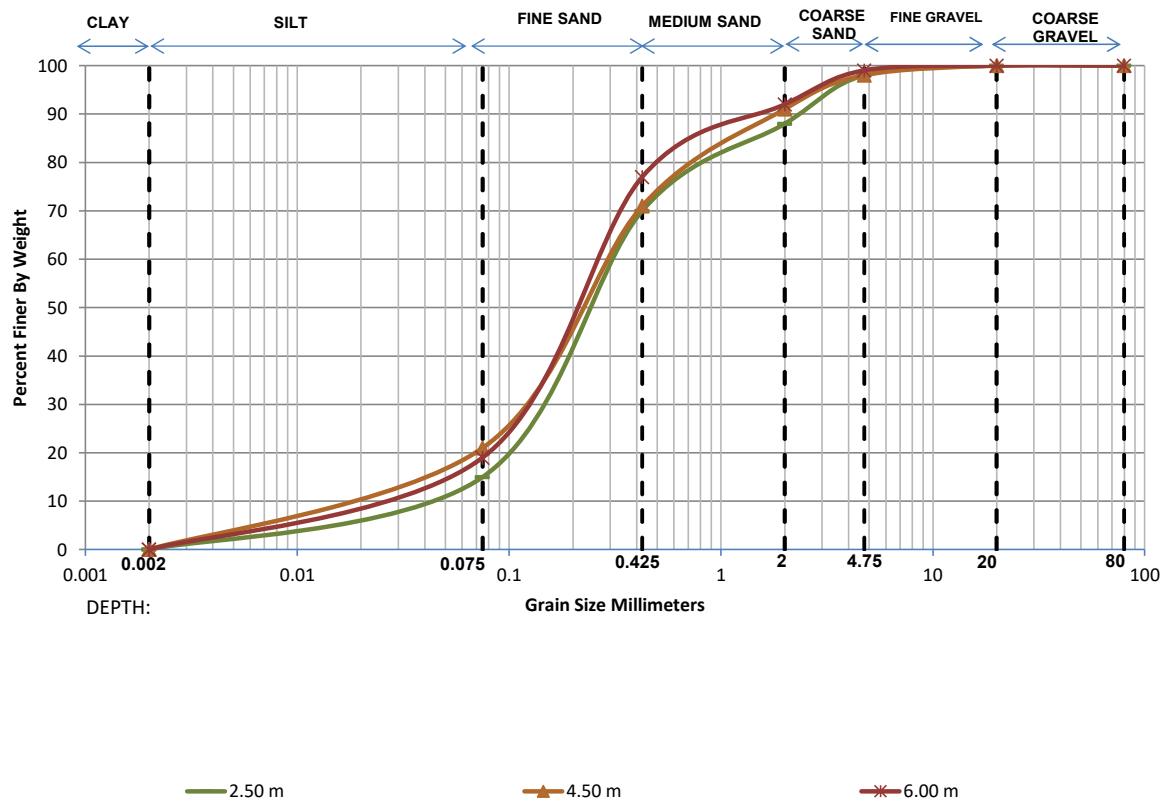
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1205
B.H. No.	419



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	20.00	65.00	10.00	3.00	2.00	0.00	0.0276	0.1149	0.2367	8.57	2.02
6.00 m	0.00	28.00	63.00	6.00	2.00	1.00	0.00	0.0151	0.0820	0.1946	12.86	2.28
9.00 m	0.00	48.00	45.00	2.00	1.00	4.00	0.00	0.0060	0.0340	0.1167	19.48	1.66
12.00 m	10.00	50.00	20.00	8.00	7.00	5.00	0.00	0.0020	0.0173	0.0750	37.50	1.99
15.00 m	9.00	49.00	35.00	5.00	0.00	2.00	0.00	0.0024	0.0200	0.0808	33.55	2.06
16.50 m	10.00	46.00	27.00	3.00	3.00	11.00	0.00	0.0020	0.0198	0.0912	45.60	2.14
18.00 m	0.00	23.00	69.00	6.00	2.00	0.00	0.00	0.0218	0.1008	0.2085	9.56	2.23

GRAIN SIZE DISTRIBUTION CURVES

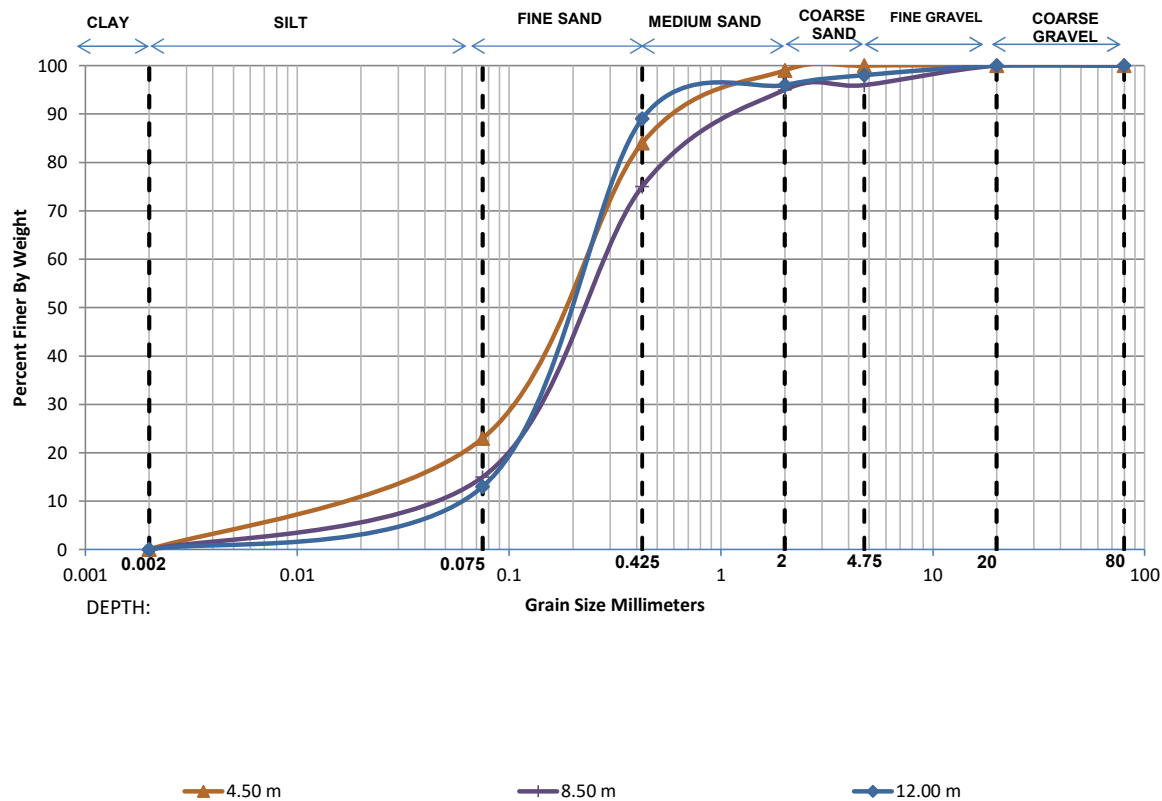
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1209
B.H. No.	421



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	15.00	55.00	18.00	10.00	2.00	0.00	0.0438	0.1474	0.3233	7.38	1.53
4.50 m	0.00	21.00	50.00	20.00	7.00	2.00	0.00	0.0243	0.1160	0.3044	12.52	1.82
6.00 m	0.00	19.00	58.00	15.00	7.00	1.00	0.00	0.0297	0.1226	0.2720	9.17	1.86

GRAIN SIZE DISTRIBUTION CURVES

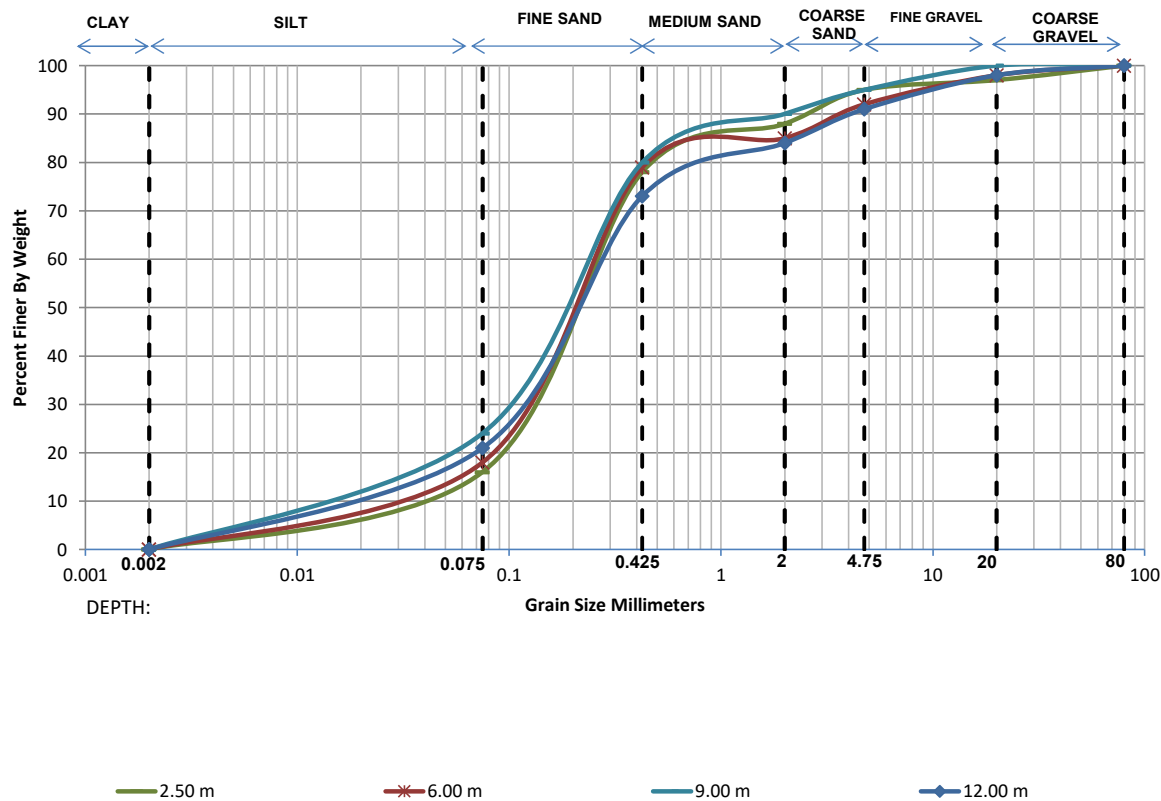
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1213
B.H. No.	422



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
4.50 m	0.00	23.00	61.00	15.00	1.00	0.00	0.00	0.0214	0.1025	0.2324	10.88	2.11
8.50 m	0.00	15.00	60.00	20.00	1.00	4.00	0.00	0.0443	0.1439	0.2936	6.63	1.59
12.00 m	0.00	13.00	76.00	7.00	2.00	2.00	0.00	0.0561	0.1449	0.2455	4.37	1.52

GRAIN SIZE DISTRIBUTION CURVES

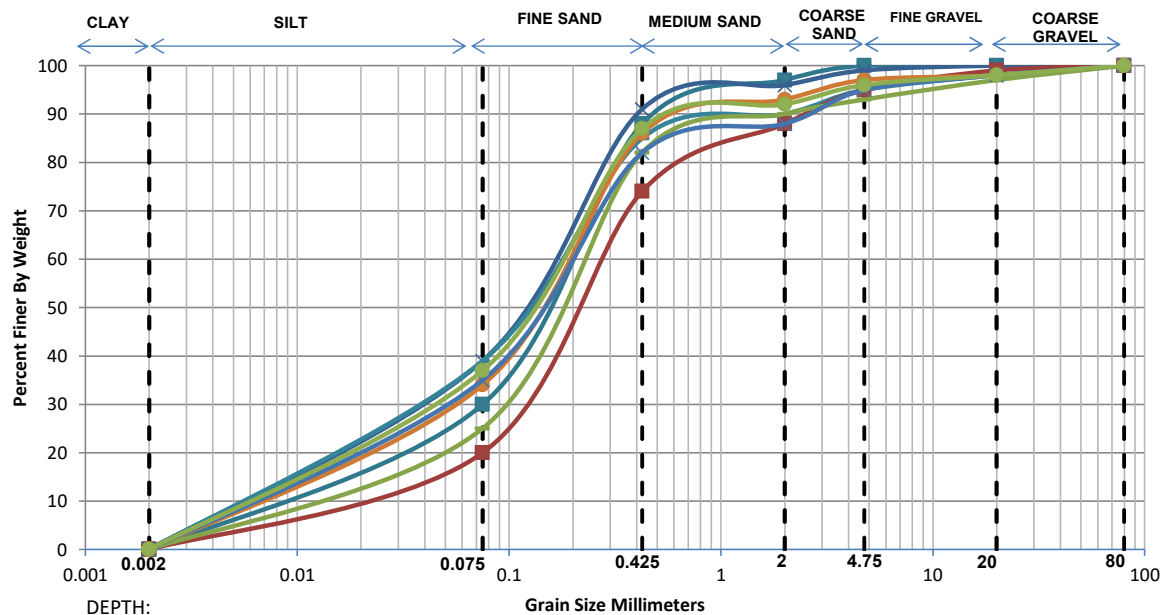
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1216
B.H. No.	423



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	16.00	62.00	10.00	7.00	2.00	3.00	0.0401	0.1361	0.2735	6.83	1.69
6.00 m	0.00	18.00	61.00	6.00	7.00	6.00	2.00	0.0328	0.1258	0.2625	8.00	1.84
9.00 m	0.00	24.00	56.00	10.00	5.00	5.00	0.00	0.0195	0.0989	0.2424	12.42	2.07
12.00 m	0.00	21.00	52.00	11.00	7.00	7.00	2.00	0.0245	0.1145	0.2875	11.75	1.86

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1219
B.H. No.	424



■ 3.00 m
 ✕ 5.50 m
 — 9.00 m
 ■ 13.50 m
 — 19.50 m
 — 24.00 m
 ✕ 30.00 m
 — 33.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	30.00	58.00	9.00	3.00	0.00	0.00	0.0132	0.0750	0.1959	14.82	2.17
5.50 m	0.00	39.00	52.00	5.00	3.00	1.00	0.00	0.0084	0.0495	0.1554	18.60	1.89
9.00 m	0.00	39.00	46.00	5.00	5.00	3.00	2.00	0.0082	0.0491	0.1685	20.52	1.75
13.50 m	0.00	20.00	54.00	14.00	7.00	4.00	1.00	0.0268	0.1191	0.2850	10.63	1.85
19.50 m	0.00	34.00	52.00	7.00	4.00	1.00	2.00	0.0105	0.0621	0.1862	17.78	1.98
24.00 m	0.00	25.00	57.00	8.00	3.00	4.00	3.00	0.0182	0.0943	0.2307	12.68	2.12
30.00 m	0.00	35.00	47.00	6.00	7.00	3.00	2.00	0.0098	0.0590	0.1944	19.80	1.82
33.00 m	0.00	37.00	50.00	5.00	4.00	2.00	2.00	0.0090	0.0540	0.1714	18.96	1.88

GRAIN SIZE DISTRIBUTION CURVES

Project Name

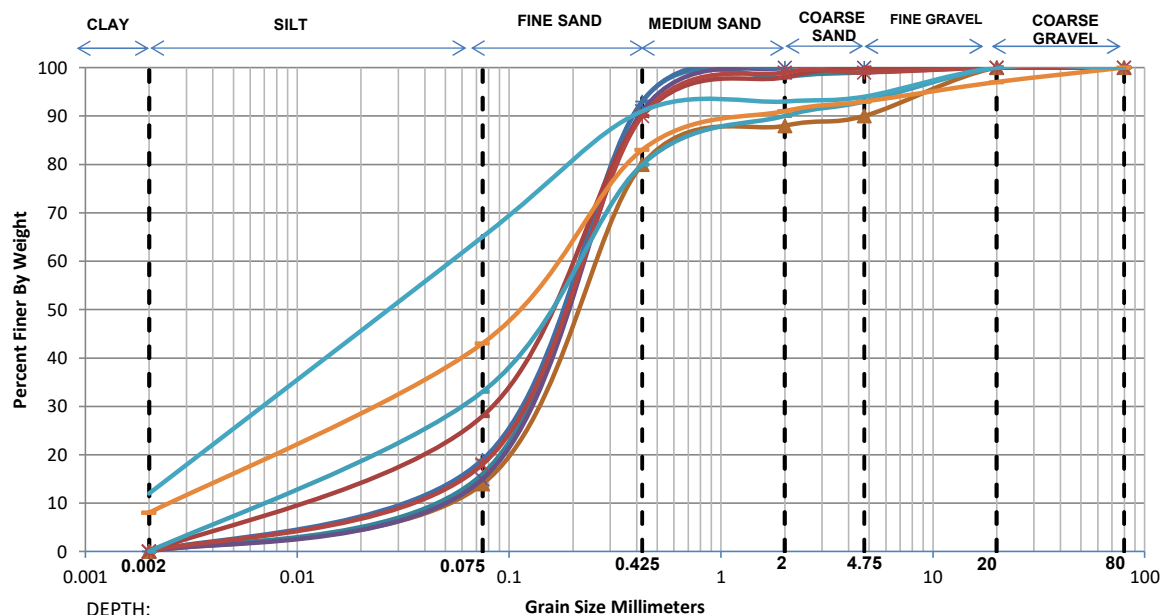
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1223

B.H. No.

BH-425

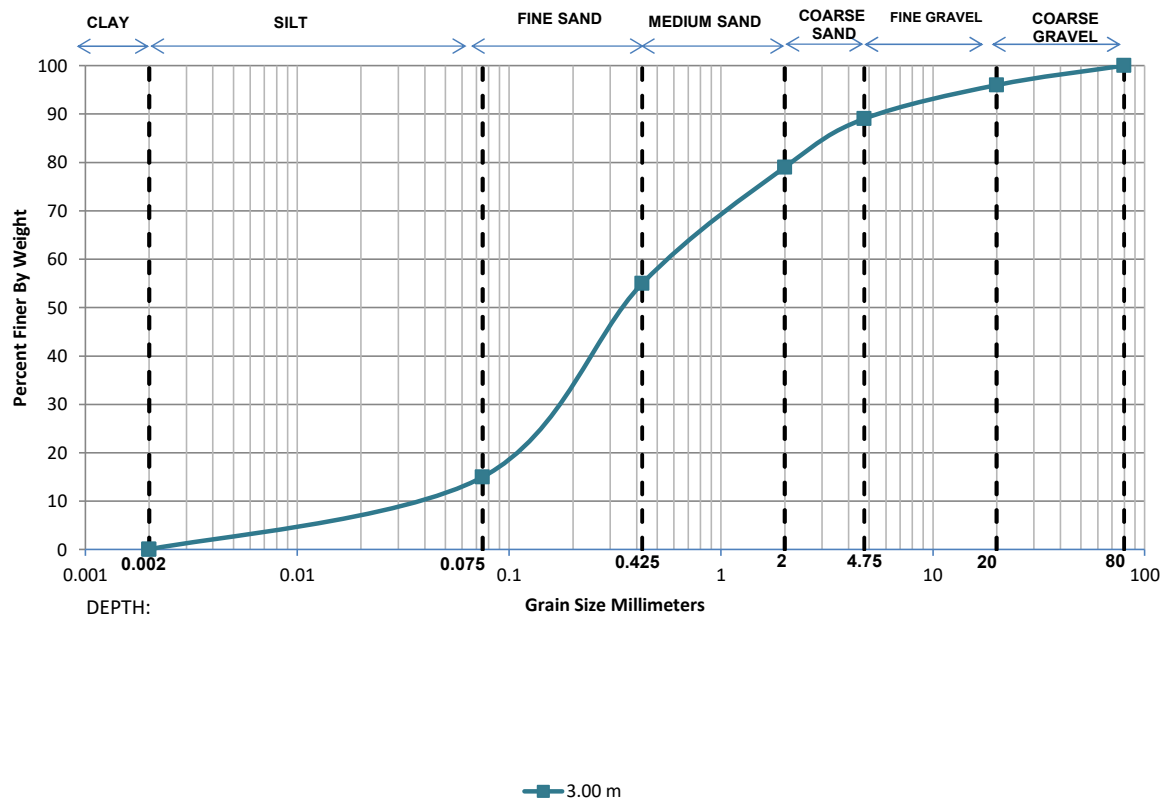


— 4.50 m — 9.00 m — 16.50 m — 21.00 m — 22.50 m — 31.50 m — 36.00 m — 37.50 m — 45.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
4.50 m	0.00	14.00	66.00	8.00	2.00	10.00	0.00	0.0498	0.1447	0.2699	5.42	1.56
9.00 m	0.00	16.00	77.00	5.00	1.00	1.00	0.00	0.0412	0.1295	0.2275	5.52	1.79
16.50 m	0.00	15.00	76.00	9.00	0.00	0.00	0.00	0.0456	0.1349	0.2357	5.17	1.70
21.00 m	0.00	19.00	74.00	7.00	0.00	0.00	0.00	0.0308	0.1168	0.2190	7.11	2.02
22.50 m	0.00	28.00	62.00	8.00	2.00	0.00	0.00	0.0151	0.0821	0.1975	13.08	2.26
31.50 m	0.00	18.00	72.00	9.00	0.00	1.00	0.00	0.0336	0.1220	0.2290	6.81	1.93
36.00 m	0.00	33.00	47.00	10.00	3.00	7.00	0.00	0.0108	0.0648	0.2116	19.52	1.83
37.50 m	8.00	35.00	40.00	8.00	2.00	4.00	3.00	0.0031	0.0363	0.1602	51.38	2.64
45.00 m	12.00	53.00	26.00	2.00	1.00	6.00	0.00	-	0.0138	0.0631	-	-

GRAIN SIZE DISTRIBUTION CURVES

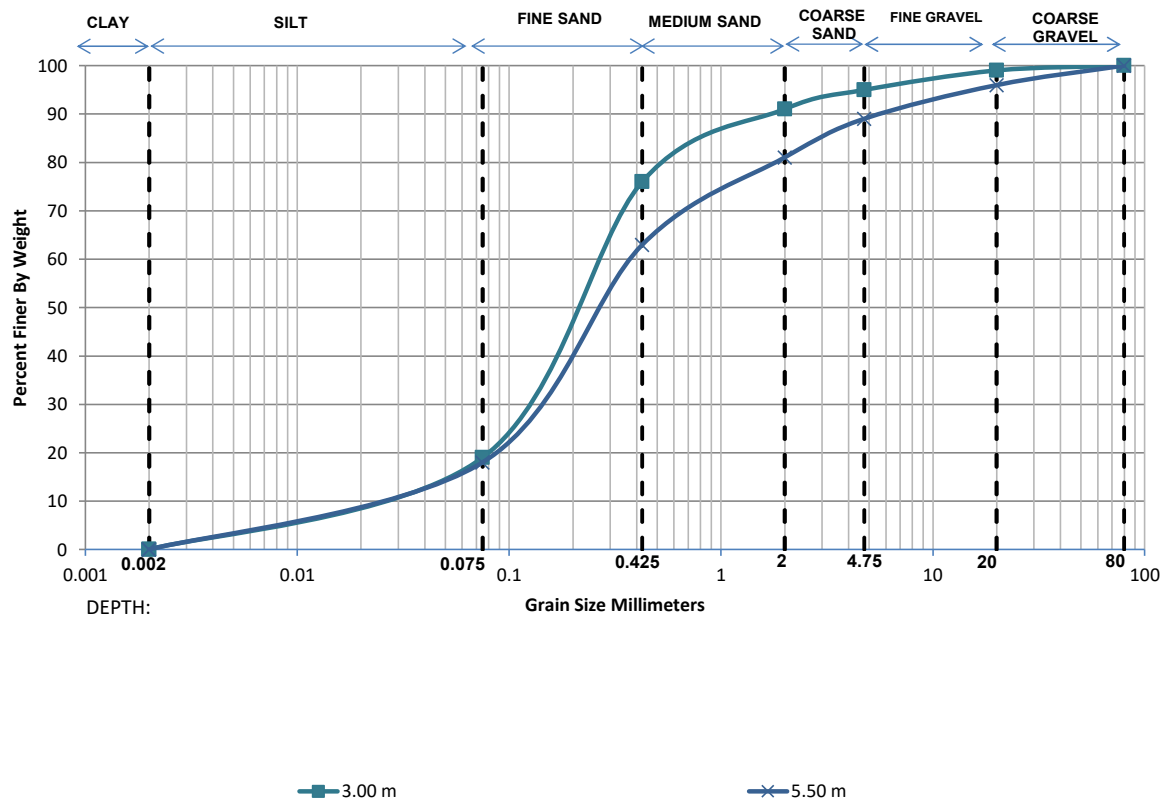
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	DP-5
B.H. No.	427



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	15.00	40.00	24.00	10.00	7.00	4.00	0.0422	0.1681	0.5626	13.34	1.19

GRAIN SIZE DISTRIBUTION CURVES

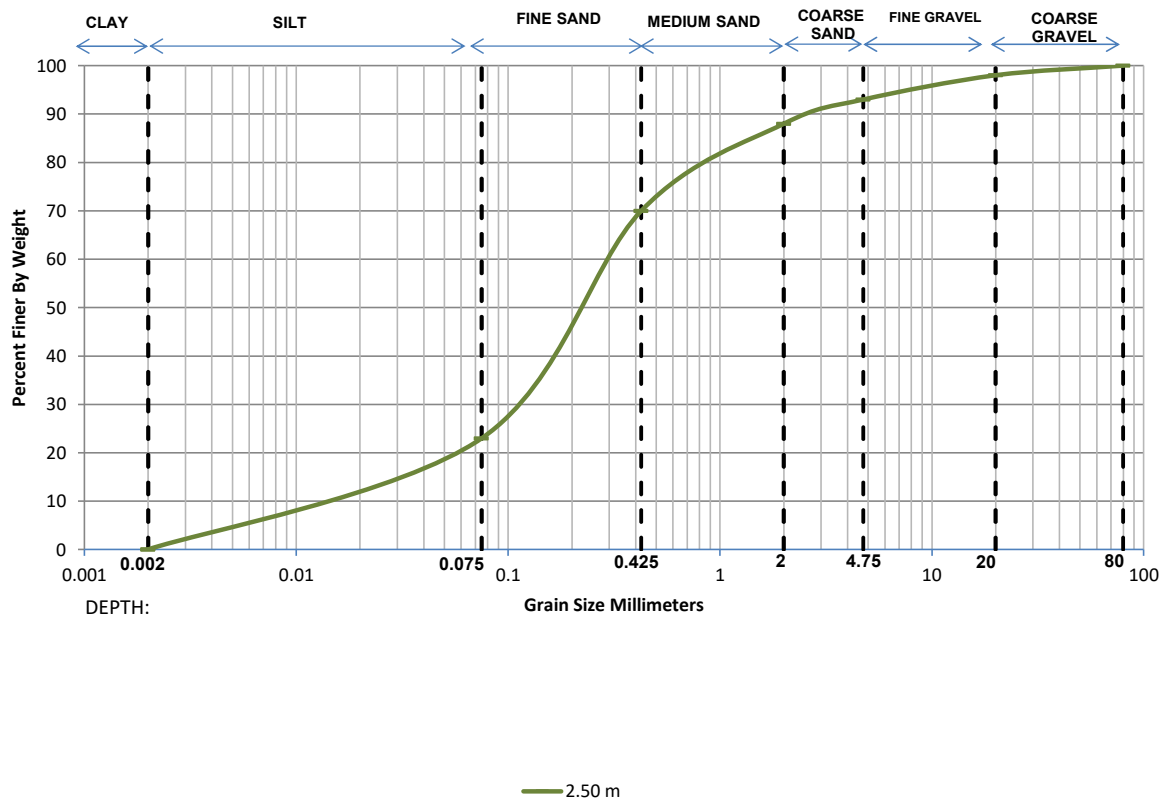
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	DP-8
B.H. No.	428



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	19.00	57.00	15.00	4.00	4.00	1.00	0.0296	0.1231	0.2770	9.36	1.85
5.50 m	0.00	18.00	45.00	18.00	8.00	7.00	4.00	0.0314	0.1373	0.3842	12.24	1.56

GRAIN SIZE DISTRIBUTION CURVES

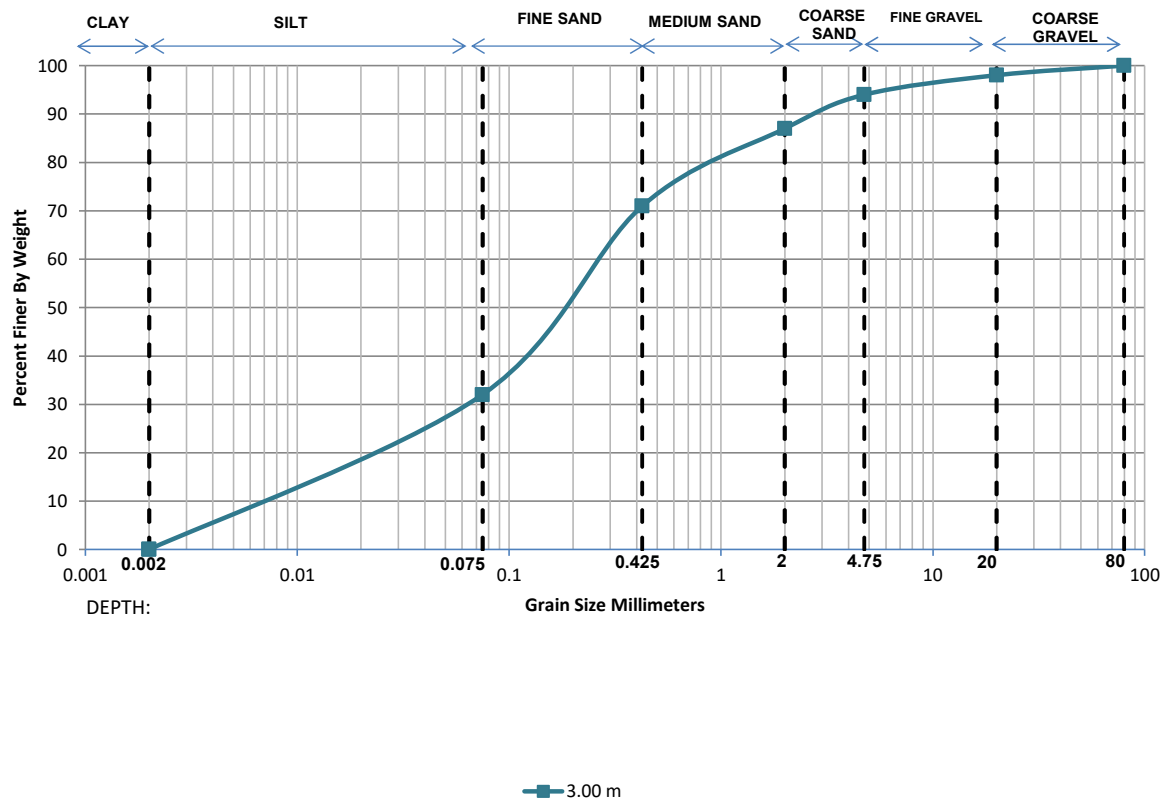
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	DP-12
B.H. No.	429



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	23.00	47.00	18.00	5.00	5.00	2.00	0.0205	0.1064	0.3066	14.98	1.80

GRAIN SIZE DISTRIBUTION CURVES

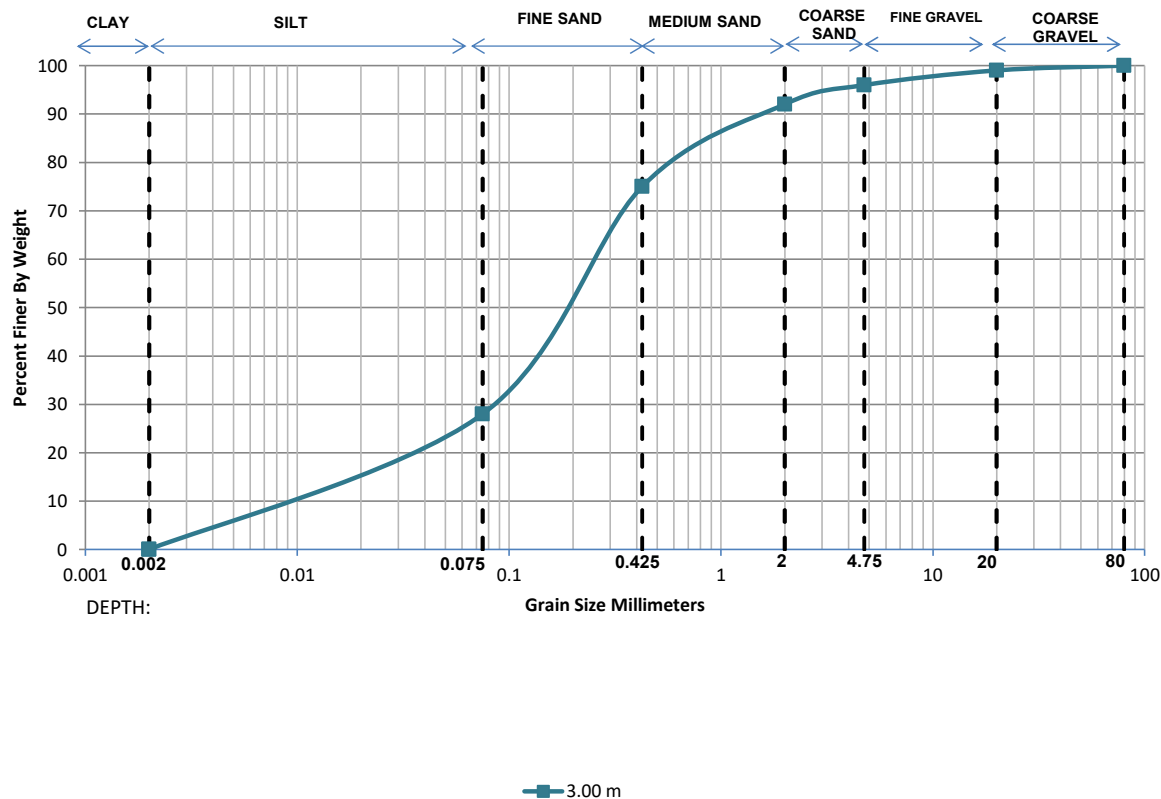
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	DP-15
B.H. No.	430



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	32.00	39.00	16.00	7.00	4.00	2.00	0.0111	0.0678	0.2720	24.47	1.52

GRAIN SIZE DISTRIBUTION CURVES

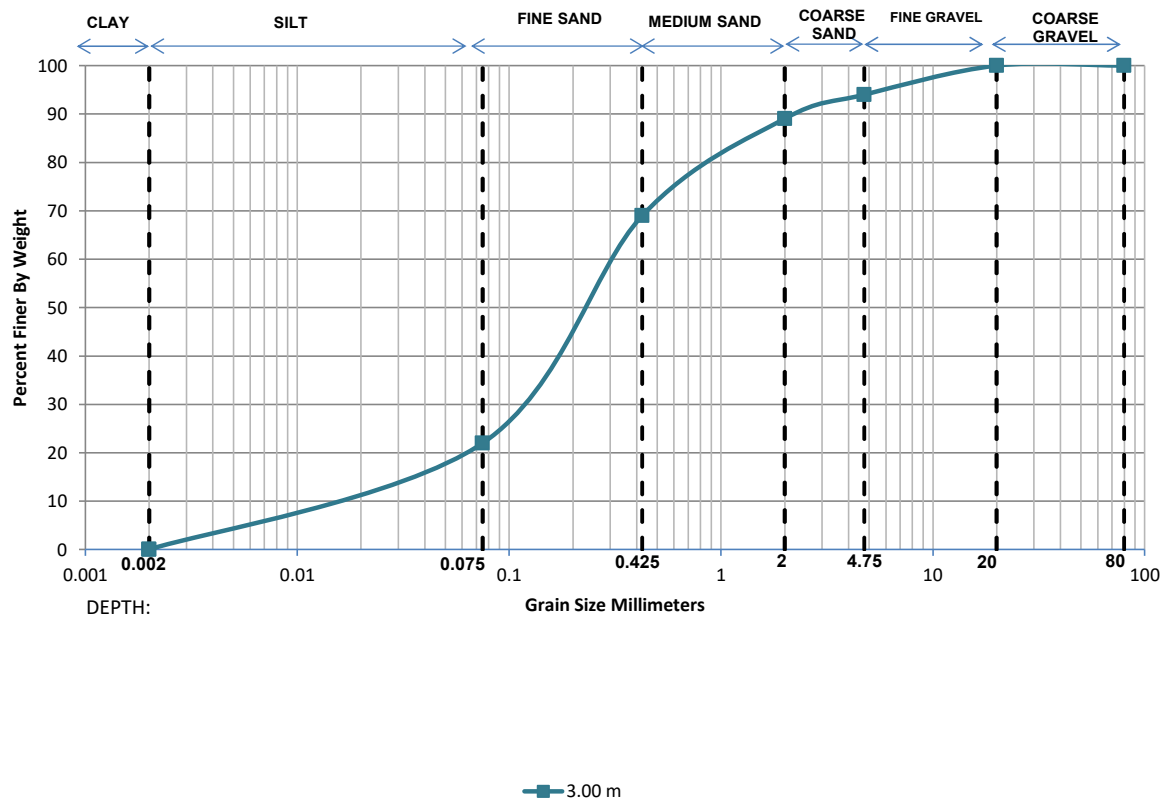
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	DP-19
B.H. No.	431



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	28.00	47.00	17.00	4.00	3.00	1.00	0.0144	0.0828	0.2575	17.87	1.85

GRAIN SIZE DISTRIBUTION CURVES

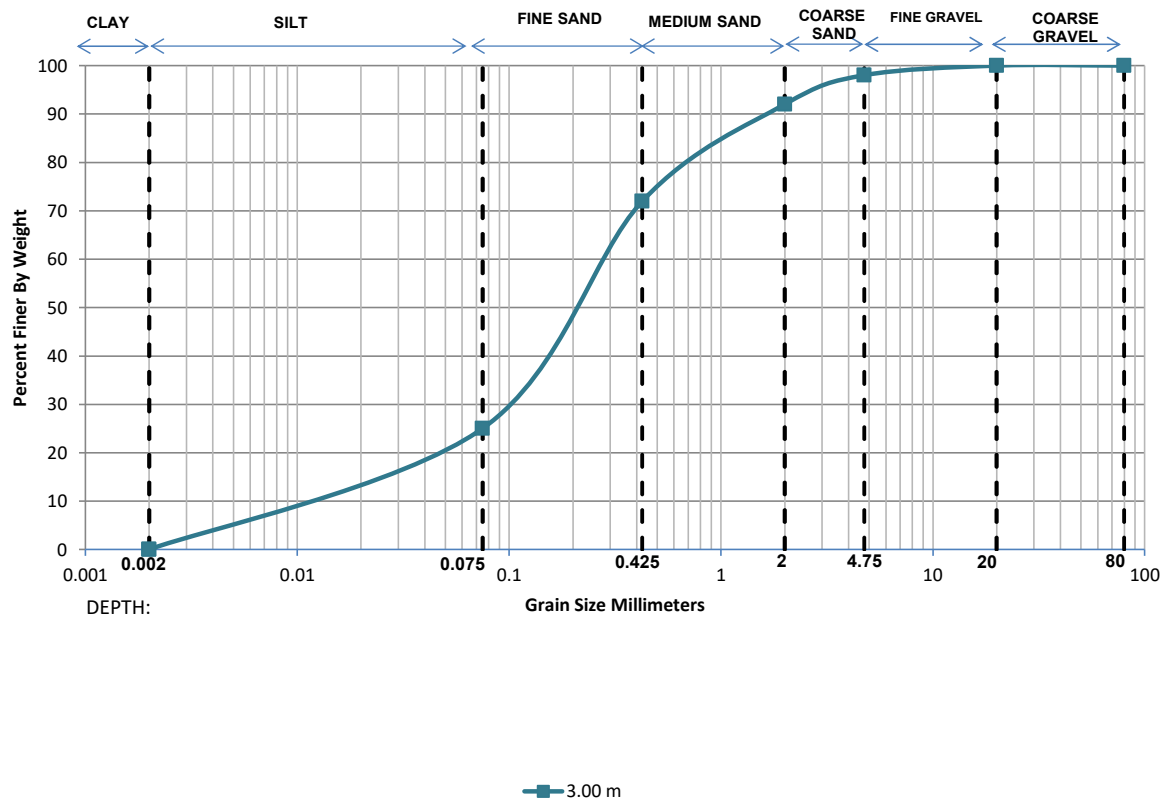
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	DP-22
B.H. No.	432



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	22.00	47.00	20.00	5.00	6.00	0.00	0.0222	0.1119	0.3178	14.34	1.78

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	DP-25
B.H. No.	433

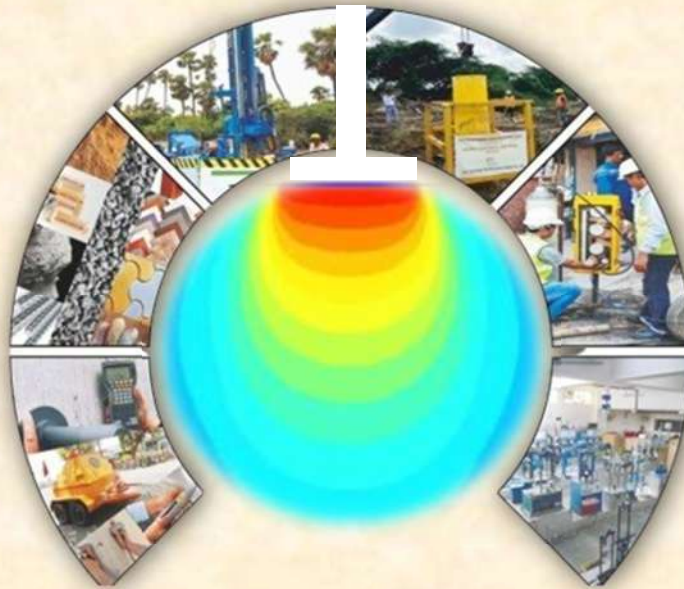


Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	25.00	47.00	20.00	6.00	2.00	0.00	0.0176	0.0963	0.2872	16.29	1.83

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.
B-11(G), Malviya Industrial Area, Jaipur-302017
Tel.: 91-141-4046599, Fax: 91-141-2751806
E-mail: info@cegtesthouse.com.
www.cegtesthouse.com

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/344_07 BHs	00	17.08.2026

Submitted to:
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www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/344

Date:- 17.08.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-IV**

Dear Sir,

We are pleased to submit this report of 07 boreholes carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-



Pratibha Bagaria
Sr Geotechnical Engineer



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

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Tel.: 91-141-4046599, Fax: 91-141-2751806
E-mail: info@cegtesthouse.com., www.cegtesthouse.com

CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,,**

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 45.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 07 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Pier no.	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)		+(R.L.)
					E	N	
1.	BH-411	P-1178	Not Encountered	18.00	576342.000	2989068.000	-
2.	BH-413	P-1184	Not Encountered	45.00	576318.000	2989237.000	-
3.	BH-414	P-1187	Not Encountered	39.00	576304.000	2989315.000	-
4.	BH-415	CH 39+460	Not Encountered	34.50	576291.000	2989385.000	-
5.	BH-416	CH 39+540	Not Encountered	34.50	576277.000	2989301.000	-
6.	BH-417	P-1193	Not Encountered	39.00	576268.000	2989578.000	-
7.	BH-419	P-1200	Not Encountered	38.56	576262.000	2989759.000	-

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of

the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

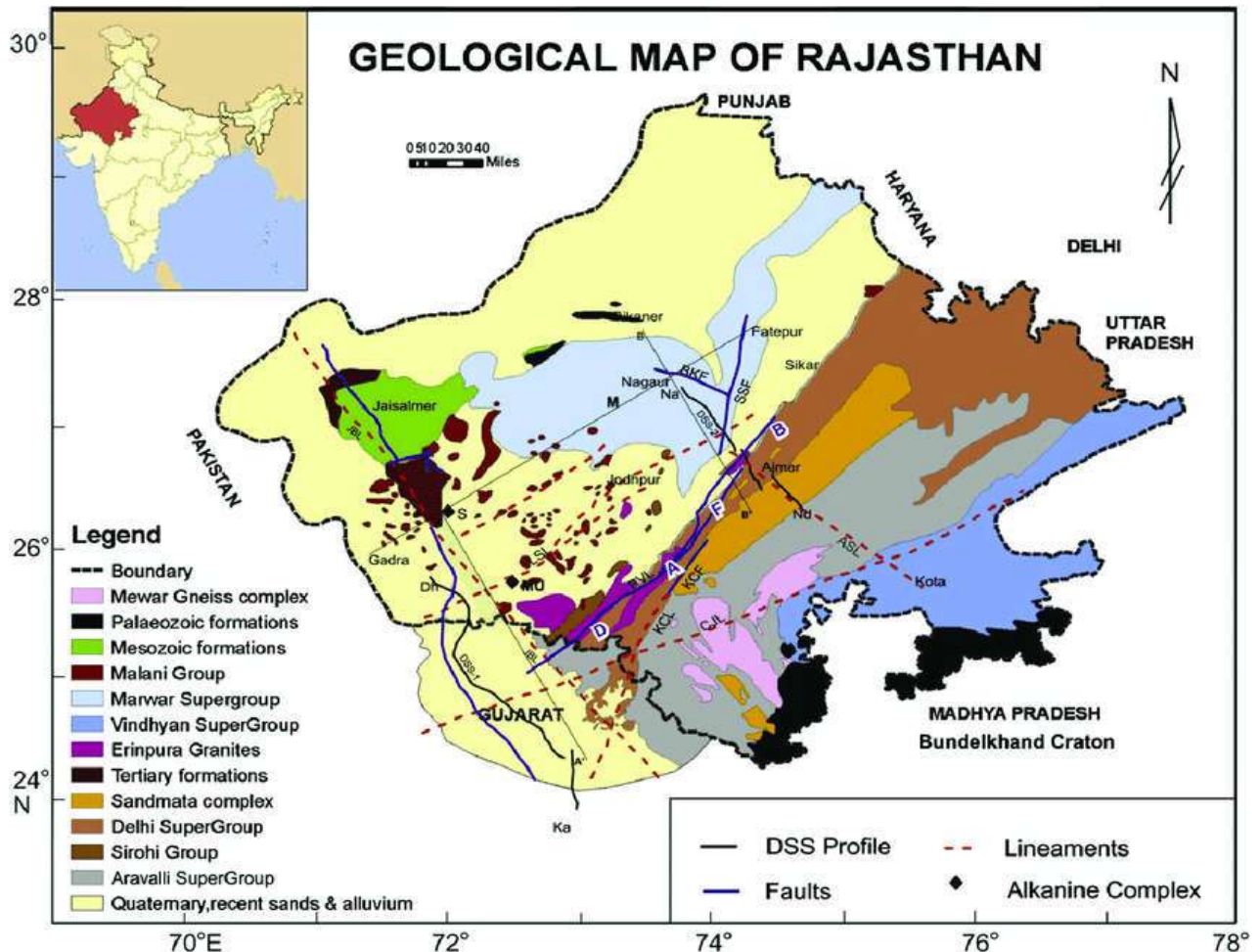


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

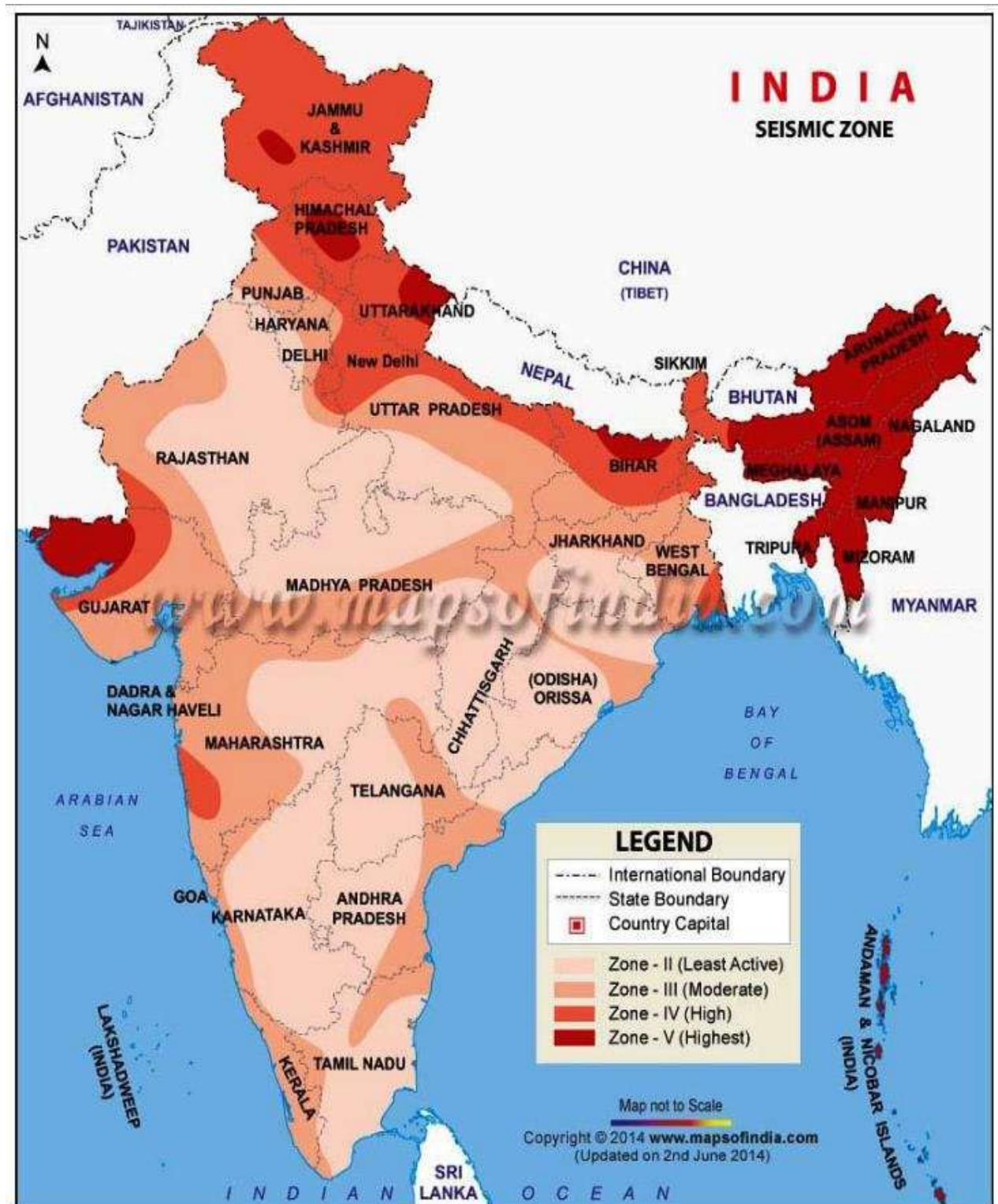


Fig. 2: Seismicity Map of India



Figure 3 : - Site Location Plan.

The field and laboratory test described in Chapter 3.

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in June July 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbling at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 07 BHs, the soil and rock stratification is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH NO.	Depth (m)		Description
	From	To	
BH-411	0.00	2.50	Filled Up soil
	2.50	7.54	Very Dense, Brownish, Silty Sand
	7.54	18.00	Highly Weathered, Greyish to Brownish, Very Poor, Boulder
BH-413	0.00	2.50	Filled Up soil
	2.50	18.00	Medium Dense to Dense, Brownish, Silty Sand
	18.00	34.56	Very Dense, Brownish, Silty Sand
	34.56	45.00	Completely Weathered to Highly Weathered, Brownish, Very Poor, Boulder
BH-414	0.00	2.50	Filled Up soil
	2.50	18.00	Loose to Dense, Brownish, Silty Sand
	18.00	28.54	Very Dense, Brownish, Silty Sand
	28.54	39.00	Completely Weathered to Highly Weathered, Brownish, Very Poor, Boulder
BH-415	0.00	2.50	Filled Up soil
	2.50	6.00	Medium Dense, Brownish, Silty Sand
	6.00	8.50	Stiff, Brownish, Clay of Low Plasticity
	8.50	16.50	Medium Dense to Dense, Brownish, Silty Sand
	16.50	24.08	Very Dense, Brownish, Silty Sand
	24.08	34.50	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-416	0.00	2.50	Filled Up soil
	2.50	13.50	Medium Dense to Dense, Brownish, Poorly Graded Silty Sand
	13.50	24.04	Very Dense, Brownish, Silty Sand
	24.04	34.50	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-417	0.00	2.50	Filled Up soil
	2.50	18.00	Medium Dense to Dense, Brownish, Silty Sand
	18.00	28.90	Very Dense, Brownish, Silty Sand
	28.90	39.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-419	0.00	2.50	Filled Up soil
	2.50	16.50	Medium Dense to Dense, Brownish, Silty Sand
	16.50	28.56	Very Dense, Brownish, Silty Sand
	28.56	38.56	Completely to Highly Weathered, Brownish, Very Poor, Boulder

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989068 m	Easting :576342 m
Reduced Level (m):(+) -	BH. No. :BH-411	BH Depth (m):18
Proposed/Existing Structure :P-1178	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :13-07-2026	Date of Completion :15-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	>100						
3.5									
4.0									
4.5	4.5	SPT-2	>100						
5.0				Very Dense, Brownish, Silty Sand	SM				
5.5									
6.0	6	SPT-3	>100						
6.5									
7.0									
7.5	7.5 7.54	SPT-4 RC-1	>100						
8.0									
8.5									
9.0	9	RC-2		Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		11.64	0	
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989068 m	Easting :576342 m
Reduced Level (m):(+-)	BH. No. :BH-411	BH Depth (m):18
Proposed/Existing Structure :P-1178	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :13-07-2026	Date of Completion :15-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-3					12.66	0	
11.0									
11.5									
12.0	12	RC-4					12	0	
12.5									
13.0									
13.5	13.5	RC-5					12.66	0	
14.0				Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV				
14.5									
15.0	15	RC-6					11.33	0	
15.5									
16.0									
16.5	16.5	RC-7					12.66	0	
17.0									
17.5									
18.0	18						12	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989237 m	Easting :576318 m
Reduced Level (m):(+) -	BH. No. :BH-413	BH Depth (m):45
Proposed/Existing Structure :P-1184	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :11-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	12						
3.5									
4.0									
4.5	4.5	SPT-2	16						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	16						
6.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	22						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	30						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989237 m	Easting :576318 m
Reduced Level (m):(+) -	BH. No. :BH-413	BH Depth (m):45
Proposed/Existing Structure :P-1184	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :11-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	34	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	36						
12.5									
13.0				Very Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	42						
14.0									
14.5									
15.0	15	SPT-9	46						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	48						
17.0									
17.5									
18.0	18	SPT-11	50	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	53						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989237 m	Easting :576318 m
Reduced Level (m):(+-)	BH. No. :BH-413	BH Depth (m):45
Proposed/Existing Structure :P-1184	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :11-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	57						
21.5									
22.0									
22.5	22.5	SPT-14	68						
23.0									
23.5									
24.0	24	SPT-15	78						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	83						
26.0									
26.5									
27.0	27	SPT-17	>100						
27.5									
28.0									
28.5	28.5	SPT-18	>100						
29.0									
29.5									
30.0	30	SPT-19	>100						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989237 m	Easting :576318 m
Reduced Level (m):(+-)	BH. No. :BH-413	BH Depth (m):45
Proposed/Existing Structure :P-1184	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :11-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	>100						
32.0									
32.5				Very Dense, Brownish, Silty Sand	SM				
33.0	33	SPT-21	>100						
33.5									
34.0									
34.5	34.5 34.56	SPT-22 RC-1	>100						
35.0									
35.5									
36.0	36	RC-2					10.41	0	
36.5									
37.0									
37.5	37.5	RC-3		Completely Weathered to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10	0	
38.0									
38.5									
39.0	39	RC-4					10.66	0	
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989237 m	Easting :576318 m
Reduced Level (m):(+-)	BH. No. :BH-413	BH Depth (m):45
Proposed/Existing Structure :P-1184	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :11-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	RC-5					10	0	
41.0									
41.5									
42.0	42	RC-6		Completely Weathered to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.33	0	
42.5									
43.0									
43.5	43.5	RC-7					10.66	0	
44.0									
44.5									
45.0	45						12	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989315 m	Easting :576304 m
Reduced Level (m):(+) -	BH. No. :BH-414	BH Depth (m):39
Proposed/Existing Structure :P-1187	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	9						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	13						
6.5				Loose to Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	15						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	18						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989315 m	Easting :576304 m
Reduced Level (m):(+) -	BH. No. :BH-414	BH Depth (m):39
Proposed/Existing Structure :P-1187	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	24	Loose to Dense, Brownish, Silty Sand	SM				
11.0									
11.5	11.5	UDS*							
12.0	12	SPT-7	33						
12.5									
13.0				Very Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	36						
14.0									
14.5									
15.0	15	SPT-9	40						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	42						
17.0									
17.5									
18.0	18	SPT-11	50	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	62						
20.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989315 m	Easting :576304 m
Reduced Level (m):(+) -	BH. No. :BH-414	BH Depth (m):39
Proposed/Existing Structure :P-1187	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	72						
21.5									
22.0									
22.5	22.5	SPT-14	>100						
23.0									
23.5									
24.0	24	SPT-15	>100	Very Dense, Brownish, Silty Sand	SM				
24.5									
25.0									
25.5	25.5	SPT-16	>100						
26.0									
26.5									
27.0	27	SPT-17	>100						
27.5									
28.0									
28.5	28.5 28.54	SPT-18 RC-1	>100						
29.0				Completely Weathered to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
29.5									
30.0	30	RC-2					10.95	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989315 m	Easting :576304 m
Reduced Level (m):(+) -	BH. No. :BH-414	BH Depth (m):39
Proposed/Existing Structure :P-1187	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	RC-3					10	0	
32.0									
32.5									
33.0	33	RC-4					10.66	0	
33.5									
34.0									
34.5	34.5	RC-5		Completely Weathered to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10	0	
35.0									
35.5									
36.0	36	RC-6					12	0	
36.5									
37.0									
37.5	37.5	RC-7					11.33	0	
38.0									
38.5									
39.0	39						12	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :39+460	Northing :2989385 m	Easting :576291 m
Reduced Level (m):(+) -	BH. No. :BH-415	BH Depth (m):34.5
Proposed/Existing Structure :-	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	10						
3.5									
4.0									
4.5	4.5	SPT-2	11	Medium Dense, Brownish, Silty Sand	SM				
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	15						
6.5									
7.0									
7.5	7.5	SPT-4	17	Stiff, Brownish, Clay of Low Plasticity	CL				
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	18	Medium Dense to Dense, Brownish, Silty Sand	SM				
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :39+460	Northing :2989385 m	Easting :576291 m
Reduced Level (m):(+) -	BH. No. :BH-415	BH Depth (m):34.5
Proposed/Existing Structure :-	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

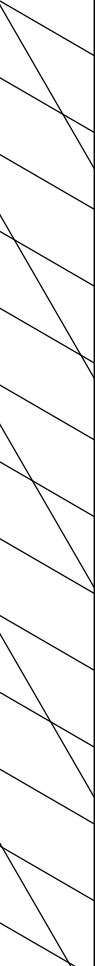
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	21	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5	11.5	UDS*							
12.0	12	SPT-7	24						
12.5									
13.0				Very Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	37						
14.0									
14.5									
15.0	15	SPT-9	45						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	54						
17.0									
17.5									
18.0	18	SPT-11	63	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	70						
20.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :39+460	Northing :2989385 m	Easting :576291 m
Reduced Level (m):(+) -	BH. No. :BH-415	BH Depth (m):34.5
Proposed/Existing Structure :-	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	>100	Very Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	>100						
23.0									
23.5									
24.0	24 24.08	SPT-15 RC-1	>100	Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
24.5									
25.0									
25.5	25.5	RC-2					11.26	0	
26.0									
26.5									
27.0	27	RC-3					10	0	
27.5									
28.0									
28.5	28.5	RC-4					10.66	0	
29.0									
29.5									
30.0	30	RC-5					10	0	



<i>BH Location/Chainage</i> :39+460	<i>Northing</i> :2989385 m	<i>Easting</i> :576291 m
<i>Reduced Level (m):(+)-</i>	BH. No. :BH-415	<i>BH Depth (m):</i> 34.5
<i>Proposed/Existing Structure</i> :-	<i>Water Table (m):</i> Not Encountered	<i>Inclination</i> : Vertical
<i>Boring type</i> :Rotary	<i>Dia. of Boring</i> :150/76 mm	<i>Depth of Casing (m)</i> :-
<i>Date of Start</i> :10-07-2026	<i>Date of Completion</i> :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	RC-6					11.33	0	
32.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
32.5									
33.0	33	RC-7					12	0	
33.5									
34.0									
34.5	34.5						11.33	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :39+540	Northing :2989301 m	Easting :576277 m
Reduced Level (m):()-	BH. No. :BH-416	BH Depth (m):34.5
Proposed/Existing Structure :-	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	11						
3.5									
4.0									
4.5	4.5	SPT-2	16						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	22	Medium Dense to Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	31						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :39+540	Northing :2989301 m	Easting :576277 m
Reduced Level (m):(+) -	BH. No. :BH-416	BH Depth (m):34.5
Proposed/Existing Structure :-	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	36	Medium Dense to Dense, Brownish, Poorly Graded Silty Sand	SP-SM				
11.0									
11.5									
12.0	12	SPT-7	39						
12.5				Very Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	52						
14.0									
14.5									
15.0	15	SPT-9	62						
15.5									
16.0									
16.5	16.5	SPT-10	72						
17.0									
17.5									
18.0	18	SPT-11	82						
18.5									
19.0									
19.5	19.5	SPT-12	88						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :39+540	Northing :2989301 m	Easting :576277 m
Reduced Level (m):(+) -	BH. No. :BH-416	BH Depth (m):34.5
Proposed/Existing Structure :-	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	>100	Very Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	>100						
23.0									
23.5									
24.0	24 24.04	SPT-15 RC-1	>100	Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
24.5									
25.0									
25.5	25.5	RC-2					10.95	0	
26.0									
26.5									
27.0	27	RC-3					10	0	
27.5									
28.0									
28.5	28.5	RC-4					10.66	0	
29.0									
29.5									
30.0	30	RC-5					10	0	



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :39+540	Northing :2989301 m	Easting :576277 m
Reduced Level (m):(+) -	BH. No. :BH-416	BH Depth (m):34.5
Proposed/Existing Structure :-	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :12-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	RC-6					11.33	0	
32.0									
32.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
33.0	33	RC-7					12	0	
33.5									
34.0									
34.5	34.5						11.33	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989578 m	Easting :576268 m
Reduced Level (m):(+) -	BH. No. :BH-417	BH Depth (m):39
Proposed/Existing Structure :P-1193	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	10						
3.5									
4.0									
4.5	4.5	SPT-2	14						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	18	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	24						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	27						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989578 m	Easting :576268 m
Reduced Level (m):(+) -	BH. No. :BH-417	BH Depth (m):39
Proposed/Existing Structure :P-1193	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	33	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	36						
12.5									
13.0				Very Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	40						
14.0									
14.5									
15.0	15	SPT-9	43						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	47						
17.0									
17.5									
18.0	18	SPT-11	50	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	55						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989578 m	Easting :576268 m
Reduced Level (m):(+-)	BH. No. :BH-417	BH Depth (m):39
Proposed/Existing Structure :P-1193	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	57						
21.5									
22.0									
22.5	22.5	SPT-14	59						
23.0									
23.5									
24.0	24	SPT-15	61						
24.5				Very Dense, Brownish, Silty Sand	SM				
25.0									
25.5	25.5	SPT-16	63						
26.0									
26.5									
27.0	27	SPT-17	65						
27.5									
28.0									
28.5	28.5	SPT-18	>100						
28.9	28.9	RC-1							
29.0									
29.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
30.0	30	RC-2					14.54	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989578 m	Easting :576268 m
Reduced Level (m):(+-)	BH. No. :BH-417	BH Depth (m):39
Proposed/Existing Structure :P-1193	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :10-07-2026	Date of Completion :11-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	RC-3					10	0	
32.0									
32.5									
33.0	33	RC-4					10.66	0	
33.5									
34.0									
34.5	34.5	RC-5		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10	0	
35.0									
35.5									
36.0	36	RC-6					11.33	0	
36.5									
37.0									
37.5	37.5	RC-7					12	0	
38.0									
38.5									
39.0	39						11.33	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989759 m	Easting :576262 m
Reduced Level (m):(+-)	BH. No. :BH-419	BH Depth (m):38.56
Proposed/Existing Structure :P-1200	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :09-07-2026	Date of Completion :10-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS-1							
3.0	3	SPT-1	7						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0									
5.5	5.5	UDS-2							
6.0	6	SPT-3	15	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	19						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	23						
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989759 m	Easting :576262 m
Reduced Level (m):(+) -	BH. No. :BH-419	BH Depth (m):38.56
Proposed/Existing Structure :P-1200	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :09-07-2026	Date of Completion :10-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	32						
12.5									
13.0				Very Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	36						
14.0									
14.5									
15.0	15	SPT-9	42						
15.5									
16.0									
16.5	16.5	SPT-10	52						
17.0									
17.5									
18.0	18	SPT-11	63						
18.5									
19.0									
19.5	19.5	SPT-12	72						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)HI METRO RAIL CORPORATION LTD

BH Location/Chainage :-	Northing :2989759 m	Easting :576262 m
Reduced Level (m):(+-)	BH. No. :BH-419	BH Depth (m):38.56
Proposed/Existing Structure :P-1200	Water Table (m):Not Encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :09-07-2026	Date of Completion :10-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	77						
21.5									
22.0									
22.5	22.5	SPT-14	83						
23.0									
23.5									
24.0	24	SPT-15	>100	Very Dense, Brownish, Silty Sand	SM				
24.5									
25.0									
25.5	25.5	SPT-16	>100						
26.0									
26.5									
27.0	27	SPT-17	>100						
27.5									
28.0									
28.5	28.5 28.56	SPT-18 RC-1	>100						
29.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
29.5									
30.0	30	RC-2					11.11	0	



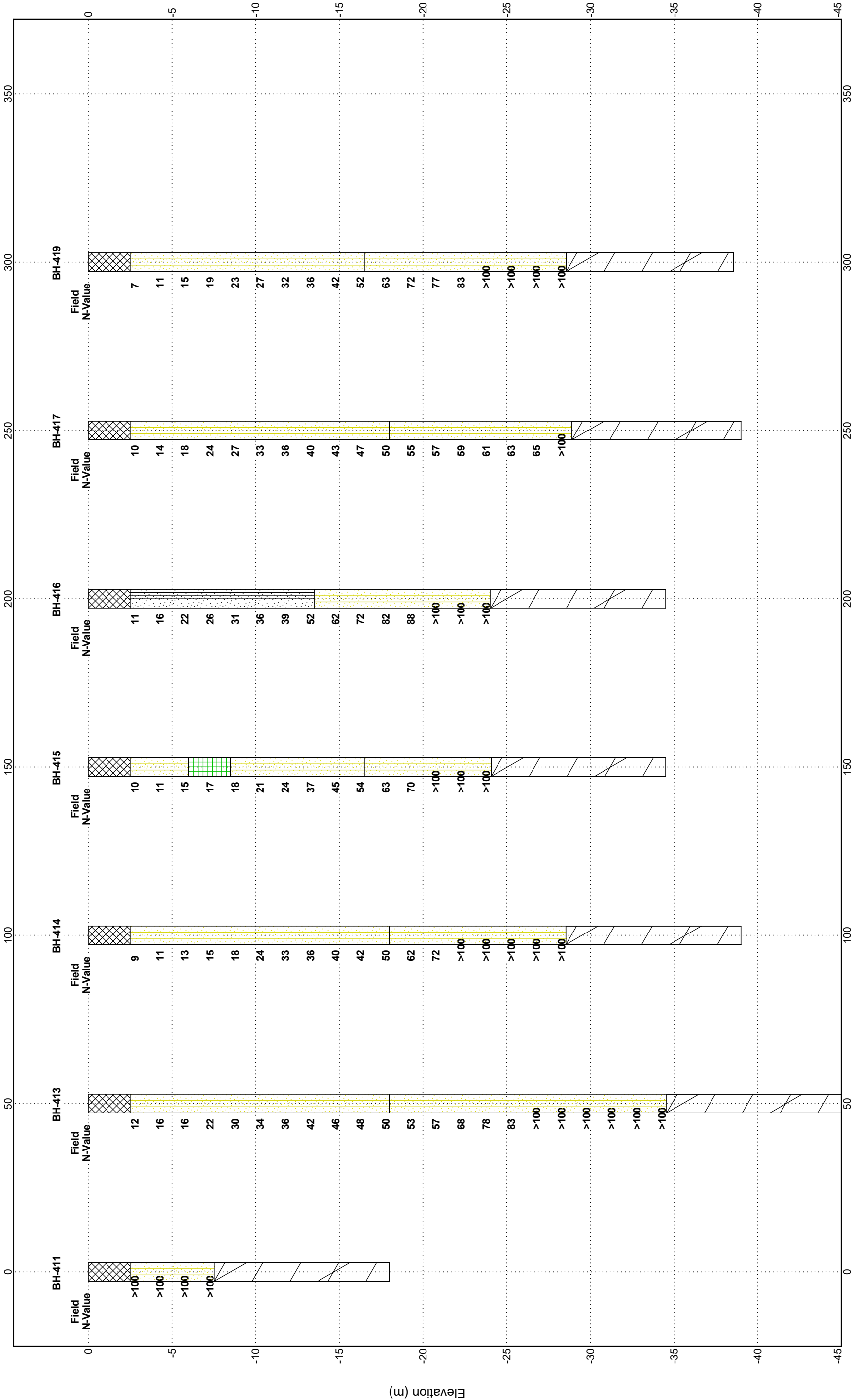
<i>BH Location/Chainage :-</i>	<i>Northing :2989759 m</i>	<i>Easting :576262 m</i>
<i>Reduced Level (m):(+) -</i>	BH. No. :BH-419	<i>BH Depth (m):38.56</i>
<i>Proposed/Existing Structure :P-1200</i>	<i>Water Table (m):Not Encountered</i>	<i>Inclination : Vertical</i>
<i>Boring type :Rotary</i>	<i>Dia. of Boring :150/76 mm</i>	<i>Depth of Casing (m) :-</i>
<i>Date of Start :09-07-2026</i>	<i>Date of Completion :10-07-2026</i>	

[illegible]

SUB SOIL PROFILE DIAGRAM -

CLIENT DELHI METRO RAIL CORPORATION LTD
PROJECT NUMBER SR-1241 25-26

PROJECT NAME GTI work for JPR Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length ~42.8 km)
PROJECT LOCATION Jaipur, Rajasthan



Distance Along Baseline (m)

APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL & ROCK CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL AND ROCK CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todt Mod (Total approximate length -42.8 km)”PKG-IV						Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code							
	13-07-2026	to	15-07-2026	P-1178	BH-411	NOT ENCOUNTERED	18.00 m	576342.000 m	2989068.000 m	-		SR-1241_26-27																		
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Shear Strength			Free Swell Index (%)		Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Consolidation Parameters								
							Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)		Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)
DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	>100	-		SM		0	24	52	15	8	1	0	-	NIL	-	NP	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	>100	-		SM		0	44	33	8	10	5	0	-	NIL	-	NP	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-1	7.54	-	-	Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		C. R. = 11.64 %	R.Q.D. = 0 %		-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-2	9.00	-	-		GRADE-IV		C. R. = 12.66 %	R.Q.D. = 0 %		-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-3	10.50	-	-		GRADE-IV		C. R. = 12 %	R.Q.D. = 0 %		-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-4	12.00	-	-		GRADE-IV		C. R. = 12.66 %	R.Q.D. = 0 %		Sp.Gr. = 2.60		W.A. = 1.71 %		Density = 2.59 (g/cc)	Porosity = 4.45 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-5	13.50	-	-		GRADE-IV		C. R. = 11.33 %	R.Q.D. = 0 %		-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-6	15.00	-	-		GRADE-IV		C. R. = 12.66 %	R.Q.D. = 0 %		-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-7	16.50	-	-		GRADE-IV		C. R. = 12 %	R.Q.D. = 0 %		Sp.Gr. = 2.58		W.A. = 1.79 %		Density = 2.57 (g/cc)	Porosity = 4.62 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SOIL AND ROCK CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code			
	Date of Boring		Grain Size Distribution % wt retained				Atterberg Limits %						NOT ENCOUNTERED		45.00 m		576318.000 m		2989237.000 m						-		
	11-07-2026	to	12-07-2026	P-1184	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)			Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e₀)	Pressure (kg/cm²)				C _y x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description	IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Fine	Gravel														
DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-														
UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-														
SPT-1	3.00	12	15		SM		0	25	74	1	0	0	0	0	NIL	NP	-	-	-	-	-	-	-	-	-		
SPT-2	4.50	16	17		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS-1	5.50	-	-		SM		0	25	70	5	0	0	0	0	NIL	NP	1.72	1.55	2.62	DST	0.00	30	-	-	-	-	
SPT-3	6.00	16	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-4	7.50	22	20		SM		0	26	69	4	1	0	0	0	NIL	NP	-	-	-	-	-	-	-	-	-		
UDS*	8.50	-	-		Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-													
SPT-5	9.00	30	26			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-6	10.50	34	27			SM		0	24	73	1	0	0	2	0	NIL	NP	1.80	1.61	2.62	DST+	0.00	31	-	-	-	
SPT-7	12.00	36	27			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-8	13.50	42	30			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-9	15.00	46	31			SM		0	38	55	7	0	0	0	0	NIL	NP	-	-	-	-	-	-	-	-	-	
SPT-10	16.50	48	31			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	50	31			SM		0	31	60	8	1	0	0	NIL	NP	1.85	1.64	2.61	DST+	0.00	32	-	-	-	-	
SPT-12	19.50	53	31			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-13	21.00	57	32			SM		0	27	66	7	0	0	0	0	NIL	NP	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	68	37			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	78	40			SM		0	25	65	8	2	0	0	0	NIL	NP	1.88	1.66	2.61	DST+	0.00	33	-	-	-	-
SPT-16	25.50	83	41			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code											
	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description	IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Grain Size Distribution % wt retained		Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)	
Sample Type																																
SPT-17	27.00	>100	-	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-18	28.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	30.00	>100	-		SM		0	35	56	8	1	0	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-20	31.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-21	33.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-22	34.50	>100	-		SM		0	36	54	4	1	5	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-1	34.56	-	-	Completely Weathered to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		C. R. = 10.41 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-2	36.00	-	-		GRADE-V		C. R. = 10 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-3	37.50	-	-		GRADE-IV		C. R. = 10.66 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-4	39.00	-	-		GRADE-V		C. R. = 10 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-5	40.50	-	-		GRADE-IV		C. R. = 11.33 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-6	42.00	-	-		GRADE-IV		C. R. = 10.66 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-7	43.50	-	-		GRADE-IV		C. R. = 12 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todī Mod (Total approximate length -42.8 km)”PKG-IV										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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	SPT-11	18.00	50	31	Very Dense, Brownish, Silty Sand	SM		0	23	55	15	5	2	0	-	NIL	NP	-	1.87	12.50	1.66	2.63	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _s)	Soil & Rock Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				NOT ENCOUNTERED		34.50 m		576291.000 m						2989385.000 m		-	SR-1241_26-27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)			Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	DS-1	0.00	-	-	Filled Up soil	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

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SOIL AND ROCK CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS+UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)" PKG-IV										IS Classification	IS Symbol	Soil & Rock Description	Observed SPT Value (N)	Corrected SPT Value (N _c)	Date of Boring										Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	SR-1241_26-27
	10-07-2026				to		12-07-2026		CH-39540							BH-416		-		34.50 m		576277.000 m		2989301.000 m		-														
	Sample Type	Depth from G.L. (m)				Clay	Silt	Fine	Medium	Coarse						Fine	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)		Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)			
DS-1	0.00	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
UDS*	2.50	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-1	3.00	11	13		0	10	86	4	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-2	4.50	16	17		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
UDS-1	5.50	-	-		0	7	87	5	0	1	0	-	NIL	NP	-	1.75	11.44	1.57	2.61	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-							
SPT-3	6.00	22	22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-4	7.50	26	24		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
UDS*	8.50	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-5	9.00	31	26		0	9	85	6	0	0	0	-	NIL	NP	-	1.80	12.00	1.61	2.61	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-							
SPT-6	10.50	36	29		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-7	12.00	39	29		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-8	13.50	52	37		0	22	61	14	1	2	0	-	NIL	NP	-	1.86	12.50	1.65	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-							
SPT-9	15.00	62	42		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-10	16.50	72	46		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-11	18.00	82	50		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-12	19.50	88	51		0	33	56	10	1	0	0	-	NIL	NP	-	1.89	13.00	1.67	2.63	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	-							
SPT-13	21.00	>100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-14	22.50	>100	-		0	28	65	7	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
SPT-15	24.00	>100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								

Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS=Undisturbed Sample, SPT=Standard Penetration Test, UDS+UDS not recovered, DST=Direct Shear Test, UUT=Unconsolidated Undrained Triaxial Shear Test, DST+ = Direct Shear Test on Remoulded Sample, UUT+ = Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL AND ROCK CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code												
	Date of Boring		Grain Size Distribution % wt retained						Atterberg Limits %				576268.000 m			2989578.000 m																			
	10-07-2026	to	11-07-2026	P-1193	BH-417	NIOT ENCOUNTERED	39.00 m	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)			Free Swell Index (%)	Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)														
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil & Rock Description			IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)		
DS-1	0.00	-	-	Filled Up soil			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-1	3.00	10	12				SM		0	22	68	8	2	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	14	15				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	5.50	-	-				SM		0	20	70	7	3	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	18	18				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	24	22	SM		0	19	67	9	5	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	8.50	-	-	Medium Dense to Dense, Brownish, Silty Sand			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-5	9.00	27	23				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	33	27				SM		0	20	65	10	4	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	36	27				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	40	29				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	43	29	SM		0	14	74	10	2	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-10	16.50	47	30	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-11	18.00	50	31	SM		0	22	60	12	4	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-12	19.50	55	32	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-13	21.00	57	32	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-14	22.50	59	32	SM		0	28	57	9	5	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-15	24.00	61	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-16	25.50	63	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-17	27.00	65	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-18	28.50	>100	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disurbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

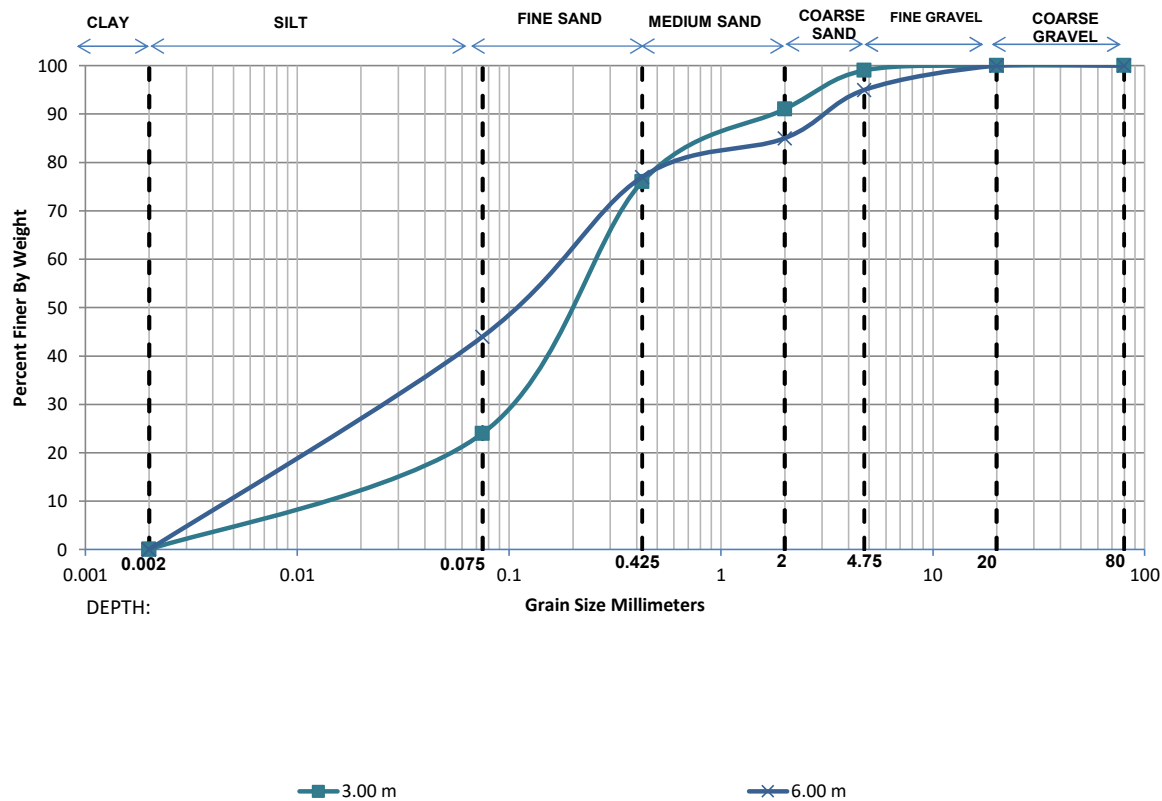
SOIL AND ROCK CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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GRAIN SIZE DISTRIBUTION CURVES

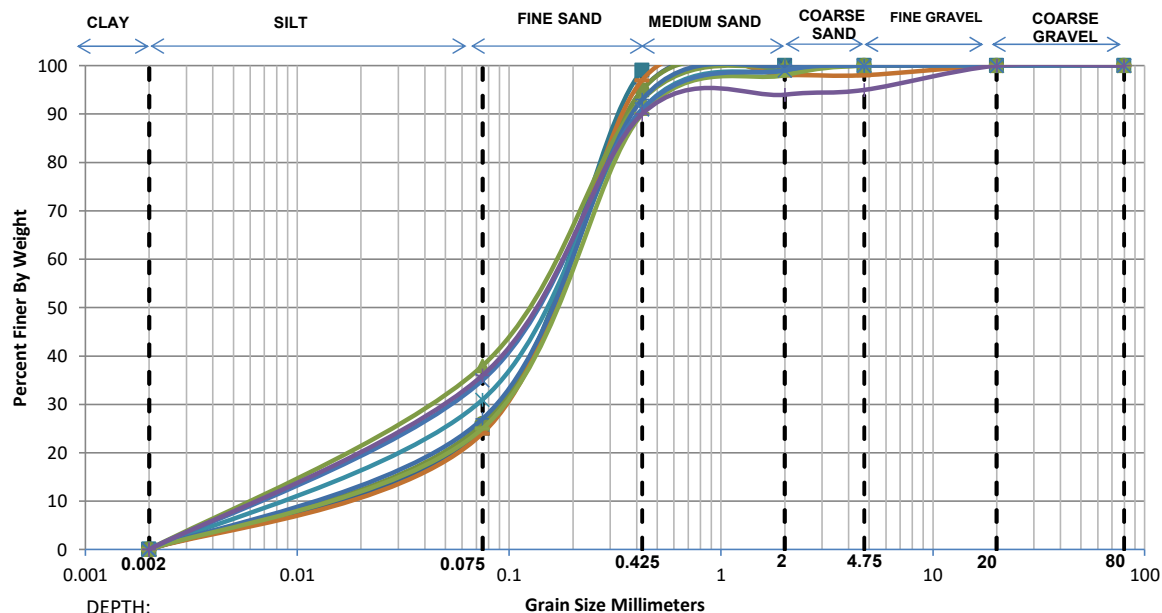
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1178
B.H. No.	411



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	24.00	52.00	15.00	8.00	1.00	0.00	0.0193	0.0998	0.2633	13.66	1.96
6.00 m	0.00	44.00	33.00	8.00	10.00	5.00	0.00	0.0066	0.0389	0.1738	26.50	1.32

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1184
B.H. No.	413

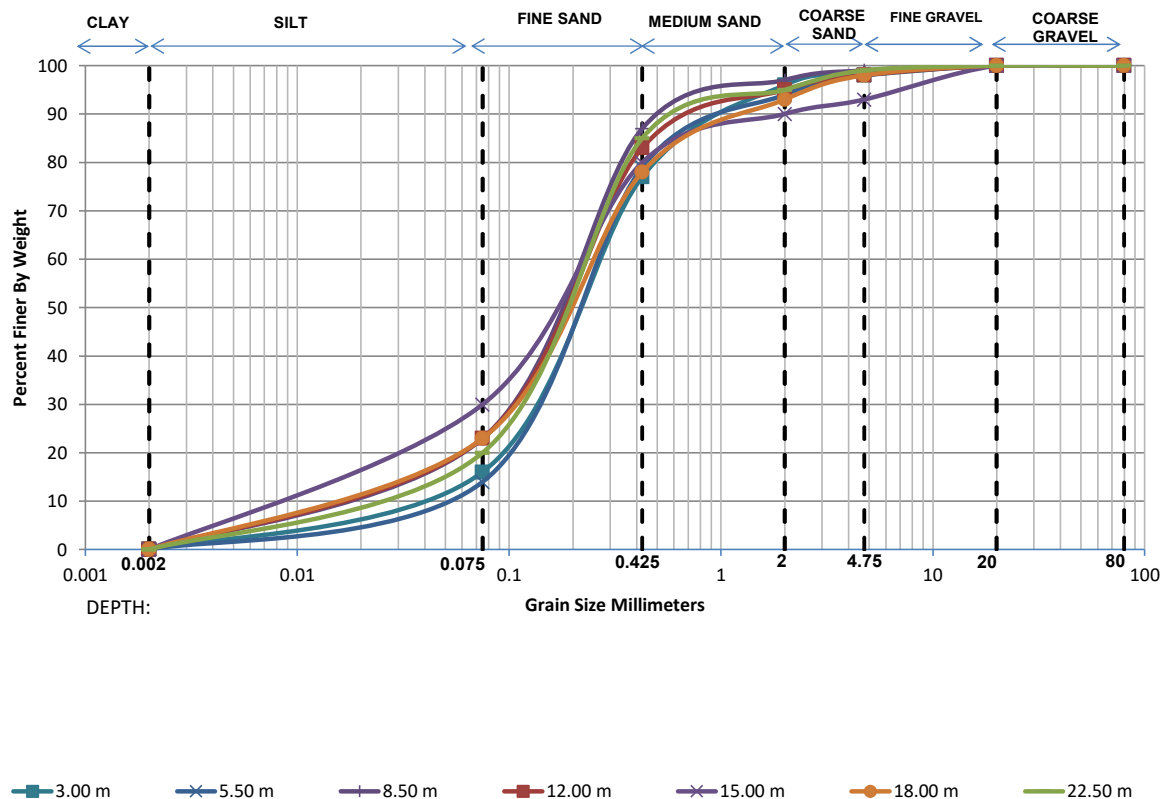


— 3.00 m × 5.50 m ● 7.50 m — 10.50 m ▲ 15.00 m * 18.00 m + 21.00 m — 24.00 m × 30.00 m — 34.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	25.00	74.00	1.00	0.00	0.00	0.00	0.0190	0.0923	0.1886	9.91	2.37
5.50 m	0.00	25.00	70.00	5.00	0.00	0.00	0.00	0.0188	0.0927	0.1961	10.41	2.33
7.50 m	0.00	26.00	69.00	4.00	1.00	0.00	0.00	0.0175	0.0890	0.1927	10.99	2.35
10.50 m	0.00	24.00	73.00	1.00	0.00	2.00	0.00	0.0204	0.0962	0.1948	9.54	2.33
15.00 m	0.00	38.00	55.00	7.00	0.00	0.00	0.00	0.0088	0.0519	0.1562	17.79	1.97
18.00 m	0.00	31.00	60.00	8.00	1.00	0.00	0.00	0.0126	0.0716	0.1852	14.75	2.21
21.00 m	0.00	27.00	66.00	7.00	0.00	0.00	0.00	0.0163	0.0855	0.1941	11.93	2.32
24.00 m	0.00	25.00	65.00	8.00	2.00	0.00	0.00	0.0186	0.0933	0.2072	11.14	2.26
30.00 m	0.00	35.00	56.00	8.00	1.00	0.00	0.00	0.0101	0.0595	0.1711	16.96	2.05
34.50 m	0.00	36.00	54.00	4.00	1.00	5.00	0.00	0.0096	0.0567	0.1683	17.58	2.00

GRAIN SIZE DISTRIBUTION CURVES

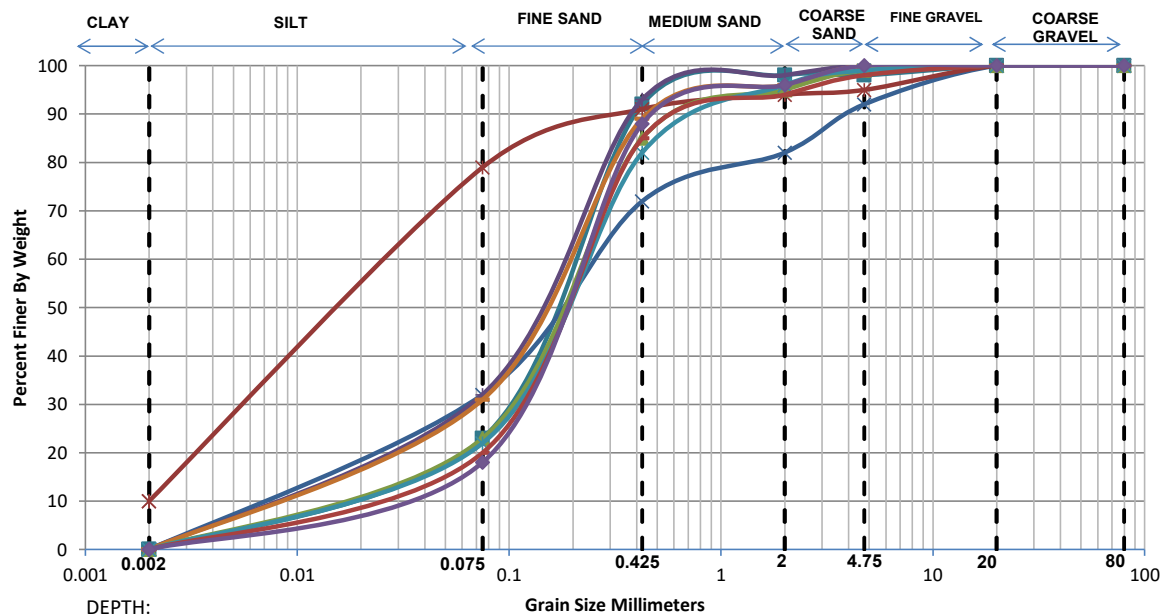
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1187
B.H. No.	414



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	16.00	61.00	19.00	2.00	2.00	0.00	0.0400	0.1375	0.2810	7.03	1.68
5.50 m	0.00	14.00	65.00	15.00	4.00	2.00	0.00	0.0497	0.1459	0.2761	5.55	1.55
8.50 m	0.00	23.00	64.00	10.00	2.00	1.00	0.00	0.0215	0.1017	0.2217	10.30	2.17
12.00 m	0.00	23.00	60.00	12.00	3.00	2.00	0.00	0.0213	0.1026	0.2348	11.02	2.10
15.00 m	0.00	30.00	50.00	10.00	3.00	7.00	0.00	0.0129	0.0750	0.2226	17.26	1.96
18.00 m	0.00	23.00	55.00	15.00	5.00	2.00	0.00	0.0210	0.1038	0.2561	12.20	2.00
22.50 m	0.00	20.00	65.00	10.00	4.00	1.00	0.00	0.0276	0.1149	0.2367	8.57	2.02

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	CH-39460
B.H. No.	415

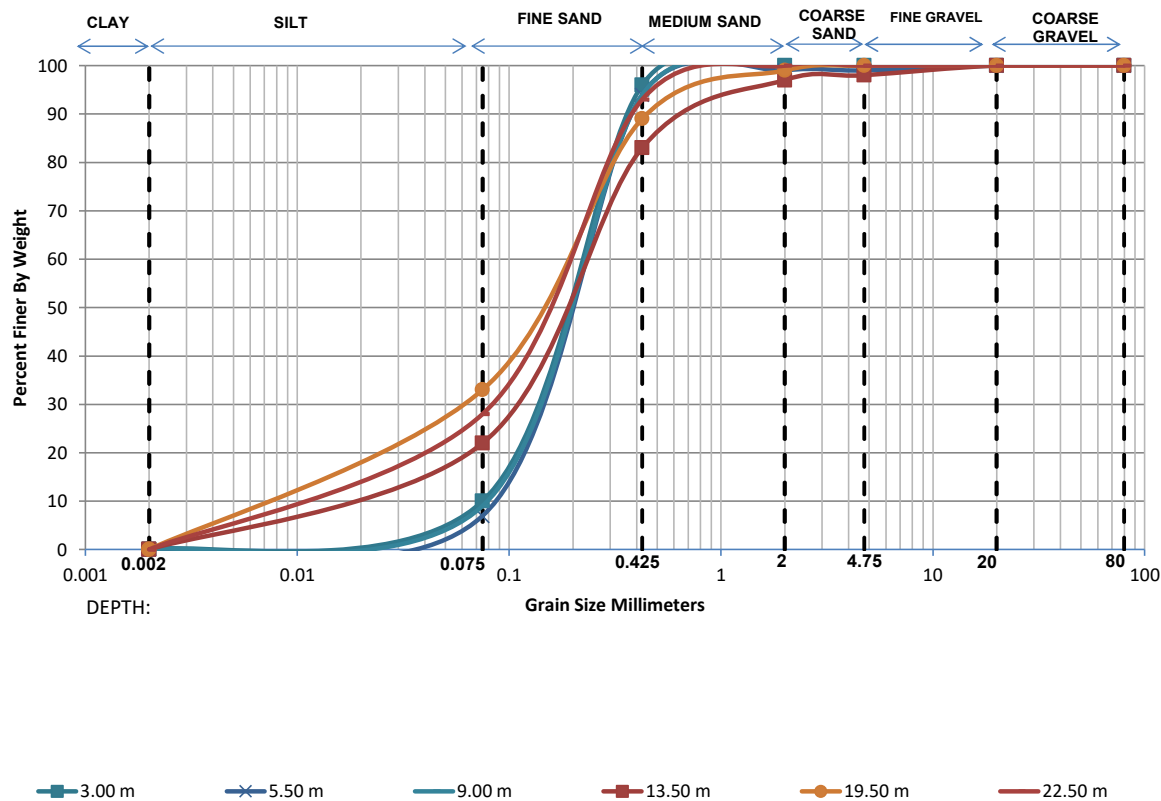


■ 3.00 m
 × 5.50 m
 × 6.00 m
 × 8.50 m
 × 10.50 m
 × 13.50 m
 × 16.50 m
 × 21.00 m
 × 24.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	23.00	69.00	6.00	0.00	2.00	0.00	0.0218	0.1008	0.2085	9.56	2.23
5.50 m	0.00	32.00	40.00	10.00	10.00	8.00	0.00	0.0112	0.0678	0.2610	23.40	1.58
6.00 m	10.00	69.00	12.00	3.00	1.00	5.00	0.00	0.0020	0.0118	0.0423	21.17	1.65
8.50 m	0.00	32.00	61.00	5.00	2.00	0.00	0.00	0.0119	0.0684	0.1769	14.85	2.22
10.50 m	0.00	31.00	58.00	7.00	4.00	0.00	0.00	0.0125	0.0716	0.1893	15.17	2.17
13.50 m	0.00	23.00	62.00	10.00	4.00	1.00	0.00	0.0214	0.1021	0.2276	10.63	2.14
16.50 m	0.00	22.00	60.00	14.00	3.00	1.00	0.00	0.0230	0.1072	0.2421	10.50	2.06
21.00 m	0.00	20.00	65.00	9.00	4.00	2.00	0.00	0.0276	0.1149	0.2363	8.56	2.02
24.00 m	0.00	18.00	70.00	8.00	4.00	0.00	0.00	0.0335	0.1226	0.2336	6.97	1.92

GRAIN SIZE DISTRIBUTION CURVES

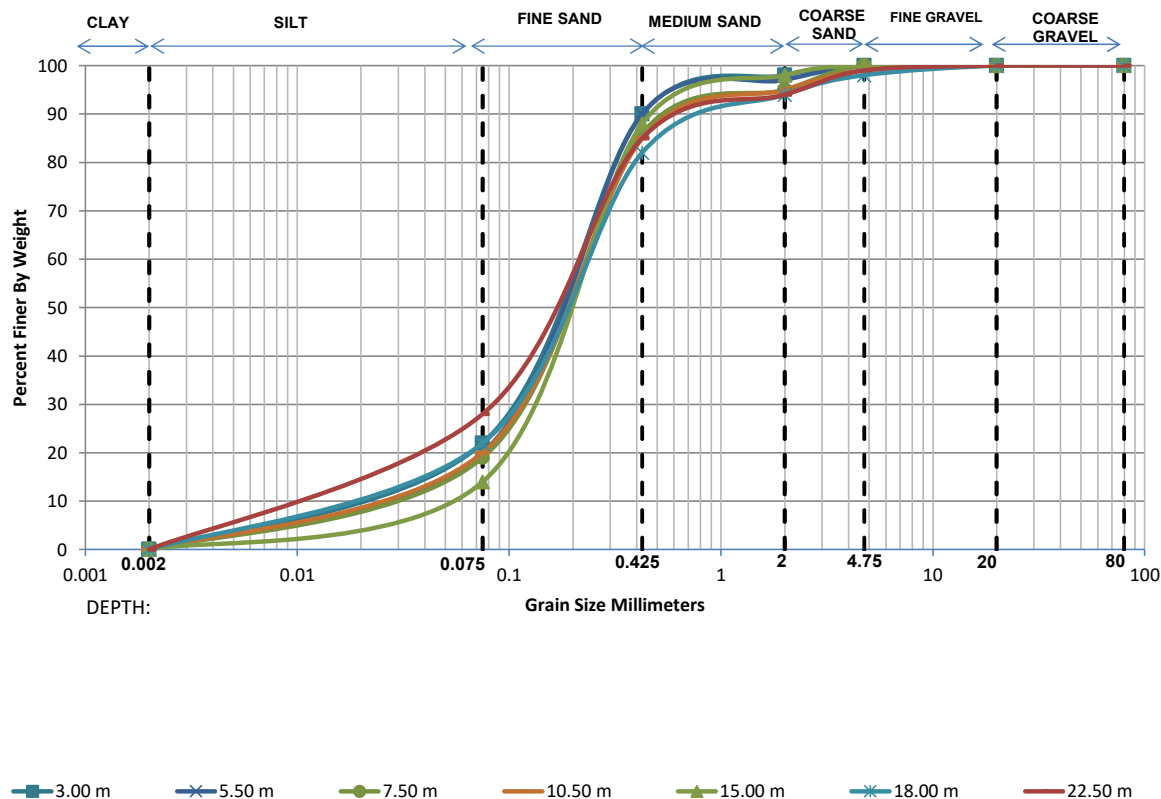
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	CH-39540
B.H. No.	416



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	10.00	86.00	4.00	0.00	0.00	0.00	0.0750	0.1558	0.2401	3.20	1.35
5.50 m	0.00	7.00	87.00	5.00	0.00	1.00	0.00	0.0917	0.1722	0.2532	2.76	1.28
9.00 m	0.00	9.00	85.00	6.00	0.00	0.00	0.00	0.0804	0.1619	0.2471	3.07	1.32
13.50 m	0.00	22.00	61.00	14.00	1.00	2.00	0.00	0.0231	0.1069	0.2385	10.32	2.07
19.50 m	0.00	33.00	56.00	10.00	1.00	0.00	0.00	0.0111	0.0652	0.1832	16.44	2.08
22.50 m	0.00	28.00	65.00	7.00	0.00	0.00	0.00	0.0152	0.0819	0.1908	12.54	2.31

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1193
B.H. No.	417

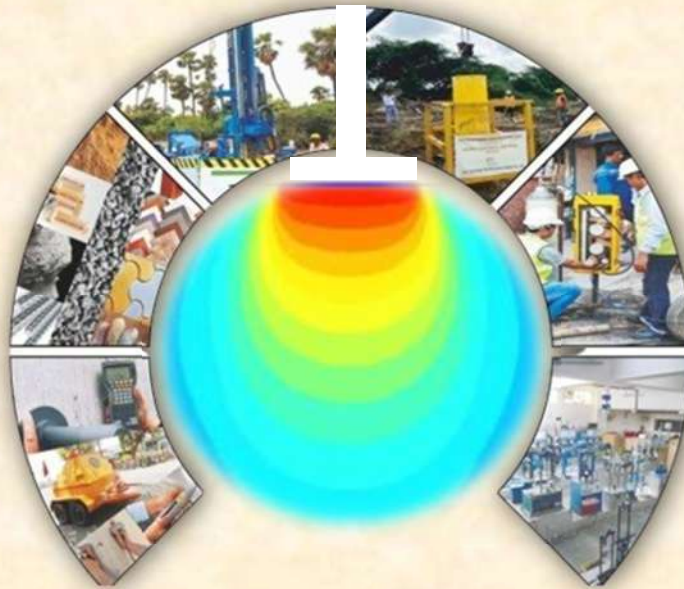


Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	22.00	68.00	8.00	2.00	0.00	0.00	0.0235	0.1052	0.2166	9.20	2.17
5.50 m	0.00	20.00	70.00	7.00	3.00	0.00	0.00	0.0280	0.1134	0.2224	7.96	2.07
7.50 m	0.00	19.00	67.00	9.00	5.00	0.00	0.00	0.0303	0.1189	0.2364	7.79	1.97
10.50 m	0.00	20.00	65.00	10.00	4.00	1.00	0.00	0.0276	0.1149	0.2367	8.57	2.02
15.00 m	0.00	14.00	74.00	10.00	2.00	0.00	0.00	0.0504	0.1409	0.2459	4.88	1.60
18.00 m	0.00	22.00	60.00	12.00	4.00	2.00	0.00	0.0230	0.1071	0.2414	10.47	2.06
22.50 m	0.00	28.00	57.00	9.00	5.00	1.00	0.00	0.0149	0.0823	0.2111	14.19	2.15

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

E-mail: info@cegtesthouse.com.

www.cegtesthouse.com

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/344_10 BHs	00	01.09.2026

Submitted to:
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www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/344

Date:- 01.09.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-IV**

Dear Sir,

We are pleased to submit this report of 14 boreholes carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-



Pratibha Bagaria
Sr Geotechnical Engineer



TC-10943
NABL Accredited
Both Field & Lab Tests

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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,**.

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 50.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 10 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Pier no.	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)		+(R.L.)
					E	N	
1.	BH-394	P1126	Not encountered	50.00	576425.000	2987454.000	-
2.	BH-395	-	Not encountered	50.00	576393.000	2987548.000	-
3.	BH-396	-	Not encountered	50.00	576370.000	2987628.000	-
4.	BH-397	P1133	Not encountered	50.00	576336.000	2987733.000	-
5.	BH-398	P1136	Not encountered	50.00	576315.000	2987829.000	-
6.	BH-399	P1140	Not encountered	46.03	576311.000	2987936.000	-
7.	BH-400	P1143	Not encountered	50.00	576307.000	2988013.000	-
8.	BH-401	P1147	Not encountered	33.00	576298.000	2988113.000	-
9.	BH-402	P1150	Not encountered	40.00	576297.000	2988215.000	-
10.	BH-403	P1154	Not encountered	34.04	576302.000	2988322.000	-

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being

the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

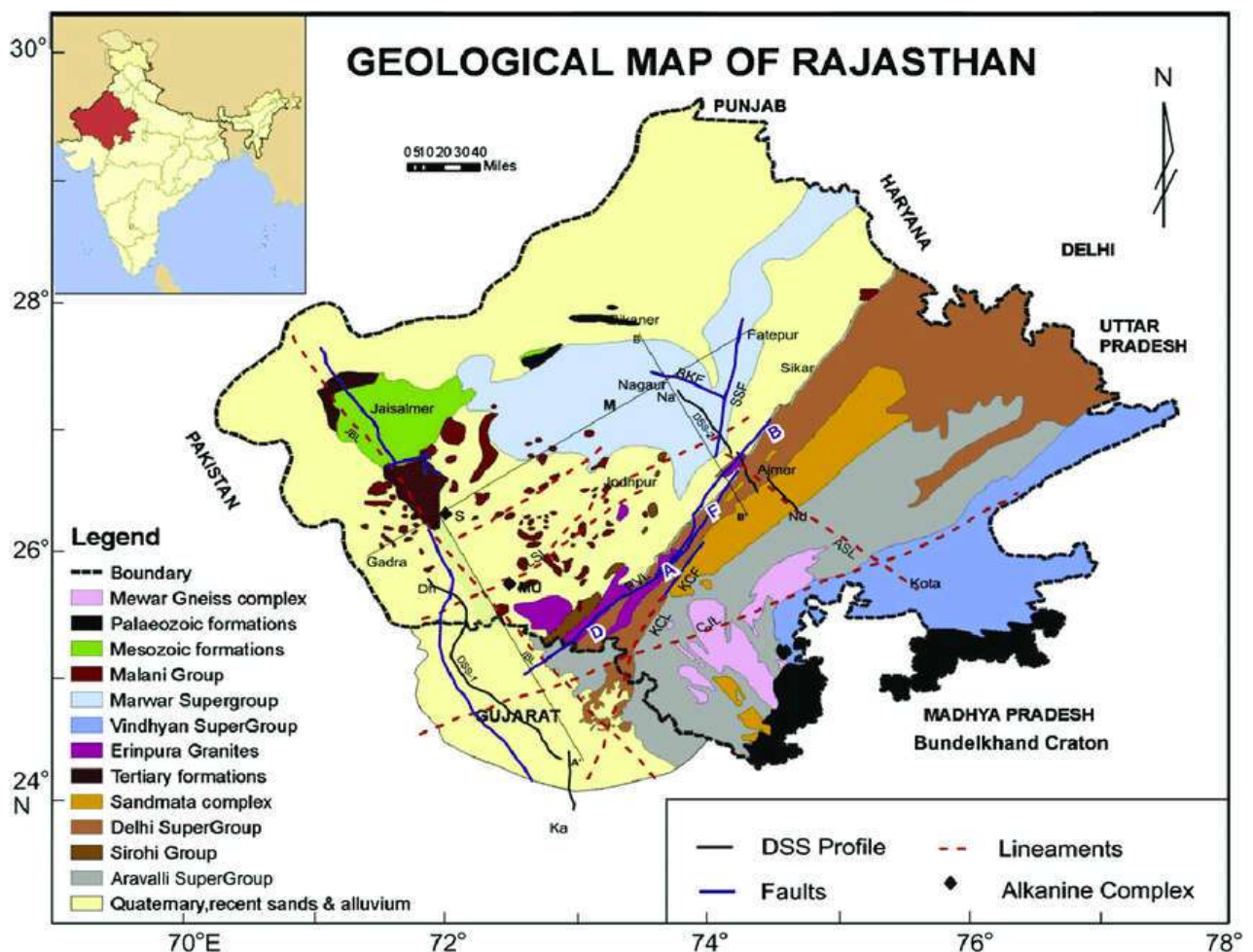


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

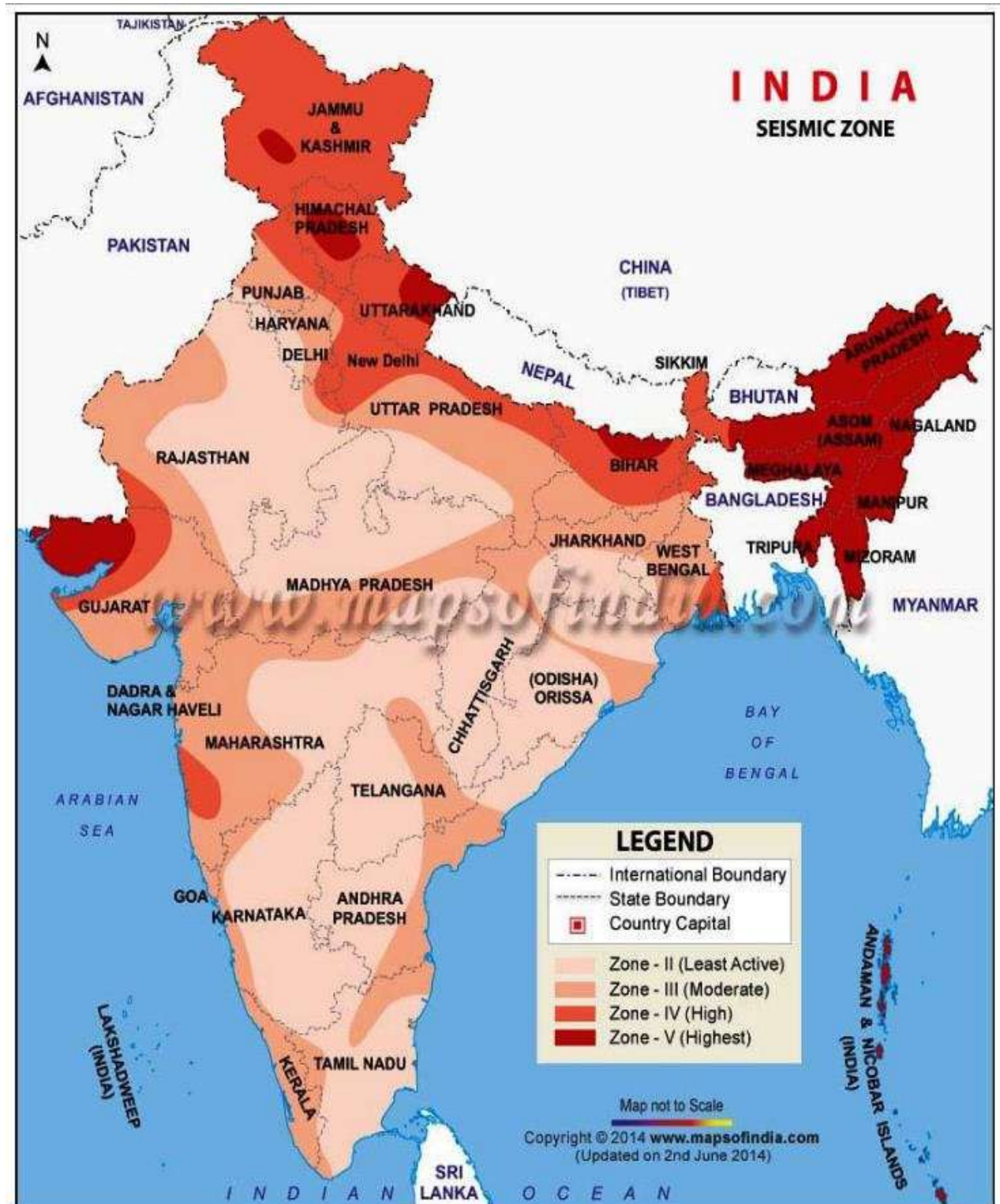


Fig. 2: Seismicity Map of India



Figure 3 : - Site Location Plan.

The field and laboratory test described in Chapter 3.

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in June July 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbing at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 10 BHs, the soil and rock stratification is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH. No.	Depth(m)		Description
	From	To	
BH-394	0.00	2.50	Filled Up Soil
	2.50	19.50	Loose to Dense, Brownish, Silty Sand
	19.50	50.00	Very Dense, Brownish, Silty Sand
BH-395	0.00	2.50	Filled Up Soil
	2.50	25.50	Medium Dense to Dense, Brownish, Silty Sand
	25.50	34.50	Hard, Brownish, Clay Of Low Plasticity
	34.50	50.00	Very Dense, Brownish, Silty Sand
BH-396	0.00	2.50	Filled Up Soil
	2.50	27.00	Medium Dense to Dense, Brownish, Silty Sand
	27.00	50.00	Very Dense, Brownish, Silty Sand
BH-397	0.00	2.50	Filled Up Soil
	2.50	18.00	Medium Dense to Dense, Brownish, Silty Sand
	18.00	50.00	Very Dense, Brownish, Silty Sand
BH-398	0.00	2.50	Filled Up Soil
	2.50	22.50	Medium Dense to Dense, Brownish, Silty Sand
	22.50	50.00	Very Dense, Brownish, Silty Sand
BH-399	0.00	2.50	Filled Up Soil
	2.50	18.00	Medium Dense to Dense, Brownish, Silty Sand
	18.00	36.03	Very Dense, Brownish, Silty Sand
	36.03	46.03	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-400	0.00	2.50	Filled Up Soil
	2.50	19.50	Medium Dense to Dense, Brownish, Silty Sand
	19.50	50.00	Very Dense, Brownish, Silty Sand
BH-401	0.00	2.50	Filled Up Soil
	2.50	18.00	Medium Dense to Dense, Brownish, Silty Sand
	18.00	22.90	Very Dense, Brownish, Silty Sand
	22.90	33.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-402	0.00	2.50	Filled Up Soil
	2.50	16.50	Medium Dense to Dense, Brownish, Silty Sand
	16.50	30.04	Very Dense, Brownish, Silty Sand
	30.04	40.00	Completely to Highly Weathered, Brownish, Very Poor, Boulder
BH-403	0.00	2.50	Filled Up Soil
	2.50	16.50	Medium Dense to Dense, Brownish, Silty Sand
	16.50	24.04	Very Dense, Brownish, Silty Sand
	24.04	34.04	Completely to Highly Weathered, Brownish, Very Poor, Boulder

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987454 m	Easting :576425 m
Reduced Level (m):(+-)	BH. No. :BH-394	BH Depth (m):50
Proposed/Existing Structure :BH-394 (P1126)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	9						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	15						
6.5				Loose to Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	20						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	28						
9.5									
10.0									

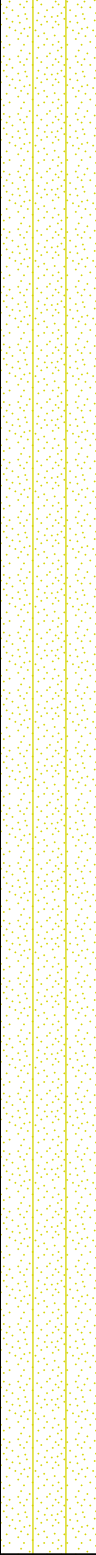
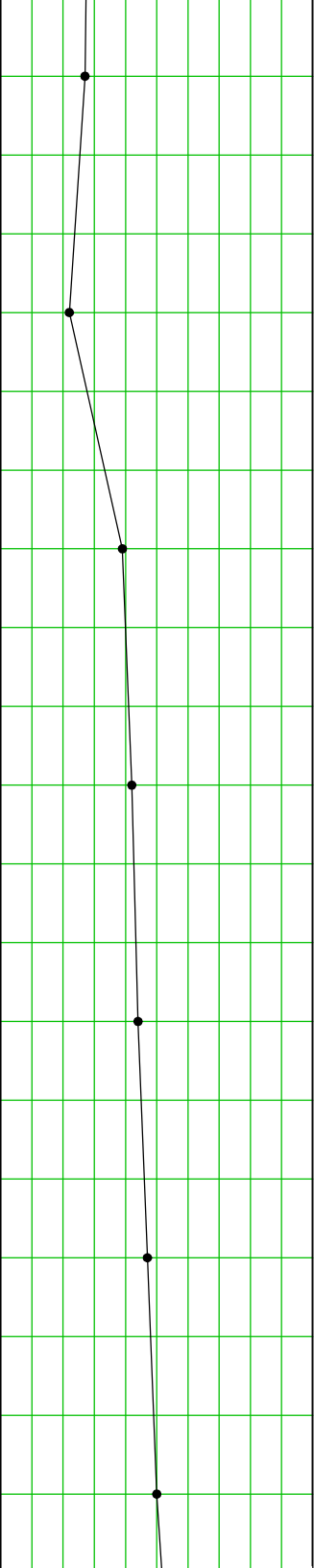
UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987454 m	Easting :576425 m
Reduced Level (m):(+) -	BH. No. :BH-394	BH Depth (m):50
Proposed/Existing Structure :BH-394 (P1126)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27	Loose to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	22						
12.5									
13.0									
13.5	13.5	SPT-8	39						
14.0									
14.5									
15.0	15	SPT-9	42						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	44						
17.0									
17.5									
18.0	18	SPT-11	47						
18.5									
19.0									
19.5	19.5	SPT-12	50						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987454 m	Easting :576425 m
Reduced Level (m):(+-)	BH. No. :BH-394	BH Depth (m):50
Proposed/Existing Structure :BH-394 (P1126}	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	55						
21.5									
22.0									
22.5	22.5	SPT-14	54						
23.0									
23.5									
24.0	24	SPT-15	59						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	62						
26.0									
26.5									
27.0	27	SPT-17	64						
27.5									
28.0									
28.5	28.5	SPT-18	60						
29.0									
29.5									
30.0	30	SPT-19	69						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987454 m	Easting :576425 m
Reduced Level (m):(+-)	BH. No. :BH-394	BH Depth (m):50
Proposed/Existing Structure :BH-394 (P1126)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	72						
32.0									
32.5									
33.0	33	SPT-21	76						
33.5									
34.0									
34.5	34.5	SPT-22	79						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	82						
36.5									
37.0									
37.5	37.5	SPT-24	85						
38.0									
38.5									
39.0	39	SPT-25	90						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987454 m	Easting :576425 m
Reduced Level (m):(+-)	BH. No. :BH-394	BH Depth (m):50
Proposed/Existing Structure :BH-394 (P1126)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+600	Northing :2987548 m	Easting :576393 m
Reduced Level (m):(+) -	BH. No. :BH-395	BH Depth (m):50
Proposed/Existing Structure :BH-395	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	11						
3.5									
4.0									
4.5	4.5	SPT-2	15						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	18	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	22						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	26						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+600	Northing :2987548 m	Easting :576393 m
Reduced Level (m):(+) -	BH. No. :BH-395	BH Depth (m):50
Proposed/Existing Structure :BH-395	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29						
11.0									
11.5									
12.0	12	SPT-7	32						
12.5									
13.0									
13.5	13.5	SPT-8	35						
14.0									
14.5									
15.0	15	SPT-9	38	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	42						
17.0									
17.5									
18.0	18	SPT-11	46						
18.5									
19.0									
19.5	19.5	SPT-12	50						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+600	Northing :2987548 m	Easting :576393 m
Reduced Level (m):(+) -	BH. No. :BH-395	BH Depth (m):50
Proposed/Existing Structure :BH-395	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	52						
21.5									
22.0									
22.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0		SPT-15	58						
24.5									
25.0									
25.5	25.5	SPT-16	61						
26.0									
26.5									
27.0	27	SPT-17	63						
27.5									
28.0				Hard, Brownish, Clay Of Low Plasticity	CL				
28.5	28.5	SPT-18	67						
29.0									
29.5									
30.0	30	SPT-19	69						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+600	Northing :2987548 m	Easting :576393 m
Reduced Level (m):()-	BH. No. :BH-395	BH Depth (m):50
Proposed/Existing Structure :BH-395	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	71						
32.0									
32.5				Hard, Brownish, Clay Of Low Plasticity	CL				
33.0	33	SPT-21	73						
33.5									
34.0									
34.5	34.5	SPT-22	77						
35.0									
35.5									
36.0	36	SPT-23	81						
36.5									
37.0									
37.5	37.5	SPT-24	83	Very Dense, Brownish, Silty Sand	SM				
38.0									
38.5									
39.0	39	SPT-25	85						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+600	Northing :2987548 m	Easting :576393 m
Reduced Level (m):()-	BH. No. :BH-395	BH Depth (m):50
Proposed/Existing Structure :BH-395	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	87						
41.0									
41.5									
42.0	42	SPT-27	91						
42.5									
43.0									
43.5	43.5	SPT-28	93						
44.0									
44.5									
45.0	45	SPT-29	95	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	97						
47.0									
47.5									
48.0	48	SPT-31	99						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+680	Northing :2987628 m	Easting :576370 m
Reduced Level (m):(+) -	BH. No. :BH-396	BH Depth (m):50
Proposed/Existing Structure :BH-396	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	12						
3.5									
4.0									
4.5	4.5	SPT-2	13						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	11	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	15						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	15						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+680	Northing :2987628 m	Easting :576370 m
Reduced Level (m):(+) -	BH. No. :BH-396	BH Depth (m):50
Proposed/Existing Structure :BH-396	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	17						
11.0									
11.5									
12.0	12	SPT-7	26						
12.5									
13.0									
13.5	13.5	SPT-8	33						
14.0									
14.5									
15.0	15	SPT-9	23	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	32						
17.0									
17.5									
18.0	18	SPT-11	42						
18.5									
19.0									
19.5	19.5	SPT-12	41						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+680	Northing :2987628 m	Easting :576370 m
Reduced Level (m):(+) -	BH. No. :BH-396	BH Depth (m):50
Proposed/Existing Structure :BH-396	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	48						
21.5									
22.0									
22.5	22.5	SPT-14	46						
23.0									
23.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
24.0	24	SPT-15	44						
24.5									
25.0									
25.5	25.5	SPT-16	42						
26.0									
26.5									
27.0	27	SPT-17	57						
27.5									
28.0									
28.5	28.5	SPT-18	61	Very Dense, Brownish, Silty Sand	SM				
29.0									
29.5									
30.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+680	Northing :2987628 m	Easting :576370 m
Reduced Level (m):()-	BH. No. :BH-396	BH Depth (m):50
Proposed/Existing Structure :BH-396	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5		SPT-20	72						
32.0									
32.5									
33.0	33	SPT-21	75						
33.5									
34.0									
34.5	34.5	SPT-22	53						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	53						
36.5									
37.0									
37.5	37.5	SPT-24	60						
38.0									
38.5									
39.0	39	SPT-25	61						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :37+680	Northing :2987628 m	Easting :576370 m
Reduced Level (m):()-	BH. No. :BH-396	BH Depth (m):50
Proposed/Existing Structure :BH-396	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :21-07-2026	Date of Completion :22-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	64						
41.0									
41.5									
42.0	42	SPT-27	64						
42.5									
43.0									
43.5	43.5	SPT-28	37						
44.0									
44.5									
45.0	45	SPT-29	77	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	88						
47.0									
47.5									
48.0	48	SPT-31	75						
48.5									
49.0									
49.5									
50.0	50	SPT-32	82						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987733 m	Easting :576336 m
Reduced Level (m):(+) -	BH. No. :BH-397	BH Depth (m):50
Proposed/Existing Structure :BH-397 (P1133)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	10						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	17	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	22						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	27						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987733 m	Easting :576336 m
Reduced Level (m):(+) -	BH. No. :BH-397	BH Depth (m):50
Proposed/Existing Structure :BH-397 (P1133)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	32	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	38						
12.5									
13.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	42						
14.0									
14.5									
15.0	15	SPT-9	45						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	48						
17.0									
17.5									
18.0	18	SPT-11	51	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	54						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987733 m	Easting :576336 m
Reduced Level (m):(+-)	BH. No. :BH-397	BH Depth (m):50
Proposed/Existing Structure :BH-397 (P1133)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	57						
21.5									
22.0									
22.5	22.5	SPT-14	59						
23.0									
23.5									
24.0	24	SPT-15	61						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	64						
26.0									
26.5									
27.0	27	SPT-17	66						
27.5									
28.0									
28.5	28.5	SPT-18	68						
29.0									
29.5									
30.0	30	SPT-19	71						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987733 m	Easting :576336 m
Reduced Level (m):(+-)	BH. No. :BH-397	BH Depth (m):50
Proposed/Existing Structure :BH-397 (P1133)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	74						
32.0									
32.5									
33.0	33	SPT-21	76						
33.5									
34.0									
34.5	34.5	SPT-22	78						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	81						
36.5									
37.0									
37.5	37.5	SPT-24	85						
38.0									
38.5									
39.0	39	SPT-25	87						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987733 m	Easting :576336 m
Reduced Level (m):(+) -	BH. No. :BH-397	BH Depth (m):50
Proposed/Existing Structure :BH-397 (P1133)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	89						
41.0									
41.5									
42.0	42	SPT-27	91						
42.5									
43.0									
43.5	43.5	SPT-28	95						
44.0									
44.5									
45.0	45	SPT-29	97	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	99						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987829 m	Easting :576315 m
Reduced Level (m):(+) -	BH. No. :BH-398	BH Depth (m):50
Proposed/Existing Structure :BH-398 (P1136)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	16						
3.5									
4.0									
4.5	4.5	SPT-2	20						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	25	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	28						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	23						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987829 m	Easting :576315 m
Reduced Level (m):(+) -	BH. No. :BH-398	BH Depth (m):50
Proposed/Existing Structure :BH-398 (P1136)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	21						
11.0									
11.5									
12.0	12	SPT-7	27						
12.5									
13.0									
13.5	13.5	SPT-8	29						
14.0									
14.5									
15.0	15	SPT-9	36	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	40						
17.0									
17.5									
18.0	18	SPT-11	44						
18.5									
19.0									
19.5	19.5	SPT-12	42						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987829 m	Easting :576315 m
Reduced Level (m):(+) -	BH. No. :BH-398	BH Depth (m):50
Proposed/Existing Structure :BH-398 (P1136)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	45						
21.5									
22.0									
22.5	22.5	SPT-14	50	Very Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0	24	SPT-15	53						
24.5									
25.0									
25.5	25.5	SPT-16	60						
26.0									
26.5									
27.0	27	SPT-17	55						
27.5									
28.0									
28.5	28.5	SPT-18	62						
29.0									
29.5									
30.0	30	SPT-19	64						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987829 m	Easting :576315 m
Reduced Level (m):(+-)	BH. No. :BH-398	BH Depth (m):50
Proposed/Existing Structure :BH-398 (P1136)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	61						
32.0									
32.5									
33.0	33	SPT-21	65						
33.5									
34.0									
34.5	34.5	SPT-22	68						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	72						
36.5									
37.0									
37.5	37.5	SPT-24	65						
38.0									
38.5									
39.0	39	SPT-25	66						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987829 m	Easting :576315 m
Reduced Level (m):(+-)	BH. No. :BH-398	BH Depth (m):50
Proposed/Existing Structure :BH-398 (P1136)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987936 m	Easting :57631 m
Reduced Level (m):(+) -	BH. No. :BH-399	BH Depth (m):46.03
Proposed/Existing Structure :BH-399 (P1140)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	16						
3.5									
4.0									
4.5	4.5	SPT-2	22						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	28	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	34						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	37						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987936 m	Easting :57631 m
Reduced Level (m):(+) -	BH. No. :BH-399	BH Depth (m):46.03
Proposed/Existing Structure :BH-399 (P1140)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	40	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	42						
12.5									
13.0				Very Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	44						
14.0									
14.5									
15.0	15	SPT-9	46						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	48						
17.0									
17.5									
18.0	18	SPT-11	51	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	53						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987936 m	Easting :57631 m
Reduced Level (m):(+-)	BH. No. :BH-399	BH Depth (m):46.03
Proposed/Existing Structure :BH-399 (P1140)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	57						
21.5									
22.0									
22.5	22.5	SPT-14	59						
23.0									
23.5									
24.0	24	SPT-15	63						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	66						
26.0									
26.5									
27.0	27	SPT-17	70						
27.5									
28.0									
28.5	28.5	SPT-18	75						
29.0									
29.5									
30.0	30	SPT-19	77						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987936 m	Easting :57631 m
Reduced Level (m):(+) -	BH. No. :BH-399	BH Depth (m):46.03
Proposed/Existing Structure :BH-399 (P1140)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	80						
32.0									
32.5									
33.0	33	SPT-21	91	Very Dense, Brownish, Silty Sand	SM				
33.5									
34.0									
34.5	34.5	SPT-22	>100						
35.0									
35.5									
36.0	36 36.03	SPT-23 RC-1	>100						
36.5									
37.0									
37.5	37.5	RC-2					10.2	0	
38.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
38.5									
39.0	39	RC-3					10.66	0	
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987936 m	Easting :57631 m
Reduced Level (m):(+-)	BH. No. :BH-399	BH Depth (m):46.03
Proposed/Existing Structure :BH-399 (P1140)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	RC-4		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.66	0	
41.0									
41.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
42.0	42	RC-5					10	0	
42.5									
43.0									
43.5	43.5	RC-6					11.33	0	
44.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
44.5									
45.0	45	RC-7					12	0	
45.5									
46.0	46.03						10.67	0	



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988013 m	Easting :576307 m
Reduced Level (m):(+-)	BH. No. :BH-400	BH Depth (m):50
Proposed/Existing Structure :BH-400 (P1143)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5				Filled Up Soil	FILL				
1.0									
1.5									
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	14	Medium Dense to Dense, Brownish, Silty Sand	SM				
3.5									
4.0									
4.5	4.5	SPT-2	18						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	22						
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5									
9.0	8.8 9	UDS* SPT-5	31						
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988013 m	Easting :576307 m
Reduced Level (m):(+) -	BH. No. :BH-400	BH Depth (m):50
Proposed/Existing Structure :BH-400 (P1143)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	35						
11.0									
11.5									
12.0	12	SPT-7	37						
12.5									
13.0									
13.5	13.5	SPT-8	40						
14.0									
14.5									
15.0	15	SPT-9	43	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	45						
17.0									
17.5									
18.0	18	SPT-11	48						
18.5									
19.0									
19.5	19.5	SPT-12	50	Very Dense, Brownish, Silty Sand	SM				
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988013 m	Easting :576307 m
Reduced Level (m):(+-)	BH. No. :BH-400	BH Depth (m):50
Proposed/Existing Structure :BH-400 (P1143)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	51						
21.5									
22.0									
22.5	22.5	SPT-14	53						
23.0									
23.5									
24.0	24	SPT-15	55						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	57						
26.0									
26.5									
27.0	27	SPT-17	59						
27.5									
28.0									
28.5	28.5	SPT-18	61						
29.0									
29.5									
30.0	30	SPT-19	63						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988013 m	Easting :576307 m
Reduced Level (m):(+-)	BH. No. :BH-400	BH Depth (m):50
Proposed/Existing Structure :BH-400 (P1143)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	65						
32.0									
32.5									
33.0	33	SPT-21	72						
33.5									
34.0									
34.5	34.5	SPT-22	78						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	82						
36.5									
37.0									
37.5	37.5	SPT-24	87						
38.0									
38.5									
39.0	39	SPT-25	93						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988013 m	Easting :576307 m
Reduced Level (m):(+-)	BH. No. :BH-400	BH Depth (m):50
Proposed/Existing Structure :BH-400 (P1143)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :20-07-2026	Date of Completion :21-06-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	97						
41.0									
41.5									
42.0	42	SPT-27	99						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988113 m	Easting :576298 m
Reduced Level (m):(+) -	BH. No. :BH-401	BH Depth (m):33
Proposed/Existing Structure :BH-401 (P1147)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	12						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	13	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	15						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	17						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988113 m	Easting :576298 m
Reduced Level (m):(+) -	BH. No. :BH-401	BH Depth (m):33
Proposed/Existing Structure :BH-401 (P1147)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988113 m	Easting :576298 m
Reduced Level (m):(+-)	BH. No. :BH-401	BH Depth (m):33
Proposed/Existing Structure :BH-401 (P1147)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	60	Very Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	>100						
23.0	22.9	RC-1							
23.5									
24.0	24	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		13.63	0	
24.5									
25.0									
25.5	25.5	RC-3					10.66	0	
26.0									
26.5									
27.0	27	RC-4					10	0	
27.5									
28.0									
28.5	28.5	RC-5					10.66	0	
29.0									
29.5									
30.0	30	RC-6					10	0	



<i>BH Location/Chainage :-</i>	<i>Northing</i> :2988113 m	<i>Easting</i> :576298 m
<i>Reduced Level (m):(+) -</i>	BH. No. :BH-401	<i>BH Depth (m)</i> :33
<i>Proposed/Existing Structure</i> :BH-401 (P1147)	<i>Water Table (m)</i> :Not encountered	<i>Inclination</i> : Vertical
<i>Boring type</i> :Rotary	<i>Dia. of Boring</i> :150 mm	<i>Depth of Casing (m)</i> :-
<i>Date of Start</i> :19-07-2026	<i>Date of Completion</i> :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5	31.5	RC-7		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.66	0	
31.0									
31.5									
32.0									
32.5	33			Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V		10	0	
32.0									
32.5									
33.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988215 m	Easting :576297 m
Reduced Level (m):(+) -	BH. No. :BH-402	BH Depth (m):40
Proposed/Existing Structure :BH-402 (P1150)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	9						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	15	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	21						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	24						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988215 m	Easting :576297 m
Reduced Level (m):(+) -	BH. No. :BH-402	BH Depth (m):40
Proposed/Existing Structure :BH-402 (P1150)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	28	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	32						
12.5									
13.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	39						
14.0									
14.5									
15.0	15	SPT-9	44						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	52						
17.0									
17.5									
18.0	18	SPT-11	60	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	68						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988215 m	Easting :576297 m
Reduced Level (m):(+-)	BH. No. :BH-402	BH Depth (m):40
Proposed/Existing Structure :BH-402 (P1150)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	77						
21.5									
22.0									
22.5	22.5	SPT-14	82						
23.0									
23.5									
24.0	24	SPT-15	87						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	93						
26.0									
26.5									
27.0	27	SPT-17	>100						
27.5									
28.0									
28.5	28.5	SPT-18	>100						
29.0									
29.5									
30.0	30	SPT-19	>100						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988215 m	Easting :576297 m
Reduced Level (m):(+) -	BH. No. :BH-402	BH Depth (m):40
Proposed/Existing Structure :BH-402 (P1150)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.0	30.04	RC-1							
30.5									
31.0									
31.5	31.5	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.27	0	
32.0									
32.5									
33.0	33	RC-3					10.66	0	
33.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
34.0									
34.5	34.5	RC-4					10	0	
35.0									
35.5									
36.0	36	RC-5					10.66	0	
36.5									
37.0									
37.5	37.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.33	0	
38.0									
38.5									
39.0	39	RC-7					12	0	
39.5									
40.0	40						11.33	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988322 m	Easting :576302 m
Reduced Level (m):(+-)	BH. No. :BH-403	BH Depth (m):34.04
Proposed/Existing Structure :BH-403 (P1154)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :18-07-2026	Date of Completion :19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	12						
3.5									
4.0									
4.5	4.5	SPT-2	17						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	22	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	30						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2988322 m	Easting :576302 m
Reduced Level (m):(+) -	BH. No. :BH-403	BH Depth (m):34.04
Proposed/Existing Structure :BH-403 (P1154)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :18-07-2026	Date of Completion :19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	34	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	39						
12.5									
13.0				Very Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	46						
14.0									
14.5									
15.0	15	SPT-9	48						
15.5				Very Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	51						
17.0									
17.5									
18.0	18	SPT-11	58	Very Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	63	Very Dense, Brownish, Silty Sand	SM				
20.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2988322 m	Easting : 576302 m
Reduced Level (m): (+)-	BH. No. : BH-403	BH Depth (m): 34.04
Proposed/Existing Structure : BH-403 (P1154)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 18-07-2026	Date of Completion : 19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	>100						
21.5									
22.0				Very Dense, Brownish, Silty Sand	SM				
22.5	22.5	SPT-14	>100						
23.0									
23.5									
24.0	24 24.04	SPT-15 RC-1	>100						
24.5									
25.0									
25.5	25.5	RC-2		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		10.27	0	
26.0									
26.5									
27.0	27	RC-3					10.66	0	
27.5									
28.0				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-V				
28.5	28.5	RC-4					10	0	
29.0									
29.5				Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV				
30.0	30	RC-5					10.66	0	



<i>BH Location/Chainage :-</i>	<i>Northing :2988322 m</i>	<i>Easting :576302 m</i>
<i>Reduced Level (m):(+)-</i>	<i>BH. No. :BH-403</i>	<i>BH Depth (m):34.04</i>
<i>Proposed/Existing Structure :BH-403 (P1154)</i>	<i>Water Table (m):Not encountered</i>	<i>Inclination : Vertical</i>
<i>Boring type :Rotary</i>	<i>Dia. of Boring :150 mm</i>	<i>Depth of Casing (m) :-</i>
<i>Date of Start :18-07-2026</i>	<i>Date of Completion :19-07-2026</i>	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)	
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100	
30.5										
31.0										
31.5	31.5	RC-6		Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		11.33	0		
32.0										
32.5										
33.0	33	RC-7						12	0	
33.5										
34.0	34.04						18.26	0		

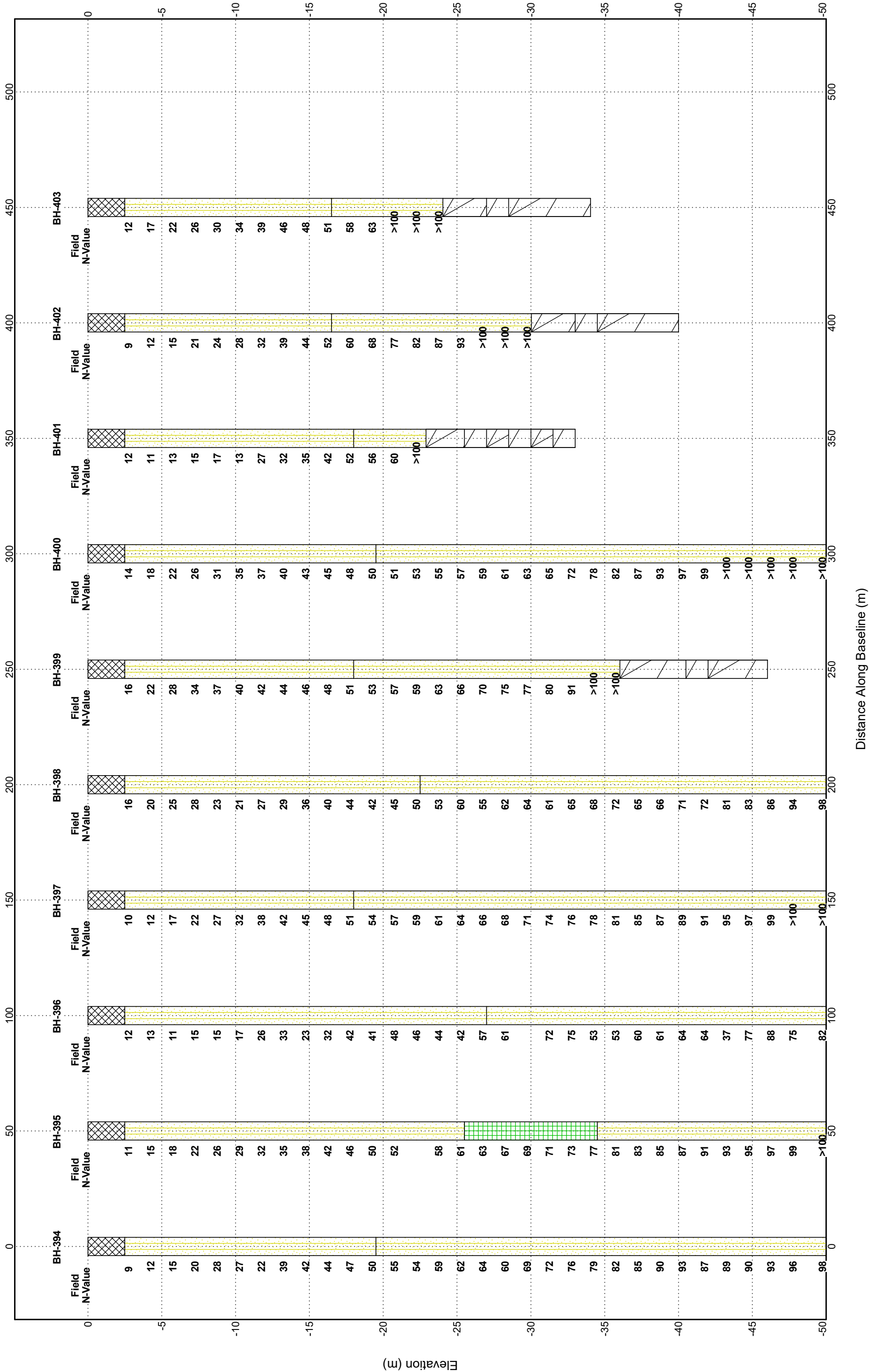
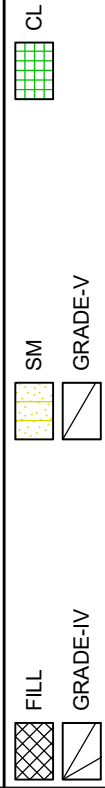
SUB SOIL PROFILE DIAGRAM -

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME GTI work for JPR Metro Ph-II, Prahladpura to Toddi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL & ROCK CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)					R.L.	Ref. Code										
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _s)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			NOT ENCOUNTERED		50.00 m	576425.000 m			2987454.000 m	-	SR-1241_26-27									
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit		Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)				Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS*	2.50	-	-	Loose to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-1	3.00	9	11		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-2	4.50	12	13		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS-1	5.50	-	-		SM		0	24	70	5	1	0	0	-	1.69	11.20	1.52	2.63	DST	0.00	29	-	-	-	-	-	-	-	-	-	-	-	
	SPT-3	6.00	15	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	20	18		SM		0	24	66	8	2	0	0	-	1.75	11.50	1.57	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-5	9.00	28	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	27	22		SM		0	19	74	6	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	22	17		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	39	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	42	29		SM		0	15	73	11	1	0	0	-	1.80	12.00	1.61	2.62	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-	
	SPT-10	16.50	44	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	47	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	50	30		SM		0	27	59	9	2	3	0	-	1.83	12.50	1.63	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-13	21.00	55	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	54	29	SM		0	14	69	11	3	3	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-15	24.00	59	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-16	25.50	62	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS+ - Undisturbed Sample, UDS* - UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"PKG-IV										Soil Description	Observed SPT Value (N)	Corrected SPT Value (N)	IS Classification	IS Symbol	Date of Boring						Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code
	21-07-2026		to		22-07-2026		CH-37600		BH-395	NOT ENCOUNTERED						50.00 m		576393.000 m		2987548.000 m															
	Sample Type	Depth from G.L. (m)	Clay	Silt	Grain Size Distribution % wt retained			Atterberg Limits %								Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)				

Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Undisturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated
 DST*-DST not recovered, UUT*-UUT not recovered, UDS+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample,
 DST+ - Direct Shear Test on Remoulded Sample, UUT- - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 D8-Disturbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code								
	21-07-2026		to		22-07-2026		CH-37680		BH-396				NOT ENCOUNTERED		50.00 m		576370.000 m		2987628.000 m													
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %			Type of Test	Shear Strength		Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)			Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _p)				
Clay								Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit		Plasticity Index	Shrinkage Limit					Bulk Density (g/cm ³)	Natural Moisture Content (%)					Dry Density (g/cm ³)	Specific Gravity	Cohesion C (kg/cm ²)	Angle of Friction (φ°)
SPT-17	27.00	57	28	Very Dense, Brownish, Silty Sand	SM		0	19	65	8	5	3	0	-	NIL	NP	-	1.82	12.50	1.62	2.62	DST+	0.00	32	-	-	-	-	-			
SPT-18	28.50	61	29		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-19	360.00	65	30		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-20	31.50	72	33		SM			0	15	66	13	3	3	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-21	33.00	75	35		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-22	34.50	53	24		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-23	36.00	53	24		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-24	37.50	60	28		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-25	39.00	61	28		SM			0	25	40	17	10	8	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-26	40.50	64	29		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-27	42.00	64	29		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	43.50	37	17		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	45.00	77	35		SM			0	30	45	12	8	5	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.50	88	40		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	48.00	75	35		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	50.00	82	38		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code					
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				NOT ENCOUNTERED		50.00 m	576336.000 m			2987733.000 m			-	SR-1241_26-27					
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)		Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-1	3.00	10	12		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	12	13		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	5.50	-	-		SM		0	20	74	6	0	0	0	NIL	NP	-	1.68	1.52	2.63	0.00	29	-	-	-	-	-	-	-	-	-	-	-
	SPT-3	6.00	17	17		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-4	7.50	22	20		SM		0	22	68	10	0	0	0	NIL	NP	-	1.75	1.57	2.63	0.00	30	-	-	-	-	-	-	-	-	-	-	-
	UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	27	23		SM		0	15	75	8	1	1	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-6	10.50	32	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-7	12.00	38	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-8	13.50	42	30	SM		0	15	76	8	1	0	0	NIL	NP	-	1.80	1.61	2.62	0.00	31	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	45	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-10	16.50	48	31	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)" PKG-IV										IS Classification	IS Symbol	Soil Description	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Grain Size Distribution % wt retained						Atterberg Limits %				B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code
	Date of Boring		Chainage/Location	B.H. No.	NOT ENCOUNTERED		50.00 m	576336.000 m									2987733.000 m																					
	20-07-2026	to			21-07-2026	P-1133		BH-397	Bulk Density (g/cm³)								Natural Moisture Content (%)		Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)		Void Ratio (e ₀)	Pressure (kg/cm²)		C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _p)					
Sample Type	SPT-11	18.00	51	32	Very Dense, Brownish, Silty Sand	SM	0	18	61	15	3	0	-	NIL	NP	-	1.83	12.50	1.63	2.61	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-					
	SPT-12	19.50	54	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-13	21.00	57	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-14	22.50	59	32				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-15	24.00	61	32		SM	0	16	83	1	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-16	25.50	64	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-17	27.00	66	32		SM	0	22	72	5	1	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-18	28.50	68	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-19	30.00	71	33		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-20	31.50	74	34		SM	0	20	72	6	1	1	0	-	NIL	NP	-	1.88	13.00	1.66	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-	-					
	SPT-21	33.00	76	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	SPT-22	34.50	78	36		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	SPT-23	36.00	81	37	SM	0	21	74	4	1	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-24	37.50	85	39	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-25	39.00	87	40	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-26	40.50	89	41	SM	0	27	68	5	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-27	42.00	91	42	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-28	43.50	95	44	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-29	45.00	97	45	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-30	46.50	99	46	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	SPT-31	48.00	>100	-	SM	0	23	73	4	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	SPT-32	50.00	>100	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

Abbreviations:-
DS-Disurbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV						Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				NOT ENCOUNTERED		50.00 m		576315.000 m						2987829.000 m		-	SR-1241_26-27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
								Silt		Sand		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)			C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code					
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Type of Test			Cohesion C (kg/cm ²)	Angle of Friction (φ°)									
	SPT-14	22.50	50	27	Very Dense, Brownish, Silty Sand	SM		0	26	56	8	6	3	1	-	NIL	NP	-	1.83	12.50	1.63	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-
	SPT-15	24.00	53	27		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-16	25.50	60	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-17	27.00	55	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-18	28.50	62	29		SM		0	29	54	9	6	1	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-19	30.00	64	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-20	31.50	61	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-21	33.00	65	30		SM		0	31	53	8	3	1	4	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-22	34.50	68	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-23	36.00	72	33		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-24	37.50	65	30		SM		0	19	61	9	7	1	3	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-25	39.00	66	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-26	40.50	71	33		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-27	42.00	72	33		SM		0	18	55	16	6	5	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-28	43.50	81	37		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-29	45.00	83	38		SM		0	18	57	12	6	3	4	-	NIL	NP	-	1.90	14.00	1.67	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-	-
	SPT-30	46.50	86	40	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-31	48.00	94	43	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-32	50.00	98	45	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity		Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters							
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Type of Test		Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)				Compression Index (C _p)							
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-1	3.00	16	20		SM		0	14	57	18	5	2	4	-	NIL	NP	-	1.72	11.50	1.54	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	22	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	5.50	-	-		SM		0	27	58	9	3	3	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-3	6.00	28	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	34	31		SM		0	22	61	6	6	2	3	-	NIL	NP	-	1.76	12.00	1.57	2.62	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-	-	-
	UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-5	9.00	37	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	40	32		SM		0	30	51	11	3	2	3	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	42	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	44	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	46	31		SM		0	25	51	15	7	1	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-10	16.50	48	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	51	32		SM		0	23	52	16	5	4	0	-	NIL	NP	-	1.82	12.50	1.62	2.62	DST+	0.00	32.00	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-12	19.50	53	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-13	21.00	57	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	59	32	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-15	24.00	63	33	SM		0	17	60	15	4	4	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-16	25.50	66	33	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Un-disturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV						Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Sample Type		Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Shear Strength				Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
									Silt		Sand		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	DS-1	0.00	-	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)”PKG-IV										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Date of Boring		20-07-2026	to	21-06-2026	P-1143	BH-400	NOT ENCOUNTERED	50.00 m	576307.000 m			2988013.000 m	-		SR-1241_26-27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %				Shear Strength			Free Swell Index			Swelling Pressure			Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
							Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

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SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 UDS-Disurbed Sample, SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+-Direct Shear Test on Remoulded Sample, UUT+-Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"PKG-IV										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code							
	Date of Boring		20-07-2026		P-1150		BH-402		NOT ENCOUNTERED				40.00 m		576297.000 m			2988215.000 m													
	19-07-2026	to																													
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters					
							Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit			Plastic Limit	Plasticity Index	Shrinkage Limit	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)				Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)		
DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-1	3.00	9	11		SM		0	26	56	6	5	3	4	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-2	4.50	12	13		SM		0	15	60	13	5	4	3	-	NIL	NP	-	1.68	11.00	2.63	DST+	0.00	28	-	-	-	-	-	-	-	
UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-3	6.00	15	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-4	7.50	21	19		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	8.50	-	-		Very Dense, Brownish, Silty Sand	SM		0	30	53	8	7	2	0	-	NIL	NP	-	1.76	12.10	2.62	DST	0.00	30	-	-	-	-	-	-	-
SPT-5	9.00	24	21			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	28	23			SM		0	18	58	12	6	2	4	-	NIL	NP	-	1.78	12.50	2.62	DST+	0.00	30	-	-	-	-	-	-	-
SPT-7	12.00	32	24			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	39	28			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	44	30			SM		0	25	57	7	5	4	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	52	34			SM		0	22	53	16	3	4	2	-	NIL	NP	-	1.84	13.00	2.62	DST+	0.00	32	-	-	-	-	-	-	-
SPT-11	18.00	60	37			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-12	19.50	68	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-13	21.00	77	43		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	82	44	Very Dense, Brownish, Silty Sand	SM		0	27	54	12	2	3	2	-	NIL	NP	-	1.87	13.50	2.61	DST+	0.00	33	-	-	-	-	-	-	-	
SPT-15	24.00	87	45		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-16	25.50	93	46		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV						Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	19-07-2026		to		20-07-2026		P-1150		BH-402			NOT ENCOUNTERED			40.00 m		576297.000 m		2988215.000 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Dry Density (g/cm³)		Specific Gravity	Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Abbreviations:-
DS-Undisturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

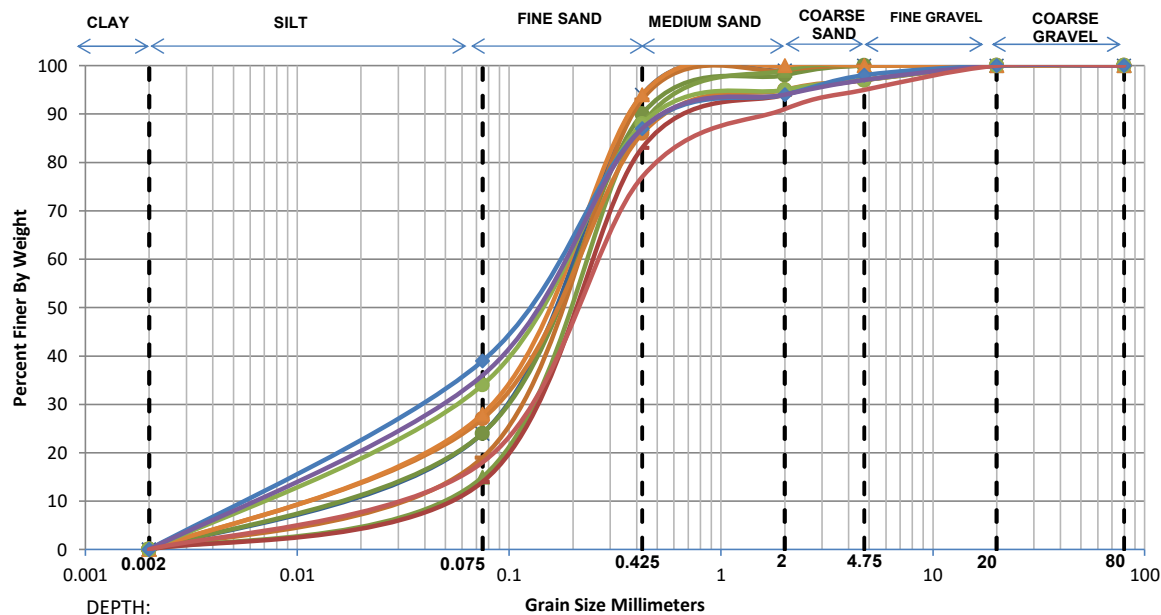
SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"-PKG-IV					Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Free Swell Index					Swelling Pressure		Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
								Clay	Silt		Fine	Medium		Coarse	Fine	Coarse	Liquid Limit			Plastic Limit	Plasticity Index		Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
RC-1	24.04	-	-	-	Completely to Highly Weathered, Brownish, Very Poor, Boulder	GRADE-IV		R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1126
B.H. No.	394

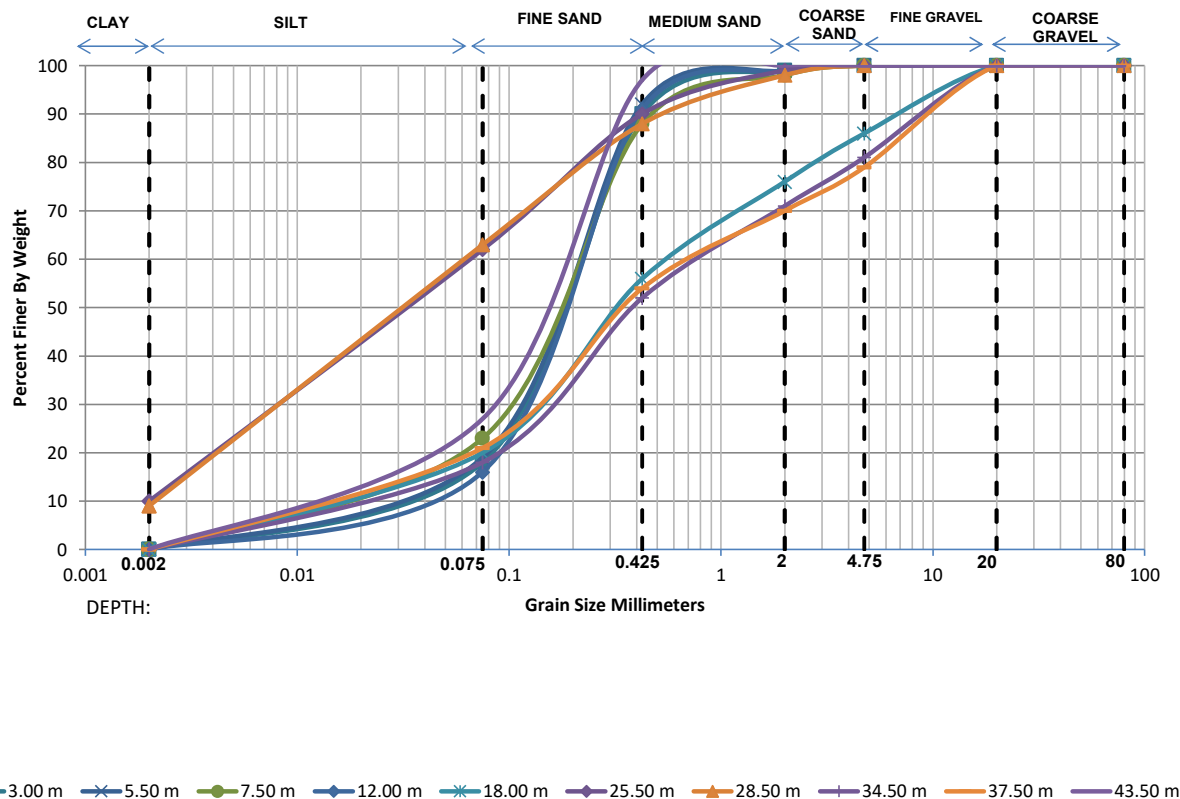


—×— 5.50 m —●— 7.50 m —●— 10.50 m —▲— 15.00 m —●— 19.50 m —●— 22.50 m —●— 28.50 m —●— 33.00 m —●— 39.00 m —●— 43.50 m —●— 50.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	24.00	70.00	5.00	1.00	0.00	0.00	0.0203	0.0966	0.2011	9.92	2.29
7.50 m	0.00	24.00	66.00	8.00	2.00	0.00	0.00	0.0201	0.0972	0.2104	10.49	2.24
10.50 m	0.00	19.00	74.00	6.00	1.00	0.00	0.00	0.0308	0.1168	0.2187	7.10	2.02
15.00 m	0.00	15.00	73.00	11.00	1.00	0.00	0.00	0.0453	0.1363	0.2433	5.37	1.68
19.50 m	0.00	27.00	59.00	9.00	2.00	3.00	0.00	0.0160	0.0860	0.2115	13.25	2.19
22.50 m	0.00	14.00	69.00	11.00	3.00	3.00	0.00	0.0500	0.1434	0.2604	5.20	1.58
28.50 m	0.00	28.00	66.00	6.00	0.00	0.00	0.00	0.0153	0.0819	0.1886	12.36	2.33
33.00 m	0.00	34.00	54.00	7.00	2.00	3.00	0.00	0.0105	0.0622	0.1810	17.19	2.03
39.00 m	0.00	39.00	48.00	7.00	4.00	2.00	0.00	0.0083	0.0493	0.1642	19.88	1.79
43.50 m	0.00	36.00	51.00	7.00	3.00	3.00	0.00	0.0095	0.0565	0.1760	18.55	1.91
50.00 m	0.00	18.00	59.00	14.00	4.00	5.00	0.00	0.0327	0.1273	0.2743	8.40	1.81

GRAIN SIZE DISTRIBUTION CURVES

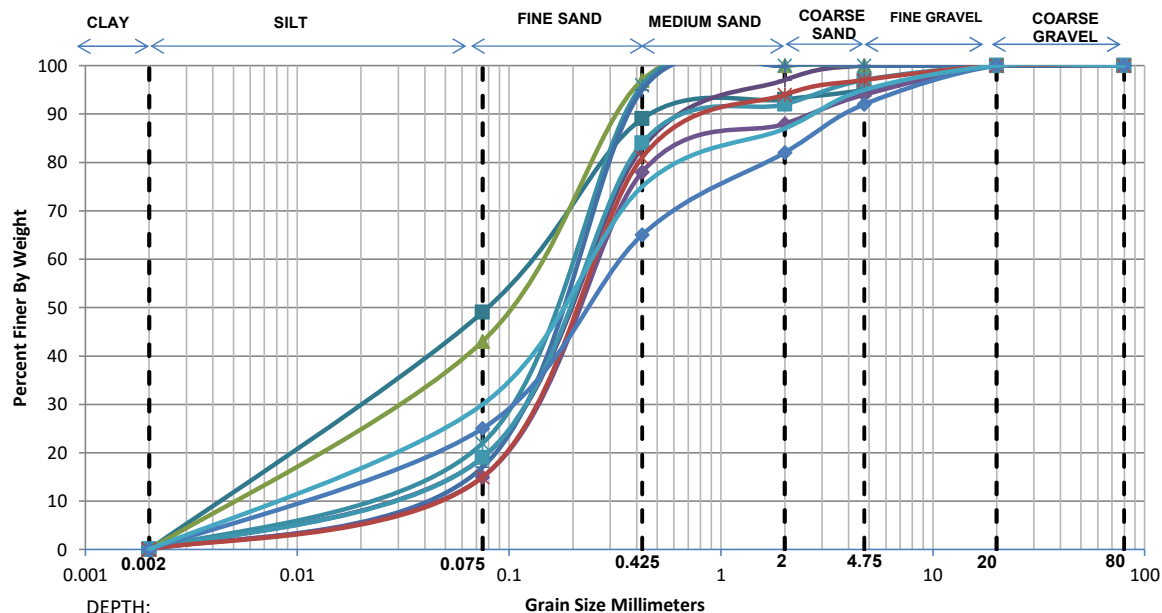
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	CH-37600
B.H. No.	395



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	18.00	72.00	9.00	1.00	0.00	0.00	0.0336	0.1220	0.2290	6.81	1.93
5.50 m	0.00	19.00	73.00	7.00	1.00	0.00	0.00	0.0307	0.1171	0.2210	7.19	2.02
7.50 m	0.00	23.00	65.00	10.00	2.00	0.00	0.00	0.0216	0.1016	0.2191	10.15	2.18
12.00 m	0.00	16.00	75.00	8.00	1.00	0.00	0.00	0.0411	0.1304	0.2325	5.66	1.78
18.00 m	0.00	20.00	36.00	20.00	10.00	14.00	0.00	0.0252	0.1340	0.5547	21.99	1.28
25.50 m	10.00	52.00	28.00	9.00	1.00	0.00	0.00	0.0020	0.0168	0.0700	35.02	2.01
28.50 m	9.00	54.00	25.00	10.00	2.00	0.00	0.00	0.0024	0.0172	0.0678	28.29	1.82
34.50 m	0.00	18.00	34.00	19.00	10.00	19.00	0.00	0.0302	0.1541	0.8282	27.43	0.95
37.50 m	0.00	21.00	33.00	16.00	9.00	21.00	0.00	0.0228	0.1296	0.7588	33.23	0.97
43.50 m	0.00	27.00	70.00	3.00	0.00	0.00	0.00	0.0164	0.0853	0.1859	11.31	2.38

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	CH-37680
B.H. No.	396

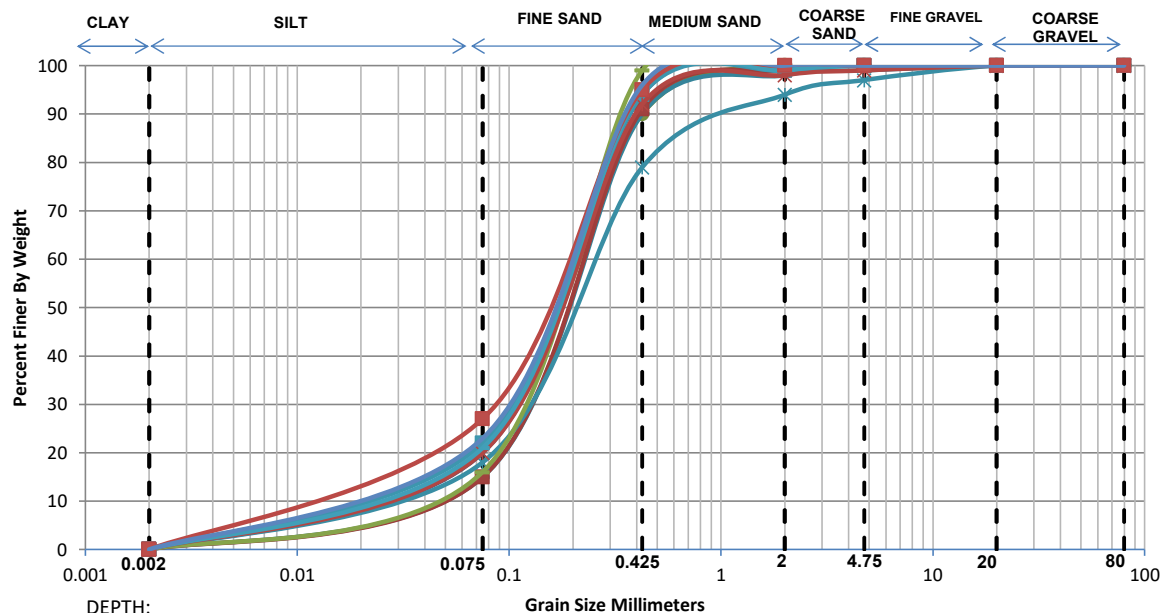


—■— 3.00 m —●— 8.50 m —▲— 15.00 m —✱— 18.00 m —+— 21.00 m —◆— 25.50 m —■— 27.00 m —✕— 31.50 m —◆— 39.00 m —— 45.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	49.00	40.00	4.00	2.00	5.00	0.00	0.0057	0.0325	0.1170	20.37	1.57
8.50 m	0.00	19.00	64.00	14.00	3.00	0.00	0.00	0.0301	0.1202	0.2473	8.21	1.94
15.00 m	0.00	43.00	54.00	3.00	0.00	0.00	0.00	0.0072	0.0420	0.1317	18.28	1.86
18.00 m	0.00	22.00	74.00	4.00	0.00	0.00	0.00	0.0239	0.1040	0.2034	8.52	2.23
21.00 m	0.00	17.00	78.00	5.00	0.00	0.00	0.00	0.0374	0.1246	0.2207	5.90	1.88
25.50 m	0.00	15.00	63.00	10.00	6.00	6.00	0.00	0.0445	0.1410	0.2761	6.20	1.62
27.00 m	0.00	19.00	65.00	8.00	5.00	3.00	0.00	0.0302	0.1195	0.2421	8.02	1.95
31.50 m	0.00	15.00	66.00	13.00	3.00	3.00	0.00	0.0448	0.1397	0.2652	5.92	1.64
39.00 m	0.00	25.00	40.00	17.00	10.00	8.00	0.00	0.0172	0.0981	0.3511	20.43	1.59
45.00 m	0.00	30.00	45.00	12.00	8.00	5.00	0.00	0.0127	0.0750	0.2487	19.60	1.78

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1133
B.H. No.	397

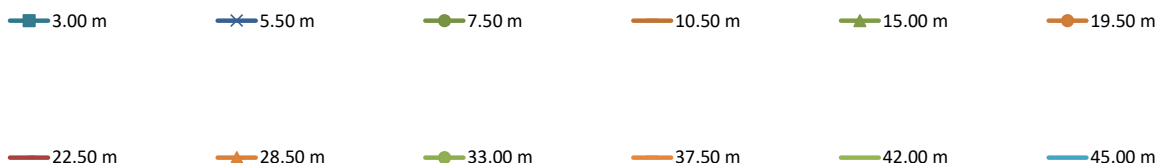
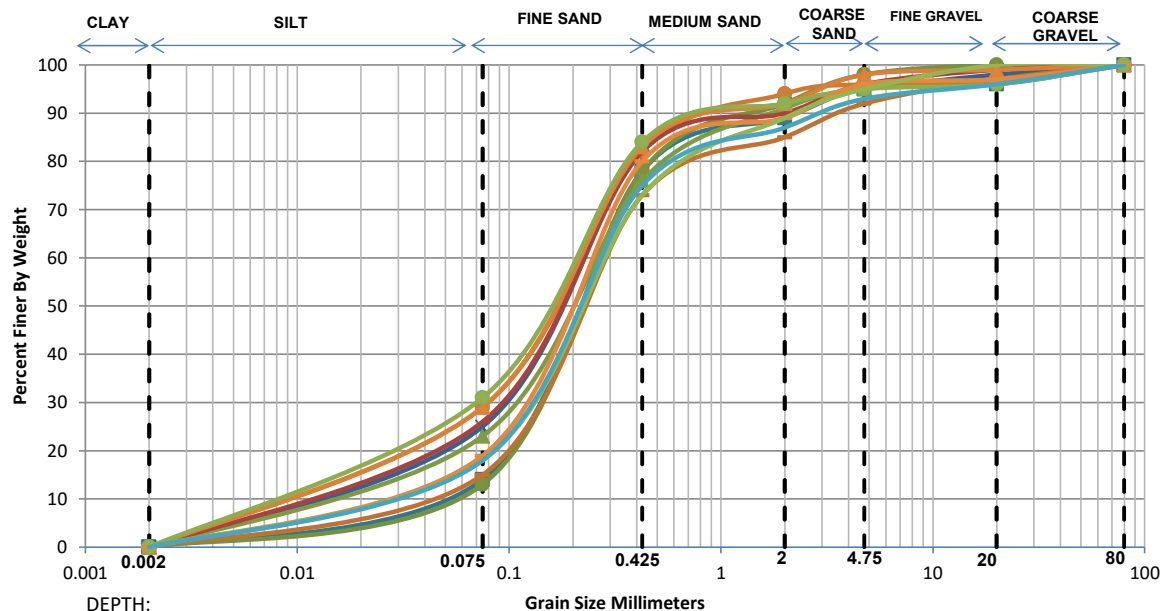


—×— 5.50 m —●— 7.50 m —●— 9.00 m —■— 13.50 m —*— 18.00 m —■— 24.00 m —■— 27.00 m —*— 31.50 m —■— 36.00 m —■— 40.50 m —■— 48.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
5.50 m	0.00	20.00	74.00	6.00	0.00	0.00	0.00	0.0282	0.1124	0.2137	7.58	2.10
7.50 m	0.00	22.00	68.00	10.00	0.00	0.00	0.00	0.0235	0.1052	0.2172	9.23	2.17
9.00 m	0.00	15.00	75.00	8.00	1.00	1.00	0.00	0.0455	0.1353	0.2376	5.22	1.69
13.50 m	0.00	15.00	76.00	8.00	1.00	0.00	0.00	0.0456	0.1349	0.2354	5.17	1.70
18.00 m	0.00	18.00	61.00	15.00	3.00	3.00	0.00	0.0328	0.1265	0.2656	8.09	1.83
24.00 m	0.00	16.00	83.00	1.00	0.00	0.00	0.00	0.0416	0.1274	0.2162	5.19	1.80
27.00 m	0.00	22.00	72.00	5.00	1.00	0.00	0.00	0.0238	0.1044	0.2073	8.73	2.21
31.50 m	0.00	20.00	72.00	6.00	1.00	1.00	0.00	0.0281	0.1129	0.2177	7.75	2.08
36.00 m	0.00	21.00	74.00	4.00	1.00	0.00	0.00	0.0259	0.1081	0.2083	8.04	2.17
40.50 m	0.00	27.00	68.00	5.00	0.00	0.00	0.00	0.0164	0.0854	0.1898	11.60	2.35
48.00 m	0.00	23.00	73.00	4.00	0.00	0.00	0.00	0.0220	0.1001	0.2003	9.10	2.27

GRAIN SIZE DISTRIBUTION CURVES

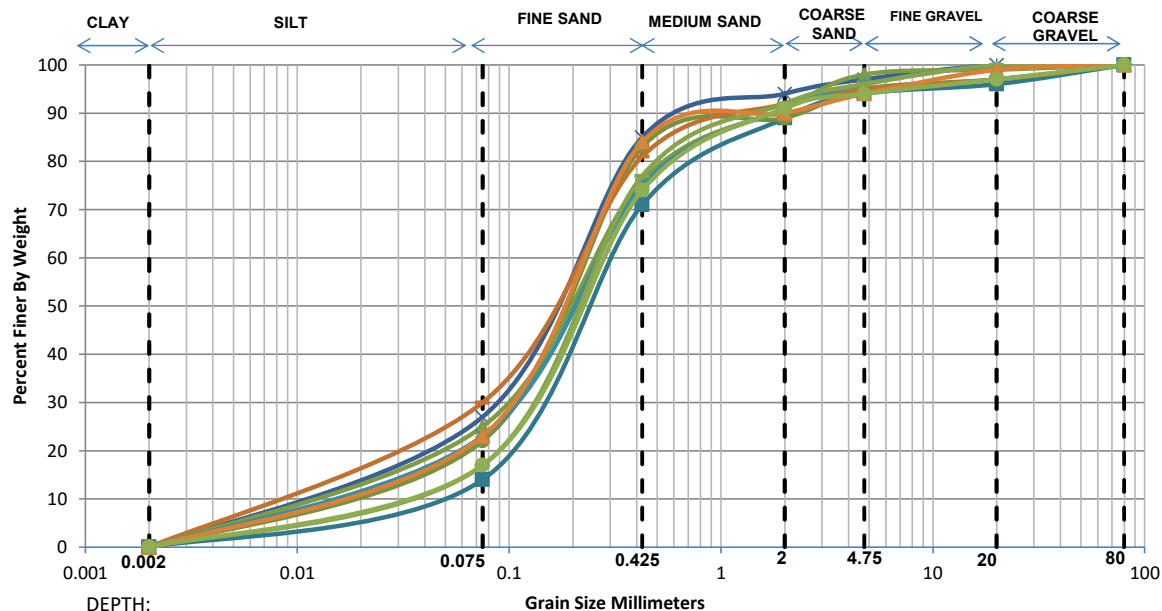
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1136
B.H. No.	398



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	14.00	64.00	11.00	6.00	1.00	4.00	0.0496	0.1461	0.2790	5.62	1.54
5.50 m	0.00	25.00	58.00	9.00	3.00	3.00	2.00	0.0183	0.0942	0.2275	12.46	2.14
7.50 m	0.00	13.00	65.00	14.00	6.00	2.00	0.00	0.0554	0.1515	0.2824	5.10	1.47
10.50 m	0.00	15.00	58.00	12.00	7.00	5.00	3.00	0.0441	0.1444	0.3020	6.85	1.56
15.00 m	0.00	23.00	53.00	15.00	4.00	2.00	3.00	0.0209	0.1043	0.2661	12.76	1.96
19.50 m	0.00	29.00	53.00	12.00	2.00	1.00	3.00	0.0138	0.0786	0.2190	15.85	2.04
22.50 m	0.00	26.00	56.00	8.00	6.00	3.00	1.00	0.0169	0.0903	0.2275	13.44	2.12
28.50 m	0.00	29.00	54.00	9.00	6.00	1.00	1.00	0.0139	0.0786	0.2142	15.46	2.08
33.00 m	0.00	31.00	53.00	8.00	3.00	1.00	4.00	0.0123	0.0715	0.2035	16.54	2.04
37.50 m	0.00	19.00	61.00	9.00	7.00	1.00	3.00	0.0299	0.1210	0.2567	8.58	1.91
42.00 m	0.00	18.00	55.00	16.00	6.00	5.00	0.00	0.0323	0.1296	0.2966	9.17	1.75
45.00 m	0.00	18.00	57.00	12.00	6.00	3.00	4.00	0.0325	0.1281	0.2837	8.73	1.78

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1140
B.H. No.	399

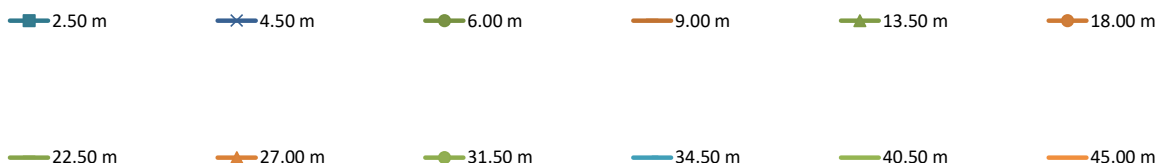
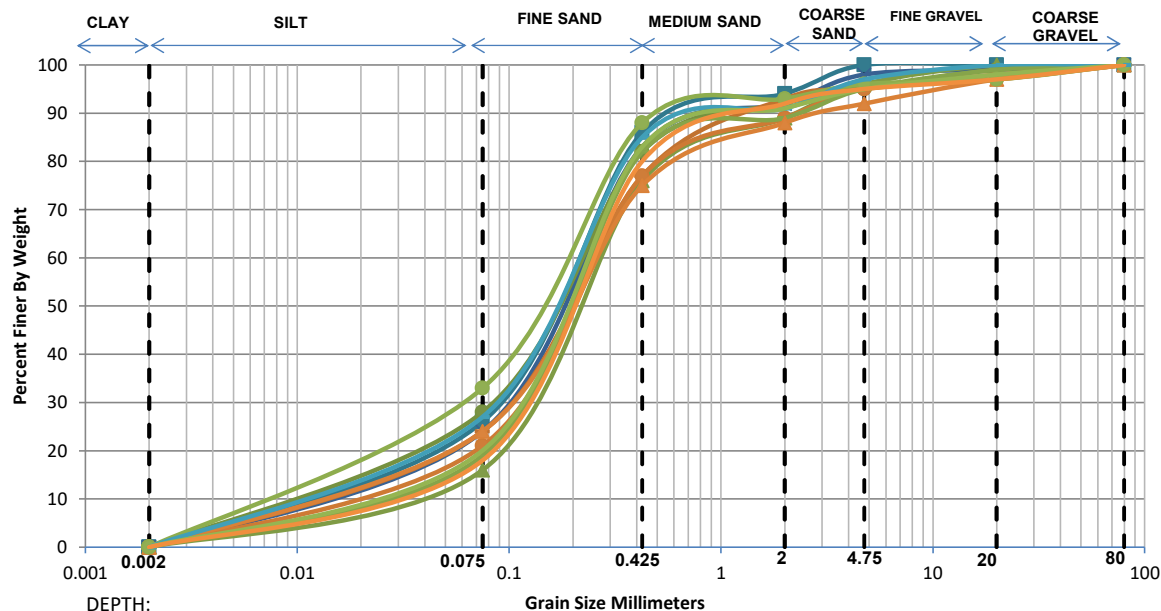


3.00 m 5.50 m 7.50 m 10.50 m 15.00 m 18.00 m 24.00 m 28.50 m 33.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	14.00	57.00	18.00	5.00	2.00	4.00	0.0490	0.1519	0.3184	6.50	1.48
5.50 m	0.00	27.00	58.00	9.00	3.00	3.00	0.00	0.0159	0.0861	0.2145	13.47	2.17
7.50 m	0.00	22.00	61.00	6.00	6.00	2.00	3.00	0.0231	0.1066	0.2357	10.20	2.09
10.50 m	0.00	30.00	51.00	11.00	3.00	2.00	3.00	0.0129	0.0750	0.2189	16.92	1.99
15.00 m	0.00	25.00	51.00	15.00	7.00	1.00	1.00	0.0179	0.0954	0.2603	14.57	1.96
18.00 m	0.00	23.00	52.00	16.00	5.00	4.00	0.00	0.0208	0.1047	0.2720	13.08	1.94
24.00 m	0.00	17.00	60.00	15.00	4.00	4.00	0.00	0.0361	0.1322	0.2772	7.68	1.75
28.50 m	0.00	23.00	61.00	6.00	4.00	5.00	1.00	0.0214	0.1022	0.2293	10.74	2.13
33.00 m	0.00	17.00	57.00	17.00	3.00	3.00	3.00	0.0358	0.1341	0.2934	8.19	1.71

GRAIN SIZE DISTRIBUTION CURVES

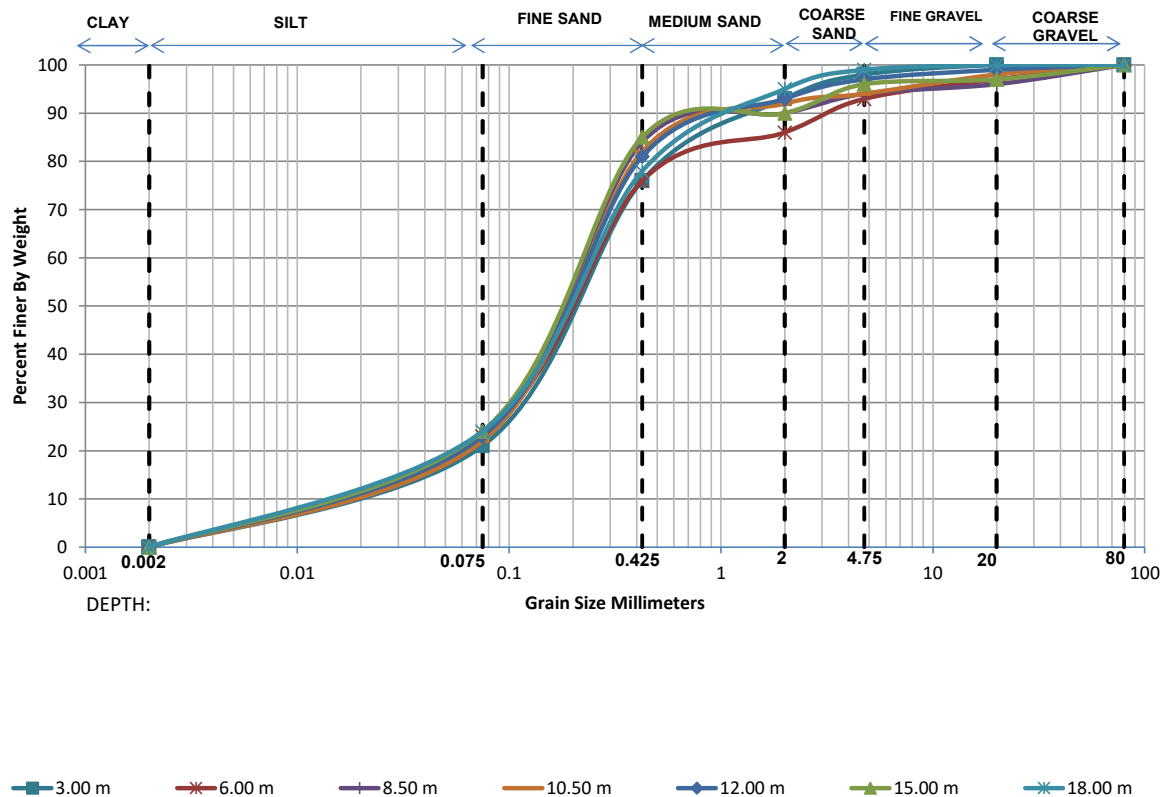
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1143
B.H. No.	400



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	26.00	60.00	8.00	6.00	0.00	0.00	0.0171	0.0898	0.2144	12.52	2.20
4.50 m	0.00	24.00	59.00	9.00	6.00	1.00	1.00	0.0197	0.0983	0.2306	11.72	2.13
6.00 m	0.00	28.00	54.00	10.00	3.00	4.00	1.00	0.0147	0.0824	0.2216	15.03	2.08
9.00 m	0.00	24.00	53.00	16.00	2.00	3.00	2.00	0.0193	0.0996	0.2584	13.36	1.99
13.50 m	0.00	16.00	60.00	13.00	7.00	4.00	0.00	0.0399	0.1375	0.2839	7.11	1.67
18.00 m	0.00	21.00	56.00	12.00	6.00	2.00	3.00	0.0248	0.1131	0.2655	10.73	1.94
22.50 m	0.00	19.00	63.00	7.00	6.00	4.00	1.00	0.0301	0.1201	0.2484	8.27	1.93
27.00 m	0.00	24.00	51.00	13.00	4.00	5.00	3.00	0.0192	0.1000	0.2680	13.95	1.94
31.50 m	0.00	33.00	55.00	5.00	3.00	1.00	3.00	0.0111	0.0652	0.1840	16.56	2.08
34.50 m	0.00	27.00	58.00	6.00	6.00	3.00	0.00	0.0159	0.0861	0.2134	13.41	2.18
40.50 m	0.00	20.00	63.00	8.00	4.00	3.00	2.00	0.0275	0.1154	0.2424	8.82	2.00
45.00 m	0.00	18.00	62.00	12.00	3.00	2.00	3.00	0.0329	0.1258	0.2605	7.92	1.85

GRAIN SIZE DISTRIBUTION CURVES

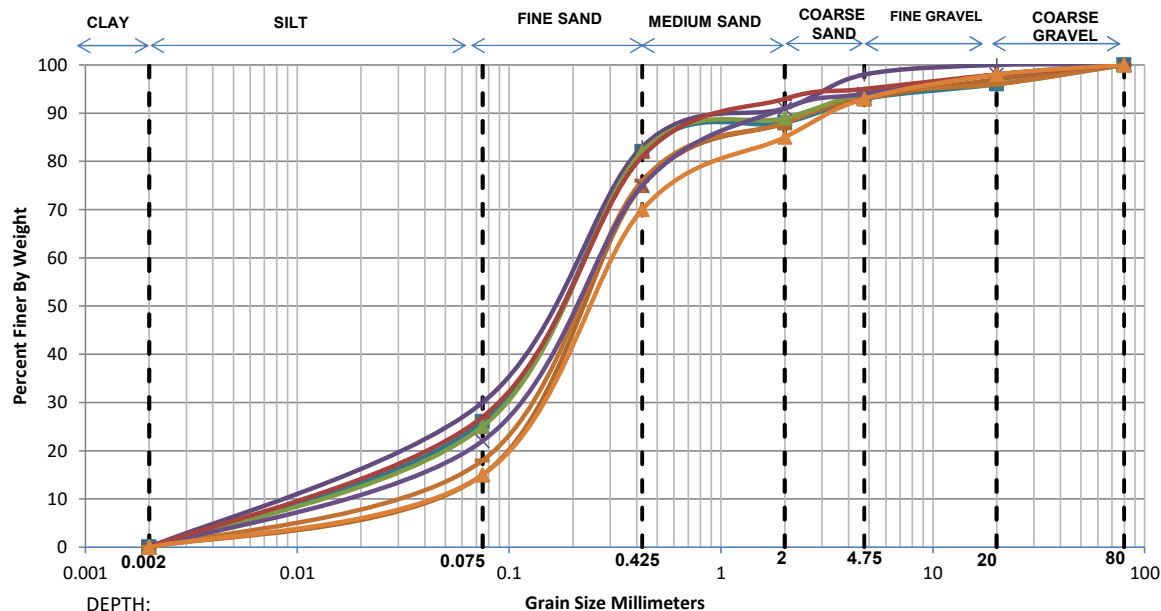
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1147
B.H. No.	401



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	21.00	55.00	17.00	5.00	2.00	0.00	0.0247	0.1137	0.2724	11.04	1.92
6.00 m	0.00	23.00	53.00	10.00	7.00	4.00	3.00	0.0209	0.1041	0.2642	12.66	1.97
8.50 m	0.00	23.00	61.00	6.00	4.00	2.00	4.00	0.0214	0.1022	0.2293	10.74	2.13
10.50 m	0.00	22.00	60.00	10.00	2.00	4.00	2.00	0.0230	0.1070	0.2407	10.44	2.06
12.00 m	0.00	23.00	58.00	12.00	4.00	2.00	1.00	0.0212	0.1030	0.2421	11.43	2.07
15.00 m	0.00	24.00	61.00	5.00	6.00	1.00	3.00	0.0198	0.0979	0.2227	11.25	2.17
18.00 m	0.00	24.00	54.00	17.00	4.00	1.00	0.00	0.0194	0.0995	0.2539	13.09	2.01

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1150
B.H. No.	402

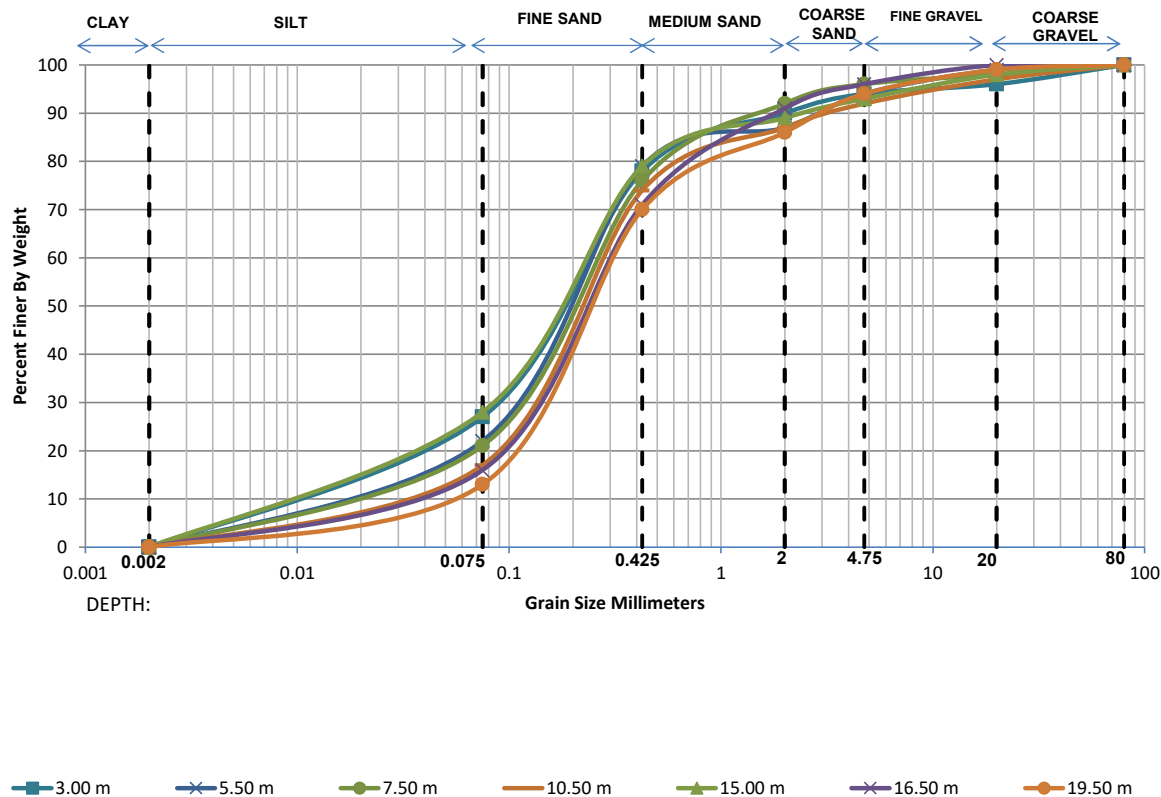


—■— 3.00 m —▲— 4.50 m —+— 8.50 m —●— 10.50 m —▲— 15.00 m —×— 16.50 m —— 22.50 m —▲— 28.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	26.00	56.00	6.00	5.00	3.00	4.00	0.0169	0.0902	0.2267	13.40	2.12
4.50 m	0.00	15.00	60.00	13.00	5.00	4.00	3.00	0.0443	0.1432	0.2913	6.58	1.59
8.50 m	0.00	30.00	53.00	8.00	7.00	2.00	0.00	0.0130	0.0750	0.2104	16.16	2.05
10.50 m	0.00	18.00	58.00	12.00	6.00	2.00	4.00	0.0326	0.1276	0.2785	8.55	1.80
15.00 m	0.00	25.00	57.00	7.00	5.00	4.00	2.00	0.0182	0.0943	0.2303	12.66	2.12
16.50 m	0.00	22.00	53.00	16.00	3.00	4.00	2.00	0.0226	0.1093	0.2748	12.17	1.93
22.50 m	0.00	27.00	54.00	12.00	2.00	3.00	2.00	0.0157	0.0864	0.2295	14.60	2.07
28.50 m	0.00	15.00	55.00	15.00	8.00	5.00	2.00	0.0438	0.1470	0.3224	7.36	1.53

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1154
B.H. No.	403

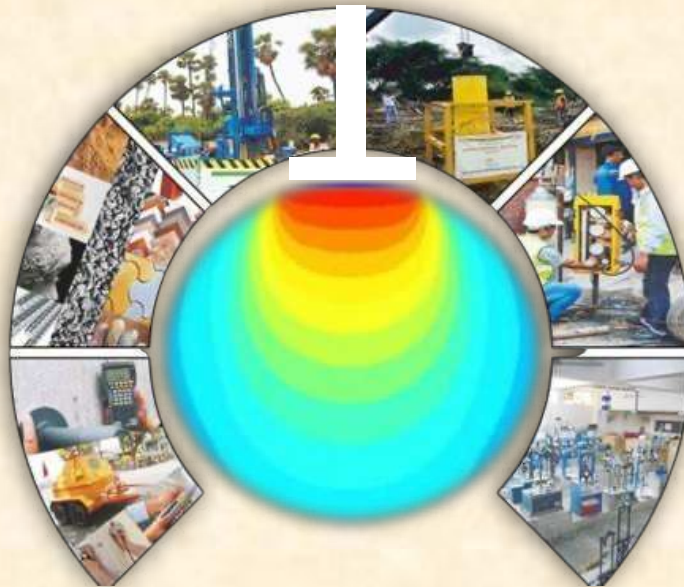


Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	27.00	51.00	12.00	4.00	2.00	4.00	0.0156	0.0866	0.2426	15.58	1.99
5.50 m	0.00	22.00	57.00	8.00	7.00	5.00	1.00	0.0229	0.1077	0.2519	11.02	2.02
7.50 m	0.00	21.00	55.00	16.00	4.00	2.00	2.00	0.0247	0.1136	0.2720	11.02	1.92
10.50 m	0.00	17.00	57.00	13.00	5.00	5.00	3.00	0.0358	0.1337	0.2920	8.15	1.71
15.00 m	0.00	28.00	51.00	10.00	4.00	5.00	2.00	0.0146	0.0826	0.2339	16.01	2.00
16.50 m	0.00	16.00	55.00	20.00	5.00	4.00	0.00	0.0394	0.1416	0.3151	7.99	1.61
19.50 m	0.00	13.00	57.00	16.00	8.00	5.00	1.00	0.0547	0.1578	0.3264	5.96	1.39

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

E-mail: info@cegtesthouse.com.

www.cegtesthouse.com

SR-1241

**“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”**

PKG-IV

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/418_07 BHs	00	01.09.2026

Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.
B-11(G), Malviya Industrial Area, Jaipur-302017
Tel.: 91-141-4046599, Fax: 91-141-2751806
E-mail: info@cegtesthouse.com
www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/418

Date:- 01.09.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-IV**

Dear Sir,

We are pleased to submit this report of 07 boreholes(BH-404 to BH-410) carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-



Pratibha Bagaria
Sr Geotechnical Engineer



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

E-mail: info@cegtesthouse.com., www.cegtesthouse.com

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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,**.

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 21.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 07 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Pier no.	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)	
					E	N
1.	BH-404	P-1157	Not Encountered	21.00	576312.000	2988430.000
2.	BH-405	P-1161		12.04	576319.000	2988542.000
3.	BH-406	P-1164		15.00	576326.000	2988604.000
4.	BH-407	38+760		16.50	576332.000	2988693.000
5.	BH-408	38+840		21.00	576337.000	2988764.000
6.	BH-409	P-1171		13.50	576347.000	2988874.000
7.	BH-410	P-1174		13.00	576349.000	2988360.000

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of

the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

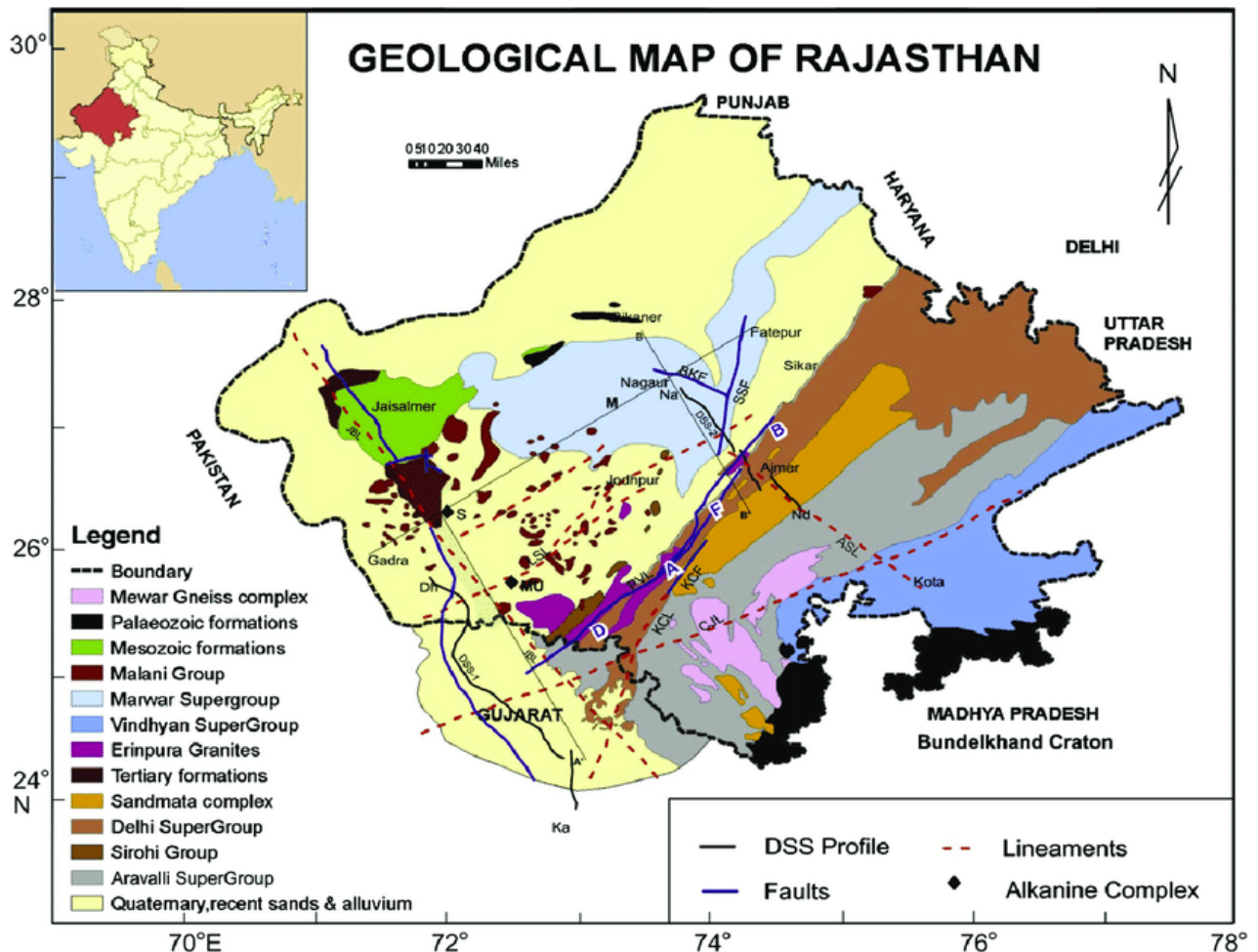


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

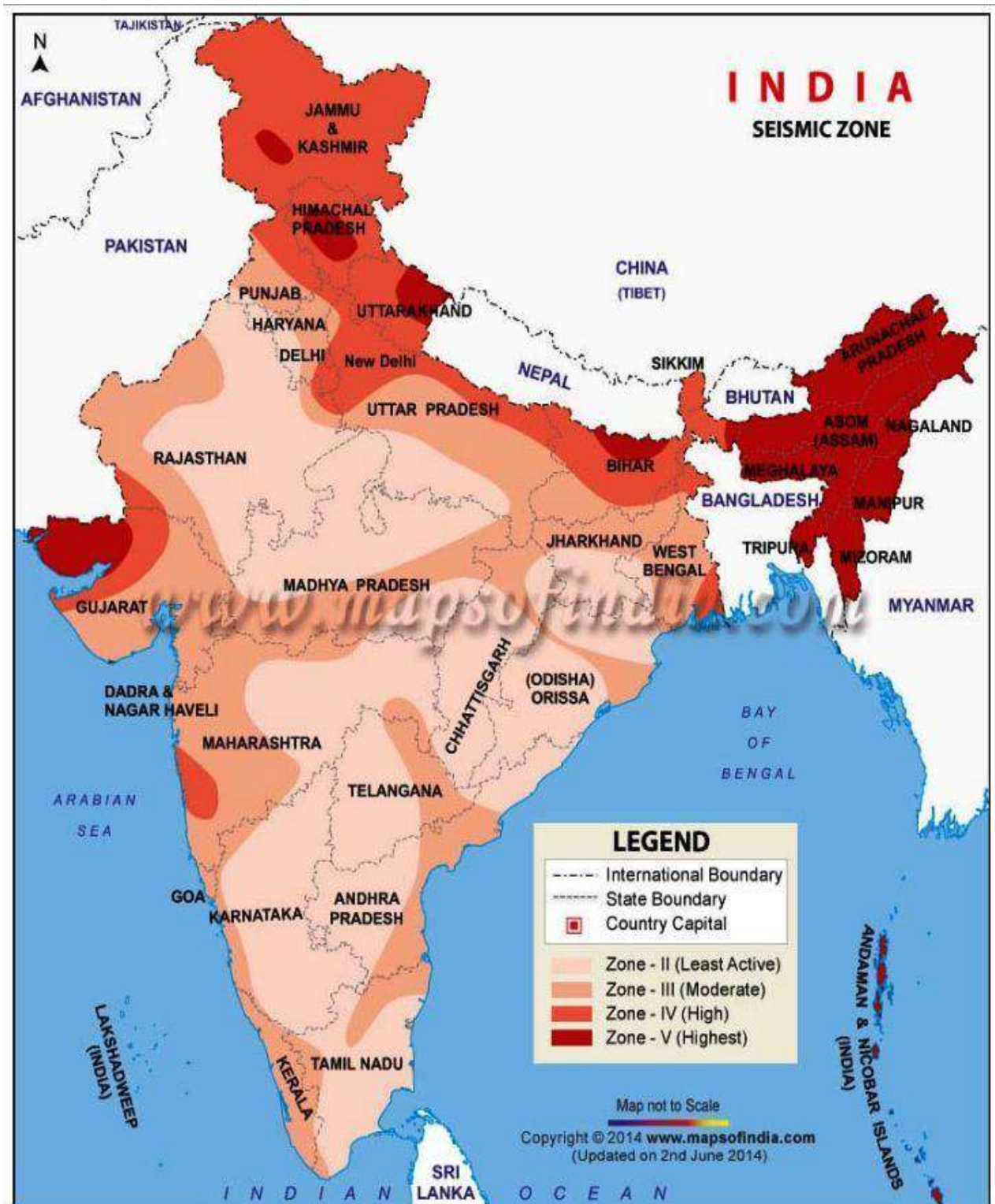


Fig. 2: Seismicity Map of India



Figure 3 : - Site Location Plan

The field and laboratory test described in Chapter 3.

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in July 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbling at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 07 BHs, the soil and rock stratification is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH No.	Depth (m)		Description
	From	To	
BH-404	0.00	2.50	Filled Up soil
	2.50	9.00	Medium Dense to Dense, Brownish, Silty Sand
	9.00	10.90	Very Dense, Brownish, Silty Sand
	10.90	21.00	Highly Weathered, Greyish to Brownish, Very Poor, Boulder
BH-405	0.00	2.00	Filled Up soil
	2.00	12.04	Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder
BH-406	0.00	2.50	Filled Up soil
	2.50	4.55	Very Dense, Brownish, Silty Sand
	4.55	15.00	Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder
BH-407	0.00	2.50	Filled Up soil
	2.50	6.00	Very Dense, Brownish, Silty Sand
	6.00	16.50	Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder
BH-408	0.00	2.50	Filled Up soil
	2.50	6.00	Medium Dense to Dense, Brownish, Silty Sand
	6.00	10.54	Very Dense, Brownish, Silty Sand
	10.54	21.00	Highly Weathered, Greyish to Brownish, Very Poor, Boulder
BH-409	0.00	2.50	Filled Up soil
	2.50	13.50	Highly Weathered, Greyish to Brownish, Very Poor, Boulder
BH-410	0.00	2.50	Filled Up soil
	2.50	13.00	Highly Weathered, Greyish to Brownish, Very Poor, Boulder

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing :2988430 m	Easting :576312 m
Reduced Level (m):(+) -	BH. No. :BH-404	BH Depth (m):21
Proposed/Existing Structure :P-1157	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :19-07-2026	Date of Completion :20-07-2026	

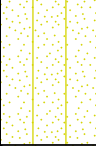
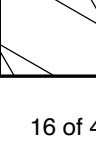
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	10						
3.5									
4.0									
4.5	4.5	SPT-2	18						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	33	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	37						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	55						
9.5				Very Dense, Brownish, Silty Sand	SM				
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing : 2988430 m	Easting : 576312 m
Reduced Level (m):(+)-	BH. No. : BH-404	BH Depth (m): 21
Proposed/Existing Structure : P-1157	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 19-07-2026	Date of Completion : 20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	>100	Very Dense, Brownish, Silty Sand	SM				
11.0	10.9	RC-1							
11.5									
12.0	12	RC-2					15.45	0	
12.5									
13.0									
13.5	13.5	RC-3					12	0	
14.0									
14.5									
15.0	15	RC-4					12.66	0	
15.5				Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV				
16.0									
16.5	16.5	RC-5					12	0	
17.0									
17.5									
18.0	18	RC-6					12.66	0	
18.5									
19.0									
19.5	19.5	RC-7					12	0	
20.0									



<i>BH Location/Chainage :</i>	<i>Northing :</i> 2988430 m	<i>Easting :</i> 576312 m
<i>Reduced Level (m):(+)-</i>	BH. No. :BH-404	<i>BH Depth (m):</i> 21
<i>Proposed/Existing Structure :</i> P-1157	<i>Water Table (m):</i> Not encountered	<i>Inclination :</i> Vertical
<i>Boring type :</i> Rotary	<i>Dia. of Boring :</i> 150/76 mm	<i>Depth of Casing (m) :-</i>
<i>Date of Start :</i> 19-07-2026	<i>Date of Completion :</i> 20-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5	21			Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV				
21.0							13.33	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing :2988542 m	Easting :576319 m
Reduced Level (m):(+) -	BH. No. :BH-405	BH Depth (m):12.04
Proposed/Existing Structure :P-1161	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :17-07-2026	Date of Completion :18-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0				Filled Up soil	FILL				
1.5									
2.0	2 2.04	SPT-1 RC-1	>100						
2.5									
3.0									
3.5	3.5	RC-2					10.27	0	
4.0									
4.5									
5.0	5	RC-3					10	0	
5.5									
6.0				Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV				
6.5	6.5	RC-4					10.66	0	
7.0									
7.5									
8.0	8	RC-5					10.66	0	
8.5									
9.0									
9.5	9.5	RC-6					10.66	0	
10.0									



<i>BH Location/Chainage :</i>	<i>Northing :</i> 2988542 m	<i>Easting :</i> 576319 m
<i>Reduced Level (m):(+)-</i>	BH. No. :BH-405	<i>BH Depth (m):</i> 12.04
<i>Proposed/Existing Structure :</i> P-1161	<i>Water Table (m):</i> Not encountered	<i>Inclination :</i> Vertical
<i>Boring type :</i> Rotary	<i>Dia. of Boring :</i> 150/76 mm	<i>Depth of Casing (m) :-</i>
<i>Date of Start :</i> 17-07-2026	<i>Date of Completion :</i> 18-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5									
11.0	11	RC-7		Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		10	0	
11.5									
12.0	12.04						10.27	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing :2988604 m	Easting :576326 m
Reduced Level (m):()-	BH. No. :BH-406	BH Depth (m):15
Proposed/Existing Structure :P-1164	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :17-07-2026	Date of Completion :19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	>100	Very Dense, Brownish, Silty Sand	GRADE-IV				
3.5									
4.0									
4.5	4.5	SPT-2	>100						
4.55	4.55	RC-1							
5.0									
5.5									
6.0	6	RC-2					11.72	0	
6.5									
7.0									
7.5	7.5	RC-3		Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		12	0	
8.0									
8.5									
9.0	9	RC-4					10	0	
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing : 2988604 m	Easting : 576326 m
Reduced Level (m):(+)-	BH. No. : BH-406	BH Depth (m): 15
Proposed/Existing Structure : P-1164	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 17-07-2026	Date of Completion : 19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-5					10	0	
11.0									
11.5									
12.0	12	RC-6		Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		10	0	
12.5									
13.0									
13.5	13.5	RC-7					10.66	0	
14.0									
14.5									
15.0	15						10	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :38+760	Northing :2988693 m	Easting :576332 m
Reduced Level (m):(+) -	BH. No. :BH-407	BH Depth (m):16.5
Proposed/Existing Structure :-	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :17-07-2026	Date of Completion :19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	38						
3.5									
4.0									
4.5	4.5	SPT-2	>100	Very Dense, Brownish, Silty Sand	SM				
5.0									
5.5									
6.0	6 6.03	SPT-3 RC-1	>100						
6.5									
7.0									
7.5	7.5	RC-2					12.24	0	
8.0				Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV				
8.5									
9.0	9	RC-3					11.33	0	
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :38+760	Northing :2988693 m	Easting :576332 m
Reduced Level (m):(+) -	BH. No. :BH-407	BH Depth (m):16.5
Proposed/Existing Structure :-	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :17-07-2026	Date of Completion :19-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-4					12	0	
11.0									
11.5									
12.0	12	RC-5					13.33	0	
12.5									
13.0				Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV				
13.5	13.5	RC-6					13.33	0	
14.0									
14.5									
15.0	15	RC-7					11.33	0	
15.5									
16.0									
16.5	16.5						10	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :38+840	Northing :2988764 m	Easting :576337 m
Reduced Level (m):()-	BH. No. :BH-408	BH Depth (m):21
Proposed/Existing Structure :-	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :17-07-2026	Date of Completion :18-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	30						
3.5									
4.0									
4.5	4.5	SPT-2	45	Medium Dense to Dense, Brownish, Silty Sand	SM				
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	55						
6.5									
7.0									
7.5	7.5	SPT-4	70						
8.0									
8.5	8.5	UDS*							
9.0	9	SPT-5	78	Very Dense, Brownish, Silty Sand	SM				
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :38+840	Northing :2988764 m	Easting :576337 m
Reduced Level (m):(+) -	BH. No. :BH-408	BH Depth (m):21
Proposed/Existing Structure :-	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :17-07-2026	Date of Completion :18-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5 10.54	SPT-6 RC-1	>100	Very Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	RC-2					12.32	0	
12.5									
13.0									
13.5	13.5	RC-3					11.33	0	
14.0									
14.5									
15.0	15	RC-4		Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		12.66	0	
15.5									
16.0									
16.5	16.5	RC-5					12	0	
17.0									
17.5									
18.0	18	RC-6					12.66	0	
18.5									
19.0									
19.5	19.5	RC-7					121	0	
20.0									



<i>BH Location/Chainage</i> :38+840	<i>Northing</i> :2988764 m	<i>Easting</i> :576337 m
<i>Reduced Level (m):(+)-</i>	BH. No. :BH-408	<i>BH Depth (m):</i> 21
<i>Proposed/Existing Structure :-</i>	<i>Water Table (m):</i> Not encountered	<i>Inclination</i> : Vertical
<i>Boring type</i> :Rotary	<i>Dia. of Boring</i> :150/76 mm	<i>Depth of Casing (m) :-</i>
<i>Date of Start</i> :17-07-2026	<i>Date of Completion</i> :18-07-2026	

[illegible]

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing :2988874 m	Easting :576347 m
Reduced Level (m):(+) -	BH. No. :BH-409	BH Depth (m):13.5
Proposed/Existing Structure :P-1171	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :15-07-2026	Date of Completion :17-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3 3.04	SPT-1 RC-1	>100						
3.5									
4.0									
4.5	4.5	RC-2					11.11	0	
5.0									
5.5									
6.0	6	RC-3		Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		10	0	
6.5									
7.0									
7.5	7.5	RC-4					10.66	0	
8.0									
8.5									
9.0	9	RC-5					10	0	
9.5									
10.0									

UDS*-UDS not recovered

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing : 2988874 m	Easting : 576347 m
Reduced Level (m):(+)-	BH. No. : BH-409	BH Depth (m): 13.5
Proposed/Existing Structure : P-1171	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150/76 mm	Depth of Casing (m) :-
Date of Start : 15-07-2026	Date of Completion : 17-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	RC-6					12	0	
11.0									
11.5									
12.0	12	RC-7		Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		11.33	0	
12.5									
13.0									
13.5	13.5						12	0	

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :	Northing :2988360 m	Easting :576349 m
Reduced Level (m):(+) -	BH. No. :BH-410	BH Depth (m):13
Proposed/Existing Structure :P-1174	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150/76 mm	Depth of Casing (m) :-
Date of Start :15-07-2026	Date of Completion :17-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3 3.06	SPT-1 RC-1	>100						
3.5									
4.0									
4.5	4.5	RC-2					11.8	0	
5.0									
5.5									
6.0	6	RC-3		Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		10	0	
6.5									
7.0									
7.5	7.5	RC-4					10	0	
8.0									
8.5									
9.0	9	RC-5					10	0	
9.5									
10.0									

UDS*-UDS not recovered



<i>BH Location/Chainage :</i>	<i>Northing :</i> 2988360 m	<i>Easting :</i> 576349 m
<i>Reduced Level (m):(+)-</i>	BH. No. :BH-410	<i>BH Depth (m):</i> 13
<i>Proposed/Existing Structure :</i> P-1174	<i>Water Table (m):</i> Not encountered	<i>Inclination :</i> Vertical
<i>Boring type :</i> Rotary	<i>Dia. of Boring :</i> 150/76 mm	<i>Depth of Casing (m) :-</i>
<i>Date of Start :</i> 15-07-2026	<i>Date of Completion :</i> 17-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)		
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100		
10.5	10.5	RC-6		Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		10	0			
11.0											
11.5											
12.0	12	RC-7							10.66	0	
12.5											
13.0	13						19	0			
								</			

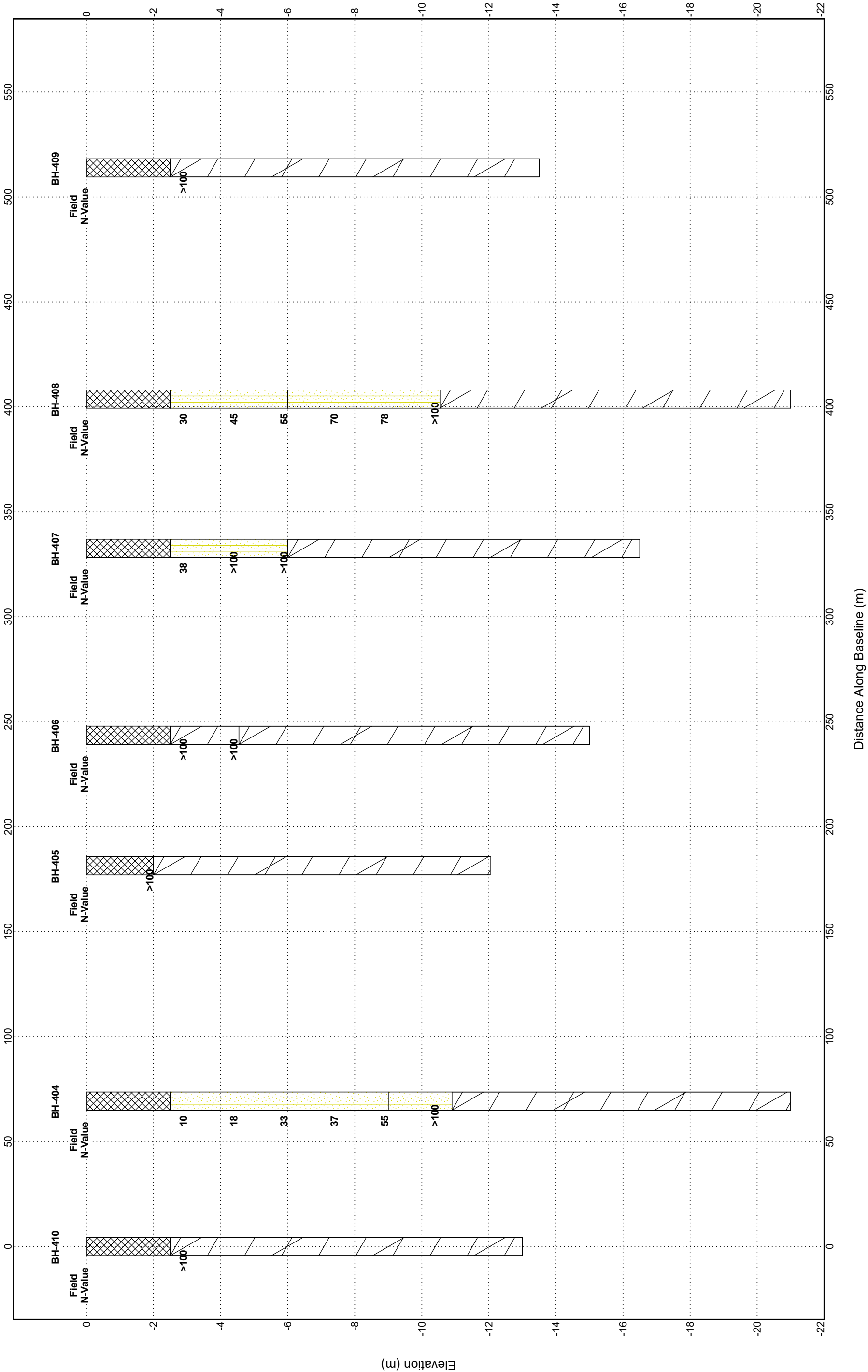
SUB SOIL PROFILE DIAGRAM - BH-404 to BH-410

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME GTI work for JPR Metro Ph-II, Prahladpura to Toddi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL & ROCK CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code			
	Date of Boring		Grain Size Distribution % wt retained						Atterberg Limits %				Shear Strength			Free Swell Index (%)										
	19-07-2026	to	20-07-2026	P-1157	BH-404	NOT ENCOUNTERED	21.00 m	576312.000 m	2988430.000 m	Void Ratio (e ₀)			Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)		M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _c)									
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Fine	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)		
DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-1	3.00	10	12		SM		0	19	70	8	2	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	
SPT-2	4.50	18	19		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	5.50	-	-		SM		0	19	58	15	4	4	0	-	NIL	NP	-	1.77	12.44	1.57	2.62	DST	0.00	30	-	
SPT-3	6.00	33	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-4	7.50	37	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-5	9.00	55	47	Very Dense, Brownish, Silty Sand	SM		0	18	55	17	5	4	1	-	NIL	NP	-	1.82	12.50	1.62	2.61	DST	0.00	32	-	
SPT-6	10.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-1	10.90	-	-	Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		C. R. = 15.45 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-2	12.00	-	-		GRADE-IV		C. R. = 12 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-3	13.50	-	-		GRADE-IV		C. R. = 12.66 % R.Q.D. = 0 %						Sp.Gr. = 2.56 W.A. = 1.71 %	Density = 2.55 (g/cc)	-	Porosity = 4.38 %	-	-	-	-	-	-	-	-	-	
RC-4	15.00	-	-		GRADE-IV		C. R. = 12 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-5	16.50	-	-		GRADE-IV		C. R. = 12.66 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-6	18.00	-	-		GRADE-IV		C. R. = 12 % R.Q.D. = 0 %						Sp.Gr. = 2.58 W.A. = 1.79 %	Density = 2.57 (g/cc)	-	Porosity = 4.62 %	-	-	-	-	-	-	-	-	-	-
RC-7	19.50	-	-		GRADE-IV		C. R. = 13.33 % R.Q.D. = 0 %						-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code														
	17-07-2026		to		18-07-2026		P-1161		BH-405		NOT ENCOUNTERED		12.04 m	576319.000 m		2988542.000 m		-	SR-1241_26-27														
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)		Natural Moisture Content (%)	Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)		Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Consolidation Parameters				
							Silt		Medium		Coarse		Gravel		Liquid Limit		Plastic Limit	Plasticity Index	Shrinkage Limit	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)						
DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-		-												-	-	-	-	-	-
SPT-1	2.00	<100	-	Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-1	2.04	-	-		GRADE-IV		C. R. = 10.27 %	R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-2	3.50	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-3	5.00	-	-		GRADE-IV		C. R. = 10.66 %	R.Q.D. = 0 %		Sp.Gr. = 2.54		W.A. = 1.77 %		Density = 2.53 (g/cc)		Porosity = 4.50 %		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-4	6.50	-	-		GRADE-IV		C. R. = 10.66 %	R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-5	8.00	-	-		GRADE-IV		C. R. = 10.66 %	R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-6	9.50	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %		Sp.Gr. = 2.55		W.A. = 1.47 %		Density = 2.54 (g/cc)		Porosity = 3.75 %		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RC-7	11.00	-	-	GRADE-IV		C. R. = 10.27 %	R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code									
	17-07-2026		to		19-07-2026		P-1164		BH-406		NOT ENCOUNTERED		15.00 m		576326.000 m		2988604.000 m		-	SR-1241_26-27												
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters					
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)			Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)				Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)	
	DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	UDS*	2.50	-	-	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-1	3.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-2	4.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-1	4.55	-	-	Completely to Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		C. R. = 11.72 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-2	6.00	-	-		GRADE-IV		C. R. = 12 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-3	7.50	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	Sp.Gr. = 2.57	W.A. = 1.77 %	Density = 2.56 (g/cc)	Porosity = 4.55 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-4	9.00	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-5	10.50	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-6	12.00	-	-		GRADE-IV		C. R. = 10.66 %	R.Q.D. = 0 %	Sp.Gr. = 2.58	W.A. = 1.47 %	Density = 2.57 (g/cc)	Porosity = 3.79 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-7	13.50	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code						
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Free Swell Index (%)			Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Consolidation Parameters										
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)		Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _o)
DS-1	0.00	-	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-	-	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	38	47	SM			0	20	52	10	4	10	4	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	>100	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	>100	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-1	6.03	-	-	-	GRADE-IV		C. R. = 12.24 % R.Q.D. = 0 %				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-2	7.50	-	-	-	GRADE-IV		C. R. = 11.33 % R.Q.D. = 0 %				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-3	9.00	-	-	-	GRADE-IV		C. R. = 12 % R.Q.D. = 0 %				Sp.Gr. = 2.55 W.A. = 1.85 %		Density = 2.54 (g/cc)		Porosity = 4.72 %		-	-	-	-	-	-	-	-	-	-	-	-	-		
RC-4	10.50	-	-	-	GRADE-IV		C. R. = 13.33 % R.Q.D. = 0 %				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-5	12.00	-	-	-	GRADE-IV		C. R. = 13.33 % R.Q.D. = 0 %				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RC-6	13.50	-	-	-	GRADE-IV		C. R. = 11.33 % R.Q.D. = 0 %				Sp.Gr. = 2.56 W.A. = 1.55 %		Density = 2.55 (g/cc)		Porosity = 3.97 %		-	-	-	-	-	-	-	-	-	-	-	-	-		
RC-7	15.00	-	-	-	GRADE-V		C. R. = 10 % R.Q.D. = 0 %				-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code														
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity		Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters							
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _y x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)							
	DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-1	3.00	30	36		SM		0	20	55	17	4	4	0	NIL	NP	-	1.78	12.00	1.59	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	45	48		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	5.50	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-3	6.00	55	54	Very Dense, Brownish, Silty Sand	SM		0	19	60	12	5	4	0	NIL	NP	-	1.82	12.50	1.62	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-4	7.50	70	63		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	8.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	78	66	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	>100	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RC-1	10.54	-	-	Highly Weathered, Greyish to Brownish, Very Poor, Boulder	GRADE-IV		C. R. = 12.32 %		R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-2	12.00	-	-		GRADE-IV		C. R. = 11.33 %		R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-3	13.50	-	-		GRADE-IV		C. R. = 12.66 %		R.Q.D. = 0 %		Sp.Gr. = 2.58		W.A. = 1.40 %		Density = 2.57 (g/cc)		Porosity = 3.61 %		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-4	15.00	-	-		GRADE-IV		C. R. = 12 %		R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-5	16.50	-	-		GRADE-IV		C. R. = 12.66 %		R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-6	18.00	-	-		FALSE	-	C. R. = 121 %		R.Q.D. = 0 %		Sp.Gr. = 2.59		W.A. = 1.35 %		Density = 2.58 (g/cc)		Porosity = 3.50 %		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-7	19.50	-	-		GRADE-IV		C. R. = 12 %		R.Q.D. = 0 %		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 SPT-Standard Penetration Test, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Sample, UDS-Un disturbed Sample, UDS†- Direct Shear Test on Remoulded Sample, UUT†- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

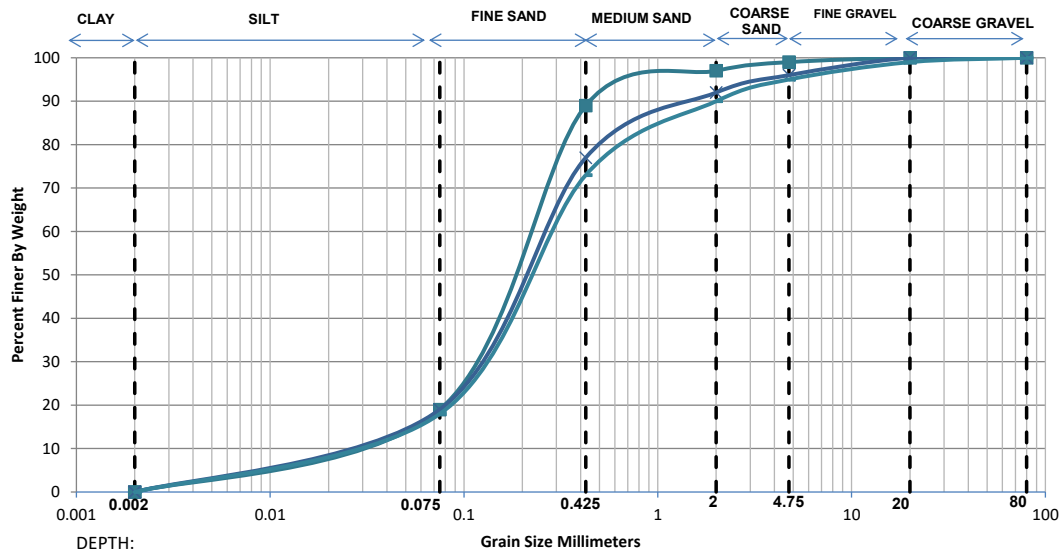
SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”PKG-IV										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code					
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %			NOT ENCOUNTERED		13.00 m	576349.000 m	2988360.000 m	-	SR-1241_26-27								
Clay		Silt	Fine	Medium				Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity						Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)
	DS-1	0.00	-	-	Filled Up soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	2.50	-	-	Highly Weathered, Greyish to Brownish, Very Poor, Boulder	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-1	3.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-1	3.06	-	-		GRADE-IV		C. R. = 11.8 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-2	4.50	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-3	6.00	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	Sp.Gr. = 2.54	W.A. = 1.67 %	Density = 2.53 (g/cc)	Porosity = 4.24 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-4	7.50	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-5	9.00	-	-		GRADE-V		C. R. = 10 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RC-6	10.50	-	-	GRADE-IV		C. R. = 10.66 %	R.Q.D. = 0 %	Sp.Gr. = 2.57	W.A. = 1.45 %	Density = 2.56 (g/cc)	Porosity = 3.73 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	RC-7	12.00	-	-	GRADE-IV		C. R. = 19 %	R.Q.D. = 0 %	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

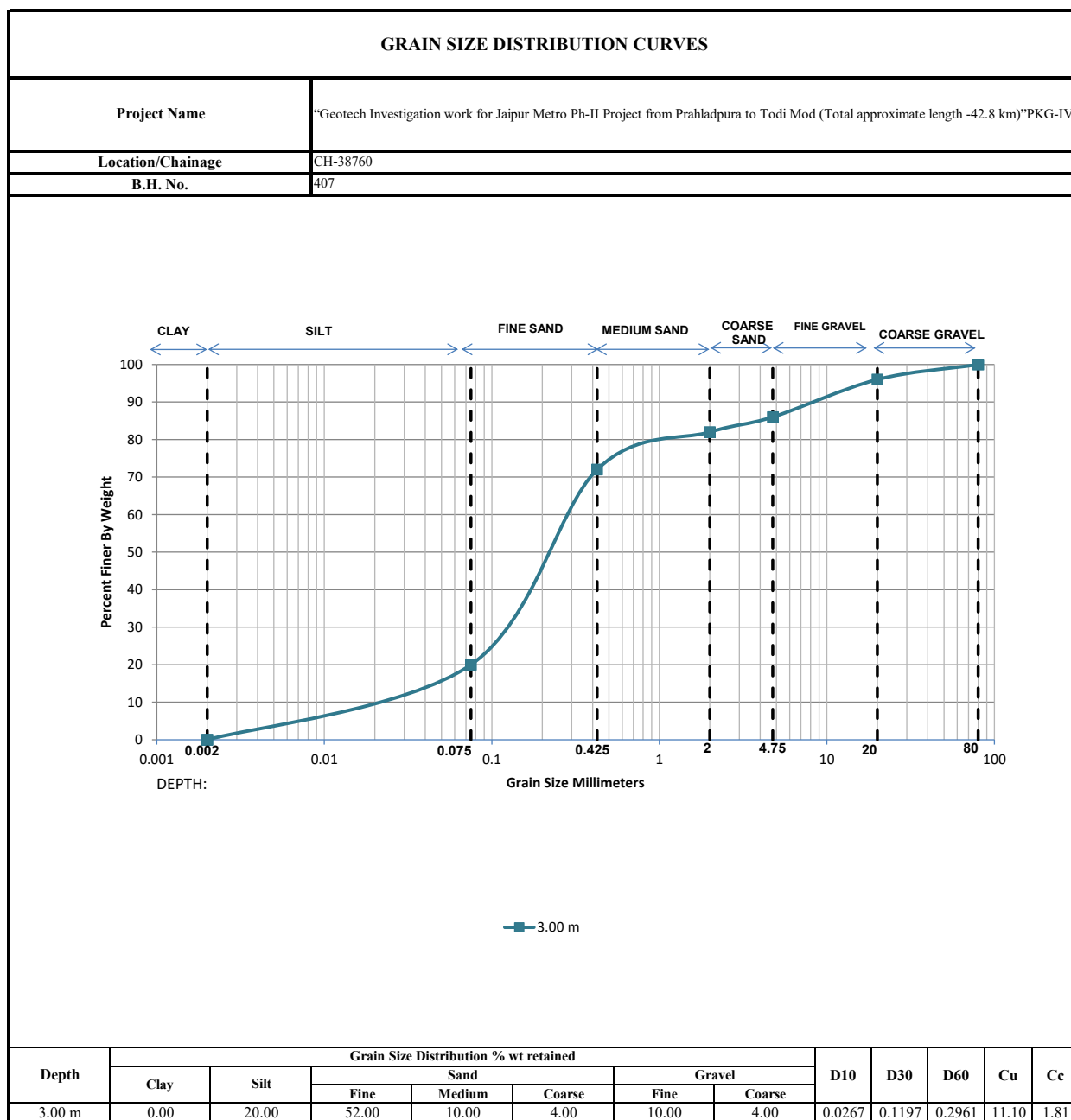
Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1157
B.H. No.	404



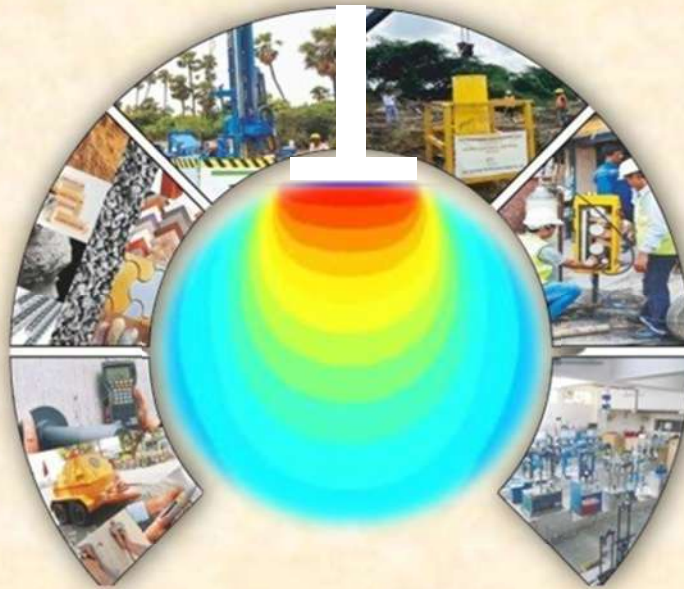
Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	19.00	70.00	8.00	2.00	1.00	0.00	0.0305	0.1180	0.2281	7.47	2.00
5.50 m	0.00	19.00	58.00	15.00	4.00	4.00	0.00	0.0297	0.1226	0.2720	9.17	1.86
9.00 m	0.00	18.00	55.00	17.00	5.00	4.00	1.00	0.0323	0.1297	0.2969	9.19	1.75



SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV



Submitted to:
Delhi Metro Rail Corporation Ltd



TC-10943
NABL Accredited
Both Field & Lab Tests

CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

E-mail: info@cegtesthouse.com

www.cegtesthouse.com

SR-1241

“Geotech Investigation work for Jaipur Metro
Ph-II Project from Prahladpura to Todi Mod
(Total approximate length -42.8 km)”

PKG-IV

SR. No.	Report Ref. No.	Revision No.	Date
1241_25-26	CEGTH/DMRC/SR-1241/2026-27/424_14 BHs	00	02.09.2026

Submitted to:
Delhi Metro Rail Corporation Ltd



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E-mail: info@cegtesthouse.com
www.cegtesthouse.com

CEGTH/DMRC/SR-1241/2026-27/424

Date:- 02.09.2026

To,

Project Director/Jaipur-II, DMRC
Office of Chief Project Manager-8
Opposite Frank Anthony Public School
Lala Lajpat Rai Marg, Lajpat Nagar-IV
New Delhi - 110024

Subject :- “Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi
Mod (Total approximate length -42.8 km)”**PKG-IV**

Dear Sir,

We are pleased to submit this report of 14 boreholes carried out for the proposed project.

The accompanying report presents results of field tests and laboratory tests conducted on selected soil and rock samples ,their interpretation and foundation recommendations.

Should there be any clarifications regarding the contents please contact us at your most convenient time.

We value the opportunity to participate in this project and look forward a pleasant association on future projects.

Very truly yours,
CEG Test House & Research Centre Pvt. Ltd.



Nehal Jain
Sr. General Manager, Geotechnical
Authorized Signatory

Prepared By:-



Pratibha Bagaria
Sr Geotechnical Engineer



CEG Test House and Research Centre Pvt. Ltd.

B-11(G), Malviya Industrial Area, Jaipur-302017

Tel.: 91-141-4046599, Fax: 91-141-2751806

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CHAPTER 1 GENERAL

1.1 INTRODUCTION:

The work of “**Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)**” was awarded to CEG Test House & Research Centre Pvt. Ltd. by **Delhi Metro Rail Corporation Ltd.,**.

Field work including drilling of boreholes and sample collection covered in this report was carried out in the presence of Client’s Engineer. Laboratory tests were conducted on selected soil samples to determine the design parameters, confirming to relevant specifications and the guidelines received from the client.

This report includes the details of methodology of investigation, collection of soil samples, laboratory test results, analysis of results and recommendations for results for proposed structures based on Soil samples collected from the Borelog locations.

1.2 SCOPE OF WORK:

- Mobilisation of necessary plant equipments, men and materials for the geotechnical investigation work as per specifications, drawings and instructions of the engineer, shifting of the equipment from one test location to another location to complete the entire field work within the stipulated time schedule and demobilization after completion of field work.
- Making 150 mm nominal diameter boreholes at various locations upto 50.00m depth below the natural ground level in all types of soil using suitable approved method of boring including chiselling, cleaning, providing casing pipe as required or as directed by the engineer.
- Performing Standard Penetration Tests at every 1.5 m interval and at every change of strata.
- Collecting undisturbed or disturbed soil samples at every 3.0 m interval and at every change of strata. Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Recording of ground water table and collecting water samples for conducting chemical analysis in the laboratory.
- Transporting all the collected soil samples to the laboratory.
- Conducting various laboratory tests on selected soil samples at CEGTH NABL accredited laboratory including preparation of samples to determine the following properties all complete as per specification :

On soil Samples

- Dry density test
- Bulk Density and Moisture Content.

- Specific gravity
- Sieve Analysis (Mechanical) with Hydrometer Classification
- Liquid Limit, Plastic Limit and Shrinkage Limit
- Direct Shear Test
- Triaxial Shear Test
- Chemical Analysis of soil samples (pH, chloride, Sulphate)

The details of borehole locations and general geology of site location describe in **Chapter 2**.

CHAPTER 2 DETAILS OF SITE AND GENERAL GEOLOGICAL HISTORY

2.1 SITE LOCATION:

The locations of 14 boreholes were marked on the ground as per the layout given by the Engineer. These locations are shown in **Fig 3**. The details of various boreholes locations along with their co-ordinates are provided in table 2.1.

The details of the site and test locations for the proposed project are shown in location plan in Fig 3. The site of proposed project is located at **Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India.

Table 2.1: Details of Borehole Locations & Test Locations

S.No	BH.No	Pier no.	Depth of Water Table below EGL (m)	Depth of Borehole below EGL(m)	Co-ordinates (m)	
					E	N
1.	BH-361	P1022	Not Encountered	50.00	576702.000	2984269.000
2.	BH-362	P1025	Not Encountered	50.00	576761.000	2984331.000
3.	BH-363	P1029	Not Encountered	50.00	576768.000	2984450.000
4.	BH-364	P1032	Not Encountered	50.00	576730.000	2984538.000
5.	BH-365	P1036	Not Encountered	50.00	576701.000	2984638.000
6.	BH-366	P1039	Not Encountered	50.00	576681.000	2984725.000
7.	BH-373	P1058	Not Encountered	50.00	576568.000	2985345.000
8.	BH-374	P1054	Not Encountered	50.00	576558.000	2985411.000
9.	BH-375	P1065	Not Encountered	50.00	576534.000	2985520.000
10.	BH-376	P1068	Not Encountered	50.00	576513.000	2989601.000
11.	BH-390	P1112	Not Encountered	50.00	576420.000	2987049.000
12.	BH-391	P1116	Not Encountered	50.00	576434.000	2987175.000
13.	BH-392	P1119	Not Encountered	50.00	576442.000	2987275.000
14.	BH-393	P1123	Not Encountered	50.00	576437.000	2987385.000

2.2 GENERAL GEOLOGY

2.2.1 LOCATION

The study area is located within the eastern margin of the Aravalli Craton in Jaipur, Rajasthan, forming a part of the northwestern Indian Shield. The geology of the region is predominantly characterized by Precambrian rock formations comprising quartzites, schists, phyllites, granites, and gneisses, which are generally hard, compact, and crystalline in nature. The area also contains occurrences of alluvial deposits in low-lying zones. The regional topography is undulating, with elevation generally ranging from approximately 400 meters to 600 meters above Mean Sea Level.

2.2.2 CLIMATE

The project area, located in Jaipur district of Rajasthan, experiences a semi-arid climate characterized by extremely hot summers, mild winters, and a short monsoon season. Temperatures generally range from approximately 5°C in winter to 45°C during peak summer months, with May and June being the hottest period. The region receives an average annual rainfall of about 500 to 700 mm, mainly during the southwest monsoon from July to September. Relative humidity remains low for most of the year, increasing during the monsoon season. Wind conditions are generally dry and moderate, with occasional dust storms during summer. These climatic conditions play an important role in geotechnical aspects such as foundation design, groundwater fluctuation, drainage planning, and construction scheduling.

2.2.3 GEOLOGY

“The subsurface conditions at the Jaipur location are predominantly composed of sandy silt, silty sand, and clayey soil with varying proportions of gravel and weathered rock fragments. The upper strata generally exhibit moderate weathering and loose to medium dense soil conditions, underlain by residual soils derived from quartzite, schist, and granite gneiss formations of the Aravalli terrain. The weathered zone gradually transitions into comparatively competent geological formations at greater depths, with occasional joints and fractures observed in the parent material.”

The Geological formation of the Rajasthan is as follows:

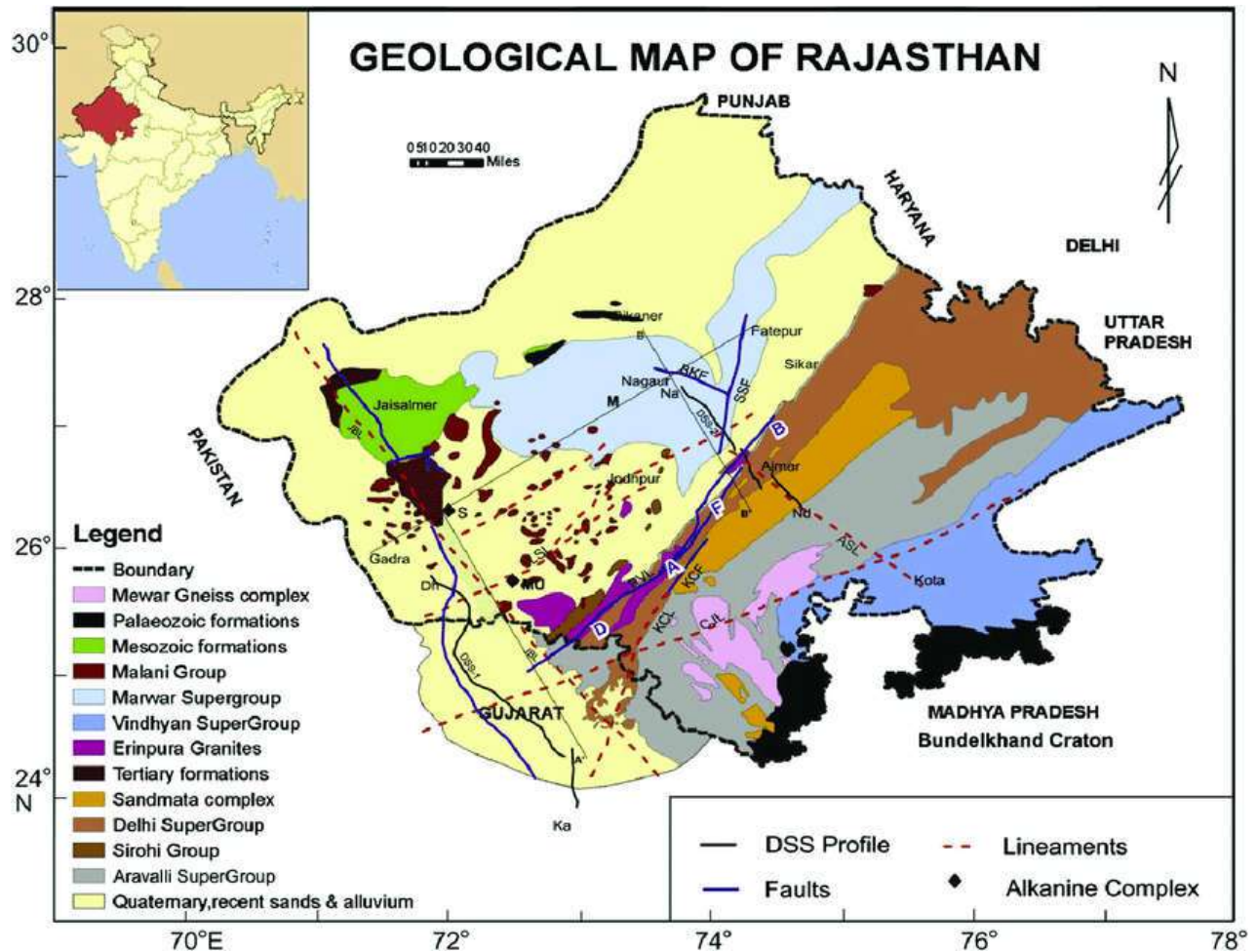


Fig. 1: Geological map of Rajasthan

2.2.4 Seismicity

The site of proposed project is located at **Jagatpura, Jaipur** in the State of **Rajasthan** falls in seismic zone – II (Zone factor=0.10) of India as per Is : 1893 (Part-1)-2016.

Seismicity Map of India is shown below:-

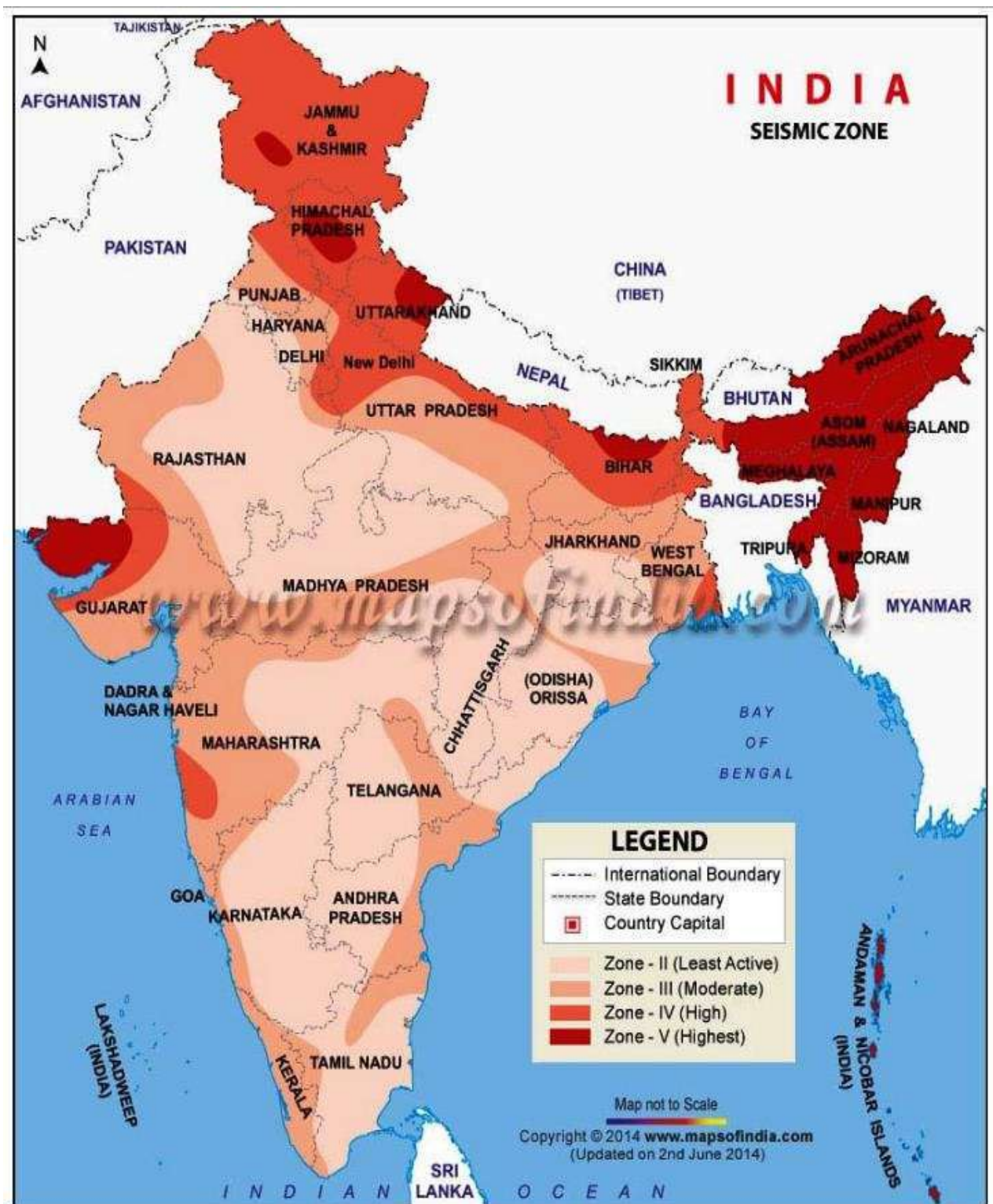


Fig. 2: Seismicity Map of India



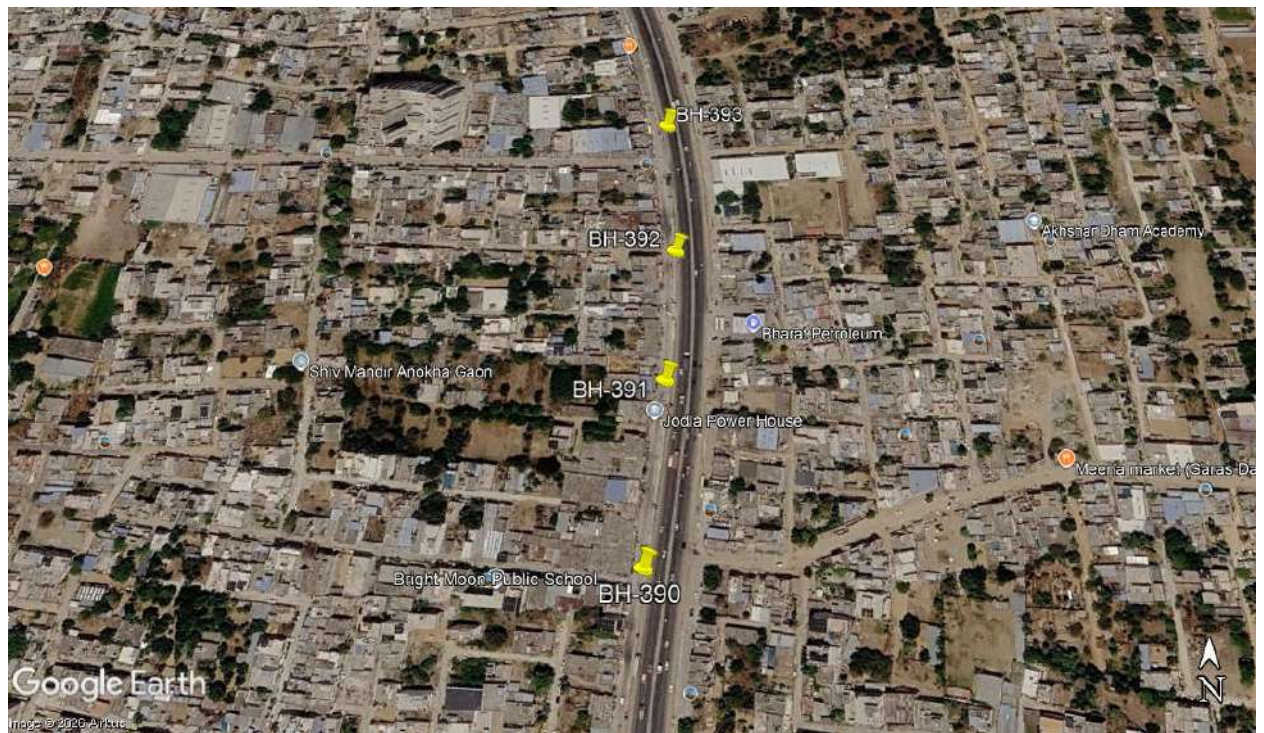


Figure 3 : - Site Location Plan

The field and laboratory test decribed in Chapter 3.

CHAPTER 3 FIELD AND LABORATORY TEST PROCEDURE

3.1 FIELD INVESTIGATION:

For geotechnical investigation work, hydraulic or mechanical drilling rigs were installed at the specified borehole locations along with the required men and machineries for conducting the requisite field work. The equipment was relocated from one test site to another during the fieldwork, and was demobilized upon the satisfactory completion of each respective borehole.

For conducting the field investigations the following practices were followed at site:

- In soil, boreholes of 150 mm dia. were drilled as per the standard procedure laid in IS: 1892. Wherever rocky strata was encountered before achieving the required depth below E.G.L., bore holes were further extended beyond refusal through soft and hard rock using Hydraulic drilling Rigs with Nx size double tube core barrel or diamond bits upto required depth below the EGL and were terminated as per the instruction of Engr. in-charge.
- Borehole was properly cleaned before taking any sample in soil.
- Standard Penetration Tests and collection of undisturbed or disturbed soil samples were carried out as per the specification IS: 2131 and IS: 2132. The same has been discussed in detail in soil and Rock characteristics attached with the report.
- Ground water table was measured as per IS: 6935-1973. The depth of ground water level was to be measured after 24 hours of completion of borehole.

3.1.1 IN SOIL STRATA

(i) Standard Penetration Test

The Standard Penetration Tests were conducted in boreholes as per IS 2131. Each test was carried out using the standard split spoon sampler carrying manual hammer to measure the number of blows ‘N’.

Standard split spoon sampler was attached to an ‘A’ rod. It was driven from borehole bottom to a distance of 45 cm using a standard hammer of 63.5 kg falling freely from a height of 75 cm to the required depth. While driving, the number of blows required to penetrate every 15 cm are recorded. The total number of blows required for the last 30 cm is taken as ‘N’ value at that particular depth of the borehole. Wherever the total penetration was less than 45cm, the no. of blows & the depth penetrated is recorded in the respective borelog.

SPT ‘N’ values were correlated with relative density of non-cohesive stratum and with consistency of cohesive stratum as given below:-

Table 3.1: Soil compactness as per SPT N values

Correlation for Clay / Plastic silt		Correlation for Sand / Non-Plastic silt	
Consistency	Penetration Value (N)	Compactness	Penetration Value (N)
Very Soft	0 - 2	Very Loose	0 - 4
Soft	2 - 4	Loose	4 - 10
Medium	4 - 8	Medium	10 - 30
Stiff	8 - 15	Dense	30 - 50
Very Stiff	15 - 30	Very Dense	> 50
Hard	> 30		

(ii) The field SPT N values were corrected as per the guidelines given in IS: 2131 as follows:

(a) For overburden: - The N value for cohesionless soil is corrected with the help of fig. 1 given in IS-2131.

(b) Due to dilatancy :- Wherever N values observed below water table in fine sand, silty sand or silt was greater than 15, then corrected N values were corrected as under:

$$N' = 15 + \frac{1}{2} (N-15)$$

(iii) Disturbed Sampling (Soil) in boreholes

Disturbed soil samples each weighing approx. 1kg. were collected starting from a depth of 0.5m depth below EGL and at every identifiable change of strata. Samples were immediately sealed, labeled and carefully transported to the laboratory for testing.

(iv) Undisturbed Sampling (Soil) in boreholes

Undisturbed samples were collected at 3.0 m intervals using 100 mm diameter and 450 mm long MS tubes with Area ratio as specified as per clause 4.1.1 (c) of IS: 1892 (latest) provided with sampler head with ball and socket arrangement. Before taking any sample, sampling tube was properly greased. Immediately after taking on undisturbed sample in a tube, the adopter head was removed along with the disturbed material. The visible ends of the sample were trimmed off any wet disturbed soil. The ends were coated alternately with four layers of just molten wax. More molten wax was added to give a total thickness of min. 25 mm. The samples were carefully labeled and transported to the laboratory for testing. Undisturbed samples wherever slipped during lifting were duly marked in the field logs as well as in the soil profile.

3.1.2 GROUND WATER TABLE DEPTH

During the field investigation conducted in August 2026, the groundwater table was not encountered in any of the borehole locations.

3.2 LABORATORY INVESTIGATIONS:

i. Laboratory Tests For Soil Samples

Summary of various laboratory test conducted on selected Undisturbed/Disturbed is given below:

Table 3.4: Description of Tests on Soil Samples

Description of Test	Reference	Undisturbed (UDS) Soil Samples	Disturbed (DS/SPT) Soil Samples
Grain Size Analysis / Hydrometer	IS: 2720 (Part - 4)	✓	✓
Natural Moisture Content / Bulk / Dry density	IS : 2720 (Part – 2)	✓	-
Atterberg Limits - Liquid Limit - Plastic Limit - Shrinkage Limit	IS: 2720 (Part - 5) IS: 2720 (Part - 5) IS: 2720 (Part - 6)	✓ ✓ -	✓ ✓ -
Specific Gravity	IS : 2720 (Part – 3)	✓	✓
Direct Shear Test	IS : 2720 (Part – 13)	✓	✓
Triaxial compressive shear test	IS : 2720 (Part – 11)	✓	✓
Chemical Analysis of Soil Samples	IS : 2720 (Part – 22, 26, 27)	✓	-

ii. Grain Size Analysis:

The Grain Size analysis test were performed in accordance with IS 2720 (Part 4) – 1965. For this test an oven dry pulverized soil sample is sieved through the set of sieves 19mm, 10mm, 4.75mm, 2.0mm, 425 micron, 75micron. The amounts of soil retained on each sieve were noted down. The % retained, cumulative % retained and % passing are computed accordingly. If the % passing 75 micron sieve is significant, Hydrometer method is used to find the percentage of silt and clay fraction. Hydrometer were performed in as per IS 2720 (Part 4) – 1965. The results are attached in Appendix B.

iii. Liquid Limit (IS:2720- Part-5)

By Cone Penetrometer Method

Liquid limit by cone penetrometer test were performed in accordance with IS 2720 (Part 5) – 1985. The tests were conducted, at varying water contents, in order to produce a series of cone penetrations (usually 4) in the range 15mm to 25mm. The resulting cone penetrations are plotted verses the water content of the test specimens. The Liquid Limit (WL) is read off the graph, being the water content at which the line of best fit through the test points crosses 20mm penetration.

iv. Plastic Limit:

Plastic Limit test were performed as per IS:2720-Part-5. The sample rolled between the fingers of one hand and the glass plate with pressure sufficient to reduce the mass into a thread of about 3 mm in 5 to 10 complete forward and back movements until the thread starts just crumbing at a diameter of 3 mm.

v. Plasticity Index

The plasticity index I_p is given by

$$I_p = WL - WP \text{ (in percent)}$$

vi. Specific Gravity

Specific gravity test were performed in accordance with IS 2720 (Part 3 Section-1) – 1980. The results are attached in Appendix B.

vii. Direct Shear Test

Direct shear tests were performed as per IS 2720 (Part XIII)-2015, on the undisturbed soil samples obtained during the field investigation. For this test shear box test apparatus was used. The specimen of size 6 cm x 6 cm x 2.4 cm was used. The normal stresses of 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively were used.

viii. Triaxial Shear Test

Triaxial Shear Test under Unconsolidated Un-drained (UU) condition as per IS: 2720 (Part-11)-2011 were performed on the undisturbed soil samples obtained during the field investigation. All specimen of size 38mm diameter and 76mm height were used. The axial loading was applied at 1.25 mm/min rate of strain. The normal stresses applied were 0.5 kg/cm², 1.0 kg/cm², 1.5 kg/cm², 2.0 kg/cm² and 3.0 kg/cm² respectively.

CHAPTER 4 ANALYSIS OF TEST RESULTS

4.1 STRATIFICATION

The study of the borehole logs of 14 BHs, the soil and rock stratification is done as per IS 1498., the details of strata and soil classification, are provided in table 4.1.

Table 4.1: Strata Description

BH. No.	Depth (m)		Description
	From	To	
BH-361	0.00	2.50	Filled Up Soil
	2.50	21.00	Medium Dense to Dense, Brownish, Silty Sand
	21.00	34.50	Very Dense, Brownish, Silty Sand
	34.50	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-362	0.00	2.50	Filled Up Soil
	2.50	19.50	Medium Dense to Dense, Brownish, Silty Sand
	19.50	46.50	Very Dense, Brownish, Silty Sand
	46.50	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-363	0.00	2.50	Filled Up Soil
	2.50	10.50	Loose, Medium Dense, Brownish, Silty Sand
	10.50	30.00	Medium Dense to Very Dense, Brownish, Poorly Graded Sand with Silt
	30.00	43.50	Very Dense, Brownish, Silty Sand
	43.50	50.00	Hard, Brownish, Clay Of Low Plasticity
BH-364	0.00	2.50	Filled Up Soil
	2.50	21.00	Medium Dense to Dense, Brownish, Silty Sand
	21.00	31.50	Very Dense, Brownish, Poorly Graded Sand with Silt
	31.50	50.00	Very Dense, Brownish, Silty Sand
BH-365	0.00	2.50	Filled Up Soil
	2.50	22.50	Medium Dense to Dense, Brownish, Silty Sand
	22.50	50.00	Very Dense, Brownish, Silty Sand
BH-366	0.00	2.50	Filled Up Soil
	2.50	22.50	Loose , Medium Dense to Dense, Brownish, Silty Sand
	22.50	40.50	Very Dense, Brownish, Silty Sand
	40.50	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-373	0.00	2.50	Filled Up soil
	2.50	24.00	Loose,Medium Dense to Dense, Brownish, Silty Sand
	24.00	50.00	Very Dense, Brownish, Silty Sand
BH-374	0.00	2.50	Filled Up Soil
	2.50	25.50	Medium Dense to Dense, Brownish, Silty Sand
	25.50	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-375	0.00	2.50	Filled Up Soil
	2.50	30.00	Medium Dense to Dense, Brownish, Silty Sand
	30.00	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt
BH-376	0.00	2.50	Filled Up Soil
	2.50	34.50	Medium Dense to Dense, Brownish, Silty Sand
	34.50	50.00	Very Dense, Brownish, Poorly Graded Sand with Silt

BH. No.	Depth (m)		Description
	From	To	
BH-390	0.00	2.50	Filled up Soil
	2.50	21.00	Medium Dense to Dense, Brownish, Silty Sand
	21.00	50.00	Very Dense, Brownish, Poorly Graded mixed with Silt
BH-391	0.00	2.50	Filled up Soil
	2.50	19.50	Medium Dense to Dense, Brownish, Silty Sand
	19.50	50.00	Very Dense, Brownish, Poorly Graded mixed with Silt
BH-392	0.00	2.50	Filled up Soil
	2.50	19.50	Medium Dense to Dense, Brownish, Silty Sand
	19.50	50.00	Very Dense, Brownish, Poorly Graded mixed with Silt
BH-393	0.00	2.50	Filled up Soil
	2.50	15.00	Medium Dense to Dense, Brownish, Silty Sand
	15.00	50.00	Very Dense, Brownish, Silty Sand

Abbreviations

BH	Borehole
EGL	Existing Ground Level
GWT	Ground Water Table
RQD	Rock Quality Designation
IS	Indian Standards
SPT	Standard Penetration Test
DS	Disturbed Soil
R.L.	Reduced Level
m	Metre
sp. gr.	Specific Gravity
%	Percentage
mg /l	Milligram per litre
mg /kg	Milligram per kilogram

REFERENCE INDIAN STANDARD CODES

S.No.	IS Codes No	TITLE
1	IS : 1892-1979 RA-2016	Code of Practice for subsurface investigation for foundations.
2	IS : 1498-1970 RA 2016	Classification and Identification of soils for general Engineering Purpose.
3	IS :1904 - 2021	Code of practice for design and construction of foundations in soils:General Requirements.
4	IS : 2131-1981 RA 2016	Method for Standard Penetration Test (SPT) for Soils.
5	IS : 2132-1986 RA 2016	Code of Practice for Thin - Walled tube sampling of Soils.
6	IS : 4464-1985 RA 2019	Code of Practice for presentation of drilling information and core description in foundation investigation.
7	IS : 5313-1980 RA 2019	Guide for core drilling observations.
8	IS :5313-2020	Guide for core drilling observations.
9	IS : 4078-1980 RA2019	Code of Practice for indexing and storage of drill cores.
10	IS : 6926-1996 RA 2015	Diamond core drilling – Site investigation for river valley projects - code of Practice.
11	IS : 6935-1973 RA 2019	Method of determination of water level in a bore hole.
12	IS : 15686:2006 RA 2015	Recommendations for the preparation of Geological and Geotechnical maps for river valley projects.
13	IS : 6403 1981 RA 2016	Code of Practice for Determination of Bearing capacity of shallow foundations
14	IS : 8009 (P-1)-1976 RA 2019	Code of practice for calculation of Settlements of Foundations
15	IS: 12070 - 1987 RA 2020	Code of practice for design and construction of shallow foundations on rocks
16	IS :13365 (P-1) : 1998 RA 2021	Quantitative classificationSystems of rock mass — guidelines
17	IS : 1893 (P-1) 2016	Criteria for Earthquake resistant design of structures.
18	IS : 456- 2000 RA 2016	Plain and Reinforced Concrete-Code of Practice.
19	IRC-78-2024	Standard Specifications and Code of Practice for Road Bridges, Foundation & Substructure
Sr.	BOOK	TITLE
1.	Joseph E. Bowles	Foundation Analysis and Design

APPENDIX – A (FIELD DATA RESULTS)

Appendix No.	ITEMS
A-1	FIELD BOREHOLE LOGS
A-2	SUBSOIL PROFILE DIAGRAM

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984269 m	Easting :576702 m
Reduced Level (m):(+) -	BH. No. :BH-361	BH Depth (m):50
Proposed/Existing Structure :BH-361 (P1022)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	15						
3.5									
4.0									
4.5	4.5	SPT-2	15						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	16	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	18						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	22						
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984269 m	Easting :576702 m
Reduced Level (m):(+) -	BH. No. :BH-361	BH Depth (m):50
Proposed/Existing Structure :BH-361 (P1022)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29						
11.0									
11.5									
12.0	12	SPT-7	32						
12.5									
13.0									
13.5	13.5	SPT-8	30						
14.0									
14.5									
15.0	15	SPT-9	32	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	37						
17.0									
17.5									
18.0	18	SPT-11	42						
18.5									
19.0									
19.5	19.5	SPT-12	47						
20.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984269 m	Easting :576702 m
Reduced Level (m):(+-)	BH. No. :BH-361	BH Depth (m):50
Proposed/Existing Structure :BH-361 (P1022)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	53						
21.5									
22.0									
22.5	22.5	SPT-14	50						
23.0									
23.5									
24.0	24	SPT-15	53						
24.5									
25.0									
25.5	25.5	SPT-16	57	Very Dense, Brownish, Silty Sand	SM				
26.0									
26.5									
27.0	27	SPT-17	58						
27.5									
28.0									
28.5	28.5	SPT-18	61						
29.0									
29.5									
30.0	30	SPT-19	55						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984269 m	Easting :576702 m
Reduced Level (m):(+-)	BH. No. :BH-361	BH Depth (m):50
Proposed/Existing Structure :BH-361 (P1022)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	59	Very Dense, Brownish, Silty Sand	SM				
32.0									
32.5									
33.0	33	SPT-21	64						
33.5									
34.0									
34.5	34.5	SPT-22	72	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.0									
35.5									
36.0	36	SPT-23	80						
36.5									
37.0									
37.5	37.5	SPT-24	87						
38.0									
38.5									
39.0	39	SPT-25	93						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984269 m	Easting :576702 m
Reduced Level (m):(+) -	BH. No. :BH-361	BH Depth (m):50
Proposed/Existing Structure :BH-361 (P1022)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :14-08-2026	Date of Completion :16-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	99						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
45.5	45.5	SPT-29	>100						
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50	SPT-33	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984331 m	Easting :576761 m
Reduced Level (m):(+)-	BH. No. :BH-362	BH Depth (m):50
Proposed/Existing Structure :BH-362 (P1025)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	10						
3.5									
4.0									
4.5	4.5	SPT-2	13						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	15	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	14						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	13						
9.5									
10.0									

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2984331 m	Easting : 576761 m
Reduced Level (m):(+) -	BH. No. : BH-362	BH Depth (m): 50
Proposed/Existing Structure : BH-362 (P1025)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 09-08-2026	Date of Completion : 11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29						
11.0									
11.5									
12.0	12	SPT-7	38						
12.5									
13.0									
13.5	13.5	SPT-8	38						
14.0									
14.5									
15.0	15	SPT-9	40	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	45						
17.0									
17.5									
18.0	18	SPT-11	40						
18.5									
19.0									
19.5	19.5	SPT-12	53	Very Dense, Brownish, Silty Sand	SM				
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984331 m	Easting :576761 m
Reduced Level (m):(+-)	BH. No. :BH-362	BH Depth (m):50
Proposed/Existing Structure :BH-362 (P1025)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	58						
21.5									
22.0									
22.5	22.5	SPT-14	60						
23.0									
23.5									
24.0	24	SPT-15	68						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	70						
26.0									
26.5									
27.0	27	SPT-17	78						
27.5									
28.0									
28.5	28.5	SPT-18	82						
29.0									
29.5									
30.0	30	SPT-19	85						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984331 m	Easting :576761 m
Reduced Level (m):(+-)	BH. No. :BH-362	BH Depth (m):50
Proposed/Existing Structure :BH-362 (P1025)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	88						
32.0									
32.5									
33.0	33	SPT-21	90						
33.5									
34.0									
34.5	34.5	SPT-22	92						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	94						
36.5									
37.0									
37.5	37.5	SPT-24	97						
38.0									
38.5									
39.0	39	SPT-25	99						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984331 m	Easting :576761 m
Reduced Level (m):(+) -	BH. No. :BH-362	BH Depth (m):50
Proposed/Existing Structure :BH-362 (P1025)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100	Very Dense, Brownish, Silty Sand	SM				
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0				Very Dense, Brownish, Silty Sand	SM				
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0									
45.5	45.5	SPT-29	>100	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50	SPT-33	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984450 m	Easting :576768 m
Reduced Level (m):(+-)	BH. No. :BH-363	BH Depth (m):50
Proposed/Existing Structure :BH-363 (P1029)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	8						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	15						
6.5				Loose, Medium Dense, Brownish, Silty Sand	SM				
7.0									
7.5	7.5	SPT-4	19						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	22						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984450 m	Easting :576768 m
Reduced Level (m):(+) -	BH. No. :BH-363	BH Depth (m):50
Proposed/Existing Structure :BH-363 (P1029)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	25	Loose, Medium Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	29						
12.5									
13.0									
13.5	13.5	SPT-8	30						
14.0									
14.5									
15.0	15	SPT-9	34	Medium Dense to Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
15.5									
16.0									
16.5	16.5	SPT-10	37						
17.0									
17.5									
18.0	18	SPT-11	39						
18.5									
19.0									
19.5	19.5	SPT-12	41						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984450 m	Easting :576768 m
Reduced Level (m):(+-)	BH. No. :BH-363	BH Depth (m):50
Proposed/Existing Structure :BH-363 (P1029)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	44						
21.5									
22.0									
22.5	22.5	SPT-14	46						
23.0									
23.5									
24.0	24	SPT-15	49						
24.5									
25.0				Medium Dense to Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
25.5	25.5	SPT-16	52						
26.0									
26.5									
27.0	27	SPT-17	55						
27.5									
28.0									
28.5	28.5	SPT-18	61						
29.0									
29.5									
30.0	30	SPT-19	63						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984450 m	Easting :576768 m
Reduced Level (m):(+-)	BH. No. :BH-363	BH Depth (m):50
Proposed/Existing Structure :BH-363 (P1029)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	66						
32.0									
32.5									
33.0	33	SPT-21	69						
33.5									
34.0									
34.5	34.5	SPT-22	71						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	75						
36.5									
37.0									
37.5	37.5	SPT-24	79						
38.0									
38.5									
39.0	39	SPT-25	84						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984450 m	Easting :576768 m
Reduced Level (m):(+) -	BH. No. :BH-363	BH Depth (m):50
Proposed/Existing Structure :BH-363 (P1029)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	91	Very Dense, Brownish, Silty Sand	SM				
41.0									
41.5									
42.0	42	SPT-27	94						
42.5				Hard, Brownish, Clay Of Low Plasticity	CL				
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0									
45.5	45.5	SPT-29	>100						
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984538 m	Easting :576730 m
Reduced Level (m):(+) -	BH. No. :BH-364	BH Depth (m):50
Proposed/Existing Structure :BH-364 (P1032)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :12-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	14						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	16	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	22						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	29						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984538 m	Easting :576730 m
Reduced Level (m):(+) -	BH. No. :BH-364	BH Depth (m):50
Proposed/Existing Structure :BH-364 (P1032)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :12-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	31						
11.0									
11.5									
12.0	12	SPT-7	38						
12.5									
13.0									
13.5	13.5	SPT-8	36						
14.0									
14.5									
15.0	15	SPT-9	44	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	48						
17.0									
17.5									
18.0	18	SPT-11	49						
18.5									
19.0									
19.5	19.5	SPT-12	49						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984538 m	Easting :576730 m
Reduced Level (m):(+-)	BH. No. :BH-364	BH Depth (m):50
Proposed/Existing Structure :BH-364 (P1032)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :12-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	52						
21.5									
22.0									
22.5	22.5	SPT-14	59						
23.0									
23.5									
24.0	24	SPT-15	61						
24.5									
25.0									
25.5	25.5	SPT-16	69	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
26.0									
26.5									
27.0	27	SPT-17	75						
27.5									
28.0									
28.5	28.5	SPT-18	82						
29.0									
29.5									
30.0	30	SPT-19	87						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984538 m	Easting :576730 m
Reduced Level (m):(+)-	BH. No. :BH-364	BH Depth (m):50
Proposed/Existing Structure :BH-364 (P1032)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :12-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
31.0									
31.5	31.5	SPT-20	93						
32.0									
32.5									
33.0	33	SPT-21	90						
33.5									
34.0									
34.5	34.5	SPT-22	83						
35.0									
35.5				Very Dense, Brownish, Silty Sand	SM				
36.0	36	SPT-23	89						
36.5									
37.0									
37.5	37.5	SPT-24	84						
38.0									
38.5									
39.0	39	SPT-25	88						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984538 m	Easting :576730 m
Reduced Level (m):(+-)	BH. No. :BH-364	BH Depth (m):50
Proposed/Existing Structure :BH-364 (P1032)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :12-08-2026	Date of Completion :14-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	90						
41.0									
41.5									
42.0	42	SPT-27	94						
42.5									
43.0									
43.5	43.5	SPT-28	97						
44.0									
44.5									
45.0				Very Dense, Brownish, Silty Sand	SM				
45.5	45.5	SPT-29	99						
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50	SPT-33	>100						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2984638 m	Easting : 576701 m
Reduced Level (m): (+)-	BH. No. : BH-365	BH Depth (m): 50
Proposed/Existing Structure : BH-365 (P1036)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 09-08-2026	Date of Completion : 11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	16						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	22	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	23						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984638 m	Easting :576701 m
Reduced Level (m):(+) -	BH. No. :BH-365	BH Depth (m):50
Proposed/Existing Structure :BH-365 (P1036)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27						
11.0									
11.5									
12.0	12	SPT-7	30						
12.5									
13.0									
13.5	13.5	SPT-8	36						
14.0									
14.5									
15.0	15	SPT-9	39	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	42						
17.0									
17.5									
18.0	18	SPT-11	45						
18.5									
19.0									
19.5	19.5	SPT-12	47						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984638 m	Easting :576701 m
Reduced Level (m):(+) -	BH. No. :BH-365	BH Depth (m):50
Proposed/Existing Structure :BH-365 (P1036)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	49	Medium Dense to Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	51						
23.0									
23.5									
24.0	24	SPT-15	50						
24.5									
25.0									
25.5	25.5	SPT-16	54						
26.0									
26.5				Very Dense, Brownish, Silty Sand	SM				
27.0	27	SPT-17	57						
27.5									
28.0									
28.5	28.5	SPT-18	64						
29.0									
29.5									
30.0	30	SPT-19	67						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984638 m	Easting :576701 m
Reduced Level (m):(+-)	BH. No. :BH-365	BH Depth (m):50
Proposed/Existing Structure :BH-365 (P1036)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	69						
32.0									
32.5									
33.0	33	SPT-21	74						
33.5									
34.0									
34.5	34.5	SPT-22	81						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	87						
36.5									
37.0									
37.5	37.5	SPT-24	94						
38.0									
38.5									
39.0	39	SPT-25	99						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984638 m	Easting :576701 m
Reduced Level (m):(+) -	BH. No. :BH-365	BH Depth (m):50
Proposed/Existing Structure :BH-365 (P1036)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :09-08-2026	Date of Completion :11-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0				Very Dense, Brownish, Silty Sand	SM				
45.5	45.5	SPT-29	>100						
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984725 m	Easting :576681 m
Reduced Level (m):(+) -	BH. No. :BH-366	BH Depth (m):50
Proposed/Existing Structure :BH-366 (P1039)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

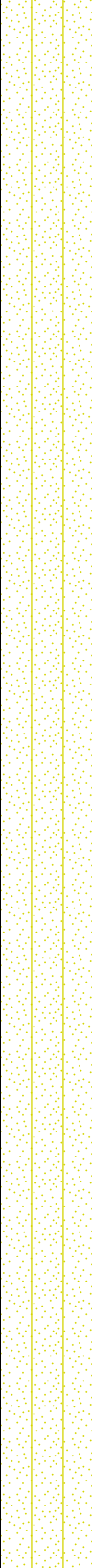
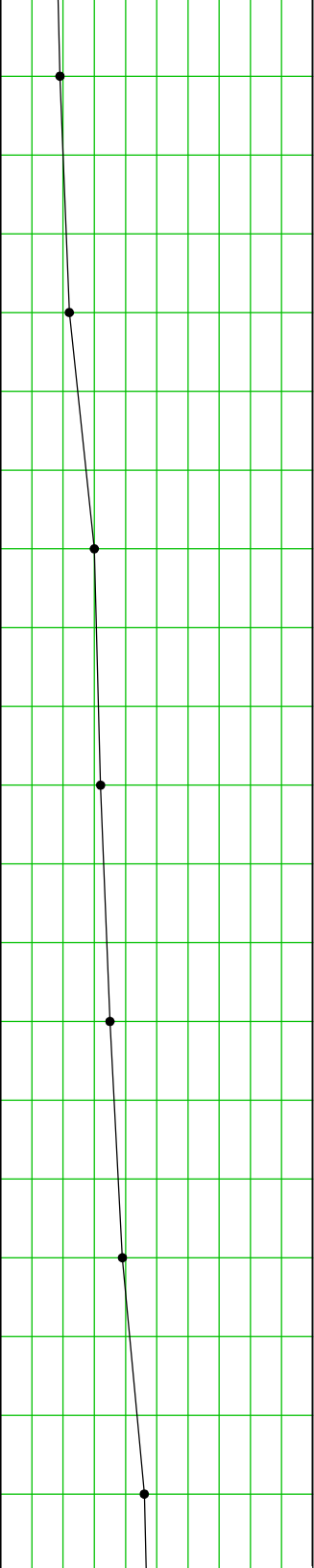
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	8						
3.5									
4.0									
4.5	4.5	SPT-2	11						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	13	Loose , Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	15						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	17						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984725 m	Easting :576681 m
Reduced Level (m):(+) -	BH. No. :BH-366	BH Depth (m):50
Proposed/Existing Structure :BH-366 (P1039)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	19	Loose , Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	22						
12.5									
13.0									
13.5	13.5	SPT-8	30						
14.0									
14.5									
15.0	15	SPT-9	32						
15.5									
16.0									
16.5	16.5	SPT-10	35						
17.0									
17.5									
18.0	18	SPT-11	39						
18.5									
19.0									
19.5	19.5	SPT-12	46						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984725 m	Easting :576681 m
Reduced Level (m):(+-)	BH. No. :BH-366	BH Depth (m):50
Proposed/Existing Structure :BH-366 (P1039)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	48	Loose , Medium Dense to Dense, Brownish, Silty Sand	SM				
21.5									
22.0									
22.5	22.5	SPT-14	51						
23.0									
23.5									
24.0	24	SPT-15	57						
24.5									
25.0									
25.5	25.5	SPT-16	61						
26.0									
26.5				Very Dense, Brownish, Silty Sand	SM				
27.0	27	SPT-17	64						
27.5									
28.0									
28.5	28.5	SPT-18	75						
29.0									
29.5									
30.0	30	SPT-19	77						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984725 m	Easting :576681 m
Reduced Level (m):(+-)	BH. No. :BH-366	BH Depth (m):50
Proposed/Existing Structure :BH-366 (P1039)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	80						
32.0									
32.5									
33.0	33	SPT-21	82						
33.5									
34.0									
34.5	34.5	SPT-22	85						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	89						
36.5									
37.0									
37.5	37.5	SPT-24	92						
38.0									
38.5									
39.0	39	SPT-25	96						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2984725 m	Easting :576681 m
Reduced Level (m):(+) -	BH. No. :BH-366	BH Depth (m):50
Proposed/Existing Structure :BH-366 (P1039)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :07-08-2026	Date of Completion :09-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100	Very Dense, Brownish, Silty Sand	SM				
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0									
45.5	45.5	SPT-29	>100	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50								

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985345 m	Easting :576568 m
Reduced Level (m):(+-)	BH. No. :BH-373	BH Depth (m):50
Proposed/Existing Structure :BH-373 (P1058)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	8						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	11	Loose, Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	13						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	17						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985345 m	Easting :576568 m
Reduced Level (m):(+) -	BH. No. :BH-373	BH Depth (m):50
Proposed/Existing Structure :BH-373 (P1058)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	15						
11.0									
11.5									
12.0	12	SPT-7	17						
12.5									
13.0									
13.5	13.5	SPT-8	13						
14.0									
14.5									
15.0	15	SPT-9	27	Loose, Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	32						
17.0									
17.5									
18.0	18	SPT-11	32						
18.5									
19.0									
19.5	19.5	SPT-12	35						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985345 m	Easting :576568 m
Reduced Level (m):(+-)	BH. No. :BH-373	BH Depth (m):50
Proposed/Existing Structure :BH-373 (P1058)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :05-08-2026	

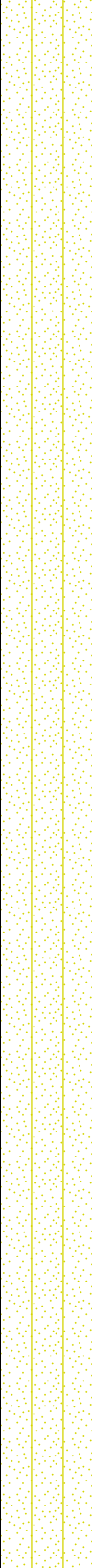
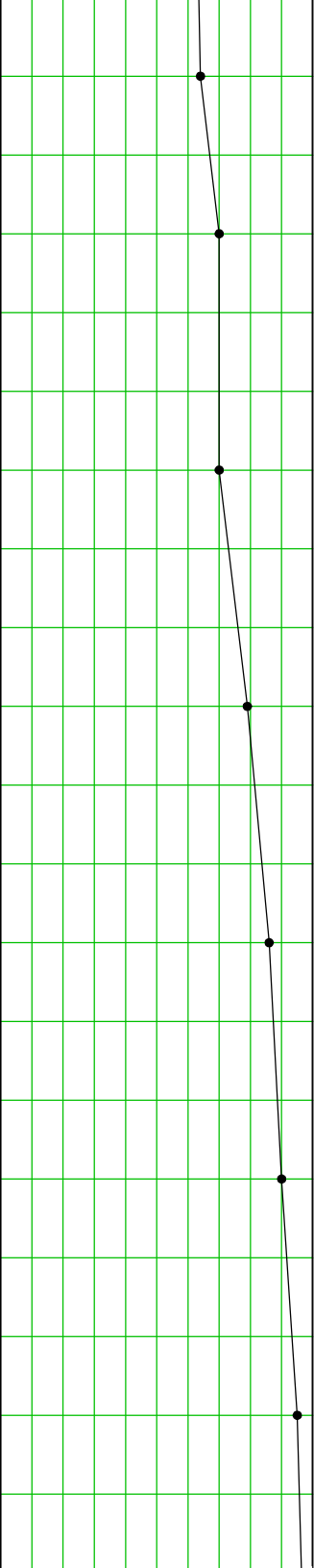
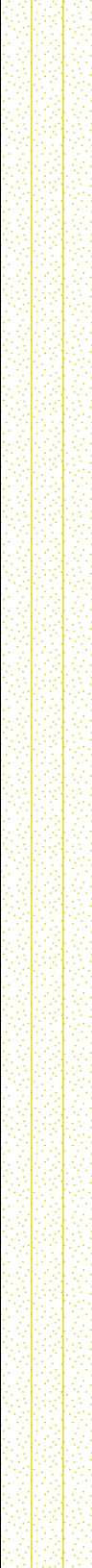
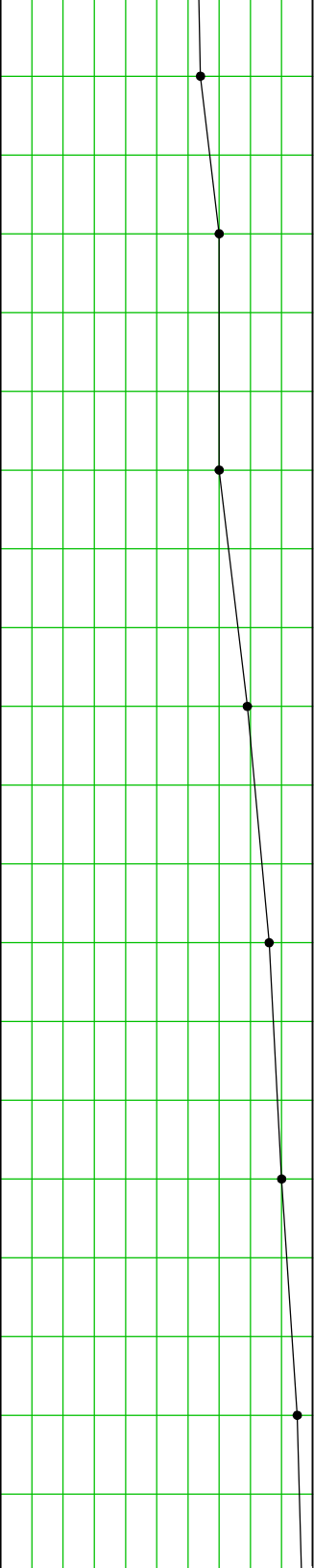
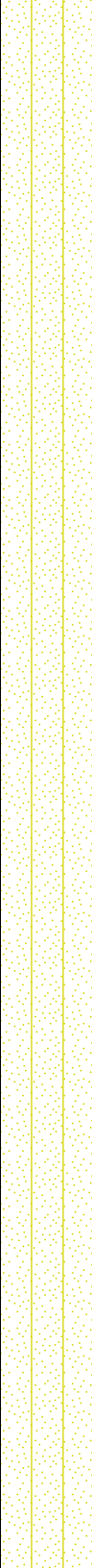
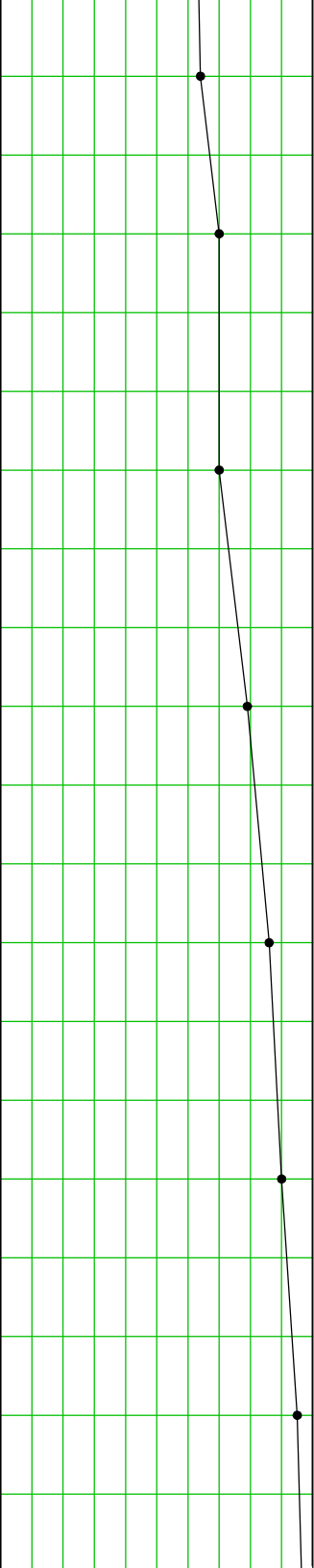
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5				Loose, Medium Dense to Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	42						
21.5									
22.0									
22.5	22.5	SPT-14	42	Very Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0	24	SPT-15	66						
24.5									
25.0									
25.5	25.5	SPT-16	66						
26.0									
26.5									
27.0	27	SPT-17	69						
27.5									
28.0									
28.5	28.5	SPT-18	62						
29.0									
29.5									
30.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985345 m	Easting :576568 m
Reduced Level (m):(+-)	BH. No. :BH-373	BH Depth (m):50
Proposed/Existing Structure :BH-373 (P1058)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5	30.5	SPT-19	64	Very Dense, Brownish, Silty Sand	SM				
31.0									
31.5	31.5	SPT-20	70						
32.0									
32.5									
33.0	33	SPT-21	70						
33.5									
34.0									
34.5	34.5	SPT-22	79	Very Dense, Brownish, Silty Sand	SM				
35.0									
35.5									
36.0	36	SPT-23	86						
36.5									
37.0									
37.5	37.5	SPT-24	90						
38.0									
38.5									
39.0	39	SPT-25	95	Very Dense, Brownish, Silty Sand	SM				
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985345 m	Easting :576568 m
Reduced Level (m):(+) -	BH. No. :BH-373	BH Depth (m):50
Proposed/Existing Structure :BH-373 (P1058)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :04-08-2026	Date of Completion :05-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	97						
41.0									
41.5									
42.0	42	SPT-27	99						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50	SPT-33	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985411 m	Easting :576558 m
Reduced Level (m):(+) -	BH. No. :BH-374	BH Depth (m):50
Proposed/Existing Structure :BH-374 (P1054)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :02-08-2026	Date of Completion :03-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	16						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	22	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	23						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985411 m	Easting :576558 m
Reduced Level (m):(+) -	BH. No. :BH-374	BH Depth (m):50
Proposed/Existing Structure :BH-374 (P1054)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :02-08-2026	Date of Completion :03-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	27						
11.0									
11.5									
12.0	12	SPT-7	20						
12.5									
13.0									
13.5	13.5	SPT-8	30						
14.0									
14.5									
15.0	15	SPT-9	36	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	39						
17.0									
17.5									
18.0	18	SPT-11	42						
18.5									
19.0									
19.5	19.5	SPT-12	42						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985411 m	Easting :576558 m
Reduced Level (m):(+-)	BH. No. :BH-374	BH Depth (m):50
Proposed/Existing Structure :BH-374 (P1054)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :02-08-2026	Date of Completion :03-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	45						
21.5									
22.0									
22.5	22.5	SPT-14	47	Medium Dense to Dense, Brownish, Silty Sand	SM				
23.0									
23.5									
24.0	24	SPT-15	49						
24.5									
25.0									
25.5	25.5	SPT-16	51						
26.0									
26.5									
27.0	27	SPT-17	50						
27.5									
28.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
28.5	28.5	SPT-18	54						
29.0									
29.5									
30.0	30	SPT-19	57						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985411 m	Easting :576558 m
Reduced Level (m):(+-)	BH. No. :BH-374	BH Depth (m):50
Proposed/Existing Structure :BH-374 (P1054)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :02-08-2026	Date of Completion :03-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	64						
32.0									
32.5									
33.0	33	SPT-21	74						
33.5									
34.0									
34.5	34.5	SPT-22	81						
35.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.5									
36.0	36	SPT-23	87						
36.5									
37.0									
37.5	37.5	SPT-24	94						
38.0									
38.5									
39.0	39	SPT-25	99						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985411 m	Easting :576558 m
Reduced Level (m):(+-)	BH. No. :BH-374	BH Depth (m):50
Proposed/Existing Structure :BH-374 (P1054)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :02-08-2026	Date of Completion :03-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985520 m	Easting :576534 m
Reduced Level (m):(+) -	BH. No. :BH-375	BH Depth (m):50
Proposed/Existing Structure :BH-375 (P1065)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	11						
3.5									
4.0									
4.5	4.5	SPT-2	12						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	20	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	24						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	27						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985520 m	Easting :576534 m
Reduced Level (m):(+) -	BH. No. :BH-375	BH Depth (m):50
Proposed/Existing Structure :BH-375 (P1065)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	23						
11.0									
11.5									
12.0	12	SPT-7	28						
12.5									
13.0									
13.5	13.5	SPT-8	30						
14.0									
14.5									
15.0	15	SPT-9	32	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	37						
17.0									
17.5									
18.0	18	SPT-11	41						
18.5									
19.0									
19.5	19.5	SPT-12	43						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985520 m	Easting :576534 m
Reduced Level (m):(+-)	BH. No. :BH-375	BH Depth (m):50
Proposed/Existing Structure :BH-375 (P1065)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	42						
21.5									
22.0									
22.5	22.5	SPT-14	45						
23.0									
23.5									
24.0	24	SPT-15	41						
24.5									
25.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	45						
26.0									
26.5									
27.0	27	SPT-17	48						
27.5									
28.0									
28.5	28.5	SPT-18	49						
29.0									
29.5									
30.0	30	SPT-19	52						

FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2985520 m	Easting : 576534 m
Reduced Level (m):(+)-	BH. No. : BH-375	BH Depth (m): 50
Proposed/Existing Structure : BH-375 (P1065)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 01-08-2026	Date of Completion : 02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	59						
32.0									
32.5									
33.0	33	SPT-21	62						
33.5									
34.0									
34.5	34.5	SPT-22	66						
35.0				Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
35.5									
36.0	36	SPT-23	70						
36.5									
37.0									
37.5	37.5	SPT-24	78						
38.0									
38.5									
39.0	39	SPT-25	90						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2985520 m	Easting :576534 m
Reduced Level (m):(+-)	BH. No. :BH-375	BH Depth (m):50
Proposed/Existing Structure :BH-375 (P1065)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	92						
41.0									
41.5									
42.0	42	SPT-27	99						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50	SPT-33	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989601 m	Easting :576513 m
Reduced Level (m):(+-)	BH. No. :BH-376	BH Depth (m):50
Proposed/Existing Structure :BH-376 (P1068)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled Up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	9						
3.5									
4.0									
4.5	4.5	SPT-2	13						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	15	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	14						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	20						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989601 m	Easting :576513 m
Reduced Level (m):(+) -	BH. No. :BH-376	BH Depth (m):50
Proposed/Existing Structure :BH-376 (P1068)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	22						
11.0									
11.5									
12.0	12	SPT-7	24						
12.5									
13.0									
13.5	13.5	SPT-8	28						
14.0									
14.5									
15.0	15	SPT-9	29	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	31						
17.0									
17.5									
18.0	18	SPT-11	23						
18.5									
19.0									
19.5	19.5	SPT-12	32						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989601 m	Easting :576513 m
Reduced Level (m):(+-)	BH. No. :BH-376	BH Depth (m):50
Proposed/Existing Structure :BH-376 (P1068)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	36						
21.5									
22.0									
22.5	22.5	SPT-14	39						
23.0									
23.5									
24.0	24	SPT-15	36						
24.5									
25.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	32						
26.0									
26.5									
27.0	27	SPT-17	38						
27.5									
28.0									
28.5	28.5	SPT-18	34						
29.0									
29.5									
30.0	30	SPT-19	35						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989601 m	Easting :576513 m
Reduced Level (m):(+)-	BH. No. :BH-376	BH Depth (m):50
Proposed/Existing Structure :BH-376 (P1068)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	38						
32.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
32.5									
33.0	33	SPT-21	46						
33.5									
34.0									
34.5	34.5	SPT-22	50						
35.0									
35.5									
36.0	36	SPT-23	54						
36.5									
37.0									
37.5	37.5	SPT-24	56	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
38.0									
38.5									
39.0	39	SPT-25	62						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2989601 m	Easting :576513 m
Reduced Level (m):(+) -	BH. No. :BH-376	BH Depth (m):50
Proposed/Existing Structure :BH-376 (P1068)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :01-08-2026	Date of Completion :02-08-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	68	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM				
41.0									
41.5									
42.0	42	SPT-27	72						
42.5									
43.0									
43.5	43.5	SPT-28	77						
44.0									
44.5									
45.0	45	SPT-29	84						
45.5									
46.0									
46.5	46.5	SPT-30	90						
47.0									
47.5									
48.0	48	SPT-31	99						
48.5									
49.0									
49.5	49.5	SPT-32	>100						
50.0	50	SPT-33	>100						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987049 m	Easting :576420 m
Reduced Level (m):(+) -	BH. No. :BH-390	BH Depth (m):50
Proposed/Existing Structure :BH-390 (P1112)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	17						
3.5									
4.0									
4.5	4.5	SPT-2	19						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	23	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	27						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	31						
9.5									
10.0									

UDS*-UDS not recovered



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987049 m	Easting :576420 m
Reduced Level (m):(+) -	BH. No. :BH-390	BH Depth (m):50
Proposed/Existing Structure :BH-390 (P1112)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	33						
11.0									
11.5									
12.0	12	SPT-7	37						
12.5									
13.0									
13.5	13.5	SPT-8	41						
14.0									
14.5									
15.0	15	SPT-9	46	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	48						
17.0									
17.5									
18.0	18	SPT-11	44						
18.5									
19.0									
19.5	19.5	SPT-12	49						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987049 m	Easting :576420 m
Reduced Level (m):(+-)	BH. No. :BH-390	BH Depth (m):50
Proposed/Existing Structure :BH-390 (P1112)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
20.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
21.0	21	SPT-13	55						
21.5									
22.0									
22.5	22.5	SPT-14	43						
23.0									
23.5									
24.0	24	SPT-15	48						
24.5									
25.0									
25.5	25.5	SPT-16	53	Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
26.0									
26.5									
27.0	27	SPT-17	61						
27.5									
28.0									
28.5	28.5	SPT-18	58						
29.0									
29.5									
30.0	30	SPT-19	63						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987049 m	Easting :576420 m
Reduced Level (m):(+)-	BH. No. :BH-390	BH Depth (m):50
Proposed/Existing Structure :BH-390 (P1112)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	67						
32.0									
32.5									
33.0	33	SPT-21	69						
33.5									
34.0									
34.5	34.5	SPT-22	73						
35.0				Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
35.5									
36.0	36	SPT-23	78						
36.5									
37.0									
37.5	37.5	SPT-24	82						
38.0									
38.5									
39.0	39	SPT-25	85						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987049 m	Easting :576420 m
Reduced Level (m):(+-)	BH. No. :BH-390	BH Depth (m):50
Proposed/Existing Structure :BH-390 (P1112)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	89						
41.0									
41.5									
42.0	42	SPT-27	92						
42.5									
43.0									
43.5	43.5	SPT-28	95						
44.0									
44.5									
45.0	45	SPT-29	98	Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987175 m	Easting :576434 m
Reduced Level (m):(+)-	BH. No. :BH-391	BH Depth (m):50
Proposed/Existing Structure :BH-391 (P1116)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	14						
3.5									
4.0									
4.5	4.5	SPT-2	17						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	20	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	24						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	26						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987175 m	Easting :576434 m
Reduced Level (m):(+-)	BH. No. :BH-391	BH Depth (m):50
Proposed/Existing Structure :BH-391 (P1116)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	29						
11.0									
11.5									
12.0	12	SPT-7	32						
12.5									
13.0									
13.5	13.5	SPT-8	26						
14.0									
14.5									
15.0	15	SPT-9	30	Medium Dense to Dense, Brownish, Silty Sand	SM				
15.5									
16.0									
16.5	16.5	SPT-10	44						
17.0									
17.5									
18.0	18	SPT-11	48						
18.5									
19.0									
19.5	19.5	SPT-12	52						
20.0				Very Dense, Brownish, Poorly Graded silt mixed with Silt	SP-SM				



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987175 m	Easting :576434 m
Reduced Level (m):(+-)	BH. No. :BH-391	BH Depth (m):50
Proposed/Existing Structure :BH-391 (P1116)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	62						
21.5									
22.0									
22.5	22.5	SPT-14	55						
23.0									
23.5									
24.0	24	SPT-15	57						
24.5									
25.0				Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
25.5	25.5	SPT-16	52						
26.0									
26.5									
27.0	27	SPT-17	61						
27.5									
28.0									
28.5	28.5	SPT-18	65						
29.0									
29.5									
30.0	30	SPT-19	68						



FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2987175 m	Easting : 576434 m
Reduced Level (m):(+)-	BH. No. : BH-391	BH Depth (m): 50
Proposed/Existing Structure : BH-391 (P1116)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 24-07-2026	Date of Completion : 25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	71						
32.0									
32.5									
33.0	33	SPT-21	74						
33.5									
34.0									
34.5	34.5	SPT-22	78						
35.0				Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
35.5									
36.0	36	SPT-23	82						
36.5									
37.0									
37.5	37.5	SPT-24	86						
38.0									
38.5									
39.0	39	SPT-25	89						
39.5									
40.0									

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987175 m	Easting :576434 m
Reduced Level (m):(+) -	BH. No. :BH-391	BH Depth (m):50
Proposed/Existing Structure :BH-391 (P1116)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :24-07-2026	Date of Completion :25-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	93						
41.0									
41.5									
42.0	42	SPT-27	97						
42.5									
43.0									
43.5	43.5	SPT-28	99						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987275 m	Easting :576442 m
Reduced Level (m):(+) -	BH. No. :BH-392	BH Depth (m):50
Proposed/Existing Structure :BH-392 (P1119)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	17						
3.5									
4.0									
4.5	4.5	SPT-2	8						
5.0									
5.5	5.5	UDS-1							
6.0	6	SPT-3	23	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	26						
8.0									
8.5	8.5	UDS-2							
9.0	9	SPT-5	31						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987275 m	Easting :576442 m
Reduced Level (m):(+) -	BH. No. :BH-392	BH Depth (m):50
Proposed/Existing Structure :BH-392 (P1119)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	39	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	38						
12.5									
13.0				Medium Dense to Dense, Brownish, Silty Sand	SM				
13.5	13.5	SPT-8	43						
14.0									
14.5									
15.0	15	SPT-9	40						
15.5				Medium Dense to Dense, Brownish, Silty Sand	SM				
16.0									
16.5	16.5	SPT-10	44						
17.0									
17.5									
18.0	18	SPT-11	49	Medium Dense to Dense, Brownish, Silty Sand	SM				
18.5									
19.0									
19.5	19.5	SPT-12	57						
20.0				Very Dense, Brownish, Poorly Graded Silt mixed with Silt	SP-SM				



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987275 m	Easting :576442 m
Reduced Level (m):(+-)	BH. No. :BH-392	BH Depth (m):50
Proposed/Existing Structure :BH-392 (P1119)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	64						
21.5									
22.0									
22.5	22.5	SPT-14	61						
23.0									
23.5									
24.0	24	SPT-15	84						
24.5									
25.0				Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
25.5	25.5	SPT-16	58						
26.0									
26.5									
27.0	27	SPT-17	63						
27.5									
28.0									
28.5	28.5	SPT-18	69						
29.0									
29.5									
30.0	30	SPT-19	68						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987275 m	Easting :576442 m
Reduced Level (m):(+)-	BH. No. :BH-392	BH Depth (m):50
Proposed/Existing Structure :BH-392 (P1119)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	73						
32.0									
32.5									
33.0	33	SPT-21	67						
33.5									
34.0									
34.5	34.5	SPT-22	80						
35.0				Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM				
35.5									
36.0	36	SPT-23	72						
36.5									
37.0									
37.5	37.5	SPT-24	84						
38.0									
38.5									
39.0	39	SPT-25	78						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987275 m	Easting :576442 m
Reduced Level (m):(+-)	BH. No. :BH-392	BH Depth (m):50
Proposed/Existing Structure :BH-392 (P1119)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)					RQD (%)					(Depth v/s SPT N Value)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
							0	25	50	75	100	0	25	50	75	100	0	10	20	30	40	50	60	70	80	90	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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FIELD BOREHOLE LOG

Project Name : GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km) Client : Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing : 2987385 m	Easting : 576437 m
Reduced Level (m):(+)-	BH. No. : BH-393	BH Depth (m): 50
Proposed/Existing Structure : BH-393 (P1123)	Water Table (m): Not encountered	Inclination : Vertical
Boring type : Rotary	Dia. of Boring : 150 mm	Depth of Casing (m) :-
Date of Start : 22-07-2026	Date of Completion : 23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
0.0		DS-1					0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
0.5									
1.0									
1.5				Filled up Soil	FILL				
2.0									
2.5	2.5	UDS*							
3.0	3	SPT-1	12						
3.5									
4.0									
4.5	4.5	SPT-2	15						
5.0									
5.5	5.5	UDS*							
6.0	6	SPT-3	19	Medium Dense to Dense, Brownish, Silty Sand	SM				
6.5									
7.0									
7.5	7.5	SPT-4	23						
8.0									
8.5	8.5	UDS-1							
9.0	9	SPT-5	28						
9.5									
10.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987385 m	Easting :576437 m
Reduced Level (m):(+-)	BH. No. :BH-393	BH Depth (m):50
Proposed/Existing Structure :BH-393 (P1123)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
10.0							0 25 50 75 100	0 25 50 75 100	0 10 20 30 40 50 60 70 80 90 100
10.5	10.5	SPT-6	33	Medium Dense to Dense, Brownish, Silty Sand	SM				
11.0									
11.5									
12.0	12	SPT-7	37						
12.5				Very Dense, Brownish, Silty Sand	SM				
13.0									
13.5	13.5	SPT-8	43						
14.0									
14.5									
15.0	15	SPT-9	54						
15.5									
16.0									
16.5	16.5	SPT-10	63						
17.0									
17.5									
18.0	18	SPT-11	69						
18.5									
19.0									
19.5	19.5	SPT-12	73						
20.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987385 m	Easting :576437 m
Reduced Level (m):(+-)	BH. No. :BH-393	BH Depth (m):50
Proposed/Existing Structure :BH-393 (P1123)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
20.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
20.5									
21.0	21	SPT-13	77						
21.5									
22.0									
22.5	22.5	SPT-14	80						
23.0									
23.5									
24.0	24	SPT-15	89						
24.5									
25.0				Very Dense, Brownish, Silty Sand	SM				
25.5	25.5	SPT-16	93						
26.0									
26.5									
27.0	27	SPT-17	97						
27.5									
28.0									
28.5	28.5	SPT-18	99						
29.0									
29.5									
30.0	30	SPT-19	99						



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987385 m	Easting :576437 m
Reduced Level (m):(+-)	BH. No. :BH-393	BH Depth (m):50
Proposed/Existing Structure :BH-393 (P1123)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
30.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
30.5									
31.0									
31.5	31.5	SPT-20	>100						
32.0									
32.5									
33.0	33	SPT-21	>100						
33.5									
34.0									
34.5	34.5	SPT-22	>100						
35.0				Very Dense, Brownish, Silty Sand	SM				
35.5									
36.0	36	SPT-23	>100						
36.5									
37.0									
37.5	37.5	SPT-24	>100						
38.0									
38.5									
39.0	39	SPT-25	>100						
39.5									
40.0									



FIELD BOREHOLE LOG

Project Name :GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)Client :Delhi Metro Rail Corporation Ltd

BH Location/Chainage :-	Northing :2987385 m	Easting :576437 m
Reduced Level (m):(+-)	BH. No. :BH-393	BH Depth (m):50
Proposed/Existing Structure :BH-393 (P1123)	Water Table (m):Not encountered	Inclination : Vertical
Boring type :Rotary	Dia. of Boring :150 mm	Depth of Casing (m) :-
Date of Start :22-07-2026	Date of Completion :23-07-2026	

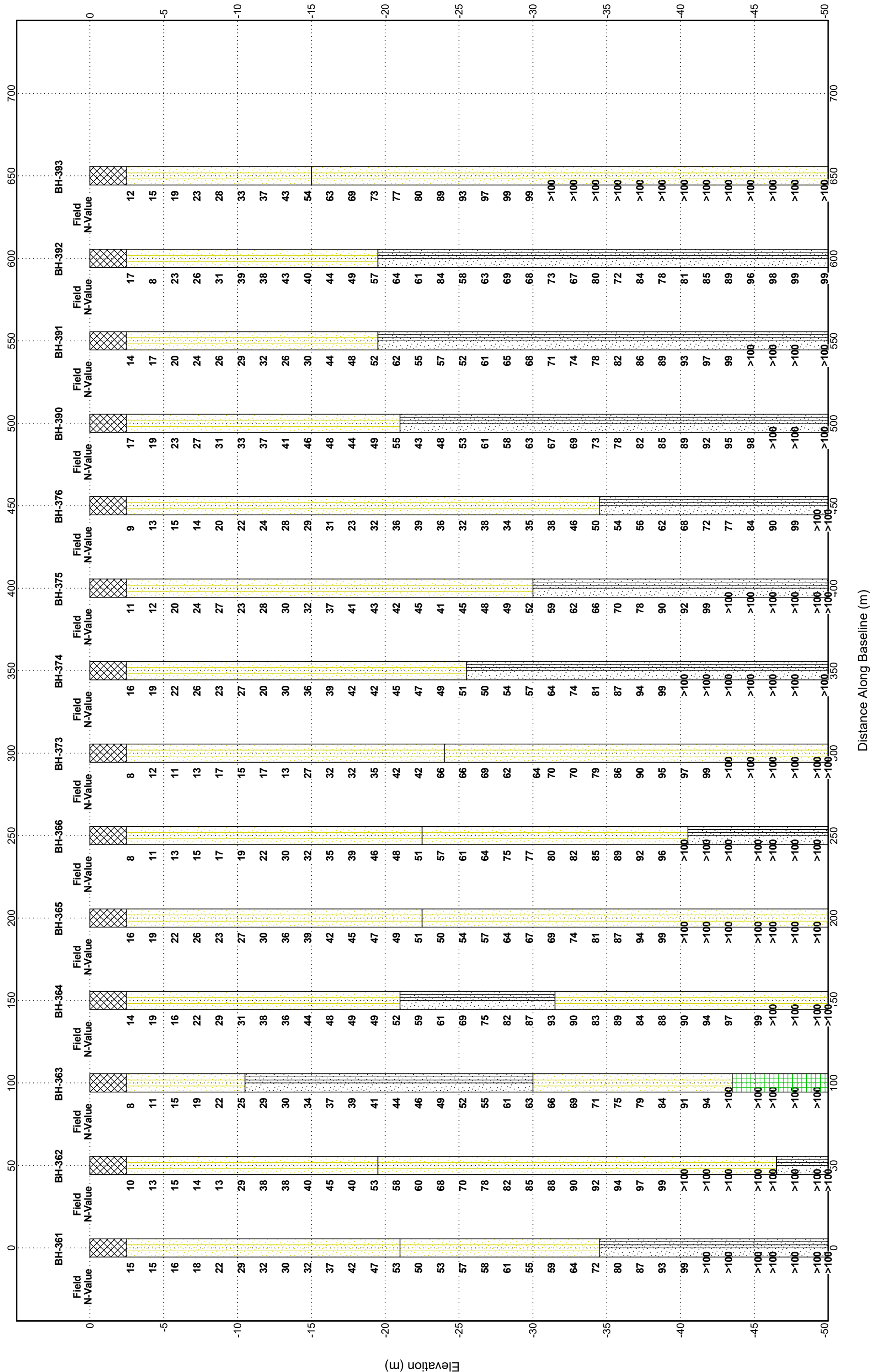
Depth (m)	Sample & In-Situ Test Depth (m)	Sample Type	SPT N Value	Strata Description	IS Classification	Graphic Log	Core Recovery (%)	RQD (%)	(Depth v/s SPT N Value)
40.0							0 25 50 75100	0 25 50 75100	0 10 20 30 40 50 60 70 80 90 100
40.5	40.5	SPT-26	>100						
41.0									
41.5									
42.0	42	SPT-27	>100						
42.5									
43.0									
43.5	43.5	SPT-28	>100						
44.0									
44.5									
45.0	45	SPT-29	>100	Very Dense, Brownish, Silty Sand	SM				
45.5									
46.0									
46.5	46.5	SPT-30	>100						
47.0									
47.5									
48.0	48	SPT-31	>100						
48.5									
49.0									
49.5									
50.0	50	SPT-32	>100						

CLIENT Delhi Metro Rail Corporation Ltd

PROJECT NAME	GTI work for JPR Metro Ph-II, Prahladpura to Todi Mod (Total approximate length -42.8 km)

PROJECT NUMBER SR-1241 25-26

PROJECT LOCATION Jaipur, Rajasthan



APPENDIX – B (LAB TEST RESULTS)

Appendix No.	ITEMS
B-1	SOIL & ROCK CHARACTERISTICS SHEETS
B-2	GSD CURVES

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code			
	14-08-2026		to		16-08-2026		P-1022		BH-361		NOT ENCOUNTERED		50.00 m		576702.000 m		2984269.000 m								-		SR-1241_26-27					
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters				
Clay								Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit					Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)				Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _c)	
DS-1	0.00	-	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	15	18	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	15	16	SM			0	13	84	2	1	0	0	-	NIL	NP	-	1.72	11.50	1.54	2.64	DST+	0.00	29	-	-	-	-	-	-	-	-
UDS*	5.50	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	16	16	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	18	17	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	8.50	-	-	SM			0	16	78	4	2	0	0	-	NIL	NP	-	1.76	11.89	1.57	2.63	DST	0.00	30	-	-	-	-	-	-	-	-
SPT-5	9.00	22	19	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	29	23	SM			0	15	80	3	2	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	32	24	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	30	22	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	32	22	SM			0	17	78	4	1	0	0	-	NIL	NP	-	1.80	12.50	1.60	2.63	DST	0.00	31	-	-	-	-	-	-	-	-
SPT-10	16.50	37	24	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-11	18.00	42	26	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-12	19.50	47	28	SM			0	14	78	5	2	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)" PKG-IV										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %				Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters								
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit					Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)				Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)				
SPT-13	21.00	53	30	Very Dense, Brownish, Silty Sand	SM			0	16	70	8	4	2	0	-	NIL	NP	-	1.83	13.00	1.62	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	50	-		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-15	24.00	53	27		SM			0	17	75	5	2	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-16	25.50	57	28		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-17	27.00	58	28		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-18	28.50	61	28		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	30.00	55	25		SM			0	14	78	6	2	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-20	31.50	59	27		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-21	33.00	64	29		-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-22	34.50	72	33	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM	0	11	85	1	3	0	0	-	NIL	NP	-	1.88	13.50	1.66	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-		
SPT-23	36.00	80	37		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-24	37.50	87	40		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-25	39.00	93	43		SP-SM	0	7	91	1	0	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-26	40.50	99	46		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-27	42.00	>100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-28	43.50	>100	-		SP-SM	0	12	85	2	1	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-29	45.50	>100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-30	46.50	>100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-31	48.00	>100	-		SP-SM	0	10	80	7	2	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-32	49.50	>100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-33	50.00	>100	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code				
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)	
								Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)			Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)									
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-1	3.00	10	12		SM		0	19	72	0	1	0	8	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	13	14		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	5.50	-	-		SM		0	29	68	2	1	0	0	NIL	NP	-	1.71	1.53	2.64	DST	0.00	29	-	-	-	-	-	-	-	-	-	-
	SPT-3	6.00	15	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	14	13		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-2	8.50	-	-		SM		0	15	85	0	0	0	0	NIL	NP	1.70	1.52	2.63	DST	0.00	29	-	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	13	11		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	29	23		SM		0	20	75	2	2	1	0	NIL	NP	1.78	1.58	2.62	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-
	SPT-7	12.00	38	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	38	27		SM		0	15	79	1	1	4	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-9	15.00	40	27		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-10	16.50	45	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-11	18.00	40	25	SM		0	16	80	2	1	1	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	53	31	SM		0	26	67	4	2	1	0	NIL	NP	1.84	1.63	2.61	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-	
	SPT-13	21.00	58	33	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	60	32	Very Dense, Brownish, Silty Sand			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-15	24.00	68	35		SM		0	18	69	0	0	1	12	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-16	25.50	70	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS+ - Undisturbed Sample, UDS* - UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)					R.L.	Ref. Code						
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Dry Density (g/cm ³)		Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters					
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)		Natural Moisture Content (%)	Type of Test	Cohesion C (kg/cm ²)				Angle of Friction (φ°)					
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	2.50	-	-	Loose, Medium Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-1	3.00	8	10		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	11	12		SM		0	14	86	0	0	0	0	-	NIL	NP	-	1.71	11.50	1.53	2.64	DST+	0.00	29	-	-	-	-	-	-	
	UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-3	6.00	15	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-4	7.50	19	17		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	8.50	-	-		SM		0	17	80	2	1	0	0	-	NIL	NP	-	1.76	12.15	1.57	2.64	DST	0.00	30	-	-	-	-	-	-	
	SPT-5	9.00	22	19		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	25	20		SP-SM		0	12	81	0	1	6	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-7	12.00	29	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-8	13.50	30	22	Medium Dense to Very Dense, Brownish, Poorly Graded Sand with Silt	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	34	23		SP-SM		0	6	88	1	1	4	0	-	NIL	NP	-	1.82	12.50	1.62	2.63	DST+	0.00	31	-	-	-	-	-	-	
	SPT-10	16.50	37	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	39	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	41	24		SP-SM		0	10	87	3	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-13	21.00	44	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-14	22.50	46	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-15	24.00	49	25		SP-SM		0	11	86	3	0	0	0	-	NIL	NP	-	1.85	13.00	1.64	2.62	DST+	0.00	32	-	-	-	-	-	-	
	SPT-16	25.50	52	26	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code						
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				NOT ENCOUNTERED		50.00 m		576768.000 m						2984450.000 m		-			
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)		Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)
	SPT-17	27.00	55	26	Medium Dense to Very Dense, Brownish, Poorly Graded Sand with Silt	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-18	28.50	61	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-19	30.00	63	29	Very Dense, Brownish, Silty Sand	SM		0	37	62	1	0	0	0	NIL	NP	-	1.87	13.50	1.65	2.61	DST+	0.00	32	-	-	-	-	-	-	-	-	
	SPT-20	31.50	66	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-21	33.00	69	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-22	34.50	71	33		SM		0	34	53	4	3	6	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-23	36.00	75	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-24	37.50	79	36		SM		0	27	48	4	0	0	21	NIL	NP	-	1.89	14.00	1.66	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-	
	SPT-25	39.00	84	39	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-26	40.50	91	42	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-27	42.00	94	94	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-28	43.50	>100	-	Hard, Brownish, Clay Of Low Plasticity	CL		13	44	36	2	2	3	0	21	11	-	2.03	1.67	2.68	UUT+	3.00	6	-	-	-	-	-	-	-	-	-	-
	SPT-29	45.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-30	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-31	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-32	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)”PKG-IV						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code												
	12-08-2026		to		14-08-2026		P-1032		BH-364		NOT ENCOUNTERED		50.00 m	576730.000 m		2984538.000 m		-	SR-1241_26-27												
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Shear Strength			Consolidation Parameters														
							Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)
DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	14	17		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	19	21		SM		-	0	16	81	3	0	0	0	0	NP	-	1.74	12.00	1.55	2.63	DST+	0.00	29	-	-	-	-	-	-	-
UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-3	6.00	16	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	22	20		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	8.50	-	-		SM		-	0	15	76	6	2	1	0	NIL	NP	-	1.77	12.65	1.57	2.63	DST	0.00	30	-	-	-	-	-	-	-
SPT-5	9.00	29	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	31	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	38	29		SM		-	0	19	78	2	0	1	0	NIL	NP	-	1.82	13.00	1.61	2.62	DST+	0.00	31	-	-	-	-	-	-	-
SPT-8	13.50	36	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	44	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	48	31		SM		-	0	31	63	2	1	3	0	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-11	18.00	49	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-12	19.50	49	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todli Mod (Total approximate length -42.8 km)”PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code				
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %				NOT ENCOUNTERED		50.00 m		576730.000 m						2984538.000 m		-	SR-1241_26-27			
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)			Void Ratio (e ₀)	Pressure (kg/cm²)	C _y x 10 ⁻⁴ (cm²/Sec)
SPT-13	21.00	52	29		Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM		0	12	81	4	3	0	0	-	NIL	NP	-	1.84	13.50	1.62	2.62	DST+	0.00	32	-	-	-	-	-	-	-	
SPT-14	22.50	59	32			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	61	31			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-16	25.50	69	34			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-17	27.00	75	36			SP-SM		0	11	83	5	1	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-18	28.50	82	38			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	30.00	87	40			-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-20	31.50	93	43		SM		0	20	79	1	0	0	0	0	-	NIL	NP	-	1.89	14.00	1.66	2.61	DST+	0.00	33	-	-	-	-	-	-	-	
SPT-21	33.00	90	41		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-22	34.50	83	38		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-23	36.00	89	41		SM		0	19	78	2	1	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-24	37.50	84	39		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-25	39.00	88	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-26	40.50	90	41		SM		0	20	72	5	2	1	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-27	42.00	94	43		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	43.50	97	45		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	45.50	99	46		SM		0	19	68	8	3	2	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-33	50.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV						Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)				R.L.	Ref. Code														
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %		Shear Strength		Free Swell Index (%)		Swelling Pressure (kg/cm ²)		Permeability (cm/sec)	Consolidation Parameters												
								Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)				
DS-1	0.00	-	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	2.50	-	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-1	3.00	16	20	SM			0	20	75	5	0	0	0	0	NP	-	1.70	11.00	1.53	2.63	DST+	0.00	29	-	-	-	-	-	-	-	-	-	
SPT-2	4.50	19	21	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	5.50	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-3	6.00	22	22	SM			0	24	73	3	0	0	0	0	NP	-	1.74	11.50	1.56	2.62	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	26	24	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	8.50	-	-	SM			0	28	70	2	0	0	0	0	NP	-	1.77	11.88	1.58	2.62	DST	0.00	30	-	-	-	-	-	-	-	-	-	-
SPT-5	9.00	23	20	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-6	10.50	27	22	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-7	12.00	30	23	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-8	13.50	36	26	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-9	15.00	39	27	SM			0	23	76	1	0	0	0	0	NP	-	1.79	12.00	1.60	2.61	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	42	27	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	45	28	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-12	19.50	47	28	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-13	21.00	49	28	SM		0	46	54	0	0	0	0	0	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm³)		Natural Moisture Content (%)		Dry Density (g/cm³)		Specific Gravity		Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm²)			Permeability (cm/sec)			Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	SPT-14	22.50	51	28	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table			Termination Depth		Coordinates (E,N)						R.L.		Ref. Code		
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				NOT ENCOUNTERED			50.00 m		576681.000 m						-		SR-1241_26-27	
								Silt		Sand		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)
	DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS*	2.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-1	3.00	8	10		SM		0	13	85	1	0	1	0	-	NIL	NP	-	1.65	11.50	1.48	2.64	DST+	0.00	28	-	-	-	-	-	-	
	SPT-2	4.50	11	12		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-3	6.00	13	13		SM		0	13	84	1	1	1	0	-	NIL	NP	-	1.70	12.00	1.52	2.63	DST+	0.00	29	-	-	-	-	-	-	
	SPT-4	7.50	15	14		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	8.50	-	-		SM		0	20	75	3	2	0	0	-	NIL	NP	-	1.74	12.14	1.55	2.62	DST+	0.00	30	-	-	-	-	-	-	
	SPT-5	9.00	17	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	19	15		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-7	12.00	22	17		SM		0	17	80	3	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-8	13.50	30	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	32	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-10	16.50	35	23	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-11	18.00	39	24	SM		0	17	76	7	0	0	0	-	NIL	NP	-	1.81	12.50	1.61	2.62	DST+	0.00	31	-	-	-	-	-	-		
	SPT-12	19.50	46	27	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-13	21.00	48	27	SM		0	18	77	5	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code			
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)
								Clay	Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit															
	SPT-14	22.50	51	28	Very Dense, Brownish, Silty Sand	SM		0	24	65	10	1	0	0	-	NIL	NP	1.84	1.63	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-
	SPT-15	24.00	57	30		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-16	25.50	61	31		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-17	27.00	64	31		SM		0	17	76	7	0	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-18	28.50	75	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-19	30.00	77	35		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-20	31.50	80	37		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-21	33.00	82	38		SM		0	20	74	4	2	0	0	0	-	NIL	NP	1.87	1.65	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-
	SPT-22	34.50	85	39		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-23	36.00	89	41		SM		0	19	77	4	0	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-24	37.50	92	42		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-25	39.00	96	44		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-26	40.50	>100	-	Very Dense, Brownish, Poorly Graded Sand with Silt	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-27	42.00	>100	-		SP-SM		0	8	91	1	0	0	0	0	-	NIL	NP	1.90	1.67	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-
	SPT-28	43.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-29	45.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-30	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-31	48.00	>100	-		SP-SM		0	10	90	0	0	0	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-32	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
 D8-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)		Natural Moisture Content (%)		Dry Density (g/cm ³)		Specific Gravity		Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm ²)			Permeability (cm/sec)			Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	SPT-15	24.00	66	35	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)				R.L.	Ref. Code													
	Date of Boring		to		03-08-2026		P-1054		BH-374				NOT ENCOUNTERED		50.00 m		576558.000 m		2985411.000 m				-	SR-1241_26-27											
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Consolidation Parameters											
							Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit					Plastic Limit	Plasticity Index	Shrinkage Limit				Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm²/Kg)	Compression Index (C _p)				
DS-1	0.00	-	-	Filled Up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
SPT-1	3.00	16	20		SM		0	16	65	15	4	0	0	0	1.73	11.50	1.55	2.63	DST+	0.00	29	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-2	4.50	19	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-3	6.00	22	22		SM		0	20	65	10	5	0	0	0	1.75	12.00	1.56	2.63	DST+	0.00	29	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-4	7.50	26	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	8.50	-	-		SM		0	19	66	8	7	0	0	0	1.76	12.14	1.57	2.62	DST	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-5	9.00	23	20		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-6	10.50	27	22		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-7	12.00	20	15		SM		0	14	63	17	6	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-8	13.50	30	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-9	15.00	36	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-10	16.50	39	25		SM		0	17	62	13	7	1	0	0	1.82	12.50	1.62	2.61	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-11	18.00	42	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-12	19.50	42	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-13	21.00	45	25	SM		0	20	58	12	7	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	47	25			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	49	25	SM		0	24	55	9	6	4	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Date of Boring		Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code										
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained							Atterberg Limits %				Shear Strength			Free Swell Index (%)					Swelling Pressure (kg/cm ²)		Permeability (cm/sec)							
								Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)											
	SPT-16	25.50	51	25	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM		0	12	60	18	6	2	2	-	NIL	NP	-	1.84	13.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-17	27.00	50	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-18	28.50	54	25		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-19	30.00	57	26		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-20	31.50	64	29		SP-SM		0	11	62	11	11	3	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-21	33.00	74	34		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-22	34.50	81	37		SP-SM		0	11	64	9	10	4	2	-	NIL	NP	-	1.88	13.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-23	36.00	87	40		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-24	37.50	94	43		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-25	39.00	99	46		SP-SM		0	8	59	18	6	5	4	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-26	40.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-27	42.00	>100	-		SP-SM		0	6	61	16	8	5	4	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-28	43.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-29	45.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-30	46.50	>100	-		SP-SM		0	9	57	16	7	8	3	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-31	48.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-32	50.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"										Soil Description	IS Classification	IS Symbol	Date of Boring						Chainage/Location	B.H. No.	Depth of Water Table			Termination Depth		Coordinates (E,N)						R.L.	Ref. Code	
	01-08-2026		to		02-08-2026		P-1065		BH-375					NOT ENCOUNTERED			50.00 m		576534.000 m			2985520.000 m		-		SR-1241_26-27									
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Grain Size Distribution % wt retained	Liquid Limit			Plasticity Index					Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test			Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _p)				
Clay						Silt	Fine	Medium	Coarse	Fine	Coarse																								
DS-1	0.00	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	11	14		0	24	70	5	1	0	0	-	NIL	NP	-	1.68	11.00	1.51	2.64	DST+	0.00	29	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	12	13		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	5.50	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-3	6.00	20	20		0	22	72	4	1	1	0	-	NIL	NP	-	1.73	11.50	1.55	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	24	22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS-1	8.50	-	-		0	17	74	3	2	2	2	-	NIL	NP	-	1.76	11.88	1.57	2.63	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-5	9.00	27	23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-6	10.50	23	19		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-7	12.00	28	21		0	21	68	5	2	2	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-8	13.50	30	22		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-9	15.00	32	22		0	16	66	7	6	2	3	-	NIL	NP	-	1.80	12.50	1.60	2.62	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	37	24		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-11	18.00	41	25		0	21	69	4	2	2	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-12	19.50	43	25		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-13	21.00	42	24		0	17	70	6	2	2	3	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-14	22.50	45	24		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-15	24.00	41	21		0	15	68	8	3	3	3	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-16	25.50	45	23		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code									
	Date of Boring		Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)											
	01-08-2026	to 02-08-2026	P-1065	BH-375	NOT ENCOUNTERED	50.00 m	576534.000 m	2985520.000 m	Type of Test	Cohesion C (kg/cm²)							Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm²)						C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _p)						
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Clay	Silt	Fine	Medium	Coarse	Fine	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm²)	C _v x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)	Compression Index (C _p)	
SPT-17	27.00	48	23	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SPT-18	28.50	49	23		SM			0	15	67	9	2	4	3	-	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	30.00	52	24	Very Dense, Brownish, Poorly Graded Sand with Silt	SP-SM		0	9	68	10	8	3	2	-	NIL	NP	-	1.84	13.00	1.63	2.61	DST+	0.00	32	-	-	-	-	-	-	-	-	
SPT-20	31.50	59	27		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-21	33.00	62	29		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-22	34.50	66	30		SP-SM		0	7	65	12	7	5	4	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-23	36.00	70	32		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-24	37.50	78	36		SP-SM		0	8	60	15	9	6	2	-	NIL	NP	-	1.87	13.50	1.65	2.61	DST+	0.00	33	-	-	-	-	-	-	-	-	
SPT-25	39.00	90	41		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-26	40.50	92	42		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-27	42.00	99	46		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-28	43.50	>100	-		SP-SM		0	8	58	16	10	5	3	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	45.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-30	46.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-31	48.00	>100	-		SP-SM		0	9	55	14	11	7	4	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-32	49.50	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-33	50.00	>100	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"										Soil Description	IS Classification	IS Symbol	Date of Boring						Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code
	01-08-2026		to		02-08-2026		P-1068		BH-376					NOT ENCOUNTERED		50.00 m		576513.000 m				2989601.000 m											
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Grain Size Distribution % wt retained				Atterberg Limits %					Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength				Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _p)				
Clay					Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit					Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)													
DS-1	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
UDS*	2.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-1	3.00	9	11	0	14	70	11	5	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-2	4.50	13	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
UDS-1	5.50	-	-	0	23	62	10	5	0	0	-	NIL	NP	-	1.71	11.74	1.53	2.64	DST	0.00	29	-	-	-	-	-	-	-	-				
SPT-3	6.00	15	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-4	7.50	14	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
UDS-2	8.50	-	-	0	28	56	12	4	0	0	-	NIL	NP	-	1.76	12.00	1.57	2.63	DST	0.00	30	-	-	-	-	-	-	-	-				
SPT-5	9.00	20	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-6	10.50	22	18	0	23	57	14	5	1	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-7	12.00	24	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-8	13.50	28	20	0	28	56	9	5	2	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-9	15.00	29	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-10	16.50	31	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-11	18.00	23	14	0	16	60	15	6	3	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-12	19.50	32	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-13	21.00	36	20	0	19	57	11	7	4	2	-	NIL	NP	-	1.80	12.50	1.60	2.63	DST+	0.00	31	-	-	-	-	-	-	-	-				
SPT-14	22.50	39	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-15	24.00	36	19	0	14	57	17	6	4	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SPT-16	25.50	32	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)"										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code								
	01-08-2026		to		02-08-2026		P-1068		BH-376				NOT ENCOUNTERED		50.00 m		576513.000 m		2989601.000 m													
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %			Type of Test	Shear Strength		Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)			Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _p)				
Clay								Silt	Fine	Medium	Coarse	Gravel	Liquid Limit	Plastic Limit	Plasticity Index		Shrinkage Limit	Bulk Density (g/cm ³)					Natural Moisture Content (%)	Dry Density (g/cm ³)					Specific Gravity	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	
SPT-17	27.00	38	18	Medium Dense to Dense, Brownish, Silty Sand	-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SPT-18	28.50	34	16		0							16	65	8	6	5	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-
SPT-19	30.00	35	16		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-20	31.50	38	17		0							13	56	13	11	5	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-
SPT-21	33.00	46	21		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-22	34.50	50	23	Very Dense, Brownish, Poorly Graded Sand with Silt	-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SPT-23	36.00	54	25		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-24	37.50	56	26		0							6	57	17	10	7	3	-	NIL	NP	-	1.84	13.00	1.63	2.61	DST+	0.00	32	-	-	-	
SPT-25	39.00	62	29		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-26	40.50	68	31		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-27	42.00	72	33		0							9	62	14	9	4	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-
SPT-28	43.50	77	35		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-29	45.00	84	39		SP-SM							-	NP	-	1.88	13.50	1.66	2.61	DST+	0.00	33	-	-	-	-	-						
SPT-30	46.50	90	41		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-31	48.00	99	46		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-32	49.50	>100	-		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-33	50.00	>100	-		-							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length ~42.8 km)”										Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Date of Boring		24-07-2026		to		25-07-2026		P-1112		BH-390		NOT ENCOUNTERED		50.00 m		576420.000 m		2987049.000 m				-		SR-1241_26-27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Sand								Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Type of Test	Cohesion C (kg/cm²)	Angle of Friction (φ°)	Void Ratio (e ₀)					Pressure (kg/cm²)	C _y x 10 ⁻⁴ (cm²/Sec)	M _v x 10 ⁻² (cm³/Kg)				Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
DS-1	0.00	-	-	Filled up Soil	-		-	-	-									-	-	-	-				-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code								
	Date of Boring		Grain Size Distribution % wt retained						Atterberg Limits %				576420.000 m			2987049.000 m															
	24-07-2026	to 25-07-2026	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit			Plasticity Index	Shrinkage Limit		Bulk Density (g/cm³)	Natural Moisture Content (%)	Dry Density (g/cm³)	Specific Gravity	Type of Test	Cohesion C (kg/cm²)			Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm²)	Permeability (cm/sec)	Void Ratio (e₀)	Pressure (kg/cm²)	C _y x 10⁴ (cm²/Sec)	M _v x 10² (cm²/Kg)
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description										IS Classification	IS Symbol																
SPT-13	21.00	55	31											SP-SM																	
SPT-14	22.50	43	23											-																	
SPT-15	24.00	48	25											-																	
SPT-16	25.50	53	26											SP-SM																	
SPT-17	27.00	61	29											-																	
SPT-18	28.50	58	27											-																	
SPT-19	30.00	63	29											SP-SM																	
SPT-20	31.50	67	31											-																	
SPT-21	33.00	69	32											-																	
SPT-22	34.50	73	34											SP-SM																	
SPT-23	36.00	78	36											-																	
SPT-24	37.50	82	38											-																	
SPT-25	39.00	85	39											SP-SM																	
SPT-26	40.50	89	41											-																	
SPT-27	42.00	92	42											-																	
SPT-28	43.50	95	44											SP-SM																	
SPT-29	45.00	98	45											-																	
SPT-30	46.50	>100	-											-																	
SPT-31	48.00	>100	-											-																	
SPT-32	50.00	>100	-											-																	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	Date of Boring					Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth	Coordinates (E,N)						R.L.	Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	24-07-2026		to	25-07-2026	P-1116			BH-391	NOT ENCOUNTERED		50.00 m	576434.000 m		2987175.000 m																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Clay	Silt	Grain Size Distribution % wt retained									Atterberg Limits %			Bulk Density (g/cm ³)	Natural Moisture Content (%)			Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
IS Classification			IS Symbol	Soil Description	Corrected SPT Value (N _c)	Observed SPT Value (N)	Depth from G.L. (m)	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)			Specific Gravity	Type of Test									Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _p x 10 ⁻⁴ (cm ³ /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _c)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

Abbreviations:-
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SOIL CHARACTERISTICS

[illegible]

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test; DST+ - Direct Shear Test on Remoulded Sample, UUT+ - Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Toddi Mod (Total approximate length -42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code						
	22-07-2026		to		23-07-2026		P-1119		BH-392				NOT ENCOUNTERED		50.00 m		576442.000 m		2987275.000 m											
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained					Atterberg Limits %			Shear Strength			Free Swell Index (%)		Swelling Pressure (kg/cm ²)	Permeability (cm/sec)			Consolidation Parameters					
Clay								Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)			Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)
DS-1	0.00	-	-	-	Filled up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UDS*	2.50	-	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SPT-1	3.00	17	21	SM			0	41	54	5	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-2	4.50	8	9	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-1	5.50	-	-	SM			0	15	60	18	7	0	0	-	1.70	10.58	1.54	2.63	DST	0.00	29	-	-	-	-	-	-	-	-	-
SPT-3	6.00	23	23	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-4	7.50	26	24	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UDS-2	8.50	-	-	SM			0	25	59	9	7	0	0	-	1.75	11.21	1.57	2.62	DST	0.00	30	-	-	-	-	-	-	-	-	-
SPT-5	9.00	31	27	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-6	10.50	39	31	SM			0	27	55	13	5	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-7	12.00	38	29	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-8	13.50	43	31	SM			0	26	58	8	6	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-9	15.00	40	27	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-10	16.50	44	29	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPT-11	18.00	49	31	SM			0	27	55	14	0	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS*-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	“Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todli Mod (Total approximate length -42.8 km)”										Chainage/Location	B.H. No.	Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.	Ref. Code								
	Date of Boring		to		23-07-2026		P-1119		BH-392				NOT ENCOUNTERED		50.00 m		576442.000 m		2987275.000 m		-	SR-1241_26-27										
Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained				Atterberg Limits %			Grain Size Distribution % wt retained			Shear Strength			Free Swell Index (%)			Swelling Pressure (kg/cm ²)		Permeability (cm/sec)		Consolidation Parameters					
							Clay	Silt	Fine	Medium	Coarse	Fine	Coarse	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Type of Test	Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)
SPT-12	19.50	57	34	Very Dense, Brownish, Poorly Graded mixed with Silt	SP-SM																											
SPT-13	21.00	64	36		-																											
SPT-14	22.50	61	33		-																											
SPT-15	24.00	84	44		SP-SM																											
SPT-16	25.50	58	29		-																											
SPT-17	27.00	63	30		-																											
SPT-18	28.50	69	32		SP-SM																											
SPT-19	30.00	68	31		-																											
SPT-20	31.50	73	34		-																											
SPT-21	33.00	67	31		-																											
SPT-22	34.50	80	37		SP-SM																											
SPT-23	36.00	72	33		-																											
SPT-24	37.50	84	39		SP-SM																											
SPT-25	39.00	78	36		-																											
SPT-26	40.50	81	37		-																											
SPT-27	42.00	85	39		SP-SM																											
SPT-28	43.50	89	41	-																												
SPT-29	45.00	96	44	-																												
SPT-30	46.50	98	45	SP-SM																												
SPT-31	48.00	99	46	-																												
SPT-32	50.00	99	46	-																												

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code							
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				Bulk Density (g/cm ³)	Natural Moisture Content (%)	Dry Density (g/cm ³)	Specific Gravity	Shear Strength			Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Consolidation Parameters								
								Clay	Silt	Fine	Medium	Coarse	Gravel		Liquid Limit	Plastic Limit	Plasticity Index					Shrinkage Limit	Type of Test	Cohesion C (kg/cm ²)				Angle of Friction (φ°)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _y x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ³ /Kg)	Compression Index (C _c)			
	DS-1	0.00	-	-	Filled up Soil	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	UDS*	2.50	-	-	Medium Dense to Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	SPT-1	3.00	12	15		SM		-	0	13	60	17	7	3	0	-	NIL	NP	-	1.69	10.50	1.53	2.64	DST+	0.00	29	-	-	-	-	-	-	-	-	-	
	SPT-2	4.50	15	16		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS*	5.50	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-3	6.00	19	19		SM		-	0	29	51	12	5	3	0	-	NIL	NP	-	1.72	11.00	1.55	2.64	DST+	0.00	30	-	-	-	-	-	-	-	-	-	-
	SPT-4	7.50	23	21		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	UDS-1	8.50	-	-		SM		-	0	22	61	10	7	0	0	-	NIL	NP	-	1.75	11.45	1.57	2.63	DST+	0.00	31	-	-	-	-	-	-	-	-	-	-
	SPT-5	9.00	28	24		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-6	10.50	33	27		SM		-	0	26	57	15	2	0	0	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-7	12.00	37	28		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	SPT-8	13.50	43	31	SM		-	0	22	60	13	2	2	1	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-9	15.00	54	37	SM		-	0	15	55	18	8	2	2	-	NIL	NP	-	1.83	12.00	1.63	2.62	DST+	0.00	32	-	-	-	-	-	-	-	-	-	-	-
	SPT-10	16.50	63	41	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-11	18.00	69	43	SM		-	0	19	53	18	5	3	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-12	19.50	73	43	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-13	21.00	77	43	SM		-	0	30	56	6	5	2	1	-	NIL	NP	-	1.87	12.50	1.66	2.62	DST+	0.00	33	-	-	-	-	-	-	-	-	-	-	-
	SPT-14	22.50	80	43	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-15	24.00	89	46	SM		-	0	14	60	15	5	4	2	-	NIL	NP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SPT-16	25.50	93	46	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

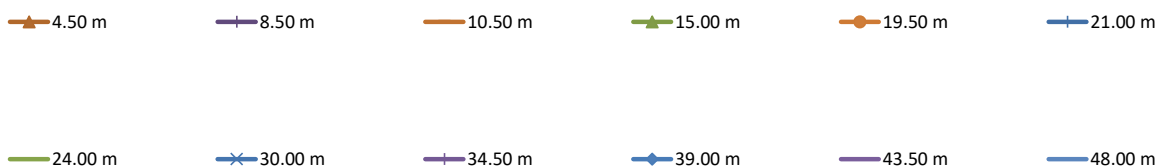
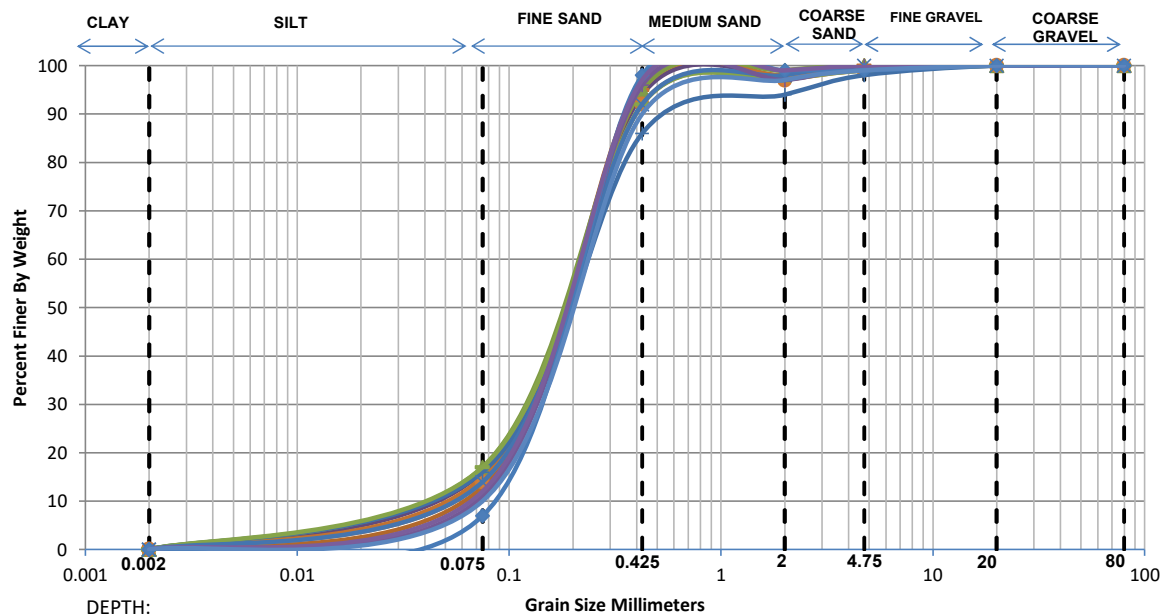
SOIL CHARACTERISTICS

Project	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"										Date of Boring		Chainage/Location		B.H. No.		Depth of Water Table		Termination Depth		Coordinates (E,N)						R.L.		Ref. Code																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	Sample Type	Depth from G.L. (m)	Observed SPT Value (N)	Corrected SPT Value (N _c)	Soil Description	IS Classification	IS Symbol	Grain Size Distribution % wt retained						Atterberg Limits %				NOT ENCOUNTERED		50.00 m	576437.000 m			2987385.000 m	-	SR-1241_26-27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
								Silt		Sand		Gravel		Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Bulk Density (g/cm ³)	Natural Moisture Content (%)		Dry Density (g/cm ³)	Specific Gravity	Type of Test				Cohesion C (kg/cm ²)	Angle of Friction (φ°)	Free Swell Index (%)	Swelling Pressure (kg/cm ²)	Permeability (cm/sec)	Void Ratio (e ₀)	Pressure (kg/cm ²)	C _v x 10 ⁻⁴ (cm ² /Sec)	M _v x 10 ⁻² (cm ² /Kg)	Compression Index (C _p)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	SPT-17	27.00	97	46	Very Dense, Brownish, Silty Sand	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Abbreviations:-
DS-Disturbed Sample, SPT-Standard Penetration Test, UDS-Undisturbed Sample, UDS*-UDS not recovered, DST-Direct Shear Test, UUT-Unconsolidated Undrained Triaxial Shear Test, DST+- Direct Shear Test on Remoulded Sample, UUT+- Unconsolidated Undrained Tri-axial Test on Remoulded Sample.

GRAIN SIZE DISTRIBUTION CURVES

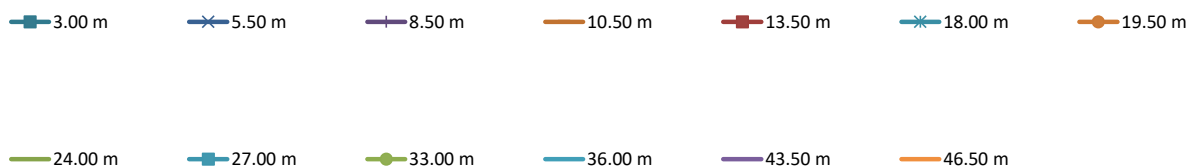
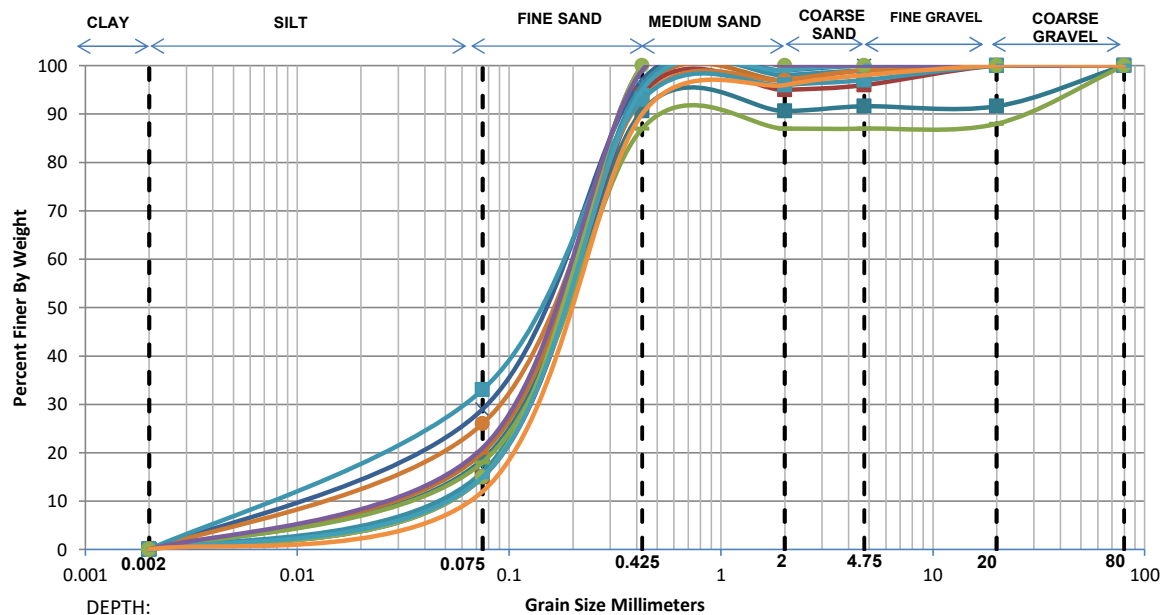
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1022
B.H. No.	361



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
4.50 m	0.00	13.00	84.00	2.00	1.00	0.00	0.00	0.0566	0.1412	0.2287	4.04	1.54
8.50 m	0.00	16.00	78.00	4.00	2.00	0.00	0.00	0.0413	0.1291	0.2253	5.46	1.79
10.50 m	0.00	15.00	80.00	3.00	2.00	0.00	0.00	0.0458	0.1331	0.2262	4.94	1.71
15.00 m	0.00	17.00	78.00	4.00	1.00	0.00	0.00	0.0374	0.1245	0.2204	5.89	1.88
19.50 m	0.00	14.00	78.00	5.00	2.00	1.00	0.00	0.0507	0.1388	0.2355	4.65	1.61
21.00 m	0.00	16.00	70.00	8.00	4.00	2.00	0.00	0.0407	0.1323	0.2448	6.01	1.76
24.00 m	0.00	17.00	75.00	5.00	2.00	1.00	0.00	0.0372	0.1255	0.2265	6.08	1.87
30.00 m	0.00	14.00	78.00	6.00	2.00	0.00	0.00	0.0507	0.1389	0.2358	4.65	1.61
34.50 m	0.00	11.00	85.00	1.00	3.00	0.00	0.00	0.0691	0.1508	0.2362	3.42	1.39
39.00 m	0.00	7.00	91.00	1.00	0.00	1.00	0.00	0.0911	0.1696	0.2459	2.70	1.28
43.50 m	0.00	12.00	85.00	2.00	1.00	0.00	0.00	0.0628	0.1457	0.2318	3.69	1.46
48.00 m	0.00	10.00	80.00	7.00	2.00	1.00	0.00	0.0750	0.1591	0.2521	3.36	1.34

GRAIN SIZE DISTRIBUTION CURVES

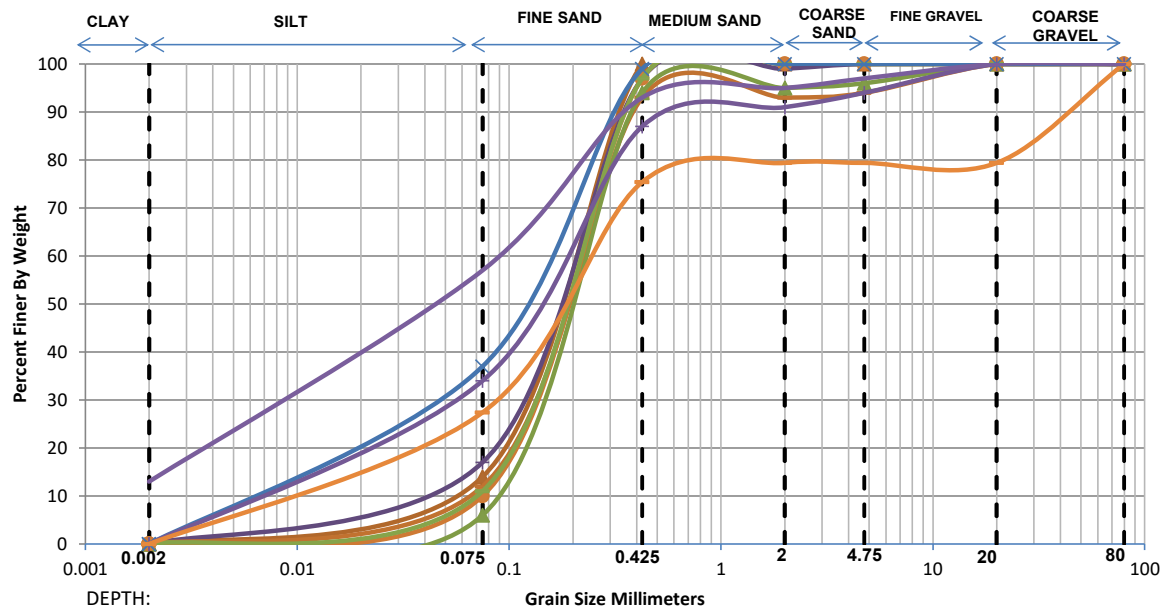
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1025
B.H. No.	362



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	18.60	72.00	0.00	1.00	0.00	8.40	0.0318	0.1336	0.3216	10.11	1.75
5.50 m	0.00	29.00	68.00	2.00	1.00	0.00	0.00	0.0144	0.0784	0.1793	12.44	2.38
8.50 m	0.00	15.00	85.00	0.00	0.00	0.00	0.00	0.0462	0.1492	0.3099	6.71	1.56
10.50 m	0.00	20.00	75.00	2.00	2.00	1.00	0.00	0.0283	0.1121	0.2108	7.46	2.11
13.50 m	0.00	15.00	79.00	1.00	1.00	4.00	0.00	0.0458	0.1333	0.2275	4.97	1.71
18.00 m	0.00	16.00	80.00	2.00	1.00	1.00	0.00	0.0414	0.1284	0.2212	5.34	1.80
19.50 m	0.00	26.00	67.00	4.00	2.00	1.00	0.00	0.0174	0.0892	0.1964	11.26	2.32
24.00 m	0.00	18.00	69.00	0.00	0.00	1.00	12.00	0.0334	0.1400	0.3352	10.03	1.75
27.00 m	0.00	33.00	60.00	3.00	1.00	3.00	0.00	0.0113	0.0653	0.1729	15.34	2.19
33.00 m	0.00	15.00	85.00	0.00	0.00	0.00	0.00	0.0462	0.1492	0.3099	6.71	1.56
36.00 m	0.00	15.00	80.00	4.00	1.00	0.00	0.00	0.0458	0.1332	0.2265	4.94	1.71
43.50 m	0.00	21.00	78.00	1.00	0.00	0.00	0.00	0.0261	0.1073	0.2009	7.69	2.19
46.50 m	0.00	12.00	78.00	6.00	2.00	2.00	0.00	0.0624	0.1491	0.2459	3.94	1.45

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1029
B.H. No.	363

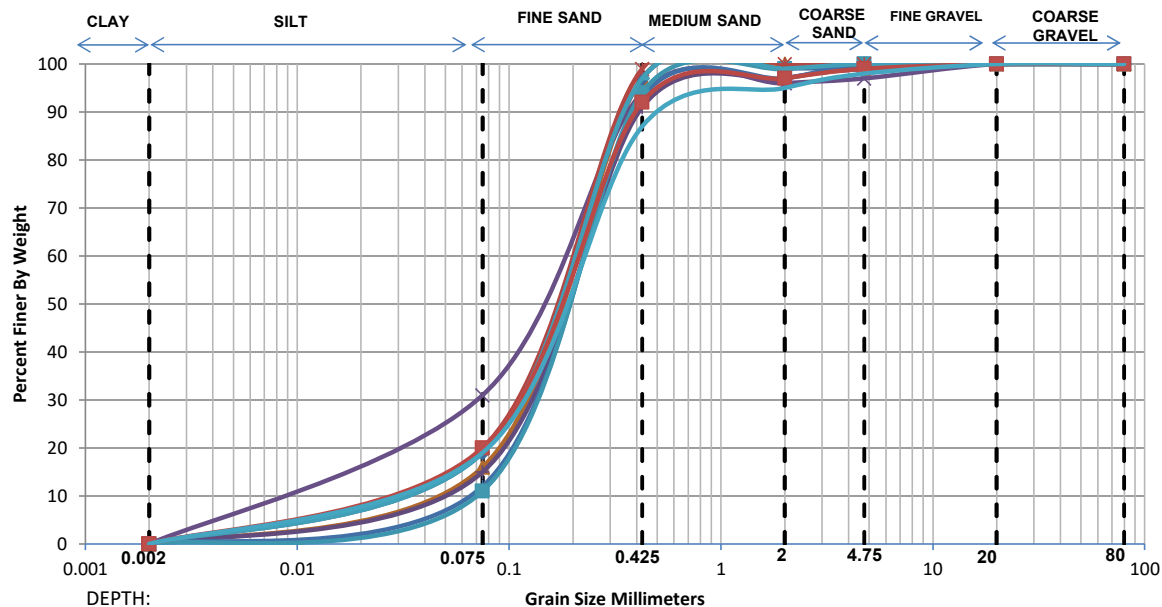


—▲— 4.50 m —+— 8.50 m —●— 10.50 m —▲— 15.00 m —●— 19.50 m —●— 24.00 m —×— 30.00 m —+— 34.50 m —●— 37.50 m —+— 43.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
4.50 m	0.00	14.00	86.00	0.00	0.00	0.00	0.00	0.0512	0.1553	0.3138	6.13	1.50
8.50 m	0.00	17.00	80.00	2.00	1.00	0.00	0.00	0.0376	0.1238	0.2165	5.76	1.89
10.50 m	0.00	12.00	81.00	0.00	1.00	6.00	0.00	0.0626	0.1742	0.3383	5.41	1.43
15.00 m	0.00	6.00	88.00	1.00	1.00	4.00	0.00	0.0976	0.1772	0.2554	2.62	1.26
19.50 m	0.00	10.00	87.00	3.00	0.00	0.00	0.00	0.0750	0.1552	0.2383	3.18	1.35
24.00 m	0.00	11.00	86.00	3.00	0.00	0.00	0.00	0.0691	0.1505	0.2351	3.40	1.39
30.00 m	0.00	37.00	62.00	1.00	0.00	0.00	0.00	0.0093	0.0547	0.1500	16.05	2.13
34.50 m	0.00	34.00	53.00	4.00	3.00	6.00	0.00	0.0105	0.0621	0.1825	17.38	2.01
37.50 m	0.00	27.40	48.00	4.00	0.00	0.00	20.60	0.0150	0.0851	0.2514	16.73	1.92
43.50 m	13.00	44.00	36.00	2.00	2.00	3.00	0.00	-	0.0166	0.0846	-	-

GRAIN SIZE DISTRIBUTION CURVES

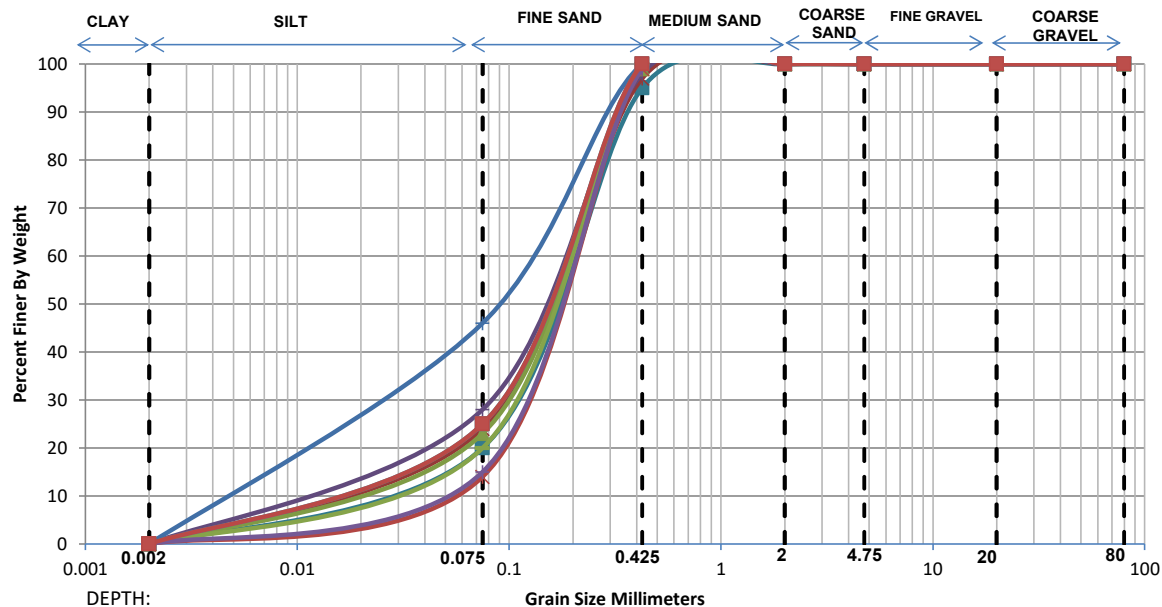
Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1032
B.H. No.	364



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
4.50 m	0.00	16.00	81.00	3.00	0.00	0.00	0.00	0.0415	0.1281	0.2198	5.30	1.80
8.50 m	0.00	15.00	76.00	6.00	2.00	1.00	0.00	0.0456	0.1347	0.2349	5.16	1.70
12.00 m	0.00	19.00	78.00	2.00	0.00	1.00	0.00	0.0311	0.1156	0.2104	6.77	2.05
16.50 m	0.00	31.00	63.00	2.00	1.00	3.00	0.00	0.0127	0.0717	0.1777	14.03	2.28
21.00 m	0.00	12.00	81.00	4.00	3.00	0.00	0.00	0.0626	0.1476	0.2393	3.82	1.46
27.00 m	0.00	11.00	83.00	5.00	1.00	0.00	0.00	0.0690	0.1520	0.2407	3.49	1.39
31.50 m	0.00	20.00	79.00	1.00	0.00	0.00	0.00	0.0285	0.1112	0.2040	7.16	2.13
36.00 m	0.00	19.00	78.00	2.00	1.00	0.00	0.00	0.0311	0.1156	0.2104	6.77	2.05
40.50 m	0.00	20.00	72.00	5.00	2.00	1.00	0.00	0.0281	0.1128	0.2174	7.74	2.09
45.50 m	0.00	19.00	68.00	8.00	3.00	2.00	0.00	0.0304	0.1186	0.2333	7.67	1.98

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1036
B.H. No.	365

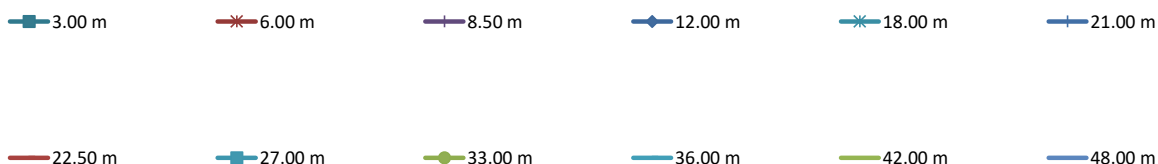
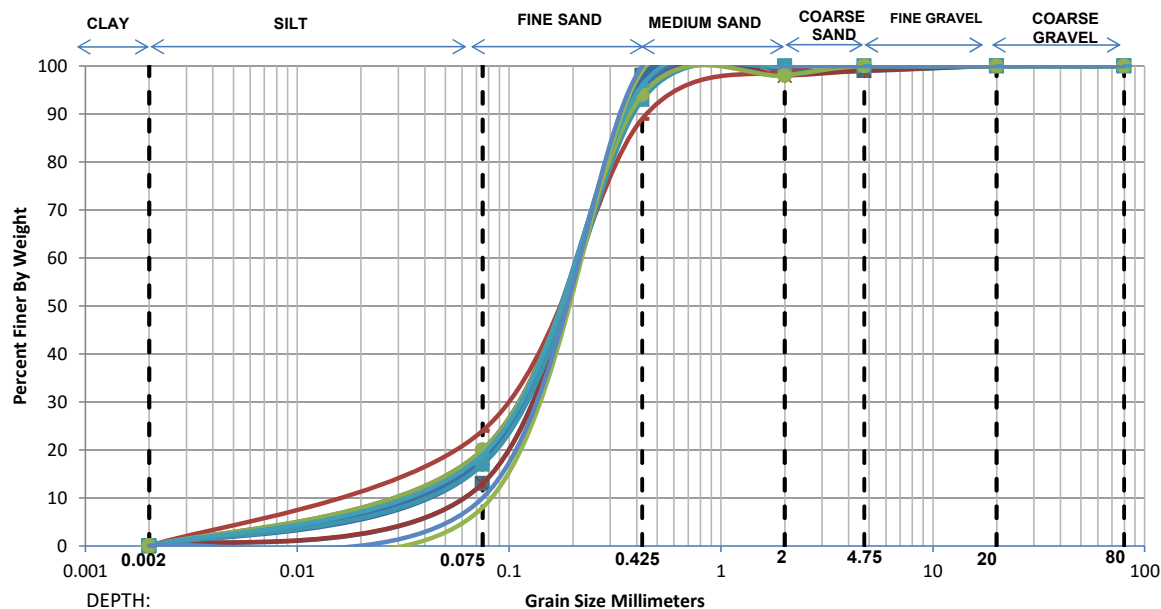


— 2.50 m — 5.50 m — 7.50 m — 13.50 m — 19.50 m — 22.50 m — 25.50 m — 30.00 m — 33.00 m — 39.00 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
2.50 m	0.00	20.00	75.00	5.00	0.00	0.00	0.00	0.0283	0.1121	0.2116	7.49	2.10
5.50 m	0.00	24.00	73.00	3.00	0.00	0.00	0.00	0.0204	0.0962	0.1953	9.57	2.32
7.50 m	0.00	28.00	70.00	2.00	0.00	0.00	0.00	0.0154	0.0818	0.1810	11.74	2.40
13.50 m	0.00	23.00	76.00	1.00	0.00	0.00	0.00	0.0222	0.0997	0.1948	8.79	2.30
19.50 m	0.00	46.00	54.00	0.00	0.00	0.00	0.00	0.0065	0.0373	0.1530	23.49	1.40
22.50 m	0.00	20.00	80.00	0.00	0.00	0.00	0.00	0.0286	0.1205	0.2898	10.15	1.76
25.50 m	0.00	25.00	75.00	0.00	0.00	0.00	0.00	0.0191	0.0951	0.2683	14.07	1.77
30.00 m	0.00	14.00	85.00	1.00	0.00	0.00	0.00	0.0511	0.1360	0.2223	4.35	1.63
33.00 m	0.00	15.00	84.00	1.00	0.00	0.00	0.00	0.0461	0.1316	0.2192	4.76	1.71
39.00 m	0.00	25.00	75.00	0.00	0.00	0.00	0.00	0.0191	0.0951	0.2683	14.07	1.77

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"PKG-IV
Location/Chainage	P-1039
B.H. No.	366



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	13.00	85.00	1.00	0.00	1.00	0.00	0.0567	0.1408	0.2269	4.00	1.54
6.00 m	0.00	13.00	84.00	1.00	1.00	1.00	0.00	0.0566	0.1411	0.2285	4.03	1.54
8.50 m	0.00	20.00	75.00	3.00	2.00	0.00	0.00	0.0283	0.1121	0.2111	7.47	2.11
12.00 m	0.00	17.00	80.00	3.00	0.00	0.00	0.00	0.0376	0.1239	0.2168	5.77	1.89
18.00 m	0.00	17.00	76.00	7.00	0.00	0.00	0.00	0.0373	0.1253	0.2250	6.03	1.87
21.00 m	0.00	18.00	77.00	5.00	0.00	0.00	0.00	0.0340	0.1204	0.2177	6.41	1.96
22.50 m	0.00	24.00	65.00	10.00	1.00	0.00	0.00	0.0200	0.0974	0.2134	10.66	2.22
27.00 m	0.00	17.00	76.00	7.00	0.00	0.00	0.00	0.0373	0.1253	0.2250	6.03	1.87
33.00 m	0.00	20.00	74.00	4.00	2.00	0.00	0.00	0.0282	0.1123	0.2132	7.56	2.10
36.00 m	0.00	19.00	77.00	4.00	0.00	0.00	0.00	0.0310	0.1159	0.2126	6.86	2.04
42.00 m	0.00	8.00	91.00	1.00	0.00	0.00	0.00	0.0855	0.1640	0.2412	2.82	1.30
48.00 m	0.00	10.00	90.00	0.00	0.00	0.00	0.00	0.0750	0.1806	0.3292	4.39	1.32

GRAIN SIZE DISTRIBUTION CURVES

Project Name

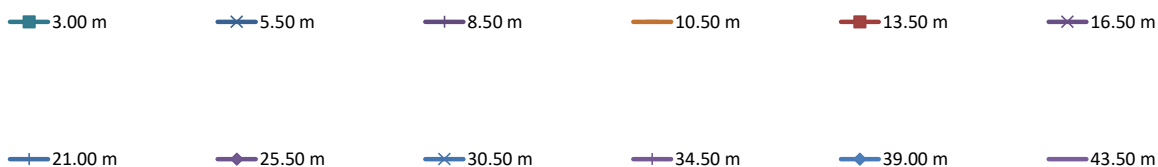
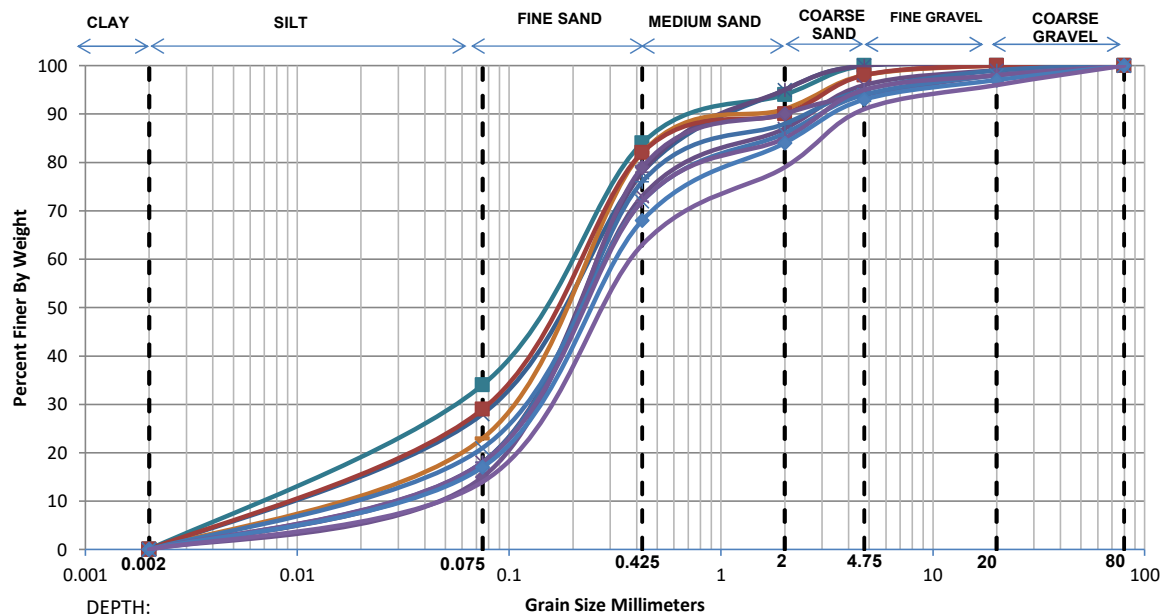
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1058

B.H. No.

373



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	34.00	50.00	10.00	6.00	0.00	0.00	0.0104	0.0620	0.1932	18.56	1.91
5.50 m	0.00	28.00	50.00	17.00	5.00	0.00	0.00	0.0146	0.0826	0.2414	16.58	1.94
8.50 m	0.00	18.00	60.00	17.00	5.00	0.00	0.00	0.0327	0.1271	0.2707	8.27	1.82
10.50 m	0.00	23.00	59.00	9.00	7.00	2.00	0.00	0.0212	0.1027	0.2373	11.17	2.09
13.50 m	0.00	29.00	53.00	8.00	8.00	2.00	0.00	0.0138	0.0786	0.2174	15.73	2.06
16.50 m	0.00	18.00	55.00	14.00	9.00	3.00	1.00	0.0323	0.1294	0.2959	9.15	1.75
21.00 m	0.00	18.00	58.00	12.00	7.00	4.00	1.00	0.0326	0.1276	0.2785	8.55	1.80
25.50 m	0.00	15.00	64.00	11.00	4.00	4.00	2.00	0.0446	0.1406	0.2722	6.10	1.63
30.50 m	0.00	21.00	51.00	14.00	8.00	4.00	2.00	0.0244	0.1151	0.2952	12.11	1.84
34.50 m	0.00	18.00	54.00	13.00	10.00	3.00	2.00	0.0322	0.1299	0.3019	9.36	1.73
39.00 m	0.00	17.00	51.00	16.00	9.00	4.00	3.00	0.0353	0.1381	0.3345	9.48	1.62
43.50 m	0.00	14.00	49.00	16.00	12.00	5.00	4.00	0.0482	0.1595	0.3870	8.03	1.36

GRAIN SIZE DISTRIBUTION CURVES

Project Name

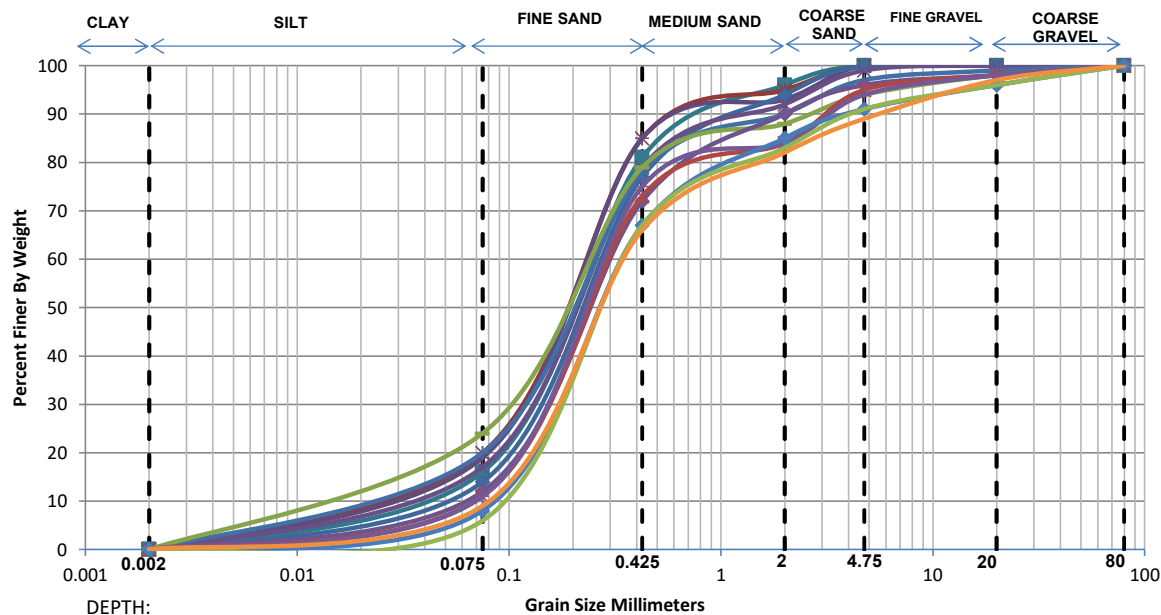
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1054

B.H. No.

374



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	16.00	65.00	15.00	4.00	0.00	0.00	0.0403	0.1351	0.2631	6.52	1.72
6.00 m	0.00	20.00	65.00	10.00	5.00	0.00	0.00	0.0276	0.1149	0.2367	8.57	2.02
8.50 m	0.00	19.00	66.00	8.00	7.00	0.00	0.00	0.0303	0.1192	0.2390	7.89	1.96
12.00 m	0.00	14.00	63.00	17.00	6.00	0.00	0.00	0.0495	0.1474	0.2853	5.76	1.54
16.50 m	0.00	17.00	62.00	13.00	7.00	1.00	0.00	0.0362	0.1311	0.2676	7.38	1.77
21.00 m	0.00	20.00	58.00	12.00	7.00	2.00	1.00	0.0271	0.1173	0.2635	9.71	1.93
24.00 m	0.00	24.00	55.00	9.00	6.00	4.00	2.00	0.0195	0.0990	0.2463	12.66	2.05
25.50 m	0.00	12.00	60.00	18.00	6.00	2.00	2.00	0.0613	0.1618	0.3160	5.15	1.35
31.50 m	0.00	11.00	62.00	11.00	11.00	3.00	2.00	0.0683	0.1654	0.3102	4.55	1.29
34.50 m	0.00	11.00	64.00	9.00	10.00	4.00	2.00	0.0683	0.1635	0.2992	4.38	1.31
39.00 m	0.00	8.00	59.00	18.00	6.00	5.00	4.00	0.0889	0.1897	0.3562	4.01	1.14
42.00 m	0.00	6.00	61.00	16.00	8.00	5.00	4.00	0.1039	0.2017	0.3583	3.45	1.09
46.50 m	0.00	9.00	57.00	16.00	7.00	8.00	3.00	0.0819	0.1846	0.3626	4.43	1.15

GRAIN SIZE DISTRIBUTION CURVES

Project Name

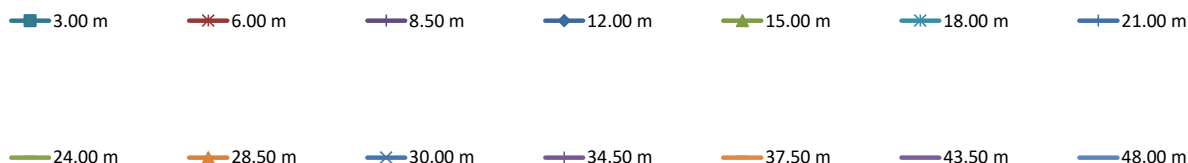
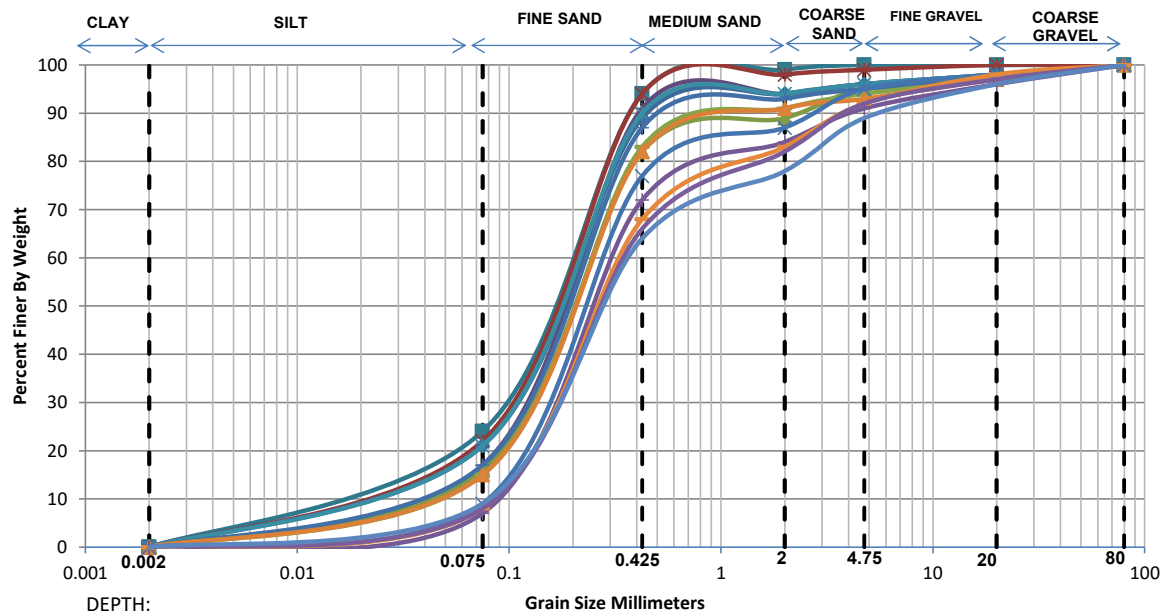
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1065

B.H. No.

375



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	24.00	70.00	5.00	1.00	0.00	0.00	0.0203	0.0966	0.2011	9.92	2.29
6.00 m	0.00	22.00	72.00	4.00	1.00	1.00	0.00	0.0238	0.1043	0.2070	8.71	2.21
8.50 m	0.00	17.00	74.00	3.00	2.00	2.00	2.00	0.0372	0.1257	0.2280	6.14	1.87
12.00 m	0.00	21.00	68.00	5.00	2.00	2.00	2.00	0.0255	0.1094	0.2211	8.66	2.12
15.00 m	0.00	16.00	66.00	7.00	6.00	2.00	3.00	0.0404	0.1339	0.2569	6.36	1.73
18.00 m	0.00	21.00	69.00	4.00	2.00	2.00	2.00	0.0256	0.1092	0.2185	8.53	2.13
21.00 m	0.00	17.00	70.00	6.00	2.00	2.00	3.00	0.0369	0.1273	0.2385	6.47	1.84
24.00 m	0.00	15.00	68.00	8.00	3.00	3.00	3.00	0.0450	0.1383	0.2567	5.71	1.66
28.50 m	0.00	15.00	67.00	9.00	2.00	4.00	3.00	0.0449	0.1389	0.2603	5.80	1.65
30.00 m	0.00	9.00	68.00	10.00	8.00	3.00	2.00	0.0812	0.1730	0.2951	3.63	1.25
34.50 m	0.00	7.00	65.00	12.00	7.00	5.00	4.00	0.0952	0.1893	0.3239	3.40	1.16
37.50 m	0.00	8.00	60.00	15.00	9.00	6.00	2.00	0.0887	0.1880	0.3482	3.92	1.14
43.50 m	0.00	8.00	58.00	16.00	10.00	5.00	3.00	0.0890	0.1905	0.3637	4.09	1.12
48.00 m	0.00	9.00	55.00	14.00	11.00	7.00	4.00	0.0820	0.1866	0.3802	4.64	1.12

GRAIN SIZE DISTRIBUTION CURVES

Project Name

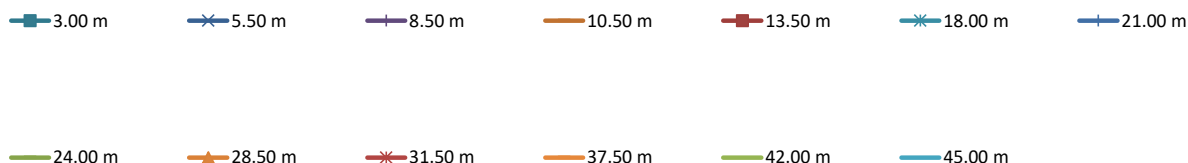
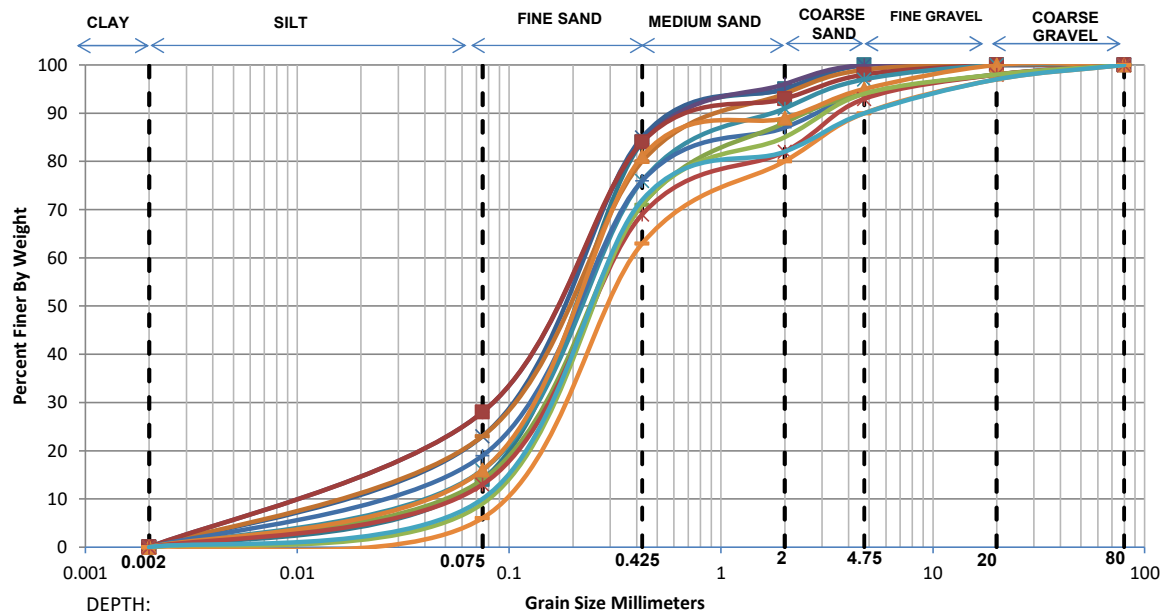
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1068

B.H. No.

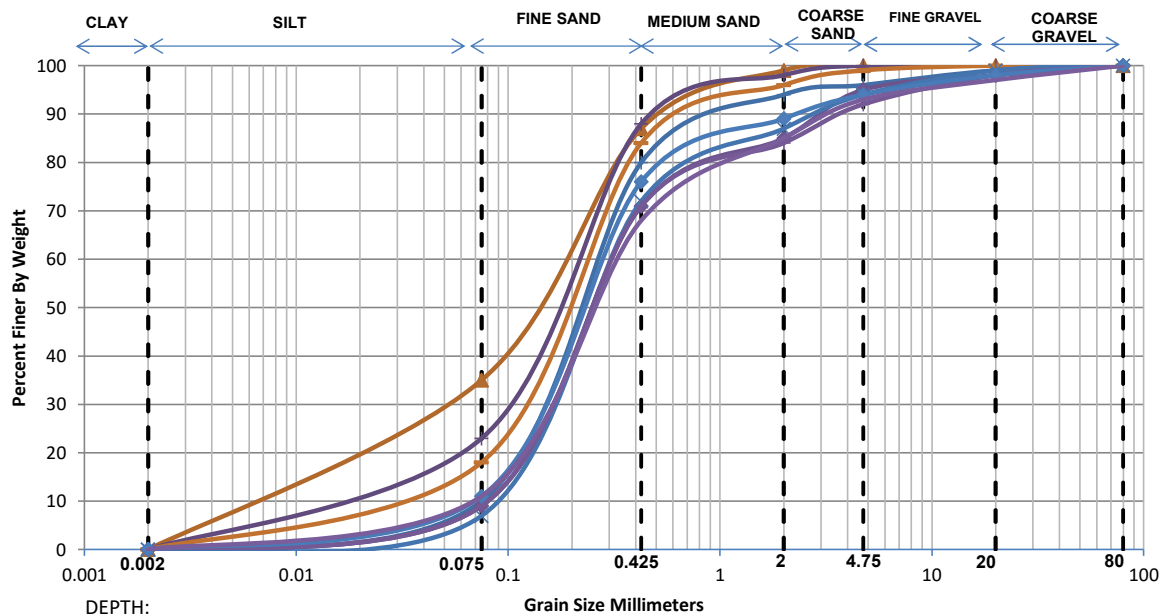
376



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	14.00	70.00	11.00	5.00	0.00	0.00	0.0501	0.1428	0.2572	5.13	1.58
5.50 m	0.00	23.00	62.00	10.00	5.00	0.00	0.00	0.0214	0.1021	0.2276	10.63	2.14
8.50 m	0.00	28.00	56.00	12.00	4.00	0.00	0.00	0.0148	0.0823	0.2154	14.52	2.12
10.50 m	0.00	23.00	57.00	14.00	5.00	1.00	0.00	0.0211	0.1033	0.2469	11.69	2.05
13.50 m	0.00	28.00	56.00	9.00	5.00	2.00	0.00	0.0148	0.0823	0.2143	14.44	2.13
18.00 m	0.00	16.00	60.00	15.00	6.00	3.00	0.00	0.0399	0.1377	0.2845	7.13	1.67
21.00 m	0.00	19.00	57.00	11.00	7.00	4.00	2.00	0.0296	0.1228	0.2755	9.31	1.85
24.00 m	0.00	14.00	57.00	17.00	6.00	4.00	2.00	0.0490	0.1517	0.3181	6.49	1.48
28.50 m	0.00	16.00	65.00	8.00	6.00	5.00	0.00	0.0403	0.1345	0.2608	6.47	1.72
31.50 m	0.00	13.00	56.00	13.00	11.00	5.00	2.00	0.0546	0.1582	0.3326	6.09	1.38
37.50 m	0.00	6.00	57.00	17.00	10.00	7.00	3.00	0.1051	0.2072	0.3924	3.73	1.04
42.00 m	0.00	9.00	62.00	14.00	9.00	4.00	2.00	0.0815	0.1788	0.3265	4.00	1.20
45.00 m	0.00	10.00	62.00	10.00	8.00	7.00	3.00	0.0750	0.1716	0.3176	4.23	1.24

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	P-1112
B.H. No.	390



—▲— 4.50 m —●— 8.50 m —●— 10.50 m —●— 21.00 m —●— 25.50 m —●— 30.00 m —●— 34.50 m —●— 39.00 m —●— 43.50 m

Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
4.50 m	0.00	35.00	52.00	12.00	1.00	0.00	0.00	0.0100	0.0593	0.1815	18.19	1.94
8.50 m	0.00	23.00	65.00	10.00	2.00	0.00	0.00	0.0216	0.1016	0.2191	10.15	2.18
10.50 m	0.00	18.00	66.00	12.00	3.00	1.00	0.00	0.0332	0.1242	0.2463	7.42	1.89
21.00 m	0.00	10.00	70.00	14.00	2.00	3.00	1.00	0.0750	0.1659	0.2821	3.76	1.30
25.50 m	0.00	9.00	62.00	14.00	10.00	3.00	2.00	0.0815	0.1788	0.3265	4.00	1.20
30.00 m	0.00	7.00	65.00	15.00	7.00	5.00	1.00	0.0952	0.1898	0.3247	3.41	1.17
34.50 m	0.00	9.00	62.00	13.00	8.00	6.00	2.00	0.0815	0.1787	0.3263	4.00	1.20
39.00 m	0.00	11.00	65.00	13.00	5.00	4.00	2.00	0.0684	0.1633	0.2957	4.32	1.32
43.50 m	0.00	11.00	57.00	17.00	8.00	4.00	3.00	0.0680	0.1710	0.3443	5.06	1.25

GRAIN SIZE DISTRIBUTION CURVES

Project Name

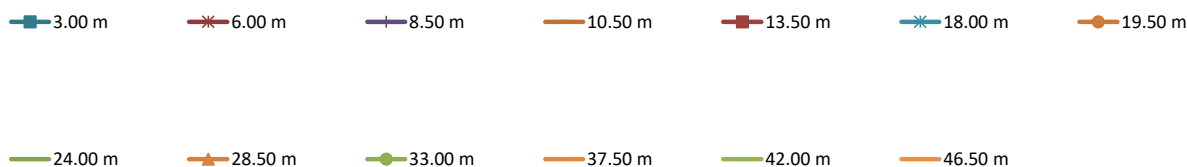
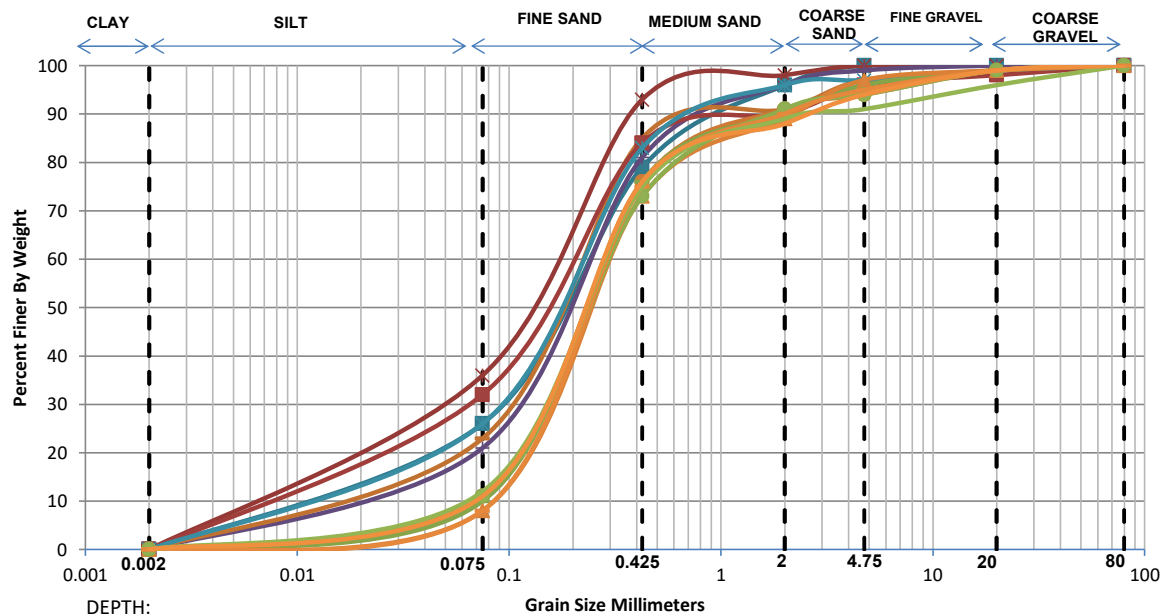
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1116

B.H. No.

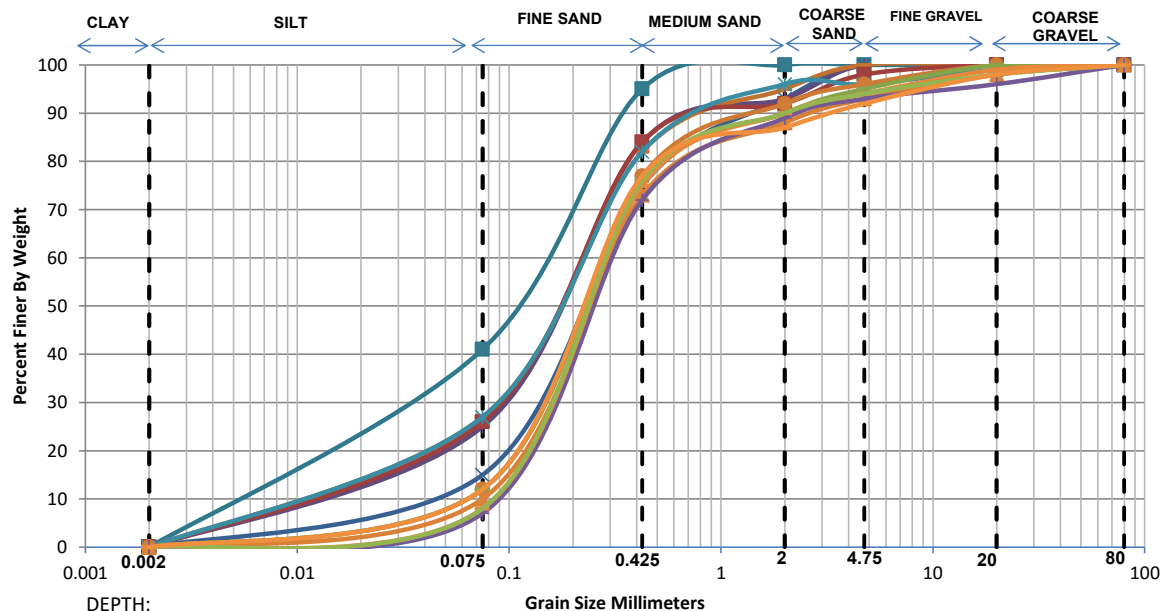
391



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	26.00	53.00	17.00	4.00	0.00	0.00	0.0168	0.0907	0.2431	14.50	2.02
6.00 m	0.00	36.00	57.00	5.00	2.00	0.00	0.00	0.0097	0.0569	0.1629	16.88	2.06
8.50 m	0.00	21.00	60.00	15.00	3.00	1.00	0.00	0.0250	0.1119	0.2491	9.95	2.01
10.50 m	0.00	23.00	62.00	6.00	6.00	2.00	1.00	0.0214	0.1020	0.2262	10.56	2.15
13.50 m	0.00	32.00	52.00	6.00	6.00	2.00	2.00	0.0116	0.0682	0.1991	17.15	2.01
18.00 m	0.00	26.00	57.00	13.00	1.00	2.00	1.00	0.0170	0.0902	0.2257	13.30	2.12
19.50 m	0.00	11.00	65.00	15.00	3.00	5.00	1.00	0.0684	0.1635	0.2963	4.33	1.32
24.00 m	0.00	10.00	66.00	14.00	6.00	3.00	1.00	0.0750	0.1688	0.2983	3.98	1.27
28.50 m	0.00	8.00	65.00	16.00	8.00	2.00	1.00	0.0881	0.1831	0.3177	3.61	1.20
33.00 m	0.00	11.00	62.00	18.00	3.00	5.00	1.00	0.0683	0.1664	0.3123	4.58	1.30
37.50 m	0.00	8.00	67.00	15.00	5.00	4.00	1.00	0.0878	0.1811	0.3076	3.50	1.21
42.00 m	0.00	12.00	63.00	14.00	2.00	5.00	4.00	0.0615	0.1588	0.2985	4.85	1.37
46.50 m	0.00	11.00	65.00	12.00	6.00	5.00	1.00	0.0684	0.1631	0.2954	4.32	1.32

GRAIN SIZE DISTRIBUTION CURVES

Project Name	"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"
Location/Chainage	P-1119
B.H. No.	392



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	41.00	54.00	5.00	0.00	0.00	0.00	0.0078	0.0456	0.1418	18.27	1.89
5.50 m	0.00	15.00	60.00	18.00	7.00	0.00	0.00	0.0443	0.1437	0.2930	6.62	1.59
8.50 m	0.00	25.00	59.00	9.00	7.00	0.00	0.00	0.0183	0.0941	0.2241	12.24	2.16
10.50 m	0.00	27.00	55.00	13.00	5.00	0.00	0.00	0.0158	0.0863	0.2261	14.33	2.09
13.50 m	0.00	26.00	58.00	8.00	6.00	2.00	0.00	0.0170	0.0900	0.2205	12.96	2.16
18.00 m	0.00	27.00	55.00	14.00	0.00	3.00	1.00	0.0158	0.0863	0.2264	14.36	2.09
19.50 m	0.00	12.00	65.00	15.00	4.00	4.00	0.00	0.0617	0.1575	0.2895	4.70	1.39
24.00 m	0.00	12.00	64.00	14.00	5.00	5.00	0.00	0.0616	0.1581	0.2937	4.77	1.38
28.50 m	0.00	10.00	63.00	15.00	5.00	5.00	2.00	0.0750	0.1715	0.3135	4.18	1.25
34.50 m	0.00	7.00	65.00	17.00	4.00	3.00	4.00	0.0952	0.1901	0.3252	3.42	1.17
37.50 m	0.00	8.00	67.00	15.00	4.00	5.00	1.00	0.0878	0.1811	0.3076	3.50	1.21
42.00 m	0.00	8.00	68.00	14.00	4.00	4.00	2.00	0.0877	0.1801	0.3028	3.45	1.22
46.50 m	0.00	12.00	65.00	10.00	5.00	6.00	2.00	0.0617	0.1569	0.2879	4.67	1.39

GRAIN SIZE DISTRIBUTION CURVES

Project Name

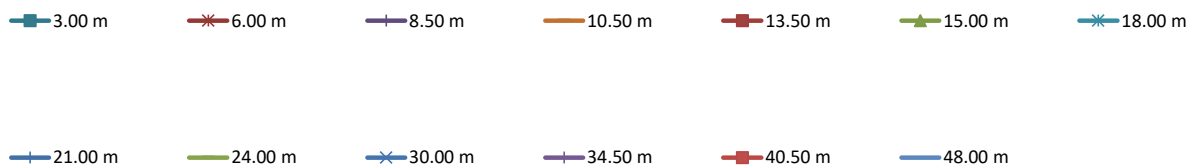
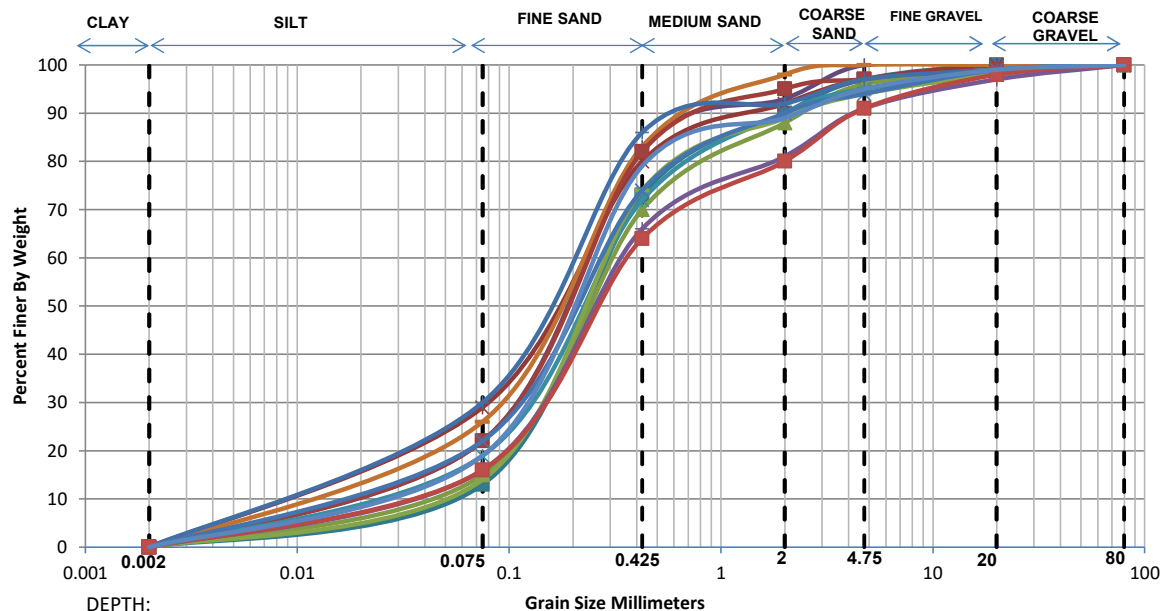
"Geotech Investigation work for Jaipur Metro Ph-II Project from Prahladpura to Todi Mod (Total approximate length -42.8 km)"

Location/Chainage

P-1123

B.H. No.

393



Depth	Grain Size Distribution % wt retained							D10	D30	D60	Cu	Cc
	Clay	Silt	Sand			Gravel						
			Fine	Medium	Coarse	Fine	Coarse					
3.00 m	0.00	13.00	60.00	17.00	7.00	3.00	0.00	0.0550	0.1554	0.3079	5.60	1.43
6.00 m	0.00	29.00	51.00	12.00	5.00	3.00	0.00	0.0137	0.0787	0.2269	16.52	1.99
8.50 m	0.00	22.00	61.00	10.00	7.00	0.00	0.00	0.0231	0.1068	0.2371	10.26	2.08
10.50 m	0.00	26.00	57.00	15.00	2.00	0.00	0.00	0.0170	0.0902	0.2264	13.34	2.12
13.50 m	0.00	22.00	60.00	13.00	2.00	2.00	1.00	0.0230	0.1071	0.2417	10.49	2.06
15.00 m	0.00	15.00	55.00	18.00	8.00	2.00	2.00	0.0438	0.1474	0.3233	7.38	1.53
18.00 m	0.00	19.00	53.00	18.00	5.00	3.00	2.00	0.0293	0.1253	0.3013	10.30	1.78
21.00 m	0.00	30.00	56.00	6.00	5.00	2.00	1.00	0.0131	0.0750	0.2003	15.24	2.14
24.00 m	0.00	14.00	60.00	15.00	5.00	4.00	2.00	0.0493	0.1492	0.2996	6.08	1.51
30.00 m	0.00	22.00	52.00	16.00	4.00	5.00	1.00	0.0225	0.1096	0.2806	12.46	1.90
34.50 m	0.00	16.00	50.00	15.00	10.00	6.00	3.00	0.0390	0.1450	0.3536	9.08	1.53
40.50 m	0.00	16.00	48.00	16.00	11.00	7.00	2.00	0.0387	0.1471	0.3742	9.66	1.49
48.00 m	0.00	19.00	60.00	10.00	6.00	4.00	1.00	0.0298	0.1214	0.2612	8.76	1.89