

BUREAU OF INDIAN STANDARDS

Program of Work

WRD 23 : Measurement and Cost Analysis of Works for River Valley Projects

Scope: Standardization in the field of measurement and cost analysis of civil engineering works for water resource projects.

Liaison:

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10061:2024	Analysis of Unit Rate of Excavation of Tunnels by Cyclic Drilling and Blasting i;½ Proforma (Second Revision)		-	Indigenous
2	IS 10062:2024	Proforma for analysis of unit rate of quarrying rock by mechanical means second revision of IS 10062		-	Indigenous
3	IS 10160:2024	Proforma for analysis of unit rate of earthwork used in construction of river valley projects (first revision of IS 10160)		-	Indigenous
4	IS 10421:2025	Proforma for Analysis of Unit Rate of Shuttering/ Formwork for Concrete Works (First Revision)		-	Indigenous
5	IS 10777:2025	Proforma for Analysis of Unit Rate of Rock Excavation by Mechanical Means Including Blasting for Open Excavation (Second Revision)		-	Indigenous
6	IS 11399 (Part 1):1985 Reviewed In : 2021	Guidelines for estimating output norms of items of work in construction of river valley projects : Part 1 earthwork excavation	March, 2021	2	Indigenous
7	IS 11590:1995 Reviewed In : 2021	Guidelines for working out unit rate cost of the construction equipment used for river valley projects (First Revision)	March, 2021	-	Indigenous
8	IS 11638:2025	Proforma for Estimation of Unit Rate in Construction of Embankment by Mechanical Means (Second Revision)		-	Indigenous
9	IS 13418:2025	Proforma for Analysis of Unit Rate of Grouting in River Valley Projects (First Revision)		-	Indigenous
10	IS 13419:2025	Proforma for Analysis of Unit Rate of Shotcreting/Guniting in River Valley Projects (First Revision)		-	Indigenous
11	IS 14590:2025	Proforma for Analysis of Unit Rate		-	Indigenous

		of Dewatering (First Revision)			
12	IS 14749:2000 Reviewed In : 2021	Proforma for analysis of unit rate of underground excavation by cyclic drilling and blasting	March, 2021	-	Indigenous
13	IS 14835:2000 Reviewed In : 2021	Guidelines for estimating unit rate of items of works in construction of rubble masonry for river valley projects	March, 2021	-	Indigenous
14	IS 4851:2024	Estimating Unit Rate of Concrete Used in Mechanized Construction of River Valley Projects i _c ½ Proforma (Third Revision)		-	Indigenous
15	IS 4852:2024	Estimating Unit Rate of Random Rubble Masonry Used in Construction of River Valley Projects i _c ½ Proforma (Third Revision)		-	Indigenous
16	IS 4877:1968 Reviewed In : 2021	Guide for preparation of estimate for river valley projects	March, 2021	-	Indigenous
17	IS 9401 (Part 1):1999 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 1 excavation for foundation (First Revision)	March, 2022	-	Indigenous
18	IS 9401 (Part 2):2003 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 2 dewatering (First Revision)	December, 2022	-	Indigenous
19	IS 9401 (Part 3):2003 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 3 grouting (Second Revision)	December, 2022	-	Indigenous
20	IS 9401 (Part 4):2018 Reviewed In : 2023	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 4 Concrete work	September, 2023	-	Indigenous
21	IS 9401 (Part 5):2014 Reviewed In : 2024	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 5 masonry (First Revision)	May, 2024	-	Indigenous
22	IS 9401 (Part 6):2013 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 6 ventilation pipes and other embedded Materials (First Revision)	December, 2022	-	Indigenous
23	IS 9401 (Part 7):2013 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 7 joints (First Revision)	December, 2022	-	Indigenous
24	IS 9401 (Part 8):1985 Reviewed In : 2025	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 8 instrumentation	February, 2025	1	Indigenous
25	IS 9401 (Part 9):1987 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 9 lining	July, 2022	-	Indigenous
26	IS 9401 (Part	Method of measurement of works in	July, 2022	-	Indigenous

	10):1990 Reviewed In : 2022	river valley projects(Dams - And Appurtenant Structures): Part 10 formwork			
27	IS 9401 (Part 11):1998 Reviewed In : 2022	Methods of measurement of work in river valley projects (Damsand Appurtenantstructures): Part 11 diaphragm walls (First Revision)	July, 2022	-	Indigenous
28	IS 9401 (Part 12):1992 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures)	July, 2022	1	Indigenous
29	IS 9401 (Part 13):1992 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 13 earth and fill dams	July, 2022	-	Indigenous
30	IS 9401 (Part 14):1992 Reviewed In : 2022	Method of measurement of works in river valley projects (Damsand Appurtenantstructures): Part 14 canal works	July, 2022	-	Indigenous
31	IS 9401 (Part 15):2010 Reviewed In : 2025	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 15 investigation works - Drilling of bore holes and exploratory drifting and logging	March, 2025	-	Indigenous
32	IS 9401 (Part 16):1999 Reviewed In : 2021	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 16 tunneling	March, 2021	-	Indigenous
33	IS 9401 (Part 17):1999 Reviewed In : 2021	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 17 hydromechanical and related metal works	March, 2021	-	Indigenous
34	IS 9401 (Part 18):2000 Reviewed In : 2021	Method of measurement of work in river valley projects (Dams And Appurtenant Structures): Part 18 sheet pilcng	March, 2021	-	Indigenous
35	IS 9401 (Part 19):2022 Reviewed In : 2022	Method of measurement of works in river valley projects Dams and appurtenant structures Part 19 Electro Mechanical Works		-	Indigenous
36	IS 9401 (Part 20):2013 Reviewed In : 2022	Method of measurement of works in river valley projects (Dams And Appurtenant Structures): Part 20 protection works	December, 2022	-	Indigenous

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Preliminary Draft Standards

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
1	WRD 23 (27473) Revision of: IS 9401:1999	METHOD OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 1 EXCAVATION FOR FOUNDATION
2	WRD 23 (27474) Revision of: IS 9401:1987	METHOD OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 9 LINING
3	WRD 23 (27477) Revision of: IS 9401:1990	METHOD OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 10 FORMWORK
4	WRD 23 (27479) Revision of: IS 9401:1992	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 12 TOPOGRAPHICAL SURVEYS

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	WRD 23 (00480)	Method of measurement of water in River Valley Projects Dams and Appurtenant Structures Part 4 Concrete Works first revision IS 9401 PART 4 1980
2	WRD 23 (00481)	Method of measurement of water in River Valley Projects Dams and Appurtenant Structures Part 5 Masonry first revision of IS 9401 PART 5 1980
3	WRD 23 (15663) Revision of: IS 9401:2009	Method of measurement of works in river valley projects Dams and appurtenant structures Part 19 Electro Mechanical Works
4	WRD 23 (16701) Revision of: IS 4851:1987	Estimating Unit Rate of Concrete Used in Mechanized Construction of River Valley Projects Proforma Third Revision
5	WRD 23 (16703) Revision of: IS 4852:1987	Estimating Unit Rate of Random Rubble Masonry Used in Construction of River Valley Projects Proforma Third Revision
6	WRD 23 (16704) Revision of: IS 10061:1991	Analysis of Unit Rate of Excavation of Tunnels by Cyclic Drilling and Blasting Proforma Second Revision
7	WRD 23 (16705) Revision of: IS 10160:1982	Proforma for analysis of unit rate of earthwork used in construction of river valley projects first revision of IS 10160
8	WRD 23 (16708) Revision of: IS 10062:1991	Proforma for analysis of unit rate of quarrying rock by mechanical means second revision of IS 10062
9	WRD 23 (16770) Revision of: IS 10777:1994	Proforma for Analysis of Unit Rate of Rock Excavation by Mechanical Means Including Blasting for Open Excavation Second Revision
10	WRD 23 (16771) Revision of: IS 11638:2000	Proforma for Estimation of Unit Rate in Construction of Embankment by Mechanical Means Second Revision
11	WRD 23 (16772) Revision of: IS 13418:1992	Proforma for Analysis of Unit Rate of Grouting in River Valley Projects First Revision
12	WRD 23 (16773) Revision of: IS 13419:1992	Proforma for Analysis of Unit Rate of Shotcreting Guniting in River Valley Projects First Revision
13	WRD 23 (16774) Revision of: IS 14590:1998	Proforma for Analysis of Unit Rate of Dewatering First Revision
14	WRD 23 (16777) Revision of: IS 10421:1983	Proforma for Analysis of Unit Rate of Shuttering Formwork for Concrete Works First Revision
15	WRD 23 (27478) Revision of: IS 9401:1998	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 11 DIAPHRAGM WALLS
16	WRD 23 (27520) Revision of: IS 9401:1985	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 8 INSTRUMENTATION
17	WRD 23 (27521) Revision of: IS 9401:1992	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 13 EARTH AND FILL DAMS

18	WRD 23 (27522) Revision of: IS 9401:1992	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 14 CANAL WORKS
19	WRD 23 (27523) Revision of: IS 9401:2010	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 15 INVESTIGATION WORKS DRILLING OF BORE HOLES AND EXPLORATORY DRIFTING AND LOGGING
20	WRD 23 (27524) Revision of: IS 9401:1999	METHODS OF MEASUREMENT OF WORKS IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 16 TUNNELING
21	WRD 23 (27525) Revision of: IS 9401:1999	METHODS OF MEASUREMENT OF WORK IN RIVER VALLEY PROJECTS DAMS AND APPURTENANT STRUCTURES PART 17 HYDROMECHANICAL AND RELATED METAL WORKS
22	WRD 23 (28147) Revision of: IS 4877:1968	GUIDE FOR PREPARATION OF ESTIMATE FOR RIVER VALLEY PROJECTS
23	WRD 23 (28148) Revision of: IS 11590:1995	GUIDELINES FOR WORKING OUT UNIT RATE COST OF THE CONSTRUCTION EQUIPMENT USED FOR RIVER VALLEY PROJECTS
24	WRD 23 (28149) Revision of: IS 11399:1985	GUIDELINES FOR ESTIMATING OUTPUT NORMS OF ITEMS OF WORK IN CONSTRUCTION OF RIVER VALLEY PROJECTS PART 1 EARTHWORK EXCAVATION

Total Published Standards:36 Total Standards Under development:28

Aspect Wise Report

Product : 0
Code of Practices : 35
Methods of Test : 0
Terminology : 0
Dimensions : 0
System Standard : 0
Safety Standard : 0
Others : 1
Service Specification : 0
Process Specification : 0
Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 9401 (Part 15/Sec 1):1993 Reviewed In : 2007	Method of measurement of works in river valley projects Dams and appurtenant structures Part 15 Investigation works Section 1 Drilling of bore holes
2	IS 9401 (Part 15/Sec 2):1992 Reviewed In : 2007	Method of Measurement of Works in River Valley Projects dams and appurtenant structures - Part 15 Investigation Works - Section 2 Exploratory Drifting

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
<i>No Records Found</i>		