



COMPANY PROFILE

# SOIL TEST AND FOUNDATION DESIGN

"Quality is Our Speciality"

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Project Management Consultant  
" NABL Accredited Laboratory"



## About Us

**STFD** is a trusted name in the field of Quality Control, Project Management, Construction, DPR, Consultants, Architectural Planning, Structural Design & Drawing, Material Testing, and Geotechnical Investigation & Digital Survey Activities. The Firm is a NABL Accredited Laboratory and has successfully completed more than 1000 project over the past 10 years in various states of India. Er. Saurabh kumar, M.Tech (Geotechnical Eng.) is the C.E.O of the Company and he is the member of Indian Geotechnical Society, having experiences in soil investigation, Geotechnical Engineering and foundation studies. Company carries all above work with the help of latest technology, software's and sophisticated equipment's. The success of the company is due to practical applications of technical abilities depending upon site conditions by using skills of talented crew by the Technical Team with a vast experience in the field of Geotechnical Investigation, Quality Control & Project Management.

**AN EMPANELED COMPANY IN " WRD & BEEIDC, GOVERNMENT OF BIHAR "**

**&**

**" ROAD CONSTRUCTION DEPARTMENT, GOVERNMENT OF JHARKHAND"**



## QUALITY POLICY

- ★ We use authentic test procedures to test the samples and release accurate results in time.
- ★ Providing Impartiality and Confidentiality to all the Customer/ Client.
- ★ By Providing consistent quality services to meet customer needs on time completion of
- ★ Testing Analysis on every time.
- ★ By ensuring competency of employees and encouraging their participation in continual improvements of QMS.
- ★ Timely delivery of testing services and delivery of test reports to meet our customer requirements.
- ★ Complying withal statutory and regulatory requirements related to Analysis of Soil, Rock, some parameters of Building material Cement, Aggregate, Bricks and Concrete samples testing activities.
- ★ Ensuring that all personnel concerned with testing activities familiarize themselves with the quality documentation and implement policies and procedure in their work.



## OUR MISSION

- ★ We are committed to providing quality, cost-effective, and professional consulting services to our clients.
- ★ Our vision is to be the company whose name is a synonym for success in geotechnical engineering in domestic and foreign markets while preserving the quality of service and responsibility towards our client.
- ★ Provide high quality services to meet customer needs.
- ★ Provide Precise, Reliable and Timely Services to Customers.
- ★ Provide accurate results by use of authentic test procedures.

## OUR VISSION

- ★ To be our clients' choice of our because our employees provide them with the best consulting services.
- ★ Our business is focused on continuous improvement of quality services and responsibilities towards our clients.
- ★ Business success is based on committed work of employees and their commitment to achieve customer satisfaction.



# FIELD TESTS



SI No.	Name of Test	Test Method
1.	Core Cutter	IS 2720 ( Part 29)
2.	Sand Replacement	IS 2720 (Part 28)
3.	Standard Penetration Test	IS 2131
4.	Insitu Field Permeability Test	IS 5529 (Part 1 & 2)
5.	Plate Load Test	IS 1888
6.	Cyclic Plate load Test	IS 5249
7.	Modulus of Subgrade Reaction ( K Value)	IS 9214
8.	Electrical Resistivity Test	IS 3043 & IS 15736





# VARIOUS TYPE OF PROJECT IN FIELD TEST



CORE CUTTER



SAND REPLACEMENT



Soil Sample



WATER TANK



Survey



Tunnel



HILL AREA - HIGHWAY



Bridge



# LABORATORY TEST





# SOIL TESTS

SI No.	Name of Test	Test Method
1.	Water Content of Soil	IS 2720 (Part 2)
2.	Specific Gravity of Soil	IS 2720 ( Part 3/Sec 1 & 2)
3.	Dry Sieve Analysis of Soil	IS 2720 (Part 4)
4.	Wet Sieve Analysis	IS 2720 (Part 4)
5.	Hydrometer Analysis	IS 2720 (Part 4)
6.	Liquid Limit	IS 2720 ( Part 5)
7.	Plastic Limit	IS 2720 ( Part 5)
8.	Shrinkage Limit	IS 2720 ( Part 6)
9.	Light Compaction (MDD,OMC)	IS 2720 ( Part 7)
10	Heavy Compaction (MDD,OMC)	IS 2720 ( Part 8)
11	Unconfined Compressive Strength	IS 2720 ( Part 10)
12	Triaxial Compression	IS 2720 ( Part 11)
13	Direct Shear	IS 2720 ( Part 13)
14	Consolidation Test	IS 2720 ( Part 15)
15	CBR- Soaked (4days)	IS 2720 ( Part 16)
16	California Bearing Ratio - Unsoaked	IS 2720 ( Part 16)
17	Free Swell Index of soil	IS 2720 ( Part 40)
18	Swelling Pressure of Soils	IS 2720 ( Part 41)
19	Total Soluble Solids	IS 2720 ( Part 21)
20	Chemical Test (pH, Chloride, Sulphate )	IS 2720 ( Part 24,26, 27)
21	Organic Matter	IS 2720 ( Part 22)
22	Permeability Test	IS 2720 (Part 17)



## ROCK TESTS

SI No.	Name of Test	Test Method
1.	Dry Density	IS 13030
2.	Porosity	IS 13030
3.	Specific Gravity	IS 13030
4.	Point Load Strength Index of Rock	IS 8764
5.	Unconfined Compressive Strength	IS 9143
6.	Water content of Rock	IS 13030
7.	Water Absorption	IS 1124
<b>COARSE AGGREGATES</b>		
1.	Elongation, Flakiness Index	IS 2386 (Part 1)
2.	Sieve Analysis	IS 2386 (Part 1)
3.	Specific Gravity	IS 2386 (Part 3)
4.	Water absorption	IS 2386 (Part 3)
5.	Moisture content	IS 2386 (Part 3)
6.	Organic Impurities	IS 2386 (Part 2)
7.	Soundness by Chloride & Sulphate	IS 2386 (Part 5)
8.	Bulk Density	IS 2386 (Part 3)
9.	Impact Value	IS 2386 (Part 4)
10.	10 percent Fines Value	IS 2386 (Part 3)
11.	Crushing Value	IS 2386 (Part 4)
<b>FINE AGGREGATES</b>		
1.	Sieve Analysis	IS 2386 (Part 1)
2.	Specific Gravity, Water absorption	IS 2386 (Part 3)
3.	Silt Content (Finer than 75 micron)	IS 2386 (Part 3)
4.	Moisture content	IS 2386 (Part 3)
5.	Organic Impurities	IS 2386 (Part 2)
6.	Soundness by Chloride & Sulphate	IS 2386 (Part 5)
7.	Bulk Density ((Loose & Rodded)	IS 2386 (Part 3)



# LAB EQUIPMENT PHOTOS





## OUR SERVICES

- ✦ GEOTECHNICAL CONSULTANCY WORKS
- ✦ LABORATORY TESTING SERVICES
- ✦ FIELD TESTS
- ✦ REBOUND HAMMER TEST
- ✦ AUGER BORING
- ✦ DRILLING WORKS (VERTICAL, HORIZONTAL & CROSSHOLE)
- ✦ SURVEYING
- ✦ BRIDGE DESIGNING & ESTIMATE
- ✦ PREPARATION DPR WORKS
- ✦ GEOPHISICAL SURVEY
- ✦ HYDROLOGICAL SURVEY
- ✦ EVALUATION OF LIQUEFACTION POTENTIAL



## GEO TECHNICAL INVESTIGATION FOR VARIOUS CLIENTS

SI No.	PROJECT DETAILS	CLIENT DETAILS
1.	SOIL INVESTIGATION AND TOPOGRAPHICAL SURVEY OF GREENFIELD AIRPORT AT DALOO (Area 1000 Acres), SILCHAR, ASSAM	AIRPORTS AUTHORITY OF INDIA
2.	SOIL INVESTIGATION FOR NCC PATNA, KANKARBAGH (Elevated Metro Line)	DELHI METRO RAIL CORPORATION LTD.
3.	SOIL INVESTIGATION FOR SALEPUR TO RAJGIR AT NH-82 VIA NOORSARAI-ABHIYAPUR-SILAO (BOREHOLE DEPTH- 40 M)	NATIONAL HIGHWAY AUTHORITY OF INDIA
4.	SOIL INVESTIGATION FOR SONE-KANHAR GARHWA LIS	LARSEN & TOUBRO
5.	SOIL INVESTIGATION FOR RAILWAY CROSSING ZONE PAKUR & DUMKA, JHARKHAND	JAKSON LIMITED
6.	SOIL INVESTIGATION FOR DAMODAR RIVER CROSSING PNCPL (NRL) PROJECT, BARDHAMAN-WEST BENGAL, (BH DEPTH UPTO 50 M)	PLN CONSTRUCTION LIMITED
7.	SOIL INVESTIGATION FOR PHASE-I OF MRTS PATNA (DEPOT AREA)	DELHI METRO RAIL CORPORATION LTD.
8.	GEOTECHNICAL INVESTIGATION FOR THE CONSTRUCTION OF 2 LANE BRIDGE ACROSS RIVER KOSI FROM BHEJA-BAKAUR SECTION OF NH-527 A UNDER SCHEME OF BHARATMALA PARIYOJNA PHASE-1	NATIONAL HIGHWAY AUTHORITY OF INDIA
9.	SOIL INVESTIGATION FOR BRAHAMPUTRA RIVER MICROTUNNELING CROSSING WORK IN THE STATE OF WEST BENGAL. (BOREHOLE DEPTH 25 M IN WATER)	NUMALIGARH REFINERY LIMITED
10	SOIL INVESTIGATION FOR RAIDAK -II RIVER MICROTUNNELING CROSSING WORK IN THE STATE OF WEST BENGAL.	M/S OIL INDIA LIMITED
11	GEOTECHNICAL INVESTIGATIONS FOR THE CONSTRUCTION OF RCC BRIDGES OF ABOUT 500 BRIDGES IN THE STATE OF BIHAR	RURAL WORKS DEPARTMENT, BIHAR



## Permenant Strength of Organization (Nature of Expertise/Specializaiton)

SI No.	Family Name First Name	Proposed Position for The Project	Firm (Acronym)	Employment Status with Firm (full time Regular staff or other)	Education/Degree (Year/Institution)	No. of years of relevant Project Experience
1.	Saurabh Kumar	Sr Geotechnical Engineer	Soil Test And Foundation Design	FT-(Regular Full Time)	M. Tech (Geotechnical Engineering) Kurukshetra University	10 Yrs.
2.	Ajay Kumar	Structural Engineer	Soil Test And Foundation Design	FT-(Regular Full Time)	M-Tech (Transportation Engineering) IIT, Kharagpur.	10 Yrs.
3.	Ravinesh Kumar	Nondestructive Testing (NDT)	Soil Test And Foundation Design	FT-(Regular Full Time)	M.E (Civil-Earthquake Engineering) Bangalore University, Bangalore	10 Yrs.
4.	Abhinav Kumar	Project Manager (Geotech)	Soil Test And Foundation Design	FT-(Regular Full Time)	M-Tech (Water Resources Engineering) NIT, Patna.	05 Yrs.
5.	Manish Kumar	Geotechnical Engineer	Soil Test And Foundation Design	FT-(Regular Full Time)	M. Tech (Structure)Madhyanchal Professional University, Bhopal	09 Yrs.
6.	Shashikant Kumar	Geotechnical Engineer	Soil Test And Foundation Design	FT-(Regular Full Time)	B.Tech (Civil Engineering) National Institute of Technology, Srinagar	10 Yrs.
7.	Amjad Ali	Geotechnical Engineer	Soil Test And Foundation Design	FT-(Regular Full Time)	B.Tech (Civil Engineering) Maulana Azad College of Engineering & Technology, Patna	08 Yrs.
8.	Mudassar Hussain	Laboratory Director	Soil Test And Foundation Design	FT-(Regular Full Time)	B.Tech (Civil Engineering) Maulana Azad College of Engineering & Technology, Patna	08 Yrs.
9.	Akash Ojha	Geotechnical Engineer	Soil Test And Foundation Design	FT-(Regular Full Time)	M.Tech (Civil Engineering) Delhi Technical University	02 Yrs.



# SOIL TEST AND FOUNDATION DESIGN

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## Our Branches:

Ghaziabad, Guwahati, Mumbai