PART-A

CHAPTER-1

SALIENT FEATURES OF THE JHANG CANAL DIVISION LCC(W) JHANG

1.1 LOCATION.

Jhang Canal Division is one of the Divisions of Lower Chenab Canal West Circle, Faisalabad Zone and started its function from 17-08-1911. It irrigates the area under the command of Bhowana Branch and Jhang Branch Lower Canal System. The Division falls in four Districts whose split up of area is given below:-

S#	DISTRICT.	G.C.A.	C.C.A	Sweet
1.	Faisalabad	1290	11908	Sweet
2.	Jhang	32121	27089	Sweet
3.	Toba Tek singh	247365	195197	Brackish
4.	Chiniot	95593	76172	Sweet
	Total:-	**67849**	**533366**	

Jhang Canal Division is one out of three Divisions of Lower Chenab Canal West Circle, Faisalabad of Faisalabad Irrigation Zone, Faisalabad. It comprises of four Sub Divisions:-

	G.C.A (In acres)	C.C.A (In acres)	G.A (In acres)	Fish Forms (In acres)
Total Area under the Division	**678489**	**533366**	-	-
EXISTING AREA				
Wer Sub Division	191752	154303	491.49	-
Dhaular Sub Division	262189	204676	2427.52	2.16
Veryam Sub Division	224548	174387	4301.08	8.50
Flood Bund Sub Division	-	-	-	-
Total Area of Division	**678489**	**533366**	**7220.09**	**10.66**

IRRIGATION SYSTEM OF JHANG CANAL DIVISION.

I. PERENNIAL SYSTEM

Jhang Canal Division is one of the Divisions of Lower Chenab Canal West Circle, Faisalabad Zone and started its function from 17-08-1911. It irrigates the area under the command of Bhowana Branch and Jhang Branch Lower Canal System. Out of an area of 678,489 acres GCA, 533,366 acres CCA of District Faisalabad, Jhang, Chiniot and Toba Tek Singh falls in the jurisdiction of Jhang Canal Division. Irrigation system of division comprises of two Branch Canals off taking from Tail of Jhang Branch Upper named as Jhang Branch Lower and Bhowana Branch Canal and its Sub System of Channels consist of 31 number distributaries and 42 number minors. It comprises of four Sub Divisions headed by the Sub Divisional Officers, namely; Wer, Dhaular, Veryam & Flood Bund.

In addition to above mentioned canal system, there are three Flood Bunds as following:-

1. Jhang Flood Protection Bund
2. Thatta Mahla Flood bund
3. Loop Bund

These Bunds were constructed by the Irrigation Department during the years 1950 & 1959, to check the spill of River Chenab entering in Jhang Sadar and the other abadies of Jhang City with the total length of 26.70 miles.

Thatta Mahla flood Bund was constructed to save the Jhang City, valuable crops and vital installations. The said Flood Bund breached during the Flood of 1973 and major damages occurred in the Jhang City. To improve the condition of the Flood Bund, it was remodeled and its top level was raised up to a free board of 5` above High flood level of 1973. Loop Bund is a second defense line for the Thatta Mahla Flood Bund. It starts from RD. 1500 Thatta Mahla Flood Bund and terminates at RD. 11500 adopting a shape of Loop.

I. FLOOD BUND SUB DIVISION

1. Jhang Flood Protection Bund from RD 0+000 – 71+000
2. Thatta Mahla Flood bund from RD 0+000 – 51+000
3. Loop Bund from RD 0+000 – 11+500.

II WER SUB DIVISION

Bhowana Branch off takes from RD 308426/R Jhang Branch Upper. Its full supply discharge at head is 506 Cs. 10 No. Distributaries & 15 No. Minors fall in Wer Sub Division. Bhowana Branch & its system fall in Wer Sub Division from RD 0+000 – RD 37+478+000. It irrigates the fertile land of Tehsil Bhowana Disrict Chiniot and Tehsil & District Jhang,

III DHAULAR SUB DIVISION

Jhang Branch Lower off takes from RD 308426/F Jhang Branch Upper. Its full supply discharge at head is 1517.71 Cs. 10 No. Distributaries & 13 No. Minors fall in Dhaular Sub Division. It irrigates the fertile land of Tehsil Gojra Disrict Toba Tek Singh and Tehsil & District Jhang,

IV VERYAM SUB DIVISION

The jurisdiction of Veryam Canal Sub Division starts from RD 131+000 of Jhang Branch Lower. Its full supply discharge at this point is 758.42 Cs. 11 No. Distributaries & 13 No. Minors fall in Veryam Sub Division. It irrigates the fertile land of Tehsil Gojra Disrict Toba Tek Singh.

LENGTH OF CHANNELS.

Sr. No.	Description	No. of Distributaries / Minor	Length in Canal Mile
1	**Bhowana Branch & Its System**		7.50
i.	Distributaries	10 No. Distributaries	104.12
ii.	Minor	15 No. Minors	38.99
2	**Jhang Branch Lower**		37.86
i.	Distributaries	21 No. Distributaries	187.21
ii.	Minor	26 No. Minors	106.44

LINED CHANNEL

Sr. No.	LENGTH (IN MILE)	
	No. of Channel	**Length in Canal Miles**
A	**LINED CHANNEL**	
1	58	392.29
B	**EARTHEN CHANNEL**	
2	14	44.47

DISCHARGE.

Sr. No.	SYSTEM	DISCHARGE (IN CUSECS)
1	Bhowana Branch & Its System	506.00
2	Jhang Branch Lower	1571.71

1.2 GENERAL DESCRIPTION

Jhang Canal Division is one of the Divisions of Lower Chenab Canal West Circle, Faisalabad Zone and started its function from 17-08-1911. It irrigates the area under the command of Bhowana Branch and Jhang Branch Lower Canal System. Out of an area of 678,489 acres GCA, 533,366 acres CCA of District Faisalabad, Jhang, Chiniot and Toba Tek Singh falls in the jurisdiction of Jhang Canal Division. Irrigation system of division comprises of two Branch Canals off taking from Tail of Jhang Branch Upper named as Jhang Branch Lower and Bhowana Branch Canal and its Sub System of Channels consist of 31 number distributaries and 42 number minors. It comprises of four Sub Divisions headed by the Sub Divisional Officers, namely; Wer, Dhaular, Veryam & Flood Bund.

In addition to above mentioned canal system, there are three Flood Bunds as following:-

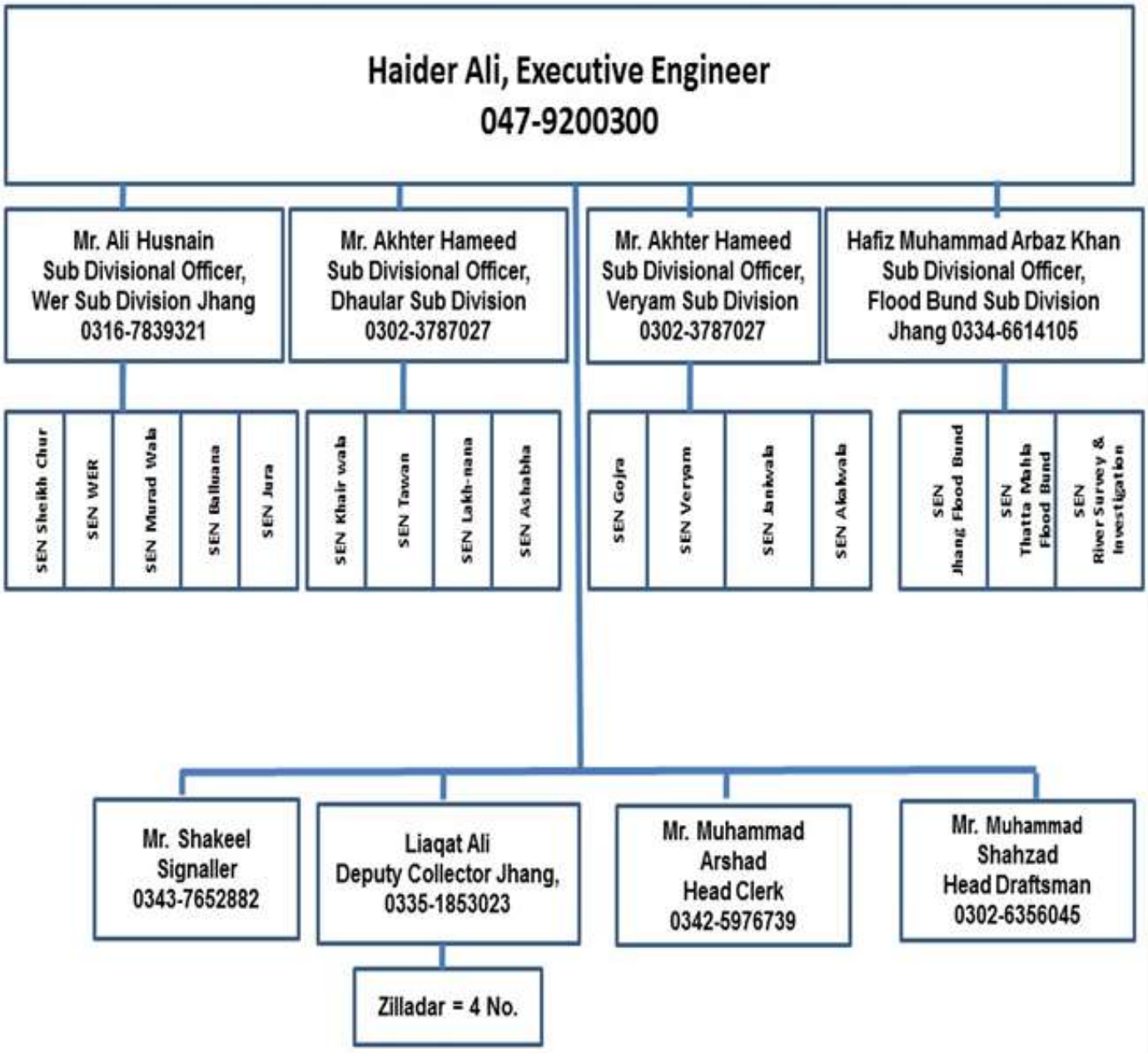
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1.3

ADMINSTRATIVE SETUP


Haider Ali, Executive Engineer
047-9200300
Mr. Ali Husnain
Sub Divisional Officer,
Wer Sub Division Jhang
0316-7839321
Mr. Akhter Hameed
Sub Divisional Officer,
Dhaular Sub Division
0302-3787027
Mr. Akhter Hameed
Sub Divisional Officer,
Veryam Sub Division
0302-3787027
Hafiz Muhammad Arbaz Khan
Sub Divisional Officer,
Flood Bund Sub Division
Jhang 0334-6614105
SEN Sheikh Chur
SEN WER
SEN Murad Wala
SEN Balluana
SEN Jura
SEN Khair wala
SEN Tavan
SEN Lakh-nana
SEN Ashabha
SEN Gojra
SEN Veryam
SEN Jankwala
SEN Akakwala
SEN Jhang Flood Bund
SEN Thatta Mahla Flood Bund
SEN River Survey & Investigation
Mr. Shakeel
Signaller
0343-7652882
Liaqat Ali
Deputy Collector Jhang,
0335-1853023
Mr. Muhammad
Arshad
Head Clerk
0342-5976739
Mr. Muhammad
Shahzad
Head Draftsman
0302-6356045
Zilladar = 4 No.

CHAPTER-2

FLOOD PROTECTION AND RIVER TRAINING WORKS

2.1 DESIGN PARAMETER OF TRAINING WORKS

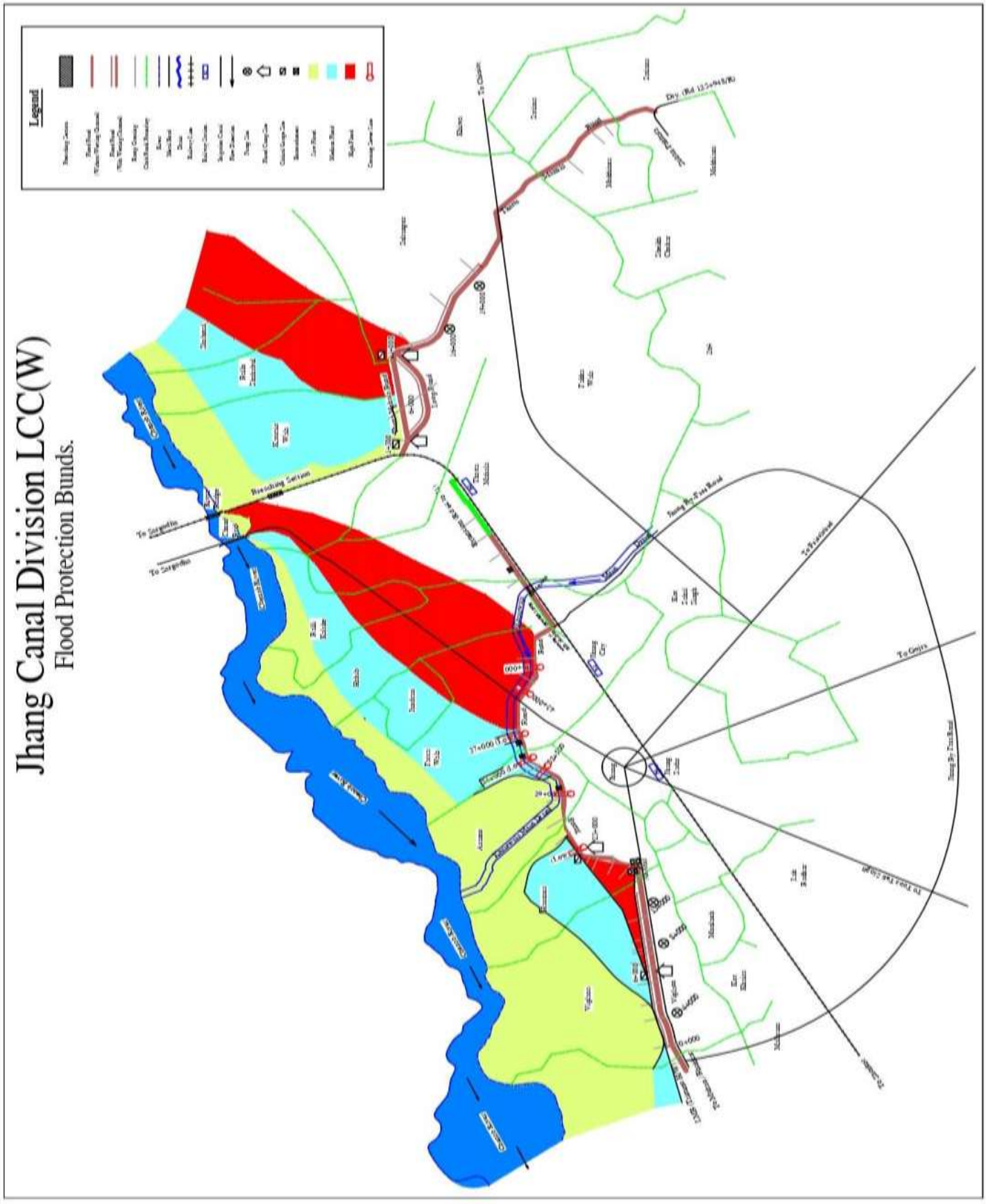
S.NO	NAME OF FLOOD BUND	LENGTH	
		RD	MILES
1	Thatta Mahla Flood Bund	0+000	51+000
2	Loop Bund	0+000	11+500
3	Jhang Flood Protection Bund	0+000	71+000
	TOTAL		**26.70**

DESIGN PARAMETER.

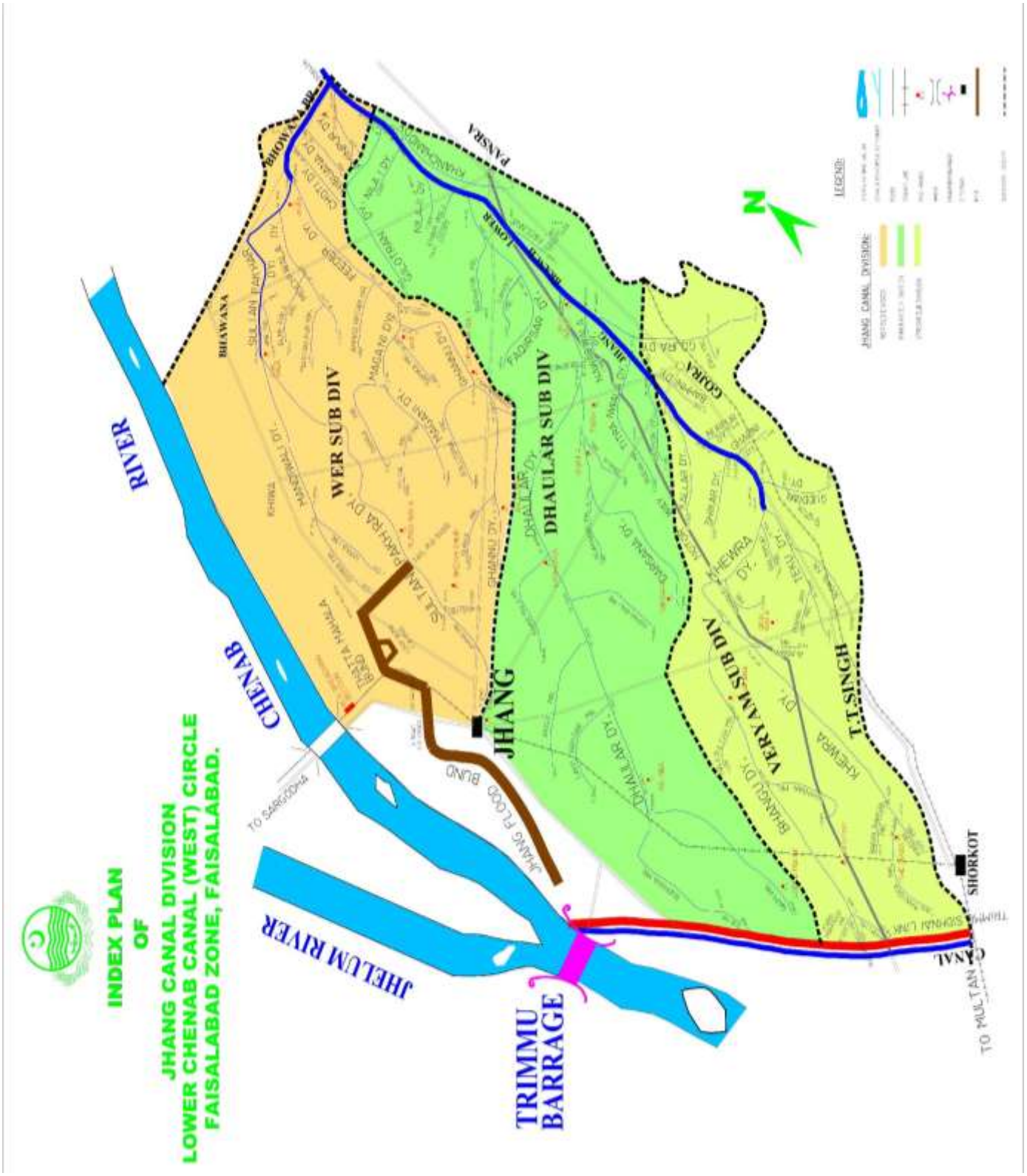
A. FLOOD PROTECTION AND RIVER TRAINING WORKS.

Sr. No.	Name	Length	Top Width	Side Slopes		Free Board
				River Side	Country Side	
1	Thatta Mahla Bund	RD:0-51000 (10.20 Miles)	i.0-31 = 25ft ii.31-51 = 20ft	3:1	2:1	6ft
2	Jhang Flood Bund	RD:0-71000 (14.20 Miles)	i. 0-18 =25ft ii.18-52 =45ft iii.52-71=25ft	3:1 3:1 3:1	2:1 2:1 2:1	6ft
3	Loop Bund	RD:0-11500 (2.30 Miles)	20ft	3:1	2:1	6ft
	Mileage	26.70 Miles				

2.2 LOCATION MAP



INDEX PLAN


INDEX PLAN
OF
JHANG CANAL DIVISION
LOWER CHENAB CANAL (WEST) CIRCLE
FAISALABAD ZONE, FAISALABAD.
RIVER
CHENAB
JHELUM RIVER
TRIMMU
BARRAGE
JHANG
WER SUB DIV
DHAULAR SUB DIV
VERYAM SUB DIV
T.T.SINGH
SHORKOT
BHAWANA
PANSRA
GOJRA
KHEWRA DY.
TO SARGODHA
TO MULTAN
N

CHAPTER-3
BRIEF HISTORY
OF
PAST FLOOD EVENTS

BRIEF HISTORY OF PAST FLOOD EVENTS.

As a consequence to exceptionally high Floods in river Chenab, Thatta Mahla Bund, main protection Line for Jhang city breached during the night between 11-12 August,1973. The gauge at RD: 1+500, of Thatta Mahla Flood Bund recorded at the time of breach was 526.90 ft against the previous highest level ever recorded as 525.90 ft during Floods of 1957. The total length of breach occurred in the bund was 2155 ft during 1973 with an approximate discharge of 80,000 Cs: passed through the breach when the gauge recorded at Revaz Bridge was 522.70 ft against the highest ever recorded 522.20 ft during 1957.

The peak discharges passed through the river Chenab at critical gauge site at RD.1500 of Thatta Mahla flood Bund are as under.

Sr.No.	Year	Date of Peak Flood at Trimmu H/W	Discharge at Trimmu Head Works	Date	Gauge RD 1+500 of Thatta Mahala Bund	Duration
1	1973	15.08.73	666910	15.08.73	526.90	
2	1974	17.07.74	150170	-	-	-
3	1975	20.07.75	458247	-	-	-
4	1976	10.08.76	704633	10.08.76	525.20	-
5	1977	19.07.77	293628	-	-	-
6	1978	20.07.78	286806	-	-	-
7	1979	17.07.79	168680	-	-	-
8	1980	17.07.80	182081	-	-	-
9	1981	31.07.81	306171	29.07.81	521.80	8-12 Hrs
10	1982	04.08.82	135522	-	-	-
11	1983	05.09.83	272781	-	-	-
12	1984	31.08.84	150608	-	-	-
13	1985	11.08.85	277512	21.07.85	520.90	6-12 Hrs
14	1986	08.08.86	403187	31.07.86	520.50	1-10 Hrs
15	1987	14.06.87	157613	-	- -	-
16	1988	29.09.88	493123	29.09.88	524.50	4-5 Hrs
17	1989	03.08.89	481517	2-3.08.89	521.10	21-03 Hrs
18	1990	24.03.90	207396	- -	-	-
19	1991	16.04.91	207026	-	-	-

Sr. No.	Year	Date of Peak Flood at Trimmu H/W	Discharge at Trimmu Head Works	Date	Gauge RD 1+500 of Thatta Mahala Bund	Duration
20	1992	13.09.92	683117	13.09.92	524.35	16-19 Hrs
21	1993	14.07.93	326744	-		
22	1994	23.07.94	323099	-		
23	1995	01.08.95	129561	31.07.95	525.95	15-21 Hrs
24	1996	27.08.96	543708	27.08.96	527.00	4-6 Hrs
25	1997	01.09.97	677417	30.08.97	525.40	5-10 Hrs
26	1998	13.07.98	148668	-	-	-
27	1999	22.07.99	61476	-	-	-
28	2000	26.07.2000	116179	-	-	-
29	2001	18.08.2001	72431	-	-	-
30	2002	17.08.2002	108627	-	-	-
31	2003	07.08.2003	122805	-	-	-
32	2004	21.08.2004	42756	-	-	-
33	2005	17.07.2005	162097	11.07.05	522.40	9-13 Hrs
34	2006	07.09.2006	266270	06.09.06	523.60	18-21 Hrs
35	2007	16.03.2007	173529	-	-	-
36	2008	04.08.2008	132220	-	-	-
37	2009	21.08.2009	62265	-	-	-
38	2010	10.08.2010	323026	10.08.2010	522.50	15- 19-Hrs
39	2011	20.09.2011	132890	-	-	-
40	2012	07.08.2012	82794	`-	-	-
41	2013	20.08.2013	272609	19.08.2013	525.40	07-13 Hrs
42	2014	11.09.2014	626006+ 77000	09.09.2014	528.10	06-07 Hrs
43	2015	29.07.2015	150570	-	-	-
44	2016	10.08.2016	166139	10.08.2016	520.80	1.00 Hrs
45	2017	21.07.2017	92595	-	-	-
46	2018	16.08.2018	94680	-	-	-
47	2019	22.08.2019	105821	-	-	-
48	2020	01.09.2020	196077	-	-	-
49	2021	31.07.2021	123167	-	-	-
50	2022	18.08.2022	129815	-	-	-
51	2023	25.07.2023	125186	-	-	-
52	2024	19.08.2024	96280	-	-	-
53	2025	01.09.2025	550965	30.08.2025	528.00	0:00 Hrs

During 1976, a maximum discharge of 706442 cusec passed through Trimmu Barrage. A maximum gauge of 525.20 was recorded at RD: 1500 Thatta Mahla Bund on 09.08.1976 at 05:00 Hours with corresponding gauge 521.50 of Revaz Bridge and 506.80 at RD: 23000 of Flood protection Bund. There was damage to top and slope of bund due to heavy rains and wave action during Floods of 1976. All necessary repairs were carried out at site after Floods of 1976. There was no appreciable Flood in the River during the year 1977, 1978, 1979 and 1980. During 1981, the maximum discharge passing downstream Khanki was 5.47 Lac cusec on 26.08.1981, Qadirabad 5.79 Lac cusec on 26.07.1981 and at Trimmu 3.06 Lac cusec on 31.07.1981. The maximum gauge along Jhang Flood Protection Bund at RD: 23000 was 502.00 on 30.07.1981. There was no Flood during 1982 and 1983.

During 1985, the maximum discharge passed D/S Khanki was 309068 Cs. on 07.08.1985, Qadirabad 318117 Cs. on 08.08.1985 and Trimmu 277512 Cs. on 11.08.1985. The corresponding gauge at Revaz Bridge was 519.10 on 11.08.1985. The gauge at RD: 23000 Jhang Flood Protection Bund was 503.60 on 22.07.1985. During 1986, the maximum discharge passed D/S Khanki was 3,26,000 Cs. on 28.07.1986 at 09:00 hours, Qadirabad 312862 Cs. on 28.07.1986 at 12.00 hours. The maximum discharge D/S Rasul Barrage was recorded as 141404 cs: on 05.08.1986 at 06.00 hours. The accumulated effect of Rasul and Qadirabad was received at Trimmu on 08.08.1986 at 04.00 hours and was recorded as 403187 Cs. The maximum gauge recorded at Revaz Bridge was 518.40 and corresponding gauge at RD; 1500 T.M Bund was 521.10 and that of RD: 23000 of J. F.P Bund was 502.90.

During 1987, Maximum Discharge D/S Khanki was 98745 Cs. on 27.07.1987. The peak gauge at Revaz Bridge was 516.70 Cs. on 29.07.1987. However the Flood water did not touch the Bunds during 1987. During 1988 maximum discharge D/S Khanki was 864220 Cs. on 26.09.1988 at 12.00 hours and D/S Qadirabad 892299 Cs. on 26.09.1988 at 16.00 hours and D/S Trimmu 993123 Cs. on 29.09.1988 at 17.00 hours. The maximum gauge recorded at Revaz Bridge was 521.20 on 29.09.1988 at 5.00 hours and gauge at RD: 1500 T.M Bund was 524.50 on 29.09.1988 at 4.00 hours and that of RD: 23000 F.P Bund was 505.10 on 29.09.1988. The Flood water touched the bunds and parallel flow caused damages to the slopes of Jhang F.P Bund. A jet like water flow passing through bridge opposite RD: 27-28 J.F.P Bund also caused serious damage to the Bund.

During 1989, there was very high flood in River Chenab. Peak discharge of 512205 Cs. on 31.07.1989 at 2.00 hours to 5.00 hours was recorded at Khanki and same reached Qadirabad on the same day at 16.00 hours with maximum discharge of 547400 Cs. This very high flood showed Peak discharge of 431517 Cs. at Trimmu Barrage with duration of 6.00 hours to 13.00 hours on

03.08.1989 and maximum gauge at Revaz Bridge was recorded 519.40 on 02.08.1989 at 23.00 hours for 2.00 hours duration. Flood water touched the T.M Bund & J.F.P Bund on 31.07.1989 at 9.00 hours/5.00 hours respectively. The Flood water resulted maximum gauge along T.M flood Bund RD: 1500 as 521.00 on 03.08.1989 & J.F.P Bund RD: 23000 gauge 505.75 on 02.08.1989.

During 1990 there was very high flood in the River Chenab Peak and a discharge of 160760 Cs was observed on 10.09.1990 at 12.00 hours at Khanki and Qadirabad respectively and peak discharge of 151584 Cs at Trimmu Head Works on 12.09.1990 at 12.00 hours. During 1991 there was high flood in River Chenab with peak discharge of 103878 and 120469 Cs. on 14.07.1991 at 6.00 A.M at Khanki Head & Qadirabad Barrage respectively and peak discharge of 161471 Cs. on 24.07.1991 at 6.00 A.M at Trimmu Barrage. The flood water showed the maximum gauge at Revaz Bridge as 518.00.

During 1992, maximum discharge of 910512 Cs passed D/S Khanki on 11.09.1992 at 21.00 hours and D/S Qadirabad 948446 Cs. on 11.09.1992 at 04.00 hours. The maximum gauge recorded at Revaz Bridge was 520.30 on 13.09.1992 at 19.00 hours and gauges observed at RD: 1500 T.M Bund were 524.35 on 13.09.1992 at 16.00 hours and that of RD: 23+000 J. F.P Bund 506.75 on 13.09.1992 at 01:00 hours . The Flood water touched the bunds and parallel flow caused damages to the slopes of Jhang F.P Bund.

During 1996, on 23.08.1996 maximum flood of 851223 Cs. was observed down stream QBD Barrage at 5.00 A.M and raised up to 853231 at 10.00 A.M with Revaz Bridge gauge 518.00 & 518.20 respectively. The maximum effect was received on 27.08.1996 at Revaz Bridge. The4 maximum gauge observed 522.60 and gauge at RD: 1500 of Thatta Mahla Flood Bund was received 527.00 at 2.00 am. This position remained constant up to 7.00 A.M and breaching section was not operated. After 7.00 am, gauge at RD: 1500 T.M.F.B went down slowly.

During flood 1997 on 28.08.1997 high flood of 873442 Cs. passed down stream Qadirabad Barrage at 17.00 hours and remained constant up to 22.00 hours. The maximum accumulated effect was received 30.08.1997, at Revaz Bridge at 24.00 hours. The maximum gauge at Revaz Bridge was observed 521.21 and maximum gauge at RD: 1500 of Thatta Mahla Bund was noted on 31.08.1997 at 5.00 AM. This maximum gauge level 525.40 remained constant up to 10.00 AM. After 10.00 A.M, the gauge at RD: 1500 of Thatta Mahla Bund went down slowly. No flood was received during 2003-2004.

During 2005, River Chenab received flood at Maralla on 07.07.2005 at 15:00 hours with its peak at 24:00 Hours with a discharge of 333744 Cs. Khanki Head Works started raising on 07.07.2005 at 22:00 Hours and flood water reached to high flood with its peak discharge of 368078 Cs at 10.00 Hrs on 08.07.2005. River Chenab came into low flood at Qadirabad Head Works on 07.07.2005 at 22:00Hrs and turned to medium flood with peak discharge of 369847 Cs at 17:00Hrs on 08.07.2005. Similarly rising of flood water at Chiniot Bridge started on 09.07.2005 at 14:00 Hours

and level fell down with 263200 Cs from 15:00Hrs on 09.07.2005 to 23:00Hrs and it again raised with discharge 282000 at 24:00Hrs on 09.07.2005 to peak of 295800 Cs. up to 7:00Hrs on 10.07.2005. The gauge at Revaz Bridge raised from 516.80 at 5:00Hrs on 09.07.2005 to 520.30 at 4:00Hrs on 11.07.2005. With the rising of gauge at Revaz Bridge, water spilled out from river and travelled on left side towards T.M.B parallel to Railway Line and hit T.M.B at R.D 1500 at 4:00Hrs on 10.07.2005. The flood water effect reached at Trimmu Head Works with peak discharge of 171137 Cs.

During year 2006, River Chenab received high Flood on 03.09.2006, at Marala with discharge of 332950 Cs. Khanki Head Works raised and reached to high flood on .4.9.06 at 9.00 Hrs with its peak discharge of 418740 Cs. River Chenab came into high flood at Qadirabad Barrage on 4.9.06 on 14.00 Hrs with peak discharge of 432206 Cs. Flood water at Chiniot Bridge started raising on 5.9.06 and falling with 309600 Cs discharge on 5.9.06 at 23.00 Hrs. With the raising of gauges at Revaz bridge, the water spilled out from the river on left side towards T.M.B parallel to Railway Line and hit T.M.B at RD: 1500. The flood water reached at Trimmu Head Works with peak discharge of 266270 Cs on 7.9.2006 at 16.00 Hrs.

There was heavy rain fall in the catchment area of River Chenab during the month March, 2007 resulting high Flood at Marala Head works with peak discharge 252409 Cs on 13.03.2007 at 15 Hours, simultaneously at Khanki on 13.03.2007 at 17:00 Hours with Peak discharge of 3,00 197 Cs. River Chenab raised at Qadirabad Barrage with peak discharge of 3,12,836 Cs on 13.03.2007 at 21:00 Hrs. This Flood water reached at Trimmu Headworks on 15.03.2007 at 6.00 Hrs with discharge of 156882 Cs.

During the year 2007, River Chenab received a maximum discharge of 83867 Cs at Qadirabad Barrage on 1.07.2007 at 6.00 Hrs which passed through Trimmu Barrage with max discharge of 62421 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2008, River Chenab received a maximum discharge of 125317 Cs at Qadirabad Barrage on 04.08.2008 at 6.00 Hrs which passed through Trimmu Barrage with max discharge of 67836 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2009, River Chenab received a maximum discharge of 77535 Cs at Qadirabad Barrage on 19.06.2009 at 6.00 Hrs which passed through Trimmu Barrage with max discharge of 72625 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2010, River Chenab received a maximum discharge of 319733 Cs at Qadirabad Barrage on 07.08.2010 at 3.00 Hrs which passed through Trimmu Barrage with max discharge of 222204 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2011, River Chenab received a maximum discharge of 170547Cs at Qadirabad Barrage on 17.09.2011 at 12.00 Hrs which passed through Trimmu Barrage with max discharge of 132890 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2012, River Chenab received a maximum discharge of 180789Cs at Qadirabad Barrage on 05.08.2012 at 11.00 Hrs which passed through Trimmu Barrage with max discharge of 82794 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2013, River Chenab received a maximum discharge of 403403 Cs at Qadirabad Barrage on 15.08.2013 at 18.00 Hrs which passed through Trimmu Barrage with max discharge of 272609 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2014, River Chenab received exceptionally High flood with maximum discharge of 904285 Cs at Qadirabad Barrage on 07.09.2014 at 11.00 Hrs which passed through Trimmu Barrage with max discharge of 626006 Cs the through Barrage and 77000 Cs through Breaching section. Jhang Flood Protection Bund of Jhang Canal Division L.C.C (W) Jhang breached / damaged in between RD 1+000 to 2+000 on 10.09.2014 at 01:40 hours.

The water level at Rivaz Railway Bridge during 1973 Flood was recorded 522.60 that raised upto 524.90 on 09.09.2014 at 06:000 hours (Difference 2.30 ft). Water level at RD 1+500 Thatta Mahalla Flood Bund raised upto 528.10 on 09.09.2014 at 06:00 hours against HFL of 1973 i.e., 526.90 ft. (Difference 1.20 ft). Danger Flood mark at RD: 23+000 of Jhang Flood Protection

Bund is 508.00 and water level raised upto 510.30 on 09.09.2014 at 23:00 hours. (Difference 2.30 ft).At RD 6+000 Jhang Flood Protection Bund, designed Highest Flood Level (HFL) is 506.79 whereas water level raised to 508.80 on 09.09.2014 at 24:00 hours (Difference 2.01 ft).

During the year 2015, River Chenab received a maximum discharge of 161054 Cs at Qadirabad Barrage on 13.07.2015 at 10.00 Hrs which passed through Trimmu Barrage with max discharge of 150570 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2016, River Chenab received a maximum discharge of 405542 Cs at Qadirabad Barrage on 08.08.2016 at 3:00 Hrs which passed through Trimmu Barrage with max discharge of 166139 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2017, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 164660 Cs at 13:00 and remain same upto 14:00 on 19.07.2017 at 2:00 Hrs which passed through Trimmu Barrage with max discharge of 92595 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2018, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 172031 Cs at 6:00 and remain same upto 13:00 on 14.08.2018 at 24:00 Hrs which passed through Trimmu Barrage with maximum discharge of 94680 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2019, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 131899 Cs at 9:00 and remain same upto12 :00 on 15.08.2019 at 3:00 Hrs which passed through Trimmu Barrage with max discharge of 105821 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2020, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 267540 Cs at 15:00 and remain same upto 20 :00 on 28.08.2020 at 5:00 Hrs which passed through Trimmu Barrage with max discharge of 206077 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2021, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 187812 Cs at 6:00 and remain same upto 18 :00 on 29.07.2021 at 5:00 Hrs which passed through Trimmu Barrage with max discharge of 123167 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2022, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 193577 Cs at 15:00 and remain same upto 17:00 on 12.08.2022 at 15:00 Hrs which passed through Trimmu Barrage with max discharge of 129815 Cs without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2023, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 185749 Cs at 09:00 and remain same upto 12:00 on 20.07.2023 at 9:00 Hrs which

passed through Trimmu Barrage with max discharge of 125186 Cs on 25.07.2023 at 21:00 without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2024, River Chenab received a maximum discharge of D/S Qadirabad Barrage was 168995 Cs at 02:00 and remain same upto 15:00 on 16.08.2024 at 12:00 Hrs which passed through Trimmu Barrage with max discharge of 96280 Cs on 19.08.2024 at 12:00 without damaging to the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

During the year 2025, River Chenab received a maximum discharge at D/S Qadirabad Barrage of 1077951 Cs at 18:00 and remained same upto 22:00 on 27.08.2025 at 9:00 Hrs, which passed through Trimmu Barrage with max discharge of 550965 Cs on 01.09.2025 at 21:00 without damaging the Flood Protection Bunds of Jhang Canal Division L.C.C (W) Jhang.

CHAPTER-4
DESIGN DATA, HISTORIC PEAK FLOOD DATA AND PREVIOUS FIVE YEARS FLOOD DATA OF HEAD WORKS / BARRAGE AND OR OTHER CONTROL POINTS.

4.1 FLOOD LIMITS.

The terminology of different kinds of flood is low, Medium, High, very high and exceptionally high and they will be taken as such in the light of any wireless message received from respective warning centers.

FLOOD LIMIT	TRIMMU	QADIRABAD	RASUL
1. Low	1.50 to 2.00 Lac	1.00 Lac	0.75 Lac
2. Medium	2.00 to 3.00 Lac	1.50 Lac	1.10 Lac
3. High	3.00 to 4.50 Lac	2.00 Lac	1.25 Lac
4. Very High	4.50 to 6.00 Lac	4.00 Lac	2.23 Lac
5. Exceptionally High	Above 6.00 Lac	6.00 Lac & Above	Above 3.00 Lac

4.2 TIME LAGS OF HIGH FLOODS.

As per statement, the following are the time lags for average flood flows in the Rivers

RIVER	SITE	DESIGNED CAPACITY	DISTANCE IN K.M.	TIME LAG IN HOURS
Chenab	Marala	11.00 Lac	-	-
	Khanki	11.00 Lac	56	9
	Qadirabad	9.00 Lac	30	6
	Chiniot Bridge		101	38
	Revaz Bridge		80	16
	Trimmu	8.75 Lac	34	10
	Panjnad	7.00 Lac	257	81

4.3 HIGHEST FLOODS.

The highest flood discharges in cuses recorded upstream Trimmu Head Works and gauge at Thatta Mahalla Flood Bund RD: 1+500 during last Ten years are as under: -

Sr. No.	Year	Date of Peak Flood at Trimmu H/W	Discharge at Trimmu Head Works	Date	Gauge RD.1+500 of Thatta Mahala Bund	Duration
1	2014	10.09.2014	626006 +73000	09.09.2014	528.10	06-07 Hrs
2	2015	29.07.2015	150570	-	-	-
3	2016	10.08.2016	166139	10.08.2016	528.10	1.00 Hrs
4	2017	21.07.2017	92595	-	-	-
5	2018	16.08.2018	94680	-	-	-
6	2019	22.08.2019	105821	-	-	-
7.	2020	01.09.2020	206077	-	-	-
8.	2021	31.07.2021	123167	-	-	-
9.	2022	18.08.2022	128915	-	-	-
10.	2023	25.07.2023	125186	-	-	-
11	2024	19.08.2024	96280	-	-	-
12	2025	01.09.2025	550965	30.08.2025	528.00	07:00 Hrs

4.4 PEAK DISCHARGES.

5 Year	Khanki Barrage			Qadirabad Barrage			Trimmu Barrage		
	Date	Time	Discharge	Date	Time	Discharge	Date	Time	Discharge
1	2	3	4	5	6	7	8	9	10
1973	8-Oct	6.12	864000	8-Oct	6.12	854000	8-Dec	16.12	611972
1974	24/7	24.00	196076	25/7	6.00	19828	27/7	02.00	150172
1975	17/7	12.00	660680	17/7	18.00	669819	21/7	05.00	458247
1976	17/07	12	666241	17/07	17.18	669819	20/07	17	458247
1977	8-Jul	2	586453	8-Jul	8	608057	8-Oct	2	706433
1978	8-Sep	14	433095	8-Sep	22.24	428009	8-Dec	17.52	238042
1979	8-Mar	-	246868	8-Mar	-	245566	8-May	-	269584
1980	15/07	6	128209	15/07	6	122166	17/07	12	183681
1981	26/07	21	546505	26/07	19	578968	31/07	2.04	306171
1982	8-Feb	3	256010	25/07	12	221777	27/07	12	138532
1983	8-Sep	20	303913	8-Sep	6	283227	8-Sep	6	276988

Year	Khanki Barrage			Qadirabad Barrage			Trimmu Barrage		
	Date	Time	Discharge	Date	Time	Discharge	Date	Time	Discharge
1	2	3	4	5	6	7	8	9	10
1984	8-Dec	6	135855	8-Sep	18	108476	30/08	11	155000
1985	8-Jul	18	309069	8-Aug	6	318118	8-Nov	6	277512
1986	8-May	12	341000	8-May	12	345258	8-Aug	12	403187
1987	27/07	6	98745	27/07	18	77279	30/07	6	98083
1988	26/09	12	88422	26/09	16	892299	29/09	17	93123
1989	31/07	2	612205	29/07	16	547400	8-Mar	6	431517
1990	9-Oct	12	234460	9-Oct	12	243272	9-Dec	12	151584
1991	14/07	6	103870	14/07	6	120429	24/07	6	161471
1992	9-Oct	21	910512	9-Nov	4.08	948446	13/09	21	683117
1993	7-Nov	9	430410	7-Nov	17	443054	13/09	17	335889
1994	20/07	24	425160	21/07	4	425567	23/07	3	303521
1995	27/07	17	604336	29/07	13	644397	8-Dec	-	609561
1996	23/08	5	851269	23/08	10	853231	27/08	16	543708
1997	28/08	12	847650	28/08	to 17.00	873442	9-Jan	to 9.00	677417
1998	10.09.98	6	26832	25/9	6	39780	29/9	6	16876
1999	11.8	6	112147	20/7	6	108190	8-May	6	54856
2000	237	6	268358	24/7	6	190640	26/7	6	116179
2001	24.7	6	131888	8-Aug	6	125483	27/7	6	57211
2002	15.8	6	137210	15/8	6	182170	17/8	6	101855
2003	19/02	18	371788	19/02	22	367408	22/02	5	165169
2004	18/08	6	85101	18/08	6	90043	21/08	6	48173
2005	7-Aug	10	368078	7-Aug	17	369847	17.07/2005	15	162097
2006	4/9/2006	9	418740	4/9/2006	14	432206	7/9/2006	16	266270
2007	1/7/2007	6	72923	1/7/2007	6	83867	2/7/2007	6	173529
2008	4/8/2008	6	123320	4/4/2008	6	103317	4/8/2008	6	132220
2009	-	-	-	16/06/2009	6	77535	21/8/2009	6	62265
2010	07.08.2010	13	327637	7/8/2010	10	319733	10/8/2010	22	323026
2011	19.09.2011	19	171383	17.09.2011	12	170547	20.09.2011	6	132890
2012	05.08.2012	6	176197	05.08.2012	11	180789	07.08.2012	6	82794
2013	15.08.2013	10	410332	15.08.2013	18	403403	20.08.2013	13	272609
2014	07.09.2014	7:00	947099	07.09.2014	11:00	904285	10.09.2014	19:00	626006 +77000
2015	13.07.2015	3:00	155567	13.07.2015	10:00	161054	29.07.2015	15:00	150570
2016	07.08.2016	24:00:00	418736	08.08.2016	3:00	405542	10.08.2016	14:00	166139
2017	19.07.2017	8:00	184346	19.07.2017	13:00	164660	21.07.2017	18:00	92595

Year	Khanki Barrage			Qadirabad Barrage			Trimmu Barrage		
	Date	Time	Discharge	Date	Time	Discharge	Date	Time	Discharge
1	2	3	4	5	6	7	8	9	10
2018	13.08.2018	12:00	182025	14.08.2018	6:00	172031	16.08.2018	24:00:00	94680
2019	15.08.2019	24:00:00	133613	15.08.2019	9:00	131899	22.08.2019	18:00	105821
2020	28.08.2020	7:00	286230	28.08.2020	15:00	267540	01.09.2020	3:00	206077
2021	29.07.2021	6:00	189683	29.072021	6:00	187812	31.07.2021	5:00	123167
2022	12.08.2022	6:00	210945	12.08.2022	15:00	193577	18.08.2022	15:00	129815
2023	20.07.2023	2:00	204041	20.07.2023	09:00	185749	25.07.2023	21:00	125186
2024	16.08.2024	2:00	168995	16.08.2024	09:00	148323	19.08.2024	12:00	96280
2025	27.08.2025	15:00	1085750	27.08.2025	18:00	1077951	01.09.2025	9:00	550965

Executive Engineer,
Jhang Canal Division LCC(W),
Jhang.

CHAPTER-5
FLOOD FIGHTING STRATEGY

FLOOD FIGHTING STRATEGY

Following flood fighting strategy will be adopted at Flood Bund Sub Division , Jhang

DANGEROUS FLOOD MARKS FOR THE BUNDS ARE AS UNDER: -

Name of Bund	Danger Flood Mark	Site or RD of Bund
1. Thatta Mahla Flood Bund	525.00	1500
2. Jhang Flood Protection Bund	508.00	23000

When these gauges are attained at respective sites, the Sub Divisional Officer Flood Bund Sub Division (at Jhang) will issue a warning to the District Administration who will arrange to inform the public to evacuate immediately from the areas identified in this Plan.

The following Flood Bunds, are directly affected by the Floods and Flood spells:-

S.No:	FLOOD BUND/CHANNELS	REACH.	LENGTH.
1.	Jhang Flood Protection Bund	RD:0+000-71+000	14.20 miles
2.	Thatta Mahalla Bund	RD: 0+000-51+000	10.20 miles
3.	Loop Bund	RD: 0+000-11+500	2.30 miles
		Total:	**26.70 miles.**

STAGE-1

LOW FLOOD DISCHARGE 100000-150000 Cs.

When river discharge ranges between these limits, watching establishment shall be deployed at the rate of one man per mile (01 Shift) Sub Engineer, of Jhang Flood Bund Section & Thatta Mahla Flood Bund Section were supervise the entire watching operation of the Jhang Flood Bund Section & Thatta Mahla Flood Bund left bank of river Chenab Sub Divisional Officer, Flood Bund Sub Division will act as the officer in-charge of watching operation. In low / Normal Flood, 1 No. Excavator, 4 No. Trolleys 1 No. Tractor with front blade & 26 No. person beldar & 02 No. mate required for both Jhang Flood Protection Bund and Thatta Mahla Flood Bund.

STAGE- II

MEDIUM FLOOD DISCHARGE 150,000-200,000 Cs.

When the discharge ranges between these limits, watching establishment will be increased to 02 person /mile /shift (02 Shift). In case of any emergency, Sub Divisional Officer, Flood Bund Sub Division, Jhang will promptly contact Executive Engineer Jhang and suggest/take fighting

measures with prior concurrence of Superintending Engineer LCC (west), Circle Faisalabad. He will keep a close liaison with Flood Center of District Coordination Officer Jhang and Flood Emergency Officer of Faisalabad Irrigation Zone Faisalabad. In Medium to high flood stage 05 No. Excavator, 15 No. Trolleys / 08 Dumpers, 05 No. Tractor with front blade & 110 No. person beldar & 09 No. mate required for both Jhang Flood Protection Bund and Thatta Mahla Flood Bund.

STAGE- III

HIGH FLOOD DISCHARGE 200000-400000 Cs.

When the discharge ranges between these limits, watching establishment will be increased to 02 person /mile /shift (02 Shift). The Sub Engineer of Jhang Flood Protection Bund & Thatta Mahla Flood Bund will shift their camps at Jhang Flood Protection Bund at RD: 6+000 and RD 1+500 of Thatta Mahalla Flood Bund. The Sub Divisional Officer Flood Bund Sub Division, Jhang will be overall in-charge of flood watching and related activities. In Medium to high flood stage 05 No. Excavator, 15 No. Trolleys / 08 Dumpers, 05 No. Tractor with front blade & 110 No. person beldar & 09 No. mate required for both Jhang Flood Protection Bund and Thatta Mahla Flood Bund.

STAGE -IV

VERY HIGH FLOOD DISCHARGE 400000-600000 Cs.

In very high flood five person per mile per shift (three shifts) and one Chowkidar per camp for 24/7 on Jhang Flood Protection Bund & Thatta Mahalla Flood Bund. In very high flood situation 06 No. Excavator, 22 No. Trolleys / 11 Dumpers, 06 No. Tractor with front blade & 131 No. beldar & 11 No. mate required.

STAGE- V

EXCEPTIONALLY HIGH FLOOD ABOVE 600000 Cs.

This stage warrants alarming situation five person per mile per shift (three shifts) and one Chowkidar per camp for 24/7. In exceptionally high situation 11 No. Excavator, 22 No. Trolleys / 11 Dumpers, 11 No. Tractor with front blade & 131 No. beldar & 11 No. mate required.

On receipt of exceptionally high flood, the Deputy Collector Jhang along with concerned Zilladars will shift at camps sites at Jhang Flood Protection Bund & Thatta Mahla Flood Bund. He will arrange,

i. Proclamation on loudspeakers etc. for evacuation of abadies inside the flood bunds.
ii. Prepare maps for the areas inundated and carry out immediate survey for damages to crops and other properties.
iii. Keep a close liaison with Sub Divisional Officer and assist him in procurement of labour and other camping arrangements.

Executive Engineer, Jhang Division will camp at Jhang Canal Rest House and will be overall in charge of all watching and Flood fighting activities. He will remain in touch with District Administration Jhang and Flood Emergency Officer, Jhang. He will launch Flood fighting activities with Consultation/Concurrence of Superintending Engineer, LCC(West), Circle Faisalabad.

In Exceptionally high flood stage 9 No. Excavator, 2 No. Dozers, 20 No. Trolleys / 10 Dumpers, 9 No. Tractor with front blade & 278 No. beldar & 32 No. mate required for both flood bunds for breaching site, camp 02 excavator 01 Dozer 03 Dumpers.

Note:- The Superintending Engineer. Shall approve one additional shift during low to high flood based on necessity of site but he shall clearly mention the reach where the additional shift allowed and also approved hiring of Machinery at various flood stages should be granted by the Superintending Engineer.

The Superintending Engineer shall approve additional resources above the approved flood fighting plan on the recommendations of Executive Engineer ,based on site necessity with copy to TPM Consultants and respective Chief Engineer but must mention the reach and justified the

CHAPTER-6
FLOOD DAMAGES RESTORATION WORKS

FLOOD DAMAGES RESTORATION WORKS.

There are no flood damage restoration works under execution in Jhang Canal Division LCC(W), Jhang for the year 2025.

CHAPTER-7
FLOOD FIGHTING
WATCHING ARRANGEMENT

7.1 PRE –FLOOD ARRANGEMENTS

SCHEDULE OF FLOOD PREPAREDNESS ACTIVITIES FOR FLOOD SEASON 2025.

Sr.#	Activity	Target Dates	Achievements
I.	**Preparation of Flood Fighting Plans.**		
	a) Submission of Draft Divisional Plans by Zonal Chief to Chief Engineer Drainage and Flood (after Scrutiny by S.E / C.E).	15.02.2026	
	b) Review by Chief Engineer D&F	15.03.2026	
	c) Final submission of Divisional Plans.	31.03.2026	
	d) Clearance by Chief Engineer D&F	10.04.2026	
II	**Inspection of Flood Infrastructure**		
	a. By Executive Engineers	10.03.2026	
	b. Checking Inspection by S.E / C.E	20.03.2026	
	c. Inspection by the Departmental Army Team	31.03.2026	
III	a) Identification of Critical Encroachments on Bunds and spurs to the Civil Administration	31.03.2026	
	b)Pre flood breaching section operation committee meeting for briefing on operation of breaching section	30.04.2026	
	c)Submission of clearance of critical encroachments on bund / spurs by the Chief Engineer	30.04.2026	
IV	**Painting Gauges, RD Marks, Data Boards and Repairs to Flood Bund etc.**	31.05.2026	
V	**Replenishment of Reserve Stock of Stone and Flood Fighting Materials**		
	a) Identification of needs	28.02.2026	.
	b) Funding procurement Arrangements	15.03.2026	
	c) Procurement, stacking, Prescribed Field checks	31.05.2026	
VI	**Installation of Wireless Sets**	15.06.2026	
VII	**Opening of Zonal Flood Cells**		
	a) Duty Roster	01.06.2026	
	b) Operative	15.06.2026	
VIII	Completion of Operating of Wetting Channel	15.06.2026	

The flood season which is generally from 15th June to 15th October every year, demands strict watching of flood bunds. Thus, to meet with emergency and necessity of watching, man power establishment will be employed through contractor from 15.06.2026 to 15.10.2026, Furthermore, during receipt of flood and keeping in view the situation of flood, civil administration also provides labour of District Council, Town Committee and also from the other Departments for the purpose of close watching on the Flood Bunds. Yardstick for human resource inclusive of 100 percent of regular establishment of the Division at normal and low flood and for medium and above flood situation 50 percent of regular establishment of the Division and backup Division in flood fighting plan.

7.2 WATCHING ESTABLISHMENT DETAILS

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 (1 Shift)		1 Person/ mile (1 Shift)		2 Person/ mile (2 Shift)		5 Person/ mile (3 Shift)	
1	Jhang Flood Protection Bund	14.20	7	1	14	1	28	2	70	3
2	Thatta Mahla Flood Bund	10.20	5	1	10	1	20	2	50	3
3	Loop Bund	2.30	1	1	2	1	5	2	11	3
	TOTAL :-	26.70	13		26		106		393	

NOTE:

1. The Executive Engineer Jhang Canal Division, Jhang may employ work charge establishment as per site situation after obtaining approval from Superintending Engineer Lower Chenab Canal LCCW Faisalabad.
2. Sub Divisional Officer, Flood Bund Sub Division was employ watching establishment as per strength mentioned above subjected to approval from competent authority.
3. In case of very high flood, the strength of establishment was increased with express permission of Executive Engineer.
4. 1 No. Mate must be assigned to supervised 12 No. Belars.

7.3 ESTABLISHED CAMPS DETAILS

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	**Jhang Flood Protection Bund**	**14.20**	**1+000-2+000**	1	-	-	1
			32+000-33+000	1			
2	**Thatta Mahla Flood Bund**	**10.20**	**-**	**-**	1	1	2
3	**Loop Bund**	**2.30**	**-**	**-**	-	-	1
	Total	**26.70**	**-**	**2**	**1**	**1**	**4**

There is no reserve stock of stone is sanction in Jhang Canal Division.

7.4 WATCHING MATERIAL.

Minimum requirement of Flood Fighting Materials for each vulnerable site / Permanent Camp (15 miles)

Sr. No.	Items	Unit	Required Quantity	Remarks
1	Shouldari/Tent	No	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	
3	Table	No	01	
4	Generator (2-3 KVA)	No	01	
5	Pedestal Fans	No	01	
6	Charpois	No	02	
7	Symbolic Jackets	No	50	
8	Polyethylene Sheet	Kg	100	
9	Bamboos (4" dia and 10 ft long)	No	100	
10	Water Cooler	No	01	
11	Portable Umbrella	No	02	
12	Life Jackets	No	05	
13	Utensils (10 person serving)	No	01	
14	Jute/Plastic bags	No	1000	
15	Walkie Talkie Set	Sets	02	
16	Raincoats	No	10	
17	LED flood light	No	10	
18	Extension Cable (10 ft)	No	02	
19	Rechargeable torches	No	20	
20	Kassi	Kg	20	
21	Axes	No	20	
22	G.I. Buckets	No	05	
23	7/44 cable	Feet	500	
24	Sutli	Kg	02	
25	Sewing Needles	No	10	
26	Emergency Medical Kit	No	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	

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

Sr. No.	Items	Unit	Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari / Tent	No	01	01	0	Outsourced
2	Walke Talkie Set	Sets	01	0	02	
3	Chairs	No	06	0	06	
4	Raincoats	No	10	0	10	
5	Table	No	01	0	01	
6	LED Flood light	No	10	0	10	
7	Generator (2-3KVA)	No	01	0	01	
8	Extension Cable (10 ft)	No	02	0	02	
9	Pedestal Fans	No	01	0	01	
10	Rechargeable torches	No	20	0	20	
11	Charpois	No	02	0	02	
12	Kassi	No	20	0	20	
13	Symbolic Jackets	No	50	0	50	
14	Axes	No	20	0	20	
15	Water Cooler	No	01	0	01	
16	G.I Buckets	No	05	0	05	
17	Portable umbrella	No	02	0	02	
18	7/44 cable	Feet	500	0	500	
19	Utensils (10 person serving)	No	01	0	01	
20	Sutli	Kg	02	0	02	
21	Jute/Plastic bags	No	500	0	500	
22	Sewing Needles	No	10	0	10	

7.5 ARRNAGEMENT FOR SOUNDING & PROBING

Not related.

7.6 LIGHTING ARRNAGEMENT.

Petrol generators, emergency lights, lanterns and torches will be arranged for lighting arrangements

7.7 RATION ARRANGEMENT

The establishment and supervisory staff will be provided food and water by the Irrigation Department.

7.8 P.O.L ARRANGEMETN FOR VEHICLE.

Civil Administration & Irrigation Department will arrange to supply POL for vehicles.

7.9 TRANSPORTATION

Vehicles are available for transportation during Flood Season.

LAW AND ORDER

There is no likelihood of any interruption by anyone except cutting of banks of Flood Bund to reduce heading up. In case of necessity, District Coordination Officer Jhang will be contacted by the Executive Engineer, Canal Jhang Division to take decision at site.

7.10 MEDICAL ARRANGEMENT FOR LABOUR

It will be responsibility of Health Department to provide Medical Facilities in flood areas where is required under supervision of Civil Administration.

7.11 LIAISON WITH OTHER DEPARTMENT.

Executive Engineer, Jhang Canal Division will keep liaison with the Civil and Army Authorities and will keep the Superintending Engineer LCC Faisalabad, fully apprised of the flood situation in Jhang Canal Division.

7.12 ROLE OF THE ARMY.

Role of the Army is very important in case of any emergent position arising due to high flood. A continuous liaison with the Army Authorities will be maintained during flood and if required necessary help will be sought.

7.13 DUTIES OF TELEPHONE ATTENDANT

The duty Roaster has been prepared as under.

Sr No.	Name of official	Period	Time	
			From	To
1	(Hafiz Hamid Khan) Telephone attendant Jhang Canal Division Jhang	8 Hours	0900	1600
2	Shakeel Ahmed Signaller with Faisal Abbas Naib Qasid	8 Hours	1600	2400
3	Awais Khan Signaller & Altaf Hussain Chowkidar	8 Hours	0100	0900

7.15 WIRELESS ARRANGEMENTS

During flood season wireless set installed by the Police Department in Vehicle.

CHAPTER-8
DETAIL OF ENCROACHMENT

DETAIL OF ENCROACHMENT.

A. Encroachment

Sr No.	Total Encroachments	Removed	Remaining	Remarks
1	5 No. Houses Jhang Flood Protection Bund at RD 17+000 – 18+000		5 No. Houses Jhang Flood Protection Bund at RD 17+000 – 18+000	**These are the non-critical encroachments on the slope of Flood Bunds.**
2	2 No. Shops Thatta Mahla Flood Bund at 27+000.		2 No. Shops Thatta Mahla Flood Bund at 27+000.	

B. Critical Encroachment

Sr No.	Total Encroachments	Removed	Remaining	Remarks
1	**NiL**	**NiL**	**NiL**	

CHAPTER-9
DUTY ROSTER / FLOOD FIGHTING PROGRAM.

DUTY ROSTER FLOOD FIGHTING PROGRAM.

DUTIES OF IRRIGATION STAFF

I) Signallers.

The Canal Telegraph Station at Jhang shall remain open for 24 hours. This station has the following installations for receiving and transmitting the massages.

1. Canal Telegraph System connected Faisalabad.
2. Trunk Telephone No.047-9200300
3. Local Telephone connected with the following points.

    i) Revaz Bridge
    ii) Thatta Mahla Bund RD 1500 and 11500
    iii) Flood Protection Bund RD 23000
    iv) Trimmu Head Works

    This station shall remain open for 24 hours during flood emergency days and the following signallers will assist the Signaller at Jhang.

    1. Signaller Sheikh Chuhar.
    2. Signaller Veryam.
    3. Signaller Lakhlana.

    The work of Sheikh Chuhar and Lakhlana Telegraph Offices will be looked after by the Signaller Wer, Bhangu and Ashaba respectively.

The Signaler Sheikh Chuhar, Veryam and Lakhlana will be called for duty by Signaller Jhang when the discharge at Qadirabad goes beyond medium flood.

FIELD STAFF

a) **SUB DIVISIONAL OFFICERS**

The Flood Bunds fall in the jurisdiction of Sub Divisional Officer Flood Bund Sub Division with Headquarter at Jhang who under the advice and directions of the Executive Engineer, Jhang will be overall In-charge of all the operations connected with the Flood Bunds. Sub Divisional Officer Wer, Veryam and Dhaular Sub Divisions will assist him during flood days, SDO Veryam and Dhaular will be in-charge of the operations/arrangements of their assigned reaches on Jhang Flood Protection Bund and Sub Divisional Officer Wer on Thatta Mahala Bund. Sub Divisional Officer Veryam and Dhaular shall keep his temporary Headquarter at RD 6+000 & 23+000 of Jhang Flood Protection Bund. SDO Wer will keep his Headquarter at RD 11+500 of Thatta Mahla flood bund. The Sub Divisional Officers shall move for flood duty when Qadirabad records medium flood and is still rising.

. b) **SUB ENGINEERS AND ZILLADARS**

The Canal is completely closed during flood days. The Sub Engineers from other sections along their Class-IV establishment with their kassies shall move to their duties shown at

page No. 45. They shall also bring their own Gauge Readers, Dak Runners, Artificers and Electricians to assist them in recording and transmitting gauges, removing defects of electric installations and T&P in their respective jurisdiction.

THEIR DUTIES SHALL CONSIST OF

1. To deploy the labour for detecting and repairing rat holes/cracks rain cuts and other defects.
2. To remove the Jungle from the inner toe of bank.
3. Puddle the river side of the banks as the flood raises.
4. To ensure that the gauges are being recorded directly and promptly by the Gauge Readers on duty.
5. To maintain the road for movement of the Vehicles.
6. To inform promptly to the Officer incharge regarding any apprehended danger and other important incidents.
7. Each Sub Engineer, will be responsible for receiving the emergency store required by him for the use of the labour and return the same to the Sub Engineers Flood Bunds, the emergency is over.
8. They will ensure complete closure of culverts for water courses crossing flood bunds by Sluice valves or gunny bags.

OFFICIAL STAFF

The Sub Divisional Office will remain open for 24 Hrs: during flood days. The Head Clerk will depute the clerical staff to attend office Telephone No. 047-9200300 promptly and for this purpose, the Executive Engineer will approve a duty roaster, before 1st July.

One cyclist will be deputed by Sub Divisional Officer Flood Bund to remain on duty in the Divisional Office for prompt delivery of the messages.

DUTY ROSTER: BATTLE STATIONS OF KEY PERSONAL DURING HIGH & EXCEPTIONALLY HIGH FLOOD FLOW

Name of Bund	Office Incharge	Field Staff on Flood Duty	Reach of Duty	Departmental Labour			
				Regular	Temporary Estt:	Sectional Estt:	
Thatta Mahla Flood Bund	Sub Divisional Officer flood Bund Sub Division & Sub Divisional Officers, Wer, Sub Division & Deputy Canal Collector Jhang with two Magistrates.	Sub Engineer, SCR ---------- WER ---------- JRA Zilladar BLN Sub Engineer BLN ---------- MDW Zilladar SCR:	RD:11+500 -15+000 RD: 0-31 RD: 31-51	1 1 -	6 5 5 6	10 JRA: 10 BLN 10 WER 30 70	Sub Engineer, Thatta Mahla Flood Bund to Keep Vigilance in reach RD: 0+000 - 51+000 and arrange Labour & Material at Thatta Mahla Flood Bund.
Jhang Flood Protection Bund	Sub Divisional Officer Flood bund Sub Division & Sub Divisional Officers, Wer, Veryam Sub Division & Sub Divisional Officers, Dhaular, Dhaular Sub Division with two Magistrates	Sub Engineer JWA Sub Engineer As-haba Sub Engineer VRM Zilladar--------- Sub Engineer LKN: ---------- KWL Zilladar---------- Sub Engineer SVI Zilladar Ashaba	RD: 0-18 RD: 18-31 RD: 31-42 RD: 42-71 (Tai)	1 2 3 1 7	4 10 6 10 31	10 Veryam 10 + 5 JWA ASB 10 GRA 10 AKW 45	Sub Engineer, Jhang Flood Protection Bund shall be In charge of store At RD: 23,000

Note:-

1. Sub Divisional Officer, Flood Bund Sub Division will be over all in-charge of all embankments.
2. During high Flood in case of emergency, Faisalabad Canal Division being the sister Division will be connected for performing Flood Duty alongwith its complete Establishment and Officers.

OFFICE OF THE
EXECUTIVE ENGINEER,
JHANG CANAL DIVISION LCC(W)
JHANG.

OFFICE ORDER.

A Divisional Flood Cell has been constituted which will started functioning in the office of Executive Engineer, Jhang Canal Division LCC(W) , Jhang with effect from 15-06-2026 under the overall control and supervision of Executive Engineer, Jhang Canal Division LCC(W), Jhang who was nominated as Flood Emergency liaison Officer for flood season 2026. The contact phone Nos. was as under: -

Phone No. 047-9200300. Flood Emergency Officer No. 0349-9050865

The flood cell will perform the duty 24 Hours and following Camp Clerk / Signalers will remain present round the clock.

Shift No: - 1 0900 to 1600 Hours.

1. Shakeel Ahmed Signaller..
2. Faisal Haibib Naib Qasid.

Shift No: - 2 1600 to 2400 Hours.

3. Awais Khan Signaller.
4. Mujhid Abbas Chowkidar.

Shift No. 3: -0100 to 0900 Hours.

5. Zaffar Signaller.
6. Altaf Hussain Chowkidar.

Note: - The Shift of the Officials will change on every week turn by turn.

Executive Engineer,
Jhang Canal Division LCC(W)
Jhang.

CHAPTER-10

EMERGENCY TELEPHONE NOS

EMERGENCY TELEPHONE NUMBERS

A. IRRIGATION DEPARTMENT.

S. NO	DESIGNATION	OFFICE	TELEPHONE		
			OFFICE	RESIDENCE	MOBILE
1	Secretary Irrigation	Lahore	042-99212117 042-99212118	042-99200954	
2	Deputy Secretary Operation	Lahore	042-99112127		
3	Director Flood	Lahore	042-99233552		
4	Flood Warning Centre	Lahore	042-99205157	042-99205158	
5	Chief Monitoring PMIU	Lahore	042-99213595 042-99213597		Toll Free No. 0800-11333
6	Chief Engineer	Faisalabad Zone	-		
7	Superintending Engineer	Lower Chenab Canal West Circle	-		
8	Executive Engineer	Jhang Canal Division	07-9200300		0349-9050865
9	Flood Emergency Officer	Executive Engineer (OP) Faisalabad	-		
10	Chief Engineer	D&F Lahore	042-35291304	042-99233551	0303-7713303
11	Sub Divisional Officer	Flood Bund Sub Division	-	-	0334-6614105
12	Sub Divisional Officer	Wer Sub Division	-	-	0316-7839321
13	Sub Engineer	Thatta Mahla Flood Bund Section	-	-	0334-1045325
14	Sub Engineer	Jhang Flood Protection Bund Section	-	-	0341-0518828
15	Sub Engineer	Colony Section	-	-	0305-1738386
16	Sub Engineer	Joura Section	-	-	0345-7873207
17	Sub Engineer	Wer Section	-	-	0345-7601858
18	Sub Engineer	Muradwala Section	-	-	0346-7286221
19	Sub Engineer	Balluana Section	-	-	0344- 1443145
20	Sub Engineer	Sheikh Chur Section	-	-	0 308- 1411362

B. CIVIL ADMINISTRATION

S.NO	DESIGNATION	TELEPHONE		
		OFFICE	RESIDENCE	MOBILE
1	D.C. Jhang	047-9200081	-	
2	District Officer Revenue	07-9200107	-	
3	Assistant Commissioner Jhang		-	
4	D.P.O Jhang	047-9200444	-	
5	D.H.O Jhang		-	
6	District Officer Agriculture Jhang		-	

CHAPTER-11
STANDARD OPERATING PROCEDURE (SOP)
FOR BREACHING SECTIONS

11.1 HISTORY OF THE BREACHING SECTION

There is no breaching section under control of Jhang Canal Division.

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

There is no breaching section under control of Jhang Canal Division so there is no Location, Design, Quantity and Variety of the explosive required for detonation.

11.3 ARRANGEMENT OF EXPLOSIVES AND SECURITY OF EXPLOSIVE STORES.

Not related.

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

Not related.

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

Not related.

11.6 DUTY ROSTER IN CASE OF CRITICAL SITUATION.

Duty Roster in case of critical situation mentioned above.

11.7 BREACHING COMMITTEE WITH THEIR ACTION PLAN.

BREACH OPERATING COMMITTE

1- Deputy Commissioner, Jhang. = Convener
2- Representative of National Highway Authority. = Member
3- Executive Engineer, Jhang Canal Division, Jhang. = Member
4- Executive Engineer, Highway Department (C&W), Jhang. = Member
5- Representative from Pakistan Army not below the rank of an it. Colonel = Member

Owned by	Pakistan Railways
Maintained by	Pakistan Railways
Location	Between Jhang Chund Railway station at Railway kilometer 71(11-12),(13-15,72)
No. of Set	3 No.
No. of liner in each set	65 No. (13 row) (13x5)
Depth of liner	7 Ft
Dia of liner	4”
Critical Gauge level	525 Ft
Site of Critical Gauge	RD 1+500 of Thatta Mahla Flood Bund.
Breaching history	2014,2025
Village affected upon operation of Breaching Section	Balli Kalske, Asumo,Jandran, Habib, Pacca wala.

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

Balli Kalske, Asumo,Jandran, Habib, Pacca wala.

11.9 ANNOUNCEMENT AND DETAIL OF EVACUATION ARRANGEMENTS.

The matter related to Administration Department

11.10 DETAILS OF COORDINATION WITH CIVIL / ARMY AUTHORITIES.

According to the critical situation the coordination with the Civil / Army Authorities well in time. flow .

11.11 PARALLEL COMMUNICATION ARRANGEMENTS.

According to the critical situation the coordination with the Civil / Army Authorities well in time.

11.12 INDEX PLAN

Attached

Executive Engineer,	**Superintending Engineer,**	**Chief Engineer,**
Jhang Canal Division,	**Lower Chenab Canal West Circle**	**Faisalabad Irrigation Zone**
Jhang	**Faisalabad.**	**Faisalabad.**

PART-B

CHAPTER-12
VULNERABLE SITES ON FLOOD BUND / STRUCTURES

12.1. APPREHENDED BREACHES IN FLOOD BUNDS / STRUCTURES.

The apprehension sites at RD 1+000-2+000 and RD 32+000 – 33+000 of Jhang Flood Protection Bund of Jhang Canal Division.

12.2 OPERATION OF BREACHING SECTION.

There is no breaching section in jurisdiction of Jhang Canal Division Jhang. The breaching section exists at Revaz Bridge and relates to Railway Department.

12.3 BREACHES DUE TO RISING OF FLOOD WATER, DETERIORATION OF FLOOD BUND ETC.

No Such Case.

CHAPTER-13

EMERGENCY CONTINGENCY PLAN FOR VULNERABLE SITE (SITES)

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

The apprehension sites at RD 1+000-2+000 and RD 32+000 – 33+000 of Jhang Flood Protection Bund of Jhang Canal Division.

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

S.No	Name of Villages	Name of River
	Low Flood	
1	Mouza Choori Noona,	Chenab
2	Mouza Maghiana ,	Chenab
3	Mouza Baila Bungash	Chenab
	Medium Flood	
4	Mouza Diraj	Chenab
5	Mouza Hasnana	Chenab
	High Flood	
6	Mouza Hasnana,	Chenab
7	Mouza Vijhlana,	Chenab
8	Mouza Kot Khaira,	Chenab
9	Mouza Malluana,	Chenab
	Villages likely to be affected in case of breaching section is operated	
10	Billi Kaleke,	Chenab
11	Asamo,	Chenab
12	Jandran ,	Chenab
13	Habib ,	Chenab
14	Pacca Wala	Chenab

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

In case of exceptionally high flood in River Chenab, District Administration Jhang was informed by Irrigation Department for evacuation from the area lying in pocket (Ghulam Wah Disty, Khadir Branch and P.I. Link) the accumulated water was ultimately diverted towards River Chenab.

13.3.1 ARRANGEMENTS.

Flood fighting material has been purchased and applied as per flood situation, as explained in chapter No. 7

13.3.2. ESTABLISHMENT OF FLOOD FIGHTING CAMPS.

The Camp of S.D.O Flood Bund Sub Division and his team will be at RD. 1+500 of Thatta Mahla Flood Bund. He will employ watching establishment as per requirement. In case of very high flood, the strength of establishment may be increased with express permission of Executive Engineer.

Sr. No.	Description of Flood Fighting Camps	Location of Camps	Remarks
1	Jhang Flood Protection Bund	Camp between RD:1+000 – 2+000 RD:32+000 – 33+000.	The remaining Flood Fighting material will be purchase before flood season 2026 and duty staff officers/ officials will be engaged.
2	Jhang Flood Protection Bund	Camp if required between RD 51+000 - 52+000	The remaining Flood Fighting material will be purchase before flood season 2026 and duty staff officers/ officials will be engaged.
3	Thatta Mahala Flood Bund	Camp at RD:1+500 RD 11+500	The remaining Flood Fighting material will be purchase before flood season 2026 and duty staff officers/ officials will be engaged.
4	Thatta Mahala Flood Bund	Camp if required at RD:19+000	The remaining Flood Fighting material will be purchase before flood season 2026 and duty staff officers/ officials will be engaged.

13.3.3. DUTIES OF OFFICERS / OFFICIALS AND THEIR CAMP SITES

During High Flood Flow (as per page #48-49.) Sub Divisional Officer, Flood Bund Sub Division will be in charge of overall embankments

Name of Bund	Office Incharge	Field Staff on Flood Duty	Reach of Duty	Departmental Labour			
				Regular	Temporary Estt:	Sectional Estt:	
Thatta Mahla Flood Bund	Sub Divisional Officer flood Bund Sub Division & Sub Divisional Officers, Wer, Sub Division & Deputy Canal Collector Jhang with two Magistrates.	Sub Engineer, SCR ---------- WER ---------- JRA Zilladar BLN Sub Engineer BLN ---------- MDW Zilladar SCR:	RD:11+500 -15+000 RD: 0-31 RD: 31-51	1 1 -	6 5 5 6	10 JRA: 10 BLN 10 WER 30 70	Sub Engineer, Thatta Mahla Flood Bund to Keep Vigilance in reach RD: 0+000 - 51+000 and arrange Labour & Material at Thatta Mahla Flood Bund.
Jhang Flood Protection Bund	Sub Divisional Officer Flood bund Sub Division & Sub Divisional Officers, Wer, Veryam Sub Division & Sub Divisional Officers, Dhaular, Dhaular Sub Division with two Magistrates	Sub Engineer JWA Sub Engineer As-haba Sub Engineer VRM Zilladar--------- Sub Engineer LKN: ---------- KWL Zilladar---------- Sub Engineer SVI Zilladar Ashaba	RD: 0-18 RD: 18-31 RD: 31-42 RD: 42-71 (Tai)	1 2 3 1 7	4 10 6 10 31	10 Veryam 10 + 5 JWA ASB 10 GRA 10 AKW 45	Sub Engineer, Jhang Flood Protection Bund shall be In charge of store At RD: 23,000

13.3.4 DEPARTMENTAL MACHINERY AVAILABLE.

No such machinery is available in Jhang Canal Division LCC(W), Jhang.

13.3.5 MACHINERY AVAILABLE FROM PRIVATE SOURCE.

Machinery will be hired by the private source as per requirement.

13.3.6. FLOOD FIGHTING MATERIAL REQUIRED.

13.3.7. FLOOD FIGHTING MATERIAL AVAILABLE.

For one vulnerable site.

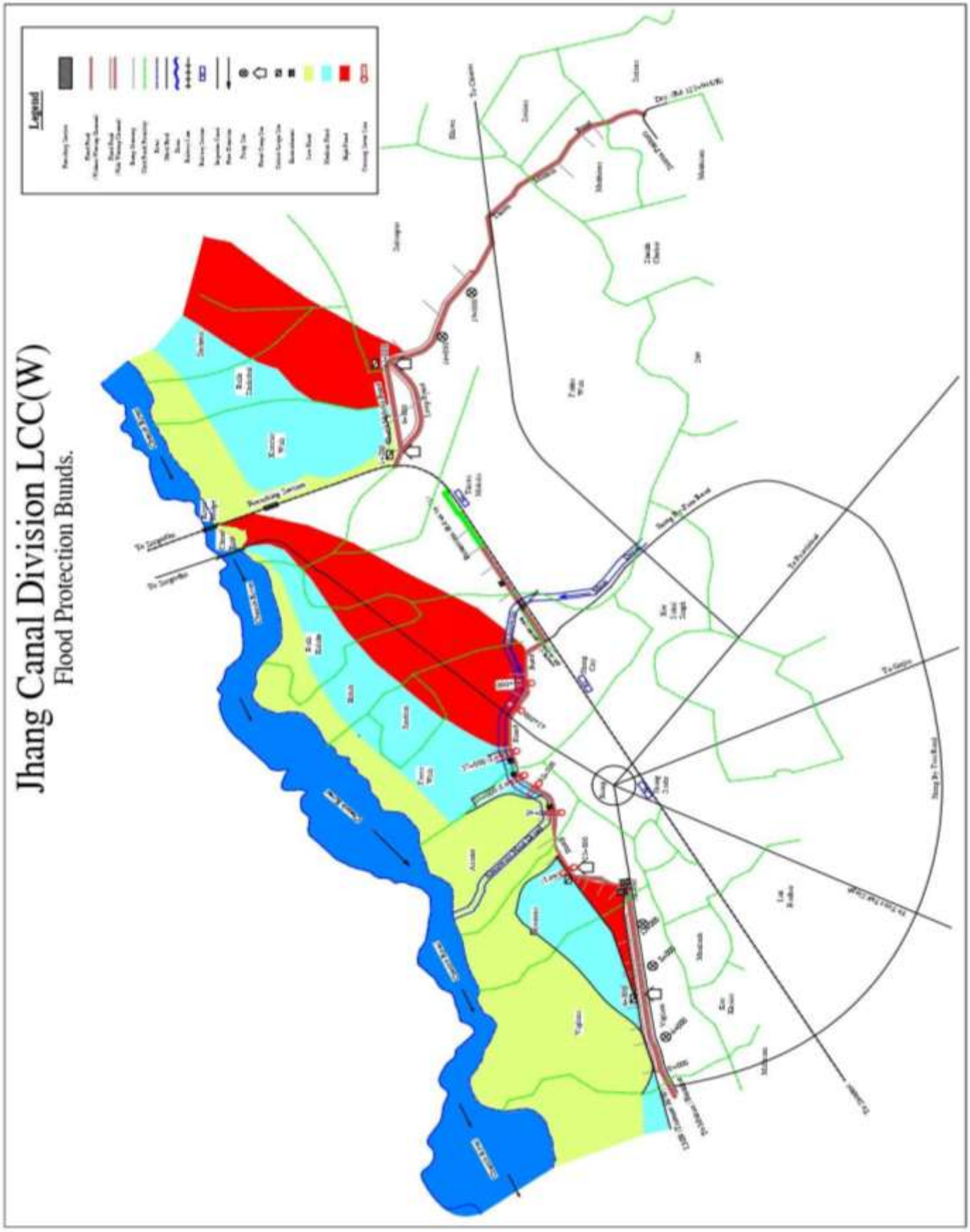
Sr. No.	Items	Unit	Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent	No	01	1	-	A little Quantity of some items of T&P articles is available mostly items has been used during flood 2025 & balance Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table	No	01	0	01	
4	Generator (2-3 KVA)	No	01	0	01	
5	Pedestal Fans	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet	Kg	100	12	88	
9	Bamboos (4" dia and 10 ft long)	No	100	35	65	
10	Water Cooler	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute/Plastic bags	No	1000	250	750	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light	No	10	0	10	
18	Extension Cable (10 ft)	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	15	5	
21	Axes	No	20	3	17	
22	G.I. Buckets	No	05	03	02	
23	7/44 cable	Feet	500	0	250	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	01	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

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

- **Government Hospital = 2 Nos.**
- **Private Hospital = 16 Nos.**
- **Schools = 16 No.**
- **D.C Office = 1 NO.**
- **High Ways Offices = 1 No.**
- **Irrigation Offices = 1 No.**
- **Rail Way Lines = 1 No,**
- **Main Pacca Roads = 3 Nos.**
- **Courts = 1 No.**
- **P.T.C.L Offices = 1 No.**
- **W.A.P.D.A Offices = 1 No.**
- **SUI GASS Offices = 1 No.**
- **Private Property Like Kacha Houses**

Executive Engineer,
Jhang Canal Division LCC(W),
Jhang

INDEX SHOWING FLOOD EMBANKMENT



CHAPTER-14

ACTION PLAN

14.1 RE-SHIFTING/RECOUPING PLAN OF RESERVE STONE DEPARTMENTALLY.

Sr. No.	Name of structure	Sanctioned Quantity	Available Quantity (% Cft)	Balance Quantity	Remarks
1.	Jhang Flood Protection Bund RD 5+000	-	231.69 % Cft	-	Reserve stock of Stone received from PIU Jhang Canal Division after completion work Remodeling of selected reaches Jhang Flood Protection Bund & Thatta Mahla Flood Bund.
2.	Thatta Mahla Flood Bund RD 12+000	-	191.72 % Cft	-	

14.2 DETAIL OF INLET / OUTLET CROSSING ALONG WITH CLOSING METHODOLOGY.

Not applicable

Executive Engineer,
Jhang Canal Division LCC(W),
Jhang

14.3 DEPLOYMENT OF MACHINERY (NORMAL TO LOW FLOOD)

Deployment of Machinery (Normal to Low Flood)

Sr. No.	Structure Name	Length (Miles)	Excavators	Trolleys	Dumpers	Tractor with Front blade (1/15 miles reach)
1	**Jhang Flood Protection Bund**	**14.20**	S.E shall allow deputation of one (1) excavator & four (4) Trolleys during low flood at camps/vulnerable points and Jhang Flood Protection Bund & Thatta Mahla Flood Bund.			1
2	**Thatta Mahla Flood Bund**	**10.20**				1
3	**Loop Bund**	**2.30**				-
	Total	**26.70**	**-**	**-**	**-**	**2**

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 reach	**4 per 7 mile reach**	**2 per 7 mile reach**	**1 per 7 mile reach**
1	**Jhang Flood Protection Bund**	**14.20**	2	8	4	2
2	**Thatta Mahla Flood Bund**	**10.20**	2	6	3	2
3	**Loop Bund**	**2.30**	0	1	1	-
	Total	**26.70**	**4**	**15**	**8**	**4**

14.5 DEPLOYMENT OF MACHINERY (VERY HIGH TO EXCEPTIONALLY 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 reach	2 per 5 mile reach	Very High Flood	Exp. High Flood
			1 per 5 mile reach	2 per 5 mile reach			1 per 5 mile reach	2 per 5 mile reach
1	Jhang Flood Protection Bund	14.20	3	6	12	6	3	6
2	Thatta Mahla Flood Bund	10.20	2	4	8	4	2	4
3	Loop Bund	2.30	-	1	2	1	-	1
	Total	26.70	5	11	22	11	5	11

Note: - Payment for Machinery and Work Charge Employs subject to verification by M/S NES PAK / Departmental Committee.

14.6 POLICE DEPLOYMENT PLAN

Sr. No.	Vulnerable sites used for illegal cuts during floods	Concerned Canal Division	Concerned Police Station & District	Police personnel to be deployed		Remarks (If any)
				Inspector/ SI/ASI	Constables	
Relates to Civil Administration Department						

14.7 DETAIL OF SYNTHETIC BAGS WITH CAPACITY OF 50 KG AND 100 KG.

ITEM	UNIT	REQUIRED QUANTITY	AVAILABLE	BALANCE	REMARKS
NIL					

14.8 DETAILS OF POLYTHENE SHEET OF BLACK COLOUR TO PROTECT UP STREAM SLOPE AGAINST WAVE ACTION AND TO CONTROL SEEPAGE THROUGH EMBANKMENTS.

ITEM	UNIT	REQUIRED QUANTITY	AVAILABLE	BALANCE	REMARKS
Polythene sheets of black color	KG	400Kg	-	-	The Balance quantity of required material will be purchased before flood 2026.

14.9 ANY OTHER DETAILS AS PER SOPs APPROVED BY THE ADMINISTRATIVE DEPARTMENT

Will be strictly followed.

Executive Engineer,
Jhang Canal Division LCC(W),
Jhang

CHAPTER-15

BACK UP DIVISIONS

(IN CASE OF BREACH)

In case of breach Faisalabad Canal Division, Faisalabad will work as backup of this Division.

Executive Engineer, **Jhang Canal Division,** **Jhang**	**Superintending Engineer,** **Lower Chenab Canal West Circle** **Faisalabad.**	**Chief Engineer,** **Faisalabad Irrigation Zone** **Faisalabad.**