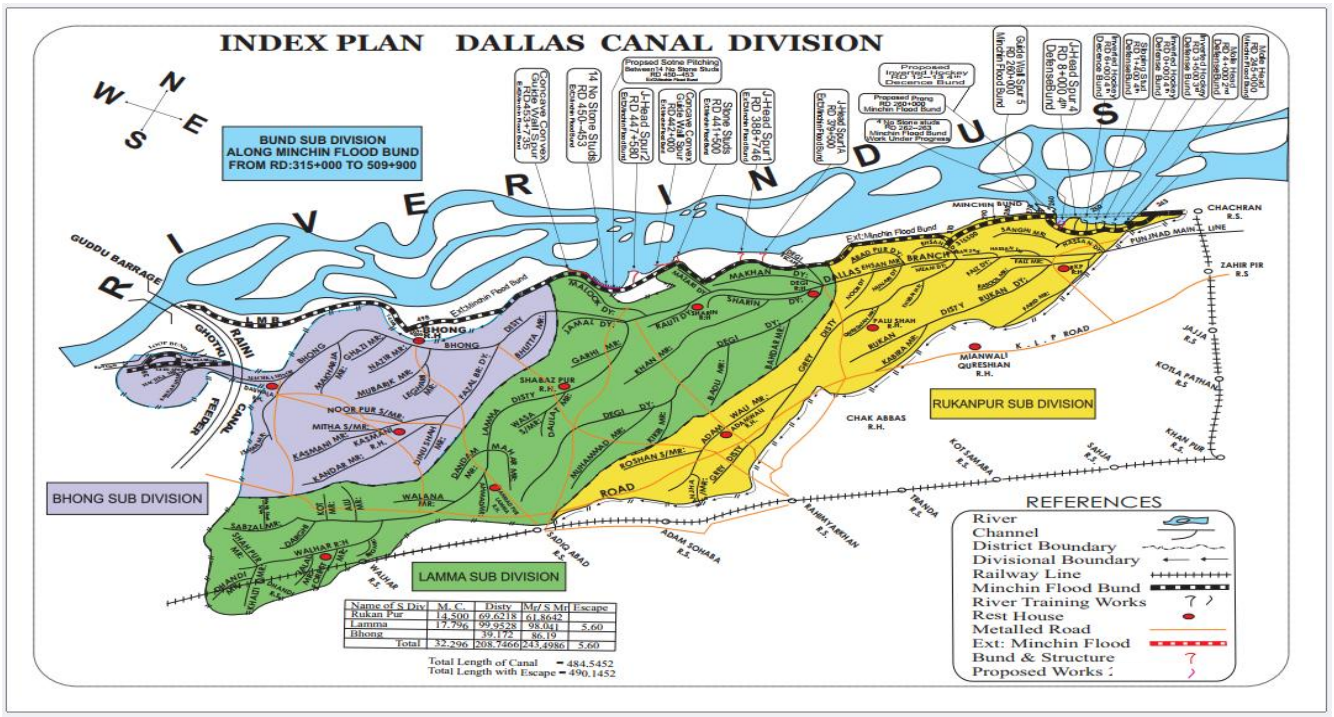
GOVERNMENT OF THE PUNJAB

IRRIGATION DEPARTMENT

FLOOD FIGHTING PLAN FOR THE YEAR 2026

DALLAS CANAL DIVISION RAHIM YAR KHAN



PART-A

Chapter 1

SALIENT FEATURE OF THE CONCERNED DIVISION

1.1 LOCATION

The Dallas Canal Division is located on the left bank of the Indus River. Its starting point is downstream of Chachran town in Tehsil Khanpur. The division is bordered by the Indus River to the north, the Guddu Barrage command area to the southwest, and the irrigation boundary of Rahimyarkhan Division to the southeast.

1.2 GENERAL DESCRIPTION

The Gross command area of Dallas Canal Division is 437,320 acres, with a culturable command area of 410,274 acres. The lands in this region are highly fertile. To safeguard the irrigation system and the fertile lands from potential river spills, three flood embankments, spanning a total length of 22 miles, have been established. These embankments include Minchin Bund (RD 243,000-309,000), Machka Dilawra Bund (RD 0-38,000), and Loop Bund (RD 0-6,070).

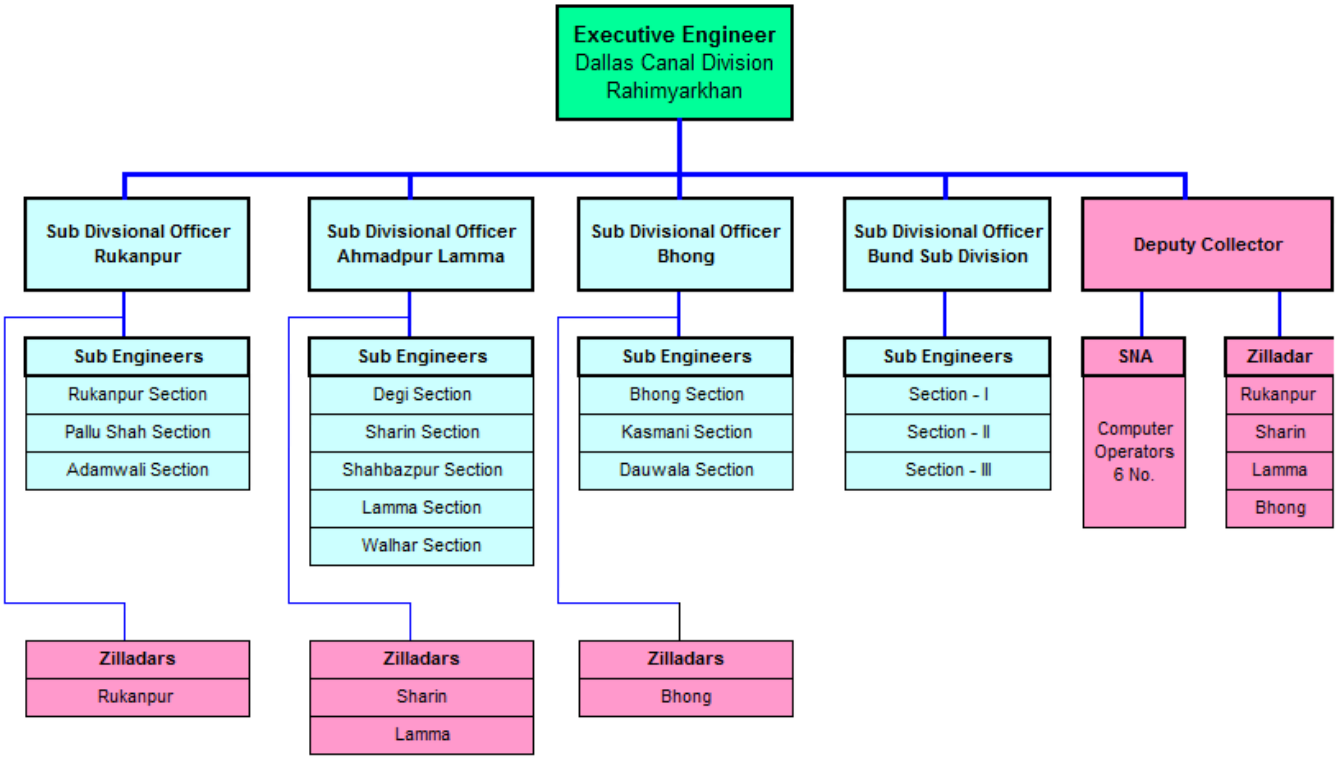
During the floods of 1995 to 1997, Minchin Bund experienced erosion from RD 246 to 259. In response, three defensive bunds were constructed in setback positions by the Rahimyarkhan Canal Division. The 4th defence bund is linked to Minchin Bund at RD 263 and to the 3rd defence bund at RD 5-6. In 1998, the government approved the construction of five spurs to combat river erosion and protect the Rahimyarkhan and Dallas Divisions. These spurs have been completed, with Spur No. 4 at RD 8 of the 4th defence bund and Guide wall spur No. 5 at RD 260 of the Minchin Bund being incorporated into the Dallas Canal Division.

The Minchin Bund, existing at the site, has been rehabilitated and raised to a 6 ft freeboard above the flood levels of 1992. An extension of the existing Minchin Flood bund from RD 309,000 to LMB Guddu Barrage has been constructed, featuring three J-Head Spurs and one Concave Convex Guide Wall. This extension is connected at RD 509+900 with the LMB Guddu Barrage, providing protection to the infrastructure and canal system in the area against river spills.

Length of Canal	= 490 Mile
Length of Bund	= 67.34 Mile
No. of Spurs	= 6 No.
Guide Wall	= 1 No
Inverted Hockey Spur	= 3 No
Stone Stud	= 3 No
Mole Head	= 2 No
GCA / CCA	=437320 / 410274 Acres

1.3 ADMINISTRATIVE SETUP.

ORIGINATION CHART OF DALLAS CANAL DIVISION IS AS UNDER



Chapter 2

FLOOD PROTECTION & RIVER TRAINING WORKS

Flood protection works of the division are briefed as under.

2.1 DESIGN PARAMETERS OF FLOOD PROTECTION BUND & RIVER TRAINING WORKS.

1.	Minchin bund from (RD:243-310)	= RD 50	= 13.40 Miles
2.	Fourth Defence Bund (RD 0-15840)	= RD 15.80	= 3.17 Miles
3.	Extension Minchin Bund (RD: 309+500-509+900)	= RD 200.40	= 40.08 Miles
4.	Machka Dilawara Bund (RD: 0-38000)	= RD 38	= 7.60 Miles
5.	Loop Bund (RD: 0-6070)	= RD 6.07	= 1.21 Miles
6.	2nd Defence Bund (RD:0-4000)	= RD 4	= 0.80 Miles
7.	3rd Defence Bund (RD:0-5375)	= RD 5.37	= 1.08 Miles
	Total RD:	**=319.64**	**= 67.34 Miles**

BUNDS.

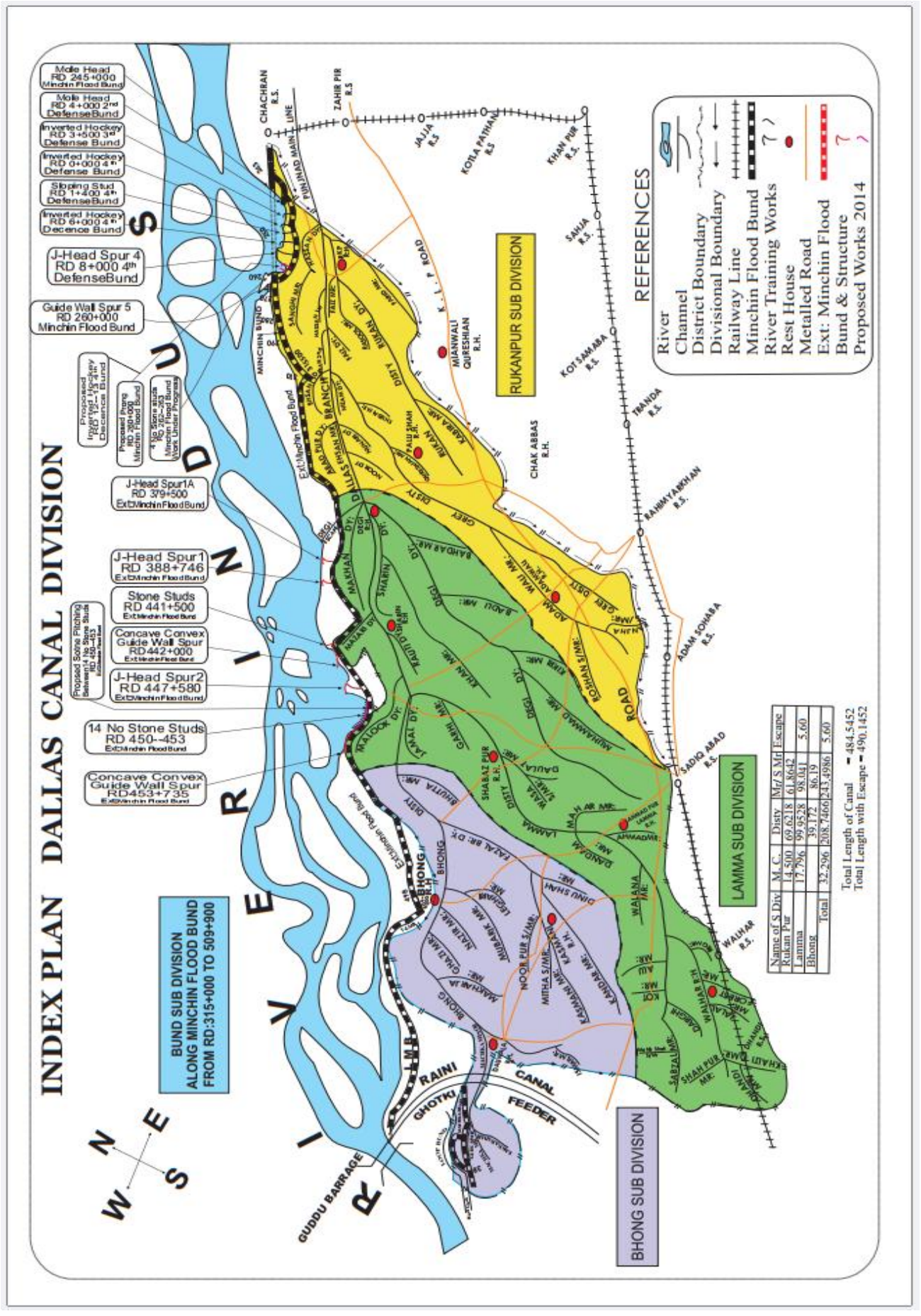
Sr. No.	Name of bund	Top width in ft	Side slope		Free board	Remarks.
			City side	River side		
1	Minchin Bund	25	2:1	3:1	6'	
2	Extension Minchin Bund	25	2:1	3:1	7'	
3	4th Defence Bund	25	2:1	3:1	7'	
4	Machka Dilawra Bund	25	2:1	3:1	6'	
5	Loop bund	25	2:1	3:1	6'	

SPURS.

Sr. No	Structures	Length			Section								Pitching Ft
		Shank Ft.	Head Ft	Total	Top width Ft	Side Slope Head		Side Slope (Shank)		Free board	Apron	Crush & spawl	
						U/S	D/S	U/S	D/S				
1	Inverted Hockey Spur U/S of J-Head Spur No. 4	2020	249	2269	25			2:1	2:1	6 ft		1’	1.0
2.	J Head spur no. 4 at RD 8 of 4th defence Bund.	1400	1651	3051	30	2:1	3:1	3:1	3:1	6 ft	70x7'	1’	1.0
3.	Guide Wall spur no. 5 at RD 260 of Minchin Bund.	637	941	1578	30	2:1	2:1	3:1	2:1	6 ft	70x7'	1’	1.0
4	J-Head Spur No. 1-A at RD: 379+500 of Extension Minchin Bund	2340	1950	4290	30	2:1	3:1	3:1	3:1	6 ft	70x7'	1’	1.0
5	J-Head Spur No. 1 at RD: 388+746 of Extension Minchin Bund	5196	1993	7189	30	2:1	3:1	3:1	3:1	6 ft	70x7'	1’	1.0
6	Stone Stud at RD: 441+500 of Extension Minchin Bund	300	80	380		2:1	2:1	3:1	2:1				
7	Guide Head Spur RD: 442+000 of Extension Minchin Bund	190	745	935		2:1	3:1				20 ft		
8	J-Head Spur No. 2 at RD: 447+380 of Extension Minchin Bund	2340	1950	4290	30	2:1	3:1	3:1	3:1	6 ft	70x7'	1’	1.0
9	Guide Wall Spur at RD: 453+735 of Extension Minchin Bund	471	3319	3790	30	2:1	3:1			6 ft	70x7'	1’	1.0
10	Solid Stone Studs at RD: 462-463 (3 Nos)	Solid stone stud with top width 25 ft length 90 to 100											

11	Mole Head at RD 245+000 Minchin Flood Bund				25	2:1	2:1	2:1	2:1	6	25x7’	1’	1.0
12	Mole Head at RD 4+000 2nd Defence Bund.				25	2:1	2:1	2:1	2:1	6	25x7’	1’	1.0
13	Inverted Hockey at RD 3+000 of 3rd Defence Bund.				25	1.5:1	1.5:1	2:1	2:1	6	25x7’	1’	1.0
14	Inverted Hockey at RD 0+000 of 4th Defence Bund.				25	1.5:1	1.5:1	2:1	2:1	6	25x7’	1’	1.0
15	Slopping stud at RD 1+400 at 4th Defence Bund.	550		550	25	2:1	2:1	2:1	2:1	6	25x7’	1’	1.0
16	Solid Stone Studs between RD: 466+500-467+100 (3 Nos)	Solid stone stud with top width 15 ft length 100											
18	Solid Stone Studs between RD: 466+500-467+100 (4 Nos)	Solid stone stud with top width 15 ft length 50											
19	Inverted hockey at RD 468+300	Solid stone inverted Hockey with top width 25 ft and 360 ft length											
20	Solid Stone Studs between RD 468+800 to 469+400 (4 Nos)	Solid Stone Stud with top width 50 ft length 50 ft											

2.2 Location Map



Chapter 3

BRIEF HISTORY OF PAST FLOOD EVENTS

Indus is the largest river in Pakistan having a length of about 3200 KM. It originates from Lake Manasavover in Hamaliyas. It flows in mountainous ranges upto Kala Bagh and then in plains upto Thatta and ultimately falls in Arabian Sea. Discharge of river varies from 0.50 Lac Cs in winter to 11.0 Lac Cs in summer.

River Chenab falls in River Indus upstream of Chachran Town in District Rahimyarkhan opposite Minchin Flood Bund RD: 105. River Indus Plane is about 10 miles wide having a network of small & large creaks.

Minchin Flood Bund was constructed downstream of Panjnad headworks along left bank of river Chenab and Indus for protection of Panjnad Main Line/Canal & its Canal System. It starts opposite to RD: 52 of Panjnad Main Line and ends near RD: 55 of Dallas Branch, with total length of about 315+500 thousand feet ending at RD: 7 of right bank of Ehsan Disty of Dallas Canal System.

The terrain & the contour of the area is such that if a spill of river Indus crosses the highest ridge on the left flank of the river in the said gap, the spill of water will never fall back into main river but will devastate everything on its way in Punjab & Sindh provinces. The same happened when the Left Marginal Bund (LMB) of Panjnad Head Works breached during flood 1973.

The course of river has gradually shifted from right bank to left bank, after 1994 & 1995 flood, the main current further shifted toward left bank. For the changed posture of the river and keeping in view the geophysical features, a scheme was proposed to extend the Minchin flood bund to the Left Marginal Bund (LMB) of Guddu Barrage, in order to protect the abadies, precious agriculture lands, industry and infrastructure on left bank of the river all the way from Panjand Headworks to Guddu barrage.

The project of extension Minchin Bund was launched during the year 2008. The contractor completed the river training works under this project and major part of the embankments but construction of the embankments at 18 sites in varying lengths was not allowed by the landowners of the area by getting stay orders from the court. Initially, when the project was launched, no land acquisition was provided which created discomfort and feeling of unease especially among the small landowners losing their land to (under) the embankment. The project was re-launched for the completion of the Extension Minchin Flood Bund after flood 2010 and at present all the gaps have been filled and linked with LMB Guddu Barrage.

In 2010 exceptional flood came in River Indus. After subsidence of flood 2010, the course of River Indus has changed significantly. The main creek of River has shifted to left bank and is attacking the structures present on left flanks of river. No significant damage was observed after

flood 2010 and structures were stable. However at low flow after 2011 the aprons of Spur No. 2, 4 and 5 and guide wall were observed with continued regular erosive behavior. In 2011-12 the apron of the concavo convex guide wall at RD 453+735 and river started eroding the flood bund at RD 442-43. The projects of replenishing the apron of concavo convex guide wall and checking erosion at RD 442-43 were taken up under para 2.89 PWD code. The stone stud at RD: 441+500 and Guide Spur at RD: 442+000 were constructed and completed in 2012.

During the flood 2013, the following sites under the control of Dallas Division became under attack of River Indus.

i. Guide Spur No. 5 at RD: 260+000 of Minchin Flood Bund.
ii. Minchin Flood Bund at RD: 262+000 to RD: 263+000.
iii. Extension Minchin Flood Bund at RD: 450+000 to RD:453+000

These sites were checked and controlled by taking temporary measures as advised Expert Committee during its visit, at sites.

After the flood 2013, the detail survey was carried out and working paper was submitted to Chief Engineer Irrigation Research Institute Lahore for seeking advice for the permanent solution of these problems.

The Expert Committee recommended the following proposals.

1. Guide Spur No. 5. At RD: 260 of Minchin Flood Bund, an Inverted Hockey Spur and prong U/S of the Guide Spur.
2. RD: 262+000 to 264+000, Minchin Flood Bund, the proposal as per Model Study.
3. RD: 450+000 to 453+000 Extension Minchin Flood Bund, a stone pitching with 10 ft wide apron.

But unfortunately due to paucity of funds the work could not be executed and again the emergent work under para 2.89 PWD was carried out during flood 2014 and site was temporarily protected. After the flood 2014 the PC-I for these proposal has been submitted to Govt. But work could not be executed at site.

During flood 2015, the high flood passed through Indus River the major part of flood embankment remain protected. At the rising stage, the shank of mole head truncated part at RD: 245 was became under erosive action and the site was checked by launching trees and providing killa bushing and the width of bank was restored in set-back position. And the sluffing due to the wind storm / wave action at the different location was checked by placing earth filled gunny plastic bags. A seepage phenomenon was observed at RD: 395-400 which checked by providing pushta to cover the hydraulic gradients. However Guide Spur No. 5 at RD: 260 U/S Nose in length 325 ft was damaged and concavo convex Guide Wall at RD: 453+735 D/s Solid Slope 90 ft in length was also damage. These sites were checked by temporarily by providing stone dumping.

After the flood, the detailed estimate of these structures has been technically sanctioned and restoration works were completed.

During flood season 2018, the main river attacks on Extension Minchin Flood Bund from RD: 458-465 and started erosion to the bund between RD: 462-463. The three No. solid stone studs were constructed in the said reach to protect the bund from erosive action of river on emergent basis. The PC-I of Rs. 136-906 (M) for the construction of two No. solid stone studs at RD: 461+000 and RD: 462+000 was approved by CDWP in Aril 2018 with the condition that feasibility report may get approved from competent forum which was submitted to the Government.

Meanwhile, river trend changed altogether and river started severe erosive action b/w RD 462+000 to 463+000. This alarming situation was discussed in Departmental Expert Committee in June, 2018 and on the direction of Departmental Expert Committee 03 Nos solid stone studs were constructed in July 2018 at RD 462+000, 462+500, and 463+000 by invoking Para 2.89 of PWD code and Para 59d(iii) of PPRA Rules 2014.

In January, 2019 River Indus started erosion b/w RD 460+000 to 463+000. Due to aggressive river attack, the matter was referred to Departmental Expert Committee after detailed river survey, In the light of direction of Departmental Expert Committee, the flood bund was successfully protected by dumping of stone under Para 2.89 of PWD code and Para 59d(iii) of PPRA Rules 2014.

After flood season 2019, working paper was submitted to Departmental Expert Committee after conducting detailed river survey. The Departmental Expert Committee proposed construction of 03 Nos Inverted Hockey at RD 462+000, 463+800 and 465+500. Further Raising & strengthening of Minchin Flood Bund from RD: 370+000 to 509+900 has been done during the year 2018-19. The work was executed under the supervision of Project Implementation Unit (PIU).

At the onset of the 2025 flood season, the river exerted significant pressure on the flood bund between RD 465+000 and RD 475+000, resulting in erosion along this reach. The Expert Committee inspected the site on various occasions and recommended immediate flood-fighting measures. In view of the continuously changing river conditions, the Committee revisited the site and advised continuation of flood-fighting operations.

The solid stone studs constructed between RD 465+000 and RD 470+000 within the active creek performed effectively and withstood more than three flood peaks exceeding 500,000 cusecs, despite sustaining some damage during the flood.

A model study was conducted for this reach, and certain long-term remedial measures were recommended. Accordingly, a PC-I was prepared and submitted in July 2025; however, the scheme was unfortunately capped. As an alternative, short-term remedial measures have been recommended by the Departmental Expert Committee, and the corresponding cost estimate is currently under preparation and restoration of damages is under progress.

Chapter 4

DESIGN DATA, HISTORIC PEAK FLOOD DATA AND PREVIOUS FIVE YEARS FLOOD DATA OF HEAD WORKS / BARRAGES AND OR OTHER CONTROL POINTS.

4.1 FLOOD LIMITS

Minchin Bund from RD: 243+000-509+000 is affected by the joint discharge of River Chanab D/S Punjnad Head Works and River Indus D/S Taunsa Barrage. Flood stages are as under.

Sr. No	Site	Low (Cs)	Medium (Cs)	High (Cs)	Very High (Cs)	Exceptionally High (Cs)
1.	D/S Panjnad Head Works	1,50,000	2,00,000	3,00,000	4,50,000	6,00,000
2.	D/S Tounsa Barrage	2,50,000	3,75,000	5,00,000	6,50,000	Above 8.0 Lac
3.	U/S Guddu Barrage	3,50,000	5,00,000	7,00,000	9,00,000	Above 9.0 (Lac Cs)

The approximate discharge at Chachran will be assessed by adding the 48 hours earlier discharge downstream Taunsa Barrage and 24 hours earlier discharge downstream Panjnad Headworks. However River stage will be the same as indicating the Guddu Barrage.

Chachran is not discharge measuring point. The gauge fixed at Chachran indicates only the level of water **from which free board of existing bund will be calculated**.

The strict monitoring of River gauges will observed and discharge of hill torrents falling in River Indus downstream Taunsa Barrage will be added so as to assess the discharge passing through Chachran.

4.2 TIME LAG OF FLOODS

S.No.	Description	Reach				Time Login Days				Distance in Canal Miles
1	RIVERS					NOV to APR	MAY JUN	JUL AUG	SEP OCT	
	1 Channab	I	Marala	-	Khanki	1	1	1	1	40
		Ii	Khanki	-	Qadirabad	1	0	0	0	29
		Iii	Qadirabad	-	Trimmu	4	3	2	3	160
	2 Jehlum	I	Mangla	-	Rasool	1	1	1	1	43
		Ii	Rasool	-	Rail C.J, Link	3	2	2	2	118
		Iii	Rail C.J, Link	-	Trimmu	1	1	-	1	80
	3 Channab Cum Jehlum	I	Trimmu	-	Tail T.P.Link	4	3	2	2	119
		Ii	Tail T.P.Link	-	Punjnad	1	1	1	1	70
	4 Punjnad	I	Punjnad	-	Mithankot/ Chanhran	1	1	1	1	58
	5 Indus	I	Terbela	-	Attock	1	0	0	0	25
		Ii	Attock	-	Kalabagh	2	1	1	1	100
		Iii	Kalabagh	-	Chashma	1	1	1	1	61
		Iv	Chashma	-	Taunsa	4	3	2	2	152
		V	Taunsa	-	Mitan Kot	3	2	2	2	129
		Vi	Mitan Kot	-	Guddu	1	1	1	1	59
		Vii	Guddu	-	Sukkar	2	1	1	1	130
		Viii	Sukkar	-	Kotri	5	4	3	3	298

4.3 HIGHEST FLOODS.

No control point on River exists in the jurisdiction of Dallas Canal Division. However previous 15 year maximum discharge at Guddu Barrage is as under:-

S. No	Year	Discharge at Guddu Barrage in Cusecs	Flood Stages
1	2005	548148	High
2	2006	762344	Very High
3	2007	395110	Medium
4	2008	285135	Low
5	2009	376152	Medium
6	2010	1148738	Exceptionally High
7	2011	400313	Medium
8	2012	258262	Low
9	2013	443540	Medium
10	2014	595150	High
11	2015	727785	Very High
12	2016	362118	Medium
13	2017	432890	Medium
14	2018	344642	Medium
15	2019	422653	Medium
16	2020	570722	High
17	2021	423545	Medium
18	2022	717787	Very High
19	2023	481913	Medium
20	2024	439179	Medium
21	2025	635759	High

Maximum flood passed in August, 2010 Guddu Barrage discharge was observed 1148738

4. PEAK DISCHARGE

There is no Head works or other control points in Dallas Division. The flood protection works of the division are meant to save the irrigation system and the area from the River spill. River discharges are not observed.

Discharges of river Indus & Chenab are as under:-(Cusecs)

Month	Punjnad		Taunsa		Chachran	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum

Year 2017

Month	**Punjnad**		**Tounsa**		**Chachran**	
	Maximum	**Minimum**	**Maximum**	**Minimum**	**Maximum**	**Minimum**
April-17	29050	1831	55968	31542	-	-
May-17	32419	2026	152239	59465	-	-
Jun-17	29089	833	215206	156044	10.20	7.10
Jul-17	73071	2074	275849	205255	10.90	7.5
Aug-17	78788	8208	424388	178329	13.10	3.6
Sep-17	36132	1663	159837	91263	7.4	5.4
Oct-17	13900	4919	91263	37569	-	-
Nov-17	9127	1000	52434	36947	-	-
Dec-17	2500	1000	41093	15346	-	-

Year 2018

April-18	4304	800	45538	19666	-	-
May-18	6082	2291	65868	43887	-	-
Jun-18	12450	2774	214424	57311	9.6	8.8
Jul-18	19159	6280	212004	165700	9.1	8.0
Aug-18	57464	10013	287178	178946	10.4	7.9
Sep-18	36764	7862	171885	115916	8.4	8.0
Oct-18	14400	2165	111682	30734	-	-
Nov-18	5893	2008	58410	36301	-	-
Dec-18	3893	1907	65146	17711	-	-

Year 2019

April-19	24271	8410	95348	27274	-	-
May-19	29745	6402	10858	8503	-	-
Jun-19	45180	8231	168698	94897	-	-
Jul-19	47066	15700	282282	168698	10.6	8.40
Aug-19	87336	21973	358358	137348	12.80	5.50
Sep-19	45713	14926	158869	120202	6.60	5.40
Oct-19	29974	5192	122088	34715	-	-
Nov-19	12688	4500	68822	34522	-	-
Dec-19	11530	4000	58628	15026	-	

Year 2020

April-20	105760	19746	85900	31324	-	-
May-20	34044	11550	138055	68374	-	-
Jun-20	41889	17784	196491	134632	7.50	7.20
Jul-20	32741	14480	230597	188953	7.95	7.20
Aug-20	60949	11653	321920	167508	9.00	7.40
Sep-20	147296	23344	464560	95893	12.50	4.00
Oct-20	21380	5400	107328	39536	-	-
Nov-20	14955	7536	64773	38254	-	-
Dec-20	12792	3274	63372	15023	-	-

Year 2021

April-21	24681	12945	50137	28360	-	-
May-21	24681	10908	92556	42529	5.5	4.5
Jun-21	18258	9683	189504	83390	7.75	5.7
Jul-21	43530	8691	220170	15770	8.9	6.7
Aug-21	72683	10956	327621	135469	10.01	5.3
Sep-21	34053	9580	159289	108268	6.00	4.2
Oct-21	19038	2067	108529	32335	-	-
Nov-21	8594	2390	55982	32335	-	-
Dec-21	6128	3547	49234	15238	-	-

Year 2022

Month	Punjnad		Tounsa		Chachran	
	Maximum	**Minimum**	**Maximum**	**Minimum**	**Maximum**	**Minimum**
April-22	11528	-	49362	22334	-	-
May-22	-	-	92306	34407	-	-
Jun-22	-	-	104731	66321	-	-
Jul-22	98758	-	292900	93478	8.90	8.5
Aug-22	112564	26173	622095	124204	11.10	5.5
Sep-22	34031	-	580056	61138	11.10	5.6
Oct-22	3060	-	52042	41259	-	-
Nov-22	3060	-	45308	36922	-	-
Dec-22	-	-`	40905	11104	-	-

Year 2023.

Month	Punjnad		Tounsa		Chachran	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
April-23	7005	-	45043	-	-	-
May-23	0	-	81918	-	-	-
Jun-23	0	-	173317	-	6.60	-
Jul-23	97230	-	419895	-	9.90	-
Aug-23	134504	-	357457	-	9.40	-
Sep-23	86059	-	134018	-	7.60	-
Oct-23	16727	-	90040	-	6.20	-
Nov-23	9471	-	50856	-	-	-
Dec-23	4013	-	44960	-	-	-

Year 2024

Month	Punjnad		Tounsa		Chachran	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
April-24	6102	-	116369	-	-	-
May-24	11000	-	168925	-	7.60	-
Jun-24	20380	-	179335	-	7.80	-
Jul-24	21441	-	204749	-	8.00	-
Aug-24	64320	-	439179	-	10.20	-
Sep-24	51462	-	192251	-	7.70	-
Oct-24	5388	-	85302	-	5.00	-
Nov-24	0	-	50639	-	-	-
Dec-24	0	-	46722	-	-	-

Year 2025

Month	Punjnad		Tounsa		Chachran	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
April-25	0	-	47918	-	1.90	-
May-25	0	-	146153	-	5.85	-
Jun-25	0	-	160812	-	5.95	-
Jul-25	46442	-	426400	-	9.90	-
Aug-25	86814	-	488809	-	10.60	-
Sep-25	668195	-	236451	-	11.60	-
Oct-25	54373	-	91216	-	-	-
Nov-25	15242	-	51508	-	-	-
Dec-25	15951	-	48448	-	-	-

Chapter 5

FLOOD FIGHTING STRATEGY.

Minchin Flood Bund is affected by both the Rivers i.e. Indus and Chanab. The correct flood warnings may be assessed by watching the discharge downstream of Taunsa and Punjnad Head works. Proper watching arrangements are required.

Minchin Bund is affected by the joint discharge of River Chanab D/S Punjnad Head Works and River Indus D/S Taunsa Barrage.

Sr. No	Site	Low (Cs)	Medium (Cs)	High (Cs)	Very High (Cs)	Exceptionally High (Cs)
1.	D/S Panjnad Head Works	1,50,000	2,00,000	3,00,000	4,50,000	6,00,000
2.	D/S Tounsa Barrage	2,50,000	3,75,000	5,00,000	6,50,000	Above 8.0 Lac
3.	U/S Guddu Barrage	3,50,000	5,00,000	7,00,000	9,00,000	Above 9.0 (Lac Cs)

The Minchin Flood Bund and Extension Minchin Flood Bund in the jurisdiction of Dallas Canal Division is divided in three section. The Sub Divisional Officer Bund Sub Division Dallas is in-charge of whole Bund.

1. RD: 243+000 – 353+000 Minchin Flood Bund, Extension Minchin Flood Bund and 4th Defence Bund along with all allied structures in Section 1st Bund Sub Division.
2. RD: 353+000 – 445+000 Extension Minchin Flood Bund along with allied structures in Section 2nd of Bund Sub Division.
3. RD: 445+000 – 511+000 Extension Minchin Flood Bund, Machka Dilawara Bund and Loop Bund in Section 3rd of Bund Sub Division.

   The each section is divided in sub section and Sub Engineer is in charge of sub section.

   The detail sub section is as under:-

SECTION I

1	Sub Section RD:242-272 and all allied Structure.	Sub Engineer Rukanpur, Sub Engineer Bund Ist	Camp at RD:262, Minchin Flood Bund
2	Sub Section RD:272-353 Minchin Flood Bund and all allied Structure	Sub Engineer Adamwali, Sub Engineer Pallu Shah	Camp at RD:312, Minchin Flood Bund

SECTION II

1	Sub Section RD:353-382 Minchin Flood Bund.	Sub Engineer Degi, Sub Engineer Bund II	Camp at RD:353, Minchin Flood Bund
2	Sub Section RD:382-445 Minchin Flood Bund.	Sub Engineer Sharin, Sub Engineer Shahbaz Pur	Camp at RD:388, Minchin Flood Bund

SECTION III

1	Sub Section RD:445-470 Minchin Flood Bund and all allied structure.	Sub Engineer Bhong, Bund III	Camp at RD:460, Minchin Flood Bund
2	Sub Section RD:470-511 Minchin Flood Bund.	Sub Engineer Kasmani, Lamma	Camp at RD:505, Minchin Flood Bund
3	Sub Section RD:0-38 Machka dilawra Flood Bund and loop Bund, all allied structure	Sub Engineer Duawala, Sub Engineer Walhar	Camp at RD:16+000, Minchin Flood Bund

The establishment and other requirements are arranged depending on flood stages

LOW FLOOD STAGE

When flood discharge assessed through Guddu Barrage is below 3,50,000 Cs there is no immediate danger and the river water remains within the pocket.

MEDIUM FLOOD STAGE

In case of medium flood discharge from 3,50,000 to 5,00,000 it is considered to be affecting the bund in Dallas Division and in some low lying areas, it touches the Minchin Bund.

HIGH FLOOD STAGE

From 5,00,000 to 7,00,000 Cs at Guddu Barrage a condition of High flood is to be tackled on Guddu Barrage discharge emergency is considered and maximum strength for watching is arranged.

VERY HIGH FLOOD STAGE

The discharge 7,00,000 to 9,00,000 at Guddu Barrage, the Executive Engineer Dallas Division will inform the District authorities and shift his headquarter to Degi Canal Rest House. As Minchin Flood Bund /Extension Minchin Flood Bund, Machka Dilawra Flood Bund & Loop Bund will be equally affected so the Executive Engineer Dallas Division will also have to move on all bunds. The Executive Engineer Dallas Division will inspect watching arrangement on all bunds and will camp at Rukanpur, Bangla Dilkusha or Dauwala and will inform to all concerned regarding the latest position of River.

Chapter 6

FLOOD DAMAGES RESTORATION WORKS.

The Extension Minchin Bund exists on Left Side of Indus River which was constructed for safety of canal network, agriculture lands and adjoining abadies from attack of river spill. The bund has been constructed to cover 40 miles gap between Minchin Flood Bund and Left Marginal Bund of Guddu Barrage which was required to save the road infrastructures, agriculture lands and adjoining adadies and Irrigation networks. Extension Minchin Bund was started in 2008 with 3 No. J-Head Spurs and Guide Wall. Whereas on Minchin Flood Bund, 3 No spurs (J head No 4, J Head No 5 and inverted Hockey spur) are constructed to deal with the floods. Inverted hockey spur was constructed upstream of spur No 4 to safeguard the spur no 4 and is now intact and has successfully served its purpose.

During the flood 2015, the following sites under the control of Dallas Division became under attack of River Indus and restoration work was taken in hand and completed before flood season.

1. The Guide Wall Spur No. 5 at RD: 260+000 U/S Nose in length 325 ft of Minchin Flood Bund.
2. The concavo convex Guide Wall at RD: 453+735 D/S solid slop 90 ft in length of Extension Minchin Flood Bund.

In 2016 the flood range was remain as normal. However the apron of concavo convex Guide Wall Spur at RD: 453+735 Extension Minchin Flood Bund was launched which was restored with 20 ft width.

In January, 2019 River Indus started erosion b/w RD 460+000 to 463+000. Due to aggressive river attack, the matter was referred to Departmental Expert Committee after detailed river survey, In the light of direction of Departmental Expert Committee, the flood bund was successfully protected by dumping of stone under Para 2.89 of PWD code and Para 59d(iii) of PPRA Rules 2014.

However after flood season 2019, working paper was submitted to Departmental Expert Committee after conducting detailed river survey. The Departmental Expert Committee proposed construction of 03 Nos Inverted Hockey at RD 462+000, 463+800 and 465+500. The work for construction of 03 Nos Hockey has been completed. The Extension Minchin Flood Bund from RD 463+400 to 464+900 was damaged during falling condition of flood 2019. The restoration of subjected flood bund has been completed in protection work. Moreover, an invented Hockey has also been constructed at RD: 460+500 after recommendation of DEC during the year 2021.

At the onset of the 2025 flood season, the river exerted significant pressure on the flood bund between RD 465+000 and RD 475+000, resulting in erosion along this reach. The Expert Committee inspected the site on various occasions and recommended immediate flood-fighting measures. In view of the continuously changing river conditions, the Committee revisited the site and advised continuation of flood-fighting operations.

The solid stone studs constructed between RD 465+000 and RD 470+000 within the active creek performed effectively and withstood more than three flood peaks exceeding 500,000 cusecs, despite sustaining some damage during the flood.

A model study was conducted for this reach, and certain long-term remedial measures were recommended. Accordingly, a PC-I was prepared and submitted in July 2025; however, the scheme was unfortunately capped. As an alternative, short-term remedial measures have been recommended by the Departmental Expert Committee, and the corresponding cost estimate is currently under preparation.

Chapter 7

FLOOD FIGHTING WATCHING ARRANGEMENTS.

7.1 PRE-FLOOD ARRANGEMENT

The detail survey was conducted to check the river condition and elevating of the bed. The critical / most essential work reported to authorities i.e. Chief Engineer, Superintending Engineer and Executive Engineer also visited the site and submitted their inspection notes. About the condition of flood bunds river training structure intimated to worthy Secretary Irrigation and restoration of most critical work of vulnerable reach RD: 453+000 to 475+000 are taken in hand and work will be completed prior to flood 2026.

For the watch & ward and maintaining the flood bund in Dallas Division necessary watching material and watching establishment will arranged as per approved yardstick.

FOLLOW UP ACTION ON THE FLOOD PREPAREDNESS ACTIVITIES FOR THE YEAR 2026

S. No	Irrigation Zone	Flood Fighting Plans	Field Inspection (Certificate)	Encroachments	Gauges, RD Marks Data Boards	Reserve Stock of Stone	Inspection Notes	Status of Breaching Section	Status of Explosives Store	Security of Explosive Store	Notification of Flood Emergency Officer	Purchase of Flood Fighting Material
1	2	3	4	5	6	7	8	9	10	11	12	13
1	BWP	Flood Fighting Plan for the year 2026 submitted to C.E D & F for approval.	NIL	List of encroachment submitted to DC Rahimyarkhan, Rajanpur, Ghotki for getting help for removing encroachments. Notices to all encroaches have been served.	All gauges exist but painting work will be done up to 31/5/2026	As per approved temporary Reserve stock limit, total reserve stock stone required 1454000 cft. But only 597500 cft stone is available.	Pre-Flood inspection of all flood embankment / spur has been done.	No breaching section exist.	N.A	N.A	Sub Divisional Officer Bund Sub Division	Flood Fighting material as described in Flood Fighting Plan will be purchased.

Consolidated status of Reserve Stack of Stone (in Lac CFT)

Sanctioned Reserve Stock Qty	Available Reserve Stock Qty	70% of sanctioned Reserve Stock	Difference in available and sanctioned Reserve Stock	Deficiency in Reserve Stock	Remarks
16.04	11.06	11.23	4.98	4.98	Balance required quantity upto 100% will be recouped upto 30.06.2026.

Structure wise Detail of Reserve Stack of Stone

S. No.	Name of Structure	Sanctioned Reserve Stock Limit (Lac Cft)	Quantity available (Lac Cft)	Balance Quantity Required (Lac Cft)	Remarks
1	2	3	4	5	6
1	Inverted Hockey Spur U/S Spur No. 4	1.15	1.15	0.00	
2	J-Head Spur No. 4.	1.50	1.56	-0.06	
3	Guide Wall Spur No. 5	1.50	1.37	0.13	
4	J-Head Spur No. 1	1.50	0.95	0.55	
5	J-Head Spur No. 1-A	1.50	0.46	1.04	
6	J-Head Spur No. 2	1.50	1.33	0.17	
7	Stone Stud at RD: 441+500	0.89	0.87	0.02	
8	Guide Head Spur at RD: 442+000	1.50	0.99	0.51	
10	Guide Wall at RD: 453+735	1.50	1.02	0.48	
11	Stone Studs at RD: 462+500 EMFB	2.00	1.36	0.64	
12	Stone Studs at RD: 466+500 to 469+500 of EMFB	1.50	0.00	1.50	
	Total:-	**16.04**	**11.06**	**4.98**	

7.2 WATCHING ESTABLISHMENT.

As the flood rises from normal flood stage to exceptionally high flood, the watching arrangement by labour is made and a detailed plan having duties of officer and official along with local administration is prepared mentioned above.

Watching establishment according to flood stages is as under:-

Sr. No.	Structure Name	Length (Miles)	Flood Limits							
			Normal Flood Season		Low Flood		Medium/High Flood		Very High/ Exp. High Flood	
			Men	Shift	Men	Shift	Men	Shift	Men	Shift
			1 Person/ 2 mile/Shift (1 Shift)		1 Person/ mile/Shift (1 Shift)		2 Person/ mile/Shift (2 Shift)		5 Person / mile/ Shift (3 Shift)	
1	Minchin Flood Bund	13.20	6	1	13	1	26	2	65	3
2	Extension Minchin Flood Bund	40.40	20		40		80		200	
3	Machka Dilawra flood Bund	7.60	4		8		16		35	
4	Fourth Defence Bund	3.17	1		3		6		15	
5	Loop Bund	1.21	-		1		2		5	
6	2nd Defence Bund	0.80	-		1		2		5	
7	3rd Defence Bund	1.08	-		1		2		5	

Total = 67.34								
TOTAL Per Shift :-	**31**		**67**		**134**		**330**	
Total	**31**		**67**		**268**		**990**	
No. of Mates	**2**		**5**		**22**		**82**	

Mate: 1 No. for every gang of 12 Beldars at all flood ranges.

NOTE : Payment of machinery & work charge employees is subject to verification of TPM / Consultant.

7.3 ARRANGEMENT AT SENSITIVE SITES.

Special watching of Bunds, Spurs & monitoring of flood bund in eroded / sensitive sites of Bunds will be made against the spill of floods. Reasonable quantity of stone exists at site and flood fighting material will be provided at site as per requirements after shifting the camp at these sites.

Sr. No.	Structure Name	Length (Miles)	Vulnerable sites		No. of Camps Established Except Vulnerable Points		
					Normal Flood season/Low Flood	Medium/High Flood	Very High/Exp. High Flood
			Reach	No. of Camps	15 Miles	7 Miles	5 Miles
1	**Minchin Flood Bund / Extension Minchin flood bund**	**67.34**	**453 to 475**	1	3	6	4
Total				**1**	**3**	**6**	4

7.4 WATCHING MATERIAL

Flood watching material will be provided in ample quantity and to be readily available at every dangerous site.

The quantity of material required, depends upon the importance of the bund and the distance of the bund from the nearest store from which they can be collected. The following scale of material given here under is nearly an indication of relative quantities usually provided / needed. Material will be stored in each camp. Detail of material in each camp as under:-

Minimum requirement of Flood Fighting Materials for Permanent Camp (15 miles)

S. No	Name of Articles.	Articles required	Available	Balance required /to be procured	Remarks.
1.	Shouldari / Tent	1 Nos.	-	1 Nos.	quantity of Material will be procured before
2.	Chairs	6 Nos.	-	6 Nos	
3.	Table	1 Nos.	-	1 Nos.	
4.	Generator	1 Nos.	-	1 Nos.	
5.	Pedestal Fans	1 Nos.	-	1 Nos.	

6.	Charpois	2 Nos.	-	2 Nos.	
7.	Symbolic Jackets	50 Nos.	-	50 Nos.	
8.	Polythin Sheet	100 Kg	-	100 Kg	
9.	Bamboos 4'' dia	100 Nos	-	100 Nos.	
10.	Water Coller	1 Nos.	-	1 Nos.	
11.	Portable umbrella	2 Nos.	-	2 Nos.	
12.	Life Jacket	5 Nos.	-	5 Nos.	
13.	Utensils (10 person)	1 Nos.	-	1 Nos.	
14.	Jute/Plastic bags	1000 Nos.	50 Nos.	950 Nos.	
15.	Walke Talkie Set	2 Sets	-	2 Sets	
16.	Raincoats	10 Nos.	2 Nos.	8 Nos.	
17.	LED flood light	10 Nos.	-	10 Nos.	
18.	Extension Cable 10'	2 Nos.	-	2 Nos.	
19.	Rechargeable Torches	20 Nos.	3 Nos.	17 Nos.	
20.	Kassi	20 No.	2 Nos.	18 Nos	
21.	Axes	20 Nos.	-	20 Nos.	
22.	G.I Buckets	5 Nos.	1 Nos.	4 Nos.	
23.	7/44 Cable	500 feet	-	500 feet	
24.	Sutli	2 Kg	-	2 Kg	
25.	Sewing Needles	10 Nos.	3 Nos.	7 Nos	
26.	Emergency Medical Kit	1 Nos.	-	1 Nos.	
27.	Wire crates (3x3x3) (at only those camp near river action and reserve stock exists)	100 Nos.	-	100 Nos.	

Minimum requirement of Flood Fighting Materials for Temporary Camp: (7 or 5 miles during medium to exceptionally high flood to be outsourced)

Sr. No.	ITEM	UNIT	Total Required Qty	Sr. No.	ITEM	UNIT	Total Required Qty
1	Shouldari / Tent	No.	01	2	Walke Talkie Set	Set	01
3	Chairs	No.	06	4	Raincoats	No.	10
5	Table	No.	01	6	LED Flood Light	No.	10
7	Generator (2-3 KVA)	No.	01	8	Extension Cable (10 ft)	No.	02
9	Pedestal Fans	No.	01	10	Rechargeable Torches	No.	20
11	Charpois	No.	02	12	Kassi	No.	20
13	Symbolic Jackets	No.	50	14	Axes	No.	20
15	Water Cooler	No.	01	16	G.I Buckets	No.	05
17	Portable Umbrella	No.	02	18	7/44 cable	Feet	500
19	Utensils (10 person serving)	No.	01	20	Sutli	Kg	02
21	Jute / Plastic Bags	No.	500	22	Sewing Needles	No.	10

7.5 ARRANGEMENT FOR SOUNDING & PROBING

Sounding observation instruments are available. However the boat will be hired

7.6 LIGHTING ARRANGEMENT.

As per requirement, proper light arrangement will be arranged on all flood bunds by hiring generator through contractor.

7.7 RATION ARRANGEMENT.

Ration arrangement will be done through local contractors.

7.8 P.O.L ARRANGEMENT FOR VEHICLE

Reserve Stock of P.O.L for vehicles will be kept at different sites on the following scale.

Petrol = 2000 Ltr, Diesel = 5000 Ltr,

7.9 TRANSPORTATION

Following vehicles are available in Dallas Canal Division

GBA 481 (Double Cabin), Suzuki Jeep, LEG 1417, BNH 2211 (Double Cabin), RNT 3100 (Double Cabin) Transportation will be provided by Civil Administration. In case of emergency, transportation will be hired from local market

7.10 LAW AND ORDER

Law and order will be maintained by cooperation of Civil Administration

7.11 MEDICAL ARRANGEMENT FOR LABOUR

Medical facilities for Labour will be provided by cooperation of Health Department.

7.12 LIAISON WITH OTHER DEPARTMENT

Executive Engineer Dallas Canal Division and Sub Divisional Officer, Bund Sub Division, will keep close liaison with their counter parts in other Departments. Higher authorities of other departments will be approached if needed through Director Technical / Chief Engineer. At site Sub Engineers will attend inspections of the visiting Army and Civil Officers if an Irrigation Officer is not available at site.

7.13 ROLE OF THE ARMY

In case of emergency i.e. when discharge D/S Taunsa Barrage 3.75 Lac and D/S Panjnad exceeds 2.0 Lac cusecs, Army will be stationed at Jamal Din Wali to face any emergency. In case of occurrence of any breach, Pakistan Army will help Irrigation Department.

7.14 DUTIES OF TELEPHONE ATTENDANT

An emergency / flood control center will be established by Superintending Engineer Rahim Yar Khan Canal Circle Telegraph Office and attendant would remain available round the clock during flood season. Their contact numbers as under.

S.No	Name of official	Period	Time	
			From	To
1.	Muhammad Nawaz Khan (Hd Signaller) 0302-9672301	15.06.2026 to 15.10.2026	6.00 AM	02.00 PM
2.	Sami ur Rehman Signaller (0303-310467)	15.06.2026 to 15.10.2026	02.00 PM	10.00 PM
3.	Tariq Shahzad Signaller (0300-6702148)	15.06.2026 to 15.10.2026	10.00 PM	6.00 AM

Telegraph office Rahim Yar Khan 068-9230097

7.15 WIRELESS ARRANGEMENTS

Wireless are provided by (15 Rescue Police) Rahimyarkhan in all Officer's vehicles as well as Telegraph Offices in Rahimyarkhan, Rukanpur & Ahmadpur Lamma.

Chapter 8

DETAIL OF ENCROACHMENT.

S.No	RD	Name of Bund	Name of Encroachers	Type of Encroachment	Location	Status
1	0	Machka Dilawara Bund	Ghulab Mirani S/o Allah Rakhue Mirani	House	Countryside slope	To be Removed
2.		-do-	Hazoor Bukhsh S/o Allah Rakhue Mirani	-do-	Countryside slope	To be Removed
3.		-do-	Nawab Ali S/o Allah Rakhue Mirani	-do-	Countryside slope	Removed
4.		-do-	Shorab Ali Mirani S/o Allah Rakhue Mirani	-do-	Countryside slope	To be Removed
5.	2	-do-	Karam Ali Kundary S/o Jind Wada Kundary	-do-	Countryside slope	To be Removed
6.		-do-	Noor Hassan S/o Lal Bukhsh Kundari	-do-	Countryside slope	To be Removed
7.		-do-	Allah Rakha S/o Allah Dita	-do-	Countryside slope	To be Removed
8.	4	-do-	Muhammad Hayyat S/o Choat Machi	-do-	Countryside slope	Removed
9.		-do-	Muhammad Rehman S/o Habib Machi	-do-	Countryside slope	To be Removed
10.	19	-do-	Dilber Ali S/o Muhammad Ramzan Mirani	-do-	Countryside slope	To be Removed
11.		-do-	Ghulam Yasin S/o Wali Muhammad Solangi Machi	-do-	Countryside slope	To be Removed
12.		-do-	Bacho S/o Shamshir Machi	-do-	Countryside slope	To be Removed
13.		-do-	Muhammad Arab S/o Badlo Mirani	-do-	Countryside slope	To be Removed
14.		-do-	Lal Bukhsh S/o Bubo Mirani	-do-	Countryside slope	To be Removed
15.		-do-	Puno S/o Muhammad Ismail Daya	-do-	Countryside slope	To be Removed
16.		-do-	Arbab Ali S/o Khandu Daya	-do-	Countryside slope	Removed
17.		-do-	Bahadar S/o Muhammad Ismail Daya	-do-	Countryside slope	To be Removed
18.		-do-	Muhammad Ramzan S/o Faqeer Bukhsh Daya	-do-	Countryside slope	To be Removed
19.		-do-	Riaz Ahmad S/o Rahim Bukhsh Daya	-do-	Countryside slope	Removed
20.		-do-	Khuda Bukhsh S/o Bukshoo Daya	-do-	Countryside slope	To be Removed
21.		-do-	Nazir S/o Qadir Bukhsh Daya	-do-	Countryside slope	To be Removed
22.		-do-	Jani S/o Din Muhammad Daya	-do-	Countryside slope	To be Removed
23.		-do-	Mubak S/o Allah Jiwaya	-do-	Countryside slope	To be Removed
24.		-do-	Manzoor Ahmad S/o Sulaman Machi	-do-	Countryside slope	To be Removed

25.		-do-	Habib-Ul-Allah S/o Muhammad Ramzan	-do-	Countryside slope	Removed
26.		-do-	Aziz S/o Sumwar Machi	-do-	Countryside slope	To be Removed
27.		-do-	Shabbir Ahmad S/o Loqman Machi	-do-	Countryside slope	To be Removed
28.		-do-	Faloo S/o Usman Machi	-do-	Countryside slope	To be Removed
29.		-do-	Rasheed Ahmad S/o Shadoo	-do-	Countryside slope	Removed
30.		-do-	Rahim Bukhsh S/o Muhammad Esa	-do-	Countryside slope	To be Removed
31.		-do-	Nazir Ahmad S/o Elahi Bukhsh Machi	-do-	Countryside slope	To be Removed
32.		-do-	Abdul Qadir S/o Allah Dad Machi	-do-		To be Removed
33.	RD: 262 to 315+500	Minchin Flood Bund	NIL	NIL		To be Removed
34	RD: 4-5	4th Defence Bund	Fida Hussain S/o Hanan	House (Kacha)	Countryside slope	To be Removed
35	RD: 4-5	-do-	Elahi Bux S/o Rehmat-Ullah	House 2 No. (Kacha)	Countryside slope	To be Removed
36	RD: 5-6	-do-	Qadir Bux S/o M. Bux Mohana	House 3 No. (Kacha)	Countryside slope	To be Removed
37	RD: 5-6	-do-	Nahal S/o Khamisa Caste Mohana	Shop (Kacha)	Countryside slope	To be Removed
38	RD: 8-9	-do-	Malik Akram S/o Noor Monik	-do-	River side Slope	Removed
39	RD:11-12	-do-	Abdul Aziz S/o Fazul Din Monik	House (Pacca)	Countryside slope	To be Removed
40	RD:12-13	-do-	Muhammad Iqbal S/o Imam Bux Monik	-do-	River / Country side Slope	To be Removed
41	RD:13-14	-do-	Fareed S/o Haji Mushtaq Monik	-do-	Countryside slope	To be Removed
42	RD:14-15	-do-	Sajja S/o Ghafoor Monik	Wall (Kacha)	Countryside slope	To be Removed
43	RD:15-16	-do-	Sadiq S/o Mohib Caste Monik	House (Kacha)	Countryside slope	To be Removed

CURRENT STATUS OF ENCROACHMENT

Total No. of encroachment	No. of encroachment removed	Balance encroachment to be removed	Remarks
43	7	36	The list of encroaches has been submitted to the Civil Administration, which are under process for removal the encroachments.

CRITICAL ENCROACHMENT

S. No	RD	Name of Bund	Name of Encroachers	Type of Encroachment	Location
----------NIL----------					

Chapter 9

DUTY ROSTER / FLOOD FIGHTING PROGRAMME.

On receipt of daily gauges from flood warning center as well as flood forecasting of metrological department, a comprehensive plan will be chalked out for flood management in Dallas Canal Division. Keeping in view lengthy system of Bunds along river Indus, the flood fighting area will be divided into three sectors. The detail of sector and their duties are as under:-

OVERALL INCHARGE.

Executive Engineer, Dallas Canal Division is overall Incharge of 4th Defence Bund, Minchin Flood Bund, Extension Minchin Flood Bund, Machak Dilawara Bund and Loop Bund and its allied structure s.

SECTION NO.I

Sub Divisional Officer Bund is overall Incharge in flood day & of 4th Defence Bund RD: 0 to 16269, Minchin Flood Bund RD: 243+000 to 353+000.

(i)	Camp at RD: 262+000 of Minchin Bund	**Sub Engineer Rukanpur & Bund Section I**
(ii)	Camp at RD: 312+000 Minchin Flood Bund	**Sub Engineer Pallu Shah / Adamwali**
(iii)	Sub Section Degi camp at RD: 353+000 Extension Minchin Flood Bund	**Sub Engineer Adamwali**

SECTION NO.II

Sub Divisional Officer Bund is overall Incharge from RD: 353+000 to 445+000 Extension Minchin Bund.

(i)	Sub Section Degi camp at RD: 388+000 Extension Minchin Flood Bund	**Sub Engineer Degi & Section II Bund**
(ii)	Sub Section Sharin camp at RD: 435+000 Extension Minchin Flood Bund.	**Sub Engineer Sharin / Shahbazpur**

SECTION NO.III

Sub Divisional Officer Bund is overall Incharge along with staff from RD:445+000 to 509+000 Extension Minchin Bund, Machka Dilawara Bund from RD: 0+00 to 38+000 and Loop Bund from RD: 0+00 to 6+070.

(i)	Camp at RD: 468+000 Extension Minchin Flood Bund.	**Sub Engineer Bhong, Bund III**
(ii)	Camp at RD: 505+000 Extension Minchin Flood Bund.	**Sub Engineer Kasmani, Lamma**
(iii)	Camp at RD: 16+000 Machka Dilawara Bund.	**Sub Engineer Duwala, Walhar**

Supervisory Staff	S.D.O Rukanpur Section – I				S.D.O Lamma Section –II						SDO Bhong Section –III		
S.D.O Bund S/Division	Dallas Canal Division Rahimyarkhan												
Sub Engineers	RKP	AD W	PLS	Bund I	Degi	SBP	Bund II	SRN	DEGI	BNG	KSM	DWA	Bund III
Zilladar & Patwaries	Rukanpur				Sharin		Ahmadpur Lamma			Bhong			
Official & Revenue Department	A.C & Tehsildar with Patwari K.G.O(Khan Pur Rahimyarkhan)				A.C & Tehsildar with Patwari K.G.O (Rahimyarkhan & Sadiq Abad)					A.C & Tehsildar with Patwari K.G.O (Sadiq Abad			
Police Department	(A.S.I With Three Constable (Khan Pur)				(A.S.I With Three Constable (Abad Pur)	A.S.I With Three Constable (Sadiq Abad)				D.S.P (Sadiq Abad) & S.H.O Machka With 5 Constable			
Mates / Beldar Irri: Deptt High Flood	1/12	1/10	1/10	1/10	1/12	1/10	1/10	1/12	1/10	1/10	1/10	1/10	1/10
Mates / Beldar Irri: Deptt Very High Flood	1/18	1/15	1/15	1/15	1/18	1/15	1/15	1/18	1/15	1/15	1/15	1/15	1/15
Mates / Beldar Irri: Deptt exceptionally High Flood	2/24	2/20	2/20	2/20	2/24	2/20	2/20	2/24	2/20	2/20	2/20	2/20	2/20

Chapter 10

EMERGENCY TELEPHONE NOS.

Sr No.	Name of Officers	Telephone Numbers	
		Office	Cell & Residence.
Telephone No. of Irrigation Department			
1	Secretary Irrigation Department Lahore.	042-99212117	042-99212118
2	Chief Engineer Drainage & Flood Lahore Zone.	042-99250309	-
3	Director Flood & Flood warning center 46-Jail Road Lahore.	042-99231614	-
4	Chief Engineer Irrigation Bahawalpur Zone.	062-9850333	0300-6746032
5	Executive Engineer (Operation) Bahawalpur Zone.	062-9250265	03009544773
6	Superintending Engineer Canal Circle Rahim Yar Khan	068-9230090	0300-6702694
7	Executive Engineer Dallas Division Rahim Yar Khan.	068-9230092	0333-7626359
8	Executive Engineer Rahimyarkhan Canal Division.	068-9230095	0301-3277500
9	Sub Divisional Officer Rukanpur.	068-9230092	0337-7641441
10	Sub Divisional Officer Lamma.	068-9230092	0300-8683721
11	Sub Divisional Officer Bhong.	068-9230092	0336-7876176
12	Sub Divisional Officer Bund Sub Division.	068-9230092	0300-8683721
13	Deputy Commissioner Rahim Yar Khan	068-9230266 Fax:068-9230267	03040923820
14	District Administrator Rahim Yar Khan	068-9230222	-
15	Tehsil Administrator Rahim Yar Khan	068-9230240	0300-8678825
16	Assistant Commissioner Khanpur	068-5571383	0301-6339301
19	Assistant Commissioner Rahim Yar Khan	068-9230271	0332-8142227
20	Assistant Commissioner Sadiq Abad.	068-5705533	0300-7747321
21	Assistant Commissioner Liaqutpur.	068-5795625	0300-1984444
22	Flood Emergency Center Rahim Yar Khan	068-9230097	-
23	Flood Emergency Center Bahawalpur.	062-9250273	-

Telephone No. of Police Department			
24	Senior Superintendent Police Rahim Yar Khan.	068-9230301	068-9230304 0301-8670464
25	Superintendent of Police Head Quarter Rahim Yar Khan.	068-9230309	068-9230304
26	Deputy Superintendent Police Sadar Rahimyarkhan.	068-9230311	0300-9675837
27	ASP/Deputy Superintendent Police Sadar Sadiqabad.	068-5705445	0332-3946480
Telephone No. of Pakistan Military			
28	Brigade Headquarter Rahim Yar Khan.	561-6007	561-6007
29	Brigade Major (Army co-ordination Unit)	05614124 05614125	

Chapter 11

STANDARD OPERATING PROCEDURE (SOP) FOR BREACHING SECTIONS.

11.1 HISTORY OF THE BREACHING SECTION

Not Related.

11.2 LOCATION, DESIGN, QUANTITY AND VARIETY OF THE EXPLOSIVE REQUIRED FOR DETONATION

Not Related.

11.3 ARRANGEMENT OF EXPLOSIVES AND SECURITY OF EXPLOSIVE STORES

Not Related.

11.4 LIST OF THE SECURITY STAFF ALONGWITH DETAIL OF THEIR TRAINING ETC

Not Related.

11.5 DETAIL OF MECHANICAL MEANS AS A STANDBY ARRANGEMENTS IN CASE OF DETONATION FAILURE.

Not Related.

11.6 DUTY ROSTER IN CASE OF CRITICAL SITUATION

Not Related.

11.7 BREACHING COMMITTEE WITH THEIR ACTION PLAN

Not Related.

11.8 LIST OF THE VILLAGES LIKELY TO BE INUNDATED IN CASE OF BREACH

Not Related.

11.9 ANNOUNCEMENT AND DETAIL OF EVACUATION ARRANGEMENTS.

Not Related.

11.10 DETAIL OF COORDINATION WITH CIVIL / ARMY / AUTHORITIES

Not Related.

11.11 PARALLEL COMMUNICATION ARRANGEMENTS.

Not Related.

11.12 Index Plan

Not Related.

Chief Engineer
Bahawalpur Irrigation Zone
Bahawalpur

Superintending Engineer
Rahimyarkhan Canal Circle
Rahimyarkhan

Executive Engineer
Dallas Canal Division
Rahimyarkhan

PART-B

Chapter 12

VULNERABLE SITES OF FLOOD BUND / STRUCTURE:

12.1 APPREHENDED BREACHES IN FLOOD BUNDS / STRUCTURES

The list of vulnerable sites are as follows

- RD: 453-475 of Extension Minchin Flood Bund a significant shift in the river trend. Site Plan and its position is attached herewith.

12.2 OPERATION OF BREACHIHNG SECTINOS

- No such breaching sections in the reach of Dallas Canal Division.

12.3 BREACHES DUE TO RISE OF FLOOD WATER, DETERIORATION OF FLOOD BUNDS.

- No such occurrence.

Chapter 13

EMERGENCY CONTINGENCY PLAN FOR VULNERABLE SITE

A- Vulnerable Site Rd: 453-475 of Extension Minchin Flood Bund

During falling condition of river in 2016, the main river changed its behavior and a deep creek developed just downstream concavo convex guide wall at RD: 453+735 of extension Minchin Flood Bund.

The main river started erosion to the bund from RD 462+000 to 463+000 during June, 2018. The three No. solid stone studs were constructed to protect the bund from aggressive behaviour of River Indus under the supervision of Third Party Monitoring (Consultant) during flood season of 2018. The main river was flowing near the bund from RD: 458+000 to 466+000. The River started erosion aggressively and was approaching to the bund. The offshore from river edge to the bund at RD: 464+000 was 12 feet and continuous erosion was in progress. The working paper was submitted to the office of PRO (Hydraulic) to carry out model study. Model Study report was printed in June, 2019 but proposed intervention cannot be executed due to flood season. In January, 2019 the river behavior was totally changed and new creak was developed hitting foreshore at RD 459+000 and developing sharp convex loop, threating the safety of adjoining abadies, valuable agricultural land and other infrastructures.

The Minch Flood bund was successfully protected / saved by hectic efforts during flood season, 2024.

After flood season 2019, working paper was submitted to Departmental Expert Committee after conducting detailed river survey. The Departmental Expert Committee proposed construction of 03 Nos Inverted Hockey at RD 462+000, 463+800 and 465+500. The execution work for construction of these Hockey has been completed and a new Hockey at RD: 460+500 has also been constructed after recommendations of DEC. In 2025, there was a significant shift in the river trend, causing the river to flow dangerously close to the toe of the flood bund. This resulted in erosion along the riverbank in the stretch between RD 465+000 and 475+000. The river is currently flowing near the toe of the flood bund in reach 465-475. Flood fighting measures were implemented in flood 2025, ensuring the stability of the site. A model study was conducted for this reach, and certain long-term remedial measures were recommended. Accordingly, a PC-I was prepared and submitted in July 2025; however, the scheme was unfortunately capped. As an alternative, short-term remedial measures have been recommended by the Departmental Expert Committee, and the corresponding cost estimate is currently under preparation.

13.1 PLAN SHOWING ROUTE OF FLOOD WATER COMING OUT OF THE BREACH SUPPORTED WITH LEVELS.

If breach occur at RD: **453-475** of Extension Minchin Flood Bund, the flood water will pass between the area of Extension Minchin Flood Bund and Bhong Disty which is running parallel.

13.2 DETAIL OF VILLAGES ABADIES LIKELY TO BE AFFECTED AND THIS SHOULD ALSO BE SHOWN ON THE PLAN.

➢ RD 453 to 475of Extension Minchin Bund

The following abadies likely to be affected i.e. Jamal Din wali city, Mauza Sonmiani, Kot Miran Shah, Kacha Razi, Basti Jhulan, Basti Sona zimkhani and Bhong city situated in the area.

13.3 STRATEGY AND ACTION TAKEN BE EXPLAINED IN DETAIL. THIS MAY INCLUDE.

➢ RD: 453-475 OF EXTENSION MINCHIN FLOOD BUND

During falling condition of river in 2016, the main river changed its behavior and a deep creek developed just downstream concavo convex guide wall at RD: 453+735 of extension Minchin Flood Bund.

The main river started erosion to the bund from RD 462+000 to 463+000 during June, 2018. The three No. solid stone studs were constructed to protect the bund from aggressive behaviour of River Indus under the supervision of Third Party Monitoring (Consultant) during flood season of 2018. The main river was flowing near the bund from RD: 458+000 to 466+000. The River started erosion aggressively and was approaching to the bund. The offshore from river edge to the bund at RD: 464+000 was 12 feet and continuous erosion was in progress. The working paper was submitted to the office of PRO (Hydraulic) to carry out model study. Model Study report was printed in June, 2019 but proposed intervention cannot be executed due to flood season. In January, 2019 the river behavior was totally changed and new creak was developed hitting foreshore at RD 459+000 and developing sharp convex loop, threating the safety of adjoining abadies, valuable agricultural land and other infrastructures.

After flood season 2019, working paper was submitted to Departmental Expert Committee after conducting detailed river survey. The Departmental Expert Committee proposed construction of 03 Nos Inverted Hockey at RD 462+000, 463+800 and 465+500. The execution work for construction of these Hockey has been completed and a new Hockey at RD: 460+500 has also been constructed after recommendations of DEC. In 2025, there was a significant shift in the river trend, causing the river to flow dangerously close to the toe of the flood bund. This resulted in erosion along the riverbank in the stretch between RD 465+000 and 475+000. The river is currently flowing near the toe of the flood bund in reach 465-475. Flood fighting measures were implemented in flood 2025, ensuring the stability of the site. A model study was conducted for this reach, and certain long-term remedial measures were recommended. Accordingly, a PC-I was prepared and submitted in July 2025; however, the scheme was unfortunately capped. As an alternative, short-term remedial measures have been recommended by the Departmental Expert Committee, and the corresponding cost estimate is currently under preparation.

13.3.1 ARRANGEMENTS

According to flood stages, this division has made the following arrangements for flood strategy at different stages and have explained above, however their plans are as under:-

- Day and night watching of Minchin Flood Bund and Spurs will be done by deputing the staff and establishing watching camps.

- Ample quantity of watching / flood fighting material will be arranged at each camp throughout the flood season.
- Additional machinery will be deployed:
- Lighting arrangements i.e. Generators and search lights will be arranged at each camp site in addition to arrangement already done on commencement of flood season.
- An Army contingent Jawans will also patrol along Minchin Flood Bund.
- All crossings on all the bunds will be closed thoroughly.

13.3.2 <u>ESTABLISHMENT OF FLOOD FIGHTING CAMPS.</u>

Camp will be established at Rd 468.

Details of camp's other than vulnerable site.

<u>SECTION I (SUB DIVISIONAL OFFICER BUND)</u>

1	Sub Section RD:243-272 and all allied Structure.	SDO Bund Sub Engineer Rukanpur Bund I	Minchin Flood Bund	RD:262
2	Sub Section RD:272-325 Minchin Flood Bund and all allied Structure	SDO Bund Sub Engineer Adamwali Pallu Shah	Camp at RD:312, Minchin Flood Bund	RD:312
3	Sub Section RD:325-358 Minchin Flood Bund.	SDO Bund Sub Engineer Degi,	Camp at RD:353, Minchin Flood Bund	RD:353

<u>SECTION II (SUB DIVISIONAL OFFICER BUND)</u>

1	Sub Section RD:358-400 Minchin Flood Bund.	SDO Bund Sub Engineer Bund II	Minchin Flood Bund	RD:388
2	Sub Section RD:300-450 Minchin Flood Bund.	SDO Bund Sub Engineer Sharin, Shahbaz Pur	Minchin Flood Bund	RD:435

<u>S</u>

<u>E</u>

<u>CTION III (SUB DIVISIONAL OFFICER BUND)</u>

1	Sub Section RD:450-470 Minchin Flood Bund and all allied structure.	SDO Bund Sub Engineer Bhong, Bund III	Minchin Flood Bund	RD:468
2	Sub Section RD:470-509 Minchin Flood Bund.	SDO Bund Sub Engineer Kasmani, Lamma	Minchin Flood Bund	RD:505
3	Sub Section RD:0-38 Minchin Flood Bund and loop Bund, all allied structure	SDO Bund Sub Engineer Duawala, Walhar	Minchin Flood Bund	RD:16+000

13.3.3 DUTIES OF OFFICERS / OFFICIALS AND THEIR CAMP SITES.

Camp Site	Officer	Officials
Camp at RD: 262 Minchin Flood Bund.	Safdar Hussain Cell# 0333-6445531	Tahir Maqsood Sub Engineer Cell# 03029225223
Camp at RD: 312 Minchin Flood Bund.	Safdar Hussain Cell# 0333-6445531	Afzal Karim Sub Engineer Cell# 03047943015
Camp at RD: 353 Minchin Flood Bund.	Safdar Hussain Cell# 0333-6445531	Wasim Haider Sub Engineer Cell# 03073921085
Camp at RD: 388 of Minchin Flood Bund.	Safdar Hussain Cell# 0333-6445531	Zulfiqar Ali Sub Engineer Cell# 0300-9676124
Camp at RD: 468 of Minchin Flood Bund.	Safdar Hussain Cell# 0333-6445531	Khalid Rafiq Sub Engineer Cell# 03006802103
Camp at RD: 505 of Minchin Flood Bund.	Safdar Hussain Cell# 0333-6445531	Kamran Butt Sub Engineer Cell# 03006801819
Camp at RD: 16+000 of Minchin Flood Bund	Safdar Hussain Cell# 0333-6445531	Anjum Shahin Sub Engineer Cell# 0301-7634244

13.3.4 DEPARTMENTAL MACHINERY AVAILABLE

Not Available

13.3.5 MACHINERY AVAILABLE FROM PRIVATE SOURCE

As per requirement machinery will be arranged through contractor i.e Dozer, Excavator, Tractor Trolley, Front blade Tractor. The requirement of machinery is as under in very high stage:

Excavator	=	02 Nos.
Tractor with front blade	=	02 Nos.
Tractor with Trolley	=	04 Nos

However the Agriculture Department will have to supply the dozer as provided in the District Flood Plan to meet any eventuality. The District Coordination Officer Rahimyarkhan will be specially requested to direct the District Machinery pool officer to arrange the same well in time.

13.3.6 FLOOD MATERIAL REQUIRED

13.3.7 FLOOD MATERIAL AVAILABLE

S. No	Name of Articles.	Articles required	Available	Balance required /to be procured	Remarks.
1.	Shouldari / Tent	1 Nos.	-	1 Nos.	Balance quantity of Material will be procured before flood, 2026
2.	Chairs	6 Nos.	-	6 Nos	
3.	Table	1 Nos.	-	1 Nos.	
4.	Generator	1 Nos.	-	1 Nos.	
5.	Pedestal Fans	1 Nos.	-	1 Nos.	
6.	Charpois	2 Nos.	-	2 Nos.	
7.	Symbolic Jackets	50 Nos.	-	50 Nos.	
8.	Polythin Sheet	100 Kg	-	100 Kg	
9.	Bamboos 4'' dia	100 Nos	-	100 Nos.	
10.	Water Coller	1 Nos.	-	1 Nos.	
11.	Portable umbrella	2 Nos.	-	2 Nos.	
12.	Life Jacket	5 Nos.	-	5 Nos.	
13.	Utensils (10 person)	1 Nos.	-	1 Nos.	
14.	Jute/Plastic bags	1000 Nos.	50 Nos.	950 Nos.	
15.	Walke Talkie Set	2 Sets	-	2 Sets	
16.	Raincoats	10 Nos.	2 Nos.	8 Nos.	
17.	LED flood light	10 Nos.	-	10 Nos.	
18.	Extension Cable 10'	2 Nos.	-	2 Nos.	
19.	Rechargeable Torches	20 Nos.	3 Nos.	17 Nos.	
20.	Kassi	20 No.	2 Nos.	18 Nos	
21.	Axes	20 Nos.	-	20 Nos.	
22.	G.I Buckets	5 Nos.	1 Nos.	4 Nos.	
23.	7/44 Cable	500 feet	-	500 feet	
24.	Sutli	2 Kg	-	2 Kg	
25.	Sewing Needles	10 Nos.	3 Nos.	7 Nos	
26.	Emergency Medical Kit	1 Nos.	-	1 Nos.	
27.	Wire crates (3x3x3) (at only those camp near river action and reserve stock exists)	100 Nos.	-	100 Nos.	

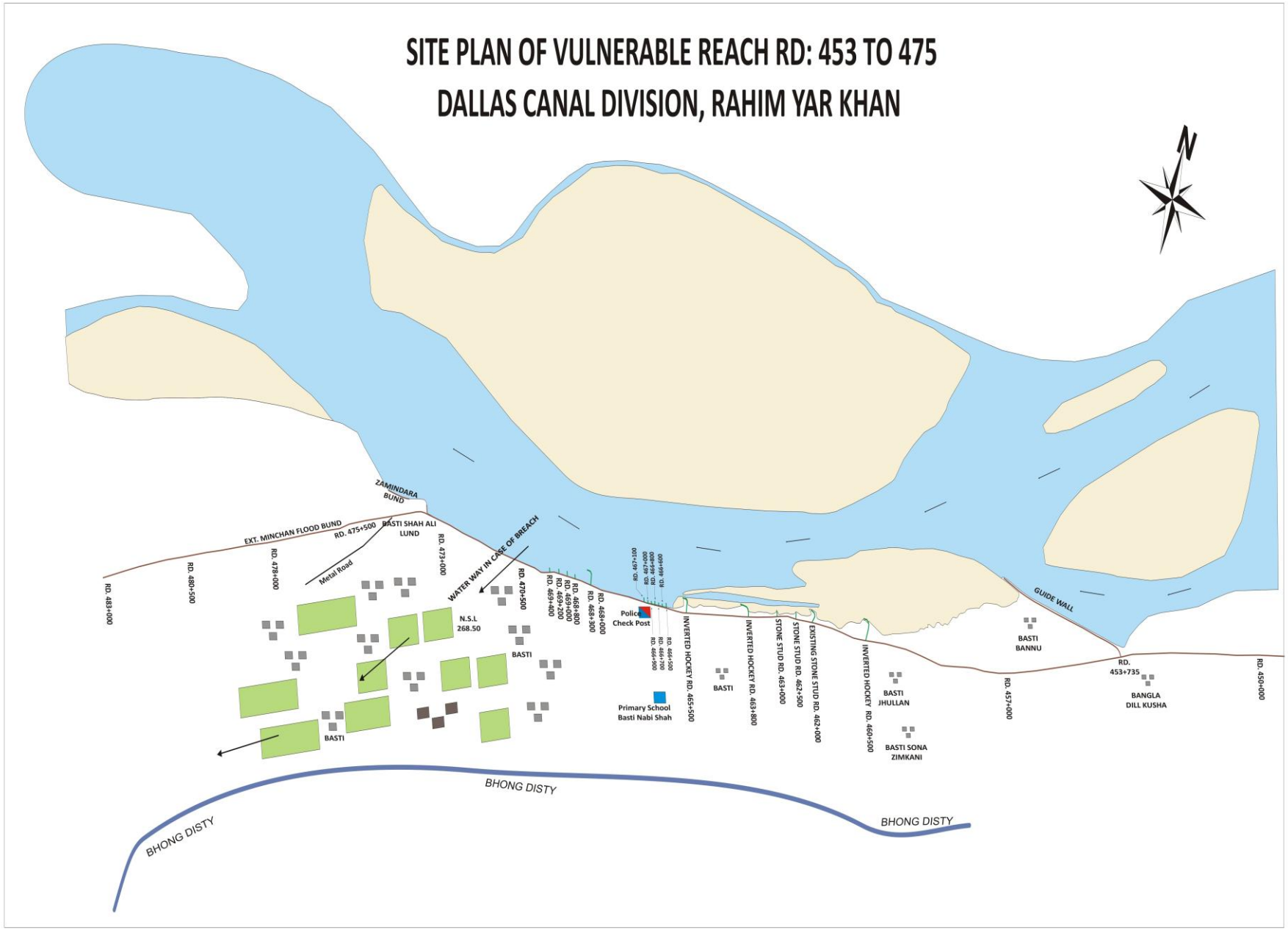
13.4 DETAIL OF OTHER INFRASTRUCTURE LIKE ELECTRIC, SUI GAS, TELEPHONE INSTALLATIONS, ROAD NETWORK, OTHER BUILDINGS, CANALS AND DRAINAGE NETWORK.

NIL

Vulnerable site RD: 453-475 Extension Minchin Flood Bund.

Map showing vulnerable RD: 453-475 Extension Minchin Flood Bund

SITE PLAN OF VULNERABLE REACH RD: 453 TO 475
DALLAS CANAL DIVISION, RAHIM YAR KHAN



Chapter 14

ACTION PLAN

14.1 RE-SHUFFLING/ RECOUPING PLAN OF RESERVE STONE DEPARTMENTALLY

As per yard stick balance quantity of reserve stock stone will recouped prior to 30.06.2026. Re-shuffling of stone will be done through contractor at site as per requirement.

14.2 DETAIL OF INLET/OUTLET CROSSING ALONG WITH CLOSING METHODOLOGY

All the inlets / outlets crossings will be closed before flood.

Name of Flood Bund / Structure	RD. of Inlet / Outlet
2nd Defense Bund 4th Defense Bund 4th Defense Bund Extension Minchin Flood Bund	RD:4+000 RD:0-1000 RD:4-5 RD:372,354-55,357-58,359-60,360-61,361-62, 364-65,366-67,371,405-6,415-16,428-29,441-42, 378,391,401,404,405

14.3 DEPLOYMENT MACHINERY (NORMAL TO LOW FLOOD)

Sr. No.	Structure Name	Length (Miles)	Excavators	Trolleys	Dumpers	Tractor with Front blade (1 per 15 mile)
1	Minchin Flood Bund / Extension Flood Bund	67.34	S.E shall allow deputation of one (1) excavator & four (4) Trolleys during low flood at camps/vulnerable points & LMB / RMB.		-	4
2					-	
3					-	
4					-	
Total					-	**4**

Note:-Payment of machinery and work charged establishment subject to verification by the TPM / Consultant.

14.4 DEPLOYMENT OF MACHINERY (MEDIUM TO HIGH FLOOD)

Sr. No.	Structure Name	Length (Miles)	Excavators	Trolleys	Dumpers	Tractor with Front blade
			1 per 7 mile	4 per 7 mile	2 per 7 mile	1 per 7 mile
1	Minchin Flood Bund / Extension Flood Bund	67.34	10	40	20	10
Total			**10**	**40**	**20**	**10**

Note:-Payment of machinery and work charged establishment subject to verification by the TPM / Consultant.

14.5 DEPLOYMENT OF MACHINERY (VERY HIGH TO EXCEPTIONAL HIGH FLOOD)

Sr. No.	Structure Name	Length (Miles)	Excavators		Trolleys	Dumpers	Tractor with Front blade	
			Very High Flood	Exp. High Flood	4 per 5 mile	2 per 5 mile	Very High Flood	Exp. High Flood
			1 per 5 mile	2 per 5 mile			1 per 5 mile	2 per 5 mile
1	Minchin Flood Bund / Extension Flood Bund	67.34	13	26	52	26	13	26
Total			**13**	**26**	**52**	**26**	**13**	**26**

Note:-Payment of machinery and work charged establishment subject to verification by the TPM / Consultant.

14.6 POLICE DEPLOYMENT PLAN

Sr. No	**Name of Structure / Bund**	Camp Location	**Site Incharge by name & Cell No.**	Detail of Police
1	Minchin Flood Bund RD: 243 to 310 i/c Guide Wall spur No. 5	J- Head Spur No. 5 RD: 260	Tahir Masood Sub Engineer Rukanpur 0302-7703225	Inspector = 01 No. ASI = 02 No. Constable = 10 No.
2	4th Defence Bund RD: 0 to 16 i/c J-Head Spur No. 4, Inverted Hockey Spur U/S of J-Head Spur No. 4	J-Head Spur No. 4 RD: 8, 4th Defence Bund	Noman Tahir SBE Pallu Shah 0300-042337	ASI = 01 No. Constable = 05 No.
3	Ext: M Flood Bund RD: 309+500 to 509+900 i/c J-Head Spur 3 No, Guide Head Spur, Guide Wall Spur, Solid Stone Stud 15 No	J-Head Spur No. 1 RD: 388 Ext: M. Bund	Wasim Haider SBE Degi 0307-3921085	ASI = 01 No. Constable = 05 No
		Guide Wall Spur RD: 453 Ext: M.Bund	Muhammad Shahid SBE Sharin 0300-6461337	Inspector = 01 No. ASI = 02 No. Constable = 10 No.
		RD: 460 Ext: M.Bund	Tahir Maqsood SBE Bhong	ASI = 01 No. Constable = 05 No.

			0302-9225223	
4	Machka Dilawara Bund RD: 0 to 34+000	RD: 26 - 27	Muhammad Fahad SBE Dauwala 0307-9360704	ASI = 01 No. Constable = 05 No.
5	Loop Flood Bund RD: 0 to 60+70	RD: 6	Khalid Rafiq Bhatti SBE Kasmani 0300-6802103	ASI = 01 No. Constable = 03 No.

14.7 DETAILS OF SYNTHETIC BAGS WITH CAPACITY OF 50 KG AND 100 KG

Sr. No	**Name of Structure / Bund**	Camp Location	**Site Incharge by name & Cell No.**	Detail of Synthetic Bags with capacity 50 kg		Detail of Synthetic bags with capacity of 100 kg		Remarks
				Required	Available	Required	Available	
1	Minchin Flood Bund RD: 243 to 310 i/c Guide Wall spur No. 5	J- Head Spur No. 5 RD: 260	Tahir Masood Sub Engineer Rukanpur 0302-7703225	3000	0	1500	0	Synthetic bags will be recouped prior to flood 2026
2	4th Defence Bund RD: 0 to 16 i/c J-Head Spur No. 4, Inverted Hockey Spur U/S of J-Head Spur No. 4	J-Head Spur No. 4 RD: 8, 4th Defence Bund	Noman Tahir SBE Pallu Shah 0300-042337	2000	0	1000	0	
3	Ext: M Flood Bund RD: 309+500 to 509+900 i/c J-Head Spur 3 No, Guide Head Spur, Guide Wall Spur, Solid Stone Stud 15 No	J-Head Spur No. 1 RD: 388 Ext: M. Bund	Wasim Haider SBE Degi 0307-3921085	2000	0	1000	0	
		Guide Wall Spur RD: 453 Ext: M.Bund	Muhammad Shahid SBE Sharin 0300-6461337	4000	0	2000	0	
		RD: 460 Ext: M.Bund	Tahir Maqsood SBE Bhong 0302-9225223	2000	0	1000	0	
4	Machka Dilawara Bund RD: 0 to 34+000	RD: 26 - 27	Muhammad Fahad SBE Dauwala 0307-9360704	2000	0	1000	0	
5	Loop Flood Bund RD: 0 to 60+70	RD: 6	Khalid Rafiq Bhatti SBE Kasmani 0300-6802103	1500	0	1000.	0	

14.8 DETAILS OF POLYTHENE SHEETS OF BLACK COLOR TO PROTECT UPSTREAM SLOPE AGAINST WAVE ACTION AND TO CONTROL SEEPAGE THROUGH EMBANKMENTS.

Sr. No	**Name of Structure / Bund**	Camp Location	**Site Incharge by name & Cell No.**	Detail of Polythene required		Remarks
				Required	Available	
1	Minchin Flood Bund RD: 243 to 310 i/c Guide Wall spur No. 5	J- Head Spur No. 5 RD: 260	Tahir Masood Sub Engineer Rukanpur 0302-7703225	30000 Sft	0	Polythene sheets will be recouped prior to flood 2026
2	4th Defence Bund RD: 0 to 16 i/c J-Head Spur No. 4, Inverted Hockey Spur U/S of J-Head Spur No. 4	J-Head Spur No. 4 RD: 8, 4th Defence Bund	Noman Tahir SBE Pallu Shah 0300-042337	20000 Sft	0	
3	Ext: M Flood Bund RD: 309+500 to 509+900 i/c J-Head Spur 3 No, Guide Head Spur, Guide Wall Spur, Solid Stone Stud 15 No	J-Head Spur No. 1 RD: 388 Ext: M. Bund	Wasim Haider SBE Degi 0307-3921085	30000 Sft	0	
		Guide Wall Spur RD: 453 Ext: M.Bund	Muhammad Shahid SBE Sharin 0300-6461337	40000 Sft	0	
		RD: 460 Ext: M.Bund	Tahir Maqsood SBE Bhong 0302-9225223	20000 Sft	0	

4	Machka Dilawara Bund RD: 0 to 34+000	RD: 26 - 27	Muhammad Shahid SBE Sharin 0300-6461337	20000 Sft	0	
5	Loop Flood Bund RD: 0 to 60+70	RD: 6	Khalid Rafiq Bhatti SBE Kasmani 0300-6802103	10000 Sft	0	

14.9 ANY OTHER DETAILS AS PER SOPS APPROVED BY THE ADMINISTRATIVE DEPARTMENT. (Recommendation for operation during floods)

Recommendations for Operation During Flood

i. The Superintending Engineer (SE) will notify all vulnerable points on the recommendations of Executive Engineer (XEN) and if the vulnerable site falls within 15 miles of embankment, then camp will be established at vulnerable site.

ii. Superintending Engineer shall allow deputation of one (1) excavator and four (4) Trolleys during low flood at Camps/ vulnerable points and LMB/RMB.

iii. The Superintending Engineer (SE) shall approve one additional shift during low to high flood based on necessity of site but he shall clearly mention the reach where additional shift is allowed.

iv. For emergent situation when very high flood levels are attained at lower flood discharges, additional camps may also be established with the approval of Superintending Engineer.

v. The concerned division shall procure flood fighting material as per requirement of seasonal flood fighting camps.

vi. Jackets with official emblem of the PID should be purchased by the concerned Division, to be used during the worst-case scenario, i.e., for exceptionally high flood.

vii. All others camps and supplies along with establishment i.e. Beldars and mates shall be outsourced before the flood season for operational efficiency during the flood fighting activities.

viii. The above mentioned yard stick of human resource is inclusive of 100% of regular flood establishment of the division at normal and low flood and for medium and above flood situation 50% of total regular establishment of the division and backup division in Flood Fighting Plan.

ix. The **Trigger Point** upstream of a Canal Division for commencing preparations shall be mentioned in the flood fighting plan and it shall be such point upstream with lag time of 3 days / 72 hours. The division shall initiate preparation corresponding to discharge magnitude expected to receive at their jurisdiction with respect to discharge at trigger point with 2025 flood data.

6

SE MBN

x. Superintending Engineers shall approve additional resources above the approved FFP on the recommendations of Executive Engineer based on site necessity with copy to TPM and respective Chief Engineer but must mentioned the reach and justify the reason for additional resources in approval.

xi. Executive Engineers (XEN) shall decide the location and relocation of flood camps.

xii. The machinery mentioned above should be hired to remain standby for 24/7 to fight any extreme situation. The working of deployed machinery during normal situation shall be with prior approval of Superintending Engineer.

xiii. Communication means must be arranged through the Government. It is recommended to allocate a unique frequency for irrigation department.

xiv. In the event that water levels reach the 'High Flood' threshold even if the recorded discharge remains below established benchmarks, all field preparations and personnel deployments must immediately escalate to Critical Level protocols.

(Zeeshan Ali)
Member/ SE, Project Circle DG Khan

(Abdul Qayyum Qadume)
Member / SE, Mailsi Canal Circle, Multan

19/01/2026

(Mohib Ullah Ali)
Member / SE, Sukhrawa Canal Circle, Sahiwal

19-01-26

(Imtiaz Hussain)
Member / SE, Bahawalpur Canal Circle

(Sammar Iqbal)
Member / SE, LCC(West) Canal Circle, Faisalabad 19/01/26.

(Hafiz Ijaz Ahmed)
Member / SE, Mandi Bahauddin Canal Circle 19/1/26

19/01/26

(Mudassar Rehan)
Member / SE Link Circle, Lahore

(Khurram Amin)
Convener / Chief Engineer, Drainage & Flood Zone, Lahore.

7

Chapter 15

BACKUP DIVISIONS (IN CASE OF BREACH)

- **Khanpur Canal Division Khanpur.**

It is certified that there is no breaching section exists in Dallas Canal Division. In case of emergency / breach Khanpur Division will be act as backup Division.

Chief Engineer Bahawalpur Irrigation Zone Bahawalpur	**Superintending Engineer** Rahimyarkhan Canal Circle Rahimyarkhan	**Executive Engineer** Dallas Canal Division Rahimyarkhan