# *GOVERNMENT OF THE PUNJAB*

# *IRRIGATION DEPARTMENT*




# FLOOD FIGHTING PLAN

# FOR THE YEAR 2026

# AHMADPUR CANAL DIVISION

# AHMADPUR EAST

## TABLE OF CONTENTS

**Chapter-1 Salient features of the Ahmadpur Canal Division, Ahmadpur East.**


| Sr. No | Description | Page No. |
|---|---|---|
| 1.1 | Location | 5 |
| 1.2 | General Description | 5 - 6 |
| 1.3 | Administrative setup | 7 |


**Chapter-2 Flood Protection and River Training Works.**


| Sr. No. | Description | Page No. |
|---|---|---|
| 2.1 | Design Parameter of River Training Works / Flood Embankment | 8 |
| 2.2 | Location Map | 10 |



**Chapter-3 Brief history of past flood events** 11 – 14


**Chapter-4 Design Data, Historic peak flood data and previous five years flood data of Headworks and other control points**


| Sr. No. | Description | Page No. |
|---|---|---|
| 4.1 | Flood Limits | 15 |
| 4.2 | Time Lag of Floods | 16 |
| 4.3 | Highest Floods | 16 |
| 4.4 | Peak Discharges | 18 |



**Chapter-5 Flood Fighting Strategy** 24 - 26

**Chapter-6 Flood Damages Restoration Works** 27


**Chapter-7 Flood Fighting Arrangements**


| Sr. No. | Description | Page No. |
|---|---|---|
| 7.1 | Pre flood arrangement | 28 |
| 7.2 | Watching establishment | 28 |
| 7.3 | Arrangement at Sensitive Sites | 29 |
| 7.4 | Watching Materials | 30 |
| 7.5 | Arrangement For Sounding & Probing | 32 |
| 7.6 | Lighting arrangement | 32 |
| 7.7 | Ration arrangement | 32 |
| 7.8 | Pol arrangement for vehicle | 32 |
| 7.9 | Transportation | 32 |

| | | |
|---|---|---|
| 7.10 | Law and order | 32 |
| 7.11 | Medical Arrangement For Labour | 33 |
| 7.12 | Liaison With Other Department | 34 |
| 7.13 | Role of the Army | 39 |
| 7.14 | Duties of Telephone Attendant | 40 |
| 7.15 | Wireless Arrangements | 40 |

**Chapter-8 Detail of Encroachments** 41 - 52

**Chapter-9 Duty Roster/Flood Fighting Program** 53 - 54

**Chapter-10 Emergency Telephone Nos.** 55

**Chapter-11 Standard Operating Procedure (Sop) For Breaching Sections**

| Sr. No. | Description | Page No. |
|---|---|---|
| 11.1 | History of the breaching section | 56 |
| 11.2 | Location, design, quantity and variety of the explosive required for detonation | 56 |
| 11.3 | Arrangement of explosives and security of explosive stores. | 56 |
| 11.4 | List of the security staff along with detail of their training etc | 56 |
| 11.5 | Detail of mechanical means as a standby arrangements in case of detonation failure. | 56 |
| 11.6 | Duty roster in case of critical situation | 56 |
| 11.7 | Breaching committee with their action plan | 56 |
| 11.8 | List of the villages likely to be inundated in case of breach | 56 |
| 11.9 | Announcement and detail of evacuation arrangements | 56 |
| 11.10 | Details of co-ordination with civil / army authorities | 56 |
| 11.11 | Parallel communication arrangements | 56 |
| 11.12 | Index plan | 56 |

**Chapter-12 Vulnerable sites on Flood Bund/Structures**

| Sr. No. | Description | Page No. |
|---|---|---|
| 12.1 | Apprehended breaches in Flood Bunds / Structures | 57 |
| 12.2 | Operation of Breaching Section | 57 |
| 12.3 | Breaches due to rising of Flood water, deterioration of flood bunds etc | 57 |

**Chaper-13 Emergency Contingency Plan For Vulnerable Site**

| Sr. No. | Description | Page No. |
|---|---|---|
| 13.1 | Plan showing route of flood water coming out of the breach supported with levels at rd. 121-129 of ahmadpur flood bund | 58 |
| 13.2 | Detail of villages abadies likely to be affected and this should also be shown on the plan. | 59 |
| 13.3 | Strategy and action taken be explained in detail. This may include | 60 |
| 13.3.1 | Arrangements | 60 |
| 13.3.2 | Establishment Of Flood Fighting Camps | 60 |
| 13.3.3 | Duties Of Officers / Officials And Their Camp Sites | 60 |
| 13.3.4 | Departmental Machinery Available | 60 |
| 13.3.5 | Machinery Available From Private Source | 60 |
| 13.3.6 | Flood Fighting Material Required | 60 |
| 13.3.7 | Flood Fighting Material Available | 60 |
| 13.4 | Detail of other infrastructure like electric, sui gas, telephone installations, road network, other buildings, canals and drainage networks. | 61 |

**Chaper-14 Action Plan**

| Sr. No. | Description | Page No. |
|---|---|---|
| 14.1 | Re-shuffling / recouping plan of reserve stock of stone departmentally. | 63 |
| 14.2 | Detail Of Inlet Outlet Crossing Alongwith Closing Methodology | 63 |
| 14.3 | Deployment of Machinery (Normal to Low flood) | 64 |
| 14.4 | Deployment of Machinery (Medium to High flood) | 64 |
| 14.5 | Deployment of Machinery (Very High to Exp. High flood) | 64 |
| 14.6 | Police Deployment Plan | 64 |
| 14.7 | Detail of Synthetic bags with capacity of 50Kg and 100 Kg | 65 |
| 14.8 | Details Of Polythene Sheets Of Black Color To Protect Upstream Slop Against Wave Action And To Control Seepage Through Embankments | 65 |
| 14.9 | Recommendation for operation during flood | 65 |

**Chaper-15 Back Up Division (In Case Of Any Breach)** 68

# CHAPTER-1

## SALIENT FEATURE OF AHMADPUR CANAL DIVISION.

### 1.1 Location:

Sutlej River enters in Pakistan near Ganda Singh Wala and after passing Sulemanki and Islam Head works, it finally approaches to Panjnad Head works. Previously, Ahmadpur Flood Bund starts from Lubana Chowk (Tail of Bahawalpur Distributary) near to Bahawalpur Railway Station and ends at RD. 67 of L.M.B of Panjnad Headworks (touches M-5 Motorway along Jhangra Sharqi Interchange link road). Now after floods of 2025, incorporation of numerical and hydrodynamic analyses conducted by Irrigation Department ADP Consultants, consideration of Physical Model Studies (conducted by Irrigation Research Institute) of Motorway Bridge at the tail of Ahmadpur Flood Bund and curtailment of 2.5 RDs at its head portion, new alignment has been considered. According to this new alignment, Amadpur Flood Bund starts with RD 0+000 near chowk Balochan (National Highway N-5) and touches Multan-Sukkar Motorway M-5 with last RD as 162+905. From RD 162+905 to RD 149+000, it contains Jhangra Sharqi Motorway Interchange Link Road, also the right of way of Uch Disty , and as per new proposal along the road new bund has to be executed. From RD 144+000 to RD 115+000, the bund contains earthen embankment passing through various abadies. From RD 115+000 to RD 105+000, it again contain Jhangra Sharqi Motorways link road that is also right of way of UCH Disty. From RD 105+000 to RD 80+000, it contains Jhangra Sharqi Motorways link road that is also the right of way of Main Ahmadpur Branch Canal. From RD 80+000, the bund leaves Jhangra Link Road and entered towards abadies. It almost has metlled road all along and acting as right bank of 1-R/Disty in reach RD 21+000 to RD 48+000. However, from RD 5+000 to RD 14+000, it contains earthen embankment.

### 1.2 General Description:

The Main Objective of the AMP Flood Bund is to save precious lives, abadies agricultural land and infrastructure with description as under:

- Enable those located in vulnerable areas in moving their livestock/ cattle.
- Minimize human misery and sufferings.
- Protect installations of sensitive nature.
- Provide protection against flood spills of Satluj River to Bahawalpur City from its western side.

- Save Sama Satta Railway Junction and valuable Agricultural land and the adjacent population.
- Protect the irrigation network of Ahmedpur Branch system of Ahmadpur Canal Division

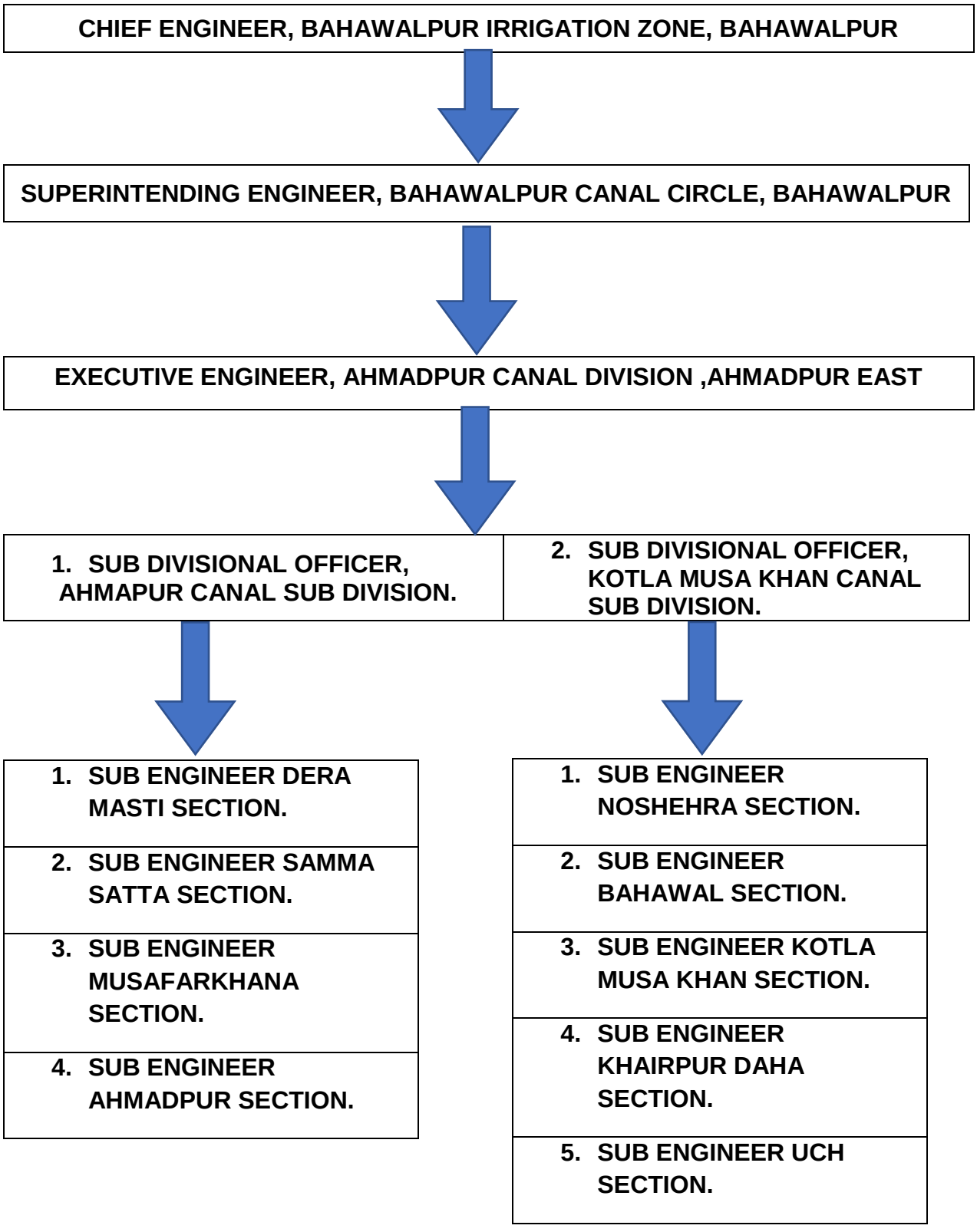
It is important to mention that the Flood Bund protects against the spill of Sutluj River and also withstand the back water of Chenab River and spill of Sutluj especially when Chenab River is in flood at Panjnad Head works.

**CHANNELS OF AHMADPUR CANAL DIVISION**

Ahmedpur Canal Division comprises of Two Sub Divisions. The Two Sub Divisions namely Ahmadpur Canal Sub Division & Kotla Musa Khan Canal Sub Division deriving supplies from Ahmedpur Branch are non-perennial. Kotla Musa Khan Canal Sub Division also contains Abbasia Canal and its off Takes in Uch Section.

Ahmedpur Branch off-takes from tail Bahawal Canal (Head Lal Sohanra) having total authorized discharge of 2380 Cs at its head with length of 42.16 Miles. AP Branch from RD: 0+000-210+800 falls in the jurisdiction of Ahmedpur Canal Division in length of 45.16 Miles. This channel irrigates the vast area of Tehsil Ahmedpur East. Total G.C.A/ C.C.A of A.P. Branch is 353588/325161 Acres for non-perennial channels.

## 1.3 Administrative Setup:



## CHAPTER-2

## FLOOD PROTECTION AND RIVER TRAINING WORKS

### 2.1 Design Parameter of River Training Works / Flood Embankment:

There is no river training works allied to Ahmadpur Flood Bund.

**FLOOD PROTECTION BUND**

The detail of different segments of Ahmadpur Flood Bund RD. 0-162+905 is given below:-

| Sr. No. | Description | RD | |
|---|---|---|---|
| | | From | To |
| 1 | Ahmadpur Flood Bund starts from Chowk Balochan (N-5 Highways (Bahawalpur) and connects at RD. 38 of 1R/AP Branch | 0 | 21 |
| 2 | Right Bank of 1R/AP Branch is considered as Flood Bund | 21 | 48 |
| 3 | Ahmadpur Flood Bund Meets with A.P Branch at RD of Ahmadpur Flood Bund. | 80 | |
| 4 | RD of Ahmadpur Flood Bund at Tail Ahmadpur Branch. | 105 | |
| 5 | RD of Ahmadpur Flood Bund along Ahmadpur Branch. | 80 | 105 |
| 6 | RD of Ahmadpur Flood Bund meets with Uch Disty. | 105 | |
| 7 | RD of Ahmadpur Flood Bund along with Uch Disty. | 105 | 115 |
| 8 | RD of Ahmadpur Flood Bund where it separate from Uch Disty. | 115+000 | |
| 9 | Low Line reaches of Ahmadpur Flood Bund | 121 | 129 |
| 10 | RD of Ahmadpur Flood Bund along Uch Disty. | 149+000 | 162+905 |

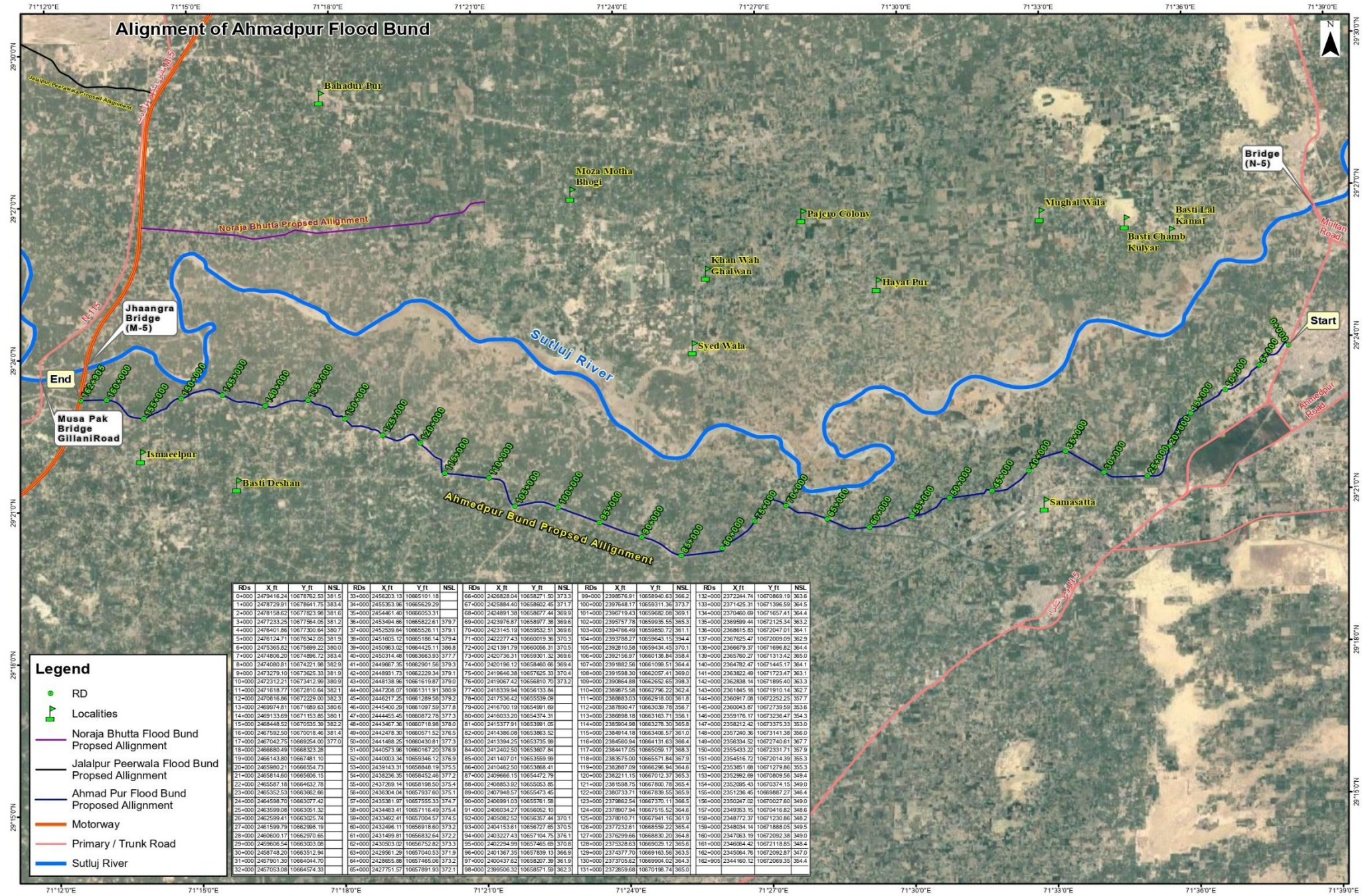
Design Data of Ahmadpur Flood Bund (as per old data) is as under:-

1. Total length. 32 Mile
2. Bank width. 20.0 feet
3. Free Board. 5.0 ft above H.F.L 1978
4. Side slope (River side/ Country side). 3:1/2:1

Design Data of Ahmadpur Flood Bund (as per revised data/proposal) is as under:-

| | |
|---|---|
| Total length. | 30.809 Mile |
| 2. Bank width. | 25.0 feet |
| 3. Free Board. | 6.0 ft above H.F.L provided by Physical Model Studies |
| 4. Side slope (River side/ Country side). | 3:1,2:1 |

## 2.2 Location Map:




| RDs | X_ft | Y_ft | NSL |
|---|---|---|---|
| 0+000 | 2479416.24 | 10678762.53 | 381.5 |
| 1+000 | 2478729.91 | 10678641.75 | 383.4 |
| 2+000 | 2478158.62 | 10677823.98 | 381.6 |
| 3+000 | 2477233.25 | 10677564.05 | 381.2 |
| 4+000 | 2476401.86 | 10677300.64 | 380.7 |
| 5+000 | 2476124.71 | 10676342.05 | 381.9 |
| 6+000 | 2475365.82 | 10675899.22 | 380.0 |
| 7+000 | 2474806.20 | 10674896.72 | 383.4 |
| 8+000 | 2474080.81 | 10674221.96 | 382.9 |
| 9+000 | 2473279.10 | 10673625.33 | 381.9 |
| 10+000 | 2472312.21 | 10673412.99 | 380.9 |
| 11+000 | 2471618.77 | 10672810.64 | 382.1 |
| 12+000 | 2470816.86 | 10672229.00 | 382.3 |
| 13+000 | 2469974.81 | 10671689.63 | 380.6 |
| 14+000 | 2469133.69 | 10671153.85 | 380.1 |
| 15+000 | 2468448.52 | 10670535.39 | 382.2 |
| 16+000 | 2467592.50 | 10670018.46 | 381.4 |
| 17+000 | 2467042.75 | 10669254.00 | 377.0 |
| 18+000 | 2466680.49 | 10668323.28 | |
| 19+000 | 2466143.80 | 10667481.10 | |
| 20+000 | 2465980.21 | 10666554.73 | |
| 21+000 | 2465814.80 | 10665606.15 | |
| 22+000 | 2465587.18 | 10664632.78 | |
| 23+000 | 2465352.53 | 10663682.66 | |
| 24+000 | 2464598.70 | 10663077.42 | |
| 25+000 | 2463599.08 | 10663051.32 | |
| 26+000 | 2462599.41 | 10663025.74 | |
| 27+000 | 2461599.79 | 10662998.19 | |
| 28+000 | 2460600.17 | 10662970.65 | |
| 29+000 | 2459606.54 | 10663003.06 | |
| 30+000 | 2458748.20 | 10663512.94 | |
| 31+000 | 2457901.30 | 10664044.70 | |
| 32+000 | 2457053.08 | 10664574.33 | |

| RDs | X_ft | Y_ft | NSL |
|---|---|---|---|
| 33+000 | 2456203.13 | 10665101.18 | |
| 34+000 | 2455353.96 | 10665629.29 | |
| 35+000 | 2454461.40 | 10666053.31 | |
| 36+000 | 2453494.66 | 10665822.61 | 379.7 |
| 37+000 | 2452539.64 | 10665526.11 | 379.1 |
| 38+000 | 2451605.12 | 10665186.14 | 379.4 |
| 39+000 | 2450963.02 | 10664425.11 | 386.8 |
| 40+000 | 2450314.48 | 10663663.93 | 377.7 |
| 41+000 | 2449667.35 | 10662901.56 | 379.3 |
| 42+000 | 2448931.73 | 10662229.34 | 379.1 |
| 43+000 | 2448138.96 | 10661619.87 | 379.0 |
| 44+000 | 2447208.07 | 10661311.91 | 380.9 |
| 45+000 | 2446217.25 | 10661289.58 | 379.2 |
| 46+000 | 2445400.29 | 10661097.59 | 377.8 |
| 47+000 | 2444455.45 | 10660872.78 | 377.3 |
| 48+000 | 2443467.36 | 10660718.98 | 378.0 |
| 49+000 | 2442478.30 | 10660571.52 | 376.5 |
| 50+000 | 2441488.25 | 10660430.81 | 377.3 |
| 51+000 | 2440573.96 | 10660167.20 | 376.9 |
| 52+000 | 2440003.34 | 10659346.12 | 376.9 |
| 53+000 | 2439143.31 | 10658848.19 | 375.5 |
| 54+000 | 2438236.35 | 10658452.46 | 377.2 |
| 55+000 | 2437269.14 | 10658198.50 | 375.4 |
| 56+000 | 2436304.04 | 10657837.60 | 375.1 |
| 57+000 | 2435381.97 | 10657555.33 | 374.7 |
| 58+000 | 2434483.41 | 10657116.49 | 375.4 |
| 59+000 | 2433492.41 | 10657004.57 | 374.5 |
| 60+000 | 2432496.11 | 10656918.60 | 373.2 |
| 61+000 | 2431499.81 | 10656832.64 | 372.2 |
| 62+000 | 2430503.02 | 10656752.82 | 373.3 |
| 63+000 | 2429561.29 | 10657040.53 | 371.9 |
| 64+000 | 2428655.88 | 10657465.06 | 373.2 |
| 65+000 | 2427751.57 | 10657891.93 | 372.1 |

| RDs | X_ft | Y_ft | NSL |
|---|---|---|---|
| 66+000 | 2426828.04 | 10658271.50 | 373.3 |
| 67+000 | 2425884.40 | 10658602.45 | 371.7 |
| 68+000 | 2424891.38 | 10658677.44 | 369.9 |
| 69+000 | 2423976.87 | 10658977.38 | 369.6 |
| 70+000 | 2423145.19 | 10659532.51 | 369.6 |
| 71+000 | 2422277.43 | 10660019.36 | 370.3 |
| 72+000 | 2421391.79 | 10660056.31 | 370.5 |
| 73+000 | 2420736.31 | 10659301.32 | 369.6 |
| 74+000 | 2420196.12 | 10658460.66 | 369.4 |
| 75+000 | 2419646.38 | 10657625.33 | 370.4 |
| 76+000 | 2419067.42 | 10656810.70 | 373.2 |
| 77+000 | 2418339.94 | 10656133.84 | |
| 78+000 | 2417536.42 | 10655539.09 | |
| 79+000 | 2416700.19 | 10654991.69 | |
| 80+000 | 2416033.20 | 10654374.31 | |
| 81+000 | 2415377.91 | 10653991.05 | |
| 82+000 | 2414386.08 | 10653863.52 | |
| 83+000 | 2413394.25 | 10653735.99 | |
| 84+000 | 2412402.50 | 10653607.84 | |
| 85+000 | 2411407.01 | 10653559.99 | |
| 86+000 | 2410462.50 | 10653868.41 | |
| 87+000 | 2409666.15 | 10654472.79 | |
| 88+000 | 2408853.92 | 10655053.85 | |
| 89+000 | 2407948.57 | 10655473.45 | |
| 90+000 | 2406991.03 | 10655761.58 | |
| 91+000 | 2406034.27 | 10656052.10 | |
| 92+000 | 2405082.52 | 10656357.44 | 370.1 |
| 93+000 | 2404153.61 | 10656727.65 | 370.5 |
| 94+000 | 2403227.43 | 10657104.75 | 376.1 |
| 95+000 | 2402294.99 | 10657465.69 | 370.8 |
| 96+000 | 2401367.35 | 10657839.13 | 366.9 |
| 97+000 | 2400437.62 | 10658207.39 | 361.9 |
| 98+000 | 2399506.32 | 10658571.59 | 362.3 |

| RDs | X_ft | Y_ft | NSL |
|---|---|---|---|
| 99+000 | 2398576.91 | 10658940.63 | 366.2 |
| 100+000 | 2397648.17 | 10659311.36 | 373.7 |
| 101+000 | 2396719.43 | 10659682.08 | 369.1 |
| 102+000 | 2395757.78 | 10659935.55 | 365.3 |
| 103+000 | 2394766.49 | 10659850.72 | 361.1 |
| 104+000 | 2393788.27 | 10659643.15 | 394.4 |
| 105+000 | 2392810.58 | 10659434.45 | 370.1 |
| 106+000 | 2392156.97 | 10660138.84 | 358.4 |
| 107+000 | 2391882.56 | 10661099.51 | 364.4 |
| 108+000 | 2391598.30 | 10662057.41 | 369.0 |
| 109+000 | 2390864.88 | 10662652.65 | 398.3 |
| 110+000 | 2389875.58 | 10662796.22 | 362.4 |
| 111+000 | 2388883.03 | 10662918.00 | 361.8 |
| 112+000 | 2387890.47 | 10663039.78 | 356.7 |
| 113+000 | 2386898.18 | 10663163.71 | 356.1 |
| 114+000 | 2385904.98 | 10663278.30 | 365.8 |
| 115+000 | 2384914.18 | 10663406.57 | 361.0 |
| 116+000 | 2384560.94 | 10664131.63 | 366.4 |
| 117+000 | 2384417.05 | 10665059.17 | 368.3 |
| 118+000 | 2383575.00 | 10665571.84 | 367.9 |
| 119+000 | 2382687.09 | 10666296.94 | 364.6 |
| 120+000 | 2382211.15 | 10667012.37 | 365.3 |
| 121+000 | 2381598.75 | 10667800.78 | 365.4 |
| 122+000 | 2380733.71 | 10667839.55 | 365.9 |
| 123+000 | 2379862.54 | 10667370.11 | 366.5 |
| 124+000 | 2378907.94 | 10667515.52 | 364.6 |
| 125+000 | 2378010.71 | 10667941.16 | 361.9 |
| 126+000 | 2377232.61 | 10668559.22 | 365.4 |
| 127+000 | 2376299.66 | 10668830.20 | 364.8 |
| 128+000 | 2375328.63 | 10669029.12 | 365.6 |
| 129+000 | 2374377.70 | 10669163.56 | 363.5 |
| 130+000 | 2373705.62 | 10669904.02 | 364.3 |
| 131+000 | 2372859.68 | 10670198.74 | 365.0 |

| RDs | X_ft | Y_ft | NSL |
|---|---|---|---|
| 132+000 | 2372344.74 | 10670869.19 | 363.6 |
| 133+000 | 2371425.31 | 10671396.59 | 364.5 |
| 134+000 | 2370460.69 | 10671657.41 | 364.4 |
| 135+000 | 2369599.44 | 10672125.34 | 363.2 |
| 136+000 | 2368615.83 | 10672047.01 | 364.1 |
| 137+000 | 2367625.47 | 10672009.09 | 362.9 |
| 138+000 | 2366679.37 | 10671696.82 | 364.4 |
| 139+000 | 2365760.27 | 10671313.42 | 365.0 |
| 140+000 | 2364782.47 | 10671445.17 | 364.1 |
| 141+000 | 2363822.49 | 10671723.47 | 363.1 |
| 142+000 | 2362838.14 | 10671895.40 | 363.3 |
| 143+000 | 2361845.18 | 10671910.14 | 362.7 |
| 144+000 | 2360917.08 | 10672252.25 | 357.7 |
| 145+000 | 2360043.87 | 10672739.59 | 353.6 |
| 146+000 | 2359176.17 | 10673236.47 | 354.3 |
| 147+000 | 2358212.42 | 10673375.33 | 353.0 |
| 148+000 | 2357240.36 | 10673141.38 | 356.0 |
| 149+000 | 2356334.52 | 10672740.61 | 367.7 |
| 150+000 | 2355433.22 | 10672331.71 | 357.9 |
| 151+000 | 2354516.72 | 10672014.39 | 355.3 |
| 152+000 | 2353851.68 | 10671279.86 | 355.3 |
| 153+000 | 2352992.89 | 10670809.56 | 349.4 |
| 154+000 | 2352085.43 | 10670374.15 | 349.0 |
| 155+000 | 2351236.45 | 10669887.27 | 346.4 |
| 156+000 | 2350247.02 | 10670027.60 | 349.0 |
| 157+000 | 2349353.15 | 10670416.82 | 348.6 |
| 158+000 | 2348772.37 | 10671230.86 | 348.2 |
| 159+000 | 2348034.14 | 10671888.05 | 349.5 |
| 160+000 | 2347063.19 | 10672092.38 | 349.0 |
| 161+000 | 2346064.42 | 10672118.85 | 348.4 |
| 162+000 | 2345064.76 | 10672092.87 | 347.0 |
| 162+905 | 2344160.12 | 10672069.35 | 354.4 |

## CHAPTER-3

## BRIEF HISTORY OF PAST FLOOD EVENTS.

Ahmadpur Flood Bund has to stand against spill of floods in River Satluj and back water effect from Punjanad Head Works. For River Satluj , the trigger point for Ahmapur Flood Bund is Islam Headwork ,whereas from Punjanand Side the trigger point is Trimmu Headworks. Hence, history of past flood events of Islam Headworks and Punjanand Headworks are relevant to Ahmadpur Flood Bund.

**However, brief history of floods for Islam Headwork is given as under:**

| Sr. No. | Year | Date | Discharge | Sr. No. | Year | Date | Discharge |
|---|---|---|---|---|---|---|---|
| **1.** | 1927 | 15/08. | 114328 | **2.** | 1956 | 18/08. | 160447 |
| **3.** | 1928 | 30/09. | 89797 | **4.** | 1957 | 09/09. | 180232 |
| **5.** | 1929 | 25/08. | 228500 | **6.** | 1958 | 13/08. | 212702 |
| **7.** | 1930 | 3/08. | 211986 | **8.** | 1959 | 27/09. | 147494 |
| **9.** | 1932 | 30/08 | 179243 | **10.** | 1960 | 08/09. | 300351 |
| **11.** | 1933 | 21/08. | 149867 | **12.** | 1961 | 17/08. | 212702 |
| **13.** | 1934 | 21/08. | 136853 | **14.** | 1962 | 29/08. | 158365 |
| **15.** | 1935 | 19/08 | 135518 | **16.** | 1963 | 17/08. | 113285 |
| **17.** | 1936 | 01/08. | 130025 | **18.** | 1964 | 24/08. | 134213 |
| **19.** | 1937 | 03/08. | 171046 | **20.** | 1965 | 31/05. | 58136 |
| **21.** | 1938 | 02/08. | 152167 | **22.** | 1966 | 15/09. | 107563 |
| **23.** | 1939 | 03/08. | 80101 | **24.** | 1967 | 21/08. | 128721 |
| **25.** | 1940 | 10/08. | 96831 | **26.** | 1968 | 26/08. | 67639 |
| **27.** | 1941 | 26/08. | 113636 | **28.** | 1969 | 27/08. | 105438 |
| **29.** | 1942 | 23/08. | 272752 | **30.** | 1970 | 26/08. | 85508 |
| **31.** | 1943 | 21/08. | 228882 | **32.** | 1971 | 20/08. | 167880 |
| **33.** | 1944 | 11/08. | 110136 | **34.** | 1972 | 17/07. | 552300 |
| **Sr. No.** | **Year** | **Date** | **Discharge** | **Sr. No.** | **Year** | **Date** | **Discharge** |
| **35.** | 1945 | 29/08. | 122403 | **36.** | 1973 | 16/07. | 116453 |
| **37.** | 1946 | 08/08. | 135825 | **38.** | 1976 | 08/09. | 111476 |
| **39.** | 1947 | 04/10. | 285254 | **40.** | 1979 | 31/07. | 120220 |
| **41.** | 1948 | 27/08. | 284742 | **42.** | 1988 | 04/10. | 306425 |
| **43.** | 1949 | 21/08. | 99404 | **44.** | 1990 | 16/09. | 122117 |
| **45.** | 1950 | 25/08. | 270800 | **46.** | 1993 | 19/07. | 89155 |
| **47.** | 1951 | 29/08. | 59911 | **48.** | 1995 | 15/09. | 183802 |
| **49.** | 1952 | 02/08. | 142001 | **50.** | 2013 | 8/25/2013 | 70932 |
| **51.** | 1953 | 10/08. | 147098 | **52.** | 2019 | 31-Aug | 52395 |
| **53.** | 1954 | 04/10. | 176189 | **54.** | 2022 | 12-Sep | 52398 |
| **55.** | 1955 | 11/10. | 342581 | **56.** | 2023 | 25-Aug | 151904 |
| **57.** | 2025 | 9-Sep | 125103 | | | | |

Similarly, as Ahmadpur Flood Bund has to face back water effect from Punjnand Headworks , as also in the floods of 2025 , **Hence, brief history of floods for Punjnad Headwork is given as under:**

| SR. NO. | YEAR | U/S GAUGE | D/S GAUGE | DISCHARGE (LAC CS) |
|---|---|---|---|---|
| 1 | **1950** | 340.30 | 339.80 | **6.76** |
| 2 | **1951** | 337.50 | 335.30 | **2.45** |
| 3 | **1952** | N/A | N/A | **N/A** |
| 4 | **1953** | 337.50 | 335.20 | **2.78** |
| 5 | **1955** | 339.35 | 338.40 | **5.50** |
| 6 | **1956** | 337.10 | 332.20 | **1.45** |
| 7 | **1957** | 339.30 | 335.10 | **5.29** |
| 8 | **1958** | 338.50 | 334.20 | **1.61** |
| 9 | **1959** | 339.20 | 338.15 | **4.93** |
| 10 | **1960** | 337.50 | 336.40 | **3.55** |
| 11 | **1961** | 337.50 | 337.00 | **3.81** |
| 12 | **1962** | 337.60 | 335.00 | **2.19** |
| 13 | **1963** | 337.80 | 332.80 | **1.09** |
| 14 | **1964** | 339.00 | 338.00 | **4.41** |
| 15 | **1965** | 337.70 | 334.90 | **1.92** |
| 16 | **1966** | 338.60 | 336.90 | **4.15** |
| 17 | **1967** | 337.80 | 334.40 | **1.55** |
| 18 | **1968** | 337.90 | 335.10 | **2.13** |
| 19 | **1969** | N/A | N/A | **N/A** |
| 20 | **1970** | 337.70 | 333.60 | **1.44** |
| 21 | **1971** | 337.70 | 336.20 | **2.61** |
| 22 | **1972** | 337.90 | 335.25 | **1.61** |
| 23 | **1973** | 341.00 | 340.30 | **8.02** |
| 24 | **1974** | N/A | N/A | **N/A** |

| | | | | |
|---|---|---|---|---|
| 25 | **1975** | 338.00 | 337.00 | **4.82** |
| 26 | **1976** | 342.40 | 340.70 | **7.10** |
| 27 | **1977** | 337.80 | 335.40 | **2.57** |
| 28 | **1978** | 337.90 | 336.60 | **3.33** |
| 29 | **1979** | 338.00 | 334.00 | **1.39** |
| 30 | **1980** | 338.40 | 334.95 | **1.80** |
| 31 | **1981** | N/A | N/A | **N/A** |
| 32 | **1982** | 337.90 | 335.00 | **1.49** |
| 33 | **1983** | 339.00 | 337.10 | **3.20** |
| 34 | **1984** | 338.20 | 334.80 | **1.54** |
| 35 | **1985** | 338.20 | 335.50 | **2.55** |
| 36 | **1986** | 341.50 | 337.40 | **3.53** |
| 37 | **1987** | 338.20 | 335.10 | **1.60** |
| 38 | **1988** | 340.90 | 339.70 | **5.07** |
| 39 | **1989** | 339.20 | 337.40 | **4.29** |
| 40 | **1990** | 338.20 | 335.45 | **2.00** |
| 41 | **1991** | 338.20 | 335.00 | **1.70** |
| 42 | **1992** | 340.50 | 340.30 | **8.12** |
| 43 | **1993** | 338.20 | 337.20 | **3.55** |
| 44 | **1994** | 338.50 | 336.20 | **2.66** |
| 45 | **1995** | 339.20 | 338.90 | **6.05** |
| 46 | **1996** | 339.00 | 338.60 | **5.71** |
| 47 | **1997** | 339.55 | 339.45 | **5.12** |
| 48 | **1998** | 338.50 | 334.20 | **1.61** |
| 49 | **1999** | 338.30 | 328.50 | **0.48** |
| 50 | **2000** | 338.20 | 330.60 | **0.75** |
| 51 | **2001** | 338.20 | 330.10 | **0.57** |
| 52 | **2002** | 338.20 | 331.00 | **0.68** |

| | | | | |
|---|---|---|---|---|
| 53 | **2003** | 338.10 | 333.70 | **0.93** |
| 54 | **2004** | 338.20 | 326.80 | **0.33** |
| 55 | **2005** | 338.00 | 334.00 | **1.01** |
| 56 | **2006** | 338.20 | 336.40 | **2.82** |
| 57 | **2007** | 338.20 | 331.90 | **0.51** |
| 58 | **2008** | 338.20 | 332.00 | **0.53** |
| 59 | **2009** | 338.20 | 329.60 | **0.32** |
| 60 | **2010** | 338.80 | 338.70 | **3.10** |
| 61 | **2011** | 338.00 | 337.05 | **1.66** |
| 62 | **2012** | 336.50 | 334.50 | **0.56** |
| 63 | **2013** | 338.80 | 336.96 | **3.17** |
| 64 | **2014** | 340.18 | 339.90 | **4.53** |
| 65 | **2015** | 338.20 | 335.00 | **1.39** |
| 66 | **2016** | 338.10 | 335.70 | **1.30** |
| 67 | **2017** | 338.10 | 333.50 | **0.78** |
| 68 | **2018** | 338.10 | 331.20 | **0.57** |
| 69 | **2019** | 337.90 | 334.55 | **0.87** |
| 70 | **2020** | 338.00 | 336.10 | **1.47** |
| 71 | **2021** | 338.00 | 333.25 | **0.75** |
| 72 | **2022** | 338.00 | 335.00 | **1.21** |
| 73 | **2023** | 337.70 | 336.10 | **1.59** |
| 74 | **2024** | 338.00 | 335.10 | **0.72** |
| 75 | **2025** | 342.90 | 342.40 | **7.03** |

In the floods of 2025, when River Satluj was in high flood and there was exceptionally high at Punjnand Headworks, Ahmadpur Flood Bund had to stand against spill of flood water from River Satluj and back water effect from exceptionally high floods at Punjnand Head works . From RD 162+905 to RD 149+000, water level was raised above the top level of the bund with average of around 2 ft . Whereas, From RD 149 +000 to RD 115+000, free board was encroached. Both of these effects were handled with flood fighting strategy.

## CHAPTER-4

## DESIGN DATA, HISTORIC PEAK FLOOD DATA AND PREVIOUS FIVE YEARS FLOOD DATA OF HEADWORKS / BARRAGE AND OTHER CONTROL POINTS

Ahmadpur Flood Bund has to face the floods from two sides: it has to contain flood water of River Satluj and to face back water effect from Punjnand Headworks. Hence for floods water in River Satluj , Islam Head works is trigger point , whereas for back water effect from Punjnand Headwork , the trigger point is same as that for Punjnand Head work.

### 4.1 Flood Limits:

Flood limits of Islam Headworks as approved by the Federal Flood Commission in its 72nd Meeting are as under:-

| | |
|---|---|
| Normal | Upto 50,000 Cs |
| Low Flood | 50,000 to 80,000 Cs |
| Medium Flood | 80,000 to 1,20,000 Cs |
| High Flood | 1,20,000 to 1,75,000 Cs |
| Very High Flood | 1,75,000 to 2,25,000 Cs |
| Exceptionally High Flood | 2,25,000 Cs and above |

Flood Limit / classification at Panjnad Headworks was fixed in the *"Meeting of the working group regarding revised lag times and flood classification / limits held on 9th July 2021 in the office of Chief Meteorologist, Flood Forecasting Division (FFD), Lahore"*.

| Sr. No. | Flood Stage / Classification | Discharge (Lac Cs) |
|---|---|---|
| **1.** | Low Flood. | 1.50 to 2.00 |
| **2.** | Medium Flood. | 2.00 to 3.00 |
| **3.** | High Flood. | 3.00 to 4.50 |
| **4.** | Very High Flood. | 4.50 to 6.00 |
| **5.** | Exceptionally High Flood. | Above 6.00 |

## 4.2 Time Lag of Floods

For River Satluj and back water effect from Punjnand Headworks :

| REACH | TRIMU TO PANJNAD | SIDHNAI TO PANJNAD | ISLAM TO PANJNAD |
|---|---|---|---|
| Distance in Canal Miles. | 165 Miles. | 145 Miles. | 130 Miles. |
| **STAGE OF FLOOD** | **TIME LAG** | | |
| Low Supplies | 81 Hrs. | 63 Hrs. | 74 Hrs. |
| Low Floods | 75 Hrs. | 60 Hrs. | 70 Hrs. |
| Medium Flood | 75 Hrs. | 60 Hrs. | 70 Hrs. |
| High Flood | 81 Hrs. | 63 Hrs. | 72 Hrs. |
| Very High Flood | 81 Hrs. | 63 Hrs. | 72 Hrs. |
| Exceptional High Flood | 81 Hrs. | 63 Hrs. | 72 Hrs. |
| Supper Flood as in 1973 | 50 Hrs. | 45 Hrs. | 30 Hrs. |
| Supper Flood as in 1992 | 78 Hrs. | 60 Hrs. | 30 Hrs. |
| Very High Flood 2014 | 121 Hrs. | 82 Hrs. | - |
| ***Exceptional High Flood 2025*** | ***133 Hrs.*** | ***102 Hrs.*** | ***74 Hrs.*** |

## 4.3 Highest Floods:

**Islam Head Works**

| Year | Through Weir (Cusecs) | Through Breaches in flood Embankments (Cusecs) | Total (Cusecs) | Remarks |
|---|---|---|---|---|
| 1955 | 342851 | 150000 | 492581 | Exceptionally High Flood |
| 1988 | 306426 | 150000 | 456426 | Exceptionally High Flood |
| 1992 | 182637 | NIL | 182637 | Very High Flood |
| 1995 | 183902 | NIL | 183902 | Very High Flood |
| 2023 | 151904 | NIL | 151904 | High Flood |
| 2025 | 125103 | NIL | 125103 | High Flood |

Highest Floods at Punjnand Headworks

| SR NO | FLOOD CATEGORY | YEAR | DATE | U/S GAUGE | D/S GAUGE | DISCHARGE (LAC CS) |
|---|---|---|---|---|---|---|
| 1 | Super Flood | **1992** | 18.07.1992 | 340.50 | 340.30 | **8.12** |
| 2 | Super Flood | **1973** | 17.08.1973 | 341.00 | 340.30 | **8.02** |
| 3 | Super Flood | **1976** | 11.08.1976 | 342.40 | 340.70 | **7.10** |
| 4 | Exceptionally High Flood | **2025** | 12.09.2025 | 342.90 | 342.40 | **7.03** |
| 5 | Exceptionally High Flood | **1950** | 27.09.1950 | 340.30 | 339.80 | **6.76** |
| 6 | Exceptionally High Flood | **1995** | 05.05.1995 | 339.20 | 338.90 | **6.05** |
| 7 | Exceptionally High Flood | **1996** | 31.08.1996 | 339.00 | 338.60 | **5.71** |
| 8 | Exceptionally High Flood | **1955** | 16.10.1955 | 339.35 | 338.40 | **5.50** |
| 9 | Exceptionally High Flood | **1957** | 02.09.1957 | 339.30 | 335.10 | **5.29** |
| 10 | Exceptionally High Flood | **1997** | 04.07.1997 | 339.55 | 339.45 | **5.12** |
| 11 | Exceptionally High Flood | **1988** | 28.07.1988 | 340.90 | 339.70 | **5.07** |
| 12 | Very High Flood | **1959** | 12.07.1959 | 339.20 | 338.15 | **4.93** |
| 13 | Very High Flood | **1975** | 29.07.1975 | 338.00 | 337.00 | **4.82** |
| 14 | Very High Flood | **2014** | 16.09.2014 | 340.18 | 339.90 | **4.53** |
| 15 | Very High Flood | **1964** | 23.08.1964 | 339.00 | 338.00 | **4.41** |

## 4.4 Peak Discharges

At Islam Headworks :

| SR. NO. | YEAR | U/S GAUGE | D/S GAUGE | DISCHARGE (LAC CS) |
|---|---|---|---|---|
| 1 | **1950** | 340.30 | 339.80 | **6.76** |
| 2 | **1951** | 337.50 | 335.30 | **2.45** |
| 3 | **1952** | N/A | N/A | **N/A** |
| 4 | **1953** | 337.50 | 335.20 | **2.78** |
| 5 | **1955** | 339.35 | 338.40 | **5.50** |
| 6 | **1956** | 337.10 | 332.20 | **1.45** |
| 7 | **1957** | 339.30 | 335.10 | **5.29** |
| 8 | **1958** | 338.50 | 334.20 | **1.61** |
| 9 | **1959** | 339.20 | 338.15 | **4.93** |
| 10 | **1960** | 337.50 | 336.40 | **3.55** |
| 11 | **1961** | 337.50 | 337.00 | **3.81** |
| 12 | **1962** | 337.60 | 335.00 | **2.19** |
| 13 | **1963** | 337.80 | 332.80 | **1.09** |
| 14 | **1964** | 339.00 | 338.00 | **4.41** |
| 15 | **1965** | 337.70 | 334.90 | **1.92** |
| 16 | **1966** | 338.60 | 336.90 | **4.15** |
| 17 | **1967** | 337.80 | 334.40 | **1.55** |
| 18 | **1968** | 337.90 | 335.10 | **2.13** |
| 19 | **1969** | N/A | N/A | **N/A** |
| 20 | **1970** | 337.70 | 333.60 | **1.44** |
| 21 | **1971** | 337.70 | 336.20 | **2.61** |
| 22 | **1972** | 337.90 | 335.25 | **1.61** |
| 23 | **1973** | 341.00 | 340.30 | **8.02** |

| | | | | |
|---|---|---|---|---|
| 24 | **1974** | N/A | N/A | **N/A** |
| 25 | **1975** | 338.00 | 337.00 | **4.82** |
| 26 | **1976** | 342.40 | 340.70 | **7.10** |
| 27 | **1977** | 337.80 | 335.40 | **2.57** |
| 28 | **1978** | 337.90 | 336.60 | **3.33** |
| 29 | **1979** | 338.00 | 334.00 | **1.39** |
| 30 | **1980** | 338.40 | 334.95 | **1.80** |
| 31 | **1981** | N/A | N/A | **N/A** |
| 32 | **1982** | 337.90 | 335.00 | **1.49** |
| 33 | **1983** | 339.00 | 337.10 | **3.20** |
| 34 | **1984** | 338.20 | 334.80 | **1.54** |
| 35 | **1985** | 338.20 | 335.50 | **2.55** |
| 36 | **1986** | 341.50 | 337.40 | **3.53** |
| 37 | **1987** | 338.20 | 335.10 | **1.60** |
| 38 | **1988** | 340.90 | 339.70 | **5.07** |
| 39 | **1989** | 339.20 | 337.40 | **4.29** |
| 40 | **1990** | 338.20 | 335.45 | **2.00** |
| 41 | **1991** | 338.20 | 335.00 | **1.70** |
| 42 | **1992** | 340.50 | 340.30 | **8.12** |
| 43 | **1993** | 338.20 | 337.20 | **3.55** |
| 44 | **1994** | 338.50 | 336.20 | **2.66** |
| 45 | **1995** | 339.20 | 338.90 | **6.05** |
| 46 | **1996** | 339.00 | 338.60 | **5.71** |
| 47 | **1997** | 339.55 | 339.45 | **5.12** |
| 48 | **1998** | 338.50 | 334.20 | **1.61** |
| 49 | **1999** | 338.30 | 328.50 | **0.48** |

| | | | | |
|---|---|---|---|---|
| 50 | **2000** | 338.20 | 330.60 | **0.75** |
| 51 | **2001** | 338.20 | 330.10 | **0.57** |
| 52 | **2002** | 338.20 | 331.00 | **0.68** |
| 53 | **2003** | 338.10 | 333.70 | **0.93** |
| 54 | **2004** | 338.20 | 326.80 | **0.33** |
| 55 | **2005** | 338.00 | 334.00 | **1.01** |
| 56 | **2006** | 338.20 | 336.40 | **2.82** |
| 57 | **2007** | 338.20 | 331.90 | **0.51** |
| 58 | **2008** | 338.20 | 332.00 | **0.53** |
| 59 | **2009** | 338.20 | 329.60 | **0.32** |
| 60 | **2010** | 338.80 | 338.70 | **3.10** |
| 61 | **2011** | 338.00 | 337.05 | **1.66** |
| 62 | **2012** | 336.50 | 334.50 | **0.56** |
| 63 | **2013** | 338.80 | 336.96 | **3.17** |
| 64 | **2014** | 340.18 | 339.90 | **4.53** |
| 65 | **2015** | 338.20 | 335.00 | **1.39** |
| 66 | **2016** | 338.10 | 335.70 | **1.30** |
| 67 | **2017** | 338.10 | 333.50 | **0.78** |
| 68 | **2018** | 338.10 | 331.20 | **0.57** |
| 69 | **2019** | 337.90 | 334.55 | **0.87** |
| 70 | **2020** | 338.00 | 336.10 | **1.47** |
| 71 | **2021** | 338.00 | 333.25 | **0.75** |
| 72 | **2022** | 338.00 | 335.00 | **1.21** |
| 73 | **2023** | 337.70 | 336.10 | **1.59** |
| 74 | **2024** | 338.00 | 335.10 | **0.72** |
| 75 | **2025** | 342.90 | 342.40 | **7.03** |

At Punjnand Headworks

| SR. NO. | YEAR | U/S GAUGE | D/S GAUGE | DISCHARGE (LAC CS) |
|---|---|---|---|---|
| 1 | **1950** | 340.30 | 339.80 | **6.76** |
| 2 | **1951** | 337.50 | 335.30 | **2.45** |
| 3 | **1952** | N/A | N/A | **N/A** |
| 4 | **1953** | 337.50 | 335.20 | **2.78** |
| 5 | **1955** | 339.35 | 338.40 | **5.50** |
| 6 | **1956** | 337.10 | 332.20 | **1.45** |
| 7 | **1957** | 339.30 | 335.10 | **5.29** |
| 8 | **1958** | 338.50 | 334.20 | **1.61** |
| 9 | **1959** | 339.20 | 338.15 | **4.93** |
| 10 | **1960** | 337.50 | 336.40 | **3.55** |
| 11 | **1961** | 337.50 | 337.00 | **3.81** |
| 12 | **1962** | 337.60 | 335.00 | **2.19** |
| 13 | **1963** | 337.80 | 332.80 | **1.09** |
| 14 | **1964** | 339.00 | 338.00 | **4.41** |
| 15 | **1965** | 337.70 | 334.90 | **1.92** |
| 16 | **1966** | 338.60 | 336.90 | **4.15** |
| 17 | **1967** | 337.80 | 334.40 | **1.55** |
| 18 | **1968** | 337.90 | 335.10 | **2.13** |
| 19 | **1969** | N/A | N/A | **N/A** |
| 20 | **1970** | 337.70 | 333.60 | **1.44** |
| 21 | **1971** | 337.70 | 336.20 | **2.61** |
| 22 | **1972** | 337.90 | 335.25 | **1.61** |
| 23 | **1973** | 341.00 | 340.30 | **8.02** |

| | | | | |
|---|---|---|---|---|
| 24 | **1974** | N/A | N/A | **N/A** |
| 25 | **1975** | 338.00 | 337.00 | **4.82** |
| 26 | **1976** | 342.40 | 340.70 | **7.10** |
| 27 | **1977** | 337.80 | 335.40 | **2.57** |
| 28 | **1978** | 337.90 | 336.60 | **3.33** |
| 29 | **1979** | 338.00 | 334.00 | **1.39** |
| 30 | **1980** | 338.40 | 334.95 | **1.80** |
| 31 | **1981** | N/A | N/A | **N/A** |
| 32 | **1982** | 337.90 | 335.00 | **1.49** |
| 33 | **1983** | 339.00 | 337.10 | **3.20** |
| 34 | **1984** | 338.20 | 334.80 | **1.54** |
| 35 | **1985** | 338.20 | 335.50 | **2.55** |
| 36 | **1986** | 341.50 | 337.40 | **3.53** |
| 37 | **1987** | 338.20 | 335.10 | **1.60** |
| 38 | **1988** | 340.90 | 339.70 | **5.07** |
| 39 | **1989** | 339.20 | 337.40 | **4.29** |
| 40 | **1990** | 338.20 | 335.45 | **2.00** |
| 41 | **1991** | 338.20 | 335.00 | **1.70** |
| 42 | **1992** | 340.50 | 340.30 | **8.12** |
| 43 | **1993** | 338.20 | 337.20 | **3.55** |
| 44 | **1994** | 338.50 | 336.20 | **2.66** |
| 45 | **1995** | 339.20 | 338.90 | **6.05** |
| 46 | **1996** | 339.00 | 338.60 | **5.71** |
| 47 | **1997** | 339.55 | 339.45 | **5.12** |
| 48 | **1998** | 338.50 | 334.20 | **1.61** |
| 49 | **1999** | 338.30 | 328.50 | **0.48** |

| | | | | |
|---|---|---|---|---|
| 50 | **2000** | 338.20 | 330.60 | **0.75** |
| 51 | **2001** | 338.20 | 330.10 | **0.57** |
| 52 | **2002** | 338.20 | 331.00 | **0.68** |
| 53 | **2003** | 338.10 | 333.70 | **0.93** |
| 54 | **2004** | 338.20 | 326.80 | **0.33** |
| 55 | **2005** | 338.00 | 334.00 | **1.01** |
| 56 | **2006** | 338.20 | 336.40 | **2.82** |
| 57 | **2007** | 338.20 | 331.90 | **0.51** |
| 58 | **2008** | 338.20 | 332.00 | **0.53** |
| 59 | **2009** | 338.20 | 329.60 | **0.32** |
| 60 | **2010** | 338.80 | 338.70 | **3.10** |
| 61 | **2011** | 338.00 | 337.05 | **1.66** |
| 62 | **2012** | 336.50 | 334.50 | **0.56** |
| 63 | **2013** | 338.80 | 336.96 | **3.17** |
| 64 | **2014** | 340.18 | 339.90 | **4.53** |
| 65 | **2015** | 338.20 | 335.00 | **1.39** |
| 66 | **2016** | 338.10 | 335.70 | **1.30** |
| 67 | **2017** | 338.10 | 333.50 | **0.78** |
| 68 | **2018** | 338.10 | 331.20 | **0.57** |
| 69 | **2019** | 337.90 | 334.55 | **0.87** |
| 70 | **2020** | 338.00 | 336.10 | **1.47** |
| 71 | **2021** | 338.00 | 333.25 | **0.75** |
| 72 | **2022** | 338.00 | 335.00 | **1.21** |
| 73 | **2023** | 337.70 | 336.10 | **1.59** |
| 74 | **2024** | 338.00 | 335.10 | **0.72** |
| 75 | **2025** | 342.90 | 342.40 | **7.03** |

## CHAPTER-5

## FLOOD FIGHTING STRATEGY

In order to ensure timely flood fighting and relief measures / activities Irrigation Department and other agencies as Civil Administration, Police, Army, etc, strictly adhere to their functions delineated in the SOP, which explicitly indicates the roles and responsibilities of each functionary of the concerned Department. However, SOPs / Strategies to be adopted at different flood limits are given blow:-

### FROM RD 0+000 TO 96+000 OF AHMADPUR FLOOD BUND (Ahmadpur Canal Sub Division)

This reach of the bund falls in the jurisdiction of Tehsil Bahawalpur, hence Tehsil Administration Bahawalpur and Military officers at Bahawalpur are to be associated with the Department. The Sub Divisional Officer Ahmedpur will inspect the entire flood bund with AC Bahawalpur and Military Officers. Sub Engineers will inspect the flood bund and will ensure to close the ramps, rain cuts ,gharas and will maintain the weak reaches during the normal flood season as per SOP laid down in this Flood Fighting Plan. As soon as the flood downstream Islam is signaled as Medium Flood, Sub Divisional Officer, Ahmedpur will shift his Head Quarter to Sama Satta and will ensure implementation of watching strength, flood fighting material and machinery as per approved scale. The concerned Sub Engineer will shift his Head Quarters at dangerous reach near Fattu Wali at RD 14+000 of flood bund.

**When the discharge downstream Islam changes from Medium to High**.

Sub Division Officer, Ahmedpur will call Zilladars along with his sub engineers & Patwaries for flood duty. Simultaneously he will reduce the indent of Ahmedpur Branch to 50%. He will ensure watching strength, machinery, flood fighting camps and flood fighting material as per the SOP laid down in this plan corresponding to the medium flood limit in River Satluj.

**Similarly, when the limit of Medium Flood crosses downstream Islam,**

Executive Engineer Ahmadpur will also shift his Head Quarter on the flood bund. Watching strength, machinery, flood fighting camps and flood fighting material as per the SOP laid down in this plan corresponding to the limit higher to medium flood limit in River Satluj reaches will be made available.

However, for back water effect for this reach, the trigger point is Trimmu Headworks in case of flood in at Punjnand Headworks. In case of the flood only at Punjnand Headwork or Flood in both the rivers, the arrangement will be made according to the developing situation after approval from Superintending Engineer, Bahawalpur Canal Circle. However, with respect to back water effect from Punjnand Headworks , this reach is not critical as that of reach from RD 96+000 to RD 162+905.

**FROM RD 96+000 TO 162+905 OF AHMEDPUR FLOOD BUND (Kotla Musa Khan Canal Sub Division)**

This reach of the flood bund falls in the jurisdiction of Tehsil Ahmedpur East. Hence, SDO Kotla Musa Khan Canal Sub Division will associate AC Ahmadpur East and Military officers at Ahmadpur(Dera Nawab Cantt) with the Department for flood fighting measures. This reach is critical with respect to back water effect from Punjnand Headwork. The Sub Divisional Officer Kotla Musa Khan will inspect the entire flood bund with AC Ahmadpur East and Military officers. Sub Engineers will inspect the flood bund and will ensure to close the ramps,rain cuts ,gharas and will maintain the weak reaches during normal flow season as per the SOP laid down in this plan. As soon as flood downstream Islam and/or Trimmu Headworks starts changes to Medium Flood, Sub Divisional Officer Kotla Musa Khan will shift to Noushera Canal Rest House. He will depute his Sub Engineers to remain present opposite village Pippli Rajan and village Ali Wahan (the vulnerable reaches) and RD 155+000

**WHEN FLOOD DOWNSTREAM HEAD ISLAM AND/ORTRIMMU CHANGES FROM MEDIUM TO HIGH .**

Sub Divisional Officer Kotla Musa Khan will himself shift to the above mentioned reaches. He will increase the watching strength, machinery, and flood fighting camps as provided in this plan corresponding to the flood limits. At this stage, he will call all his Zilladars, Patwaries for flood duty.

**WHEN FLOOD DOWNSTREAM ISLAM AND/OR TRIMMU CHANGES FROM MEDUIM TO ABOVE LIMITS**

Sub Divisional Officer Kotla Musa Khan will call all of his Establishment including zilladar and patwaris. The duties of the Establishment and Officials will be readjusted as per Duty Roster. He will increase the watching strength, machinery, and flood fighting camps as provided in this plan corresponding to the flood limits

**EFFECTIVELY HANDLING OF ANY FLOOD RELATED SITUATION.**

On receipt of daily gauges from flood warning center and flood forecasting of metrological department, a comprehensive plan is chalked-out for flood management in Ahmadpur Canal Division.

Keeping in view lengthy system of Bund along Sutlej River to effectively handle any flood related situation, such flood affected areas will be divided into various suitable sectors. Each sector headed by Sector in-charge along with requisite manpower and other resources to fight flood will be indicated.

The flood fighting area is divided into two Sub Sectors. The Executive Engineer, Ahmadpur will be overall Sector In charge.

**SUB SECTOR NO. 1**

Sub Divisional Officer, Ahmadpur Canal Sub Division alongwith his staff will look after Ahmadpur Flood Bund from RD. 0+000-96+000.

**SUB SECTOR NO. 2**

Sub Divisional Officer, Kotla Musa Khan Sub Division alongwith his staff will look after Ahmadpur Flood Bund from RD. 96+000-162+905.

**Pre-flood inspections:**

Annual Pre-flood inspections will be carried out by Departmental notified committee, Special branch and Pak Army before Flood season 2026.

## CHAPTER-6

## FLOOD DAMAGES RESTORATION WORKS

The Ahmadpur Flood Bund is situated along the left side of Sutlej River. The said River is not received Flood water from the last 30 years and is just like dead. The river training works are not along the said flood bund, so no damages accorded during the year 2020-2024. However, during 2025 floods, Ahmadpur Flood Bund stood against flood water of River Satluj and Back water effect from Punjnand Head work . Flood water was raised on average of 2 feet above the top level of the bund in tail reaches whereas in middle reaches free board was encroached. These effects were mitigated with effective flood fighting strategy. Moreover, PC-1 titled “Remodeling and Protection of Ahmadpur Flood Bund “ is being processed to meet with the future challenges of floods. There is no reserve stock for the River Training Works on Ahmadpur Flood Bund.

## CHAPTER NO.7

## FLOOD FIGHTING ARRANGEMENTS

### 7.1 Pre Flood Arrangement:

A flood control center will be established in Divisional office Ahmadpur East and responsible staff will be available round the clock. In emergency, plan has been prepared in which the camps will be shifted at different location as per Sub Sectors. Watching of Ahmadpur Flood Bund round the clock alongwith fighting material and machinery will be provided to avoid any mishap at vulnerable site. During pre-flood time, process of the procurement of the material, machinery and watching establishment shall be made through private contractors as per SOP laid down for normal flood season.

.

**Flood Warning System**

The flood warning gauges will be received from the following centers:-

- Flood Control center Lahore
- Islam /Trimmu/Punjnand Headworks (Trigger point)

Flood Control Center at the Division office will be responsible to collect these gauges 3-hourly in case of high flood and above and 6-hourly in case of low flood to medium flood. These gauges will be conveyed to Irrigation Flood Warning Center at Lahore & Zonal Office Bahawalpur and will be supplied promptly to the Executive Engineer, Ahmadpur Canal Division and Sub Divisional Office

### 7.2 Watching Establishment:

| Sr. No. | Structure Name | Length (Miles) | Flood Limits | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Normal Flood Season | | Low Flood | | Medium/High Flood | | Very High/ Exp. High Flood | |
| | | | Men | Shift | Men | Shift | Men | Shift | Men | Shift |
| | | | 1 Person/ 2 mile/Shift (1 Shift) | | 1 Person/ mile/Shift (1 Shift) | | 2 Person/ mile/Shift (2 Shift) | | 5 Person / mile/ Shift (3 Shift) | |
| 1 | Ahmadpur flood bund | 31 | 16 | 1 | 31 | 1 | 62 | 2 | 155 | 3 |
| **TOTAL Per Shift :-** | | | **16** | | **31** | | **62** | | **155** | |
| **Total** | | | **16** | | **31** | | **124** | | **465** | |
| **No. of Mates** | | | **1** | | **3** | | **10** | | **38** | |

Payment of work charge employees of subject to verification of TPM / consultants.

**Note:**

The Superintending Engineer, Bahawalpur Canal Circle, Shall approve one

additional shift during low to high flood based on necessity of site but reach will be mentioned where additional shift is required.

- Beldar will be provided with hand tools (1 Kassie, 1 Axe, and 1 Rechargeable Torch for night shift in case of flood above low flood limit)
- The activities of staff during normal flood season will be included but not limited to:
    - Removing Jungle and bushes from slopes and toe of embankment.
    - Filling of rain cuts/ Gharas.
    - Dressing of slopes.
    - Filling porcupine and rat holes.
    - Keeping the track motorable.

**Note**:

The above mentioned establishment shall be outsourced before flood season for operational efficiency during flood fighting activities. Moreover, Superintending Engineer, Bahawalpur Canal Circle shall approve additional resources above the approved FFP on the recommendations of Executive Engineer based on the necessity with copy to TPM and Chief Engineer Irrigation Bahawalpur Zone with mentioning of the reach and justifying the reason for additional resources.

### 7.3 Arrangement at Sensitive Sites:

All sensitive sites on Flood Embankments / Structures have been given special attention and all necessary arrangements regarding watching of the structures have been ensured for flood fighting with designated RDs and location as under:

| **Established Camps Details** | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Sr. No.** | **Structure Name** | **Length (Miles)** | **Vulnerable sites** | | **No. of Camps Established Except Vulnerable Points** | | |
| | | | | | **Normal Flood season/Low Flood** | **Medium/High Flood** | **Very High/Exp. High Flood** |
| | | | **Reach** | **No. of Camps** | **15 Miles** | **7 Miles** | **5 Miles** |
| **1** | Ahmadpur flood bund | 31 | 121-129 | 01 | 01 | 02 | 02 |
| **Total** | | | | 01 | 01 | 02 | 02 |

## 7.4 Watching Materials:

Flood Fighting Material will be purchased on the basis of the worst case scenario i.e for exceptionally high floods. The requirement for worst case scenario is as follows:

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

| Sr. No. | Item | Unit | Total Required Quantity | Available Quantity | Balance Quantity | Remarks |
|---|---|---|---|---|---|---|
| 1 | Shouldari / Tent | No. | 01 | 0 | 01 | Will be Purchased before coming of Flood Season 2026 |
| 2 | Chairs | No. | 06 | 0 | 06 | |
| 3 | Table | No. | 01 | 0 | 01 | |
| 4 | Generator (2-3 KVA) | No. | 01 | 0 | 01 | |
| 5 | Pedestal Fans | No. | 01 | 0 | 01 | |
| 6 | Charpois | No. | 02 | 0 | 02 | |
| 7 | Symbolic Jackets | No. | 50 | 0 | 50 | |
| 8 | Polythene Sheets | Kg | 100 | 0 | 100 | |
| 9 | Bamboos (4" dia and 10 ft long) | No. | 100 | 0 | 100 | |
| 10 | Water Cooler | No. | 01 | 0 | 01 | |
| 11 | Portable Umbrella | No. | 02 | 0 | 02 | |
| 12 | Life Jackets | No. | 05 | 0 | 05 | |
| 13 | Utensils (10 person serving) | No. | 01 | 0 | 01 | |
| 14 | Jute / Plastic Bags | No. | 1000 | 0 | 1000 | |
| 15 | Walke Talkie Set | Set | 02 | 0 | 02 | |
| 16 | Raincoats | No. | 10 | 0 | 10 | |
| 17 | LED Flood Light | No. | 10 | 0 | 10 | |
| 18 | Extension Cable (10 ft) | No. | 02 | 0 | 02 | |
| 19 | Rechargeable Torches | No. | 20 | 0 | 20 | |
| 20 | Kassi | No. | 20 | 0 | 20 | |
| 21 | Axes | No. | 20 | 0 | 20 | |
| 22 | G.I Buckets | No. | 05 | 0 | 05 | |
| 23 | 7/44 cable | Feet | 500 | 0 | 500 | |
| 24 | Sutli | Kg | 02 | 0 | 02 | |
| 25 | Sewing Needles | No. | 10 | 0 | 10 | |
| 26 | Emergency Medical Kit | No. | 1 | 0 | 1 | |
| 27 | Wire crates (3x3x3) (at only those camp near river action and reserve stock exists) | No. | 100 | 0 | 100 | |

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

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

### 7.5 ARRANGEMENT FOR SOUNDING & PROBING

Equipment including Sounding Rods, Leveling Instruments, Arrows etc. are available to perform Sounding and Probing during the flood.

### 7.6 LIGHTING ARRANGEMENT

Material for Necessary Lighting arrangements have also been made incorporated in this plan and will be made on Ahmadpur Flood Bund for flood fighting.

### 7.7 RATION ARRANGEMENT

Ration arrangement for the deployed labour is the responsibility of Civil Administration. However, this activity will also be taken into account at all levels during the floods and if required will be procured through departmental enlisted contractors.

### 7.8 POL ARRANGEMENT FOR VEHICLE

Necessary arrangements to facilitate earth moving machinery including P.O.L will also been ensured by Irrigation Department as well as by the Civil Department, wherever required.

## 7.9 TRANSPORTATION

Only three Jeeps in Ahmadpur Canal Division are available. Moreover, two number pickups will be arranged for transportation. Whereas, machinery for flood fighting activities will be outsourced as per the SOP laid down in this plan.

## 7.10 LAW AND ORDER

1. Deputy Commissioner & District Police Officer, Bahawalpur District shall provide adequate police assistance in all sectors /relief centers/flood affected areas, during any flood related emergency, for security purpose and maintenance of law & order:
2. They will also render operational support to assist XEN, SDO and SBEs of Ahmadpur Canal Division and shall also ensure maintenance of law and order in flood hit areas/relief centers.
3. They will deploy adequate police force at Critical points i.e near Samma Satta , Pipli Rajan & Shamsabad as well as along River Chenab and Sutlej for evacuation of people / livestock from low lying areas along the River bed in collaboration with Revenue department as well as Military Authorities.
4. They Will put all District Police force in state of high alert and instruct them to collect and disseminate any flood related information to higher authorities as well as general public.
5. They will make alternate arrangements for traffic, in case of suspension of normal routes, on account of floods.
6. Deputy Commissioner Bahawalpur will be kept informed of any flood related situation (extreme).
7. They will issue directions for use of public wireless system, for communication purposes, during the emergency.

## 7.11 MEDICAL ARRANGEMENT FOR LABOUR

E.D.O (H) will be expected to perform the following functions inter alia:

1. Provision of First Aid /Medicare facilities during flood related emergency in District Bahawalpur.

2. Extensive preventive vaccination/inoculation before, during and after the flood season.

3. Provision of necessary medicines, antibiotic, drug, O.R.S and anti snake biting and other necessary vaccines, in adequate quantities in addition to necessary First Aid articles.

4. Planning and organization of Emergency centers and establishment of emergency cells as well as special medical teams, for centralized planning and coordination, during actual emergency and carrying out mass inoculations/vaccination of the affected population, in targeted areas/relief centers.

5. Provision of clean sanitary conditions in affected areas. Activation of mobile units with medical officer and staff for provision of medical facilities in remotely located areas.

6. Mobilization of disaster management unit and provision of essential articles e.g blankets, stoves, tents in the relief centers, upon advice of District Government.

## 7.12 LIAISON WITH OTHER DEPARTMENT

**Executive Engineer (Highways Division) BAHAWALUR.**

XEN Highways Division Bahawalpur will ensure all possible precautionary measures prior to onset of flooding season. He will make arrangements of protection and repair of bridges/roads and necessary infrastructure and will co-ordinate with Irrigation Department in every possible way, in the event of any contingency. He shall be responsible inter alia, for:

1. Mobilization of all resources of the Highways Department including machinery and manpower, in aid and assistance of District Government /Irrigation Department.

2. Tabulating data of all excavator /trolleys in the District during the flood season required for repair of breach.

3. Improving breaches/cuts on directions of competent authority, in order to facilitate discharge of water and to prevent larger catastrophes.

4. Repair and rehabilitation of damaged roads, bridges or essential infrastructure, ensuring swift restoration of communication infrastructure, particularly to be used for relief operations.

5. Roads are in satisfactory state and normal flow of traffic is maintained before and after flood emergency situation.

6. Comprehensive survey of damaged roads is conducted and repair works start immediately as soon as flood is over.

7. Any other operation as the District Government authorities may direct, in aid and assistance of XEN Irrigation.

**E.D.O (HEALTH).**

E.D.O (H) will be expected to perform the following functions inter alia:

1. Provision of First Aid /Medicare facilities during flood related emergency in District Bahawalpur.
2. Extensive preventive vaccination/inoculation before, during and after the flood season.
3. Provision of necessary medicines, antibiotic, drug, O.R.S and anti snake biting and other necessary vaccines, in adequate quantities in addition to necessary first aid articles.
4. Planning and organization of Emergency centers and establishment of emergency cells as well as special medical teams, for centralized planning and coordination, during actual emergency and carrying out mass inoculations/vaccination of the affected population, in targeted areas/relief centers.
5. Provision of clean sanitary conditions in affected areas. Activation of mobile units with medical officer and staff, for provision of medical facilities in remotely located areas.
6. Mobilization of disaster management unit and provision of essential articles e.g. blankets, stoves, tents in the relief centers, upon advice of District Government.

**E.D.O (AGRICULTURE)**

E.D.O Agriculture is expected to perform following functions inter alia:

1. He will ensure that sufficient stock of Rabi crop seeds and fertilizers remain available in the District at all times,
2. The supply of fodder for cattle during emergency is properly managed, by the Agriculture Department.
3. He will launch a rigorous campaign in the District through loudspeaker announcements, regarding time and points of

availability of fodder and wheat bhoosa/hay. Farmers shall be educated as to how they can secure their crops from flood/rain water.

4. He will ensure that at least three mobiles teams headed by the D.D.O.A.Es Bahawalpur, Ahmadpur East remain available throughout the flood season, for monitoring of flood sectors and provision of assistance in targeted areas.
5. He will manage the workforce in order to effectively combat any natural climate and render assistance in all Flood Sectors/Relief Camps on need basis.

**E.D.O LIVESTOCK**

It has been noticed that many people prefer to stay back and protect their livestock even in desperate times, at the peril of their lives. Such a dispensation not only endangers their own lives but also makes it extremely difficult for the rescue teams to be able to extract the marooned in case situation aggravates. In view therefore, D.O Livestock shall be expected to perform the following functions?

1. A Relief Cell at the District level is established under supervision of District Livestock Officer in his office, which is remained open round the clock.
2. D.O (Livestock) shall be responsible for vaccination of animals of flood affected areas. For this purpose, banners regarding flood relief activities will be displayed at conspicuous places in all flood relief centers, in order to apprise flood affecters about facilities available for vaccination and treatment of animals.
3. In case of flood emergency, emergency field units will be activated for necessary measures pertaining to mass vaccination against spread of diseases. For this purpose, D.O (Livestock) shall organize sector wise mobile teams, for the purpose of providing treatment and vaccination. The teams will maintain active presence in flood-affected areas and render all possible assistance to the affected communities.

4. D.O (Livestock) shall report to emergency centers about the extent of damages to live stock, after flood emergency is over.

**E.D.O (EDUCATION)**

The E.D.O will be expected to perform the following functions inter alia:

1. He will make available all school premises along the vulnerable areas for establishment of relief camps, in order to be able to accommodate displaced people. He will detail requisite staff and will ensure that all school buildings remain readily available round the clock, for the purpose of accommodating the displaced people, throughout the entire flooding season.
2. He will ensure presence of boy scouts and senior class students at relief camps and shall be overall incharge and focal person for this activity.

**E.D.O (COMMUNITY DEVELOPMENT)**

He will assist in collection of donations in cash/kind of arranging relief activities within and outside the District. He will also motivate local philanthropists/volunteers as well as N.G.Os in integrating their efforts with those of the status apparatus. He will maintain a complete record of volunteers/philanthropists, keen to extend assistance in relief activities and shall also maintain an inventory of all articles collected and distributed in this regard.

**DISTRICT FLOOD CONTROLLER**

District Food Controller will ensure that:

1. In case of emergency, sufficient stocks of wheat /sugar remain available in flood affected areas.
2. will prepare a scheme for opening of temporary ration depots in the areas likely to be affected by flood /rain.
3. Will depute requisite staff with District Flood Relief Officer, during and after flood emergency.

4. Will arrange for emergency ration packets comprising of necessary available food items.
5. Will arrange for immediate supply and distribution of food through D.D.O (R) concerned.
6. Will immediately setup a centralized cell for affective coordination.

**XEN WAPDA /MEPCO**

WAPDA Officer at Ahmadpur / Bahawalpur will prepare necessary contingency plan to ensure that:-

1. No breakdown in electricity is allowed to happen in flood affected areas.
2. A Survey of electrical installation is conducted, particularly in flood /rain affected areas and appropriate arrangements are made for uninterrupted supply of electricity.
3. Uninterrupted electricity is supplied to sector offices, relief camps, as well as important installations.

**DIVISIONAL ENGINEER, PTCL**

He will ensure uninterrupted communication in the District and shall provide telephone lines immediately, in any of the facility set up on urgent basis, especially when any requisition is made by Military authorities and assistance of the civil administration. He will also be responsible for immediate restoration of telephonic linkages in case of damage to any PTCL installation, during and after flooding season.

**INCHARGE RESCUE 1122**

In-charge rescue 1122 will maintain close liaison with DFRO and shall promptly dispatch his rescue teams, at the call of DFRO, for rescue of marooned people. The 1122 service will remain in a state of high alert throughout the flooding season and shall be fully equipped with all gadgets as well as first aid equipments. Rescue 1122 will provide specialist swimmers, for extracting people from flood affected areas.

**DISTRICT OFFICER (CIVIL DEFENCE)**

1. The Civil Defense Officer shall in consultation with D.F.R.O, formulate a plan for rescue and relief operation in case of any contingency.
2. Arrange for training of Civil Defense contingent staff in handling any flood related situation.
3. Provide adequate number of volunteers for coordination of rescue activities and management of relief centers.
4. Will provide for motorboat and flood fighting equipment, on emergency basis.
5. Will setup an emergency cell for coordination amongst all departments, in case there is a high flood warning.
6. Will make available requisite number of Civil DE fence personnel/volunteers & material/equipment with District Flood relief officer Bahawalpur, for performance of duties during and after flood situation.
7. Will monitor and train volunteers, for meaningful assistance in flood fighting operations.
8. Will arrange training workshops for staff of different departments, for meaningful assistance in flood fighting operations

## 7.13 ROLE OF THE ARMY

Constitution of Islamic Republic of Pakistan enjoins upon the armed forces, to aid and assist the civil administration in times of need. Accordingly, army may be requisitioned in aid of civil administration, as and when necessary, depending upon the nature and gravity of the situation. Headquarter 4-Corps Bahawalpur 35 Div. shall nominate liaison Officers, who shall coordinate with the office of the Deputy Commissioner Bahawalpur and the DFRO Bahawalpur, during times of emergency. The military officers shall be expected to maintain constant liaison with the District Govt. and to provide troops as well as flood fighting equipment/boats, to the District Government. Upon requisition, the District Government shall arrange for accommodation of Army Troops and shall provide all necessary facilities e.g. telephone lines etc. for

communication/ operational purposes forward requests through proper channel and secure requisite number of TMO Bahawalpur and Ahmadpur East will be responsible for transportation of boats. In addition to troops from 4-Corps 35 Div, already deputed at Bahawalpur, may also be called to further assist the civil administration, during all rescue, relief and rehabilitation operations.

1. Will provide adequate police assistance in all sectors /relief centers/flood affected areas, during any flood related emergency, for security purpose and maintenance of law & order.
2. Will render operational support to assist D.F.O/ D.F.R.O/ T.F.R.O/ sector officers. In discharge of their duties and maintenance of law order in flood hit areas/relief centers.

## 7.14 DUTIES OF TELEPHONE ATTENDANT

Flood Control Rooms will be established at Tele Offices of Samma Satta, Musafir Khana, Noushehra Jadeed Sections which remain operational during the flood season and Signallers as well as Telephone Attendants remain present round the clock. All flood situation / reports is received hourly from field formation in the control rooms and conveyed to the Divisional Tele Office Ahmadpur East and Main Control Room at Zonal Office Bahawalpur.

| Sr. No. | Name of Officer / Officials | Designation | Station | Period | |
|---|---|---|---|---|---|
| | | | | From | To |
| 1 | Syed Ibrar Ahmad Sidiq | Signaler | Musafir Khana | 08:00 AM | 04:00 PM |
| 2 | Roshan Din | Head Signaler | Ahmadpur | 04:00 PM | 10:00 PM |
| 3 | Mehmood Rasheed | Signaler | Kotla Msa Khan | 10:00 PM | 08:00 AM |

## 7.15 WIRELESS ARRANGEMENTS

Wireless station at Ahmadpur Canal Division is available for communication which is connected with Flood Warning Center at Lahore and barrages on the river upstream of Islam/Trimmu Headworks.Flood warnings are received through this communication. However, Executive Engineer, Ahmadpur Canal Division will be facilitated with wireless mounted on Jeep supplied by the Police Headquarters and District Civil Administration Bahawalpur.

## CHAPTER 8

## DETAIL OF ENCROACHMENT

Encroachment along Ahmadpur Flood Bund Ahmadpur Canal Division are given as under. However, these encroachment are not critical as they have not covered the top of the bund.

| S.No. | NAME & FATHER'S NAME | AREA | R.D:/SIDE | KIND OF ENCROUCHMENT |
|---|---|---|---|---|
| 1 | Shahbaz Patwari | 3.0 Marla | 0 - 1 / R | House |
| 2 | Ghulam Hussain S/O Pari | 2.0 Marla | 0 - 1 / R | House |
| 3 | Raiz | 3.0 Marla | 0 - 1 / R | House |
| 4 | Allah Ditta S/O Pari | 2.0 Marla | 0 - 1 / R | House |
| 5 | Khadim Hussain S/O Ghous Bukhsh | 3.0 Marla | 0 - 1 / R | House |
| 6 | Allah Ditta S/O Madari | 3.0 Marla | 0 - 1 / R | House |
| 7 | Ghulam Hussain S/O Hazara | 2.0 Marla | 0 - 1 / R | House |
| 8 | Muhammad Hussain S/O Muhammad Ramzan | 3.0 Marla | 0 - 1 / R | House |
| 9 | Peer Bukhsh S/O Noor Muhammad | 3.0 Marla | 0 - 1 / R | House |
| 10 | Yaqoob S/O Noor Muhammad | 2.0 Marla | 1 - 2 / R | House |
| 11 | Hussaina S/O Noor Muhammad | 3.0 Marla | 1 - 2 / R | House |
| 12 | Ghulam Fareed S/O Bugoo | 3.0 Marla | 1 - 2 / R | House |
| 13 | Pathana S/O Gul Muhammad | 2.0 Marla | 1 - 2 / R | House |
| 14 | Ghulam Fareed S/O Muhammad Ramzan | 3.0 Marla | 1 - 2 / R | House |

| | | | | |
|---|---|---|---|---|
| 15 | Fida Hussain S/O Haq Nawaz | 3.0 Marla | 1 - 2 / R | House |
| 16 | Bashir S/O Gul Muhammad | 2.0 Marla | 1 - 2 / R | House |
| 17 | Ghulam Fareed S/O Muhammad Bukhsh | 3.0 Marla | 1 - 2 / R | House |
| 18 | Lal Bukhsh S/O Ahmad Nawaz | 3.0 Marla | 1 - 2 / R | House |
| 19 | Wazir Ahmad S/O Allah Bukhsh | 2.0 Marla | 1 - 2 / R | House |
| 20 | Allah Bukhsh S/O Wahid Bukhsh | 3.0 Marla | 1 - 2 / R | House |
| 21 | Tariq S/O Muhammad Sharif | 3.0 Marla | 1 - 2 / R | House |
| 22 | Manzoor S/O Ghulam Fareed | 2.0 Marla | 1 - 2 / R | Shop |
| 23 | Muhammad Ramzan S/O Wahid Bukhsh | 3.0 Marla | 1 - 2 / R | House |
| 24 | Muhammad Nawaz S/O Wahid Bukhsh | 3.0 Marla | 1 - 2 / R | House |
| 25 | Allah Bukhsh S/O Deewan | 2.0 Marla | 1 - 2 / R | House |
| 26 | Talib Hussain S/O Wahid Bukhsh | 3.0 Marla | 1 - 2 / R | House |
| 27 | Nazir Hassan S/O Wahid Bukhsh | 3.0 Marla | 1 - 2 / R | House |
| 28 | Muhammad Iqbal S/O Wahid Bukhsh | 2.0 Marla | 1 - 2 / R | House |
| 29 | Nazir Ahmad S/O Allah Bukhsh | 3.0 Marla | 2 - 3 / L | House |
| 30 | Muhammad Qasim S/O | 3.0 Marla | 2 - 3 / L | House |

| | | | | |
|---|---|---|---|---|
| 31 | Taj Muhammad S/O | 2.0 Marla | 2 - 3 / L | House |
| 32 | Abdul Malik S/O Khan Muhammad | 3.0 Marla | 2 - 3 / L | House |
| 33 | Ghulam Hussain S/O Khan Muhammad | 3.0 Marla | 2 - 3 / L | House |
| 34 | Manzoor S/O Ghulam Fareed | 2.0 Marla | 2 - 3 / L | House |
| 35 | Muhammad Ramzan S/O Khan Muhammad | 3.0 Marla | 2 - 3 / L | House |
| 36 | Muhammad Hassan S/O Khan Muhammad | 3.0 Marla | 2 - 3 / L | House |
| 37 | Muhammad Sadiq S/O Khan Muhammad | 2.0 Marla | 2 - 3 / L | House |
| 38 | Allah Ditta S/O Ghulam Nabi | 3.0 Marla | 2 - 3 / L | House |
| 39 | Amir Bukhsh S/O Allah Ditta | 3.0 Marla | 2 - 3 / L | House |
| 40 | Ghulam Rasul S/O Peeran Ditta | 2.0 Marla | 2 - 3 / L | House |
| 41 | Muhammad Bukhsh S/O Peeran Ditta | 3.0 Marla | 2 - 3 / L | Shop |
| 42 | Ramzan S/O Qadir Bukhsh | 3.0 Marla | 2 - 3 / L | Shop |
| 43 | Ghulam Hussain S/O Peeran Ditta | 2.0 Marla | 2 - 3 / L | House |
| 44 | Khan Muhammad S/O Noor Khan | 3.0 Marla | 2 - 3 / L | House |
| 45 | Atta Muhammad S/O Noor Khan | 3.0 Marla | 3 - 4 / L | House |
| 46 | Karim Bukhsh S/O Pahilwan | 2.0 Marla | 3 - 4 / L | House |

| | | | | |
|---|---|---|---|---|
| 47 | Allah Ditta S/O Jam Muhammad | 3.0 Marla | 3 - 4 / L | House |
| 48 | Mukhtiar Hussain S/O Karim Bukhsh | 3.0 Marla | 3 - 4 / L | House |
| 49 | Muhammad Ahmad S/O Bashir Ahmad | 2.0 Marla | 3 - 4 / L | Shop |
| 50 | Muhammad Azam S/O Sindhi | 3.0 Marla | 3 - 4 / L | House |
| 51 | Doctor Muhammad Amjad Quarashi | 3.0 Marla | 3 - 4 / L | Shop |
| 52 | Doctor Abdul Waheed & Doctor Muhammad Yasin | 2.0 Marla | 3 - 4 / L | Shop |
| 53 | Noor Din S/O | 3.0 Marla | 3 - 4 / L | Shop |
| 54 | Doctor Aamir Mahmood Bukhari | 3.0 Marla | 3 - 4 / L | Shop |
| 55 | Haji Asgher S/O | 2.0 Marla | 3 - 4 / L | House |
| 56 | Haji Ahmad | 3.0 Marla | 4 - 5 / R | House |
| 57 | Haji Asgher S/O | 3.0 Marla | 4 - 5 / R | Shop |
| 58 | D.C. Muhajir | 2.0 Marla | 4 - 5 / R | House |
| 59 | Bashir Patwari | 3.0 Marla | 4 - 5 / R | House |
| 60 | Muhammad Asif Adocate S/O | 3.0 Marla | 4 - 5 / R | House |
| 61 | Masjid | 2.0 Marla | 4 - 5 / R | Masjid |
| 62 | Haji Abdul Malik S/O | 3.0 Marla | 4 - 5 / R | Shop |
| 63 | Muhammad Iqbal S/O Sardar Khan. | 3.0 Marla | 5-6 / R | House |
| 64 | Suhail S/o Allah Bukhsh | 2.0 Marla | 5-6 / R | House |

| | | | | |
|---|---|---|---|---|
| 65 | Muhammad Sadiq S/O Peer Bukhsh | 3.0 Marla | 5-6 / R | House |
| 66 | Raiz S/O Haji Muhammad Bukhsh | 3.0 Marla | 5-6 / R | House |
| 67 | Billal Ahmad S/O Faiz Bukhsh | 2.0 Marla | 5-6 / R | House |
| 68 | Ahmad Yar S/O Khuda Bukhsh | 3.0 Marla | 5-6 / R | House |
| 69 | Allah Wasaya S/O Ahmad | 3.0 Marla | 5-6 / R | House |
| 70 | Rafiq S/O Ashiq | 2.0 Marla | 5-6 / R | House |
| 71 | Haji Billal S/O Ghulam Sarwar | 3.0 Marla | 5-6 / R | House |
| 72 | Muhammad Yar S/O Ghulam Qadir | 3.0 Marla | 6 - 7 / R | House |
| 73 | Talib Hussain S/O Khalid Hussain | 2.0 Marla | 6 - 7 / R | Shop. |
| 74 | Mushtaq Ahmad S/O Allah Bukhsh | 3.0 Marla | 6 - 7 / R | House |
| 75 | Muhammad Bukhsh S/O Allah Ditta | 3.0 Marla | 6 - 7 / R | House |
| 76 | Ashiq S/O Khadim Hussain | 2.0 Marla | 6 - 7 / R | House |
| 77 | Muhammad Hussaoin S/O Khadim Hussain | 3.0 Marla | 6 - 7 / R | House |
| 78 | Muhammad Sadiq S/O Allah Ditta | 3.0 Marla | 6 - 7 / R | House |
| 79 | Manzoor Ahmad | 2.0 Marla | 6 - 7 / R | House |
| 80 | Zawar Hussain S/O Allah Diwaya | 3.0 Marla | 6 - 7 / R | House |

| | | | | |
|---|---|---|---|---|
| 81 | Fayyaz Ahmad S/O Sarwar Khan | 3.0 Marla | 6 - 7 / R | Shop. |
| 82 | Muhammad Ahsan S/O Allah Yar | 2.0 Marla | 6 - 7 / R | Bhana (Cattle Shed) |
| 83 | Muhammad Tariq S/O Allah Wasaya | 3.0 Marla | 6 - 7 / R | House |
| 84 | Manzoor Ahmad S/O Ahmad Yar | 3.0 Marla | 6 - 7 / R | House |
| 85 | Muhammad Aslam S/O Ahmad | 2.0 Marla | 7 - 8 / R | House |
| 86 | Ahmad bukhsh S/O Sarwar | 3.0 Marla | 7 - 8 / R | House |
| 87 | Allah Wasaya S/O Khuda Bukhsh | 3.0 Marla | 7 - 8 / R | House |
| 88 | Soufi Rashid S/O Imam Bukhsh | 2.0 Marla | 7 - 8 / R | House |
| 89 | Malik Shah Muhammad | 3.0 Marla | 8 - 9 / R | House |
| 90 | Allah Rakyia S/O Peer Bukhsh | 3.0 Marla | 8 - 9 / R | House |
| 91 | Ahmad Mian S/O Mian Saeed | 2.0 Marla | 8 - 9 / R | House |
| 92 | Ghulam Nabi S/O Peer Bukhsh | 3.0 Marla | 9 - 10 / R | House |
| 93 | Muhammad Akram S/O Allah Ditta | 3.0 Marla | 9 - 10 / R | House |
| 94 | Muhammad Miraj S/O Shafi Muhammad | 2.0 Marla | 9 - 10 / R | House |
| 95 | Khadim Hussain S/O Peer Bukhsh | 3.0 Marla | 9 - 10 / R | House |
| 96 | Haq Nawaz S/O Peer Bukhsh | 3.0 Marla | 10 - 11 / R | House |

| | | | | |
|---|---|---|---|---|
| 97 | Gopi Ram S/O Ashiq Ram | 2.0 Marla | 10 - 11 / R | House |
| 98 | Sono Ram S/O Haji Ram | 3.0 Marla | 10 - 11 / R | House |
| 99 | Malik Hafeez S/O Haji | 3.0 Marla | 10 - 11 / R | House |
| 100 | Haji Faiz Bukhsh S/O Qadir Bukhsh | 2.0 Marla | 10 - 11 / R | House |
| 101 | Muhammad Sultan S/O Muhammad Shafi | 3.0 Marla | 10 - 11 / R | House |
| 102 | Muhammad Rashid S/O Allah Bukhsh | 3.0 Marla | 13 - 14 / R | House |
| 103 | Muhammad Zubair S/O | 2.0 Marla | 13 - 14 / R | House |
| 104 | Ahmad Ali S/O Manzoor Ahmad | 3.0 Marla | 13 - 14 / R | House |
| 105 | Muhammad Yaqoob S/O Ghulam Fareed | 3.0 Marla | 13 - 14 / R | House |
| 106 | Muhammad Yousaf S/O Ghulam Fareed | 2.0 Marla | 13 - 14 / R | House |
| 107 | Muhammad Ibrahim S/O Ghulam Fareed | 3.0 Marla | 13 - 14 / R | House |
| 108 | Muhammad Rafiq S/O Yar Muhammad | 3.0 Marla | 14 - 15 / R | House |
| 109 | Ijaz Ahmad S/O Ghulam Sarwar | 2.0 Marla | 14 - 15 / R | House |
| 110 | Sajad Ahmad S/O Ghulam Sarwar | 3.0 Marla | 14 - 15 / R | House |
| 111 | Noor Muhammad S/O Yar Muhammad | 3.0 Marla | 14 - 15 / R | House |
| 112 | Muhammad Sidique S/O Fahad Ahmad | 2.0 Marla | 14 - 15 / R | House |

| | | | | |
|---|---|---|---|---|
| 113 | Muhammad Zafar S/O Allah Rakyia | 3.0 Marla | 14 - 15 / R | House |
| 114 | Maher Mustafa s/O Ahmad Yar | 3.0 Marla | 14 - 15 / R | House |
| 115 | Abdul Hameed S/O Noor Muhammad | 2.0 Marla | 14 - 15 / R | House |
| 116 | Muhammad Billal S/O Muhammad Sidique | 3.0 Marla | 14 - 15 / R | House |
| 117 | Maher Azam S/O Abdul Hassan | 3.0 Marla | 15 - 16 / R | House |
| 118 | Imam Bukhsh S/O Mistri Allah Diwaya | 2.0 Marla | 15 - 16 / R | House |
| 119 | Muhammad S/O Muhammad Nawaz | 3.0 Marla | 15 - 16 / R | House |
| 120 | Allah Bachaya S/O Muhammad Ramzan | 3.0 Marla | 15 - 16 / R | House |
| 121 | Hazoor Bkhsh S/O Yar Muhammad | 2.0 Marla | 15 - 16 / R | House |
| 122 | Muhammad Sidique S/O Noor Muhammad | 3.0 Marla | 15 - 16 / R | House |
| 123 | Yasin S/O Abdulallah Rehman | 3.0 Marla | 15 - 16 / R | House |
| 124 | Atta Muhammad S/O Noor Muhammad | 2.0 Marla | 15 - 16 / R | House |
| 125 | Bashir Ahmad S/O Abdullah Rehman | 3.0 Marla | 15 - 16 / R | House |
| 126 | Ansoo Din Shah S/O Karim Haider Shah | 3.0 Marla | 15 - 16 / R | House |
| 127 | Ghulam Fareed Allah Wasaya | 2.0 Marla | 15 - 16 / R | House |

| | | | | |
|---|---|---|---|---|
| 128 | Ghulam Fareed S/O Noor Muhammad | 3.0 Marla | 15 - 16 / R | House |
| 129 | Muhammad Yar S/O Ahmad Yar | 3.0 Marla | 15 - 16 / R | House |
| 130 | Abbas S/O Muhammad Akbar | 2.0 Marla | 15 - 16 / R | House |
| 131 | Muhammad Sadiq S/O Mulla | 3.0 Marla | 15 - 16 / R | House |
| 132 | Noor Muhammad S/O Qadir Bukhsh | 3.0 Marla | 15 - 16 / R | House |
| 133 | Muhammad Azam S/O Ghulam Fareed | 2.0 Marla | 15 - 16 / R | House |
| 134 | Dil shad S/O Abdul Razzaq | 3.0 Marla | 15 - 16 / R | House |
| 135 | Muhammad Arif S/O | 3.0 Marla | 17 - 18 | House |
| 136 | Dactor Liaqat S/O Najeeb | 2.0 Marla | 17 - 18 | House |
| 137 | Adnan Shah S/O Khalid bukhari | 3.0 Marla | 17 - 18 | House |
| 138 | Ghulam Qadir S/O Allah Bachaya | 3.0 Marla | 17 - 18 | House |
| 139 | Bashir Ahmad S/O Ghulam Nabi | 2.0 Marla | 17 - 18 | House |
| 140 | Abdul Hameed S/O Faiz Bukhsh | 3.0 Marla | 17 - 18 | House |
| 141 | Muhammad Ashiq S/O Faiz Bukhsh | 3.0 Marla | 17 - 18 | House |
| 142 | Muhammad Shafi S/O Faiz Bukhsh | 2.0 Marla | 17 - 18 | House |
| 143 | Muhammad Shafi S/O Faiz Bukhsh | 3.0 Marla | 17 - 18 | House |

| | | | | |
|---|---|---|---|---|
| 144 | Muhammad Sarwar S/O Faiz Bukhsh | 3.0 Marla | 17 - 18 | House |
| 145 | Muhammad Shakir S/O Allah Wasaya | 2.0 Marla | 17 - 18 | House |
| 146 | Muhammad Rafiq S/O Allah Wasaya | 3.0 Marla | 17 - 18 | House |
| 147 | Nadir S/O Misti Allah Bukhsh | 3.0 Marla | 17 - 18 | House |
| 148 | Nadir S/O Amir Bukhsh | 2.0 Marla | 17 - 18 | House |
| 149 | Allah Yar S/O Qadir Bukhsh | 3.0 Marla | 17 - 18 | House |
| 150 | Faqir Bukhsh S/O Jind Wadda | 3.0 Marla | 17 - 18 | House |
| 151 | Misti Sharif S/O Jind Wadda | 2.0 Marla | 17 - 18 | House |
| 152 | Misti Muhammad Fareed S/O Jind Wadda | 3.0 Marla | 17 - 18 | House |
| 153 | Miraj Ahmad S/O Moulvi Manzoor | 3.0 Marla | 17 - 18 | House |
| 154 | Farooq S/O Khuda Bukhsh | 2.0 Marla | 17 - 18 | House |
| 155 | Shabir S/O Allah Bukhsh | 3.0 Marla | 17 - 18 | House |
| 156 | Haji Abdul Karim S/O Peeran Ditta | 3.0 Marla | 17 - 18 | House |
| 157 | Nazoo S/O Allah Bukhsh | 2.0 Marla | 17 - 18 | House |
| 158 | Amin S/O Muhammad Yar | 3.0 Marla | 17 - 18 | House |
| 159 | Abdul Aziz S/O Rahim Bukhsh | 3.0 Marla | 17 - 18 | House |
| 160 | Muhammad Sidique S/O Abdul Aziz | 2.0 Marla | 17 - 18 | House |
| 161 | Haq Nawaz S/O Qadi Bukhsh | 3.0 Marla | 18 - 19 | House |

| | | | | |
|---|---|---|---|---|
| 162 | Abdul Rhman S/O Karim Bukhsh | 3.0 Marla | 18 - 19 | House |
| 163 | Allah Bukhsh S/O Allah Ditta | 2.0 Marla | 18 - 19 | House |
| 164 | Irshad S/O Ghulam Sarwar | 3.0 Marla | 18 - 19 | House |
| 165 | Shams U Din S/O Qadir Bukhsh | 3.0 Marla | 18 - 19 | House |
| 166 | Qadir Bukhsh S/O Rahim Bukhsh | 2.0 Marla | 18 - 19 | House |
| 167 | Muhammad Bukhsh S/O Karim Bukhsh | 3.0 Marla | 18 - 19 | House |
| 168 | Amir Bukhsh S/O jind Wadda | 3.0 Marla | 18 - 19 | House |
| 169 | Ghulam Muhammafd S/O Allah Wasayw | 2.0 Marla | 18 - 19 | House |
| 170 | Rafiq S/O Peeran Ditta | 3.0 Marla | 18 - 19 | House |
| 171 | Mistri Gulzar S/O Haji Ghulam | 3.0 Marla | 18 - 19 | House |
| 172 | Iqbal S/O Haji Ghulam | 2.0 Marla | 18 - 19 | House |
| 173 | Haji Ghulam S/O Ghuda Bukhsh | 3.0 Marla | 21 - 22 | House |
| 174 | Muhammad Hussain S/O Ch oudry Ramzan | 3.0 Marla | 21 - 22 | House |
| 175 | Ghulam Fareed S/O Jind Wadda | 2.0 Marla | 21 - 22 | House |
| 176 | Siraj S/O Manzoor | 3.0 Marla | 21 - 22 | House |
| 177 | Muhammad Yasin S/O Moulvi Riaz | 3.0 Marla | 21 - 22 | House |
| 178 | Mistri Zafar S/O Allah Ditta | 2.0 Marla | 21 - 22 | House |

| | | | | |
|---|---|---|---|---|
| 179 | Billal S/O Haji Ghulam | 3.0 Marla | 21 - 22 | House |
| 180 | Allah Yar S/O Qadir Bukhsh | 3.0 Marla | 21 - 22 | House |
| 181 | Abdul Ghafoor S/O Muhammad Bukhsh | 2.0 Marla | 21 - 22 | House |
| 182 | Allah Nawaz S/O Qadir Bukhsh | 3.0 Marla | 21 - 22 | House |
| 183 | Shamas S/O | 3.0 Marla | 21 - 22 | House |

Numerous corresponding have been made with the district administration for the removal of these encroachment but they are permanent residential buildings.

**Ordinary Encroachment**

| Total encroachment | Removed encroachment | Balanced encroachment | Action to be taken |
|---|---|---|---|
| 183 | - | 183 | Lists have been provided to district administration vide this Office No. 4373-we dated 16-10-2018, No. 1115-17 dated 07.04.2021, No. 2953-54 dated 08.09.2021, No. 3331-35 dated 01.10.2021, No. 3688-92 dated 27.10.2021, No. 1050-51 dated 21.05.2022, No. 1808 dated 24.09.2022, No. 913-16 dated 31.12.2022, No. 1013-16 dated 09.05.2023, No. 957-60 dated 04.05.2023,No. 324-25 dated 29.03.2025, No. 362-we dated 17.04.2024, No. 101 dated 15.02.2025 & No. 30.31 dated 17.06.2025 for removal of encroachment. In case any hindrance to flood fighting activities , the district administration will be requested for removal encroachment. |

**Critical encroachment**

| Total encroachment | Removed encroachment | Balanced encroachment | Action to be taken |
|---|---|---|---|
| There is no critical encroachment to Ahmadpur Flood bund. | NIL | NIL | NIL |

## CHAPTER 9

## DUTY ROSTER / FLOOD FIGHTING PROGRAM

In order to affectively handle any flood related situation, the flood fighting activities have been divided in to two operational domains i.e. Maintenance & Repair and Watching round the clock of Ahmadpur Flood Bund. During the emergency each sector is responsible for rehabilitation, appraisal of damages, restoration of services like repair and maintenance of flood bund, plugging of pipes fixed under the bund for cross irrigation purposes, maintaining of ramps, closing of cuts etc. Duty roster of each sector is illustrated below: -

### SECTOR – 1 (AHMADPUR CANAL SUB DIVISION)

<table>
<tr><td>SDO<br>Overall incharge of sector-I<br>From RD 0+000 to 96+000</td><td colspan="4">During Low to Medium Flood</td></tr>
<tr><td rowspan="2">SBEs</td><td>DERA MASTI SECTION</td><td>SAMA SATTA SECTION</td><td colspan="2">MUSAFIR KHANA</td></tr>
<tr><td colspan="4">This reach is divided into two sub sections.<br>Section 1-A from RD 0+000 to RD 48+000<br>Section 1-B from RD 48+000 to RD 96+000<br>Two Sub Engineers will perform flood duties at a time on sub sector 1-A and 1-B while relieving one Sub Engineer on alternate days.</td></tr>
<tr><td colspan="5">During Medium to High Flood & Above</td></tr>
<tr><td>SBEs</td><td>DERA MASTI SECTION (DMI)</td><td>SAMA SATTA SECTION (SMA)</td><td>MUSAFIR KHANA (MFK)</td><td>AHMAD PUR (AMP)</td></tr>
<tr><td></td><td colspan="4">This reach is divided into four sub sections.<br>Section 1-A from RD 0+000 to RD 24+000 SBE DMI<br>Section 1-B from RD 24+000 to RD 48+000 SBE SMA<br>Section 1-C from RD 48+000 to RD 72+000 SBE MFK<br>Section 1-D from RD 72+000 to RD 96+000 SBE AMP<br>They will perform their flood duties till the flood subsides.</td></tr>
</table>

**Note:**

The Sub Divisional officer Ahmadpur Canal Sub Division, after approval from the Executive Engineer Ahmadpur Canal Division, will call Ziladar Musafir khana Section

alongwith their Patwaris depending upon the developing situation of flood. He will also deploy watching establishment and machinery as per SOPs laid down in this plan.

**SECTOR – 2 (KOTLA MOUSA KHAN CANAL SUB DIVISION)**

<table>
<tr><td>SDO<br>Overall incharge of sector-2<br>From RD 96+000 to 162+905</td><td colspan="5">During Low to Medium Flood</td></tr>
<tr><td rowspan="2">SBEs</td><td>NOSHEHRA SECTION</td><td>KHAIRPUR DAHA SECTION</td><td colspan="3">BAHAWAL SECTION</td></tr>
<tr><td colspan="4">This reach is divided into two sub sections.<br>Section 1-A from RD 96+000 to RD 129+000<br>Section 1-B from RD 129+000 to RD 162+905<br>Two Sub Engineers will perform flood duties at a time on sub sector 1-A and 1-B while relieving one Sub Engineer on alternate days.</td></tr>
<tr><td colspan="6">During Medium to High Flood & Above</td></tr>
<tr><td>SBEs</td><td>NOSHEHRA SECTION (NSR)</td><td>KHAIRPUR DAHA SECTION (KPD)</td><td>BAHAWAL SECTION (BWL)</td><td>KOTLA MOSA KHAN (KMK)</td><td>UCH SECTION</td></tr>
<tr><td></td><td colspan="5">This reach is divided into four sub sections.<br>Section 1-A from RD 96+000 to RD 112+000 SBE NSR<br>Section 1-B from RD 112+000 to RD 128+000 SBE BWL+NSR<br>Section 1-C from RD 128+000 to RD 144+000 SBE KPD<br>Section 1-D from RD 144+000 to RD 162+905 SBE KPD+UCH<br>They will perform their flood duties till the flood subsides.</td></tr>
</table>

**Note:**

The Sub Divisional officer Kotla Mosa khan Canal Sub Division, after approval from the Executive Engineer Ahmadpur Canal Division, will call Ziladar Ahmadpur Section & Kotla Mosa khan Section alongwith their Patwaris depending upon the developing situation of flood. He will also deploy watching establishment and machinery as per SOPs laid down in this plan.

## CHAPTER 10
## EMERGENCY TELEPHONE NOS.

| Sr. # | Name of Officers | Office | Mobile Number |
|---|---|---|---|
| 1 | Secretary, Irrigation Department, Lahore. | 042-99212117<br>042-99212118 | 042-99200950 |
| 2 | Additional Secretary, Technical Irrigation department, Lahore. | 042-99212128 | 042-5170035 |
| 3 | Chief Monitoring (PMIU), Lahore. | 42-99213595<br>42-99213597 | Toll Free No.<br>080011333 |
| 4 | Chief Engineer, Drainage & Flood, Lahore. | 042-99230602 | 042-99239044 |
| 5 | Chief Engineer, Multan Irrigation Zone, Multan. | 061-9200144 | 0333-5901500 |
| 6 | Chief Engineer, Bahawalpur Irrigation Zone, Bahawalpur. | 062-9250333 | 0300-6746032 |
| 7 | Superintending Engineer, Bahawalpur Canal Circle, BWP | 062-9250300 | 0345-7787618 |
| 8 | Deputy Commissioner Bahawalpur | 062-9250069 | 0341-0922083 |
| 9 | Director Flood Lahore | 042-99231614 | 042-35080267 |
| 11 | Deputy Director Flood Lahore | 042-35880700 | - |
| 12 | Flood Warning Center Lahore. | 042-99205157 | 042-99205158 |
| 13 | Executive Engineer Ahmadpur Canal Division | 062-2272367 | 03000-585525 |
| 14 | Executive Engineer Operation Bahawalpur Zone | 062-9250333 | - |
| 15 | Executive Engineer Punjnand | 062-2552222 | 0333-7483658 |
| 16 | Executive Engineer , Islam Headworks | 0673-024990 | 0300-6882004 |
| 17 | Sub Divisional Officer , Ahmadpur Canal Sub Division | - | 0300-5902613 |
| 18 | Sub Divisional Kotla Musa Khan Canal Sub Division | - | 0300-5902613 |
| 19 | Telegraph Office Ahmadpur East | | 0302-6453056 |
| 20 | Sub Engineer, Dera Masti | - | 0300-9817649 |
| 21 | Sub Engineer, Noshehra | - | 0300-6877436 |

## CHAPTER 11

## STANDARD OPERATING PROCEDURE (SOP) FOR BREACHING SECTIONS

There is no breaching section neither on Ahmadpur Flood bund nor in the jurisdiction of Ahmadpur Canal Division.

11.1 HISTORY OF THE BREACHING SECTION.
(Not Applicable)

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

11.3 ARRANGEMENT OF EXPLOSIVES AND SECURITY OF EXPLOSIVE STORES. (Not Applicable)

11.4 LIST OF THE SECURITY STAFF ALONG WITH DETAIL OF THEIR TRAINING ETC.
(Not Applicable)

11.5 DETAIL OF MECHANICAL MEANS AS A STANDBY
(Not Applicable)
ARRANGEMENTS IN CASE OF DETONATION FAILURE.

11.6 DUTY ROSTER IN CASE OF CRITICAL SITUATION.
(Not Applicable)

11.7 BREACHING COMMITTEE WITH THEIR ACTION PLAN.
(Not Applicable)

11.8 LIST OF THE VILLAGES LIKELY TO BE INUNDATED IN CASE OF BREACH.
(Not Applicable)

11.9 ANNOUNCEMENT AND DETAIL OF EVACUATION ARRANGEMENTS
(Not Applicable)

11.10 DETAILS OF CO-ORDINATION WITH CIVIL/ARMY AUTHORITIES.
(Not Applicable)

11.11 PARALLEL COMMUNICATION ARRANGEMENTS.
(Not Applicable)

11.12 INDEX PLAN. NOT RELATED

# CHAPTER 12
# VULNERABLE SITES ON FLOOD BUND

The Superintending Engineer Bahawalpur Canal Circle will notify all vulnerable points on the recommendations of Executive Engineer Ahmadpur Canal Division and if vulnerable sites falls within 15 miles of bund, then camp will established at vulnerable sites. The Ahmadpur Flood Bund is situated along the left side of River Sutlej and the Flood water at low and medium flows in the bed of River Sutlej and it never touched the embankment in the past in these limits. However, when there is high flood in River Satluj and at Punjnand the bund face maximum pressure in reaches from RD 162+905 to RD 115+000 and the most critical reaches that are low lying RD 121-129. (Vulnerable Site)

## 12.1 Apprehended breaches in Flood Bunds / Structures

The Ahmadpur Flood Bund is situated along the left flank of River Sutlej. The said river is dead last 20 years. However, in 2025 floods, when there was high flood in River Satluj and at Punjnand Headworks the reach from RD 162+905 to RD 115+000 was critical and reach from RD 121+000 to RD 129+000 has been most critical where free board was encroached.

## 12.2 Operation of Breaching Section

There is no breaching section on Ahmadpur Flood Bund.

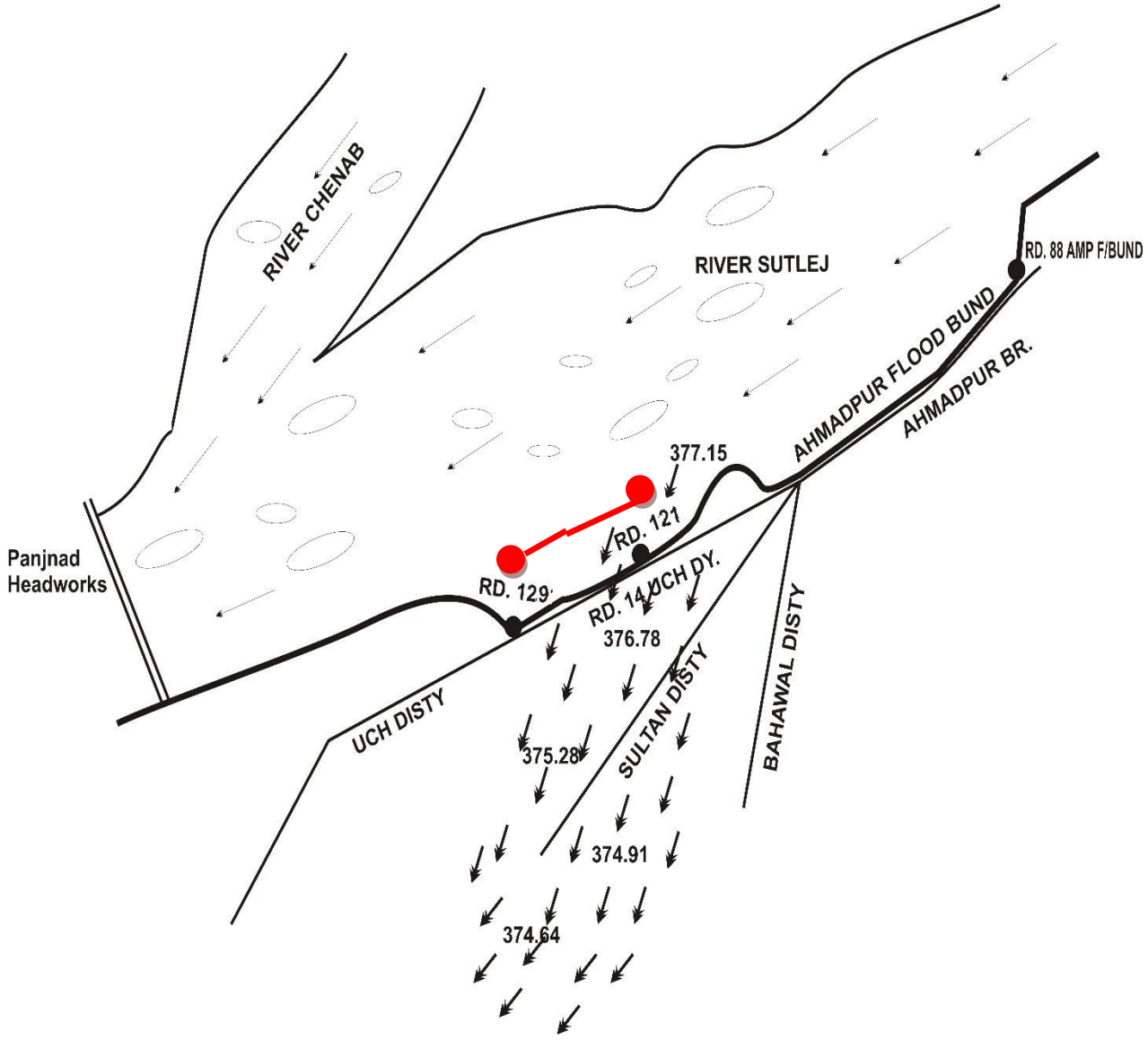
## 12.3 Breaches due to rising of Flood water, deterioration of flood bunds etc

In the high flood during 1988 and 1992, and 2025 back water of River Chenab upstream Panjnad Headworks and Flood Water in River Satluj was raised to such a level that from RD 162+905 to RD 149+000, flood water was raised on average of around 2 ft whereas from RD 149+000 to 115+000, free board was encroached. Both of these effects were addressed by effective flood fighting activities during the flood of 2025.

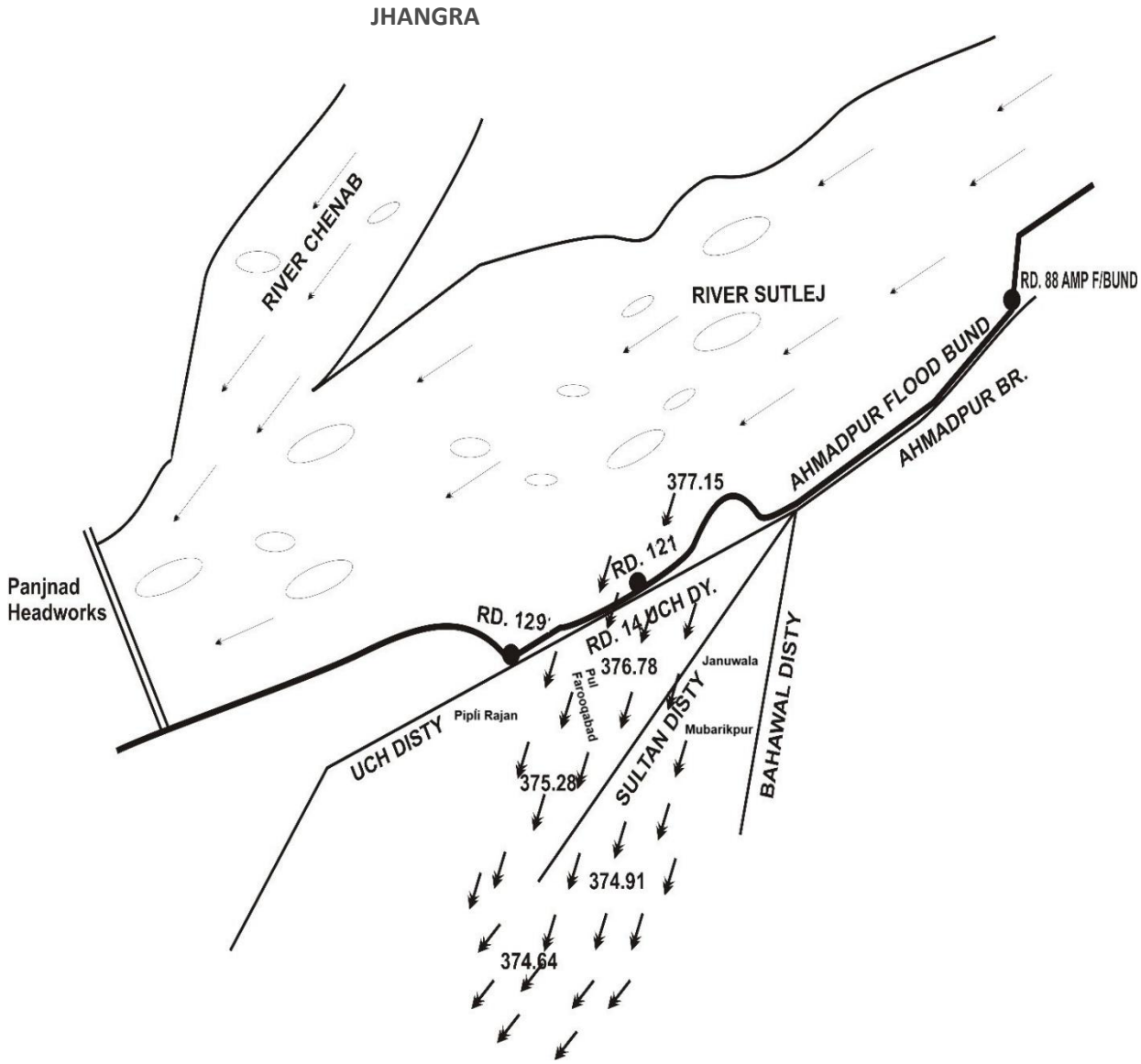
# CHAPTER 13

## EMERGENCY CONTINGENCY PLAN FOR VULNERABLE SITE

### 13.1 PLAN SHOWING ROUTE OF FLOOD WATER COMING OUT OF THE BREACH SUPPORTED WITH LEVELS AT RD. 121-129 OF AHMADPUR FLOOD BUND



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




## LIST OF VILLAGES LIKELY TO BE INUNDATED IN CASE OF BREACHES

The following villages / public property could be affected if breach occurs between RD. 121-129 of Ahmadpur Flood Bund.

| Sr. No. | Villages | Houses (Nos.) | Population (Nos.) |
|---|---|---|---|
| **1.** | Pipli Rajan | 400 | 6000 |
| **2.** | Pul Farooqabad | 300 | 4000 |
| **3.** | Januwala | 800 | 8000 |
| **4.** | Mubarikpur | 950 | 10000 |
| **Total:-** | | **2450** | **28000** |

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

### 13.3.1 ARRANGEMENTS

Guny bags, Plastic sheets, baskets, Belchas & machinery will be made available to control the breach / vulnerable site.

### 13.3.2 ESTABLISHMENT OF FLOOD FIGHTING CAMPS

Flood Fighting Camps at vulnerable site i.e. RD. 125+000 of Ahmadpur Flood Bund (Pipli Rajan) will be established for watching round the clock.

### 13.3.3 DUTIES OF OFFICERS / OFFICIALS AND THEIR CAMP SITES

| Sr. No. | Name of camp | Camp Supervisor | Camp Incharge | Overall In charge |
|---|---|---|---|---|
| 1 | RD. 125+000 | Irfan Babar<br>Sub Engineer<br>Noushehra Section<br>0300-6855781 | Talha Ali Hussnain<br>Sub Divisional Officer<br>Kotla Mosa Khan<br>Canal Sub Division<br>0300-5902613 | Muzammel Imam<br>XEN, Ahmadpur<br>Canal Division<br>0300-0585525 |

### 13.3.4 DEPARTMENTAL MACHINERY AVAILABLE

Nil

### 13.3.5 MACHINERY AVAILABLE FROM PRIVATE SOURCE

Machinery will be procured before flood season starts as per SOPs laid down in this flood fighting plan.

### 13.3.6 FLOOD FIGHTING MATERIAL REQUIRED

### 13.3.7 FLOOD FIGHTING MATERIAL AVAILABLE

Available material is located at Naushehra Canal Rest House

| Sr. No. | Item | Unit | Total Required Quantity | Available Quantity | Balance Quantity | Remarks |
|---|---|---|---|---|---|---|
| 1 | Shouldari / Tent | No. | 01 | 0 | 01 | Will be Purchased before coming of Flood Season 2026 |
| 2 | Chairs | No. | 06 | 0 | 06 | |
| 3 | Table | No. | 01 | 0 | 01 | |
| 4 | Generator (2-3 KVA) | No. | 01 | 0 | 01 | |
| 5 | Pedestal Fans | No. | 01 | 0 | 01 | |
| 6 | Charpois | No. | 02 | 0 | 02 | |
| 7 | Symbolic Jackets | No. | 50 | 0 | 50 | |
| 8 | Polythene Sheets | Kg | 100 | 0 | 100 | |
| 9 | Bamboos (4” dia and 10 ft long) | No. | 100 | 0 | 100 | |
| 10 | Water Cooler | No. | 01 | 0 | 01 | |
| 11 | Portable Umbrella | No. | 02 | 0 | 02 | |
| 12 | Life Jackets | No. | 05 | 0 | 05 | |
| 13 | Utensils (10 person serving) | No. | 01 | 0 | 01 | |
| 14 | Jute / Plastic Bags | No. | 1000 | 0 | 1000 | |
| 15 | Walke Talkie Set | Set | 02 | 0 | 02 | |
| 16 | Raincoats | No. | 10 | 0 | 10 | |
| 17 | LED Flood Light | No. | 10 | 0 | 10 | |
| 18 | Extension Cable (10 ft) | No. | 02 | 0 | 02 | |
| 19 | Rechargeable Torches | No. | 20 | 0 | 20 | |
| 20 | Kassi | No. | 20 | 0 | 20 | |

| Sr. No. | Item | Unit | Total Required Quantity | Available Quantity | Balance Quantity | Remarks |
|---|---|---|---|---|---|---|
| 21 | Axes | No. | 20 | 0 | 20 | |
| 22 | G.I Buckets | No. | 05 | 0 | 05 | |
| 23 | 7/44 cable | Feet | 500 | 0 | 500 | |
| 24 | Sutli | Kg | 02 | 0 | 02 | |
| 25 | Sewing Needles | No. | 10 | 0 | 10 | |
| 26 | Emergency Medical Kit | No. | 1 | 0 | 1 | |
| 27 | Wire crates (3x3x3) (at only those camp near river action and reserve stock exists) | No. | 100 | 0 | 100 | |

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

- **ROADS / INFRASTRUCTURES LIKELY TO BE AFFECTED IN CASE OF BREACHES**

1. Uch Disty
2. Sultan Disty
3. Bahawal Disty
4. Pacca Road from Noushehra to Hateji
5. Pacca Road from Januwala to Mubarikpur
6. Pacca Road from Noorpur to Uch Sharif
7. Pacca Road from Ahmadpur to Khairpur Dhaha
8. Pacca Road from Ahmadpur to Rahimyarkhan (KLP)

- **SCHOOLS / COLLEGES / OTHER EDUCATIONAL INSTITUTIONS**

1. Government High School Mubarikpur
2. Government High School Januwala
3. Government High School Pipli Rajan
4. Government Middle School Chowk Bhatta
5. Government High School Hathaji

- **OTHER BUILDING ETC.**

1. Rural Health Center Pipli Rajan
2. Rural Health Center Januwala
3. Basic Health Unit Mubarakpur
4. Veterinary Hospital Mubarakpur
5. Electric Pools 11KVA
6. Communication Towers
7. Main Sui Gas Pipeline Guddu to Multan

# Action Plan

# CHAPTER 14
# ACTION PLAN

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

There is no stock of Stone available in this Division.

## 14.2 DETAIL OF INLET OUTLET CROSSING ALONGWITH CLOSING METHODOLOGY

**List of Inlets & Outlets Crossing Ahmadpur Flood Bund**

| Sr. No. | Name of Channel | Outlet RD | Section / Sub Division | Remarks |
|---|---|---|---|---|
| 1 | Ahmadpur Flood Bund | 6+000 (inlet) | DMI/AMP | The outlets / inlets will be closed with the help of plastic bags |
| 2 | 1-R/AP Disty | 37500/R | SMA/AMP | |
| 3 | 1-R/AP Disty | 45284/R | SMA/AMP | |
| 4 | 1-R/AP Disty | 46850/R | SMA/AMP | |
| 5 | 1-R/AP Disty | 51039/R | SMA/AMP | |
| 6 | 1-R/AP Disty | 53725/R | SMA/AMP | |
| 7 | 1-R/AP Disty | 54290/R | SMA/AMP | |
| 8 | 1-R/AP Disty | 57780/R | SMA/AMP | |
| 9 | 1-R/AP Disty | 63890/R | SMA/AMP | |
| 10 | 1-R/AP Disty | 63900/R | SMA/AMP | |
| 11 | 1-R/AP Disty | 68220/TR | SMA/AMP | |
| 12 | 1-R/AP Disty | 45284/R | SMA/AMP | |
| 13 | 1-R/AP Disty | 45284/R | SMA/AMP | |
| 14 | 1-R/AP Disty | 45284/R | SMA/AMP | |
| 15 | Ahmadpur Branch | 200005/R | NSR/KMK | |
| 16 | Ahmadpur Branch | 207767/R | NSR/KMK | |
| 17 | Uch Disty | 5735/R | NSR/KMK | |
| 18 | Uch Disty | 35328/R | KPD/KMK | |
| 19 | Uch Disty | 40786/R | KPD/KMK | |
| 20 | Uch Disty | 43360/R | KPD/KMK | |
| 21 | Uch Disty | 45126/R | KPD/KMK | |

## 14.3 DEPLOYMENT OF MACHINERY (NORMAL TO LOW FLOOD)

| Sr. No. | Structure Name | Length (Miles) | Excavators | Trolleys | Dumpers | Tractor with Front blade (1 per 15 mile) |
|---|---|---|---|---|---|---|
| 1 | Ahmadpur flood bund | 31 | S.E shall allow deputation of one (1) excavator & four (4) Trolleys during low flood at camps/vulnerable points & LMB / RMB. | | - | 02 |
| Total | | | | | - | 02 |

Payment of machinery of subject to verification of TPM / consultants.

## 14.4 DEPLOYMENT OF MACHINERY (MEDIUM TO HIGH FLOOD)

| Sr. No. | Structure Name | Length (Miles) | Excavators | Trolleys | Dumpers | Tractor with Front blade |
|---|---|---|---|---|---|---|
| | | | 1 per 7 mile | 4 per 7 mile | 2 per 7 mile | 1 per 7 mile |
| **1** | Ahmadpur Flood bund | 31 | 04 | 16 | 08 | 04 |
| **Total** | | | 04 | 16 | 08 | 04 |

Payment of machinery of subject to verification of TPM / consultants.

## 14.5 DEPLOYMENT OF MACHINERY (VERY HIGH TO EXCEPTIONARY HIGH FLOOD)

| Sr. No. | Structure Name | Length (Miles) | Excavators | | Trolleys | Dumpers | Tractor with Front blade | |
|---|---|---|---|---|---|---|---|---|
| | | | Very High Flood | Exp. High Flood | 4 per 5 mile | 2 per 5 mile | Very High Flood | Exp. High Flood |
| | | | 1 per 5 mile | 2 per 5 mile | | | 1 per 5 mile | 2 per 5 mile |
| **1** | Ahmadpur Flood bund | 31 | 06 | 12 | 24 | 12 | 06 | 12 |
| **Total** | | | 06 | 12 | 24 | 12 | 06 | 12 |

Payment of machinery of subject to verification of TPM / consultants.

**Note:**

For Back water effect from Punjnand Headworks, discharge on the d/s of Trimmu Headwork is considered trigger point. Whereas for River Satluj, discharge on d/s of Islam Headworks is considered trigger point.

## 14.6 POLICE DEPLOYMENT PLAN

During high to exceptionally high flood, the police of Sama Satta, Musafir Khana, Naushehra and Dhorkot police stations will be called on.

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

| Sr No. | Name of Section | Nos. of Bags 50Kg | | Nos. of Bags 100Kg | | Remarks |
|---|---|---|---|---|---|---|
| | | Required | Available | Required | Available | |
| 1 | Dera Masti | 400 | 400 | 150 | 50 | The balance material will be purchased before the start of flood 2026 |
| 2 | Sama Satta | 400 | 400 | 150 | 65 | |
| 3 | Naushehra | 400 | 400 | 150 | 60 | |
| 4 | Khairpur Daha | 400 | 400 | 150 | 45 | |

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

| Sr No. | Name of Section | 12ft wide | | Remarks |
|---|---|---|---|---|
| | | Required | Available | |
| 1 | Dera Masti | 1000 ft | - | The balance material will be purchased before the start of flood 2026 |
| 2 | Sama Satta | 1000 ft | - | |
| 3 | Naushehra | 1000 ft | - | |
| 4 | Khairpur Daha | 1000 ft | - | |

## 14.9 RECOMMENDATION FOR OPERATION DURING FLOOD

**Recommendations for Operation During Flood**

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

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

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

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

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

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

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

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

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

6

SE MBW

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

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

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

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

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

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

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

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

(Imtiaz Hussain)
**Member / SE, Bahawalpur Canal Circle**

(Sammar Iqbal)
**Member / SE, LCC(West) Canal Circle, Faisalabad**

(Hafiz Ijaz Ahmed)
**Member / SE, Mandi Bahauddin Canal Circle**

(Mudassar Rehan)
**Member / SE Link Circle, Lahore**

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

7

## CHAPTER 15

## BACK UP DIVISION (IN CASE OF ANY BREACH)

In case of any eventuality / breach, **Bahawalpur Canal Division** will serve as Backup Division of Ahmadpur Canal Division. All establishment of this Division will immediately be deputed on the breach site and Executive Engineer, Bahawalpur Canal Division will be responsible for: -

1. Shall share his experience with Executive Engineer, Ahmadpur Canal Division for taking all necessary measures to cope with any emergency.
2. Shall arrange location for positioning of requisite machinery / material near the breach site to handle the situation.
3. Shall be responsible for stock piling of essential articles to combat any flood related contingency.
4. Shall arrange labour for proper maintenance of breach site.
5. Shall keep liaison with the High-ups to transmit all instructions to the lower formation.

Sub Engineer, Baghdad Section of Bahawalpur Canal Division shall be responsible for arranging Ration / Meal to all labour / establishment deployed on the breach site on Government expense.

**Executive Engineer**
Ahmadpur Canal Division
Ahmadpur East

**Superintending Engineer**
Bahawalpur Canal Circle
Bahawalpur

**Chief Engineer**
Bahawalpur Irrigation Zone
Bahawalpur