

# BUREAU OF INDIAN STANDARDS

## Program of Work

### WRD 13 : Canals And Cross Drainage Works

**Scope:** Standardization of criteria for planning, location, design, construction, inspection, maintenance and other related aspects for canals and cross drainage works.

**Liaison:**

## Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10430 : 2000 <span style="color: green;">Reviewed In : 2024</span>	Criteria for design of lined canals and guidance for selection of type of lining (First Revision)	September, 2024	1	Indigenous
2	IS 10646 : 1991 <span style="color: green;">Reviewed In : 2024</span>	Canal linings - Cementconcrete tiles - Specification (First Revision)	September, 2024	3	Indigenous
3	IS 11570 : 1985 <span style="color: green;">Reviewed In : 2024</span>	Criteriafor hydraulic design of irrigation intake structures	March, 2024	1	Indigenous
4	IS 11809 : 1994 <span style="color: green;">Reviewed In : 2024</span>	Lining for canals by stone masonry - Code of practice (First Revision)	September, 2024	2	Indigenous
5	IS 12331 : 1988 <span style="color: green;">Reviewed In : 2022</span>	General requirements for canal outlets	August, 2022	1	Indigenous
6	IS 12379 : 1988 <span style="color: green;">Reviewed In : 2022</span>	Code of practice for lining of water - Courses and field channels	August, 2022	2	Indigenous
7	IS 13143 : 1991 <span style="color: green;">Reviewed In : 2024</span>	Jointsin concreteliningofcanals - Sealing compound - Specification	March, 2024	-	Indigenous
8	IS 16238 : 2017 <span style="color: green;">Reviewed In : 2022</span>	Planning of parallel canals - Guidelines	April, 2022	-	Indigenous
9	IS 16472 : 2016 <span style="color: green;">Reviewed In : 2021</span>	Design and construction of water courses - Guidelines	February, 2021	-	Indigenous
10	IS 3872 : 2002 <span style="color: green;">Reviewed In : 2022</span>	Lining of canals with burnt clay tiles - Code of practice (First Revision)	August, 2022	1	Indigenous
11	IS 3873 : 1993 <span style="color: green;">Reviewed In : 2024</span>	Laying .cement concrete/stone slab lining on canals - Code of practice (Second Revision)	September, 2024	1	Indigenous
12	IS 4410 (Part 5) : 2023	GLOSSARY OF TERMS RELATING TO RIVER VALLEY PROJECTS PART 5 CANALS (Second Revision)		-	Indigenous
13	IS 4410 (Part 15/Sec 1) : 2023	GLOSSARY OF TERMS RELATING TO RIVER VALLEY PROJECTS PART 15 CANAL STRUCTURES Section 1 General Terms		-	Indigenous
14	IS 4410 (Part 15/Sec	GLOSSARY OF TERMS		-	Indigenous

	2) : 2023	RELATING TO RIVER VALLEY PROJECTS PART 15 CANAL STRUCTURES Section 2 Transitions			
15	IS 4410 (Part 15/Sec 3) : 1977 Reviewed In : 2020	Glossary of terms relating to river valley projects: Part 15 canal structures: Sec 3 flume.	March, 2020	-	Indigenous
16	IS 4410 (Part 15/Sec 4) : 1977 Reviewed In : 2020	Glossary of terms relating to river valley projects: Part 15 canal structures: Sec 4 regulating works	March, 2020	-	Indigenous
17	IS 4410 (Part 15/Sec 5) : 2023	GLOSSARY OF TERMS RELATING TO RIVER VALLEY PROJECTS PART 15 CANAL STRUCTURES Section 5 Cross-Drainage Works		-	Indigenous
18	IS 4515 : 2002 Reviewed In : 2022	Stone pitched lining for canals - Code of practice (Second Revision)	August, 2022	-	Indigenous
19	IS 4558 : 1995 Reviewed In : 2021	Under - Drainage of lined canals - Code of practice (Second Revision)	February, 2021	1	Indigenous
20	IS 4701 : 1982 Reviewed In : 2024	Code of practice for earthwork on canals (First Revision)	September, 2024	-	Indigenous
21	IS 4839 (Part 1) : 1992 Reviewed In : 2022	Maintenance of canals code of practice: Part 1 unlined canals (Second Revision)	August, 2022	1	Indigenous
22	IS 4839 (Part 2) : 1992 Reviewed In : 2021	Maintenance of canals - Code of practice: Part 2 lined canals (Second Revision)	February, 2021	1	Indigenous
23	IS 4839 (Part 3) : 1992 Reviewed In : 2022	Code of practice for maintenance of canals: Part 3 canal structures, drains, outlets, jungle, clearance, plantation and regulation f second revision)	August, 2022	1	Indigenous
24	IS 5256 : 1992 Reviewed In : 2022	Sealing expansion joints in concrete lining of canals - Code of practice (First Revision)	August, 2022	-	Indigenous
25	IS 5690 : 1982 Reviewed In : 2024	Guide for laying combination lining for existing unlined canals (First Revision)	September, 2024	1	Indigenous
26	IS 5968 : 1987 Reviewed In : 2022	Guide for planning and layout of canal system for krrlGatlon (First Revision)	August, 2022	-	Indigenous
27	IS 6004 : 1980 Reviewed In : 2024	Criteria for hydraulic design of sediment ejector for irrigation and power channels (First Revision)	September, 2024	-	Indigenous
28	IS 6522 : 1972 Reviewed In : 2024	Criteria for design of silt vanes for sediment control in offtaking canals	September, 2024	-	Indigenous
29	IS 6531 : 2021	Canal head regulators criteria for design Second Revision		-	Indigenous
30	IS 6936 : 1992 Reviewed In : 2022	Guide for location, selection and hydraulic design of canal escapes (First Revision)	August, 2022	-	Indigenous
31	IS 7112 : 2002 Reviewed In : 2022	Criteria for design of cross -: Sec for unlined canals in alluvial soil (First Revision)	August, 2022	-	Indigenous
32	IS 7113 : 2003 Reviewed In : 2022	Soil - Cement lining for canals - Code of practice (First Revision)	August, 2022	1	Indigenous

33	IS 7114 : 1973 Reviewed In : 2024	Criteria for hydraulic design of cross regulators for canals	September, 2024	-	Indigenous
34	IS 7331 : 1981 Reviewed In : 2022	Code of practice for inspection and maintenance of cross drainage works (First Revision)	August, 2022	-	Indigenous
35	IS 7495 : 1974 Reviewed In : 2024	Criteria for hydraulic design of silt selective head regulator for sediment control in off-taking canals	August, 2024	-	Indigenous
36	IS 7784 (Part 1) : 2013 Reviewed In : 2024	Design of cross drainage works - Code of practice: Part 1 general features (Second Revision)	September, 2024	-	Indigenous
37	IS 7784 (Part 2/Sec 1) : 1995 Reviewed In : 2020	Design of cross drainage works code of practice: Part 2 specific requirements: Sec 1 aqueducts (First Revision)	March, 2020	-	Indigenous
38	IS 7784 (Part 2/Sec 2) : 2000 Reviewed In : 2024	Code of practice for design of cross drainage works: Part 2 specific requirements: Sec 2 superpassages (First Revision)	September, 2024	1	Indigenous
39	IS 7784 (Part 2/Sec 3) : 1996 Reviewed In : 2021	Code of practice for design of cross drainage works: Part 2 specific requirements: Sec 3 canal siphons (First Revision)	February, 2021	-	Indigenous
40	IS 7784 (Part 2/Sec 4) : 1999 Reviewed In : 2024	Design of cross drainage works - Code of practice: Part 2 specific requirements: Sec 4 level crossings (First Revision)	August, 2024	-	Indigenous
41	IS 7784 (Part 2/Sec 5) : 2000 Reviewed In : 2024	Code of practice for design of cross drainage works part 2 specific requirements: Sec 5 siphon aqueducts (First Revision)	September, 2024	1	Indigenous
42	IS 7871 : 1975 Reviewed In : 2024	Criteria for hydraulic design of groyne walls (Curved Wing) for sediment distribution at off-take points in a canal	March, 2024	-	Indigenous
43	IS 7873 : 1975 Reviewed In : 2024 Decision taken to Reaffirm and Archive	Code of practice for limb concrete lining for canals	March, 2024	1	Indigenous
44	IS 7880 : 1975 Reviewed In : 2024	Criteria for hydraulic design of skimming platform for sediment control in off-taking canal	September, 2024	-	Indigenous
45	IS 7986 : 1976 Reviewed In : 2024	Code of practice for canal outlets	September, 2024	1	Indigenous
46	IS 8835 : 1978 Reviewed In : 2024	Guidelines for planning and design of surface drains	September, 2024	-	Indigenous
47	IS 9097 : 1979 Reviewed In : 2024	Guide for laying lining of canals with hot bitumen or bituminous felts	March, 2024	-	Indigenous
48	IS 9447 : 2023	Assessment of Seepage Losses in Canals by Analytical method- Guidelines ( first revision)		-	Indigenous
49	IS 9451 : 2022	Guidelines for Lining of Canals in Expansive Soils Third Revision		-	Indigenous
50	IS 9452 (Part 1) : 1993 Reviewed In : 2024	Measurement of seepage losses from canals - Code of practice: Part 1 Ponding method	March, 2024	-	Indigenous

51	IS 9452 (Part 2) : 1980 Reviewed In : 2024	Code of practice for measurement of seepage losses from canals: Part 2 inflow - O - outflow method	March, 2024	-	Indigenous
52	IS 9452 (Part 3) : 1988 Reviewed In : 2024	Code of practice for measurement of seepage losses from canals: Part 3 seepage meter method	March, 2024	-	Indigenous
53	IS 9698 : 1995 Reviewed In : 2020	Lining of canals with polyethylene film - Code of practice (First Revision)	March, 2020	1	Indigenous
54	IS 9913 : 2000 Reviewed In : 2024	Code of practice for construction of cross drainage works (First Revision)	September, 2024	1	Indigenous

### Standards under Development

#### Projects Approved

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

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
1	WRD 13 (24522) Revision of: IS 3873:1993	Laying Cement ConcreteStone slab lining on Canals-Code of Practice
2	WRD 13 (24526) Revision of: IS 4558:1995	UNDER-DRAINAGE OF LINED CANALS - CODE OF PRACTICE
3	WRD 13 (24576) Revision of: IS 4701:1982	EARTHWORK ON CANALS CODE OF PRACTICE Second Revision of IS 4701

#### 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
<i>No Records Found</i>		

#### Finalized Draft Indian Standards under Print

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

**Total Published Standards:54 Total Standards Under development:3**

### Aspect Wise Report

Product : 2  
Code of Practices : 44  
Methods of Test : 0

Terminology : 7  
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 3860 : 1966 Reviewed In : 2003	Precast Cement Concreat Slabs for Cannal Lining
2	IS 4745 : 1968	Code of Practice for Design of Cross-section of Lined Canals
3	IS 4969 : 1968	Method of Test for Detemining Flexural Strength of Precast Cement Concrete Slabs for Canal Lining
4	IS 5331 : 1969	Guide for Selection of Type of Lining for Canals

### Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 10646 : 1991 Reviewed In : 2024	Canal linings - Cementconcrete tiles - Specification First Revision
2	IS 13143 : 1991 Reviewed In : 2024	Jointsin concreteliningofcanals - Sealing compound - Specification