

**GOVERNMENT OF THE PUNJAB**  
**IRRIGATION DEPARTMENT**  
**SARGODHA IRRIGATION ZONE**  
**SARGODHA.**



**FLOOD FIGHTING PLAN**  
**2024**

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**EXECUTIVE ENGINEER, KIRANA DIVISION LJC, SARGODHA.**  
**LOWER JHELM CANAL CIRCLE, SARGODHA**

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OFFICE OF THE  
CHIEF ENGINEER IRRIGATION  
SARGODHA ZONE SARGODHA  
email: sw2.irrigation.sargodha@gmail.com

To

The Superintending Engineer,  
Lower Jhelum Canal Circle,  
Sargodha.



No. 4719 /W-II/VI-9

Dated 22 /04/2024.

Subject: - FLOOD FIGHTING PLAN FOR THE YEAR 2024.

The flood fighting plan for the year 2024 pertaining to Executive Engineers Kirana Division LJC Sargodha, Sargodha Canal Division Sargodha and Bhalwal Canal Division Bhalwal have been signed by worthy Chief Engineer Sargodha and enclosed herewith.

You are requested to please ensure the submission of Flood Fighting Plan 2024 to the following concerned quarters:-

1. The Secretary,  
Government of the Punjab,  
Irrigation Department, Lahore.
2. The Secretary,  
Punjab Flood Commission,  
Drainage & Flood Zone,  
Engineers Academy, Thokar Niaz Baig,  
Lahore.
3. The Chief Engineer,  
Drainage & Flood Zone,  
Engineers Academy, Thokar Niaz Baig,  
Lahore.
4. The Flood Relief Commissioner,  
Board of Revenue (Punjab) Lahore.
5. The Deputy Director (Hydraulics)  
HSSEU D&F Zone Lahore.
6. The Assistant Director (Technical),  
Relief & Crisis Management Department,  
40/A Lawrence Road, Lahore.

CHD  
15/4/24  
SE/L.J.C.

7. The Commander.  
Headquarter Engineers concerned Corps:
8. The Commanding Officer,  
(Rachna warriors ) 29 Radar,  
Controlled Gun Air Defence Regiment,  
Sargodha Garrison.
9. The Commissioner Concerned.
10. The D.C. Concerned.
11. The Additional District Collector, Concerned.
12. The Director General Provincial Disaster  
Management Authority,  
40/A Lawrence Road, Lahore.

The flood fighting plan 2024 must reach in above offices as well as 02 copies to this office and 04 copies to Chief Engineer D&F Zone Lahore within 02-days positively.

DA/As above.

Executive Engineer (OP),  
for Chief Engineer Irrigation Zone,  
Sargodha.

*BK*  
20/4/24

D/Goraya/20/04/2024/Flood Fighting Plan 2024 LJC Bhalwal Sargodha Kirana Approval

2269-71 23-04-24  
Copy forwarded to Kirana & Bhalwal  
for compliance  
as directed today positively

DD/As above  
(Concurrence  
F&D of each division)





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,  
Kirana Division LJC,  
Sragodha.

No.D&F/2024/ 614 /25/76,

Dated 03 /04/2024.

SUBJECT: - FLOOD FIGHTING PLANS FOR FLOOD SEASON 2024.

Ref:- Your office letter No.345/16-R, Dated 26.02.2024.

The Flood Fighting Plan 2024 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 2024, 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.

DEPUTY DIRECTOR FLOOD

For Chief Engineer Drainage & Flood Zone  
Irrigation Department Punjab, Lahore.

C.C.

1. The Chief Engineer Irrigation Sragodha Zone, Sragodha.
2. The Superintending Engineer Lower Jhelum Canal Circle, Sragodha.

# **PART – A**

## **Table of Contents**

### **PART – A**

1. Salient feature of Kirana Division LJC.....	1
1.1 Location.....	1
1.2 General Description.....	1
1.3 Administrative setup .....	3
2. Flood Protection and River Training Works .....	4
2.1 Design parameter of Training Works. ....	4
2.2 Location Map. ....	4
3. Brief history of past flood events.....	5
4. Design Data, Historic peak flood data and previous five years flood data of Head Works / Barrages and or other control points.....	7
4.1 Flood Limits .....	7
4.2 Time Lags of Floods .....	7
4.3 Highest Floods.....	7
4.4 Peak discharges .....	8
5. Flood Histogram .....	9
5. Flood Fighting Strategy.....	10
6. Flood Damages Restoration Works. ....	13
7. Flood Fighting Watching Arrangement. ....	14
7.1 Pre-Flood Arrangement .....	14
7.2 Watching Establishment.....	15
7.3 Arrangement at Sensitive sites.....	15
7.4 Watching Material.....	16
7.5 Arrangement for Sounding & Probing.....	17
7.6 Lighting Arrangement.....	17
7.7 Ration Arrangement .....	17
7.8 P.O.L. Arrangement for Vehicle .....	17
7.9 Transportation .....	17
7.10 Law and order .....	17
7.11 Medical Arrangement for Labour.....	17
7.12 Liaison with other Department.....	17
7.13 Role of the Army.....	17
7.14 Duties of Telephone Attendant.....	18
7.15 Wireless Arrangements .....	18
8. Detail of Encroachment. ....	19
9. Duty Roster/Flood Fighting Program .....	20
10. Emergency Telephone Nos. ....	21
11. Standard operating procedure (SOP) for Breaching Sections .....	22
11.1 History of the breaching section.....	22
11.2 Location, Design, Quantity and Variety of the explosive required for detonation...22	
11.3 Arrangement of explosives and security of explosive stores.....	22
11.4 List of the security staff alongwith detail of their training etc .....	22
11.5 Detail of mechanical means as a standby arrangements in case of detonation failure.....	22
11.6 Duty Roster in case of critical situation .....	22



11.7	Breaching Committee with their action plan.....	22
11.8	List of the villages likely to be inundated in case of breach .....	22
11.9	Announcement and detail of evacuation arrangements.....	22
11.10	Details of coordination with Civil/Army Authorities .....	22
11.11	Parallel communication arrangements.....	22
11.12	Index Plan.....	22
<b>PART – B</b> .....		23
12.	Vulnerable sites on Flood Bund/Structures:.....	24
12.1	Apprehended breach sites in Flood Bunds/Structures.....	24
12.2	Operation of breaching sections. ....	24
12.3	Breaches due to rising of flood water, deterioration of flood bunds etc.....	24
13.	Emergency Contingency Plan for vulnerable site (sites) listed above. Emergency Contingency Plan must include:- .....	25
13.1	Plan showing route of Flood Water coming out of the breach supported with levels.....	25
13.2	Detail of villages abadies likely to be affected and this should also be shown on the plan.....	25
13.3	Strategy and action taken be explained in detail. This may include.....	25
13.3.1	Arrangements .....	25
13.3.2	Establishment of Flood Fighting Camps. ....	26
13.3.3	Duties of Officers / Officials and their camp sites.....	26
13.3.4	Departmental Machinery available.....	26
13.3.5	Machinery available from Private Source .....	26
13.3.6	Flood Fighting Material required .....	27
13.3.7	Flood Fighting Material available .....	28
13.4	Detail of other infrastructure like electric, Sui Gas, Telephone installations, road network, other buildings, canals and drainage network. ....	28
14.	Action Plan.....	29
14.1	Re-shuffling/ recouping plan of reserve stone departmentally. ....	29
14.2	Detail of inlet/outlet crossing along with closing methodology. ....	29
14.3	Deployment of Machinery (Medium to High Flood) River Chenab. ....	30
14.4	Deployment of Machinery (High to Very High Flood) River Chenab. ....	31
14.5	Deployment of Machinery (High to Exceptionally High Flood) River Chenab. ....	32
14.6	Police deployment plan.....	33
14.7	Detail of synthetic bags with capacity of 500 kg and 1000 kg. ....	34
14.8	Details of polythene sheets of black colour to protect upstream slope against wave action and to control seepage through embankments. ....	35
15.	Back up Divisions (in case of breach).....	36
Plan reserve stock of stone at Mamola guide wall spur. ....		37
<b>LONG SECTION OF KOT NAJA FLOOD PROTECTION BUND PART -I</b> .....		38
<b>LONG SECTION OF KOT NAJA FLOOD PROTECTION BUND PART -II</b> .....		39
L-Section of Mamola Guide Wall Spur.....		40
L-Section of Inverted Hockey Spur .....		41
Revised L-Section of Khadir Disty Flood Bund .....		42
INDEX PLAN .....		43

# CHAPTER-1

## 1. Salient feature of Kirana Division LJC

### 1.1 Location

Kirana Canal Division Sargodha falls in Chenab-Jhelum Doab areas comprising part of Lower Jhelum Canal Sargodha which off-takes from left flank of river Jhelum having its jurisdiction upto right flank of river Chenab partially in District, Sargodha and Chiniot.

There are three Main Channels in the jurisdiction of this Division which are as under:-

- |    |                                    |                      |
|----|------------------------------------|----------------------|
| 1. | Kirana Disty: RD 0 - 206542 (Tail) | Discharge 440.68 Cs. |
| 2. | Khadir Disty: RD 0 - 273600 (Tail) | Discharge 235 Cs.    |
| 3. | Lalian Disty: RD 0 - 184000 (Tail) | Discharge 375 Cs.    |

These 03 No. Systems irrigate the areas in District Sargodha & Chiniot and are controlled by respective Sub Divisional Officers headed by the Executive Engineer Kirana Division LJC, Sargodha. Names and locations of Sub Divisional Offices are given below.

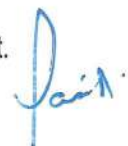
Sr. #	Name of Sub Division	Location (Head Quarter)
1	Laluwali Sub Division	Laluwali Canal Rest House at RD 60000/L of Lalian Disty
2	Khadir Sub Division	Kot Naja Canal Rest House at RD 33000-34000/R of Khadir Disty
3	Kirana Sub Division	At Katchary Road Sargodha

### 1.2 General Description.

This Division falls in Chenab-Jhelum Doab areas. Detail description of Canal Systems and river reach are as per following.

#### 1. Khadir Irrigation system

This Canal System Khadir Disty off-take at RD 117220/L of Khadir Feeder with designed discharge of 235 Cs. Its jurisdiction starts from tail of Khadir Feeder and ends near village Pipal Bhutta of Tehsil Lalian District Chiniot. It consists of 16 Nos. irrigation channels which traverse along the right bank of river Chenab partially in District Sargodha & District Chiniot.



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Khadir Disty system is protected by Kot Naja Flood Bund (Length RD 91440 – 132500)

8.212 Mile & Mamola Guide Wall Spur (Length RD 0-7000) 1.40 Mile. The Flood bund from RD 0 - 91440 now falls in jurisdiction in Bhalwal Division whereas RD 91440 - 132500 is controlled by Kirana Division till it meets Khadir Disty at RD 66000-67000 and now it's called Khadir Disty Flood Bund RD 66+450 to 68+034 (0.317 miles) and L.B.N Drain.

The Bund runs along right bank of the River Chenab with average distance from the river are about five miles.

Mamola Guide Wall Spur is located near village Muhammad Wala and protects agricultural land, local abadies and public infrastructure from flood havoc at large.

## **2. Lalian Disty System**

This irrigation System off-takes from tail RD 104300/L of Southern Branch near Ghullapur Canal Rest House. Its designed discharge is 375 Cs. and consists of 15 No Minor & Sub Minor. Length of Lalian Disty: is 184000 ft. and ends near Chak 62/SB Tehsil Lalian District Chiniot.

## **3. Kirana Disty System**

This irrigation System off-takes from tail at RD 104300/R of Southern Branch near Ghullapur Canal Rest House. Designed discharge is 440.68 Cs. It consists of 14 No off-taking channel. The length of Kirana Disty is 206542 ft. and ends near Tehsil Sillanwali. Its main off-taking channel is Chokera Disty: having discharge of 118 Cs.

The territorial jurisdiction of this Division falls in District, Sargodha & Chiniot. Network of Three major canals to provide gravity flow perennial irrigation with various intensities viz 75% & 40% to feed an overall C.C.A comprising 363152 acres in addition to commanding 419609 acres well flourished superb garden areas and orchards through 706 No outlets by utilizing 1074.68 Cs: discharge supplemented by river supplies from Mangla Dam reservoir through Lower Jhelum Canal, off-taking at Rasul Barrage.

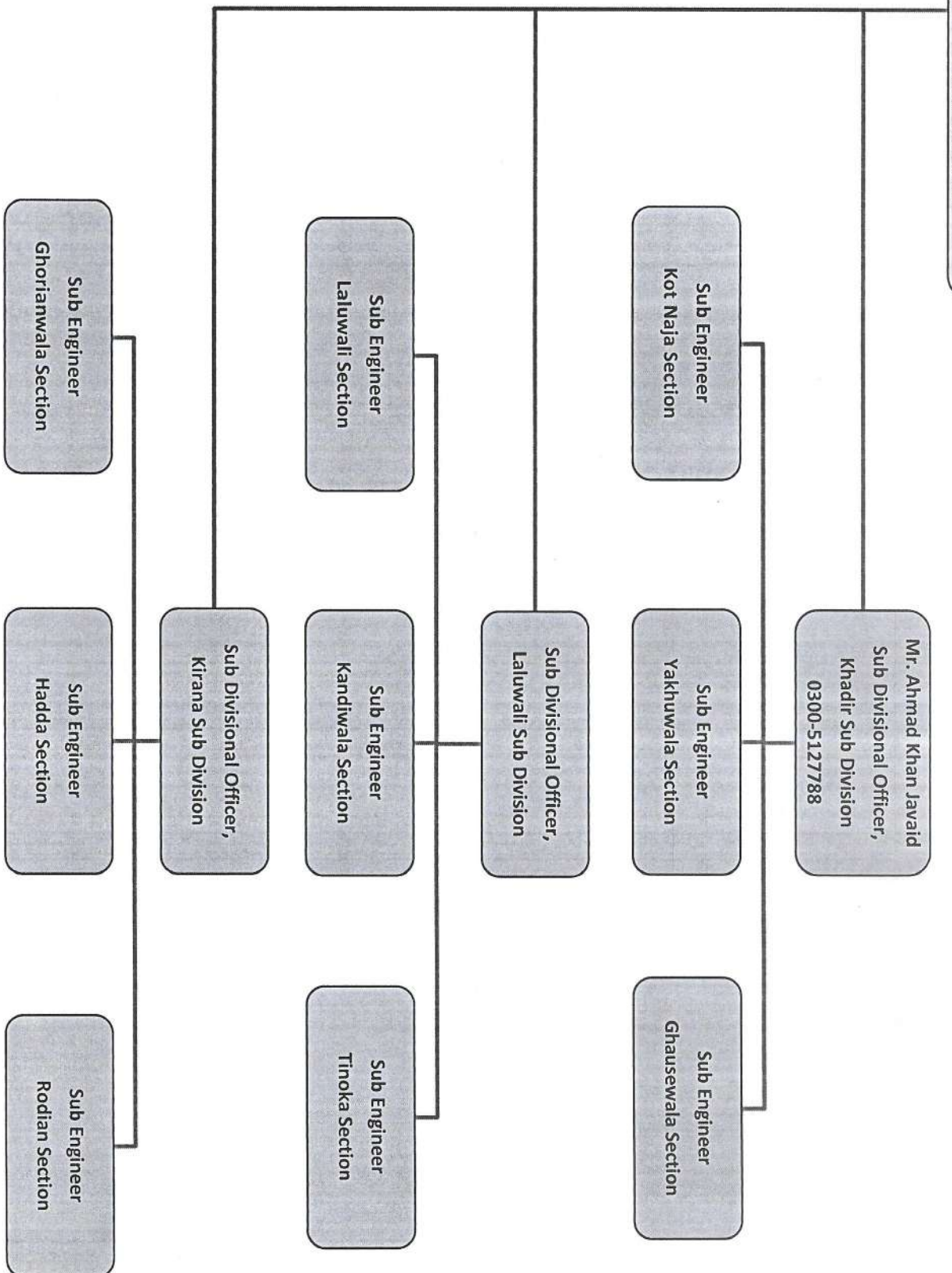


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Mr. Adnan Amjid  
Executive Engineer,  
Kirana Division LJC, Sargodha  
0345-5165764

### 1.3 Administrative setup

Administrative setup plan of Kirana Division LJC attached



## CHAPTER-2

### 2. Flood Protection and River Training Works

#### 2.1 Design parameter of Training Works.

There is one flood protection bund & two river training works in this Division which are as under.

##### I- Flood Embankment.

- a) Kot Naja Flood Bund RD: 91+440 – RD: 132+500 (8.212 Mile)
- b) Khadir Disty Flood Bund RD: 66+450 – 68+034 (0.317 Mile)

##### II- River Training Work.

- a) Mamola Guide Wall Spur RD: 0+000 – 7+000 (1.40 Mile)  
with 16 No. earthen studs = 16 x 300' (0.96 Mile)
- b) 8 No. solid stone studs at Darbar Syed Sahib Shah

##### Design Parameters.

##### I- Flood Embankment.

Description	Length (Mile)	Top Width (ft.)		Side Slope		Year of Construction
		RD	Width	R/S	C/S	
Kot Naja Flood Bund RD 91+440-132+500	8.212	91440-132500	20.00	3:1	2:1	1905
			25.00	3:1	2:1	Rehabilitation in 2019 by PIU.
Khadir Disty Flood Bund RD: 66+450 – 68+034	0.317	66450-68034	25.00	3:1	2:1	2023

##### II River Training Work.

Description	Length (Mile)	Top Width (ft.)		Side Slope		Year of Construction
		RD	Width	R/S	C/S	
Mamola Guide Wall Spur RD 0+000-7+000	1.40	0-7000	25.00	3:1	2:1	1997

Description	Length (ft.)	Top Width (ft.)	Side Slope	Year of Construction
<b>8 No. solid stone studs at Darbar Syed Sahib Shah</b>				
Stud No.1	25	15	1:1	2015
Stud No.2	50			
Stud No.3	60			
Stud No.4	80			
Stud No.5	25			
Stud No.6	25			
Stud No.7	50			
Stud No.8	80			2022

#### 2.2 Location Map.

Location map attached with page-43.

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## **CHAPTER-3**

### **3. Brief history of past flood events.**

During flood of 1995-1996, the spill of river Chenab with 644397 & 853231 Cs. discharge respectively touched Kot Naja flood bund in reaches RD: 63000 to 90000 with no damage occurred,

However, in 1997 the river Chenab with its peak on 28.8.1997 having discharge of 873443 Cs. damaged Mamola spur due to parallel flow action on D/S side.

On 13-14/03/2007 heavy rains in catchment area in the territory of Jammu & Kashmir caused high flood in river Chenab, This unexpected flood was recorded as 289000 Cs: and its effect reached at Mamola guide wall spur site, a significant change in the flow pattern of river at this high discharge intensity was observed. Due to this, the upstream curved portion (Nose) was under direct hit of the river current which caused swirls formation in the vicinity of nose. The eddies generation caused abnormal scouring which resulted launching / washing away of apron in length of 172 ft. The damage was further intensified during the flood 2010 upto 200 ft. length. To restore the structure the work namely: Rehabilitation of Mamola Guide Wall Spur on Right Side of River Chenab was completed before flood season 2014.

During flood of 2014, the spill of river Chenab with 903504 Cs. Discharges also touched Kot Naja flood bund in reach RD 49000 to 71000 and damage occurred in reach RD 70000-71000 which was filled later on. No damage occurred to Guide Walls Flood Bund in 2015 & 2016 against discharges of 161054 Cs. & 405542 Cs. respectively.

During flood season 2017, river regime upstream of Motorway (M-2) Bridge was changed due to obstruction caused by choked bays along left side of the river, resultantly, river flow has been diverted along right bank and created emergent situation posing threat to abadies, Agricultural Land & Imambargah.

#### **PROTECTION OF ABADIES AND AGRICULTURE LAND OF VILLAGE TALIBWALA DOWNSTREAM MOTORWAY M-2 BRIDGE**

A group of people met the Deputy Commissioner, Sargodha on 22-01-2020 who vide his letter No. 100/FRC dated 31-01-2020 informed that their village Tallibwala having population of 5000 people is under direct threat of the River Chenab, which has eroded about 200 Acres of Land. They also submitted that if no protective measures are adopted their agriculture land and houses will be vanished soon.

As there is no Irrigation infrastructure under the threat of River Chenab, according to Flood Policy Notified vide No. SO(Flood)VII-3/2004 dated 12-07-2019 being a Chairman of District Disaster Management Committee Deputy Commissioner, Sargodha desired to provide appropriate solution for protection of land under river action. The matter was referred to Departmental Expert Committee for possible solution vide Chief Engineer, letter No. 4844/W-II/238/84 dated 14-03-2020.

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Continuous erosion of agriculture land by current flows downstream Qadirabad Barrage near Village Talibwala. The erosive action will soon erode/inundate the Village Talibwala just 300 ft away from the River bank Talibwala require emergent provision of Flood protection / embankment. In this regard Physical model Study for a long-term technical solution has been completed at Nandipur Research Institute and resultantly PRO Hydraulics vide letter No. 1373/PRO (H)/83-M dated 27.06.2023 shared minutes of meeting of the DEC held on 22.06.2023. The PC-I has been approved by Administrative Department vide No. SO.(Floods)VI-11/2023 dated 20.10.2023 amounting to Rs. 216.947 Millions & construction of Inverted Hockey Spur of work started at site and it will be completed before flood season 2024 due to availability of funds.



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## CHAPTER-4

### 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

Floods limits for River Chenab are as below:

Head Works	Lac Cs:				
	Low	Medium	High	Very High	Exceptionally High
Marala	1.00 to 1.50	1.50 to 2.00	2.00 to 4.00	4.00 to 6.00	More than 6.00
Khanki	1.00 to 1.50	1.50 to 2.00	2.00 to 4.00	4.00 to 6.00	More than 6.00
Qadirabad	1.00 to 1.50	1.50 to 2.00	2.00 to 4.00	4.00 to 6.00	More than 6.00

Source: Federal Flood Commission Islamabad.

#### 4.2 Time Lags of Floods

Following are the time lags for high flood condition in River Chenab.

Location		Distance (Km)	Time Lag (Hour)		Remarks
From	To		Range	Indicative Average	
Marala	Khanki	56	10-14	12	i) Indicative average time lags values may vary in view of conditions / factors prevalent at the time of flood flows. ii) These values are for high flood conditions and may be used by the concerned agencies for rescue / evacuation purposes.
Khanki	Qadirabad	30	06-10	7	
Qadirabad	Trimmu.	214	60-84	72	
Qadirabad	MainaHazara.	40	-	12	
MainaHazara.	ChiniotBridge	80	-	24	

Source: Federal Flood Commission Islamabad.

#### 4.3 Highest Floods

The highest flood discharges recorded downstream Qadirabad Barrage during last five year are as under:

Year	D/S Qadirabad
2018	172031 Cs
2019	159544 Cs
2020	258954 Cs
2021	167812 Cs
2022	202149 Cs
2023	185749 Cs



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#### 4.4 Peak discharges

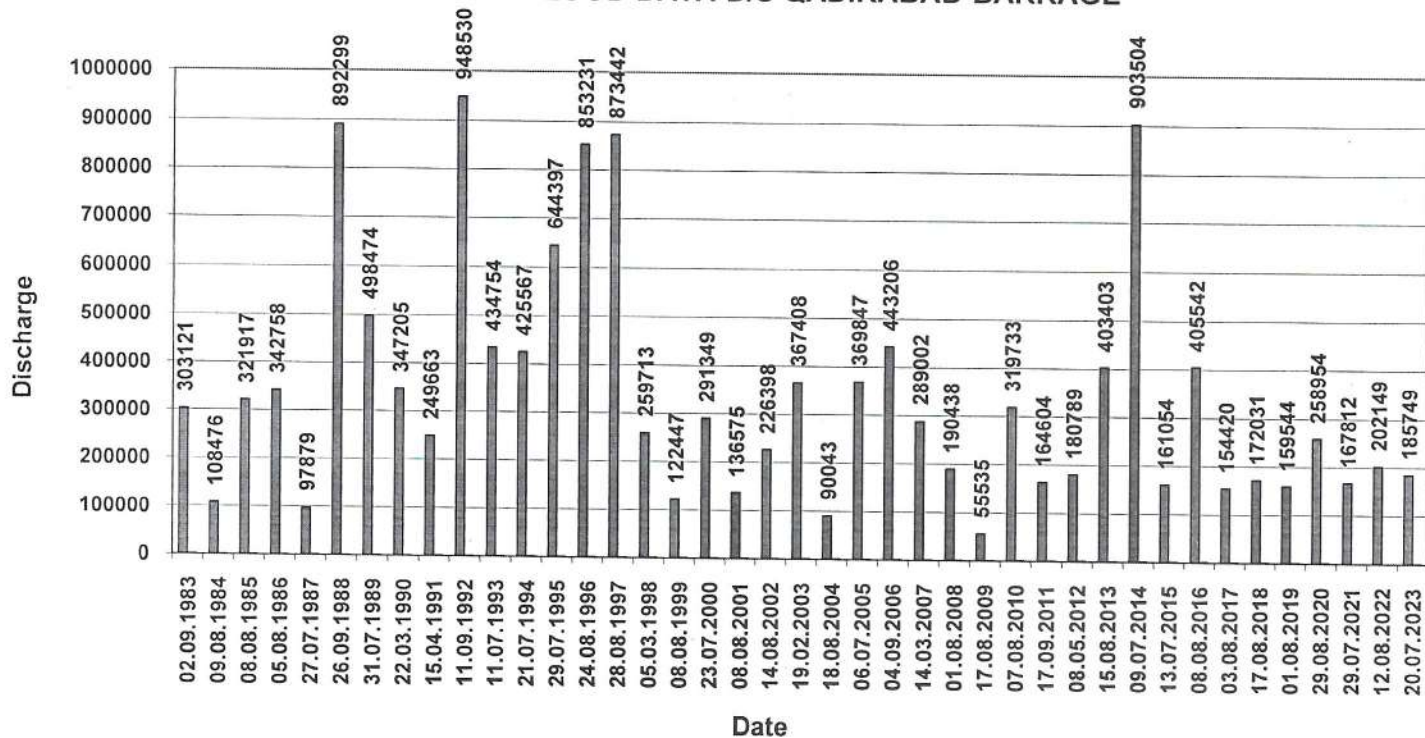
Date	Discharge (Cs)	Pond Level (ft.)
<b>Downstream Qadirabad Barrage</b>		
02.09.1983	303121	696.00
09.08.1984	108476	694.20
08.08.1985	321917	696.50
05.08.1986	342758	695.70
27.07.1987	97879	691.40
26.09.1988	892299	700.30
31.07.1989	498474	697.60
22.03.1990	347205	695.90
15.04.1991	249663	694.50
11.09.1992	948530	700.50
11.07.1993	434754	697.30
21.07.1994	425567	697.00
29.07.1995	644397	699.00
24.08.1996	853231	700.50
28.08.1997	873442	700.80
05.03.1998	259713	694.50
08.08.1999	122447	691.60
23.07.2000	291349	693.70
08.08.2001	136575	691.70
14.08.2002	226398	694.60
19.02.2003	367408	696.20
18.08.2004	90043	691.50
06.07.2005	369847	697.00
04.09.2006	443206	699.10
14.03.2007	289002	693.05
01.08.2008	190438	692.05
17.08.2009	55535	690.85
07.08-2010	319733	696.01
17-09-2011	164604	691.85
05-08-2012	180789	691.97
15-08-2013	403403	696.90
07-09-2014	903504	701.70
13-07-2015	161054	694.50
08-08-2016	405542	696.95
03-08-2017	154420	694.00
14-08-2018	172031	692.80
01-08-2019	159544	684.70
29-08-2020	258954	693.00
29-07-2021	167812	688.25
12-08-2022	202149	694.00
20-07-2023	185749	692.95

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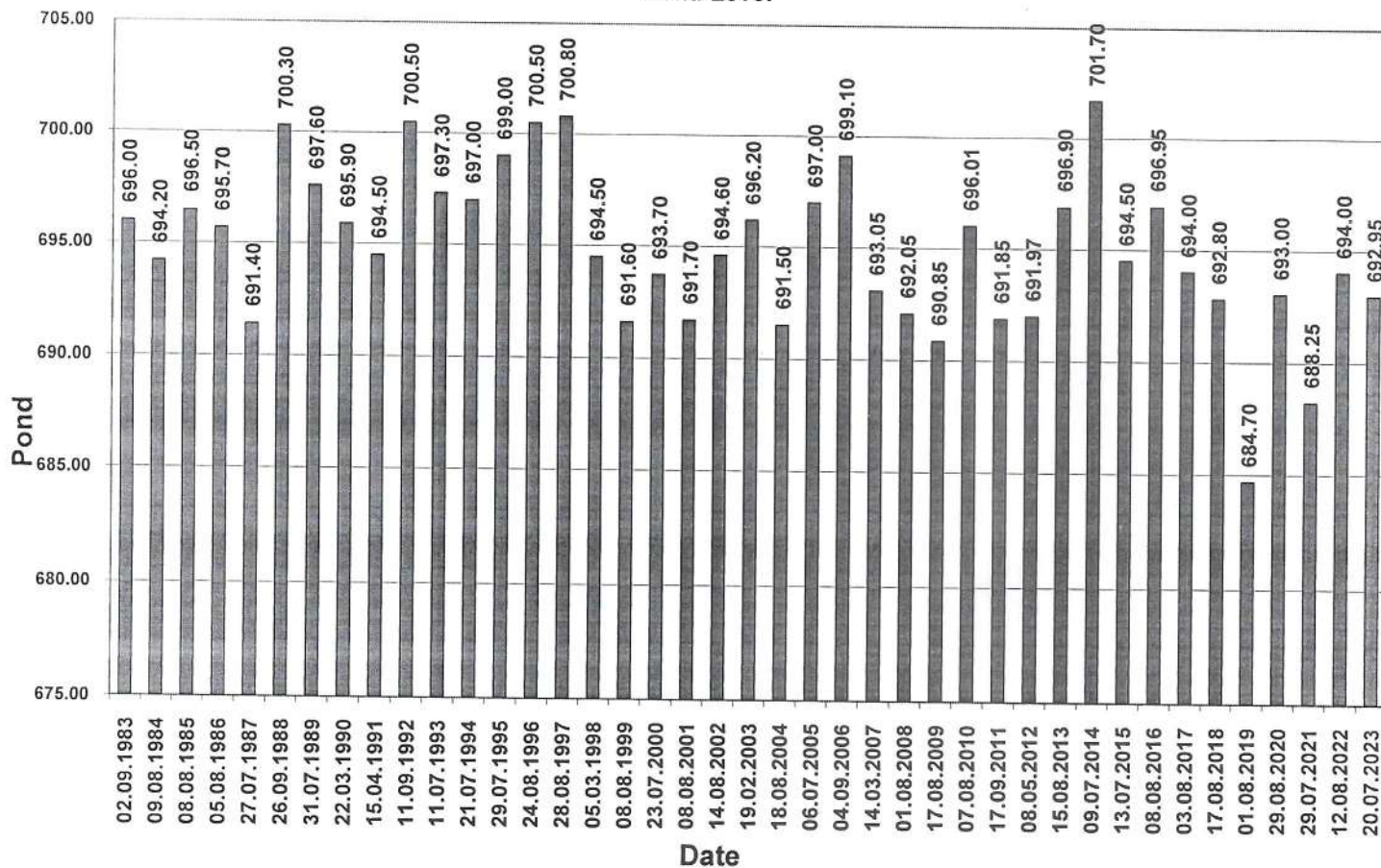


## 5. Flood Histogram

### HISTORIC PEAK FLOOD DATA D/S QADIRABAD BARRAGE



### Pond Level





## CHAPTER-5

### 5. Flood Fighting Strategy

In view of the experience of past year's floods history, constant watch is required during the flood season, great care and caution will be required for fixation of appropriate relief spots for flood fighting on different canals, flood bund and spur.

#### Canal System.

Khadir system runs parallel to river Chenab and up to RD 67+500 is protected from the spill of river by Kot Naja flood bund. The remaining part of Khadir Disty RD95000 to 273600-Tail and its allied channels on left side always remain under threat of river spill and require continuous watching. The Khadir Disty System comprises of following canals.

Canal System	Canal	Length (mile)	Discharge (Cs)
Khadir Disty System.	Khadir Disty.	54.72	235.00
	Ahmad Nagar Minor.	3.35	8.00
	Pillowal Minor.	5.94	11.00
	Khai Branch Disty.	6.67	19.00
	Jabana Minor	1.58	4.50
	Walla Minor	3.67	13.00
	Pir Punja Minor.	4.01	7.00
	Vijhulke Minor.	2.30	3.50
	Kalri Minor.	2.39	3.00

#### Camp / Sites.

The Department has proposed to install camp stations for protection of irrigation canals on Kot Naja Flood Bund, Mamola Guide wall spur and 8 No. solid stone studs at Darbar Syed Sahib Shah.

#### On Canals.

Canals	Reach RD	Length (mile)	Battle Camp Station
KhadirDisty.	95000-180000	17.00	Yakhuwala Rest House.
KhadirDisty.	180000-273000-T	18.60	Gausewala Rest House.
Ahmad Nagar Mr.	0 – Tail	3.35	Yakhuwala Rest House.
Pillowal Mr.	0 – Tail	5.90	Yakhuwala Rest House.
Khai Branch Disty.	0 – Tail	6.67	Yakhuwala Rest House.
Jabana Mr.	0 – Tail	1.58	Yakhuwala Rest House.
Walla Mr.	0 – Tail	3.67	Gausewala Rest House.
PirPunja Mr.	0 – Tail	4.01	Gausewala Rest House.
Vijhulke Mr.	0 – Tail	2.30	Gausewala Rest House.
Kalri Mr.	0 – Tail	2.40	Gausewala Rest House.

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On Bund, Spur & river training work.

Description	Reach RD	Length (mile)	Battle Camp Station
Kot Naja Flood Bund.	91440-132500	8.212	RD 93750
Mamola Guide Wall Spur.	0-7000	1.40	RD 0+000
8 No solid stone studs	At Darbar Syed Sahib Shah		

The Sub Divisional Officer, Khadir Sub Division will be the overall in-charge for operation of Kot Naja Flood bund, channels on Khadir system, Mamola Guide Wall spur and 8 No solid stone studs.

- Above mentioned camps will be installed on sites for supervision of the protection activities during emergency. For all spots sufficient articles of stock items will be available in all these camps.
- There are provisions for engagement of work charge establishment to supplement the efforts of regular establishments.
- Sub Divisional Officer, Kirana Sub Division will remain in touch with Flood Control Office, during Flood period after receiving warning that the river is in high flood, he will immediately shift his headquarter to Kot Naja Flood bund at RD 93750 and assist Sub Divisional Officer, Khadir in flood fighting operation.
- Sub Divisional Officer, Lahuwala will shift his headquarter to Yakhuwala Rest House to supervise and provide guidance to Sub Engineer Yakhuwala till the danger is over and the flood water subsides.
- Executive Engineer Kirana Canal Division is fully competent to change duty of any officer / official.

Following channels are directly affected by the RIVER Chenab spills. The channels function as flood embankment and protection to the towns (like Mahiwal, Yakhuwala), abadies, crops and other infrastructure, against the flood. The reaches of channels which are affected by river spills and where the channels function as flood bunds are:-

Sr. #	Channel	Reach	Length (mile)
1.	Khadir Disty:	RD: 0-67500.	13.50
2.	Ahmad Nagar Mr.	RD: 0-16730- Tail	3.35
3.	Pillowal Minor.	RD: 0-29715- Tail	9.43
		Total	26.28



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In view of vulnerable location of channels, being in the flood plain, it is essential to take up flood preparedness activities like strengthening weak and ghat sites, clearance of jungle, shrubs from banks and slopes and making them fit to face the ensuing floods. Therefore a gang of one man per mile is employed from 1<sup>st</sup> June to 30<sup>TH</sup> September for preparedness of the upcoming flood, in addition to existing establishment of one beldar in six miles length of canal.

i. LOW FLOOD DISCHARGE 100000 – 150000 Cs.

No extra labour will be employed. The labour arranged for preparedness will continue as such.

ii. MEDIUM FLOOD DISCHARGE 150000 – 200000 Cs

In medium flood the scale will be two men / mile / shift for three shift in a day and arranged through the external contractor.

iii. HIGH FLOOD DISCHARGE 200000 – 400000 Cs.

The flood water spills out and inundates the low lying areas and touches the flood bund. The watching is necessary to be arranged. Therefore, three men for day & night per mile are employed, including the existing gang as arranged by the external contractor.

iv. VERY HIGH FLOOD DISCHARGE 400000 – 600000 Cs.

All activities will remain as such. The watching establishment will be raised to two men per mile on channels and four men per mile for three shifts on Kot Naja Flood Bund as arranged by the external contractor.

v. EXCEPTIONALLY HIGH FLOOD ABOVE 600000 Cs.

This stage warrants alarming situation. The watching labour will be raised to three men per mile per shift on channels and six men per mile per shift for three shifts on bund. On receipt of exceptionally high flood warning, Deputy Collector, Kirana along with concerned Zilladars and Canal Patwaries will shift their camp at Yakhuwala Rest House.



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## **CHAPTER-6**

### **6. Flood Damages Restoration Works.**

Overall condition of flood protection infrastructure was satisfactory. However, no any damages to houses / lives have been reported. River erosive action was observed near Darbar Syed Sahib Shah Village Talibwala along right Bank of River Chenab Downstream Motorway M-2 Bridge. There is no structure damage during the flood season 2023 and hence, no flood restoration work is pending in Kirana Canal Division. However Construction of Inverted Hockey Spur as proposed by the Director Hydraulics Irrigation Research Institute Lahore is under progress at site along-with it is planned to rehabilitate the Mamola Guide Wall Spur before flood season 2024. The necessary estimate is sanctioned and Job order is requested to Executive Engineer, Machinery Division Lahore and it may rehabilitate depending upon availability of funds alongwith repairing/ maintenance of Kot Naja Flood Bund through filling rain cuts & gharas etc.



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## CHAPTER-7

### 7. Flood Fighting Watching Arrangement.

#### 7.1 Pre-Flood Arrangement

Sr. No.	Activity	Newly Progress	Compliance Report
I.	<b>Preparation of Flood Fighting Plan.</b>		
	a) Submission of Draft Divisional Plans by Zonal Chiefs to Chief Engineer Drainage and Flood(after scrutiny by SEs/CEs).	01-03-2024	Submitted
	b) Review by Chief Engineer D&F.	31-03-2024	
	c) Final submission of Flood Fighting Plans.	15-04-2024	
II.	<b>Inspection of Flood Infrastructure.</b>		
	By XENs	15-03-2024	
	By SEs /CEs)	31-03-2024	
	By Departmental & Army Teams	31-03-2024	
III.	Identification of encroachments on bunds and spurs to the civil administration.	31-03-2024	No encroachment on flood bund / spur
IV.	Painting gauges, RD Marks, data boards and repair to flood bunds etc.	31-05-2024	Will be completed within target date
V.	<b>Replenishment of reserve stock of stone and flood fighting materials.</b>		
	a) Identification of needs.	28-02-2024	Sanctioned = 2.497 (0.50+1.997) Lac. Cft Available = 0.130 Lac. Cft Balance = 2.367 Lac. Cft
	b) Funding /Procurement Arrangements.	15-03-2024	Estimate Sanctioned & tender called but no tender received.
	c) Procurement, stacking, prescribed field checks.	31-05-2024	-
VI.	Installation of wireless sets	15-06-2024	Will be installed within target date
VII.	<b>Opening of zonal flood cells</b>		
	a) Duty rosters.	01-06-2024	Will be issued up to target date
	b) Operative.	15-06-2024	Will be operative within target date

#### Structure wise Detail of Reserve stock of stone

	Sanctioned	Available	Balance	Remarks
1	(Mamola Guide Wall Spur) 0.50 Lac. Cft	0.13 Lac. Cft	0.37 Lac. Cft	Estimate Sanctioned & tender called but no tender received.
2	(8 No Solid Stone Studs) 1.997 Lac. Cft	0	1.997 Lac. Cft	

#### Consolidated Status of reserve stock of stone

Status of Reserve Stock of Stone (Lac. Cft)			
Sanctioned Reserve Stock limit	Available quantity	Balance quantity	Status of procurement of balance quantity
2.497	0.13	2.367	Estimate Sanctioned & tender called but no tender received.

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## 7.2 Watching Establishment

### Labour.

Manpower will be engaged during the flood season on work charge basis through advertisement and external contractor for watching and general maintenance of channel and flood bunds.

- During normal flood stage, one man per mile / shift for two shift in a day. (No extra labour will be employed. The labour arranged for preparedness will continue as such)
- During low flood stage, the scale of establishment is one man / mile / shift for two shifts in a day. (The flood water flows within river bank. No extra labour will be employed)
- In medium flood the scale will be two men / mile / shift for three shift in a day.
- During high flood four men/ mile / shift for three shifts per day will be employed.
- During very high flood stage of 6.00 Lac Cusecs discharge, the 6 men / mile / shift in three shifts will be employed.

After every three miles there will be a Mate and for every five miles there will be a Mistry in addition to Mate to supervise the work of Beldars.

### Labour During Emergency.

- Manpower will be arranged by the respective Deputy Commissioner in case of emergency to meet with situation or through external contractor.
- 4 Nos dozers and 6 Nos tractor trollies with P.O.L will be arranged by the Agricultural Department through concerned Deputy Commissioner in District Sargodha & Chiniot.
- S.H.O of concerned police station will assist Irrigation Department.

Site of Watching (RD)	Length(mile)	Canal / River Works	Labour	
			Mate	Beldar
95000-273600	35.72	Khadir Disty.	3	20
0-16730	3.35	Ahmad Nagar Minor.	1	4
0-29715	5.90	Pillawal Minor.	1	6
0-33362	6.67	Khair Branch Disty.	1	7
0-7908	1.58	Jabana Minor.	-	1
0-18356	3.67	Walla Minor.	1	4
0-20050	4.01	Pir Punja Minor.	1	4
0-11500	2.30	Vijhulke Minor.	1	3
0-11976	2.40	Kalri Minor.	-	3
91440-132500	8.212	Kot Naja Flood Bund.	3	9
0-7000	1.40	Mamola Guide Wall Spur	1	9

Site	LENGTH	Flood Limits									
		Normal Flood Stage		Low Flood Stage		Medium Flood Stage		High Flood Stage		Very High Flood Stage	
		1 Man per mile per shift		1 Man per mile per shift		2 Men per mile per shift		4 Men per mile per shift		6 Men per mile per shift	
		Man	Shift	Man	Shift	Man	Shift	Man	Shift	Man	Shift
Kot Naja Flood 91440 -132500 & Khadir Disty Flood Bund RD: 66450 – 68034	8.212 (Mile) 0.317 (Mile) Total 8.529	No extra labour will be employed.	The flood water flows within river bank. No extra labour will be employed.			63	3 Shift	117	3 Shift	171	3 Shift
8 No. solid stone studs at Darbar Syed Sahib Shah	(8 Suds) Say = 1			9	3 Shift	15	3 Shift	21	3 Shift		
Mamola Guide Wall Spur	1.40+0.96 = 2.36 (Mile) Say = 2.5			18	3 Shift	33	3 Shift	51	3 Shift		
Total				90	3 Shift per day	165	3 Shift per day	243	3 Shift per day		

## 7.3 Arrangement at Sensitive sites

Following are the main spots where watching camps will be established on temporary basis.

- Kot Naja Flood Bund. RD 93760.
- Mamola Guide Wall Spur. RD 0+000.
- 8 No. Solid stone stud. At Darbar Syed Sahib Shah.

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## 7.4 Watching Material

Following materials shall be kept at each watching hut (The material will be shifted to watching huts as soon as the intimation of Medium / High Flood limit is received).

Sr. No.	Name of item	Unit	Total quantity required for 3 No watching hut	Available quantity for 3 No. Watching huts	Balance quantity required For 3 No. Watching huts	Status of arranging / purchasing balance quantity
1	Axes (Large)	No.	15	6	9	Subject to availability of funds, the materials shall be purchased before start of flood season 2024
2	Bamboos 8' to 10' (for Lighting arrangements)	No.	60	3	57	
3	Baskets (Medium)	No.	60	5	55	
4	Buckets Plastic (Medium)	No.	15	2	13	
5	Torches (Medium) Rechargeable	No.	9	0	9	
6	Chouldaries (Medium)	No.	3	0	3	
7	E.G. Bags (50 Kg)	No.	3000	590	2410	
8	Energy Savers (50 Watt)	No.	75	0	75	
9	Folding Chair	No.	18	14	4	
10	Folding Table	No.	3	2	1	
11	Funnels	No.	6	2	4	
12	G.I. Buckets (Large)	No.	15	6	9	
13	Generator (3500 Watt)	No.	3	3	0	
14	Hand Saws	No.	6	1	5	
15	Handle for Kassi / Axes	No.	30	0	30	
16	Holder for Lamp	No.	90	0	90	
17	Kassi with Handles	No.	15	6	9	
18	Kerosene Oil	Liter	90	0	90	
19	Killas	No.	300	0	300	
20	Life Jacket	No.	15	9	6	
21	M. Oil	Liter	12	0	12	
22	Manila Rope	Per Kg	6	2	4	
23	Match Boxes	No.	30	0	30	
24	Munj / Patha / Trungers	No.	300	0	300	
25	Needles	No.	6	2	4	
26	Oil Extractors	No.	3	3	0	
27	Petrol	Liter	150	0	150	
28	Rain Coats (XXL size)	No.	15	4	11	
29	Steel Charpoy	No.	9	4	5	
30	Sutli	Per Kg	30	10	20	
31	Switch / Plugs	No.	36	0	36	
32	Umbrella (Large)	No.	15	0	15	
33	Wires 7/29	Meter	300	0	300	
34	Wooden Boards 10' x 12'	No.	6	1	5	
35	Wooden Hammers (diameter 4")	No.	6	0	6	
36	Gl. Wire (16 SWG)	Per Kg	300	0	300	
37	Gl. Wire (18 SWG)	Per Kg	300	0	300	

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### **7.5 Arrangement for Sounding & Probing**

This item relates to Barrage / Head Works Canal Division.

### **7.6 Lighting Arrangement**

Lighting arrangements will be made available.

### **7.7 Ration Arrangement**

The establishment and supervisory staff will make their own food arrangements. However in the event of dearth of commodities, the Civil Authorities will be approached to store sufficient ration.

### **7.8 P.O.L. Arrangement for Vehicle**

Respective Deputy District Officer, (Revenue) will be requested by the Sub Divisional Officer in-charge to provide help some reserve at the nearest petrol pumps to keep the vehicles on. Any obstruction found there will be pointed out by the Sub Divisional Officer.

### **7.9 Transportation**

In general civil authorities have never been able to spare any vehicle for us, but we have no other cushion available to depend upon. It is therefore urged that the Deputy Commissioner, concerned may please ensure availability of dependable vehicle from the pool of the District.

### **7.10 Law and order**

Kot Naja Flood bund falls within the administrative jurisdiction of District Sargodha & Chiniot proportionately, Mamola Guide wall spur and 8 No Solid Stone Studs fall in District Chiniot. In case of observing any sort of law and order situation from the public sides, it shall immediately be contacted by the Sub Divisional Officer, concerned with the respective authority of civil administration to maintain the situation at site to avoid any mishap.

### **7.11 Medical Arrangement for Labour**

It is the responsibility of District Government to provide medical facilities in flood areas where required.

### **7.12 Liaison with other Department**

Executive Engineer, Kirana Canal Division will keep liaison with the Civil and Army Authorities and will keep the Superintending Engineer L.J.C, Sargodha fully apprised of the flood situation.

### **7.13 Role of the Army**

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



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### 7.14 Duties of Telephone Attendant

Phone and cell No of all officers / officials have been given in **Flood Fighting Plan 2024** to make immediate contact at any emergency during flood.

Sr. No.	Name of officer / official	Period	Time	
			From	To
1	Adnan Amjid (Executive Engineer) 0345-5165764	During flood Season 2024.	24 Hours	
2	Ahmad Khan Javaid (Sub Divisional Officer) 0300-5127788	During flood Season 2024.	24 Hours	
3	Telegraph Office Sargodha 048-9230408	During flood Season 2024.	24 Hours	

### 7.15 Wireless Arrangements

Wireless system will be installed w.e.f. 15-06-2024 in the vehicle of Executive Engineer, Kirana Toyota HILUX No. GBA 429 and Sub Divisional Officer, Khadir Jeep No. SGF 8645.



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## CHAPTER-8

### 8. Detail of Encroachment.

A.

Sr. No.	Total Encroachment	Removed	Remaining	Remarks
Nil				

### B. Detail of Critical Encroachment.

Sr. No.	Total Encroachment	Removed	Remaining	Remarks
Nil				

  
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## CHAPTER-9

### 9. Duty Roster/Flood Fighting Program

DUTY ROSTER OF KEY PERSONAL DURING FLOOD SEASON 2024																
SITE	LENGTH	STAGE-I DISCHARGE	LABOUR REQUIRED	LABOUR FOR WATCHING BE DEPUTED (PER SHIFT)		STAGE-II DISCHARGE	LABOUR REQUIRED	LABOUR FOR WATCHING BE DEPUTED (PER SHIFT)		STAGE-III DISCHARGE	LABOUR REQUIRED	ESTABLISHMENT TO BE DEPUTED (PER SHIFT)	STAGE-IV DISCHARGE EXCEEDING 8 LAC Cs.			
				MATE	BELDAR			MATE	BELDAR					SDO	SUB ENGINEER	MATE
Kot Naja Flood Bund RD 91440- 132500 & Khadir Disty Flood Bund RD: 66450 – 68034	8.212 (Mile) + 0.317 (Mile) Total 8.529			9	54			9	108			Ahmad Khan Javid (Sub Divisional Officer 0300-5-127788)	Establishment will be deputed as per stage-III			
8 No. solid stone studs at Darbar Syed Sahib Shah	Stud No. 1 = 25 Stud No. 2 = 50 Stud No. 3 = 60 Stud No. 4 = 80 Stud No. 5 = 25 Stud No. 6 = 25 Stud No. 7 = 50 Stud No. 8 = 80 Total = 395 ft. 8 No. Studs Say = 1	2.0 lac Cs to 4.0 lac Cs.	Two men per mile per shift for Three shifts per day & night	3	6	4.0 lac Cs to 6.0 lac Cs.	Four men per mile per shift for Three shifts per day	3	12	6.0 lac Cs. To 8.0 lac Cs.				Sub Engineer Yakhuwala Section Babar Rasheed (0343-7868557)	3	18
Mamola Guide Wall Spur	(1.40 + 0.96) 2.36 (Mile) Say = 2.5			3	15			3	30					Sub Engineer Ghausewala Section Haroon Shahzad (0345-8678646)	3	48
		Total	3 Shift per day	90		Total	3 Shift per day	165				Total	3 Shift per day		243	

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## CHAPTER-10

### 10. Emergency Telephone Nos.


Sr. No.	Name of Post & Designation	Telephone / Cell. No.	
		Office	Residence
1	Minister Irrigation & Power Department, Punjab Lahore	042-99212809 042-99211761 Fax 042-99212810	-
2	Secretary Irrigation Department, Punjab Lahore	042-99212117 042-99212118 Fax 042-99212116	042-99200286
3	Chief Engineer, Sargodha Irrigation Zone, Sargodha.	048-9230445 Fax 048-9230414	0322-4486727 048-9230451
4	Flood Emergency Officer Sargodha Irrigation Zone Sargodha.	048-9230446 Fax 048-9230414	0300-6363739
5	Chief Engineer, Drainage and Flood Zone Lahore.	042-99233551 Fax 042-99230731	0303-7713303
6	Director Flood, Drainage and Flood Zone Lahore.	042-99233552	0300-6999490
7	Flood Warning Center Jail Road Lahore.	042-99205371 Fax 042-99205372	-
8	Superintending Engineer Lower Jhelum Canal Circle Sargodha.	048-9230413 Fax 048-9230832	048-9230463 0300-7743313
9	Superintending Engineer Drainage Circle Sargodha.	048-9230450	0345-8100407
10	Executive Engineer, Sargodha Division L.J.C, Sargodha.	048-9230409 Fax 048-9230918	0300-0147499
11	Executive Engineer, Kirana Division L.J.C, Sargodha.	048-9230399 Fax 048-9230649	0345-5165764
12	Executive Engineer, Shahpur Division L.J.C, Sargodha.	048-9230447 Fax 048-9230836	0300-6025902
13	Executive Engineer, Bhalwal Division L.J.C, At Sargodha.	048-9230406	0300-6363739
14	Executive Engineer, Rasul Division L.J.C, Rasul.	0546-553211	0308-3262291
15	Executive Engineer, Drainage Division Sargodha.	048-9230453	0333-8899931
16	Executive Engineer, Drainage Division Bhalwal.	-	0300-8199708
17	Deputy Commissioner, Sargodha.	048-9230025 048-9230026	048-9230046
18	Deputy Commissioner, Chiniot.	047-9210111-14	-
19	In-charge Vigilance Cell Irrigation & Power Department Punjab Lahore.	042-9213157	-
20	Telegraph Office Sargodha (Flood Emergency Center Sargodha)	048-9230408	-
21	Sub Divisional Officer, Khadir Sub Division.	-	0300-5127788
22	Sub Divisional Officer, Lahuwari Sub Division.	-	0333-8760466
23	Sub Divisional Officer, Kirana Sub Division.	048-3741259	0300-6021565


  
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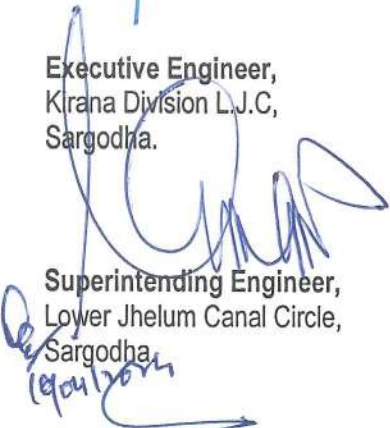


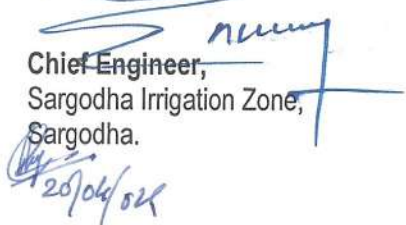
## CHAPTER-11

- 11. Standard operating procedure (SOP) for Breaching Sections**
- 11.1 History of the breaching section**  
No breaching section in Kirana Canal Division Sargodha.
- 11.2 Location, Design, Quantity and Variety of the explosive required for detonation.**  
Does not relate.
- 11.3 Arrangement of explosives and security of explosive stores**  
Does not relate.
- 11.4 List of the security staff alongwith detail of their training etc**  
Does not relate.
- 11.5 Detail of mechanical means as a standby arrangements in case of detonation failure**  
Does not relate.
- 11.6 Duty Roster in case of critical situation**  
Does not relate.
- 11.7 Breaching Committee with their action plan**  
Does not relate.
- 11.8 List of the villages likely to be inundated in case of breach**  
Does not relate.
- 11.9 Announcement and detail of evacuation arrangements**  
Does not relate.
- 11.10 Details of coordination with Civil/Army Authorities**  
Does not relate.
- 11.11 Parallel communication arrangements**  
Does not relate.
- 11.12 Index Plan**  
Does not relate.

  
Sub Divisional Officer,  
Khadir Sub Division L.J.C,  
At Kot Naja Rest House.

  
Executive Engineer,  
Kirana Division L.J.C,  
Sargodha.

  
Superintending Engineer,  
Lower Jhelum Canal Circle,  
Sargodha.

  
Chief Engineer,  
Sargodha Irrigation Zone,  
Sargodha.

# ***PART – B***

## **CHAPTER-12**

### **12. Vulnerable sites on Flood Bund/Structures:**

#### **12.1 Apprehended breach sites in Flood Bunds/Structures**

There is no vulnerable site along flood bund in jurisdiction of Kirana Canal Division LJC Sargodha.

#### **12.2 Operation of breaching sections.**

There is no breaching section in Kirana Division.

#### **12.3 Breaches due to rising of flood water, deterioration of flood bunds etc.**

*No such*



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## **CHAPTER-13**

### **13. Emergency Contingency Plan for vulnerable site (sites) listed above. Emergency Contingency Plan must include:-**

#### **13.1 Plan showing route of Flood Water coming out of the breach supported with levels.**

There is no vulnerable site along flood bund in jurisdiction of Kirana Canal Division LJC Sargodha.

#### **13.2 Detail of villages abadies likely to be affected and this should also be shown on the plan**

No such

#### **13.3 Strategy and action taken be explained in detail. This may include**

##### **13.3.1 Arrangements**

There is no vulnerable site on existing Flood Bunds / Structures; however, spilled water will inundate areas on right side of River as flood water will spread up in height of ranging 2 ft: damaging crops, kacha houses. The spilled water will again fall in the River Chenab once the flood subsides.

The in-charge *Sub Divisional Officer, Khadir Canal Sub Division and Deputy Collector, Kirana Division LJC Sargodha* taking the cognizance of situation will make liaison with the civil administration and Police Department to arrange:

- i. Proclamation on loudspeakers etc. for evacuation of abadies inside the route of flood water.
- ii. Prepare maps for the area inundated and carry out immediate survey for damages to crops and other properties.
- iii. Establish Flood Camp at RD 93760 Kot Naja Flood Bund to monitor the emergent flood situation. If any obstruction is found in way of flood water, it will be removed by deploying establishment and machines such like tractors, excavator machine and bulldozers as per situation prevailing at site. Efforts would be made that flood water may not stand in crops as well as abadies, to minimize the losses / damages and ultimately will fall again the same way in River Chenab within the shortest possible time.
- iv. Keep a close liaison with Civil Administration, Public Representatives. Army authorities and the Executive Engineer Sargodha Canal Division Sargodha. List of phone numbers of above authorities have been mentioned in this flood fighting plan (Chapter No. 10).

  
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### 13.3.2 Establishment of Flood Fighting Camps.

Bund / Spur	Location of Camps
Kot Naja Flood Bund.	RD 93750
Mamola Guide Wall Spur.	RD 0+000
8 No. solid stone studs	At Darbar Syed Sahib Shah

### 13.3.3 Duties of Officers / Officials and their camp sites

Camp No.	Location	Officer's ( Name + Designation + Mobile No )	Officials ( Name + Designation + Mobile No )
1	Kot Naja Flood Bund at RD 93750	Adnan Amjid (Executive Engineer) 0345-5165764 Ahmad Khan Javaid (Sub Divisional Officer) 0300-5127788	Intazar Hussain Sub Engineer Kot Naja. (0300-6005812)
2	8 No. solid stone studs At Darbar Syed Sahib Shah (Yakewala)		Babar Rasheed Sub Engineer Yakhuwala. (0343-7868557)
3	Mamola Guide Wall Spur at RD 0+000		Haroon Shahzad Sub Engineer Ghausewala (0345-8678646)

### 13.3.4 Departmental Machinery available

1 No. tractor trolley with front & rare blade in working condition is in control of Kirana Division LJC Sargodha. However in case of any emergency during flood season, Government machinery / bulldozers of Agricultural Engineering Department Punjab will be arranged.

### 13.3.5 Machinery available from Private Source

If needed it will be arranged / hired from private source. Machinery can be hired in case of emergency as following Points have been identified for hiring of Machinery:-

Sr. No.	Site Location	Machinery Available
1	Kalowal	i) Excavator. ii) Tractor Trolley. iii) Front Blade Tractor.
2	Kot Qazi	i) Excavator. ii) Tractor Trolley. iii) Front Blade Tractor.

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### 13.3.6 Flood Fighting Material required

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Axes (Large)	No.	15	6	9	Material required at sites  1. Kot Naja Rest House RD 32000/R Khadir Disty:  2. Yakuwala Rest House RD 122000/L Khadir Disty:  3. Ghousewala Rest House RD 236000/R Khadir Disty:  Subject to availability of funds, the materials shall be purchased before start of flood season 2024
2	Bamboos 8' to 10' (for Lighting arrangements)	No.	60	3	57	
3	Baskets (Medium)	No.	60	5	55	
4	Buckets Plastic (Medium)	No.	15	2	13	
5	Torches (Medium) Rechargeable	No.	9	0	9	
6	Chouldaries (Medium)	No.	3	0	3	
7	E.G. Bags (50 Kg)	No.	3000	590	2410	
8	Energy Savers (50 Watt)	No.	75	0	75	
9	Folding Chair	No.	18	14	4	
10	Folding Table	No.	3	2	1	
11	Funnels	No.	6	2	4	
12	G.I. Buckets (Large)	No.	15	6	9	
13	Generator (3500 Watt)	No.	3	3	0	
14	Hand Saws	No.	6	1	5	
15	Handle for Kassi / Axes	No.	30	0	30	
16	Holder for Lamp	No.	90	0	90	
17	Kassi with Handles	No.	15	6	9	
18	Kerosene Oil	Liter	90	0	90	
19	Killas	No.	300	0	300	
20	Life Jacket	No.	15	9	6	
21	M. Oil	Liter	12	0	12	
22	Manila Rope	Per Kg	6	2	4	
23	Match Boxes	Packet	30	0	30	
24	Munj / Patha / Trungers	No.	300	0	300	
25	Needles	No.	6	2	4	
26	Oil Extractors	No.	3	3	0	
27	Petrol	Liter	150	0	150	
28	Rain Coats (XXL size)	No.	15	4	11	
29	Steel Charpoy	No.	9	4	5	
30	Sutli	Per Kg	30	10	20	
31	Switch / Plugs	No.	36	0	36	
32	Umbrella (Large)	No.	15	0	15	
33	Wires 7/29	Meter	300	0	300	
34	Wooden Boards 10' x 12'	No.	6	1	5	
35	Wooden Hammers (diameter 4")	No.	6	0	6	
36	Gl. Wire (16 SWG)	Per Kg	300	0	300	
37	Gl. Wire (18 SWG)	Per Kg	300	0	300	

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### **13.3.7 Flood Fighting Material available**

Detail of flood fighting material available and stored at Kot Naja Rest House At RD 32000/R, Yakuwala Rest House At RD 122000/L & Ghousewala Rest House At RD 236000/R of Khadir Disty: is given as page No. 31 (Sr # 13.3.6)

### **13.4 Detail of other infrastructure like electric, Sui Gas, Telephone installations, road network, other buildings, canals and drainage network.**

No such installation like Sui Gas, Telephone etc.: exists in the route of flood water from breach site.

  
XEN: / KIRANA

## CHAPTER-14

### 14. Action Plan

#### 14.1 Re-shuffling/ recouping plan of reserve stone departmentally.

Reshuffling of stone is not required. Recouping of reserved stone will be done before start of flood season 2024.

#### 14.2 Detail of inlet/outlet crossing along with closing methodology.

Following are the water course crossing on Kot Naja Flood Bund in Kirana Canal Division.

Sr. No	RD of Water course crossing	Sr. No	RD of Water course crossing	Closing Methodology.
1	RD 95500	8	RD 111721	Water course crossing will be plugged through earth filled gunny bags when required.
2	RD 97600	9	RD 112980	
3	RD 99200	10	RD 114010	
4	RD 101400	11	RD 117505	
5	RD 105919	12	RD 120952	
6	RD 106520	13	RD 124300	
7	RD 107120			



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### 14.3 Deployment of Machinery (Medium to High Flood) River Chenab.

Sr. No.	Name of structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	Machinery Deployed				Labour Beldar + Mate	Availability of Stone (Lac Cft)
						Excavator	Dozer	Trolleys/ Dumpers	Tractor with front blade		
1	2	3	4	5	6	7	8	9	10	11	12
FLOOD BUNDALONG RIVER CHENAB IN KIRANA CANAL DIVISION LJC SARGODHA											
1	Kot Naja Flood Bund RD 91440-132500 & Khadir Disty Flood Bund RD: 66450 - 68034	8.529	Nil	RD: 93760	Sub Engineer Kot Naja Section Intazar Hussain (0300-6005812)	1	-	2	1	54+9=63 3 Shift per day	Not Required
2	8 No. solid stone studs	8 No. Studs	8 No. Studs	8 No. Studs at Darbar Syed Sahib Shah Village Yakewala	Sub Engineer Yakhuwala Section Babar Rasheed (0343-7868557)	-	-	-	-	6+3=9 3 Shift per day	Not Required
3	Mamola Guide Wall Spur	2.36 (1.40+0.96)	RD: 0-7000	RD: 0	Sub Engineer Ghausewala Section Haroon Shahzad (0345-8678646)	1	-	2	1	15+3=18 3 Shift per day	0.13
Total						2	-	4	2	90	0.13

\* Payment for machinery & work charge employees subject to verification by TPM/Consultants.

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## 14.4 Deployment of Machinery (High to Very High Flood) River Chenab.

Sr. No.	Name of structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	Machinery Deployed				Labour Beldar + Mate	Availability of Stone (Lac Cft)
						Excavator	Dozer	Trolleys/ Dumpers	Tractor with front blade		
1	2	3	4	5	6	7	8	9	10	11	12
FLOOD BUND ALONG RIVER CHENAB IN KIRANA CANAL DIVISION LJC SARGODHA											
1	Kot Naja Flood Bund RD 91440-132500 & Khadir Disty Flood Bund RD: 66450 - 68034	8.529	Nil	RD: 93760	Sub Engineer Kot Naja Section Intazar Hussain (0300-6005812)	1	-	2	1	108+9=117 3 Shift per day	Not Required
2	8 No. solid stone studs	8 No. Studs	8 No. Studs	8 No. Studs at Darbar Syed Sahib Shah Village Yakewala	Sub Engineer Yakhuwala Section Babar Rasheed (0343-7868557)	1	-	2	1	12+3=15 3 Shift per day	Not Required
3	Mamola Guide Wall Spur	2.36 (1.40+0.96)	RD: 0-7000	RD: 0	Sub Engineer Ghausewala Section Haroon Shahzad (0345-8678646)	1	-	2	1	30+3=33 3 Shift per day	0.13
Total						3	-	6	3	165	0.13

\* Payment for machinery & work charge employees subject to verification by TPM/Consultants.



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## 14.5 Deployment of Machinery (High to Exceptionally High Flood) River Chenab.

Sr.No.	Name of structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	Machinery Deployed				Labour Beldar + Mate	Availability of Stone (Lac Cft)
						Excavator	Dozer	Trolleys/ Dumpers	Tractor with front blade		
1	2	3	4	5	6	7	8	9	10	11	12
FLOOD BUND ALONG RIVER CHENAB IN KIRANA CANAL DIVISION LJC SARGODHA											
1	Kot Naja Flood Bund RD 91440- 132500 & Khadir Disty Flood Bund RD: 66450 – 68034	8.529	Nil	RD: 93760	Sub Engineer Kot Naja Section Intazar Hussain (0300-6005812)	2	-	6	2	162+9=171 3 Shift per day	Not Required
2	8 No. solid stone studs	8 No. Studs	8 No. Studs	8 No. Studs at Darbar Syed Sahib Shah Village Yakewala	Sub Engineer Yakhuwala Section Babar Rasheed (0343-7868557)	1	-	3	1	18+3=21 3 Shift per day	Not Required
3	Mamola Guide Wall Spur	2.36 (1.40+0.96)	RD: 0-7000	RD: 0	Sub Engineer Ghausewala Section Haroon Shahzad (0345-8678646)	1	-	3	2	48+3=45 3 Shift per day	0.13
Total						5	-	15	6	243	0.13

\* Payment for machinery & work charge employees subject to verification by TPM/Consultants.

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## 14.6 Police deployment plan.

Sr.No.	Vulnerable sites for illegal cuts during floods.	Concerned Canal Division.	Concerned Police Station & District.	Police personnel to be deployed.		Remarks(If any)
				Inspector/SI/ASI	Constables.	
1	No Vulnerable sites in Kirana Canal Division. In emergency High Flood Protection of Kot Naja Flood Bund At RD: 91440 - 132500	Kirana	Kandiwal & Distt: Chiniot.	SI = 1No. ASI = 1No.	3 Nos.	-

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### 14.7 Detail of synthetic bags with capacity of 500 kg and 1000 kg.

Sr. No.	Name of Structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	No. of Synthetic bags		Remarks
						500 Kg	1000 Kg	
1	2	3	4	5	6	7	8	10
FLOOD BUNDS ALONG RIVER CHENAB IN KIRANA CANAL DIVISION LJC SARGODHA								
1	Kot Naja Flood Bund RD 91440- 132500.	8.212	Nil	RD: 93760	Sub Engineer Kot Naja Section Intazar Hussain (0300-6005812)	Required	Available	Not available at stock and will be procured in emergency.
						200	Nil	

  
XEN: / KIRANA

14.8 Details of polythene sheets of black colour to protect upstream slope against wave action and to control seepage through embankments.

Sr. No.	Name of Structure	Length in Mile	Vulnerable Reach	Camp Location	Site Incharge by name & Cell No.	Plastic Sheet(Sft)	Remarks
1	2	3	4	5	6	9	10
FLOOD BUNDS ALONG RIVER CHENAB IN KIRANA CANAL DIVISION LJC SARGODHA							
1	Kot Naja Flood Bund RD 91440- 132500.	8.212	Nil	RD: 93760	Sub Engineer Kot Naja Section Intazar Hussain (0300-6005812)	Required	Not available at stock and will be procured in emergency.
						Available	
						3000	Nil


XEN: / KIRANA

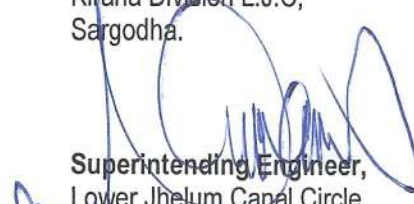
## CHAPTER-15

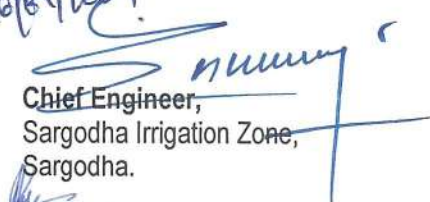
### 15. Back up Divisions (in case of breach).

In case of breach or during emergency, Shahpur Canal Division LJC, Sargodha and his field staff will act as sister Division.

  
Sub Divisional Officer,  
Khadir Sub Division L.J.C,  
At Kot Naja Rest House.

  
Executive Engineer,  
Kirana Division L.J.C,  
Sargodha.

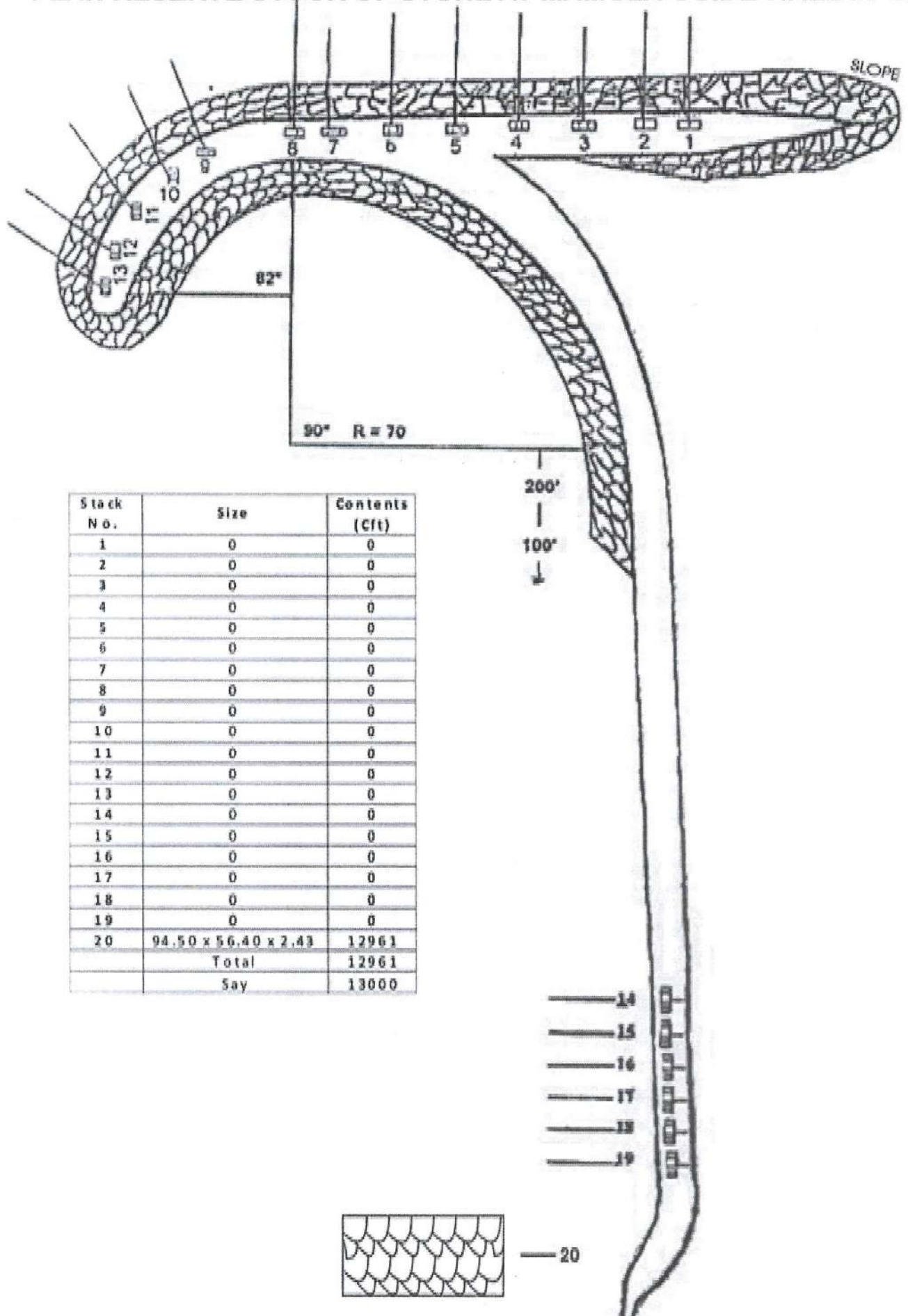
  
Superintending Engineer,  
Lower Jhelum Canal Circle,  
Sargodha.

  
Chief Engineer,  
Sargodha Irrigation Zone,  
Sargodha.

20/04/2024



# PLAN RESERVE STOCK OF STONE AT MAMOLA GUIDE WALL SPUR.



# LONG SECTION OF KOT NAJA FLOOD PROTECTION BUND PART-I

RD 0-132500-(TAIL)

	PROPOSED DATA	EXISTING DATA			LAST DESIGNED DATA					
RD OF W/C -XING	TOP WIDTH / SIDE SLOPE	TOP LEVELS WITH 6' FB ABOVE HFL 1973	TOP WIDTH	TOP LEVELS	SLOPE	TOP WIDTH HIGHT OF BANK ABOVE H.F.L	TOP R.L OF BANK	RL. OF HIGH FLOOD 1973	NATURAL SURFACE LEVELS	RD
	20' (RD 0-85250) / RIVER SIDE 3:1 / COUNTRY SIDE 2:1	54.20	15'	651.20	COUNTRY SIDE 2:1  RIVER SIDE 3:1	15.0' 3.0'	651.20	648.20	649.40	0
		52.70	15'	49.70			49.70	46.70	44.80	5000
RD 8975		51.40	15'	48.30			48.40	45.40	45.30	10000
		49.90	15'	46.90			46.90	43.90	42.60	15000
		48.60	15'	45.50			45.60	42.60	42.20	20000
RD 24765		47.00	15'	43.95			44.00	41.00	42.50	25000
RD 29145 RD 28500 RD 27450 RD 26185		45.80	15'	42.72			42.80	39.80	38.40	30000
RD 32875 RD 31500		44.60	15'	41.50			41.60	38.60	38.30	35000
RD 38875 RD 38000		43.60	15'	40.50			40.60	37.60	38.40	40000
RD 42400		42.50	14'	39.50			39.50	36.50	37.40	45000
RD 46300		41.50	14'	38.40			38.50	35.50	33.80	50000
		40.90	14'	37.70			37.90	34.90	36.40	55000
		40.20	14'	37.00			37.20	34.20	33.80	60000
RD 64300 RD 63700		39.90	14'	36.70			36.90	33.90	32.60	65000
		39.60	14'	36.50			36.60	33.60	31.70	70000
RD74600 RD71600		38.30	14'	35.00			35.30	32.30	32.00	75000

# LONG SECTION OF KOT NAJA FLOOD PROTECTION BUND PART-II

RD 0-132500-(TAIL)

RD OF W/C -XING	PROPOSED DATA		EXISTIN G DATA		LAST DESIGNED DATA					
	TOP WIDTH / SIDE SLOPE	TOP LEVELS WITH 6' FB ABOVE HFL 1973	TOP WIDTH	TOP LEVELS	SLOPE	TOP WIDTH HIGHT OF BANK ABOVE H.F.L	TOP R.L OF BANK	RL. OF HIGH FLOOD 1973	NATURAL SURFACE LEVELS	RD
	39' 43' 44' 26'	36.80	14'	33.70	COUNTRY SIDE 2:1	15.0' 3.0'	33.80	30.80	30.83	80000
		35.50	14'	32.50			31.56	28.56	27.02	85000 85250 85500 85750 86000 90000
RD 99200 RD 97600 RD 95500		34.56	14'	31.50			32.50	29.50	24.37	
		32.80	15'	29.80			29.80	26.80	26.12	95000
RD 101400		31.40	15'	28.40			28.40	25.40	22.43	100000
RD 107120 RD 106520 RD 105519		30.00	15'	27.00			27.00	24.00	19.94	105000
RD 114010 RD 112980 RD 111721		28.45	15'	25.45			25.45	22.45	20.22	110000
RD 117505		26.90	15'	23.90			23.90	20.90	18.73	115000
RD 120952		25.25	15'	22.45			22.25	19.25	18.05	120000
RD 124300		23.60	14'	20.60			20.60	17.60	15.93	125000
	20'( RD 86000-132500-TAIL) / RIVER SIDE 3:1 COUNTRY SIDE 2:1	21.69	14'	18.68	RIVER SIDE 3:1		18.69	15.69	13.85	130000
		20.70	15'	17.70			17.70	14.70	13.83	132500





# 2ND REVISED L-SECTION OF INVERTED HOCKEY SPUR NEAR VILLAGE TALIBWALA.

Level Book No. 861

Page No. 26-29

Starting Bench Mark

Location TOP LEVEL OF

STUD #8

Value = 627.75

Closing Bench Mark

Location TOP LEVEL OF

STUD #8

Value = 627.75

Survey Done By Baber Rasheed

& Intazar Hussain

Checked By

Ploted By Baber Rasheed

& Intazar Hussain

Superintending Engineer

Power Inletum Canal C. 1016

Sargodha

Executive Engineer

Kirana Division LJC

Kirana

Sub Divisional Officer

Khadr Sub Division LJC

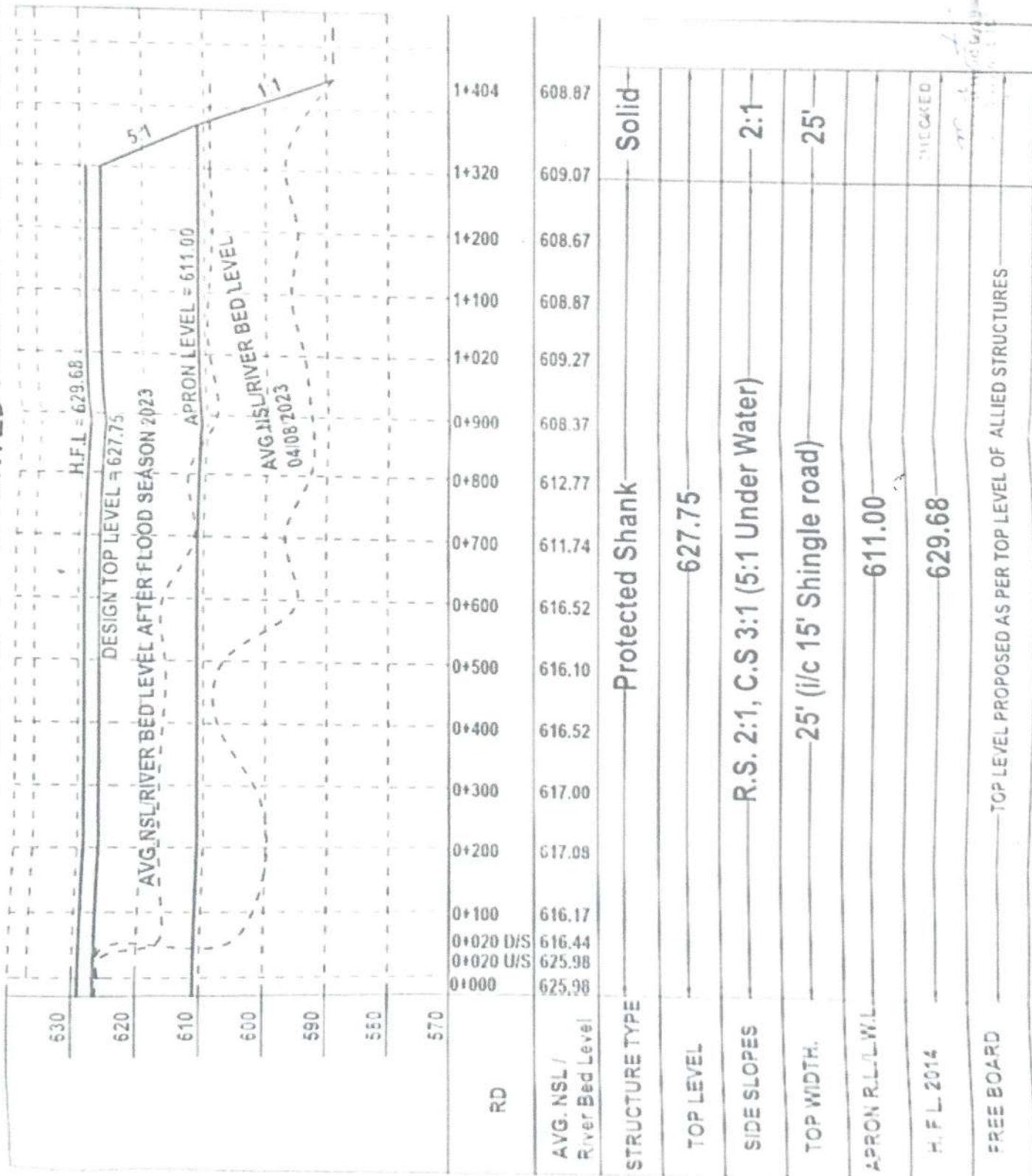
At Kot Naja Rest House

Sub Engineer

Takumala Section

Sub Engineer

Kot Naja Section

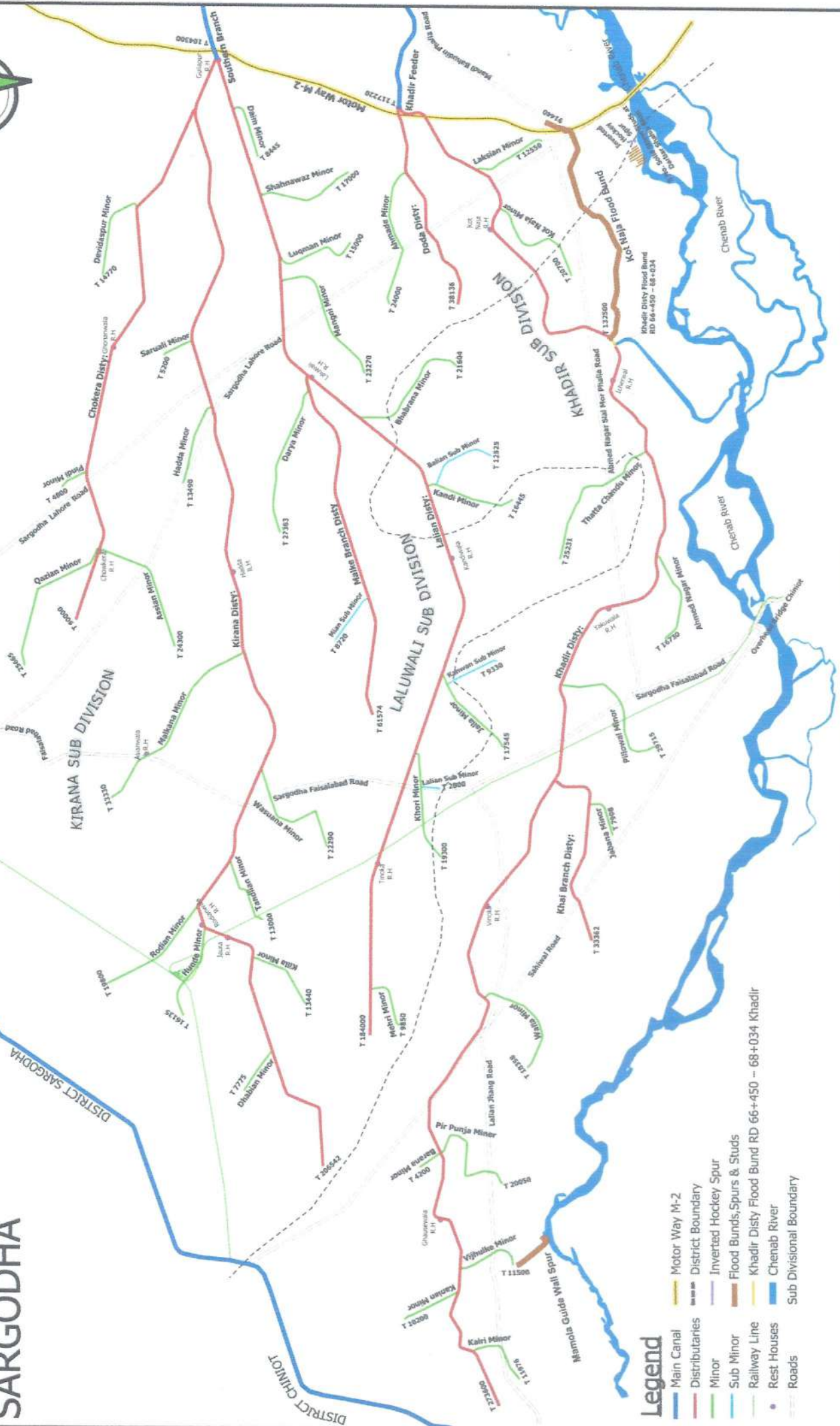








# INDEX PLAN KIRANA DIVISION LJC SARGODHA



## Legend

- Motor Way M-2
- Main Canal
- District Boundary
- Inverted Hockey Spur
- Minor
- Sub Minor
- Flood Bunds, Spurs & Studs
- Railway Line
- Khadir Dyke Flood Bund RD 66+450 - 68+034
- Chenab River
- Rest Houses
- Roads
- Sub Divisional Boundary



Designed by:  
Javed Iqbal  
Computer Operator

Traced by:  
Rizwan Ahmed  
Tracer

Checked by:  
Kamran Nawaz Maken,  
Divisional Head Draftsman

Executive Engineer,  
Kirana Division LJC,  
Sargodha.