IRRIGATION DEPARTMENT

GOVERNMENT OF THE PUNJAB

FLOOD FIGHTING PLAN
FOR THE YEAR 2023.

SAMUNDRI DRAINAGE DIVISION
FAISALABAD.
DRAINAGE CIRCLE FAISALABAD

IRRIGATION ZONE, FAISALABAD

288

357/WII
18-4-2023

OFFICE OF THE
CHIEF ENGINEER DRAINAGE & FLOOD ZONE
IRRIGATION DEPARTMENT
Government Engineering Academy Punjab, Canal Bank Road
Thokar Niaz Beg, Lahore – 53700, E-mail: cednf@yahoo.com Ph.042-99233551-52

To

The Executive Engineer,
Samundri Drainage Division
Faisalabad.

No.D&F/2023/ 774 /25/76, Dated 10 /04/2023.

SUBJECT: - **FLOOD FIGHTING PLANS FOR FLOOD SEASON 2023.**

Ref:- Your office letter No.1667/WII/2023/S/448/56, Dated 15.03.2023.

The Flood Fighting Plan 2023 received from your Division under above reference is hereby vetted and returned.

Therefore, it is requested, to circulate the same copies of Flood Fighting Plan 2023, after approved by the competent authority to all stakeholders as well as 04 copies (soft copy of Flood Fighting Plans through E-mail:cednf@yahoo.com) to this office and 01 copy to Director Hydraulic Structure Safety Evaluation Cell situated at Government Engineering Academy Punjab, Thokar Niaz Baig, Lahore.

Also circulated
C.F. / XEN
2259 WII 17/4/23

Diary No:		Date	
Worthy C.E			
(EN/OP)			
			C.C

10/4/23
DIRECTOR FLOOD / SECRETARY
PUNJAB FLOOD COMMISSION
D&F ZONE LAHORE

Pls check & put up

C.C.

1. The Chief Engineer Irrigation Faisalabad Zone, Faisalabad.
2. The Superintending Engineer Drainage Circle, Faisalabad.

DHD

18/4

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Faisalabad.

ACTION PLAN

FLOOD FIGHTING PLAN

2023.

PART – A

FLOOD FIGHTING PLAN

2023.

CHAPTER # 1.

SALIENT FEATURE OF SAMUNDRI DRAINAGE DIVISION, FAISALABAD.

1.1 LOCATION

Samundri Drainage Division was opened in year 1964 to provide drainage facilities to the highly cultivated area of District Hafizabad, Faisalabad, Chiniot, T.T Singh and Jhang. Total length of drainage system falls in this division is 789.87 mile with catchment area of 4215 square miles. The discharge carrying capacity is 6566 Cs at out fall of the system. This Division comprises 6 Nos. drainage systems and 2 Nos. independent drain. Chiniot flood bund is located near Chiniot City. It is situated 101 Km Downstream Qadirabad Barrage. It starts near Chiniot Bridge and runs parallel to Chiniot – Pindi Bhattian road, ultimately tied up with Hinduana escape.

1.2 GENERAL DESCRIPTION

Chiniot Flood bund was originally constructed during 1968-69 with a restricted length of 46000 ft and could not be properly tied to a high ridge. The high floods of 1973 and 1976 out-flanked the bund resulting into submergence/ inundation of extensive area and caused colossal damages to public and private properties. This bund was further extended up to a length of 98500 ft during 1976-78 and 2 No. spurs were also constructed at RD: 28750 and 55000 during the year 1979-80.

The Chiniot flood bund is vital structure for the safety of Chiniot City and other public / private properties. The general country slope in this area is almost North East to South East. The river water flowing from any breach through left bank adopts a longer route to re-enter in the river. The Chiniot Flood Bund thus has an important role for the safety of abadies and infrastructure on left side of River Chenab.

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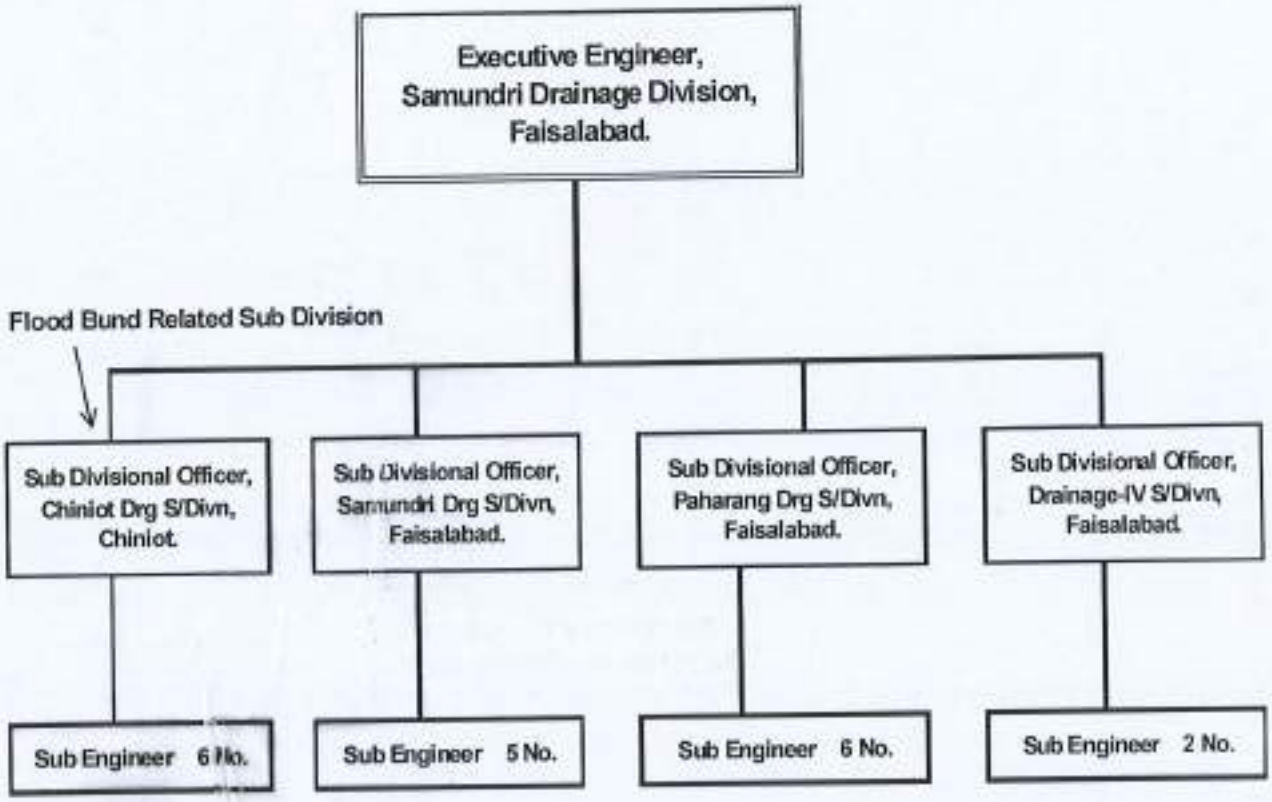
1.3 ADMINISTRATIVE SETUP



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CHAPTER # 2

FLOOD PROTECTION AND RIVER TRAINING WORKS.

2.1 DESIGN PARAMETER OF CHINIOT FLOOD BUND.

MAIN BUND.

Sr. No.	Particulars	RD	Length	Top Width	Side Slopes		Free Board	Slope
					Inner River Side	Outer Country Side		
1	Without Wetting Channel	0+000 to 5+000	5000	25'	3:1	2:1	6'.0 above H.F.L of 1973	1 in 5000
2	With Wetting Channel	5+000 to 88+500	83500	25'	2:1	2:1	-do-	-do-
	Total Length RD 0-88500.		**98500**					

WETTING CHANNEL.

Particulars	RD	Length	Designed Top width of River, Side Bank	Side Slopes		Free Board	Slope
				Outer River Side	Inner Country Side		
Bund With Wetting Channel	5+000 to 88+500	83500'	6.0'	3:1	2:1	2'.0 from H.F.L 1973	1 in 5000

SPURS.

RD. of Spur	Type	Length of Shank	Designed top width		Side Slopes				Stone Apron	Stone Pitching
			Earthen	Armoured	Earthen D/S	Armoured R/S	Earthen D/S	Armoured R/S		
28+750	J-Head 744' with 1:10 tail	6+225'	25' (0-5177)	40' (5+177 to 6+225)	3:1	3:1	3:1	2:1	75' x6'	1.3' over 0.70' Spawal
			Top R.L.613.00							
55+000	-do-	3+300	25' (0-2+252)	40' (2+252 to 3+300)	3:1	3:1	3:1	2:1	75' x6'	1.3' over 0.70' Spawal
			Top R.L.619.00							

2.2 LOCATION MAP

Attached.

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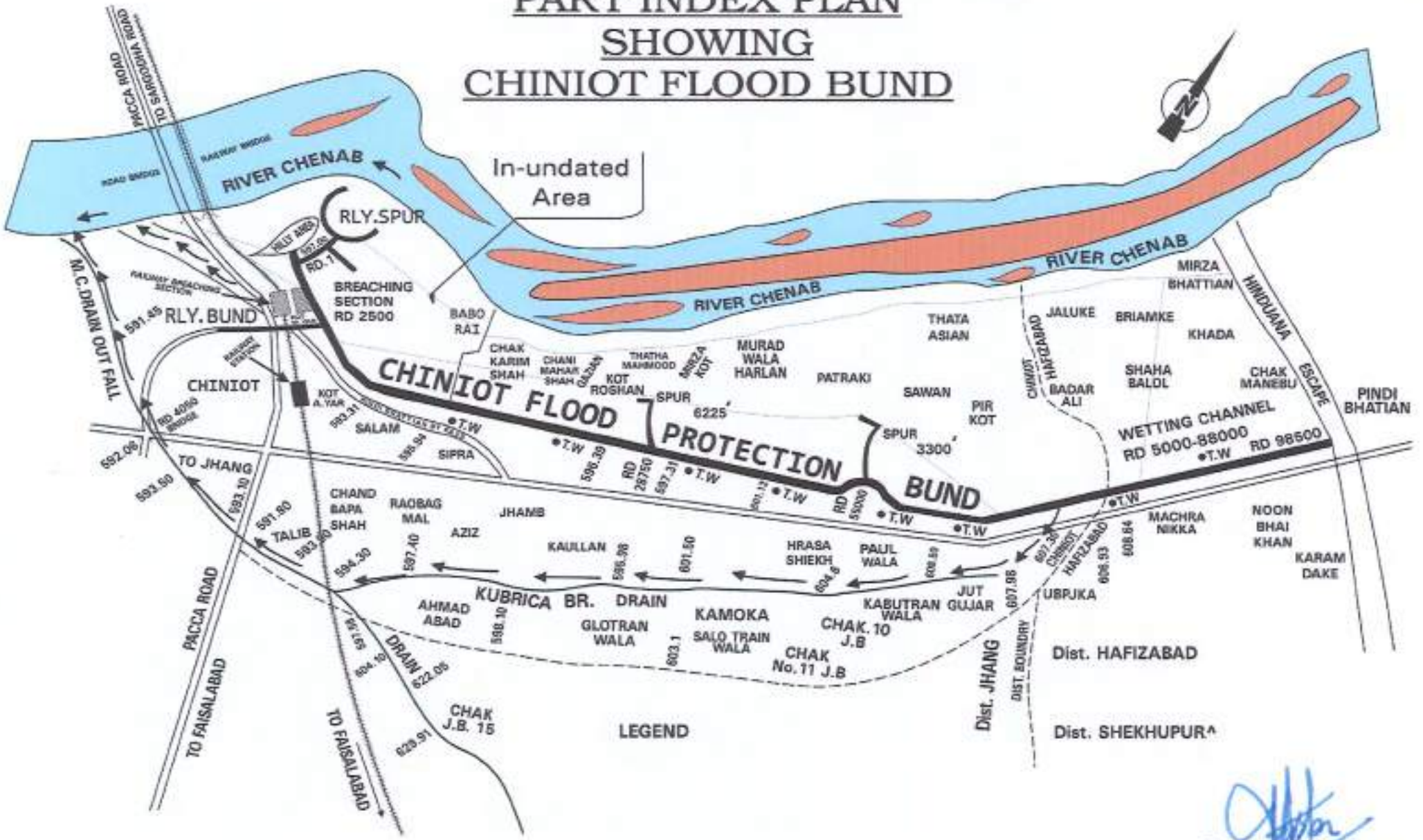
PART INDEX PLAN
SHOWING
CHINIOT FLOOD BUND



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CHAPTER # 3

BRIEF HISTORY OF PAST FLOOD EVENTS.

In consequence to exceptionally high flood in River Chenab, Chiniot Flood Bund is the main line for protection of Chiniot City. The total length of breaching section is 200 Ft. During 1992, a maximum discharge of 948530 Cs passed through Chiniot Railway Bridge. A maximum gauge of 602.35 was recorded at RD.5+000 of Chiniot Flood Bund. However, breaching section was not operated.

All the features noted are given as below.

Date. C.F.B.	Time (Hrs)	Discharge (Cusecs) Chiniot Railway Bridge.	Critical Gauge at RD 5+000
10.08.1973	**00-12**	**854000**	
17.07.1975	17-18	669819	
02.08.1976	19-21	628741	
17.08.1976	08-13	608050	
20.09.1988	**15-20**	**892229**	602.07
11.09.1992	**06-00**	**948530**	602.35
29.07.1995	09-00	640577	600.45
24.08.1996	**11-00**	**851223**	602.00
28.08.1997	**06-00**	**873000**	602.05
08.08.2001	06-00	125492	Water did not touch the gauge.
13.08.2002	06-00	69562	Water did not touch the gauge.
20.08.2003	06-00	97595	Water did not touch the gauge.
18.08.2004	06-00	93301	Water did not touch the gauge.
08.07.2005	06-00	379222	599.80
05.08.2006	20-00	286802	598.90
15.08.2007	06-00	117254	Water did not touch the gauge.
01.08.2008	06-00	74600	597.30
08.08.2010	16-00	272600	598.90
18.09.2011	07-00	115400	Water did not touch the gauge
06.08.2012	06-00	243550	Water did not touch the gauge
17.08.2013	03-00	383460	598.40
08.09.2014	**07-00**	**842500**	601.95
14.07.2015	04-00	147710	Water did not touch the gauge
09.08.2016	09-00	315540	597.90
04.08.2017	10-00	134560	Water did not touch the gauge
15.08.2018	07-00	161200	Water did not touch the gauge
02.08.2019	06-00	147710	Water did not touch the gauge
29.08.2020	12-00	264191	Water did not touch the gauge
30.07.2021	01:00	140193	Water did not touch the gauge
29.07.2022	22.00	162746	Water did not touch the gauge

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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.

FLOOD LIMITS OF RIVER CHENAB DOWN STREAM QADIRABAD BARRAGE.

Site	Low (Cusec)	Medium. (Cusec)	High (Cusec)	Very High. (Cusec)	Exceptionally High
Qadirabad	100000 to 150000	150000 to 200000	200000 to 400000	400000 to 600000	600000 Cs and above.

4.2 TIME LAG OF FLOODS.

River	Site		Distance in Km	Time Log In Hours	
	From	To		Range	Indicative Average
Chenab	Marala	Khanki	56	10 -14	12
	Khanki	Qadirabad	30	6 -10	8
	Qadirabad	Chiniot Flood Bund RD. 5+000	101	30 - 42	36

4.3 & 4.4 HIGHEST FLOODS & PEAK DISCHARGES.

Sr. No.	Year	Discharge Cs.	Critical Gauge.
1	20.09.1988	892229	602.07'
2	11.09.1992	948530	602.35'
3	24.08.1996	851223	602.00'
4	28.08.1997	873600	602.05'
5	08.09.2014	842500	601.95'

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CHAPTER # 5

FLOOD FIGHTING STRATEGY.

5.1
FLOOD STAGES.

Action plan to fight river action during various stages of river flow will be as under:-

STAGE-I

When discharge in river Chenab D/S Qadirabad Barrages is upto 3 Lac Cuses, normal work charged establishment (Regular watching) will look after the maintenance of the bund as per duty chart.

STAGE-II

When discharge in river Chenab D/S Qadirabad Barrage is from 3.00 Lac to 5.00 Lac Cs, the work charged establishment will be increased up to 4 Beldars per mile per shift for 2 shifts and watching will be done round the clock under supervision of Sub Engineers, Sub Divisional Officer, Chiniot Drainage Sub Division Chiniot. Camp will be shifted at RD. 5+000 of the bund to watch the gauge and when it reaches to 598.00 R.L, Sub Divisional Officer, Chiniot Drainage Sub Division, Chiniot will act upon the report of inter departmental group on operation and maintenance of flood protection works in Pakistan volume-I Main Report.

STAGE-III

When discharge in the River D/S Qadirabad Barrage exceeds 5 Lacs Cusecs, the bund would become vulnerable. As soon as the discharge exceeds 5 Lac cusecs at Qadirabad Barrage, the Deputy Commissioner, Chiniot would be requested for arranging jail labour or voluntary through Tehsildars/ Naib Tehsildars of the area. The D.S.P with available police force would also be required to be present at site for arranging voluntary labour and for rendering assistance to the Irrigation Department in any emergent situation / accident.

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When the discharge increase 5 Lac cusecs the following Sub Engineers, will also shift to the bund and join Sub Engineers of Chiniot Drainage Sub Division, in seriatim for day and night shifts.

a). Sub Engineer, Aminpur Drainage Section.
b). Sub Engineer, Paharang Drainage Section-I
c). Sub Engineer, Paharang Drainage Section-II.
d). Sub Engineer, Chakbandi Drainage Section.

Deputy District Officer (Revenue), Chiniot and Sub Divisional Officer, Drainage Chiniot would jointly inspect the bund and will ensure the aforementioned arrangement. Like-wise Deputy Commissioner, Chiniot and Executive Engineer, Samundri Drainage Division would jointly or individually inspect vulnerable points on the bund to satisfy themselves about watching arrangements and for issuing instructions at the site for the safety of the bund where necessary.

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Samundri Drainage Division,
Faisalabad.

CHAPTER # 6

FLOOD DAMAGES RESTORATION WORKS.

No serious flood damage occurred during the previous flood season.

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Samundri Drainage Division,
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CHAPTER # 7

FLOOD FIGHTING WATCHING ARRANGEMENT.

7.1 PRE-FLOOD ARRANGEMENT.

The following steps have been taken for pre-flood arrangements.

i). Instruction issued by the higher authorities Superintending Engineer and Departmental committee have been noted and will be comply with well before the coming flood season.

ii). Meeting with Army authorities have been made after pre-flood inspection of Chiniot Flood Bund.

Reserve Stock of Stones (Lac Cft)

Location	Sanctioned Limit	Available Qty	Balance	Remarks
CFB, Spur RD. 28+750	1.50	1.09	0.41	Sufficient quantity of reserve stock of Stone i.e.2.19 lac cft (73%) is available against 3.00 lac cft.
CFB, Spur RD. 55+000	1.50	1.10	0.40	
Total:-	**3.00**	**2.19**	**0.81**	

7.2. WATCHING ESTABLISHMENT.

When discharge will become up to 4 Lac Cs: downstream Qadirabad Barrage. 04 No. Beldars per mile per shift for two shifts would be deputed from the existing establishment of 313 No. Beldars of Samundri & Paharang Drainage Sub Divisions.

Sites	Flood Limits									
	Low		medium		High		Very High		Exceptionally High	
	Men	Shift	Men	Shift	Men	Shift	Men	Shift	Men	Shift
RD 16+290 C.F.B	4	1-Shift	4	1-Shift	16	2-Shift	32	2-Shift	64	2-Shift
RD.24+720 C.F.B	4	1-Shift	4	1-Shift	16	2-Shift	32	2-Shift	64	2-Shift
RD.55+000 C.F.B	6	1-Shift	6	1-Shift	24	2-Shift	48	2-Shift	96	2-Shift
RD.88+000 C.F.B	6	1-Shift	6	1-Shift	24	2-Shift	48	2-Shift	96	2-Shift

7.3. ARRANGEMENT AT SENSITIVE SITES.

The following reaches are likely to be sensitive / vulnerable.

RD. 0+000 – 20+000 = 20000' Ft.
RD. 27+000 –56+000 = 29000' Ft.

Reserve stock of stone is available at spur at RD.28+750(1.09 Lac Cft) and spur at RD55+000 (1.10 Lac Cft) near the sensitive sites.

These reaches have been restored to their design parameter for flood season and will be strictly watched during the flood season.

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7.4. WATCHING MATERIAL.

The emergency flood fighting material are required for flood fighting and are worked out on the basis of establishment provided for watching and anticipated damages during the flood season list attached.

Sr. No.	Name of item	Approved Qty as per yard stick	Unit	Available Quantity	Required Quantity	Schedule / plan for purchasing
1	2	3	4	5	6	7
1	Torches three cells (Chargeable Torches)	30	No	30	-	
2	E.Gunny bags	3000	No	3000	-	
3	Sutli	25	Kg	25	-	
4	Wewing needles	50	No.	50	-	
5	Bamboos 12'-14'	400	No	-	400	
6	Toot Baskets	500	No	500	-	
7	Khaji mat	200	No	200	-	
8	Oil Extractor	36	No	15	21	
9	Munj Ban	1000	Kg	400	600	
10	Funnels	40	No	-	40	
11	Trunger (S W Wire)	600	No	-	600	
12	Chouldaries	30	No	13	17	
13	Tents	10	No	10	-	The short material will be purchased before flood season 2023.
14	Driving Pegs	500	No	50	450	
15	Steel wire rope 1/2"	2000	Lft	2000	-	
16	Hand Sew	36	No	36	-	
17	Manila rope of sorts.	600	Kg	-	600	
18	Karries	100	No	88	12	
19	G.I Wire 12 no.	500	Kg	500	-	
20	G.I. Bucket	200	No	200	-	
21	Plastic bags	2000	No	2000	-	
22	Chairs	36	No	32	6	
23	Tables	9	No	9	-	
24	Generator 5-1/2 2000 watt	1	No	1	-	
25	Petrol	900	Ltr	-	900	
26	M.Oil	18	Ltr	-	18	
27	Wire 7 / 0.29	1350	Ft	1350	-	
28	Wooden board 10 x 12'	9	No	3	6	

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7.5. ARRANGEMENT FOR SOUNDING AND PROBING.

It relates to Head works and Barrages.

7.6. LIGHTING ARRANGEMENT.

01 No. mobile generator of 30 Horse power has been arranged for lighting arrangement.

7.7 RATION ARRANGEMENT.

At the time of flood, the contractor will arrange ration for working staff.

7.8. P.O.L ARRANGEMENT.

Nil.

7.9. TRANSPORTATION.

In case of real emergency, the requisite transportation will be provided by the courtesy of District Administrative.

7.10 LAW AND ORDER.

Law and order will be maintained with the help of Deputy Commissioner and District Police Officer Chiniot.

7.11 MEDICAL ARRANGEMENT FOR LABOUR .

Necessary medicines are required to be arranged by the Health Department for controlling epidemics which will be required in the entire field health unit.

7.12 LIAISON WITH OTHER DEPARTMENTS.

Executive Engineer Samundri Drainage Division Faisalabad and Sub Divisional Officer Chiniot Drainage Sub Division Chiniot will keep liaison with their counterparts of other department. Higher authorities of the department as well as Civil Administration will be constantly kept informed about the flood situation through wireless and telephone etc.

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7.13 ROLE OF ARMY.

Army will be engaged for the operation of breaching section when the Executive Engineer will communicate the decision of the operating committee to the Army Engineers in writing to blowup the breaching section.

7.14 DUTIES OF TELEPHONE ATTENDANT.

Executive Engineer Samundri Drainage Division Faisalabad will be responsible for overall implementation of flood fighting plan. The Divisional Office will remain open for 24 hours during flood days. The Head Clerk in the Divisional office will depute the clerical staff to attend the office telephone No. 041-9200470 round the clock during flood season. Duty roster of this Division is as under:-

Sr. No.	Name of Official	Duty Period		Time	
		From	To	From	To
1	Tahlib Hussain Junior Clerk. Muhammad Rizwan Naib Qasid.	15.06.2023	15.07.2023	03:00 PM	10:00 PM
2	Muhammad Mujtaba Junior Clerk. Muhammad Younis Chainman.	15.06.2023	15.07.2023	10:00 PM	08:00 AM
3	Rashid Javed Tracer. Muhammad Mazammal Naib Qaisd.	16.07.2023	15.08.2023	03:00 PM	10:00 PM
4	Muhammad Umar Nawaz Gill, Junior Clerk. Anwar Shahzad Chainman.	16.07.2023	15.08.2023	10:00 PM	08:00 AM
5	Khalid Mehmood Accounts Clerk. Muhammad Riaz Naib Qasid.	16.08.2023	15.09.2023	03:00 PM	10:00 PM
6	Muhammad Naveed Sub Divisional Clerk. Liaqat Ali Naib Qasid.	16.08.2023	15.09.2023	10:00 PM	08:00 AM
7	Muhammad Nadeem Sub Divisional Clerk. Muhammad Qasim Dak Runner.	16.09.2023	15.10.2023	03:00 PM	10:00 PM
8	Aftab Ahmad Sub Divisional Clerk. Muhammad Bilal Naib Qasid.	16.09.2023	15.10.2023	10:00 PM	08:00 AM
On Holidays					
1	Naveed Khan Junior Clerk. Mr. Nabeel Ahmad Dak Runner	-	-	08:00 AM	03:00 PM

7.15 WIRELESS ARRANGEMENTS.

Mobile wireless set will be installed in vehicle of Executive Engineer, Samundri Drainage Division, Faisalabad for communication.

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CHAPTER # 8

DETAIL OF ENCROACHMENT.

No encroachment exist on Chiniot flood bund.

Sr. No.	Total encroachment	Removed	Remaining	Remarks
A). NORMAL				
1	NIL	NIL	NIL	NIL
B). CRITICAL				
2	NIL	NIL	NIL	NIL

Executive Engineer,
Samundri Drainage Division,
Faisalabad.

CHAPTER # 9

DUTY ROSTER / FLOOD FIGHTING PROGRAM.

Reach	Discharge upto 2 Lacs				Discharge upto 4.00 Lacs.				Discharge upto 6.00 Lacs & above.			
	SDO	SEN	Mate	Beldars	SDO	SEN	1 No.Mate for 8 No. Beldars.	4 No Beldars per mile per shift for 2 Shift.	SDO	SEN	1 No.Mate for 8 No. Beldars.	8 No Beldars per Mile Per Shift for 2 Shift.
0+000-20+000 of Chiniot Flood Bund.	RD. 16+290 Chiniot Flood Bund.	Chiniot Drainage Section		4	RD. 16+290 Chiniot Flood Bund	As per 1st Stage	4	32	SDO Chiniot & 1 No. Additional SDO	2	8	64
20+000-40+000 of Chiniot Flood Bund.	-do-	Flood Bund Section-I 24+720		4	-do-	-do-	4	32	-do-	2	8	64
40+000-70+000 of Chiniot Flood Bund.	-do-	Flood Bund Section-II 55+000		6	-do-	-do-	6	48	-do-	2	12	96
70+000-88+500 of Chiniot Flood Bund.	-do-	Pindi Bhattian Drainage Section 88+500		4	-do-	-do-	4	32	-do-	2	8	64

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Faisalabad.

CHAPTER # 10

EMERGENCY TELEPHONE NOS.

FAISALABAD IRRIGATION ZONE.
EMERGENCY TELEPHONE NUMBERS.

Sr. No.	Name of Officer with Designation & Official Address.	Residential Address.	TELEPHONE.		Remarks.
			Office.	Residence.	
1	Secretary, Irrigation Department Government of The Punjab Lahore.	Lahore.	042-99212117 042-99212118	042-35731116	
2	Shahid Saleem Chief Engineer, Irrigation Zone, Faisalabad.	Bilal Road Faisalabad	041-9200268	0322-2228637	
		FAX	041-9200277		
3	Ghulam Rasool Superintending Engineer, Drainage Circle, Faisalabad.	Bilal Road Faisalabad	041-9200494	0300-8099570	
4	Nabeel Aslam Executive Engineer, Samundri Drainage Division, Faisalabad.	Canal Colony Faisalabad	041-9200470	0333-6315294	
5	Sohail Haidar Executive Engineer (OP), Faisalabad Irrigation Zone, Faisalabad.	Faisalabad.	041-9200270	0340-7159459	Flood Emergency officer.
6	Sajid Ali (Head Signaler) Canal Telegraph Office, Flood, Emergency Centre, Irrigation Department, Faisalabad.	Canal Colony Faisalabad.	041-9200774	0300-8931867	Flood Emergency Cell.
7	Maqbool Ahmad Superintending Engineer, Lower Chenab Canal (East) Circle, Faisalabad.	Faisalabad.	041-9200273	0300-8790981	Muhammad Shahwala. Kalera Flood Bund & Khanki Head works.
8	Tahir Javed Superintending Engineer, Lower Chenab Canal (West) Circle, Faisalabad.	Bilal Road Faisalabad.	041-9200272	0301-7729050	i. Thatta Mahla Bund Jhang ii) Flood Protection Bund Jhang.
9	Sohail Haider Executive Engineer, Burala Division, Faisalabad.	Faisalabad	041-9200275	0340-7159459	Muhammad Shahwala and Kalera Flood Bund near Kamalia.
10	Muzaffar Khan Executive Engineer, Hafizabad Division Faisalabad.	Faisalabad.	041-9200473	0345-6500439	In and around Faisalabad City.

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Sr. No.	Name of Officer with Designation & Official Address.	Residential Address.	TELEPHONE.		Remarks.
			Office.	Residence.	
11	Mohib Ullah Executive Engineer, Khanki H/Works Division, Wazirabad Gujranwala.	Canal Colony Khanki Barrage	055-6266327	0334-9565827 0341-3266906	Khanki Barrage.
	Rana Kashif Ali Executive Engineer, Khairwala Drainage Division Faisalabad.	Faisalabad.		0345-7571613 0334-4491174	Khairwala Drainage System.
12	Tassawar Ayub, Executive Engineer, Faisalabad Drainage Division, Faisalabad.	Canal Colony Faisalabad	041-9200471	0321-4166103	Faisalabad Drainage System.
13	, Executive Engineer, Jhang Division, Jhang.	Canal Colony Jhang.	047-9200300		Thatta Mahla and Bund Jhang.
14	Sh. Altaf-ur-Rehman Superintending Engineer, Q.B.Link Circle, Farooqabad.	Canal Colony Farooqabad, Sheikhupura.	056-3874046	0300-4366122	Circle Farooqabad Q.B. Link.
15	Adnan Yousaf Executive Engineer, Qadirabad Barrage Division, Qadirabad.	Canal Colony Qadirabad Barrage.	054-7550190	0300-1030530	Qadirabad Barrage colony District Hafizabad.
		FAX.	054-7550190		
16	Asim Shoaib. Executive Engineer, Q.B.Link Division, Farooqabad.	Faisalabad..	056-3874045 056-3876430	0323-4396905	Q.B. Link Division.
17	Shahbaz Talib Executive Engineer, Faisalabad Division LCC (W), Faisalabad.	Bilal road Faisalabad.	041-9200271	0304-4961040	In and around Faisalabad City.
18	Zulfiqar Ali Sub Divisional Officer, Chiniot Drainage Sub Division, Faisalabad.	8-Bilal road, Faisalabad.		0300-7632203	Chiniot Flood Bund.
19	Chief Engineer, D & F, Lahore.		042-99233551	-	
20	Sultan Mehmood Director Flood / Secretary Punjab Flood Commission Lahore.		042-99233552	0303-7713303	

CIVIL DEPARTMENT.

1	Deputy Commissioner Office, Faisalabad.	Faisalabad.	041-9200205-6	041-9200208-9	District Faisalabad.
2	Deputy Commissioner Office, Jhang.	Jhang Saddar.	047-9200081	047-9200181 047-9200081	District Jhang.
3	Deputy Commissioner Office, Chiniot.	Chiniot.	047-9210111	047-9210111	District Chiniot.
4	Deputy Commissioner Office, Hafizabad.	Hafizabad.	0547-521784 0547-524085	054-7521784	District Hafizabad.

CHAPTER # 11

STANDARD OPERATING PROCEDURE OF BREACHING SECTION (S.O.P).

11.1 HISTORY OF BREACHING SECTION.

After the experience of 1973 flood, the necessity of providing breaching sections at various Head Works and flood protection bunds was seriously considered to check uncontrolled disastrous damages. For Chiniot bund, breaching site was proposed at RD. 2+500 to reduce the pressure on Railway Bridge. Breach at this site would deliver the water back to the river down stream the Railway Bridge without causing any damage to Chiniot Town and other private & public properties.

The fixation of the level of the breaching section was examined by Irrigation Research Institute with the model studies based on river surveys and other data. The matter then remained under discussion with Technical Sub Committee and Technical Committee of the Flood Commission. Finally the Flood Commission in its meeting on 17/06/1974 approved the breaching site at RD.2+500 and critical flood level as 600.00 at Gauge RD.5+000 of Chiniot flood bund.

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

The flood commission in its 55th meeting held on 17/06/1974 considered the proposal of breaching site and following controlling flood level at the specified gauge site was approved by the commission.

Name of River/Site	Proposed Breach Site	Critical Flood Level At which cut is to be made.	Status of River.
Chenab.	RD. 2+500 at C.F.B.	R.L. 600.00 RD. 5+000 C.F.B.	Rising.
Chiniot Flood Bund (C.F.B)			

DESIGN OF BREACHING SECTION.

Location	Length of Breach	No. of Cuts.	Length Of each Cut.	Inner cut Distance.	Over hang On both end.	No of row Of holes In each Cut.	Distance Between Rows.	No. of Holes Per Row.	Distance Between Holes.	Depth of Holes.	Tin P.V.C Liners Size. 7' x 6"Dia 26 SWG.
Between RD. 2-3	200'.	2	100'	7'	60 ft. on one end and 67 ft. on the other end.	5	8'	9 No.	7'	12.00'	130 Nos.

Location	Length of Breaching.	Depth of Cut	No. of Cuts.	Soil Type	Compaction
Chiniot Flood Protection Bund. RD. 2+500.	200 ft	12 ft	2	Loamy Soil	Machine

The additional instructions are hereby notified in compliance to orders of the Federal flood Commission contained in the minutes of 55th Meeting.

Executive Engineer,
Samundri Drainage Division,
Faisalabad.

SAMUNDRI DRAINAGE DIVISION FAISALABAD
STATUS OF EXPLOSIVE / ACCESSORIES

Name of Division	Name / Nomenclature of Material / Accessories	Total Quantity Required	Quantity Available	Balance Quantity to be Required	Cost of Total Quantity Required	Name of Agency to whom Payment is to be Made	Amount Paid	Balance Amount to be Paid	Remarks
1	2	3	4	5	6	7	8	9	10
Samundri	PE-3A	3010 Kg	3010 Kg	-	-	Wah Nobel Pvt Ltd. Wah Cantt:	961519	-	Sufficient quantity of explosive material is available at Gujranwala Cantt.
	Wabocord	3700 Mtr	3700 Mtr	-	-	Wah Nobel Pvt Ltd. Wah Cantt:	133002	-	
	Safety Fuse No.11	300 Mtr	300 Mtr	-	-	Wah Nobel Pvt Ltd. Wah Cantt:	24885	-	
	Elec Det	20 No.	20 No.	-	-	Wah Nobel Pvt Ltd. Wah Cantt:	3482	-	
	Det Non Elec	42 No.	42 No.	-	-	Wah Nobel Pvt Ltd. Wah Cantt:	1173	-	
	Detonating Cord	2000 Mtr	2000 Mtr	-	-	Wah Nobel Pvt Ltd. Wah Cantt:	98520	-	
SUB TOTAL:							**1222581**	-	
Samundri	Sealing Compound	20 Kg	20 Kg	-	-	H.Q Engineers 30 Corps GRW	400	-	
	Liner 12ft	52 No.	52 No.			H.Q Engineers 30 Corps GRW	41080		
	Jute	50 Mtr	50 Mtr			H.Q Engineers 30 Corps GRW	1250		
	Liner 9ft	36 No.	36 No.			H.Q Engineers 30 Corps GRW	21240		
SUB TOTAL:							**63970**	-	
Freight & Escort Charges:							**40000**	-	
Samundri	Primer CE	1000 No.	1000 No.			H.Q Engineers 30 Corps GRW	923000		
G. TOTAL:							**2249551**	-	

Executive Engineer
Samundri Drainage Division
Faisalabad

i). The Executive Engineer, or Sub Divisional Officer who so ever is present at site will arrange to make the cut at the proposed site as soon as the Flood Level touches the approved critical level on the specified site along Chiniot Flood Bund i.e. RD. 5000 provided that the River is in rising position.

ii). The critical level is to be painted in red on the gauge constructed at RD. 5000 Chiniot Flood Bund Similarly a board will be fixed on the Bund site describing in red that the site will be breached as soon as the critical level of 600.00 at RD.5000 of Flood Bund is reached and River is in rising position.

iii). Deputy Commissioner as well as his representative will be informed in time about the intended relief cut for the timely evacuation of people from the area to be affected.

iv). Necessary arrangement of explosives, machinery and the manual labour on Bund will be kept available at site.

v). The Executive Engineer and higher Officers of the Department will have the discretion to make relief cuts any where if so required for the safety of Railway Bridge and Chiniot City but in all cases Deputy Commissioner and his representatives are to be informed for the purpose of evacuation well in time.

vi). The XEN Highway will be present at site to make a cut in the main road (Chiniot Sargodha road).

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QUANTITY AND VARIETY OF THE EXPLOSIVE REQUIRED FOR DETONATION.

No. of Cuts	Drilled Holes		Catridges		Explosive (Lbs)		Bonacord (Ft)	Detonator Instant No.	Detonator 25 MS. No.	Electrict Cable Double (Yds)
	5ft. X6" dia	7. ft. x 6" dia	3'-6" 5" dia	4' - 6" 5" dia	WABOX	WABONITE				
1	26	39	26	39	457.6	1118.00	1573	4	2	1000
2	52	78	52	78	915.2	2236.00	3146	8	4	2000

11.3 ARRANGEMENT OF EXPLOSIVES AND SECURITY OF EXPLOSIVE STORE.

Explosive material and its accessories required for the activation of breaching section at RD. 2+500 of Chiniot Flood Bund are stored at Gujranwala Cantt: under the supervision of Army.

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

Security staff alongwith detail of their training is under the possession of Pakistan Army Kharian Cantt:

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

The explosive material alongwith other accessories will be brought at site by the Army authorities. The arrival of machinery for cut and explosive material will be ensured well before any emergent situation arises at site.

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11.6 DUTY ROSTER IN CASE OF CRITICAL SITUATION.

Reach	Discharge upto 2 Lacs				Discharge upto 4.00 Lacs.				Discharge upto 6.00 Lacs & above.			
	SDO	SEN	Mate	Beldars	SDO	SEN	1 No.Mate for 8 No. Beldars.	4 No Beldars per mile per shift for 2 Shift.	SDO	SEN	1 No.Mate for 8 No. Beldars.	8 No Beldars per Mile Per Shift for 2 Shift.
0+000-20+000 of Chiniot Flood Bund. (4 Mile)	RD. 16+290 Chiniot Flood Bund.	Chiniot Drainage Section		4	RD. 16+290 Chiniot Flood Bund	As per 1st Stage	4	32	SDO Chiniot & 1 No. Additional SDO	2	8	64
20+000-40+000 of Chiniot Flood Bund. (4 Mile)	-do-	Flood Bund Section-I 24+720		4	-do-	-do-	4	32	-do-	2	8	64
40+000-70+000 of Chiniot Flood Bund. (6 Mile)	-do-	Flood Bund Section-II 55+000		6	-do-	-do-	6	48	-do-	2	12	96
70+000-88+500 of Chiniot Flood Bund. (3.70 Mile)	-do-	Pindi Bhattian Drainage Section 88+500		4	-do-	-do-	6	32	-do-	2	8	64

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11.7 BREACHING COMMITTEE WITH THEIR ACTION PLAN.

The cut is made at the specified site as soon as the flood level touches the critical levels 600.00 at RD.5+000 Chiniot Flood Bund, provided that the River is in rising condition. Following Breaching Operation Committee will operate the Breaching section on the direction of Competent Authority Federal Flood Commission.

1.	Deputy Commissioner / Representative of respective District Administration.	Convener.
2.	Executive Engineer, Samundri Drainage Division, Faisalabad.	Member.
3.	Executive Engineer, C& W Department.	Member.
4.	Lt. Colonol/ Representative of concerned Army Battalion.	Member.

Executive Engineer,
Samundri Drainage Division,
Faisalabad.

GOVERNMENT OF THE PUNJAB
IRRIGATION DEPARTMENT

Dated Lahore, the 15th July, 2015

NOTIFICATION

NO.SO (FLOODS) VI-33/97. Subsequent to the approval of Competent Authority and Federal Flood Commission letter dated 28-2-2015 and in supersession of all previous instructions on the subject, following procedure is hereby prescribed for the operation of breaching sections in the Punjab:

(a) Responsibility for the maintenance and operation of each breaching section shall rest upon the department owning the structure at which the breaching section is located.

(b) Breaching section shall be operated on the orders of following committee :-

(i) District Coordination Officer of the district in which the breaching section is located, who shall also be the convener of the committee;

(ii) District Coordination Officer of the district likely to be effected by the operation of breaching section or his representative (in case the area affected falls outside the district in which the breaching section is located);

(iii) Representative of the department owning the structure at which the breaching section is located (not less than the rank of an Executive Engineer or equivalent);

(iv) Representative from C&W Department not below the rank of an Executive Engineer;

(v) Executive Engineer concerned of the Irrigation Department;

(vi) Representative from Pakistan Army not below the rank of a Lt. Colonol.

(c) The decision to operate a breaching section shall be taken by the committee keeping in view the technical advice of the Executive Engineer concerned of the Irrigation Department. In case of any difference of opinion among the members, the final decision shall rest with the District Coordination Officer.

(d) In case of unavailability of the District Coordination Officer or his inability to take decision, or in case of a difference of opinion between the District Coordination Officers of the District in which the breaching section is located and the district which is likely to be affected by the operation of the breaching section, the decision to operate a breaching section shall be taken by the respective Commissioner;

(e) Breaching section shall be operated when one or more of the following conditions are met :-

(i) The discharging capacity of the structure for which breaching section is located is exceeded and the safety of structure is threatened ;

(ii) The critical gauge as indicated in the relevant Flood Fighting Plan is achieved or exceeded and is rising;

(iii) The safety of major population center-(s) is threatened due to high flood levels and in view of the Executive Engineer concerned of the Irrigation Department, operation of breaching section can help in reduction of flood levels.

(f) Where, in view of the Executive Engineer concerned of the Irrigation Department or the representative of the department owning the structure at which the breaching section is located, the aforesaid criteria is expected to be met after due consideration of all available technical and hydrological conditions, the aforesaid committee may operate the breaching section before the critical guage is achieved or exceeded. In every such case, the view of the Executive Engineer concerned of Irrigation Department or the representative of the department owning the structure shall be expressed in writing and shall be based on flood forecast by Pakistan Meteorological Department or other reliable sources, the trend of discharges in the relevant river at upstream locations, the lag times, estimated attenuation and expected inflows from tributaries, nullahs and streams en-route. Where advance breaching is planned, the committee may also consult professional experts and seek advice from the Superintending Engineer or the Chief Engineer concerned of the Irrigation Department.

(g) Breaching section shall be operated by the contingent deputed by the Engineering-in-Chief, Pakistan Army as indicated in the Flood Fighting Plan. Explosive method shall be the preferred method for operation of breaching section. However, the department owning the structure on which the breaching section is located, and in case of their failure to do so, Irrigation Department shall make available, in advance, necessary earth moving machinery and

other equipment for affecting the breach through mechanical means in the shortest possible time.

(h) The District Coordination Officer concerned and all other relevant agencies shall ensure all necessary arrangements for the safety and if required evacuation of population likely to be effected by the operation of breaching section.

— Sd —

SECRETARY IRRIGATION

No, & Dato Even

A copy is forwarded for information and necessary action to :-

i) The Chief Secretary, Punjab, Lahore.
ii) The Federal Secretary Defence, Government of Pakistan, Islamabad.
iii) The Federal Secretary Water & Power, Government of Pakistan, Islamabad.
iv) The Federal Secretary Railways, Government of Pakistan Islamabad.
v) Col ® Shuja Khanzada, Minister for Home, Lahore.
vi) The Senior Member, Board of Revenue, Punjab, Lahore.
vii) The Secretary to Chief Minister, Punjab, Lahore.
viii) The Secretary, Government of the Punjab, C&W Department.
ix) The Director General, PDMA, Lahore.
x) The Chairman , Federal Flood Commission, Islamabad
xi) The Engineer-in-Chief, Pakistan Army, GHQ, Rawalpindi.
xii) All Chief Engineers of Irrigation Zones in Punjab.
xiii) All Divisional Commissioners in Punjab.
xiv) All District Coordination Officers in Punjab.
xv) The Project Manager, TPM, Lahore.

Asim 15-01-2015

SECTION OFFICER (FLOODS)

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

As a consequence of activation of breaching section, abadi of Kot Muhammad Yar and new developed portion of Chiniot Town are effected. The same has been earmarked at contingency plan. However this area will be evacuated through Civil Administration well before the operation of breaching section.

FLOOD INUNDATION.

In low and medium flood ranges, the flood water meanders within the limit of River bed width. The name of villages which are likely to be inundated during low, medium, high flood are given as under:-

1. EFFECTED UNDER LOW FLOOD.

Sr #	Name of Village	Sr #	Name of Village	Sr #	Name of Village
1	Mooran Wala	2	Naseere Themary	3	Thatta Mochian
4	Babo Rai	5	Dhusri Qazian		

2. EFFECTED UNDER MEDIUM FLOOD.

Sr #	Name of Village	Sr #	Name of Village	Sr #	Name of Village
1	Mooran Wala	2	Naseere Themary	3	Thatta Mochian
4	Babo Rai	5	Dhusri Qazian	6	Shah Balol
7	Miana Kot	8	Moza Shadhan	9	Mirza Bhattian

3. EFFECTED UNDER HIGH FLOOD.

Sr #	Name of Village	Sr #	Name of Village	Sr #	Name of Village
1	Mooran Wala	2	Naseere Themary	3	Thatta Mochian
4	Babo Rai	5	Dhusri Qazian	6	Shah Balol
7	Miana Kot	8	Moza Shadhan	9	Mirza Bhattian
10	Thatta Daura Ghazi Nasir Kemari	11	Miana Kot	12	Chak Karim Shah Supra Rossan
13	Murad Wala.	14	Moza Chichar.	15	Moza Sadhan.
16	Patraki.	17	Moza Asian.	18	Sawanda Thatta.
19	Kala Asian.	20	Moza Pirda Kot.	21	Brian Ke.
22	Tharr Ke Barke.	23	Thatta Sarghans.	24	Jalke.
25	Shah Balol.	26	Khana.	27	Kanda Bhattian.
28	Amoka Chuka.	29	Mal Da Burj	30	Jher Da Burj.

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11.9 ANNOUNCEMENT AND DETAIL OF EVACUATION ARRANGEMENTS.

Evacuation of effectees is to be arranged through the Deputy Commissioner, Chiniot Additional Deputy Commissioner (Revenue), Chiniot. Executive Engineer, Samundri Drainage Division, Faisalabad will keep inter-departmental co-ordination promptly. At the time of flood, the flood situation will be conveyed well in time to District Government and other Departments, District Management Chiniot/ Hafizabad will announce evacuation arrangements. Accordingly the populated areas will be evacuated.

11.10 DETAILS OF COORDINATION WITH CIVIL/ARMY AUTHORITIES.

Meetings will be arranged with Army authorities time to time during flood season and inspection will be carried out to watch any critical situation with Civil Administration.

11.11 PARALLEL COMMUNICATION ARRANGEMENTS.

During flood season wireless set is installed in vehicle of the Executive Engineer, Incharge.

11.12 INDEX PLAN.

Attached Page No.29.

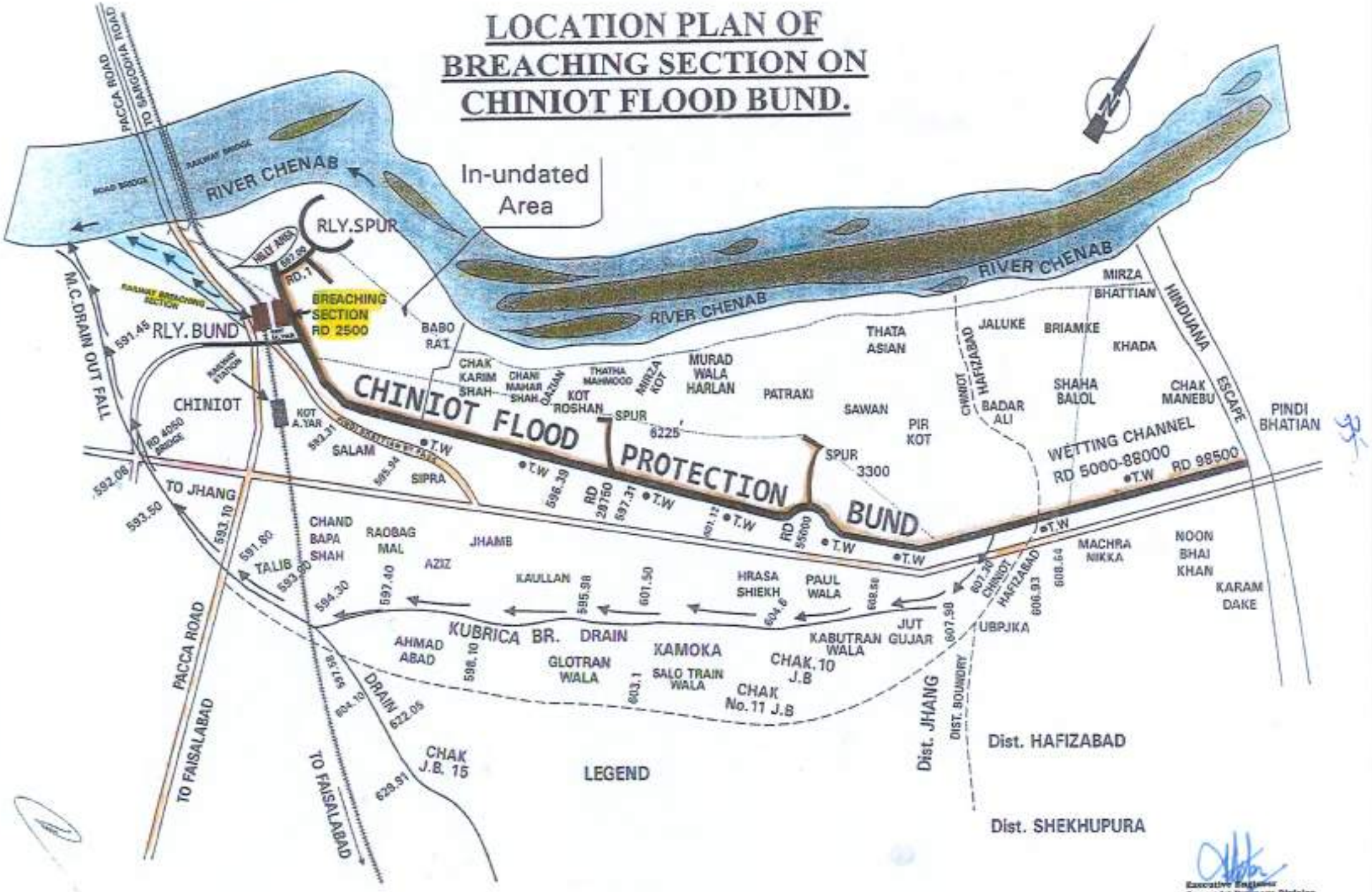
04/05/23

Executive Engineer,
Samundri Drainage Division,
Faisalabad.

Superintending Engineer,
Drainage Circle, Faisalabad.

Chief Engineer
Faisalabad Irrigation Zone,
Faisalabad.

LOCATION PLAN OF BREACHING SECTION ON CHINIOT FLOOD BUND.



Executive Engineer
Samundri Drainage Division
Faisalabad

1
RESTD

Headquarters Engineers 1 Corps
Kharian Cantonment
Telephone Military - 32364
Case Number 60901/G-DWDP3M
13 April 2020

To: Office of The Executive Engineer Samundri Drainage Division, Faisalabad

Information: Headquarter 1 Corps – Internal Security Branch
Headquarters 6 Armoured Division - Internal Security Branch
314 Assault Engineer Battalion
Chief Engineer Irrigation - Faisalabad Zone

Subject: **Minutes of Post Flood Coordination Conference Held at Headquaets Engineers 1 Corps on 14 Nov 2019**

Your letter number 767/11-W date 29-01-2020 and 2015/11-W dated 06-02-2020 (pasted below) reference.

1. **Proposed design of 2 x breaching Sections of Chiniot Flood Protection Bund between RD 2 & 3** is forwarded as per **Annexure P** to this letter. Specifications are as under:-

   a. Each Breaching Section is of 64 ft length with a total of 44 Charge Liners, each of 6" dia PVC casing pipe (water proof) in 5 x rows.
   b. Each row comprising 9 holes (staggered for each row).
   c. 3 x Rows on bund top having charge liner depth of 12 ft.
   d. 2 x Rows on slopes with charge liner depth of 9 ft.
   e. Hole to hole dist in each row be maint as 7 ft center to center.
   f. Row to row dist be maint as 8 ft center to center.
   g. Necessary explosive as per modified design is already held with unit. Holes be prep at existing loc.

2. Fwd for info / approval, please.

Docu ID: DWDP3M APPROVED By GSO-2 (Int & Terrain) Maj Rana Muhammad Sohaib Hassan Khan on 13 Apr 2020
Note: Computer Generated Documents Do Not Require Signature

RESTD

PART – B

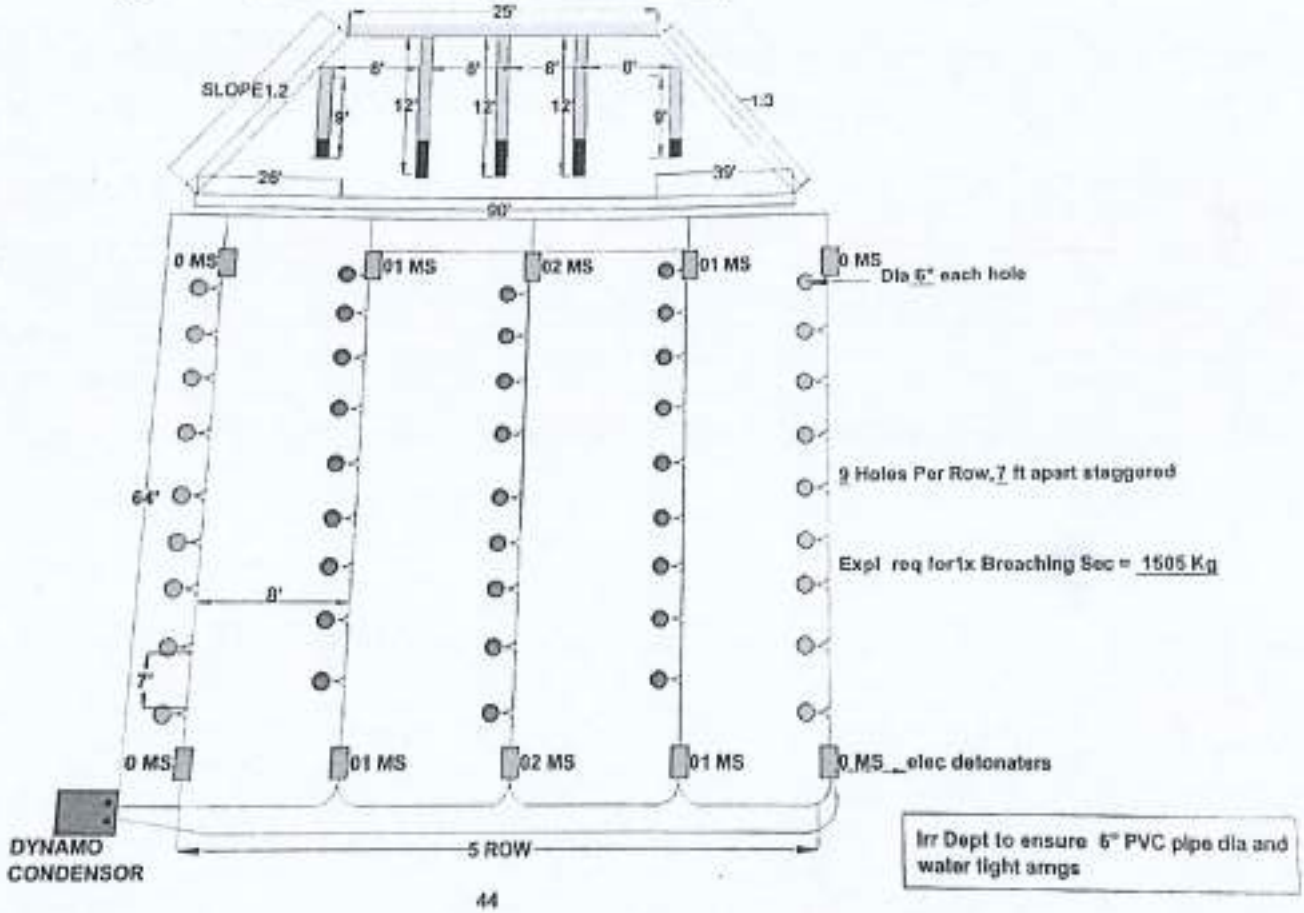
FLOOD FIGHTING PLAN

2023.

OPERATIVE PLAN BREACHING SECTION (CHINIOT FLOOD PROTECTION BUND).

Location	Length of Breach (Ft.)	Depth of Cut (Ft.)	No. of Breaching Sites	Soil Type	Compaction
Chiniot Flood Protection Bund RD.2+000 to 3+000	200'	12.0'	2	Loamy	Machine

CHINIOT FPB (X- SEC VIEW)



Executive Engineer,
Samundri Drainage Division,
Faisalabad.

CHAPTER # 12

SITES ON FLOOD BUND / STRUCTURES

12.1 Apprehended Breaches In Flood Bund/Structures.

1). CHINIOT FLOOD BUND REACH RD.68+000 TO 69+000.

The Chiniot flood bund has been constructed mainly for the protection of Chiniot town, main Highway Pindi Bhattian -Chiniot road, abadies, public / private properties and other infrastructures on the left side against the spill of river Chenab. The Chiniot flood bund RD. 0+000 to 10+000 is parallel to Chiniot town on north side. A spur at RD. 0+000 has been constructed by the Railway Department which is efficiently training the river towards Railway Bridge. The river approach up stream the Railway spur is right handed and there is no active creek on left side. Although 2 No. spurs at RD. 28+750 and at RD. 55+000 have been constructed by the Irrigation Department but there is no active creek in front of these 2 spurs. These spurs remained dormant since their construction during the year 1979-80. The beat of river Chenab in front of Chiniot flood bund is about 8 to 10 Km. Only river spill has been observed along the Chiniot flood bund during the previous floods. The level of this spill water is according to the magnitude of the flood.

12.2 OPERATION OF BREACHING SECTION.

Breaching Section will be operated on the direction of Breaching Committee made under Para 11.7.

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

The cut is made at the specified site as soon as the flood level touches the critical levels i.e.600.00 at RD.5+000 Chiniot Flood Bund, provided that the River is in rising condition. The Breaching Operation Committee will operate the Breaching section on the direction of Zonal Breaching Committee.

Executive Engineer,
Samundri Drainage Division,
Faisalabad.

CHAPTER # 13

EMERGENCY CONTINGENCY PLAN.

13.1 **Plan showing rout of flood water coming out of breach supported with level** attached on Page-38.

13.2 **Detail of villages abadies likely to be affected and this should also be shown on the plan**, attached on Page-38.

1. Main Highway Pindi Bhattian - Chiniot.
2. Villages i.e. Harsa Sheikh, Salotrianwala, Jat Gujar Kabutanwala, Thatta Kamoka, Ghafoorabad, Kubrika, Daulawala, Kaullah, Jhamb , Thattha Aziz, Ahmbadbad, Chand Bore Shah, Kot Muhammad Yar, Chiniot, Chak No.10 J.B, Chak No.11 J.B.
3. Faisalabad - Chiniot Railway line.
4. Chiniot - Sahianwala road.
5. Chiniot - Faisalabad road.
6. Chiniot Main Town.
7. Chiniot - Jhang road.
8. Public / Private installation in the area, like schools, hospitals, canals, roads in addition to the damage to the houses and crops in the area of about 50, sq miles.

The above mentioned abadies and infrastructures have become under hit of the river before the construction of Chiniot flood bund. The expected situation in case of any accidental breach in Chiniot flood bund envisages that a colossal damages and catastrophe will have to be borne. Hence the protection of Chiniot flood bund is vital in case of any emergent situation.

To avert any eventuality on receipt of expected flood, the pre-arrangements for the protection and watching of Chiniot flood bund will be made well before with the help of Army and Civil authorities. Sufficient machinery, gunny bags, bamboos, stone, labour will be arranged well before the flood hit (Plan attached).

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13.3 STRATEGY AND ACTION TAKEN.

The Chiniot Flood Bund is being brought to the designed section with 5' ft free board. The Chiniot Flood Bund has been constructed with local earth which is loose and sandy. It has been observed that during rainy season, the bund is badly damaged in case of continued spell of rains. The condition of bund becomes deteriorated and the inspection of bund for the touring officers is badly hampered, which would be maintained through existing establishment.

1). The wetting channel is being brought operative well before the start of the flood season.

2). All obstructions are also being removed from the bed of wetting channel.

3). The un-necessary ramps made by local inhabitants would be removed at the start of flood season.

4). Pre-flood visits by the Irrigation officers, Civil and Army authorities will be ensured and complete Co-ordination and exchange of views by the inspecting authorities will be maintained.

5). The flood fighting and watching material are being made available according to the provisions made in the flood fighting plan, before the onset of Flood Season 2023.

6). Effective co-ordination between the Highway Department, Irrigation Department, Railway Department, Civil Administration, Army authorities and Police will be ensured in case of any emergent situation.

7). All the aforementioned departments will keep in touch with discharge information received from the Meteorological Department, flood warning centers, and gauges from up-stream barrages.

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13.3.1 ARRANGEMENTS.

The following arrangements will be made from 1st July every year:-

i) Operation room will be opened at RD.55+000 and will start functioning with effect from 1st July 2023. All wireless, telephone and other messages will be recorded and maintained in this emergency office. The duty charts of staff, plan of bund showing position liners, flood register and other arrangements for recording the data will be available and any information called for by any agency will be supplied from this centre promptly.

ii) Duty chart will be prepared and supplied to all staff.

KILLA BUSHING.

iii) Sub Divisional Officer will keep the sources/quantity of supply of killas and bushing arrangements to check any sudden parallel flow etc.

EMPLOYMENT OF WATCHING ESTABLISHMENT.

iv) Watching gang will be employed or further raised as per stages of flood.

13.3.2. ESTABLISHMENT OF FLOOD FIGHTING CAMPS.

Local establishment will be deployed during the flood.

Camp No.	Points of Camps CFC	Discharge upto 2 Lacs				Discharge upto 4.00 Lacs.				Discharge upto 6.00 Lacs & above.			
		SDO	SEN	Mate	Beldars	SDO	SEN	1 No. Mate for 8 No. Beldars.	4 No Beldars per mile per shift for 2 shift.	SDO	SEN	1 No. Mate for 8 No. Beldars.	8 No Beldars per mile per shift for 2 shift.
1	RD 16+290	RD. 16+290 C.F.B	Chiniot Drainage Section		4	RD. 16+290 Chiniot Flood Bund	As per 1st Stage	4	32	SDO Chiniot & 1 No. Additional SDO	2	8	64
2	RD.24+720	-do-	Flood Bund Section-I 24+720		4	-do-	-do-	4	32	-do-	2	8	64
3	RD.55+000	-do-	Flood Bund Section-II 55+000		6	-do-	-do-	6	48	-do-	2	12	96
4	RD.88+500	-do-	Pindi Bhattian Drainage Section 88+500		4	-do-	-do-	6	32	-do-	2	8	64

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13.3.3 DUTIES OF OFFICERS/ OFFICIALS AND THEIR CAMP SITES.

(a). To Supervise, direct and control flood prevention measures and Flood Bunds protection activities, such as strengthening, maintenance, repair and construction of additional embankment.

(b). Operate gauge stations and provide information and data to authorities concerned for issuance of Alert and Danger warning messages.

(c). Coordinate, survey investigation of the extent of damage to Bunds, Embankment, Drains and Irrigation Tube wells.

(d). Assist and coordinate emergency repair of public services.

(e). Subsequently restore damaged public service.

(f). Supervise and coordinate actions to save stocks, equipment, machinery, etc, from damage.

Camp No.	Location	Officer Name + Designation + Mob. No.	Official Name + Designation + Mob. No.
1	RD 16+290 C.F.B	Mr. Zulifqar Ali Sub Divisional Officer, Mob. 0300-7632203	Mr. Gulzar Ahmad Sub Engineer, (Section-I) Mob:0333-6630459
2	RD.24+720 C.F.B	--do--	--do--
3	RD.55+000 C.F.B	---do---	Mr. Muhammad Faheem Sub Engineer (Section-II) Mob:0321-7710717
4	RD.88+500 C.F.B	---do---	---do---

PRINCIPAL ACTIONS.

(a). Complete repair of the flood protection works in the pre-flood season.

(b). Inspection of breaching sections to check the positioning and condition of the liners to ensure that the liners are ready to receive the charge when required.

(c). Review operating instructions for breaching sections, revision of critical levels to control the breaching sections.

(d). Review the plan for regulation of water supply.

(e) Carry out final survey and inspection of flood protection works.

(f). Providing funds to the Army for replenishment of stores.

(g). Prepare for Chiniot flood protection bund, and inventory of equipment, material with locations. Camp side RD.16+299, 24+720, 55+000 & 88+000.

13.3.4 DEPARTMENTAL MACHINERY AVAILABLE.

No departmental machinery is available.

13.3.5 MACHINERY AVAILABLE FROM PRIVATE SOURCE.

Machinery will be hired from Private Agency during flood season as per actual requirements.

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13.3.6 FLOOD FIGHTING MATERIAL REQUIRED.

13.3.7 FLOOD FIGHTING MATERIAL AVAILABLE

Sr. No.	Name of Item	Approved Qty as per yard stick	Unit	Required Quantity	Available Quantity	Balance Quantity	Remarks
1	2	3	4	5	6	6	7
1	Torches three cells (Chargeable Torches)	30	No	30	30	-	
2	E.Gunny bags	3000	No	3000	3000	-	
3	Sutli	25	Kg	25	25	-	
4	Wewing needles	50	No	50	50	-	
5	Bamboos 12'-14'	400	No	400	-	400	
6	Toot Baskats	500	No	500	500	-	
7	Khaji mat	200	No	200	200	-	
8	Oil Extractor	36	No	36	15	21	
9	Munj Ban	1000	Kg	1000	400	600	
10	Funnels	40	No	40	-	40	
11	Trunger (S W Wire)	600	No	600	-	600	
12	Chouldaries	30	No	30	13	17	
13	Tents	10	No	10	10	-	Short material will be purchased before flood season 2023
14	Driving Pegs	500	No	500	50	450	
15	Steel wire rope 1/2"	2000	Lft	2000	2000	-	
16	Hand Sew	36	No	36	30	6	
17	Manila rope of sorts.	600	Kg	600	-	600	
18	Karries	100	No	100	88	12	
19	G.I Wire 12 no.	500	Kg	500	500	-	
20	G.I. Bucket	200	No	200	200	-	
21	Plastic bags	2000	No	2000	2000	-	
22	Chairs	36	No	36	32	6	
23	Tables	9	No	9	9	-	
24	Generator 5-1/2 2000 watt	1	No	1	1	-	
25	Petrol	900	Ltr	900	-	900	
26	M.Oil	18	Ltr	18	-	18	
27	Wire 7 / 0.29	1350	Ft	1350	1350	-	
28	Wooden board 10 x 12'	9	No	9	3	6	

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13.4 DETAIL OF OTHER INFRASTRUCTURE LIKE ELECTRIC, SUI GAS, TELEPHONE INSTALLATION, ROAD NETWORK, OTHER BUILDING, CANALS & DRAINGE NETWORK.

INFRASTRUCTURES.

A	Petrol Pumps	=	10 No
B	C.N.G Station	=	7 No
•	Kubrika Drain and its system	=	Shown on map
•	Walaniwala Disty RD. 15+000 to tail.	=	Shown on map
•	Chiniot Disty and its structure between RD. 15+000 – 35+000.	=	Shown on map
•	Juniorwala Disty RD. 0+000 – tail and its system & Structure.		
•	Gas Pipe Line.		
C	Rice Mills/Factories	=	8 Nos.
D	Maqbool Gatta Factory	=	1 No.
E	Ahmed Straw Factory	=	1 No.
F	Ice Factories	=	4 Nos.
•	Area effected	=	3000 Acres

MOUZAS.

Sr #	Name of Village	Sr #	Name of Village	Sr #	Name of Village
1	Daluwala	2	Chak No.10J.B	3	Chak No.11 J.B.
4	Chak No.12 J.B.	5	Chak No.15 J.B.	6	Salotrianwala
7	Mouza Harsa Sheikh	8	Chak No.14 J.B	9	Chak No.15 J.B.
10	Mouza Ahmadabad	11	Thatta Glotran	12	Mouza Kot Sarwar
13	Mouza Jambla	14	Rao Bage	15	Luss Lawris
16	Mouza Rai Chand	17	Abadi Tahirabad	18	Sarounding Area of Chiniot City

Executive Engineer,
Samundri Drainage Division,
Faisalabad.

04/07/23

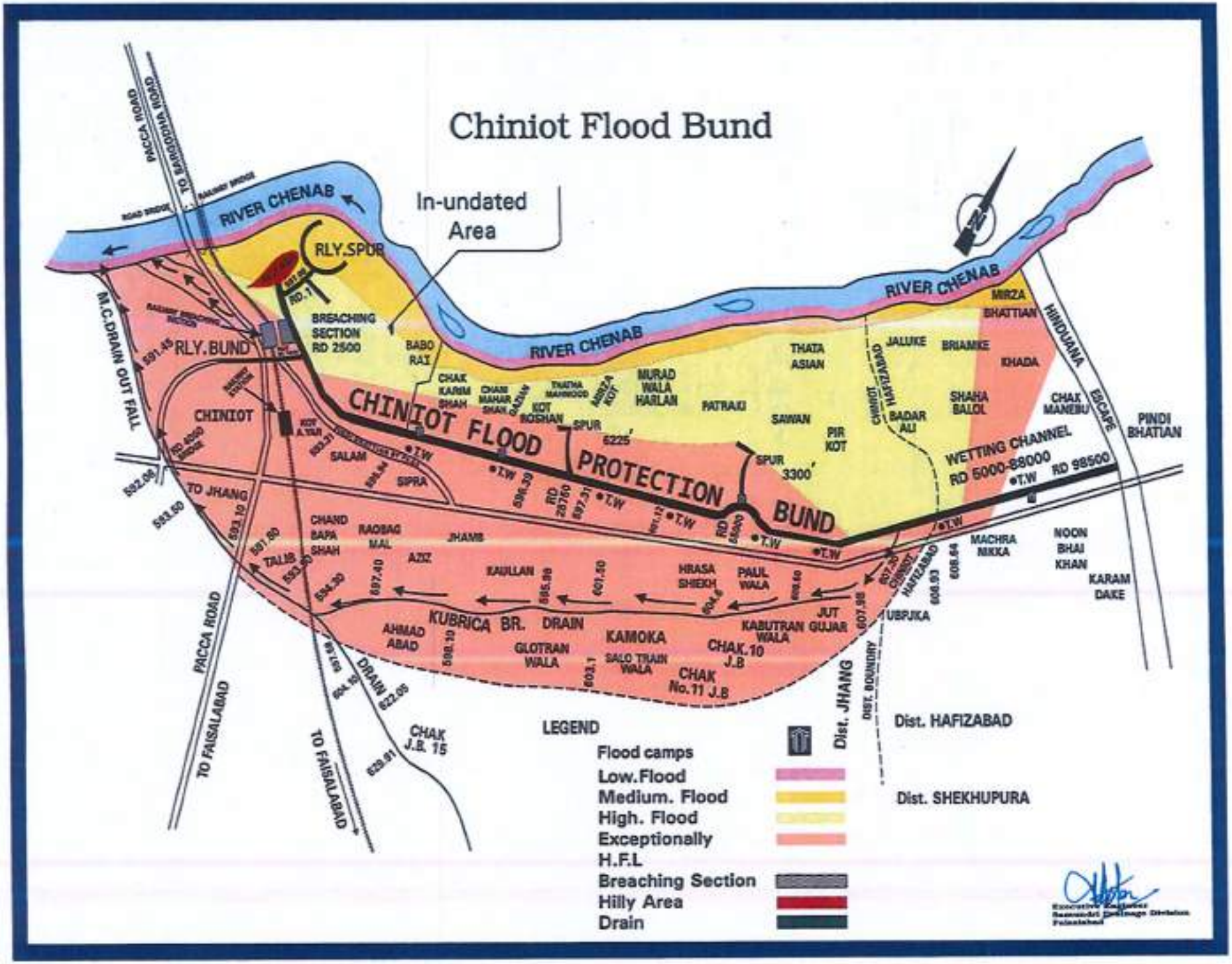
Superintending Engineer,
Drainage Circle, Faisalabad.

Chief Engineer,
Faisalabad Irrigation Zone,
Faisalabad.

PART – C

FLOOD FIGHTING PLAN

2023.


Chiniot Flood Bund
In-undated Area
RIVER CHENAB
RLY.SPUR
BREACHING SECTION RD 2500
RLY.BUND
M.C.DRAIN OUT FALL
CHINIOT
CHINIOT FLOOD PROTECTION BUND
WETTING CHANNEL RD 5000-88000
RD 98500
SPUR 6225'
SPUR 3300'
BABO RAI
CHAK KARIM SHAH
CHAK MAHAR SHAH
KOT ROSHAN
MURAD WALA HARLAN
PATRAKI
SAWAN
PIR KOT
THATA ASIAN
JALUKE
BRIAMKE
KHADA
MIRZA BHATTIAN
SHAHA BALOL
BADAR ALI
CHAK MANEBU
HINDUANA ESCAPE
PINDI BHATIAN
SALAM
SIPRA
CHAND BAPA SHAH
RAOBAG MAL
JHAMB
AZIZ
KAULLAN
HRASA SHEKH
PAUL WALA
KUBRICA BR. DRAIN
AHMAD ABAD
GLOTRAN WALA
KAMOKA
SALO TRAIN WALA
CHAK.10 J.B
CHAK No.11 J.B
KABUTRAN WALA
JUT GUJAR
UBPJKA
MACHRA NIKKA
NOON BHAI KHAN
KARAM DAKE
PACCA ROAD
TO JHANG
TO FAISALABAD
DRAIN
CHAK J.B. 15
Dist. JHANG
DIST. BOUNDRY
Dist. HAFIZABAD
Dist. SHEKHUPURA
LEGEND
Flood camps
Low.Flood
Medium. Flood
High. Flood
Exceptionally H.F.L
Breaching Section
Hilly Area
Drain

-37-

CHAPTER # 14

ACTION PLAN

14.1 RE-SHUFFLING / RECOUPING PLAN OF RESERVE STOCK OF STONE DEPARTMENTALLY.

Re-Shuffling/ Recouping of Reserve Stock of Stone will be carried out by local Machinery.

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

Sr. No.	Points	Reply
i)	Name of embankment.	Chiniot Flood Bund.
ii)	Location of crossing / outlet.	RD.68-69
iii)	Discharge capacity.	24 Cusec.
iv)	Methodology applied for crossing during flood.	Temporary closing of the pipe inlet during high flood.
v)	Details of crossing / outlet such B.D be the type of construction.	2 ft Dia R.C.C Pipe of Daluwala Try Drain.
vi)	Watching done during flood.	Watching will be done through Departmental Establishment during Flood Season.

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14.3 DEPLOYMENT MACHINERY (MEDIUM TO HIGH FLOOD).

Sr. No.	Name of Structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	Machine Deployed					Availability of Stone (Cft).
						Excavator	Dozer	Tractor Trolleys / Dumpers	Tractor with Front Blade	Labour Beldar	
1	2	3	4	5	6	7	8	9	10	11	12
1	Chiniot Flood Bund RD.0+000 to 46+000 including Spur at RD.28+750 **Section-I**	9.20	RD.16+000 to RD.24+000 (Small Bund)	RD.16+000 of Chiniot Flood Bund	Mr. Gulzar Ahmad Sub Engineer, (Section-I) Mob:0333-6630459	-	-	-	-	09	1.09 Lac Cft Chiniot Flood Bund Spur RD.28+750.
2	Chiniot Flood Bund RD.46+000 to 88+500 including Spur at RD.55+000 **Section-II**	10.50	RD.64+000 to RD.69+000 (Main Bund)	RD.55+000 of Chiniot Flood Bund	Mr. Muhammad Faheem Sub Engineer (Section-II) Mob:0321-7710717	-	-	-	-	11	1.10 Lac Cft Chiniot Flood Bund Spur RD.55+000.
		-				-	-	-	-	20	

Note:-

As per past history, flood water does not touch the Chiniot Flood Bund when medium to high in river Chenab due to which Machinery like dozer etc; is not provide.

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14.4 DEPLOYMENT OF MACHINERY (HIGH TO VERY HIGH FLOOD).

Sr. No.	Name of Structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	Machine Deployed					Availability of Stone (Cft).
						Excavator	Dozer	Tractor Trolleys / Dumpers	Tractor with Front Blade	Labour Beldar+Mate	
1	2	3	4	5	6	7	8	9	10	11	12
1	Chiniot Flood Bund RD.0+000 to 46+000 including Spur at RD.28+750 **Section-I**	9.20	RD.16+000 to RD.24+000 (Main Bund)	RD.16+000 of Chiniot Flood Bund	Mr. Gulzar Ahmad Sub Engineer, (Section-I) Mob:0333-6630459	1	-	2 / 1	1	74+9=83	1.09 Lac Cft Chiniot Flood Bund Spur RD.28+750.
2	Chiniot Flood Bund RD.46+000 to 88+500 including Spur at RD.55+000 **Section-II**	10.50	RD.64+000 to RD.69+000 (Main Bund)	RD.55+000 of Chiniot Flood Bund	Mr. Muhammad Faheem Sub Engineer (Section-II) Mob:0321-7710717	1	-	2	1	84+11=95	1.10 Lac Cft Chiniot Flood Bund Spur RD.55+000.
		-				**2**	**-**	**4 / 1**	**2**	**158+20=178**	

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14.5 DEPLOYMENT OF MACHINERY (VERY HIGH TO EXCEPTIONALLY HIGH FLOOD).

Sr. No.	Name of Structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	Machine Deployed					Availability of Stone (Cft).
						Excavator	Dozer	Tractor Trolleys / Dumpers	Tractor with Front Blade	Labour Beldar+Mate	
1	2	3	4	5	6	7	8	9	10	11	12
1	Chiniot Flood Bund RD.0+000 to 46+000 including Spur at RD.28+750 **Section-I**	9.20	RD.16+000 to RD.24+000 (Main Bund)	RD.16+000 of Chiniot Flood Bund	Mr. Gulzar Ahmad Sub Engineer, (Section-I) Mob:0333-6630459	1	1	4 / 1	2	120+16=146	1.09 Lac Cft Chiniot Flood Bund Spur RD.28+750.
2	Chiniot Flood Bund RD.46+000 to 88+500 including Spur at RD.55+000 **Section-II**	10.50	RD.64+000 to RD.69+000 (Main Bund)	RD.55+000 of Chiniot Flood Bund	Mr. Muhammad Faheem Sub Engineer (Section-II) Mob:0321-7710717	1	1	2 / 1	2	160+20=180	1.10 Lac Cft Chiniot Flood Bund Spur RD.55+000.
		-			**Total:-**	**2**	**2**	**6 / 2**	**4**	**280+36=316**	

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14.6 POLICE DEPLOYMENT PLAN.

Sr. No.	Site breaching section	Concerned Canal Division	Concerned Police Station & District	Police Personal to be deployed				Remarks (if Any)
				Inspector	SI	ASI	Constables	
1	RD.2+500 of Chiniot Flood Bund **(Section-I)**	Samundri Drainage Division, Faisalabad	Police Station Sadar Chiniot, District Chiniot	-	1	1	10	

2-

Sr. No.	Vulnerable sites used for illegal cuts during floods	Concerned Canal Division	Concerned Police Station & District	Police Personal to be deployed				Remarks (if Any)
				Inspector	SI	ASI	Constables	
2	RD.68+000 to RD.69+000 of Chiniot Flood Bund **(Section-II)**	Samundri Drainage Division, Faisalabad	Police Station Sadar Chiniot, District Chiniot	-	1	1	10	

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14.7 DETAILS OF SYNTHETIC BAGS WITH CAPACITY OF 500 KG AND 100 KG.

SYNTHETIC BAGS WITH CAPACITY OF 500 KG and 100 KG

500 Kg		100 KG		Remarks
Required (bags)	Available (bags)	Required (bags)	Available (bags)	
125	Nil	100	Nil	Balance will be procured before flood season 2023

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

POLYETHENE SHEET 300 GAUGE

Chiniot Flood Bund = 200,000 Sft.

Required (Sft)	Available (Sft)	Remarks
200,000	Nil	Balance will be procured before flood season 2023

Executive Engineer,
Samundri Drainage Division,
Faisalabad.

CHAPTER # 15

BACKUP DIVISIONS (IN CASE OF BREACH).

Faisalabad Drainage Division, Faisalabad & Faisalabad Division L.C.C. (W), Faisalabad are backup Divisions in case of breaching of Chiniot Flood Bund.

Executive Engineer,
Samundri Drainage Division,
Faisalabad.