

### Technical Reports for the Year 2016-17

S. No.	Title	Name of the Project
1.	Report on in-situ deformability characteristics of rock mass by uniaxial jacking tests in left bank drift LDR-05 at dam axis.(No. 01/RM-F/CSMRS/04/2016-17)	Dibang Multi Purpose project, Arunachal Pradesh
2.	Report on in-situ shear strength characteristics of rock mass by direct shear test in left bank drift LDR-05 at dam axis. (No. 02/RM-F/CSMRS/05/2016-17)	Dibang Multipurpose Project, Arunachal Pradesh.
3.	Report on deformability characteristics of rock mass by Goodman Jack tests at right bank of dam axis. (No. 03/RM-F/CSMRS/05/2016-17)	Dibang Multipurpose Project, Arunachal Pradesh
4.	Report on in-situ deformability characteristics of rock mass by uniaxial jacking tests in right bank drift at dam axis of Mawphu-II (No. 07/RM-F/CSMRS/05/2016-17)	H.E. Project, Meghalaya
5.	Report on in-situ shear strength characteristics of rock in right bank drift at dam axis. (No. 08/RM-F/CSMRS/05/2016-17)	Mawphu-II H.E. Project, Meghalaya
6.	Report on deformability characteristics of rock mass by uniaxial jacking tests in right bank drift D-2, at dam axis (No: 9/RM-F/CSMRS/E/06/2016-17).	Pancheshwar Multipurpose Project, India / Nepal.
7.	Report on deformability characteristics of rock mass by plate load tests conducted in right bank drifts. (No. 4/RM-F/CSMRS/E/5/2016-17)	Renukaji Dam Project, Sirmour District, H.P.
8.	Report on shear strength parameters of rock mass by in-situ shear test conducted in right bank drifts.(No. 5/RM-F/CSMRS/E/5/2016-17)	Renukaji Dam Project, Sirmour District, Himachal Pradesh.
9.	Report on deformability characteristics of rock mass by Goodman Jack tests conducted in vertical drill holes (No. 6/RM-F/CSMRS/E/7/2016-17)	Turga Pumped Storage Project, Purulia District, West Bengal.
10.	Report on Deformability Characteristics of Rock Mass.(No: 10/RM-/CSMRS/E/12/2016-17.	Spillway Axis of Polavaram Irrigation Project, A.P..
11.	Deformability Characteristics of Rock Mass by Plate Load Tests in Left Bank Drift at Dam Axis. (No: 11/RM-F/CSMRS/E/01/2016-17).	Kirthai-I H.E. Project, Jammu and Kashmir.
12.	Report on underwater scanning of the upstream face of the power house section. (No: 1/E/EG/06/2016).	Hirakud dam using remote operated vehicle.
13.	Report on underwater scanning of the upstream face of the left bank.( No: 2/E/EG/06/2016).	Hirakud dam using remote operated vehicle
14.	Report on underwater scanning of the upstream face of the right bank. (No. 1/E/EG/09/2016).	Hirakud dam using Remote Operated Vehicle

15.	Report on large size Triaxial tests conducted on rockfill material from Dam site borrow area of Sun Kosi Hydroelectric Project, Nepal (No 02/RF/RSD/CSMRS/E/04/2016)	SunKosi Hydroelectric Project, Nepal
16.	Report on large size Oedometer tests conducted on rockfill material from Dam site borrow area of Sun Kosi Hydroelectric Project, Nepal. (No 01/RF/RSD/CSMRS/E/04/2016)	Sun Kosi Hydroelectric Project, Nepal.
17.	Report on large size Triaxial tests conducted on rockfill material from Kalez Khola Hydroelectric Project, Sikkim. (No 03/RF/RSD/CSMRS/E/04/2016)	Kalez Khola Hydroelectric Project, Sikkim.
18.	Report on large size Oedometer tests conducted on rockfill material from Kalez Khola Hydroelectric Project, Sikkim (No 04/RF/RSD/CSMRS/E/04/2016)	Kalez Khola Hydroelectric Project, Sikkim
19.	Report on large size Triaxial tests conducted on rockfill material from Spillway location of Kanhar Irrigation Project, Uttar Pradesh (No 05/RF/RSD/CSMRS/E/04/2016).	Kanhar Irrigation Project, Uttar Pradesh.
20.	Report on large size Triaxial tests conducted on rockfill material from Sundari quarry of Kanhar Irrigation Project, Uttar Pradesh (No 06/RF/RSD/CSMRS/E/04/2016).	Kanhar Irrigation Project, Uttar Pradesh.
21	Report on “Laboratory Investigations on Bottom Ash and Pond Ash from Vindhyachal Super Thermal Project, Singrauli, Madhya Pradesh) (No. 04/ Soil-I/ CSMRS/E/05/2016, May 2016).	Vindhyachal Super Thermal Project, Singrauli, Madhya Pradesh
22	Report on Laboratory Investigations of Fly Ash and Soil Samples for Ash Dyke (2x110 MW) for Parichha Thermal Power Project, Parichha, Jhansi, Uttar Pradesh(No.:03 /Soil-I/CSMRS/ E/05/2016, May, 2016)	Parichha Thermal Power Project, Parichha, Jhansi, Uttar Pradesh.
23	Report on Borrow Area Investigations for the afflux bunds of Kharkai Barrage Project, Jharkhand.(No.04/Soil - II/SM/CSMRS/E/09/16)	Kharkai Barrage Project, Jharkhand
24	Report on Laboratory Investigations on Undisturbed Soil Samples Collected from the Gap-II Dam Axis for the Polavaram Project, Dowlaiswaram, Andhra Pradesh.(No.:05/Soil-I/SM/CSMRS/E/08/2016).	Polavaram Project, Dowlaiswaram, Andhra Pradesh
25	Report on Laboratory Investigations on Soil Samples Collected from the Borrow Areas for the proposed Bhaunrat Dam Project, Uttar Pradesh(No. 01/Soil-III/SM/CSMRS/E/12/2016)	Bhaunrat Dam Project, Uttar Pradesh
26	Report on Foundation Investigations for the proposed Bhaunrat Dam Project, Uttar Pradesh (No. 02/Soil-III/SM/CSMRS/E/12/2016)	Bhaunrat Dam Project, Uttar Pradesh
27	Report on the Borrow Area Investigations for the Proposed Starter Dyke of the Ash Pond for the Tanda Thermal Power	Tanda Thermal Power Project, Stage-II

	Project, Stage-II (NTPC Ltd.), Uttar Pradesh (No. 07/Soil-I/SM/CSMRS/E/02/2017, February 2017)	(NTPC Ltd.), Uttar Pradesh
28	Report on Geotechnical Investigations at the unbreached portion of the Gararda Dam Project, Rajasthan.(No.08/Soil-/SM/CSMRS/E/03/2017, March 2017)	Gararda Dam Project, Rajasthan
29	Report on laboratory investigation of fine and coarse aggregate, samples collected during 12 <sup>th</sup> visit of CSMRS team to Tehri PSP(4X 250MW) Project, Tehri Garhwal, Uttrakhand.( No. 04/CSM/CSS/E/04/2016)	PSP(4x250MW) Tehri Project, Tehri Garhwal, Uttrakhand
30	Report on ASR Test and petrography analysis of rock of rock and sand to be used as aggregate in concrete for Mawphu Stage-II Project, Meghalaya. (No. 05/CSM/CSS/E/04/2016).	Mawphu Stage-II Project, Meghalaya
31	Report on physic-chemical investigations carried out on water, coal & flyash samples collected from different locations in around Parichha TPP, Jhansi, UP (No. 15/E/CSM/Chem/04/2016)	Parichha Thermal Power Station, Jhansi, UP-
32	Chemical analysis report of nine water samples. (No. 12/E/CSM/Chem/04/2016).	Pancheshwar HE Project, India
33	Chemical analysis report of seven water samples (No. 13/E/CSM/Chem/04/2016).	Rupaligarh HE Project, Nepal -
34	Report on construction materials survey and laboratory investigations of Rock & Sand samples for use as construction materials in concrete for Rupaligad Re-Regulating Dam Project, India.(No02/C-I/CSM/E/04/2016)	Rupaligad Re-Regulating Dam Project, (PMP) India
35	Interim Report on construction materials survey and laboratory investigations of rock and natural sand samples for use as construction materials in concrete for Pancheshwar Multi-Purpose Project, Nepal.(No. 03/C-I/CSM/E/05/2016)	Pancheshwar Multi Purpose Project, (PMP), Nepal.
36	External report on chemical analysis of water samples for its suitability for construction purpose & its impact on long term concrete durability. (No. 26/E/CSM/Chem/06/2016).	Lower Kopili HE Project, Assam
37	External report on chemical analysis of water samples. (No. 33/E/CSM/Chem/06/2016)	Pancheshwar Multi-Purpose Project, India/Nepal
38	External report on chemical analysis of water samples. - (No. 34/E/CSM/Chem/06/2016)	Rupaligad Regulating Dam, India/Nepal
39	Report on laboratory investigation of fine & coarse aggregate samples collected during 1 <sup>st</sup> visit to Tehri PSP (4x250MW) Project, Tehari. (No. 09/CSM/CSS/2016/E/06)	Tehri PSP (4x250MW) Project, Tehari.
40	Report on laboratory investigation of fine & coarse aggregate samples collected during 2 <sup>nd</sup> visit to Vishnugadh Project, Uttarakhand (No 10/CSM/CSS/2016/E/06)	Vishnugadh Project, Uttarakhand
41	Revised external report on chemical analysis of water samples collected in February 2015 (Pre monsoon period)	Lower Kopili HE Project, Assam

	for its suitability for use for construction purpose & its impact on long term concrete durability (No 39/E/CSM/Chem/07/2016).	
42	Report on chemical analysis of water samples collected in June 2016 (Monsoon period) for its suitability for use for construction purpose & its impact on long term concrete durability (No 37/E/CSM/Chem/07/2016).	Lower Kopili HE Project, Assam
43	Chemical analysis of one admixture sample. (No 38/E/CSM/Chem/07/2016)	Punatsangchhu HE Project, Bhutan
44	Report on laboratory investigation of fine & coarse aggregate samples collected during 1 <sup>st</sup> visit of second MOU to Tehri PSP (4x250MW) Project, Tehri.(No 13/CSM/CSS/2016/E/07)	Tehri PSP (4x250MW) Project, Tehri
45	Report on chemical analysis of eighteen water samples (No. 46/E/CSM/Chem/08/2016)	Rihand Dam Project, UP
46	Report on chemical analysis of ten water samples for durability studies (No 47/E/CSM/Chem/08/2016)	India Sagar Power Station, Khandwa, M.P
47	Interim Report on the construction materials survey for suitability of Rock/ Sand samples for use as coarse & fine aggregate in concrete for Doimukh Hydroelectric Project (80MW), Arunachal Pradesh (No 01/C-III/CSMRS/E/07/2016)	Doimukh Hydroelectric Project (80MW), Arunachal Pradesh
48	Report on the construction materials survey for suitability of rock/sand samples for use as coarse and fine aggregates in concrete and testing of cement, admixtures and water samples for use in Polavaram Head Works Project, Polavaram, Andhra Pradesh (No 04/C-III/CSMRS/E/01/2017)	Polavaram Head Works Project, Andhra Pradesh
49	Field inspection report on the visit made to Polavaram Head Works Project, Polavaram, Andhra Pradesh (No 09/C-III/CSMRS/E/02/2017)	Polavaram Head Works Project, Andhra Pradesh
50	Final report on water quality analysis of 10 water samples, XRD analysis for mineralogy and mechanical analysis (silt & clay content) of muddy material of 04 muddy water samples received from Indira Sagar Power Station Khandwa, MP (No 50/E/CSM/Chem/09/2016)	Indira Sagar Power Station Khandwa, MP
51	Report on laboratory investigations of cement, coarse and fine aggregate, superplasticiser and construction water samples collected during 3 <sup>rd</sup> visit to Vishnu gad Pipalkoti HE project, Uttarakhand (No 20/CSS/CSM/E/10/2016)	Vishnu gad Pipalkoti HE project, Uttarakhand
52	Interim report on the construction materials survey for suitability of sand samples for use as fine aggregate in concrete for Luhri-I H E Project, HP. (No. 07/C-III/CSMRS/E/12/2016)	Luhri-I H E Project, HP

53	Final report on water quality studies for concrete durability undertaken during 2015-2016 for Lower Kopili HE Project, Assam. (No 63/E/CSM/Chem/12/2016)	Lower Kopili HE Project, Assam
54	Report on laboratory investigations on Bricks and Cement–Mortar/ Cement– Concrete Samples of Structures Renovated/ Restored under Eastern Kosi Canal System by Water Resources Department, Bihar. (No 05/C-I/CSM/E/12/2016)	Eastern Kosi Canal System by Water Resources Department, Bihar
55	Report on construction materials survey and laboratory investigations of rock and natural sand samples for use as construction materials in concrete for Pancheshwar Multipurpose Project, India/Nepal. (No 04/C-I/CSM/E/09/2016)	Pancheshwar Multipurpose Project, India/Nepal
56	Interim report on Construction Materials Survey and Laboratory Investigations on Rock and Natural Sand samples for use as coarse and fine aggregates in concrete for Wainganga (Gosilkhurd)-Nalganga (Purna Tapi) Intra State Link Project (Phase-II), Maharashtra. (No 06/C-I/CSM/E/12/2016)	Wainganga (Gosilkhurd)-Nalganga (Purna Tapi) Intra State Link Project (Phase-II), Maharashtra
57	Final report on the construction materials survey for suitability of rock/ sand samples for use as coarse & fine aggregate in concrete for Doimukh Hydroelectric Project (80MW), Arunachal Pradesh (No. 08/C-III/CSMRS/E/01/2017)	Doimukh Hydroelectric Project (80MW), Arunachal Pradesh
58	Report on the construction materials survey for suitability of rock/ sand samples for use as coarse & fine aggregates in concrete and testing of cement, admixtures and water samples for Polavaram Head Works, Polavaram, Andhra Pradesh (No. 04/C-III/CSMRS/E/01/2017)	Polavaram Head Works, Polavaram, Andhra Pradesh
59	Report on Field Testing during 3 <sup>rd</sup> visit (of 2 <sup>nd</sup> MoU) to PSP Tehri Project, Uttarakhand. (No 27/ CSM / CSS / E/ 01 /2017)	PSP Tehri Project, Uttarakhand
70	Inspection Report on 2 <sup>nd</sup> visit of CSMRS Team to Vyaasi HE Project, Uttarakhand.. (RN 28/CSM/CSS/E/01/2017)	Vyaasi HE Project, Uttarakhand
71	Field inspection report on the visit made to Polavaram Head Works, Polavaram, Andhra Pradesh (No. 09/C-III/CSMRS/E/02/2017)	Polavaram Head Works, Polavaram, Andhra Pradesh
72	Report on Porosity test performed on coarse aggregate samples for Tehri Pump Storage Plant (4 x 250 MW), Tehri Garhwal, Uttarakhand. (No 29/CSM/CSS/2017/E/02)	Tehri Pump Storage Plant (4 x 250 MW), Tehri Garhwal, Uttarakhand
73	Report on 3 <sup>rd</sup> field visit of 2 <sup>nd</sup> MOU of CSMRS team & laboratory testing of construction material samples	Tehri Pump Storage Plant (4 x 250 MW),

	collected for Tehri Pump Storage Plant (4 x 250 MW), TehriGarhwal, Uttarakhaand. (No 30/CSM/CSS/2017/E/02)	TehriGarhwal, Uttarakhaand
74	Report on chemical analysis of eleven water and ten leachate samples (No 73/E/CSM/Chem/02/2017)	Nathpa Jhakri Hydro Power Station, Jhakri, HP
75	Report on Construction Materials Survey and Laboratory Investigations on Rock, Natural Sand samples and Extracted Rock Core samples for use as Coarse and Fine Aggregates in concrete for proposed Additional Spillway Structures. (No 01/C-I/CSM/E/02/2017)	Hirakud Dam, Odisha.
76	Report on laboratory investigation on construction materials samples collected by CSMRS team during their 3 <sup>rd</sup> visit (2 <sup>nd</sup> MOU) for Tehri Pump Storage Plant (4 x 250 MW), Tehri Garhwal, Uttarakhand (No 32/CSM/CSS/2017/E/03)	Tehri Garhwal, Uttarakhand.
77	Report on field testing during 4 <sup>th</sup> field visit from 20 <sup>th</sup> to 23 <sup>rd</sup> Feb, 2017 of 2 <sup>nd</sup> MOU in connection with providing quality control services of Tehri Pump Storage Plant (4 x 250 MW), Tehri Garhwal, Uttarakhaand. (No 31/CSM/CSS/2017/E/03)	Tehri Pump Storage Plant (4 x 250 MW), Tehri Garhwal, Uttarakhaand
78	Report on the Non-destructive tests conducted for periodic assessment and long term durability consideration of Drainage galleries of Pandoh dam, Himachal Pradesh has been sent to project authority vide this office letter no. 29/20/CDD/CSM/2015/476 dated 30.03.2017 (No. 03/E/CDD/CSM/03/2017)	Pandoh dam, Himachal Pradesh
79	Final report on Construction Materials Survey and Laboratory Investigations on Rock and Natural Sand samples for use as coarse and fine aggregates in concrete for Wainganga (Gosilkhurd)-Nalganga (Purna Tapi) Intra State Link Project (Phase-II), Maharashtra has been sent (No 02/C-I/CSMRS/E/03/2017)	Wainganga (Gosilkhurd)-Nalganga (Purna Tapi) Intra State Link Project (Phase-II), Maharashtra
80	Report on Laboratory testing of Geotextile mattress for protection of B/dyke from Sissikalghar to Tekeliphuta at different reaches from Lotasur to Tekeliphuta from the erosion of River Brahmaputra for Dhakuakhana Water Resources Division, Dhakuakhana, Assam (No. 01/Geosynthetics/RSD/CSMRS/E/05/ 2016)	Dhakuakhana Water Resources Division, Assam
81	Report on Laboratory testing of Geotextile materials for NHPC Limited, Subansiri Downstream Works Field Unit, Guwahati, Assam (No. 02/Geosynthetics/RSD/CSMRS/E/06/2016)	NHPC Limited, Subansiri Downstream Works Guwahati, Assam
82	Report on Laboratory testing of Geo-textile materials and Rope Gabions for the installation of Geo-textile tube embankment for coastal erosion protection at Pentha in	Department of Water Resources, AUL

	Rajnagar of Kendrapara District under ICZMP in Odisha for AUL Embankment Division, Department of Water Resources, Odisha (No. 03/Geosynthetics/RSD/CSMRS/E/03/2017)	Embankment Division, Odisha
83	Report on Laboratory testing of Geosynthetic materials and Gabion wires for Flood Management of River Ranganadi along with river training work on both bank embankments in Lakhimpur district (Assam) for North Lakhimpur Water Resources Division, North Lakhimpur (No. 04/Geosynthetics/RSD/CSMRS/E/02/2017)	North Lakhimpur Water Resources Division, Assam
84	Report on laboratory investigation of rock from Pancheshwar Multipurpose Project, Nepal(01/RM-Lab/CSMRS/E/06/2016)	Pancheshwar Multipurpose Project, Nepal
85	Report on Strength and Deformability Characteristics of rock from Goriganga – IIIA HE Project, Uttarakhand (No 03/RM-L/CSMRS/E/09/2016)	Goriganga – IIIA HE Project, Uttarakhand
86	Report on laboratory investigation of rock from Rupaligad re-regulating Dam, Nepal (No 2A/RM-Lab/CSMRS/E/09/2016)	Rupaligad re-regulating Dam, Nepal
87	Report on Laboratory Investigations of Rock from Punatsangchhu -II H.E. Project, Bhutan (No. 01/RM-L/CSMRS/E/01/2017)	Punatsangchhu -II H.E. Project, Bhutan
88	Report on laboratory investigation of rock from Punatsangchhu-I HE Project, Bhutan (No. 07/RM-Lab/CSMRS/E/03/2017)	Punatsangchhu-I HE Project, Bhutan
89	Report on laboratory investigation of rock from Polavaram Irrigation Project, Andhra Pradesh (No. 09/RM-Lab/CSMRS/E/03/2017)	Polavaram Irrigation Project, Andhra Pradesh