

FLOOD PLAN - 2018



OFFICE OF THE DEPUTY COMMISSIONER, LAHORE

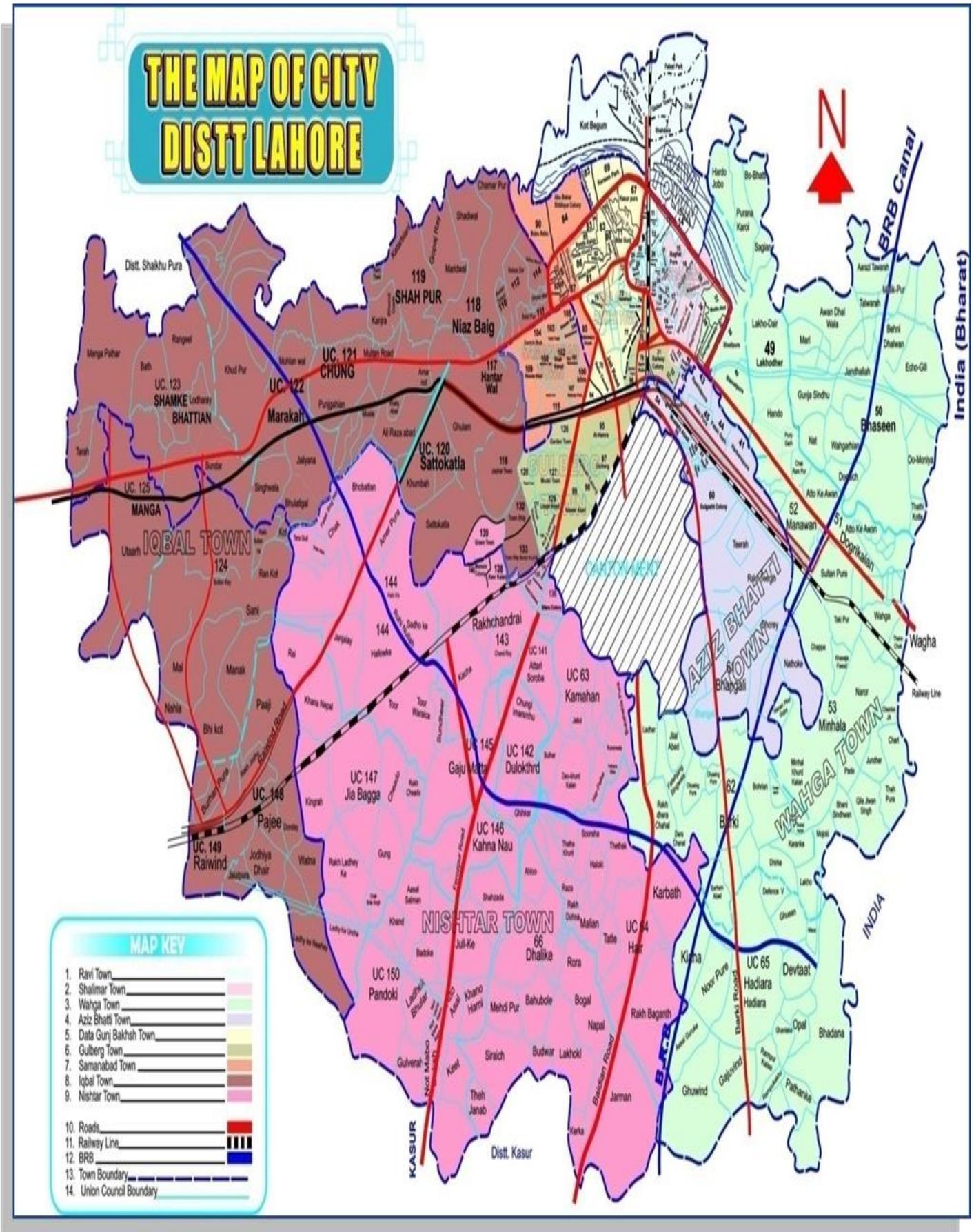
FOREWORD

Lahore is prone to flooding during monsoon season. Incessant rains always pose two pronged challenge i.e. from low degree to high degree flood depending upon the intensity of rains in catchment areas of River Ravi and accumulation of rain water in low lying areas of District Lahore. A befitting state of preparedness and with minimum reaction time in case of emergency requires a comprehensive planning. Through “Flood Plan 2018”, Lahore District aims at saving life and property, protecting vital installation and organizing timely information, evacuation, rescue, relief and rehabilitation operations.

Lahore District is protected by Shahdara and Sharakpur bunds on the right side and by Mehmood Booti on the left. To save the population from the havocs of flood, a survey of the protection bunds has been got completed by the authorities of Irrigation Department in Coordination with Revenue Department. Necessary repair / maintenance work will be completed by 10th June, 2018 positively.

All departments including LESCO, PTCL, SWM, Rescue 1122, WASA, Livestock, Health, PHA and Civil Defence have prepared comprehensive Contingency Plans which will help counter the havoc played by the floods. Once more the officers of CDGL under the aegis of Deputy Commissioner, Lahore are on the vanguard to combat any emergency.

Figure 1: Lahore Map



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OBJECTIVE

Objective of this plan is to

- a. Save life and property.
- b. Minimize human misery and sufferings.
- c. Protect vital installations and equipment.
- d. Evacuation, rescue, relief and rehabilitation measures.

HISTORY OF FLOODS

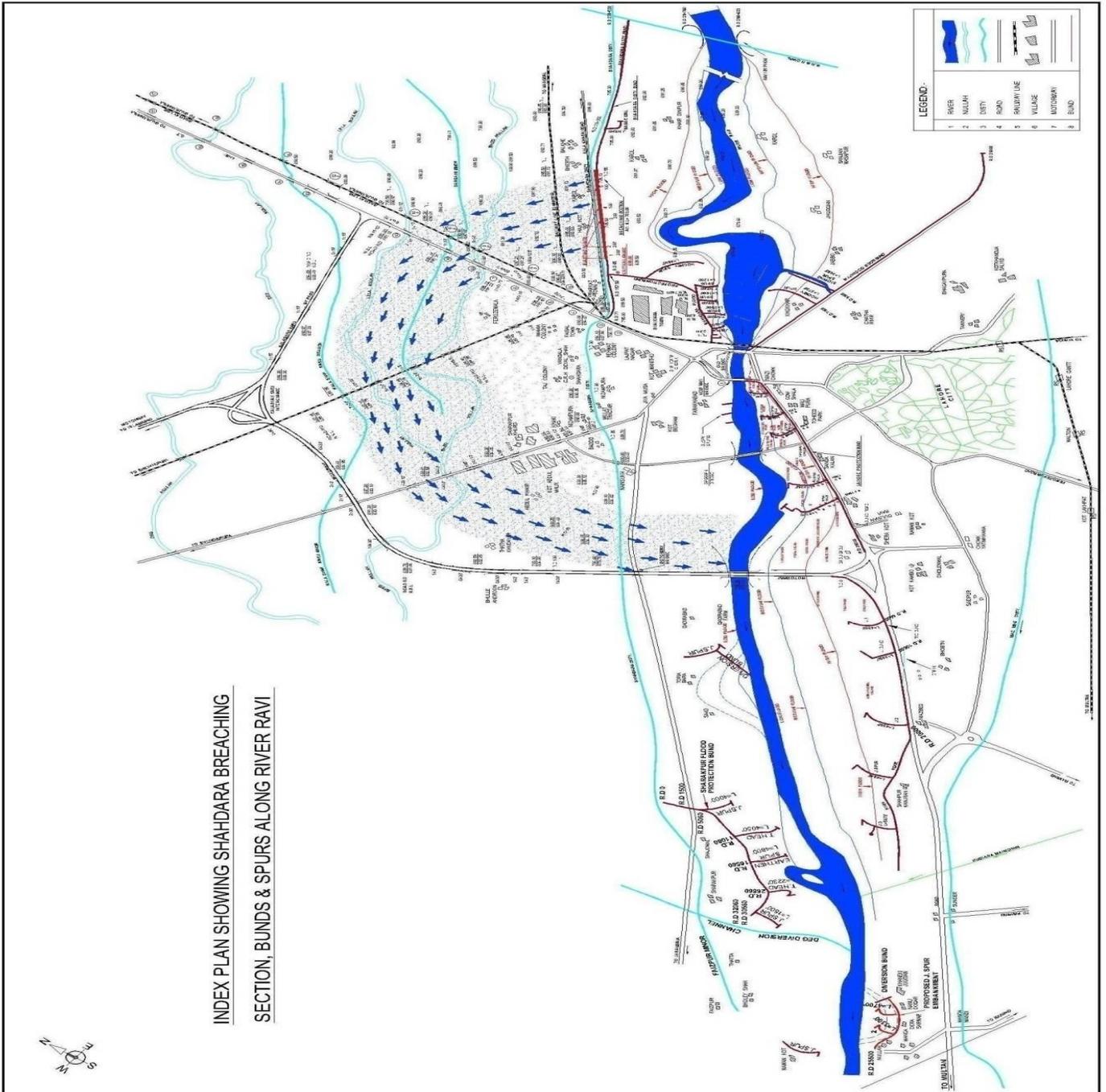
There are three gauging stations upto Shahdara Railway Bridge when river Ravi enters into territory of Pakistan viz, Jassar, Ravi Syphon and Railway Bridge Shahdara. The first head works on this River in Pakistan is Balloki Head Works.

The gauge fixed at Shahdara Railway Bridge is recorded regularly during the flood season. In 1947, exceptional high flood of 225000 Cs was recorded at this site. In 1955 flood of 542000 Cs was experienced at Shahdara. In 1973, flood of 237380 Cs was noted at this site. During the flood of 1988, discharge of 326000 Cs. was experienced at this site. The gauge observed at Shahdara Railway Bridge was R.L. 694.70 feet, when breaching section was operated during this flood. The Shahdara Flood Protection Bund breached at RD.13± and 15± when breaching section between RD.55+000 to 65+000 of Shahdara Distributary Bund was operated during this flood. The discharge of breached section at cut in the Shahdara Flood Protection Bund was estimated to be 1.0 Lac Cs. This discharge caused inundation of Shahdara Zone and its suburbs. All the roads and other infrastructure came under water with varying depth from one foot to eight feet.

Massive destruction was caused by the flood of 1988 in Shahdara and allied abadies.

After 1988, the significant floods were experienced in 1993, 1995, 1996 & 1997 recorded as 91415, 171520, 182340 and 123080 Cs respectively. Since 1997, no real flood situation has been noted at Shahdara.

Figure 2: River Ravi Floods – Water Flow



Source: Irrigation Department Punjab

List of Areas/Villages at Risk in HIGH Flood (2.0 Lac Cusecs)

| Sr. No | AREAS/VILLAGES AT RISK | POPULATION AFFECTED (Approx.) | DESIGNATED CAMP SITE | CAMP INCHARGE (Designation/Phone) |
|---|------------------------|-------------------------------|---|--|
| WAHGA ZONE LAHORE | | | | |
| 1. | Awan Dhai Wala | 8000 persons | 1. Government Higher Secondary School Dograi Kallan Jallo More. 2. Government High School Bhaseen. | Mr. Shabbir Ahmed (Sub-Engineer) 0322-4722811 Mr. Abdul Wahab (Sub-Engineer) 0311-4646339 |
| 2. | Malik Pur | 1800 persons | | |
| 3. | Bhaini | 2000 persons | | |
| 4. | Jhandiala | 5000 persons | | |
| 5. | Talwarra | 3000 persons | | |
| 6. | Marl Marri | 2000 persons | | |
| 7. | Ganjay Sindhuwan | 5000 persons | | |
| CIRCLE SANDA - SAMANABAD ZONE / CITY | | | | |
| 1 | Sanda Kalan | 175 houses | 1. Musarat Girls High School 2. Shell Petrol Pump | Wajjid Ali Shah (Revenue Officer) 0321-4116915 |
| 2 | Babu Sabu | 150 houses | | |
| 3 | Shera Kot | Nil | | |
| 4 | Badro | 100 houses | | |
| 5 | Nonarian | 200 houses | | |
| 6 | Chambro Pur | Nil | | |

List of Areas/Villages at Risk in MEDIUM Flood (1 Lac Cusecs)

| Sr. No. | AREAS/VILLAGES AT RISK | POPULATION AFFECTED (Approx.) | DESIGNATED CAMP SITE | CAMP INCHARGE (Designation) |
|---|------------------------|-------------------------------|---|-----------------------------|
| TEHSIL RAIWIND / ALLAMA IQBAL ZONE, LAHORE | | | | |
| 1 | Chung (Pangarain) | 15000 persons | Chung Boys High School | Naib Tehsildar |
| 2. | Mohlanwal | 8000 persons | | |
| 3. | Maraca | 2000 persons | | |
| 4 | Khud Pur | 10000 persons | Loharanwala Khoo Multan Road | Naib Tehsildar |
| 5 | Sundar | 5000 persons | | |
| 6 | Shamkey Bhattian | 7000 persons | | |
| 7 | Rangeel Pur | 8000 persons | Primary School Rangeel Pur (Khanekey Jhugian) | Naib Tehsildar |
| 8 | Bath | 4000 persons | | |
| 9 | Manga Hathar | 5000 persons | | |

CONVENTIONAL SENSITIVE POINTS IN THE DISTRICT.

| Sr. No. | Sensitive Points | Safer Places | Camping Ground | Emergency Center |
|----------------|--|---------------------|-----------------------|---------------------------------|
| 1. | Farrukh Abad, Begum Kot, Jia Musa, Fateh Puri, Targarh | Ravi Bridge | Near Ravi Bridge | Office of Ravi Zone Badami Bagh |
| 2. | Shahdara, Kot Muhiboo, Kot Muhammad Hussain, Barkat Town | Shahdara Gate. 9 | Near Shahdara More | -do- |
| 3. | Bhaman, Khokhar, Bela Basti Ram, Har Narainpura | Khokhar Bund | Khokhar | Office of Shalimar Zone |
| 4. | Sanda Kalan, Ganja Kalan, Babu Sabu, Bund Shera Kot, Bhadru, Nonarian, Chamroopur, Jhuggian Nagra | Petrol Pump | Babu Sabu | Office of Data Gunj Bukhsh Zone |
| 5. | Govt. High School for Boys, Niaz Baig, Shadesal, Muridwal, Gopy Rai, Shahpur, Khan Pur, Katar Bund, Bola Garhi | Thokhar Niaz Baig | Thokhar Niaz Baig | Office of Allama Iqbal Zone |
| 6. | Chung, Mohlanwal, Khudpur, Rangilpur, Sundar, Bath, Lodhre, Jhugian Lodhre | Sundar Adda | Sundar Adda | Manga |
| 7. | Govt. High School for Boys, Manga (Outhar & Hatharr), Tarrah | Manga School | Manga School | -do- |
| 8. | Eicho Gil, Malik Pur, Kharrakhi, Bhini Dhelwan, Awan Dhailwala, Jandiala, Arazi Talwara, Talwara-War, Lakho Dher | Village Lakhodehr | Lahodehr | Office of Shalimar Zone |
| 9. | Mehmood Booti, Kot Khawaja Saeed, Baghbanpura, Ghugian Jodha, Karol, Aino Bhattian, Hardo, Jabbo, Arazi Jangua, Sagian, Wassanpura | Mahmood Booti Bund | Baghanpura | -do- |

TIME LAG

| River | Site | | Distance in (Km) | Time Lag (Hours) |
|-------|----------------|-------------|------------------|------------------|
| | From | To | | |
| Ravi | Hajipur Gujran | Jassar | 94 | 12 |
| | Jassar | Ravi Syphon | 73 | 18 |
| | Syphon | Shahdara | 24 | 8 |
| | | | | 38 |

FLOOD LIMITS (lac Cusecs)

| RIVER | SITE | LOW | MED | HIGH | VERY HIGH | EXCEP HIGH | CAPACITY |
|-------|-------------|-----|------|------|-----------|------------|----------|
| RAVI | Jassar | 0.5 | 0.75 | 1.0 | 1.5 | 2.0 | |
| | Ravi Syphon | 0.4 | 0.65 | 0.90 | 1.35 | 1.8 | |
| | Shahdara | 0.4 | 0.65 | 0.9 | 1.35 | 1.8 | 2.5 |
| | Balloki | 0.4 | 0.65 | 0.9 | 1.35 | 1.8 | |
| | Sidhnai | 0.3 | 0.45 | 0.6 | 0.9 | 1.3 | |

2.

PRE-FLOOD ARRANGEMENTS



DISTRICT FLOOD RELIEF COMMITTEE.

District Flood Relief Committee has been constituted in Lahore comprising of officers as well as prominent citizens and representatives of relevant associations and organizations in the District to coordinate all matters relating to flood/rain. This committee will act as an advisory and monitoring body. It is composed of the following:

1. Deputy Commissioner, Lahore.
2. Additional Deputy Commissioner, Lahore.
3. Chief Executive Officer (Health), Lahore.
4. Chief Executive Officer (Education), Lahore.
5. Deputy Director (Agriculture), Lahore.
6. Senior Superintendent of Police (Operations), Lahore.
7. Chief Traffic Officer, Lahore.
8. Collector (Consolidation), Lahore.
9. Chief Officer, Metropolitan Corporation, Lahore
10. Representative of Army (Eng.4 Corps HQ & 10Div HQ)
11. Managing Director WASA, Lahore.
12. Chief Engineer LDA, Lahore.
13. General Manager, PTCL.
14. Secretary, RTA Lahore.
15. District Food Controller (I & II), Lahore
16. All Executive Engineers of Irrigation, Public Tube Wells.
WAPDA, Building, Highways & Drainage Divisions.
19. Regional Manager, Agriculture Development Bank of Pakistan
20. Civil Defence Officer, Lahore.
21. Divisional Engineer-I, Railways
22. Assistant Director Local Government, Lahore.
23. Assistant Director Live Stock and Dairy Development, Lahore.
24. District Officer (Fare & Freight), General Bus Stand, Badamibagh, Lahore.
25. Secretary District Rowing Association Lahore.

The Committee may co-opt representatives of Traders, NGOs and notable of the areas likely to be affected. A meeting of the advisory committee will be held before the commencement of the flood / rainy season in connection with the completion of all necessary Pre-flood arrangements.

CONTROL ROOM

A Control Room has been established for round the clock service in the District Courts, Lahore Telephone No.042-99210630. Overall working will be monitored by Additional Deputy Commissioner, Lahore, Telephone No. 042-99210614.

WARNING SYSTEM

The main source of information regarding flood will be the irrigation Department and Police Control. Wireless sets will be installed at Ravi Gauge Station and Ravi Syphon and they will convey the discharge at Jassar, which takes about 36 hours in reaching Shahdara, so that precautionary measures can be taken well in time. After 15th June, an emergency warning center will start functioning round the clock at Ravi Gauge Station and a similar warning center will be set up in the office of Additional Collector, Sector Officers and other Coordination Deptts. Warning will be conveyed to residents of the areas likely to be affected through Police network, Revenue Field Staff, Secretaries Union Councils, Volunteers and the Sector Officers. No warning will be issued for low and medium flood. Since there is no warning system installed in the rural areas to inform about rain water coming from Hadiara drain, the Drainage Department, shall give daily discharge position of various nallas and drains during the flood season.

INSPECTION OF BUNDS

A joint inspection of Bunds for flood protection will be carried by the Irrigation Department and Revenue Department which will ensure that all repairs and maintenance work is completed by 1st July, 2018.

VACCINE

CEO (Health) will plan and organize emergency centers for first aid and medical care during flood / rain in the area under his jurisdiction. He will undertake preventive vaccination / inoculation prior to monsoon season. He will also ensure that necessary vaccines, medicines, anti-biotic drugs, ORS and anti-snake biting vaccination are available in adequate quantities. One EPI Vaccine Kit will be provided to static center and mobile team each.

SURVEY OF THE WEAK STRUCTURES / BUILDINGS

With the help of municipal authorities, survey of the weak dilapidated houses / buildings has been carried out by MCL marking dangerous buildings in the area which have to be vacated in case of flood / excessive rain emergency. Notices of vacation / repair to this effect have also been pasted.

DEWATERING

List and number of dewatering sets available with MCL and various departments has been given in Contingency Plan.

WATER PURIFICATION

Water purification sets / medicines will be arranged by WASA. In case of floods, strict water discipline will be exercised in the camps.

ANTI-SNAKE BITE MEASURES

During floods more than 30% casualties are accounted to snake bites. Adequate quantity of Anti-verom medicines will be arranged by Health Department. Each static center / mobile team will be provided with atleast 5 Anti-Snake bite injections.

ANTI-DIARRHOEAL MEASURES

During and after floods, contaminated water and poor sanitation cause diarrhea particularly susceptible groups are vulnerable to outbreak. 100 packets of ORS will be provided to each static center / mobile team by Health Department, CDGL. Public awareness on use of ORS will reduce deaths in affected areas.

LIAISON WITH LOCAL ARMY UNITS

Army will be requisitioned in the aid of Civil Administration as and when necessary. Headquarter 4-Crops will depute a Liaison Officer with Additional Collector, Lahore. A police wireless system will be installed in 4-Crops H.Q during the flood season (as practiced during Muharram) by police authorities.

3.

FLOOD FIGHTING STRATEGY

Sub Divisional Officers and their staff would remain present and vigilant in the area round the clock during flood period. The flood information would be communicated by wireless, mobile phone or sent through special messenger employed for this purpose. In case of any emergency, the Sub Divisional Officer concerned would report the matter to the Executive Engineer, Lahore Drainage Division, Superintending Engineer, Lahore Drainage Circle, Chief Engineer, Irrigation Lahore Zone, Director Regulation, Chief Engineer, Drainage & Flood and Secretary Irrigation and Power Department, Punjab Lahore.

There is an approved breaching site located at Shahdara Disty embankment at RD.55+000 to 65+000. The Shahdara Railway Bridge was constructed during the year 1870 having 33 bays out of which 18 have since been closed. The matter regarding Enhancing Capacity of Shahdara Bridge was referred to IRI. After conducting Model Study, the PC-I was prepared under the directions / proposals of Irrigation Research Institute model study report conducted in May 2005, thereafter Federal Flood Commission directed to conduct fresh model study of the project vide minutes of meeting issued by Federal Flood Commission Islamabad. The fresh model study has run and its report is in process. After receiving the report fresh PC-I will be prepared in view of proposals of Irrigation Research Institute Lahore.

With these proposals, the trend of inhabitation inside the bund area has to be controlled with the co-operation of the District Government and the Army.

On receipt of any flood warning, Sub Divisional Officer Flood Bund and Kasur Sub Division will make necessary arrangements. Sub Divisional Officer, Flood Bund and Sub Divisional Officer Kasur alongwith their field staff will camp at spur No.1 at RD.2300 of Shahdara Flood Protection Bund and at Shahpur Kanjran spur respectively. Duty roster and detail of camps along Mahmood Booti Bund, Lahore Protection Bund, Shahdara Flood Protection Bund, Shahpur Kanjran, Chung Spur, and Sharakpur Flood Protection Bund is available in Chapter-9

In case of High Flood, necessary arrangements for evacuation of affected people will be carried out by the Civil and Military authorities and the Engineering staff will remain busy in watching and protecting of the Flood Protection Works. The Lahore Division CBDC, Lahore will act as backup division once emergency is declared. All other Departments will have their own arrangements to provide help to the needy persons.

PRE-FLOOD WATCHING ARRANGEMENT
Irrigation Department

1. Camping sites along the flood bunds at critical points will be declared and camps will be established over there.
2. Required flood fighting / watching material will be procured.
3. Procurement of stone to maintain the minimum limit of reserve stock will be ensured.
4. Information regarding earth moving machinery available in the local market will be gathered.
5. Site visits along with field formation to identify the most critical points and to develop consensus for course of action if such points / reaches become dangerous.
6. Arrangements will be made for the installation of base wireless station and mobile wireless sets in Government vehicles.
7. Total length of protection bunds will be divided into different beats and assigned duties of watching of flood protection works through gangs comprising regular and work charge establishment.
8. Special funds application based on estimated amounts of emergent works will be submitted

EVACUATION PLAN

In certain circumstances it may be necessary to move people or property from an area which is endangered or has been affected by the flood.

TYPES OF EVACUATION

There are three type of evacuation:-

- a. PRE-IMPACT: moving people as a safety measure. This is only possible when warning is conveyed in time. Studies show that if risk has been properly assessed, contingency plans prepared, and people are warned effectively, then they can be moved in an orderly fashion. Assuming people will act irrationally is wrong.
- b. POST IMPACT: when there has been no warning and people are moved during the impact or as part of rescue.
- c. COMBINATION: when pre-impact evacuation is not completed before the disaster strikes.

PHASES OF EVACUATION

The phases of evacuation are:-

- a. Warning (though, some times there may not be one).
- b. Order to move.
- c. Movement.
- d. Shelter.
- e. Return.

KEY ELEMENTS OF EVACUATION PLAN

The key elements of an evacuation plan are:-

- a. Legal authority.
- b. Risks.

- c. Warning measures.
- d. Routes.
- e. Safe areas.
- f. Administrative arrangements.
- g. Control.
- h. Communications.
- i. Outline plan for return.

EVACUATION ORDER

An evacuation order should provide answer to following questions:-

- a. Why is there a need for the evacuation?
- b. When to go?
- c. How to go?
- d. Where to go?
- e. For how long?
- f. What are the administrative arrangements?
- g. What to do for further information?

PEOPLE WHO DO NOT WANT TO MOVE

Planners should consider what to do about people who despite all warnings, refuse to move. Should they be moved forcibly or should they be left to their fate?

DEPARTMENTAL PLANS

CIVIL DEFENCE–LAHORE.
FLOOD/MONSOON CONTINGENCY
PLAN–2018



CIVIL DEFENCE OFFICE
OUT FALL ROAD, LAHORE

FLOOD/MONSOON-2018 PLAN

OBJECT:

- To assist the District Administration during heavy rain / flood through available resources.
- To provide services of Civil Defence Volunteers for relief work.

SUPERVISION:

Mr. Aftab Ali
Chief Instructor

Cell No. (0300-4343210)

FOCAL PERSON:

Mr. Khalid Shahzad
Chief Instructor

Cell No. (0300-4593513)

EMERGENCY CONTROL CENTER NASIR BAGH:

During Flood/Monsoon Season Civil Defence Emergency Control Centre at Nasir Bagh will function round the clock to meet any emergent situation. Civil Defence staff and volunteers will remain high alert in three shifts at Control Centre Nasir Bagh, Lahore: -

| Shift | No. of Razakars | Shift In-charge | Timing |
|-----------------|------------------------|--|-------------------------|
| 1 st | 30 | Mr. Mudasir Liaqat Virk, Instructor G-III, 0333-4979688 | 08:00 AM to 03:00 PM |
| 2 nd | 20 | Mr. Irshad Hussain, Instructor G-III, 0322-4941394 | 02:00 PM to 10:00 PM |
| 3 rd | 10 | Mr. Sohail Pervez Instructor G-III,0322-4518592 | 09:00 PM to 08:00 AM |

DEPLOYMENT OF CIVIL DEFENCE RAZAKARS:

Civil Defence Razakars will be deployed for Rescue and relief work during heavy Rain / Flood. The duty plan for provision of Razakars from Eleven (11) Civil Defence Divisions is as under: -

| S# | Name of Zone | Name Of CD Division | No. Of Razakars | Focal Person / Divisional In-charge |
|--------------|------------------------|----------------------------|------------------------|--|
| 1. | RAVI | • City | 40 | Waseem Yasin, D.W, 0322-7777522 |
| | | • Shahdara | 30 | Mian Khalil-ur-Rahman, D.W, 0300-9475065 |
| | | • Badami Bagh | 30 | Mr. Ijaz Ahmad, D.W, 0300-4307570 |
| 2. | DATA GUNJ BUKSH | • Data Gunj | 30 | Mr. M. Ramzan Khan D.W,0322-4311092 |
| | | • Civil Lines | 20 | Ahmad Murtaza Bhatti D.W Civil Lines. 0300-4478763 |
| 3. | ALLAMA IQBAL | • Samanabad | 30 | Gulraiz Khan D.W,0333-4252288 |
| 4. | SAMANABAD | • Samanabad | 20 | Gulraiz Khan D.W,0333-4252288 |
| 5. | GULBERG | • Gulberg | 30 | Kh. Umar Hassan, D.W, 0333-4446860 |
| 6. | NISHTAR | • Model Town | 25 | Mr. Muhammad Amin, D.W, 0300-4174070 |
| 7. | WAHGA | • Mughalpura | 30 | Qamar Ullah Qureshi, D.D.W,0345-4120022 |
| 8. | AZIZ BHATTI | • Cantt | 30 | Mr. Abdul Hafiz Butt, D.W, 0300-4275105 |
| | | • Mughalpura | 20 | Qamar Ullah Qureshi, D.D.W, 0345-4120022 |
| 9. | SHALAMAR | • Misri Shah | 30 | Mr. Naseer Ahmad, D.W, 0300-4498335 |
| Total | | | 365 | |

- All Divisional Offices of Civil Defence Organization, Lahore will remain open for mobilization and training of Civil Defence Razakars during flood / heavy rains.
- Instructor In-charge of Divisions will prepared duty roster of Civil Defence Razakars and visit their respective Divisional Offices daily at evening and furnish daily progress report to Civil Defence Office, Lahore next day.
- All Divisional Warden will prepared and submit list of Razakars for flood and heavy rain duty till 15th, May-2018.

DETAIL OF RESOURCES AVAILABLE WITH CIVIL DEFENCE LAHORE: -

- **Transport:**

| | |
|---|----|
| Coaster for transportation of Razakars. | 01 |
| Mazda Truck | 01 |
| Toyota Hilux pick up | 02 |
- **Equipment:**

| | |
|-------------------|-----|
| Shovel | 100 |
| Kassi | 50 |
| Chargeable Lights | 05 |
| Pick Axe | 04 |
| Iron pane | 100 |
| Stretcher | 10 |
| Mega Phones | 04 |
| Rain Coats | 50 |
| Gum Boots | 25 |
| Fire Buckets | 100 |

GENERAL INSTRUCTIONS: -

- The Divisional Wardens and Instructors In-charge of Divisions will ensure provision of Civil Defence Razakars as per detail given in plan.
- All Divisional Offices of Civil Defence organization Lahore will remain open for training and mobilization of Civil Defence Razakars during Flood / Rainy season.
- All Chief Instructors and Instructor In-charge of Divisions will coordinate with respective Divisional Wardens for training of Civil Defence Razakars and also furnish Daily Progress Report to District Office Civil Defence Lahore next day.

Rescue – Cum – Debris Clearance Squad:

MCL will be responsible to prepare organize Rescue - cum –Debris Clearance scheme of their respective Zone to deal with the situations arising due to collapse of building as a result of heavy rain, flood, weak structure etc. In order to complement these efforts, thirty (30) Civil Defence Razakars per squad shall be provided by the Civil Defence Office, Lahore.

Preparation for De-Watering Scheme for low lying areas:

- a) As per instructions, / WASA and all MCL are responsible for the preparation of “De-Watering Schemes”. It is therefore necessary to ensure that they procure required number of De-Watering pumps, arrange training of personnel in pump operation well before the start of rainy season.
- b) Metropolitan Corporation Lahore should carry out survey of low – lying areas in time, so that they are in a position to implement the scheme efficiently. All De-watering pumps held by the MCL and WASA must be put in working order before 30-05-2018. These pumps will be inspected by the undersigned and report will be furnished to high ups as well.

Leave during Flood season:

Leave will not be granted to the officials **during Flood Season** except on extreme compassionate / medical ground.

All the Instructors have been directed to prepare list of suitable Civil Defence Razakars (containing their phone numbers/address) for Flood / Rainy season duty from their respective Divisions and furnish the same to the office on 30-5-2018 positively.

Razakars will be deployed as per direction of Worthy Deputy Commissioner Officer / Controller Civil Defence Lahore when required.

**METROPOLITAN CORPORATION, LAHORE
FLOOD CONTINGENCY PLAN -2018**



ACHIEVEMENT STATEMENT

- The priority of the Metropolitan Corporation in this Moon soon Season is to provide the most suitable services to every citizen at doorstep living in the territorial jurisdiction of MCL.
- The next most important desire to achieve the goals with high professional standards. To work hard and meet all challenges any exigency during this Monsoon.

CRUX

| | | |
|------------------------------|---|----|
| • Total No. of Zones | : | 09 |
| • Sore Points | : | 17 |
| • Choking Points | : | 23 |
| • Duty Roster at zonal level | : | 09 |

DETAIL OF ZONES

- Allama Iqbal zone
- Aziz Bhatti zone
- Data Gunj Bakhsh Zone
- Gulberg zone
- Nishter zone
- Ravi zone
- Samanabad zone
- Shalamar zone
- Wahga zone

DETAIL OF CAMPS WITH FOCAL PERSONS

| Sr. | Flood Relief Camps | Name of Focal Person | Zone | Contact No. |
|------------|--|--|----------------------|--------------------|
| 1. | 2-C-I, Tipu Chowk Township, Lahore | Syed Saqlain Abbas (Road Inspector) | Nisther zone | 0307-3333833 |
| 2. | 12-Rasool Park Shama Road Lahore | Mr. Shahid Ali AZO (I) | Samanabad zone | 0322-4263560 |
| 3. | Jallo More Office Near BRB Canal Zonal Relief Camp # 1 | Mr. Qaisar Farooq AZO (I) | Wahga Zone | 0333-4161436 |
| 4. | Zonal Office Shalimar Zone and WASA Camps round the Clock | Haji Abdul Khaliq AZO (I) | Shalamar Zone | 0300-4285152 |
| 5. | Office of Aziz Bhatti Zone | Mian Mudassar Jinnah ZO (I) | Aziz Bhatti Zone | 0322-4889940 |
| 6. | Rain Emergency Complaint Cell at O/o Metropolitan Corporation, Gulberg Zone Lahore | Asmat Ullah (Sub Engineer) | Gulberg Zone | 0300-9432312 |
| 7. | Zonal Office Data Gunj Bukhsh Zone | Mr. Abid (Sub Engineer) | DGB zone | 0333-4056797 |
| 8. | 1. Fire brigade Office G.T Road Shahdara 2. Disposal Station outside Bhati Gate 3. Outside Sheranwala Gate | Mr. Sarwar (Sub Engineer) | Ravi Zone | 0332-4752527 |
| 9. | 1. Zonal Office Iqbal Zone 2. Thokar-Niaz Baig | Mr. Amir Hamayon (Sub Engineer) | Allama Iqbal Zone | 0332-9866900 |

DETAIL OF SORE POINTS

- Ghaziabad Graveyard Camp and Nizamabad
- Khawaja Ahamd Hassan Road
- Zarrar shaheed road Infront of Gourmet Baker
- Ibrahim Colony
- B-Block, Tajpura
- Rahat Bakes Infantry Road
- Bibi pakdaman
- Garhi Shahu Chowk
- Basti Syden Shah
- Kalma chowk Ferozpur road
- Barkat Market Garden Town
- SOS Village Ferozpur Road
- Pindi Rajootan
- Kot Lakhpat Phatak
- Dera Tariq Kamboh, Katcha Jail road
- C.O Unit Office Kahna Nau
- Adda Plot Raiwinind Road
- Bhatti Gate
- Sheranwala Gate
- Timber Market
- Shahdara More
- Aik Moria Pull
- Do Moria Pull
- Chowk Na Khuda
- Chowk Shawala
- Sultan Mehmood Road near Thandi Khoi
- Darbar Neem Peer Chowk

CHOKING POINTS

- Shahdra Chowk & Underpass
- Kot Shahab Din Office
- Timber Market
- Moulana Ahmad Ali Road
- Fire Station Office Lakar Mandi
- General Bus Stand Badami Bagh
- Data Nagar, Main Bazaar
- Drain Road
- Niazi Chowk
- Aziz Road Near Govt. Girls School Misri Shah
- Akbari Mandi Circular Road
- Ak Moria Bridge Chowk Circular Road
- Kashmiri Gate Circular Road
- In front of Metro Main Ravi Road
- Shah Alam Chowk
- Bhatti Chowk
- Ali Park Fort Road
- Islamia High School
- Masti Gate Circular Road
- Habib Gunj
- Usman Gunj
- Farooq Gunj, Street No. 2

DETAIL OF MACHINERY

| Sr. No. | Item | Qty. |
|----------------|-----------------|-------------|
| 1. | Dewatering sets | 139 Nos. |
| 2. | Mazda T-3500 | 9 No. |
| 3. | Bed Ford Dumper | 8 No. |
| 4. | Hyundai Pickup | 9 No. |

HUMAN RESOURCE & THEIR TRAINING

During the Monsoon season WASA and LWMC will engage additional human resource on Work Charge basis while MCL will spare the staff from the existing strength.

WASA DMD operations will impart training to the field formation of WASA / MCL / LWMC / Health Staff to combat jointly in Rain Emergency. The training of MCL Staff was held on 16.05.2018.

During heavy Rain/ Stagnant of Water, Manhole Covers will be lifted by WASA Staff where necessary and will keep on watching till the placing of cover. He will also place warning indications for General Public.

Staff will be in uniform i.e. WASA, MCL & LWMC.

DUTY ROSTER AT ZONAL LEVEL

AZIZ BHATTI ZONE

| Sr. # | Name of officer / Official | Designation | Timing |
|-------|-------------------------------------|------------------------------------|---------------------|
| 1. | Mahboob Rabbani Butt Mr. Khurram | ZO(Finance) Telephone Operator | 8:00 am to 3:00 pm |
| 2. | M. Sheraz Butt M. Imran | Z.O(Planning) Building Surveyor | 3:00 pm to 10:00 pm |
| 3. | Mr. Liaqat Ali Rathor | Asstt: Supdt: Land | 10:00 pm to 8:00 am |

ALLAMA IQBAL ZONE

| Sr. # | Name of officer / Official | Cell No. | Timing |
|-------|----------------------------|--------------|---------------------|
| 1. | Muhammad Shafiq | 0333-4332724 | 8:00 am to 3:00 pm |
| 2. | Azeem Ud Din | 0333-4719449 | |
| 3. | Faryad Hussain | 0322-4745692 | |
| 1. | Muhammad Waseem | 0333-4076885 | 3:00 pm to 10:00 pm |
| 2. | Zubair Asif | 0312-9553360 | |
| 3. | Muhammad Ghaffar | -- | |
| 1. | Adeel Amjad | 0336-4428456 | 10:00 pm to 8:00 am |
| 2. | Nasir Mehmood | 0302-4453487 | |

DATA GUNJ BAKSH ZONE

| Sr. # | Name of officer / Official | Cell No. | Timing |
|--------------|-----------------------------------|-----------------|---------------------|
| 1. | Abid Ali | 0333-4056797 | 8:00 am to 4:00 pm |
| 2. | Mr. Zahid | 0324-4280236 | |
| 3. | Mr. Waseem | 0323-7511859 | |
| 1. | Zahir Shah | 0306-4045354 | 4:00 pm to 12:00 pm |
| 2. | Mr. Aslam Khushi | 0300-4669875 | |
| 3. | Javed Ahmad | 0321-5018463 | |
| 1. | Shakeel Haider Asadi | 0300-4096260 | 12:00 pm to 8:00 am |
| 2. | Muhammad Altaf | -- | |
| 3. | Musa Kaleem | 0306-4367702 | |

GULBERG ZONE

| Sr. # | Name of officer / Official | Cell No. | Timing |
|--------------|-----------------------------------|------------------------------|---------------------|
| 1. | Umer Shahzad Khan | 0300-8004248 | 8:00 am to 3:00 Pm |
| 2. | Mazhar Kareem Ehsan Ul Haq | 0303-4255922 | 3:00 pm to 10:00 pm |
| 3. | Jaleel Anwar Pervaiz Ali | 0321-8872593 0300-9437474 | 10:00 pm to 8:00 am |

NISHTER ZONE

| Sr. # | Name of officer / Official | Cell No. | Timing |
|--------------|--|-----------------|---------------------|
| 1. | Shahid Hameed,S/E Abdul Hameed Mate | 0300-8042803 | 8:00 am to 3:00 pm |
| 2. | Hamid Hassan, Baildar | -- | |
| 3. | Muhammad Ashfaq, Driver | -- | |
| 1. | Fawad Hussain ,S/E Syed Manzoor Abbas | 0321-9447375 | 3:00 pm to 10:00 pm |
| 2. | Zaigham Akram, Baildar | -- | |
| 3 | Eleem ud Din, Electrician | -- | |
| 1. | Rao Arshad Ali, Tracer M. Azeem Ullah Waqas, Baildar | 0321-4542727 | 10:00 pm to 8:00 am |
| 2. | Muhammad Aziz, DSM | | |
| 3. | Muhammad Shahid, Driver | | |

RAVI ZONE

| Sr. # | Name of officer / Official | Cell No. | Timing |
|--------------|--|-----------------|---------------------|
| 1. | Masroor Haidar Rizvi (shift Incharge) | -- | 8:00 am to 3:00 pm |
| 2. | Ghulam Abbas | -- | |
| 3. | Sibt- e Hassan | -- | |
| 1. | Masood Ahmad Butt (Shift Incharge) | -- | 3:00 pm to 10:00 pm |
| 2. | Muhammad Rasheed | -- | |
| 3. | Muhammad Ehsaan | -- | |
| 1. | Qadir Bashir (Shift Incharge) | -- | 10:00 pm to 8:00 am |

| | | | |
|----|---------------------|----|--|
| 2. | Muhammad Azhar Butt | -- | |
| 3. | Kamran Maqbool | -- | |

SAMANABAD ZONE

| Sr. # | Name of officer / Official | Cell No. | Timing |
|--------------|-----------------------------------|-----------------|---------------------|
| 1. | Adeel Shahzad Khan | 0313-4077142 | 8:00 am to 3:00 pm |
| 2. | Abdul Mannan | -- | |
| 3. | Muhammad Babar | -- | |
| 1. | Zohaib Fayyaz | 0314-4088640 | 3:00 pm to 10:00 pm |
| 2. | Javed Mughal | -- | |
| 3. | Muhammad Ashfaq | -- | |
| 1. | Rana Mohsin Ali | 0322-4474744 | 10:00 pm to 8:00 am |
| 2. | Mohsin Zaman | -- | |
| 3. | Muhammad Ashraf | -- | |

SHALAMAR ZONE

| Sr. # | Name of officer / Official | Cell No. | Timing |
|--------------|--|-----------------|---------------------|
| 1. | Khalid Siddiqui, Road Inspector (Shift Incharge) | 0311-4440447 | 8:00 am to 3:00 pm |
| 2. | Muhammad Kashif, Electrician | 0320-4506429 | |
| 3. | Faiz Muhammad, Electrician | 0321-7249744 | |
| 1. | Rohail Bajwa, Sub-Engineer (Shift Incharge) | 0300-6444201 | 3:00 pm to 10:00 pm |
| 2. | Jabbar Electrician | 0322-8013754 | |

| | | | |
|----|--------------------------------|--------------|---------------------|
| 3. | Fayaz Bijli, Electrician | 0324-4138764 | |
| 1. | Azeem Mahmood, Sub-Engineer | 0322-7580491 | 10:00 pm to 8:00 am |
| 2. | Hamid, Electrician | 0321-4972724 | |
| 3. | Imtiaz Ali, Electrician | 0322-4071550 | |

WAHGA ZONE

| Sr. | Name of officer/ Official | Cell No. | Timing |
|------------|----------------------------------|-----------------|---------------------|
| 1. | Mahmood Israr Fareed | 0300-4414936 | 8:00 am to 3:00 pm |
| 2. | Shahzad Noor | -- | |
| 3. | M. Faheed | -- | |
| 1. | Muhammad Asghar | 0300-8815131 | 3:00 pm to 10:00 pm |
| 2. | Muhammad Afzal | -- | |
| 3. | Muhammad Ashfaq | -- | |
| 1. | Muhammad Boota | 0322-4523290 | 10:00 pm to 8:00 am |
| 2. | Abdul Waheed | -- | |
| 3. | Faisal Mushtaq | -- | |

WATER AND SANITATION AGENCY (LDA)



CONTINGENCY PLAN

FOR

FLOOD ARRANGEMENTS

FLOOD SEASON 2018

OPERATION AND MAINTENANCE WING

CONTINGENCY PLAN FOR FLOOD EMERGENCY AND MONSOON 2018

1. GENERAL

Lahore, the metropolis of Punjab, ever since it has overgrown the walled perimeter, has been threatened by river over its banks during floods or heavy inundation caused by rains of high intensity during monsoon season.

The problems get compounded when the two events i.e. river flood and high intensity rain fall coincide. A protective earthen embankment has been constructed around the city bordering the river bank from Darogha wala to Thokar Niaz Baig, which keeps the river flood at bay. The drainage of rain water in turn becomes difficult when the drainage gated structures are closed during high floods in the river.

Due to rapid growth of population, unplanned urbanization took place in the low-lying areas, some of which are even lower than the normal River level. Therefore, drainage of the rain water from such areas by gravity is, most of the time not feasible, especially when the drainage problem is aggravated during monsoon due to further increase in the river levels.

2. LAHORE DRAINAGE SYSTEM

The topography of the existing city of Lahore divides it into the following major drainage districts.

- a) SHAHDARA
- b) LOWER CHHOTA RAVI
- c) UPPER CHHOTA RAVI
- d) CANTT / CENTRAL LAHORE.
- e) CANTT / SOUTH WESTERN LAHORE.
- f) SATTU KATLA / SOUTH EASTERN LAHORE.

2.1 PRIMARY DRAINS

The following primary drains are the major carriers for storm water which flow under gravity to the River Ravi except in case of flood conditions when pumping at drainage stations is required:

- i) Shahdara Drain
- ii) Lower Chhota Ravi Drain
- iii) Upper Chhota Ravi Drain
- iv) Shalimar Escape Channel
- v) Cantt. Drain.
- vi) Sattu Katla Drain

2.2 AREA DRAINS

The main area drains in the above mentioned drainage districts are as under:-

- a) **SHAHDARA**
 1. Farkhabad drain
- b) **LOWER CHHOTA RAVI**
 2. Circular road & Landa Bazar drain.
 3. Ravi Link Road drain.
 4. City drain.
- c) **UPPER CHHOTTA RAVI**
 5. Rajput Road Drain.
 6. Amir Road Drain.
 7. Chah Miran Drain.
 8. Makhan Pura Drain.
 9. Railway Drain.
 10. Saddiq pura Drain.
- d) **CANTT: DRAIN**
 11. Central Drain.
 12. Maclagan Road, Lytton Road & Nabha Road Drain.
 13. Islampura Rajgarh Drain.
 14. Chauburji Drain.
 15. Garhi Shahu Drain
 16. Birdwood Road Drain.
 17. Lawrence Road Drain.
 18. Gulberg-I Drain.
 19. Gulberg-II Drain.
 20. Basti Saidan Shah Drain.
 21. Upper Mall Drain.
 22. Fazalia Colony Drain.
 23. Dholanwal Drain.
 24. Al-Faisal Town Behar Shah Road Drain.

e) **SATTU KATLA / SOUTH EASTERN LAHORE**

25. General Hospital Drain.
26. Garden Town Drain.
27. Faisal Town Drain.
28. Macca Colony Drain.

2.3 **STORM WATER DRAINS & MAJOR DRAINAGE PUMPING STATION**

The following drainage stations established at the primary drains are operated when there is flood in River Ravi.

| <u>LOCATION OF DRAINAGE STATION</u> | <u>DRAINS</u> |
|--|---|
| 1. Mehmood Booti Drainage Station Ring Road | Shalimar, Escape Channel |
| 2. Siddique pura Drainage Station Ring Road. | Siddique Pura Drain, Railway Drain & Chotta Ravi (Upper) Drain. |
| 3. Chhota Ravi Drainage Station Ring Road. | Chotta Ravi (Lower) Drain |
| 4. Babu Sabu Drainage Station Link Motorway | Cantt Drain |

The sewerage system including sewage pumping stations and major drains including drainage pumping stations are maintained and operated by WASA. Desilting/cleaning of the aforementioned drains is carried out under a scheduled program throughout the year by deploying machinery as well as manual labour. One round of desilting of the drains has been completed. But due to the problem of perpetual dumping of solid waste into drains, the cleaning operation is continuously repeated to keep the drainage system ready for carrying the storm runoff generated by monsoon rains which normally start in the first week of July. For monitoring of desilting, carried out by WASA, Consultant M/s ECSP have also been engaged for 3rd Party validation.

The drainage system of Walled City, all the intramural drains and road side drains earlier maintained by EX-MCL are now maintained by Solid Waste Management Department of City District Government Lahore. The Solid Waste Management Department is carrying out desilting of these drains and plans to complete the desilting work by 30th June 2018.

WASA has also implemented its plan of desilting of underground sewerage system. Machinery at 13 Major pumping stations and 95 Lift Stations has been

brought in a state of readiness. As the operation of disposal station machinery is mostly dependent on electrical power supply, a close liaison with LESCO (WAPDA) will be maintained to ensure uninterrupted power supply to achieve speedy disposal of rain water. Further, to ensure continuous disposal of rain water generators, to be operated during load shedding, have already been installed on all major disposal stations.

3.0 DEWATERING OF LOW LYING AREAS

Lahore has been divided into the following Nine Zones:

- | | |
|-------------------|-------------------------|
| 1. Ravi Zone | 2. Data Gunj Buksh Zone |
| 3. Samanabad Zone | 4. Iqbal Zone |
| 5. Nishtar Zone | 6. Gulberg Zone |
| 7. Shalamar Zone | 8. Aziz Bhatti Zone |
| 9. Wahga Zone | |

Dewatering sets are installed in those low lying areas from where disposal of rain water through the existing sewerage/drainage system is not feasible by gravity. At present WASA having 260 dewatering sets for dewatering operation in all Nine Zones of Metropolitan area of Lahore City, WASA has completed repair and refurbishment of 165-dewatering sets and the remaining 03 will also be ready up to 27.05.2018 whereas 92 dewatering sets have already been deployed in field.

4.0 COMMUNICATION ARRANGEMENTS DURING RAINY SEASON

In order to meet the emergent situation during the heavy rains/flood season, WASA will establish one Complaint Monitoring Center located at WASA Head Office and 35 complaint centers at important points in the city which will operate round the clock during rainy season to receive and communicate complaints to field staff for prompt attendance and redressal. (List of complaint centers at **(Annex-I)**). Wireless communication system at channel 15 is available for communication between WASA Head Office and field officers of O&M Directorates to monitor the field activities and provide prompt assistance where needed.

4.1 COMPLAINT/ MONITORING CELL (CMC)

The Complaint Monitoring Cell (CMC) established at the WASA Head Office located at Ch. Zahoor Ellahi Road, will operate round the clock under the

supervision of a senior officer, with effect from 1st July 2018 to 30th September 2018. The following telephone numbers are available for contact by public:

- a) Exchange: 35754911, 35754926 & 35757425
- b) Help Line 1334

This center will be responsible to receive the complaints and to immediately convey to the concerned centers of sewerage and drainage divisions and sub divisions in the field. Follow up action would be closely monitored by the officer in-charge at this central complaint center. Emergent complaints will be conveyed to the Sub Divisional Complaint Center on telephone as well as through special messenger. Two vehicles will be allocated to CMC along-with drivers for round the clock duty. A list of telephone number of the officers of Operation and Maintenance Directorate along-with wireless call signs is at **(Annex-II)**.

In addition to above, the CMC will keep liaison with Meteorological office and communicate the daily rain forecast to field offices to ensure timely arrangements for storm water disposal.

4.2 PLAN FOR DEWATERING OPERATIONS

Main store of dewatering sets will be maintained at Main out fall where dewatering sets will be kept ready for use wherever required. Adequate number of dewatering sets will also be available at the centers in the field to facilitate quick transportation to the required places. Addresses and phone numbers of dewatering centers are as below:

- | | | |
|----|--|----------------------------|
| 1. | Main Out Fall - Sant Nagar (Gunj Buksh Zone) | Telephone: 37151855 |
| 2. | LMP Block Disposal Station- Model Town Link Road (Nishtar Zone) | Telephone: 99230443 |
| 3. | XEN Office - Doongi Ground Samanabad | Telephone: 37595304 |
| 4. | Badami Bagh (Old Water Works) | Telephone: 37727317 |
| 5. | Chowk Nakhuda (Misri Shah) | Telephone: 37280410 |
| 6. | Shalamar Link Road (Near Daras Barey Mian) | Telephone: 36826876 |
| 7. | Tajpura Disposal Station | Telephone: 36881722 |
| 8. | F-Block, Johar Town | Telephone: 35291629 |

Each Dewatering Center will work round the clock to provide the dewatering sets as per requirements. **(Annex-III)**

4.3 PLAN FOR MAINTENANCE OF STORM WATER CHANNELS

In order to look after the drains and to meet the emergency requirements in case of breach of a drain, the following emergency centers equipped with T&P and adequate staff, will be established at the following places w.e.f. 1st July 2018:-

- a) Rasool Park Ichhra (Allama Iqbal Zone).
- b) Mehmood Booti Drainage Station (Shalimar Zone)
- c) G-Block Disposal, Gulberg (Gulberg Zone).
- d) Near Sheranwala Gate (Ravi Zone).

- e) Near Lakshami Chowk (Gunj Bukhsh Zone).
- f) Upper Mall Office
- g) Usman Block disposal station (Nishtar Zone).
- h) Shoukat Khanam Disposal Station

Locations of these centers have been selected in such a way that in case of emergency the problem on storm water drain could be promptly attended. Each center will have adequate number of sanitation workers/Baidars in three shifts. These centers will start functioning with effect from 1st July 2018 and will continue upto 15th September 2018.

4.4 PLAN FOR COORDINATION WITH LESCO ON SENSITIVE DISPOSAL STATIONS/LIFT STATIONS WITH NAME OF LESCO GRID & LESCO FEEDER.

In order to have a contact with LESCO, during Monsoon, name of LESCO Grids & Feeders have been mentioned against Sensitive Disposal Stations / Lift Stations. (**Annex-IV**).

LOCATION OF COMPLAINT CENTERS

| SR NO | NAME OF CENTRE | INCHARGE CONTACTS # | MAIN SERVICE AREAS |
|------------------------------------|--------------------------------|---|---|
| RAVI ZONE | | | |
| 1. | Shahdara | Mr. Naeem Zahid, SDO Ph: 37932853 Mobile: 0334-1334436 | Shahdara, Shahdara Town, Saeed park, Jia Musa, Malik Park, Barkat Town, Begum Kot etc. |
| 2. | Farrakhabad | Mr. Sheikh Imran SDO Ph: 37927597 Mobile: 0334-1334462 | Chaman Colony, Gulsha-e-Hayat Park, Lajpat Road, Rehmat Colony, Chata Park, Farrakabad, Mehraj Park, Shoujah Colony. |
| 3. | City | Mr. Ghulam Mustafa SDO Ph: 37664420 Mobile: 0322-4423162 | Walled city, Rang Mehal, Lohari Gate, Masti Gate, Kashmiri Gate, Azam Cloth Market, Dehli Gate, Yakki Gate, Mochi Gate etc. |
| 4. | Anarkali | Ch. Muhammad Fayaz SDO Ph: 35764146 Mobile: 0321-7770057 | Dil Muhammad Road, Gowalmandi, Nisbet Road, NillaGumbad, Mcleod Road, Brandreth Road, Adda Crown Bus, New Anarkali, Paisa Akhbar, Akbari Road, Circular Road, Qilla Gujjar Singh, Abbot Road, Davis Road, Mozag Road Park, Hall Road etc. |
| 5. | Misri Shah | Mr. ZeeshanManzoor SDO Ph: 37280410 Mobile: 0334-1334414 | KachuPura, FaizBagh, Sultan Pura, Park Nagar, Jinnah Park, ChamraMandi, Swamee Nagar, Shoujah Colony, Kot Khawaja Saeed BagumPura, Gujjar Pura Scheme. Elahi Park, Begum-Pura. |
| 6. | Data Nagar | Mr. Saeed Ahmad Khan, SDO Ph: 37280363 Mobile: 03224423163 | Data Nagar, Khokhar Road, FaizBagh, Usman Gunj, Farooq Gunj etc. |
| 7. | Drainage Ravi Town | Mr. Umair Masood Mobile: 0321-8528088 | Central Drain, Chotta Ravi, Birdwood Drain, Shahdara Drain, Farrukhabad Drain, Lower Chotta Ravi, City Drain etc. |
| SHALIMAR ZONE | | | |
| 8. | Mughal pura | RanaRafaqat SDO Ph: 36844103 Mobile: 0321-4279938 | Sahuwari, Ram Garh(Mujahidabad), Kumharpura, Ghaziabad, Al-Faisal Town, Salamatrpura, Lal pull, DarasbareyMian, Nabipurashian, Tauheed park, Nishter Zone, Backside Pakistan mint etc |
| 9. | Baghbanpura | Ammar Anwar SDO Ph: 36826876 Mobile: 0323-4947427 | Baghbanpura, Bagumpura, Naseerabad, Khizarabad, Farooqabad, Mehmood booti, Haji-pura, Singh-pura, Bhogiwal, ShalimarTown, G.T. Road etc. |
| 10. | Gujjar Pura | Mr. Khalid Nafees SDO Ph: 37280363 Mobile: 0333-4306398 | China Scheme, Qamar Din Park, Kot Khawaja Saeed, Shamasabad, Begum Pura, Behar Colony, and Hassan Park |
| 11. | Shadbagh | Ch. Aslam Ashraf, SDO Ph: 37611084 Mobile: 0333-4215239 | Peerawalee, Tajpura Ground, Shad Bagh, Akram Park, MakhanaPura, Wasanpura, Scheme No.2, BhagatPura, Fazal Park KachuPura, FaizBagh, Sultan Pura, Park Nagar, Jinnah Park, ChamraMandi, Swamee Nagar, Shoujah Colony, Kot Khawaja Saeed, Gujjar Pura Scheme. |
| 12. | Drainage Shalimar Zone | RanaRafaqat SDOs Ph: 0321-4279938 | SattuKatla Drain, Nishtar Colony Sludge Carrier, General Hospital Drain, Behair Colony Drain., Makkah Colony, Nawaz Shrif Drain etc. |
| AZIZ BHATI & WAHGA ZONE | | | |
| 13. | FatehGarh | Mr. Imran Tufail, SDO Ph: 36826876 Mobile:0322-7400075 | Areas of FatehGarh etc. |
| 14. | Mustafabad | Hafiz Jawad-ur-Rehman SDO Ph: 36831904 Mobile: 0348-4545146 | Habib Colony, Suleman colony, Gulistan colony, Dharampura, Sadar Bazar, Harikey Road etc. |
| 15. | Taj Pura | Mr. Abdul Ghaffar SDO Ph: 36881722 Mobile: 0334-1334434 | Taj Pura Scheme, Tajbagh, Al-Faisal Town, Ghaziabad A, B, C, D Block etc. |
| 16. | Shadipura | Malik Israr Ahmad Mobile: -0300-4272606 | Sultan Mehmood Road, Asif Colony, Green Park, Naseerabad, Bilal Colony, Karol Bazar and Shadipura. |
| 17. | Drainage A.B Wagha Zone | Mr. Zohaib SDO Ph: 0334-7758331 | Cantt. Drain Shalimar Escape Channel, Shadipura Drain, Bhar-Shah Drain. |
| GUNJ BUKSH ZONE | | | |
| 18. | Ravi Road | ZeeshanShoukat SDO Ph:37151563 | Kasur Pura, Karim Park, Timber Market, Bilal Gunj, Mohni Road, General Bus stand, Mali puraBaghMunshiLadha etc. |

| | | | |
|--------------------------|------------------------------|--|---|
| 19. | Islam Pura | ZeeshanShoukat SDO Ph:37244155 Mobile: 0321-4608040 | Krishan Nagar, Sanda, Raj Garh, Sant Nagar, Riwarz Garden, Main out fall etc. |
| 20. | Gulshan-e-Ravi | Armughan Khan SDO Ph: 37460550 Mobile: 0324-4107917 | Gulshan-e-Ravi, Nadeem Park, Rehman Park, Sodiwal, SheraKot, Babu-Sabu and Mahajir-Abad. |
| 21. | Drainage G. B Town | Mr. Abdul Rehman SDO Ph: 0334-1334472 | SiddquePura Drain, Upper ChottaRavi,Circular Road Drain, F& V Market, Shalimar Escape Channel, GT Road Drain, SukhNher Road, Railway Drain etc. |
| GULBERG ZONE | | | |
| 22. | Mozang | Mr. MohsinGUjjar SDO Ph: 37112223 Mobile: 0345-4442625 | Mozang, Temple Road, Saadi park, Waris Road, Fane Road etc. |
| 23. | Shimla Hill | Mr. AttiqueJillani SDO Ph:36306653 Mobile: 0302-4667826 | Qilla Gujjar singh, Abbot Road, Davis Road, Allama Iqbal Road, Bibi Pak Daman, Muhammad Nagar, GhariShahu. |
| 24. | Gulberg | Mr. KashifRasool SDO Ph: 35877758 Mobile: 0307-5196065 | Gulberg, LMP Block, Canal Bank, Gurumangat, Sher Pao pull, Firdous Market, Macca Colony etc. |
| 25. | Drainage G. Town | Mr. AhmdHussnain SDO Ph:0333-4600696 | Gulberg Drain I & II Central Drain, Bird Wood Road Drain, Mozang Road Drain, Lawrance Road Drain etc. |
| NISHTAR ZONE | | | |
| 26. | Town Ship | Mr. Qamar-ul-HusnainNiaz SDO Ph: 99230443 Mobile: 0321-4687300 | Town Ship Area, KotLakhpatt, R,Q & S Block Model Twon Extt:, LDA Flats Model Town Extt: etc. |
| 27. | Garden Town | Ch. Rashid SDO Ph:99231544 Mobile: 0300-4856299 | Garden Town, Faisal Town, Model Town Extension &MochiPura |
| 28. | Green Town | Ali Haider SDO Ph:35152158 Mobile: 0300-4388157 | Green Town Area, Township PECO Road College Road, Gowala-Colony etc. |
| 29. | Industrial Area | Mr. Shoukat Ali SDO Ph: 35120408 Mobile: 0334-1334435 | Industrial Area of QAT RakhChanddra, Chungi Amar Sidhu etc. |
| 30. | Kahna | Mr. Areez Irfan SDO Ph:35152158 Mobile: 0322-9537736 | Nishtar Colony, attriSaroba, Youhanabad, DeloKhurd, Gujomata and Khana |
| 31. | Drainage Nishter Town | Mr. Areez Irfan SDOs Ph: 0322-9537736 | Garden Town Drain, College Road Drain, MoulanaShoukat Ali Drain, Faisal Town Drain, Johar Town Drain, Bagiram Drain etc, Green Town Drain. ShoukatKhaum Sludge Carrier. Gazan Road Drain etc. |
| ALLAMA IQBAL ZONE | | | |
| 32. | Ichhra | Mr. Zahid Hussain Ph:37577363 Mobile:0321-4683332 | Ichhra, Shah Jamal, Shadman Colony, Clifton Rehmanpura, Lazazar colony, Wahdat Colony etc. |
| 33. | Iqbal Town | Faisal Sarwar SDO Ph:37800553 Mobile:0300-8021339 | Allam Iqbal Town, A.I.T. Multan Road, Bhekewall, Al-Hamad Colony, Clifton Colony. |
| 34. | Sabzazar | RanaQussainNaz SDO Ph.37843866 Mobile: 0305-4409360 | Babusabu, Bund Road, Shah Noor studio, Kharak Village, Said pur&Sabzazar Schemes. |
| 35. | Samanabad | Sh. Azmat Ali SDO Ph:37578971 Mobile: 0321-4687111 | Samanabad, PakkiThatti, Nawankot, Jafaria colony, Gulshan-e-Ravi, Sodiwal Quarters etc. |
| 36. | Mustafa Town | Faisal Sarwar SDO Ph:37800553 Mobile:0300-8021339 | Mustafa Town, Mamdot Block, Ahmad Yar Block, Qayoum Block, Abbas Block. |
| 37. | Dholanwal | Mr. NoumanKhaliq Mobile No.0334-1334439 | Dholanwal, Multan Road etc. |

WIRELESS COMMUNICATION SYSTEM

LIST OF CALL SIGNS

| Sr. # | Designation | Call Sign | Name |
|-------|--|-----------|----------------------------|
| 1 | Vice Chairman WASA | 1 | Ch. Shahbaz Ahmad |
| 2 | Managing Director-WASA | 2 | Syed Zahid Aziz |
| 3 | Deputy Managing Director(O&M) | 3 | Mr. Aslam Khan Niazi |
| 4 | Director(O&M) Gunj Buksh Zone | 4 | Rana Muhammad Manan |
| 5 | Director(O&M) Gulberg Zone | 19 | Mr. SohailQadir Cheema |
| 6 | Director (O&M) Allama Iqbal Zone | 5 | Mr. Abdul Karim |
| 7 | Director(O&M) Ravi Zone | 6 | Mr. Usman Babar |
| 8 | Director(O&M) Shalimar Zone | 15 | Mr. Adeel Sharif |
| 9 | Director(O&M) Aziz Bhatti & Wagha Zone | - | Mr. Babar Habib Khan |
| 10 | Director(O&M) Nishtar Zone | 17 | Mr. Saleem Abdul Nasir |
| 11 | Director(O&M) Jubilee Town | - | Mr. Mujeeb Raza Khan Warsi |
| 12 | XEN(O&M-I) DGB-Zone | 8 | Mr. Sohail Aslam Sindhu |
| 13 | XEN(O&M-II) DGB-Zone | 7 | Mr.Saleem Ashraf |
| 14 | XEN(O&M-I) Allama Iqbal Zone | 11 | Mr. Munir Afzal |
| 15 | XEN(O&M-II) Allama Iqbal Zone | 14 | Hafiz Ghufuran |
| 16 | XEN(O&M-III) Allama Iqbal Zone | 18 | Mr. Faisal Khurram |
| 17 | XEN(O&M-I) Ravi Zone | 6 | Mr. Usman Babar |
| 18 | XEN(O&M-II) Ravi Zone | 8 | Mr. Sharjeel Hassan |
| 19 | XEN(O&M-I) Shahlimar Zone | 9 | Mr. Abdul Latif |
| 20 | XEN(O&M-II) Shahlimar Zone | | Mr. Sharjeel Hassan |
| 21 | XEN(O&M-I) Aziz Bhatti &Wagha Zone | | Mr. Salman Nisar |
| 22 | XEN(O&M-II)Aziz Bhatti & Wagha Zone | | Syed Abid Raza |
| 23 | XEN(O&M-I) Nishtar Zone | 13 | Mr. ShamasAyoub |
| 24 | XEN(O&M-II) Nishtar Zone | | Mr. ShazilWaqar |
| 25 | XEN-Transport & Equipment | | Mr. WaqasLiaqat |
| 26 | Director (P&E) | 16 | Muhammad Tanveer |
| 27 | DMD(Engg) | 46 | Mr. Naveed Mazhar |
| 28 | SDO-Dewatering Sets | 58 | Mr. Mujahid Amir |
| 29 | SDO-Ravi Road | 36 | Mr. ZeeshanShoukat |
| 30 | SDO-Krishan Nagar | 27 | Mr. ZeeshanShoukat |
| 31 | SDO-Gulshan-e-Ravi | | Mr. Armaghan Khan |
| 32 | SDO-Mozang | 26 | Mr. Mohsin Gujjar |
| 33 | SDO-Anarkali | 54 | Ch. Muhammad Fayaz |
| 34 | SDO-Shimlla Hill | 41 | Mr. Habib-ur-Rehman |
| 35 | SDO-Gulberg | 23 | Mr. KashifRasool |

| | | | |
|----|----------------------------------|----|-------------------------|
| 36 | SDO- Allama Iqbal Zone | 29 | Mr. M. Faisal Sarwar |
| 37 | SDO-Samanabad | 28 | Sh. Azmat Ali |
| 38 | SDO-Ichhra | 25 | Mr. Zahid Hussain |
| 39 | SDO-Sabzazar | 42 | RanaQussainNaz |
| 40 | SDO-Dholanwal | | Mr. NoumanKhaliq |
| 41 | SDO-Johar Town | 57 | Mr. Hussnain Raza |
| 42 | SDO- Jubilee Town / LDA Avenue-I | - | Mr. Tariq Jamil |
| 43 | SDO-Shahdara | 38 | Mr. NaeemZahid |
| 44 | SDO-Farrukhabad | 59 | Sheikh Imran |
| 45 | SDO-City | 37 | Mr. Ghulam Mustafa |
| 46 | SDO-Data Nagar | 35 | Mr. Saeed Khan |
| 47 | SDO-Shadbagh | 60 | Ch. Aslam Ashraf |
| 48 | SDO-Misri Shah | 34 | Mr. Abdul Rehman |
| 49 | SDO-Gujjar Pura | | Mr. Khalid Nafees |
| 50 | SDO-Mughalpura | 40 | RanaRafaqat |
| 51 | SDO-Baghbanpura | 33 | Mr. Ammar Anwar |
| 52 | SDO-Mustafabad | 39 | Hafiz Jawad-ur-Rehman |
| 53 | SDO-Tajpura | 56 | Mr. Abdul Ghaffar |
| 54 | SDO-FatehGarh | 62 | Mr. Imran Tufail |
| 55 | SDO-Industrial Area | 31 | Mr. Shoukatali |
| 56 | SDO-Green Town | 30 | Mr. Ali Haider |
| 57 | SDO-Kahna | | Mr. Areez Irfan |
| 58 | SDO-Garden Town | 24 | Ch. Rashid |
| 59 | SDO-Township | 32 | Mr.Qamar-ul-HusnainNiaz |

LOCATION OF LOW LYING AREAS FOR DEWATERING

| Sr. No. | LOCATION | CAUSE OF ACCUMULATION OF WATER | DISPOSAL POINT | NO. OF DEWATERING SETS |
|---------|--------------------------------|------------------------------------|---------------------------|------------------------|
| | <i>Ravi Zone</i> | | | |
| 1 | Bhati Chowk | Rain surface run off in depression | Adjacent sewer | 1 |
| 2 | Muslim Park, Jia Musa | -do- | Jia Muda Trunk sewer | 1 |
| 3 | Chatta Park | -do- | -do- | 1 |
| 4 | Hamid Park | -do- | -do- | 1 |
| 5 | Qaiser Town | -do- | Abbas Nagar Sewer | 1 |
| 6 | Kot Shahab Din | -do- | Lajpat Road | 1 |
| 7 | Nazim Abad | -do- | -do- | 1 |
| 8 | Chowk Nakhuda | Road depression | Railway drain | 2 |
| 9 | Zafar Ullah Khan Road. | -do- | Akbar Road sewer | 1 |
| 10 | Shamshad Park | Low Lying area | | 1 |
| 11 | Haji Park Amer Road. | -do- | Amer Road drain | 1 |
| 12 | Gulistan Town, Bhagat Pura. | -do- | -do- | 1 |
| 13 | Shafi St. Taj Park Amer Road. | -do- | -do- | 1 |
| 14 | Sidique Pura Drain | Low Lying area | Siddiqe pura drain | 1 |
| 15 | Mehboob Road. | -do- | -do- | 1 |
| 16 | Mian Park, Data Nagar | -do- | -do- | 1 |
| 17 | Ahmed Park, Data Nagar | -do- | -do- | 1 |
| 18 | Meraj Pura Khokhar Road. | -do- | Khokhar Road sewer | 1 |
| 19 | Niaz Pura ,Khokhar Road | -do- | -do- | 1 |
| | <i>Shalimar Zone</i> | | | |
| 20 | Shahid Park,Nadia Ghee Mills | Depression | Adjacent sewer | 1 |
| 21 | Azeem Ground | -do- | -do- | 1 |
| 22 | Kotli Pir Abdul Rehman | Low Lying area | -do- | 1 |
| 23 | Angoori Bagh Scheme No.1 | Under sized sewer | -do- | 1 |
| 24 | Sahuwari Mujahid Abad | Under sized sewer | -do- | 1 |
| 25 | Saif Park behind Shalimar Park | -do- | Ibrahim Road sewer | 1 |
| 26 | Shahab park/Ibrahim Colony | -do- | MCL drain | 1 |
| 27 | Deputy Yaqoob Colony | -do- | Main Road Gulbehar Colony | 1 |

| | | | | |
|----|---------------------------------------|---|-------------------------------|---|
| 28 | Gulbahar Colony | -do- | MCL drain | 1 |
| 29 | Green Park | -do- | -do- | 1 |
| 30 | Shadi Pura | -do- | -do- | 1 |
| 31 | Imtiaz Road. | Road depression | Tertiary drain | 1 |
| | Aziz Bhatti Zone | | | |
| 32 | Al-Faisal Town, Block-C | -do- | -do- | 1 |
| 33 | Ghaziabad near Graveyard | -do- | -do- | 1 |
| 34 | New Airport access Road | No sewerage system | Irrigation channel | 1 |
| 35 | Taj Pura Scheme Block-B | Depression | Adjacent sewer | 1 |
| 36 | Taj Pura Scheme "E" Block near Mosque | -do- | -do- | 1 |
| 37 | Taj Pura C Block | -do- | -do- | |
| 38 | Taj Pura Pind near single Grave | No sewer system | -do- | 1 |
| 39 | Bahar Shah Disposal Station | In case of Power Break Down | Adjacent drain | 1 |
| 40 | Overhead Bridge | Low Lying area. | Irrigation channel | 1 |
| 41 | Baja Line Ghari Shahu | -do- | Open area across railway line | 2 |
| | Gulberg Zone | | | |
| 42 | Liberty Parking Gulberg | Low Lying area | Trunk sewer | 2 |
| 43 | Nawaz Shirf Colony Gulberg | Deficient sewer | Drain | 1 |
| 44 | Syed Muratab Ali | Depression | Sewer | 1 |
| 45 | Zafar Ali Road Gulberg | Deficient sewer | Drain | 1 |
| 46 | Lake Road Mozang | Low Lying area | University Ground | 2 |
| 47 | Fazilia Colony | Low Lying area | Drain | 2 |
| | Gunj Buksh Zone | | | |
| 48 | D-Block Graveyard, Gulshan Ravi | -do- | -do- | 2 |
| | Allama Iqbal Zone | | | |
| 49 | Chaudary Colony Samanabad | Low Lying area | Sewer | 2 |
| 50 | Mehran Block, A.I.T | -do- | -do- | 2 |
| 51 | Madina Colony Kharak | -do- | Drain | 2 |
| 52 | C&D Block Sabzza Zar | -do- | Drain | 2 |
| 53 | Huma Block Park , A.I.T. | -do- | Sewer | 2 |
| | Nishtar Zone | | | |
| 54 | Faisal Town | Low Lying area | -do- | 1 |
| 55 | Usman block, Garden Town | Inadequate pumping capacity of disposal | Drain | 2 |

| | | | | |
|----|---------------------|----------------|---------------|-----------|
| | | station | | |
| 56 | Standby | - | | 3 |
| 57 | Arfa Tower | Low Lying area | | 1 |
| 58 | Chungi Amar Sadhu | Low Lying area | | 1 |
| | Jubilee Town | | | |
| 59 | Tikka Chowk | Low Lying area | Sewer | 1 |
| | | | Total: | 74 |

Annex-IV

LIST OF SENSITIVE DISPOSAL STATIONS/LIFT STATIONS WITH NAME OF LESCO GRID AND LESCO FEEDER

ALLAMA IQBAL ZONE

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|-------|---------------------------------------|--------------------|-----------------------------|
| 1. | Multan road disposal | Bund road | 1. Said Pur 2. Niaz Baig |
| 2. | Babu Sabu drainage station | Bund Road | 1. Sabzazar 2. Said Pur |
| 3. | Rasul Park Lift station | Shadman Qurtba | Ichhra |
| 4. | B-II M.A johar | Town Johar Town | Town Johar Town |
| 5. | Shaukat Khanam Hospital | Town Ship | Town Johar Town |
| 6. | Shah Kamal | Iqbal Town | Ichhra |
| 7. | Azam Garden | Niaz Baig | Town Johar Town |

GULBERG ZONE

Gulberg Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|-------|---------------------------------------|--------------------|----------------------|
| 1. | G-Block Disposal | Rehman Park | Bridge main Gulberg |
| 2. | Sharif colony | Rehman Park | D-I Gulberg |
| 3. | Zafar Ali Road | Rehman Park | WAPDA colony |

| | | | |
|----|-----------------------------------|-----------------|--------------------|
| 4. | Centre point | Garden Town | Jinah colony |
| 5. | Makka colony | Rehman Park | Makka colony |
| 6. | Kalma chowk | Garden Town | Askari Flats |
| 7. | Gurumangitt | Gurumangitt | Gunj Mahal Gulberg |
| 8. | Nawaz Sharif Colony near IT Tower | Old Kot Lakhpat | |

Shimla Hill Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|-------|---------------------------------------|--|----------------------|
| 1. | Lakshmi Chowk | Mecload Road 042-37242853 0321-7325398 | Royal Park |
| 2. | Mohammad Nagar Allama Iqbal Road | Mecload Road 042-37242853 0321-7325398 | Empress Park |
| 3. | Ghazi Mohallah | Mecload Road 042-37242853 0321-7325398 | Mohammad Nagar |
| 4. | Janki Devi | Mecload Road 042-37242853 0321-7325398 | Empress Park |
| 5. | Laraches colony | Civil Line 042-99202731 | Zaman Park |

GUNJ BUKSH ZONE

Anarkali Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|-------|---------------------------------------|-----------------------|----------------------|
| 1. | Napair Road | Nila Gumbad | Nila Gumbad |
| 2. | Mochi bagh Disposal station | Akbari Police station | Mujhaid Abad |

Krishan Nagar Sub Division

| S.NO. | NAME OF DISPOSAL | NAME OF LESCO | NAME OF LESCO FEEDER |
|-------|------------------|---------------|----------------------|
|-------|------------------|---------------|----------------------|

| | STATION/LIFT STATION | GRID | |
|----|---------------------------------|------------------------------|----------------------------|
| 1. | Gulshan-e-Ravi Disposal station | Gulshan-e-Ravi Sabzazar Grid | Gulshan-e-Ravi Feeder |
| 2. | M.O.Fall Disposal station | Bhatti Grid | Ibrahim road Bhatti Feeder |
| 3. | Bagh Munshi Ladha lift station | Fort Grid | Data Gunj Buksh |
| 4. | Kalay wali pully lift station. | Bhatti Grid | Data Gunj Buksh |
| 5. | Qasoor pura (Dhobi Gat) | Ravi Grid | LDA Feeder |
| 6. | Chotta Ravi Drainage station | Bhatti Grid | Rashid Road. |

Ravi Road Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|--------------|--|---------------------------|-----------------------------|
| 1. | Main Out Fall disposal station | Bhatti Grid | Ibrahim road Bhatti Feeder |
| 2. | Bagh Munshi Ladha lift station | Fort Grid | Data Gunj Buksh |
| 3. | Kalay wali pully lift station. | Bhatti Grid | Data Gunj Buksh |
| 4. | Qasoor pura (Dhobi Gat) | Ravi Grid | LDA Feeder |
| 5. | Chotta Ravi Drainage station | Bhatti Grid | Rashid Road. |

NISHTAR ZONE

Town Ship Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|--------------|--|---------------------------|--------------------------------|
| 1. | Sato Katla | Town Ship | Bilal |
| 2. | LMP Block Link Road | Model Town | Mohammad Pura and Link Road |
| 3. | Nishtar colony Ferozepur Road | New Kot Lakhpat | 1) Industrial-ii 2) Dhaloke |
| 4. | Youhanabad | New Kot Lakhpat | Dhaloke |
| 5. | Nishtar colony old | New Kot Lakhpat | Nishtar colony |
| 6. | Race Club | LEFO | Ghosia |
| 7. | Bostan colony | Old Kot lakhpat | S.P Road |
| 8. | C-I, Green Town | Town Ship | Baggrian |
| 9. | C-II, Green Town | WAPDA Town | Baggrian-ii |
| 10. | A-II, Town Ship | Town Ship | Town Ship |
| 11. | Tayat More | Town Ship | Industrial-v |

SHALAMAR ZONE

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|--------------|--|----------------------------|-----------------------------|
| 1. | Mehmood Booti Disposal station | i) Bogiwal ii) Shalimar | i) WASA ii) Islam Pura |
| 2. | Lal Pill Disposal station | Fetah Garah | Mujhaid Abad |
| 3. | Achant Garah | Shalimar-II | Sabzi Mandi |

RAVI TOWN

Shahdara Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|--------------|--|---------------------------|-----------------------------|
| 1. | Saeed Park | Shahdara | Malik Park |
| 2. | Barkat Town | Shahdara | Barkat Town |
| 3. | Shahdara Town | Shahdara | Shahdara |

Farakhabad Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|--------------|--|---------------------------|-------------------------------|
| 1. | Farakhabad | Shahdara | i) Sharqpur ii) Malik park |
| 2. | Faisal Park | Shahdara | Barkat Town |
| 3. | Faisal Park | Rustam Grid | Barkat Town |
| 4. | Nain Sukh | Rustam Grid | Faiz pura |

City Sub Division

| S.NO. | NAME OF DISPOSAL STATION/LIFT STATION | NAME OF LESCO GRID | NAME OF LESCO FEEDER |
|--------------|--|---------------------------|-----------------------------|
| 1. | Larry Adda PECO disposal station | Bhatti Gate | Ahmad Park |
| 2. | Mulana Ahmad Ali Road | Bhatti Gate | Ahmad Park |
| 3. | Forest colony | Ravi Grid | Qilla Muhammadi |
| 4. | Larry Adda Disposal for drain | Ravi Grid | Ahmad Park |
| 5. | F&V Market disposal station and drain | Ravi Grid | Qilla Muhammadi |

| | | | |
|----|--|-----------|-----------------|
| 6. | Truck stand disposal station and drain | Ravi Grid | Qilla Muhammadi |
|----|--|-----------|-----------------|

RESCUE 1122



PRE-FLOOD EMERGENCY ARRANGEMENTS FOR THE FLOOD SEASON 2018

Rescue 1122, Lahore has established a Water Rescue Team (list attached) to manage the emergencies regarding Water Rescue and Flood. The Water Rescue Team comprising of trained rescuers and equipped with following equipment to deal with emergencies.

- **Wireless Communication Ravi Base (CH-06)**
- Water Rescue Van 01
- Fiber/ Inflatable Water Boat 14
- Aluminium Water Boat (18 Persons Capacity) 02
- OBM Engine 08
- Life Jackets 65
- Life Ring 25
- Oars 26
- Life Line 08
- SCUBA Diving Set 06
(Self Contained Underwater Breathing Apparatus)

Contacts:

- Dr. Rizwan Ahmad Ch. (Emergency Officer)
- 0323-4419638
- Mr. Farooq Ahmad (Emergency Officer/ PRO)
- 0300-6045899

FLOOD & WATER RESCUE TEAM

| S. No | Name | Designation | Mobile No |
|---|-----------------|--------------------------------------|--------------|
| FLOOD / WATER RESCUE TEAM INCHARGE | | | |
| 1 | Shahid Imran | Rescue & Safety Officer | 0333-4221895 |
| RESCUE TECHNICIANS | | | |
| 1 | Babar Riaz | Rescue Technician | 0332-4541122 |
| 2 | Muhammad Azeem | Shift Incharge | 0322-3909803 |
| WATER RESCUE TEAM | | | |
| 1 | Nematullah | Lead Fire Rescuer | 0322-4346962 |
| 2 | Rashid Mahmood | Shift Incharge | 0321-9410358 |
| 3 | Awais Mahmood | Shift Incharge | 0321-7502810 |
| 4 | Mehboob Ali | Computer Telephone Wireless Operator | 0344-4842908 |
| 5 | Haq Nawaz | Emergency Medical Technician | 0343-4222448 |
| 6 | Imtiazul Hassan | Fire Rescuer | 0312-6271122 |
| 7 | Usman Maqsood | DETR Rescuer | 0347-9273266 |
| 8 | Irshad | DETR Rescuer | 0347-6376717 |
| 9 | Ashraf Baig | Driver (HTV) | 0333-4664132 |
| 10 | Basharat Ali | Sanitary Worker | 0302-4506982 |
| RESCUERS | | | |
| 1 | Irfan Habib | DETR Rescuer | 0301-4739825 |
| 2 | Muhammad Naveed | DETR Rescuer | 0301-4941271 |
| 3 | Muhammad Sajjad | DETR Rescuer | 0301-4269015 |
| 4 | Ali Akbar | DETR Rescuer | 0301-4836029 |
| 5 | M Faisal Raza | DETR Rescuer | 0321-4178634 |
| 6 | Imran Ahmad | DETR Rescuer | 0334-3671122 |
| 7 | Imtiaz Sharif | DETR Rescuer | 0334-3241122 |
| 8 | S. Najam Mehdi | DETR Rescuer | 0334-3861122 |
| 9 | Mehar Ali Raza | DETR Rescuer | 0320-6392867 |
| 10 | M.Almas | Fire Rescuer | 0306-6937707 |

| | | | |
|----|---------------|------------------------------|--------------|
| 11 | Muhammad Asif | Fire Rescuer | 0314-4664368 |
| 12 | M.QaiserJaved | Emergency Medical Technician | 0334-8068420 |
| 13 | Sarfraz Ahmed | Emergency Medical Technician | 0302-4111556 |

BACKUP TEAM

- Incharges:**
1. Muhammad Azam Rescue & Safety Officer
 2. Mohammad Muneer Rescue & Safety Officer

| S. No | Name | Father's name | Designation |
|-------|----------------------|--------------------|-------------------|
| 1 | M. Rizwan Awais | Rai Kabir Ahmad | Shift Incharge |
| 2 | Abdul Waheed | Muhammad Hanif | Shift Incharge |
| 3 | Rana Rizwan | Muhammad Rafique | Shift Incharge |
| 4 | Syed Jaffar Ali Shah | Muzammal Hussain | Shift Incharge |
| 5 | Muhammad Nadeem | Muhammad Ali | Lead Fire Rescuer |
| 6 | Nadeem Hussain | Muhammad Hussain | Lead Fire Rescuer |
| 7 | Muhammad Aslam | Muhammad Anwar | Lead Fire Rescuer |
| 8 | Imtiaz Ali | Muhammad Ali | Fire Rescuer |
| 9 | M. Mazhar | M. Nawaz | Fire Rescuer |
| 10 | M. Arshad | Noor Muhammad | Fire Rescuer |
| 11 | M. Imran Sarwar | H. M. Sarwar | Fire Rescuer |
| 12 | Yasin Bashir | Bashir Ahmad | Fire Rescuer |
| 13 | Muhammad Akram | Abdul Majeed | Fire Rescuer |
| 14 | Atta Ur Rehman | Abdul Rehman | Fire Rescuer |
| 15 | Muhammad Murtaza | Punno Khan | Fire Rescuer |
| 16 | Mohammad Awais | Walayat Ali | Fire Rescuer |
| 17 | Muhammad Usman | Muhammad Illyas | Fire Rescuer |
| 18 | H. Ghulam Mustafa | Mushtaq Ahmad Khan | Fire Rescuer |
| 19 | M Aleem | M. Khurshid | Fire Rescuer |
| 20 | Farhan Liaqat | Liaqat Ali Khan | Fire Rescuer |
| 21 | Mehboob Arshad | M. Arshad | Fire Rescuer |
| 22 | Muhammad Hussain | Ghulam Hussain | Fire Rescuer |
| 23 | Imtiaz Ali | Muhammad Ali | Fire Rescuer |
| 24 | M. Mazhar | M. Nawaz | Fire Rescuer |
| 25 | Muhammad Aleem | Muhammad Khurshid | Fire Rescuer |
| 26 | M. Arshad | Noor Muhammad | Fire Rescuer |
| 27 | Ali Raza Qadri | Din Muhammad | DETR Rescuer |
| 28 | Muhammad Atif Bashir | Bashir Ahmad | DETR Rescuer |
| 29 | Muhammad Mubashar | Muhammad Mansha | DETR Rescuer |
| 30 | Riaz Ahmad | Naeem Ahmad | DETR Rescuer |
| 31 | Arsalan Ahmad | Amanat Ali | DETR Rescuer |
| 32 | Mohammad Ali | Muhammad Farooq | DETR Rescuer |
| 33 | Kanwar Javed Umar | M. Umar Khan | Driver (HTV) |
| 34 | Nasir Mahmood | Shamsher Khan | Driver (LTV) |
| 35 | Shahzad Rafique | M. Rafique | Driver (LTV) |
| 36 | Abid Hussain | Roshan Ali | Driver (LTV) |
| 37 | Syed Majid Javed | S. Khalid Javed | Driver (LTV) |

| | | | |
|----|-----------------|----------------|-----------------|
| 38 | Muhammad Nadeem | Abdul Majeed | Driver (LTV) |
| 39 | Mujahid Ali | Muhammad Zafar | Driver (LTV) |
| 40 | Sultan Rasheed | Rasheed Ahmad | Driver (LTV) |
| 41 | Amjad Khan | Murad Khan | Driver (LTV) |
| 42 | Amanat Ali | Niamat Ali | Driver (LTV) |
| 43 | Sajjad Hussain | Ghulam Hussain | Driver (LTV) |
| 44 | Muhammad Faisal | Muhammad Latif | Sanitary Worker |

EMERGENCY VEHICLES PLAN FOR RAIN
“CODE BLUE”

| Station | Ambulance | Key Points/ Duty |
|------------------------------------|---------------------|---|
| Central Community Rescue Station | LA-77 | Model Town Mor |
| | LA-45 | Campus Bridge (Canal Road) |
| | LA-46 | Mall Road, WAPDA House |
| | LA-22 | Liberty Round About |
| | LA-80 | Central Community Rescue Station |
| | LF-24 | Kalma Chowk to Ichra (Patrolling) |
| | LR-02 | FC College to Mall Road (Patrolling) |
| | LR-05 | Central Community Rescue Station |
| | Water Bowser(LF-17) | Central Community Rescue Station |
| Niaz Baig Community Rescue Station | LA-78 | Mansoor |
| | LA-79 | Niaz Baig Community Rescue Station |
| | LA-33 | WAPDA Town Roundabout |
| | LF-27 | Niaz Baig Community Rescue Station |
| | LR-03 | Jinnah Terminal, Multan Road (Patrolling) |
| Township Community Rescue Station | LA-47 | JHL to Akbar Chowk (Patrolling) |
| | LA-48 | Township Community Rescue Station |
| | LF-25 | Akbar Chowk |
| Walton Community Rescue Station | LA-14 | Kamahan to Attari (Patrolling) |
| | LA-67 | DHA More, Walton Road (Patrolling) |

| Station | Ambulance | Key Points/ Duty |
|---------------------------------------|------------------|---|
| | LA-87 | Kacha Jail Road, Chungi Amer Sidhu |
| | LF-03 | Walton Community Rescue Station |
| Gajju Community Rescue Station | LA-49 | Nishtar to Gajjumatta (Patrolling) |
| | LA-81 | Gajju Matta Community Rescue Station |
| | LF-37 | Gajjumatta Community Rescue Station |
| Nadeem Chowk Community Rescue Station | LA-16 | Mian Meer Bridge towards Airport (Patrolling) |
| | LA-88 | Cavalry PSO Pump |
| Mustafa Abad Community Rescue Station | LA-68 | Sadar Round About |
| | LA-69 | Mustafa Abad towards Railway Station |
| | LF-10 | Sadar Round About |
| Mughalpura Community Rescue Station | LA-89 | Mughalpura Chowk towards Shalimar Link Road(Patrolling) |
| | LA-90 | Garhi Shahu, Allama Iqbal Road (Patrolling) |
| | LA-70 | Co-up store Mughalpura |
| | LA-28 | Shalimar Chowk |
| | LF-01 | UET GT Road (Patrolling) |
| Lohari Community Rescue Station | LA-05 | District Courts to PMG Chowk(Patrolling) |
| | LA-82 | Bhatti to Shah Alam Market(Patrolling) |
| | LA-31 | WAPDA House Mall Road |
| | LF-04 | GPO to Regal Chowk, Mall Road (Patrolling) |
| Yadgar Community Rescue Station | LA-91 | Azadi Chowk to 32-Chowk(Patrolling) |
| | LA-92 | Aik Moria to Railway Station(Patrolling) |
| | LA-84 | Bhatti Chowk |
| | LF-07 | Yadgar Community Rescue Station |
| Shahdara Rescue Station | LA-44 | Begum Kot Chowk(Patrolling) |
| Shahdara Community Rescue Station | LA-73 | Rachna Town(Patrolling) |
| | LA-20 | Shahdara Mor to Match Factory(Patrolling) |
| | LF-06 | Shahdara Community Rescue Station |

| Station | Ambulance | Key Points/ Duty |
|--------------------------------------|------------------|--|
| Raiwind Community Rescue Station | LA-09 | Adda Plot, Raiwind Road |
| | LA-74 | Raiwind Community Rescue Station |
| | LA-94 | THQ Raiwind |
| | LF-35 | Raiwind Community Rescue Station |
| Manga Community Rescue Station | LA-71 | Manga Community Rescue Station |
| | LA-64 | Manga Mandi Bypass, Multan Road |
| | LF-36 | Manga Mandi Bypass, Multan Road |
| Moon Market Community Rescue Station | LA-85 | Main Boulevard (Allama Iqbal Town)(Patrolling) |
| | LA-18 | Moon Market Community Rescue Station |
| | LF-02 | Yateem Khana to Scheme More(Patrolling) |
| DHA Community Rescue Station | LA-50 | Main Boulevard to Ghazi Road(Patrolling) |
| | LF-15 | Bhatta Chowk(Patrolling) |
| Saghian Community Rescue Station | LA-34 | Chauburji Chowk/ Orange Line |
| | LA-93 | Gulshan Ravi Band Road(Patrolling) |
| | LF-26 | Band Road |
| | LR-06 | Outfall Road(Patrolling) |
| Bedian Community Rescue Station | LA-76 | Bedian Road towards Airport(Patrolling) |
| | LF-31 | Bedian Rescue Station |

DISTRICT LAHORE FLOOD RELATED DETAILS (2018)

| | | | |
|------------------------------|---|------------------|--------------------------------------|
| Flood Prone Area | Shahdara to Manga (Areas adjacent to River Bed) | | |
| Boat Carrier Trolleys | 01 | | |
| OBM Operators | S. No | Name | Designation |
| | 1 | Mehboob Ali | Computer Telephone Wireless Operator |
| | 2 | Haq Nawaz | Emergency Medical Technician |
| | 3 | Atif | DETR Rescuer |
| | 4 | Yasir Ali | DETR Rescuer |
| | 5 | Ali Akbar | DETR Rescuer |
| | 6 | Sajjad | DETR Rescuer |
| | 7 | Usman Maqsood | DETR Rescuer |
| | 8 | M. Rashid | DETR Rescuer |
| | 9 | M. Mudassar | DETR Rescuer |
| | 10 | Imtiaz ul Hassan | Fire Rescuer |
| | 11 | Ashraf Baig | Driver(HTV) |
| 12 | Majid Shah | Driver (LTV) | |

GOVERNMENT OF THE PUNJAB

FLOOD FIGHTING PLAN OF LAHORE DRAINAGE DIVISION LAHORE FOR THE YEAR 2018

*LAHORE IRRIGATION ZONE, LAHORE
LAHORE DRAINAGE CIRCLE, LAHORE
LAHORE DRAINAGE DIVISION, LAHORE*

IRRIGATION DEPARTMENT, LAHORE

FLOOD FIGHTING PLAN OF LAHORE DRAINAGE DIVISION, LAHORE

CHAPTER – 1 **SALIENT FEATURES OF LAHORE DRAINAGE DIVISION**

1.1 LOCATION

Lahore Drainage Division Lahore is situated at Canal Bank Mustafabad Lahore. River Ravi enters in Pakistan territory near Kot Nainan, Tehsil Shakargarh, and District Narowal. Many flood protection works on both sides of the river, such as Jalala Bund, Kotli Sanian bund, Hajipur Gujran Bund, Bheco Chak Bund Shahdara Bund, Mehmood Booti Bund, Lahore Protection Bund & Sharkpur Bund etc along with battery of spurs are located on Pakistan side. Right from Madhupur Head works to Ravi Syphon, the River is trained in Indian Territory by large number of River Training works by India.

On the Pakistan side in Narowal District, there are Jassar Bund, Highway Flood Protection Bund, and Raya Bund. Daily information regarding discharge in the River at Mahdupur Head works is received by the Flood Warning Center, Lahore and the Departmental functionaries are supposed to be vigilant to meet with any emergency from 15th June to 15th Oct. The jurisdiction of Lahore Drainage Division Lahore, on the left side is started from downstream Ravi Syphon to Head Balloki and on the right side it started from Shahdara Flood Protection Bund to Downstream Sharkpur Flood Protection Bund. On right side of River Ravi, there is Shahdara Flood Protection Bund RD.0-15+750 which starts from upstream of Shahdara Railway Bridge and connects Shahdara Disty Flood Protection Bund at RD.65+000. Similarly on left side of River Ravi, there is Mahmood Booti Bund RD.0-29+300 on the upstream of Shahdara Railway Bridge. The Mahmood Booti Bund has now come under the Ring Road and does not exist in its original shape and design. The Shahdara and Mahmood Booti Bunds are connected with series of River Training Works to train the river through Shahdara Railway Bridge and old G.T. Road Bridge.

On right side of River Ravi, down steam of Shahdara Railway Bridge there is Sharkpur Flood bund having length RD.0-32+060 and on the left side of the River Ravi, there is Lahore protection bund RD.0-26+000 and Tie Bund connected with series of river training works. It is again mentioned here that Ring Road and Motorway have been

constructed over Lahore Protection bund & Tie Bund respectively and these both bunds now do not exist in their original shape and design.

1.2 GENERAL DESCRIPTION

Lahore Drainage Division was established during 1957-59. The main objectives of this Division are:-

1. To look after the flood protection bunds along the River Ravi in District, Lahore and Sheikhpura.
2. To maintain drains in Lahore and Kasur District.

There are four Sub Divisions under the control of this Division namely:-

1. Flood Bund Sub Division
2. Lahore Drainage Sub Division
3. Kasur Drainage Sub Division
4. River Survey Drainage Sub Division

Flood Bund Sub Division is entirely concerned with the flood protection works and to look after the flood Bunds. There are 5-No Flood Protection Bunds and 22 No spurs in Lahore and Sheikhpura District. However the J-head spur at Shahpur Kanjran and J-head spur at Chung are under control of Kasur Drainage Sub Division, Lahore.

- i) Shahdara Flood Protection Bund with 5 spurs.
- ii) Mahmood Booti Bund with 2 spurs.
- iii) Lahore Flood Protection Bund with 5 spurs.
- iv) Lahore Tie Bund with 3 spurs.
- v) J-Head spur at Shahpur Kanjran.
- vi) J-Head spur at Chung.
- vii) J-Head spur at Qadirabad.
- viii) Sharkpur Flood Protection Bund with 5 spurs.

The other 3 Sub Divisional Officers are responsible for the operation and maintenance of three drainage system:

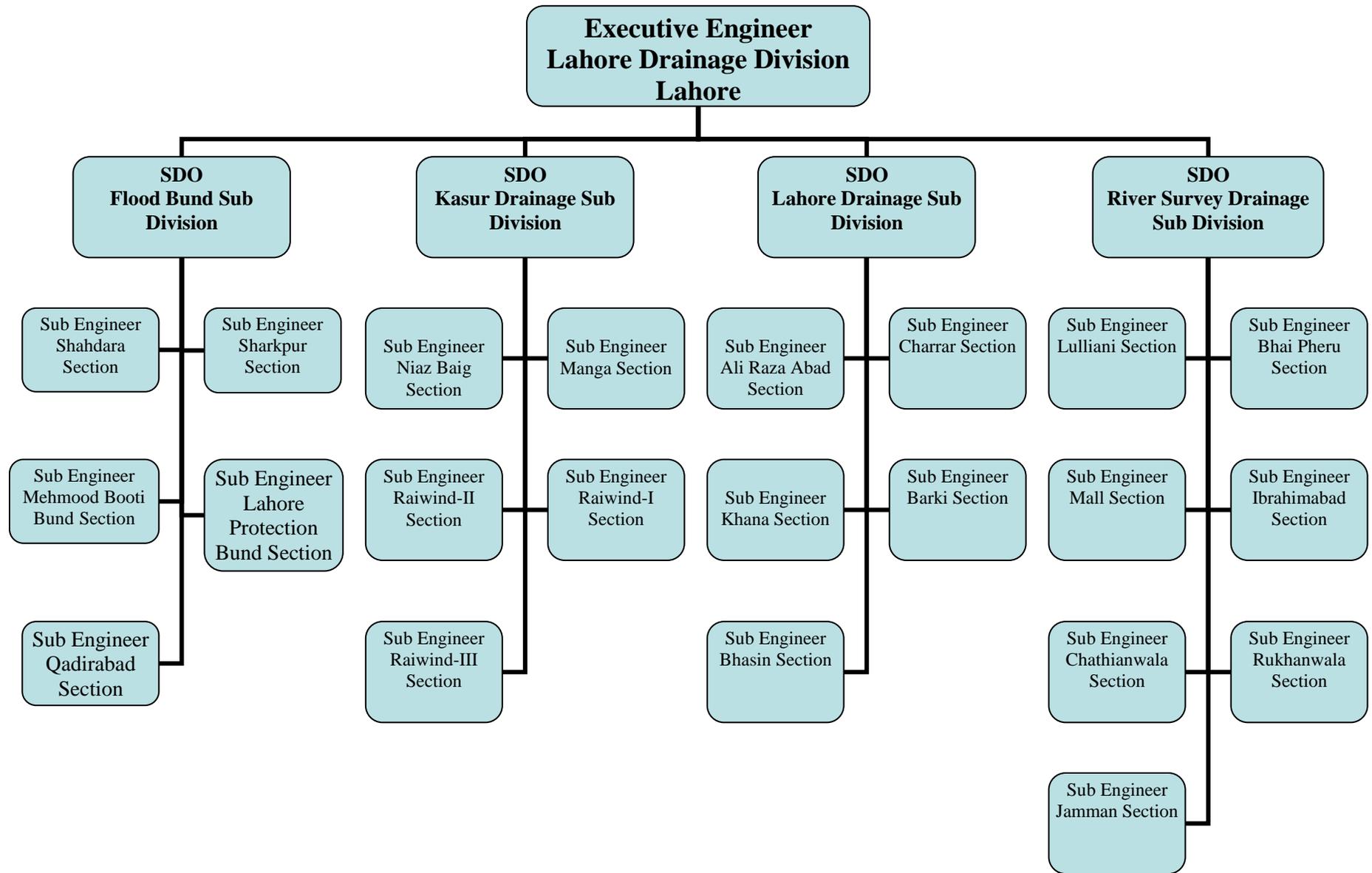
1. Hudiara Drainage System
2. Pandoki Drainage System
3. Raiwind Drainage System

Sub Divisional Officer Kasur Drainage Sub Division has the control of Raiwind Drainage System. Sub Divisional Officer Lahore Drainage Sub Division looks after the

Hudiara Drainage System while the Sub Divisional Officer River Survey Drainage Sub Division is responsible for the Pandoki Drainage System.

Watching of the bunds and River Training works is done as per duty roster provided in the flood fighting plan of this Division (plan attached). All other details of flood fighting are given in the light of instructions issued by the Chief Engineer, Drainage & Flood Zone Lahore vide No.D&F/2012/859/25/76 dated.10-03-2012.

1.3 ADMINISTRATIVE SETUP



CHAPTER – 2

FLOOD PROTECTION AND RIVER TRAINING WORKS

2.1 DESIGN PARAMETERS OF TRAINING WORKS

| S.# | Name of Bunds | Sub Division | Section | Length (in ft) | Top width (in feet) | Side Slopes | | RD | H.F.L. (R.L) for the year 1988 326000 Cs | Free Board (in ft) | Top R.L. of bund / Spur |
|---|---|--------------|---------|----------------|---------------------|-------------|---------------|-------|--|--------------------|-------------------------|
| | | | | | | River Side | Countr y side | | | | |
| FLOOD BUND SUB DIVISION, LAHORE | | | | | | | | | | | |
| <i>Mahmood Booti Section</i> | | | | | | | | | | | |
| 1 | Mahmood Booti Bund RD.0-29000 (Lahore Ring Road) | F.B.S.D | M.B.B | 29000 | 40 | 3 ;1 | 2 ;1 | 0 | 694 | 6 | 700 |
| 2 | Hockey spur at RD.7000 M.B.Bund | F.B.S.D | M.B.B | 3700 | 25 | 3 ;1 | 2 ;1 | | 694 | 6 | 700 |
| 3 | Slopping spur at RD.9000 M.B.Bund | F.B.S.D | M.B.B | 3650 | 15-18 | 3 ;1 | 3 ;1 | | 694 | | 695 |
| <i>Shahdara Flood Protection Bund Section</i> | | | | | | | | | | | |
| <i>Shahdara Flood Protection bund RD.15750</i> | | | | | | | | | | | |
| | | F.B.S.D | S.F.P.B | 15750 | 25 | 3 ;1 | 2 ;1 | 15150 | 694 | 5 | 704.34 |
| 1 | T-Head spur No.1 at RD.2300 | F.B.S.D | S.F.P.B | 600 | 25 | 3 ;1 | 3 ;1 | | | | 701 |
| 2 | T-Head spur No.2 at RD.4300 | F.B.S.D | S.F.P.B | 2000 | 25 | 3 ;1 | 3 ;1 | | | | 702 |
| 3 | T-Head spur No.3 at RD.6300 | F.B.S.D | S.F.P.B | 1000 | 25 | 3 ;1 | 3 ;1 | | | | 702.19 |
| 4 | T-Head spur No.4 at RD.7400 | F.B.S.D | S.F.P.B | 1200 | 25 | 3 ;1 | 3 ;1 | | | | 703.48 |
| 5 | Hockey spur No.5 at RD.9500 | F.B.S.D | S.F.P.B | 3600 | 25 | 3 ;1 | 3 ;1 | | | | 703.87 |
| 6 | Stone Stud No.1 along Hockey Spur. | F.B.S.D | S.F.P.B | 225 | | | | | | | |
| 7 | Stone Stud No.2 along Hockey Spur. | F.B.S.D | S.F.P.B | 225 | | | | | | | |
| <i>Lahore Flood Protection Bund Section</i> | | | | | | | | | | | |
| 1 | Lahore Protection Bund RD.3000-26000 (Lahore Ring Road) | F.B.S.D | L.F.P.B | 23000 | 25 | 3 ;1 | 2 ;1 | 3000 | 693.7 | 3 | 696.4 |
| 2 | J-spur No.1 (Gowshala) at RD.3600 | F.B.S.D | L.F.P.B | 1490 | 25 | 3 ;1 | 3 ;1 | | | 6 | 697.46 |
| 3 | J-spur No.2 at RD.5700 | F.B.S.D | L.F.P.B | 3800 | 20 | 2 ;1 | 2 ;1 | | | | 695.53 |
| 4 | J-spur No.3 at RD.9800 | F.B.S.D | L.F.P.B | 4295 | 20 | 2 ;1 | 2 ;1 | | | | 694.77 |
| 5 | J-spur No.4 at RD.17800 | F.B.S.D | L.F.P.B | 3992 | 20 | 2 ;1 | 2 ;1 | | | | 693.1 |
| 6 | T-Head spur No.5 at RD.19900 | F.B.S.D | L.F.P.B | 5775 | 20 | 2 ;1 | 2 ;1 | | | | 691 |
| <i>Tie Bund RD.0-20000 (Motorway)</i> | | | | | | | | | | | |
| 1 | J-head spur No.1 at RD.6600 | F.B.S.D | L.F.P.B | 4363 | 25 | 3 ;1 | 3 ;1 | | | | 694 |
| 2 | L-Bund / Spur at RD.10600 | F.B.S.D | L.F.P.B | 2000 | 25 | 3 ;1 | 3 ;1 | | | | 692.48 |
| 3 | J-head spur No.2 at RD.20000 | F.B.S.D | L.F.P.B | 4562 | 25 | 3 ;1 | 3 ;1 | 500 | | | 689 |

| S.# | Name of Bunds | Sub Division | Section | Length (in ft) | Top width (in feet) | Side Slopes | | RD | H.F.L. (R.L) for the year 1988 326000 Cs | Free Board (in ft) | Top R.L. of bund / Spur |
|---|---|--------------|-----------|----------------|---------------------|-------------|--------------|----|--|--------------------|-------------------------|
| | | | | | | River Side | Country side | | | | |
| Qadirabad Section | | | | | | | | | | | |
| 1 | J-spur Qadirabad | F.B.S.D | Qadirabad | 5690 | 25 | 3 ;1 | 3 ;1 | 0 | | - | 690 |
| 2 | Slopy spurs No.1 (Farkhabad) | F.B.S.D | Qadirabad | 135 | 10 | 2 ;1 | 2 ;1 | | | - | 688.5 |
| 3 | Slopy spurs No.2 (Farkhabad) | F.B.S.D | Qadirabad | 190 | 8 | 3 ;1 | 2 ;1 | | | - | 689 |
| 4 | Slopy spurs No.3 (Farkhabad) | F.B.S.D | Qadirabad | 135 | 10 | 2 ;1 | 2 ;1 | | | - | 690.83 |
| Sharkpur Flood Protection Bund Section | | | | | | | | | | | |
| 1 | Sharkpur Flood Protection Bund RD.0-32060 | F.B.S.D | SKP.F.P | 32060 | 25 | 3 ;1 | 2 ;1 | 0 | 675.7 | 6 | 679.66 |
| 2 | J-spur No.1 at RD.5060 S.F.P.Bund | F.B.S.D | SKP.F.P | 4000 | 25 | 3 ;1 | 3 ;1 | | | 5 | 678.5 |
| 3 | J-spur No.2 at RD.11080 S.F.P.Bund | F.B.S.D | SKP.F.P | 4050 | 25 | 3 ;1 | 3 ;1 | | | 5 | 677.96 |
| 4 | Earthen spur No.3 at RD.16510 S.F.P.Bund | F.B.S.D | SKP.F.P | 4800 | 25 | 3 ;1 | 3 ;1 | | | 5 | 677 |
| 5 | T-head spur No.4 at RD.26860 S.F.P.Bund | F.B.S.D | SKP.F.P | 2230 | 25 | 3 ;1 | 3 ;1 | | | 5 | 674.3 |
| 6 | J-head spur No.5 at RD.30560 S.F.P.Bund | F.B.S.D | SKP.F.P | 1800 | 25 | 3 ;1 | 3 ;1 | | | 5 | 671.69 |
| Kasur Drainage Sub Division, Lahore | | | | | | | | | | | |
| 1 | J-spur Shahpur Kanjran RD.0-7948 | Kasur | Niaz Baig | 7948 | 25 | 3 ;1 | 2 ;1 | | | | 683 |
| 2 | J-head spur at Chung RD.0-5673 | Kasur | Niaz Baig | 5673 | 25 | 3 ;1 | 3 ;1 | | | | 679.66 |
| 3 | Mole head spur | Kasur | Niaz Baig | 2244 | 25 | 3 ;1 | 3 ;1 | | | | |
| Total Length | | | | 202908 | | | | | | | |

NOTE: As already discussed in the report Mahmood Booti Flood Protection Bund, Lahore Flood Protection Bund and Tie Bund have become under Ring Road and Motorway and do not exist in their original shape and design.

2.2 LOCATION MAP On Next Page

CHAPTER – 3

BRIEF HISTORY OF PAST FLOOD EVENTS

There are three gauging stations upto Shahdara Railway Bridge when river Ravi enters into territory of Pakistan viz, Jassar, Ravi Syphon and Railway Bridge Shahdara. The first head works on this River in Pakistan is Balloki Head Works.

The gauge fixed at Shahdara Railway Bridge is recorded regularly during the flood season. In 1947, exceptional high flood of 225000 Cs was recorded at this site. In 1955 flood of 540000 Cs was experienced at Shahdara. In 1973, flood of 444299 Cs was noted at this site. During the flood of 1988, discharge of 326100 Cs. was experienced through Railway Bridge and the rest of about 249900 Cs through breaching section. The gauge observed at Shahdara Railway Bridge was R.L. 694.70 feet, when breaching section was operated during this flood. The Shahdara Flood Protection Bund breached at RD.13± and 15± when breaching section between RD.55+000 to 65+000 of Shahdara Distributary Bund was operated during this flood. The discharge of breached section at cut in the Shahdara Flood Protection Bund was estimated to be 1.0 Lac Cs. This discharge caused inundation of Shahdara Town and its suburbs. All the roads and other infrastructure came under water with varying depth from one foot to eight feet.

Massive destruction was caused by the flood of 1988 in Shahdara and allied abadies.

After 1988, the significant floods were experienced in 1993, 1995, 1996 & 1997 recorded as 91415, 171520, 182340 and 123080 Cs respectively. Since 1997, no real flood situation has been noted at Shahdara.

CHAPTER – 4

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

4.1 FLOOD LIMITS (Cs)

| Location | LOW | MEDIUM | HIGH | VERY HIGH | EXCEPTIONAL HIGH |
|-------------|----------------------|-----------------------|------------------------|------------------------|------------------------|
| Jassar | 50000 To 75000 | 75000 To 100000 | 100000 To 150000 | 150000 To 200000 | 200000 and Above |
| Ravi Syphon | 40000 To 65000 | 65000 To 90000 | 90000 To 135000 | 135000 To 180000 | 180000 and Above |
| Shahdara | 40000 To 65000 | 65000 To 90000 | 90000 To 135000 | 135000 To 180000 | 180000 and Above |
| Balloki | 40000 To 65000 | 65000 To 90000 | 90000 To 135000 | 135000 To 180000 | 180000 and Above |

4.2 TIME LAGS OF FLOODS

| River | Site | | Distance in Km | Time Lag in Hours |
|--|----------------|-------------|----------------|-------------------|
| | From | To | | |
| Ravi | Hajipur Gujran | Jassar | 94 | 12 |
| | Jassar | Ravi Syphon | 73 | 18 |
| | Ravi Syphon | Shahdara | 24 | 8 |
| Total Time Lag from Hajipur Gujran to Shahdara | | | | 38 Hours |

4.3 HIGH FLOODS

| S.# | Highest Floods | Discharge at Shahdara Railway Bridge | Discharge Through Breaching Section | Total Discharge |
|-----|----------------|--------------------------------------|-------------------------------------|-----------------|
| 1. | 1955 | 2,81,000 Cs | 2,59,000 Cs | 5,40,000 Cs |
| 2. | 1973 | 2,37,380 Cs | 2,06,919 Cs | 4,44,299 Cs |
| 3. | 1988 | 3,26,100 Cs | 2,49,900 Cs | 5,76,000 Cs |
| 4. | 1996 | 1,82,340 Cs | - | 1,82,340 Cs |

4.4 PEAK DISCHARGES

| YEAR | JASSAR | | | RAVI SYPHON | | | SHAHDARA | | |
|------|------------|--------|-----------|-------------|--------|-----------|------------|--------|-----------|
| | DATED | GAUGE | DISCHARGE | DATED | GAUGE | DISCHARGE | DATED | GAUGE | DISCHARGE |
| 1988 | 26-09-1988 | 791.00 | 121800 | 27-09-1988 | 715.70 | 325040 | 27-09-1988 | 694.70 | 576000 |
| 1989 | 31-07-1989 | 787.20 | 104818 | 01-08-1989 | 704.30 | 68702 | 01-08-1989 | 685.80 | 66985 |
| 1990 | 09-08-1990 | 782.00 | 46392 | 10-09-1990 | 703.30 | 59282 | 10-09-1990 | 684.80 | 52793 |
| 1991 | 11-08-1991 | 783.00 | 54975 | 12-08-1991 | 702.00 | 47582 | 12-08-1991 | 684.00 | 43163 |
| 1992 | 11-09-1992 | 789.60 | 148543 | 12-09-1992 | 704.50 | 80631 | 13-09-1992 | 684.80 | 62797 |
| 1993 | 11-07-1993 | 789.60 | 130740 | 13-07-1993 | 706.70 | 128188 | 14-07-1993 | 687.20 | 91415 |
| 1994 | 21-07-1994 | 791.70 | 173090 | 22-07-1994 | 706.20 | 101791 | 22-07-1994 | 685.90 | 54101 |
| 1995 | 05-09-1995 | 790.70 | 220800 | 06-09-1995 | 709.80 | 257000 | 07-09-1995 | 690.60 | 171520 |
| 1996 | 23-08-1996 | 788.80 | 151080 | 25-08-1996 | 708.40 | 196080 | 25-08-1996 | 689.40 | 182340 |
| 1997 | 26-08-1997 | 789.00 | 157600 | 30-08-1997 | 707.70 | 159200 | 30-08-1997 | 687.71 | 123080 |
| 1998 | 24-09-1998 | 783.80 | 35820 | 24-09-1998 | 703.80 | 56940 | 24-09-1998 | 684.50 | 58200 |
| 1999 | 20-08-1999 | 782.70 | 23620 | 21-08-1999 | 703.70 | 45200 | 11-08-1999 | 683.30 | 45000 |
| 2000 | 28-07-2000 | 783.70 | 34480 | 29-07-2000 | 704.10 | 39760 | 29-07-2000 | 683.20 | 51775 |
| 2001 | 15-08-2001 | 784.50 | 46100 | 15-08-2001 | 704.00 | 44100 | 16-08-2001 | 682.90 | 41000 |
| 2002 | 14-08-2002 | 785.80 | 69480 | 15-08-2002 | 703.80 | 42140 | 15-08-2002 | 682.50 | 37000 |
| 2003 | 04-08-2003 | 784.60 | 45135 | 05-08-2003 | 703.60 | 39963 | 05-08-2003 | 682.40 | 38763 |
| 2004 | 18-08-2004 | 782.70 | 30631 | 19-08-2004 | 703.70 | 37600 | 09-08-2004 | 681.80 | 32680 |
| 2005 | 08-07-2005 | 784.00 | 40200 | 08-07-2005 | 702.80 | 30720 | 09-07-2005 | 681.30 | 29130 |
| 2006 | 28-07-2006 | 783.50 | 36435 | 28-07-2006 | 702.20 | 26880 | 28-07-2006 | 680.50 | 23575 |
| 2007 | 30-06-2007 | 782.50 | 29272 | 30-06-2007 | 703.40 | 35200 | 01-07-2007 | 681.50 | 30550 |
| 2008 | 17-08-2008 | 783.50 | 36435 | 17-08-2008 | 703.00 | 32000 | 18-08-2008 | 681.70 | 31970 |
| 2009 | 29-07-2009 | 781.20 | 10080 | 30-07-2009 | 701.70 | 23920 | 30-07-2009 | 680.30 | 22205 |
| 2010 | 22-08-2010 | 782.50 | 13375 | 22-8-2010 | 702.40 | 41216 | 22-8-2010 | 679.50 | 41900 |
| 2011 | 14-08-2011 | 782.7 | 14070 | 14-08-2011 | 702.5 | 42320 | 14-08-2011 | 679.5 | 41900 |
| 2012 | 21-08-2012 | 782.8 | 26000 | 22-08-2012 | 702.3 | 40000 | 22-08-2012 | 679.3 | 39660 |
| 2013 | 16-08-2013 | 787.00 | 67700 | 18-08-2013 | 705.20 | 73551 | 18-08-2013 | 682.40 | 74880 |
| 2014 | 07-09-2014 | 787.00 | 67700 | 08-09-2014 | 705.70 | 93250 | 08-09-2014 | 682.70 | 91400 |
| 2015 | 16-08-2015 | 783.90 | 36070 | 18-07-2015 | 701.60 | 31000 | 19-07-2015 | 679.40 | 30000 |
| 2016 | 27-07-2016 | 782.00 | 25250 | 29-07-2016 | 701.50 | 45081 | 29-07-2016 | 678.70 | 44595 |
| 2017 | 02-08-2017 | 784.00 | 38004 | 02-08-2017 | 701.00 | 39853 | 20-07-2017 | 677.80 | 36258 |

CHAPTER – 5 **FLOOD FIGHTING STRATEGY**

Sub Divisional Officers and their staff would remain present and vigilant in the area round the clock during flood period. The flood information would be communicated by wireless, mobile phone or sent through special messenger employed for this purpose. In case of any emergency, the Sub Divisional Officer concerned would report the matter to the Executive Engineer, Lahore Drainage Division, Superintending Engineer, Lahore Drainage Circle, Chief Engineer, Irrigation Lahore Zone, Director Regulation, Chief Engineer, Drainage & Flood and Secretary Irrigation and Power Department, Punjab Lahore.

There are approved breaching sites located at Shahdara Disty embankment at RD.55+000 to 65+000. The Shahdara Railway Bridge was constructed during the year 1870 having 33 bays out of which 18 have since been closed. The matter regarding Enhancing Capacity of Shahdara Bridge was referred to IRI. After conducting Model Study, the PC-I was prepared under the directions / proposals of Irrigation Research Institute model study report conducted in May 2005, thereafter Federal Flood Commission directed to conduct fresh model study of the project vide minutes of meeting issued by Federal Flood Commission Islamabad No.FCI(I)/2013 Dated.20-02-2014. The fresh model study report has been received in 2015. PC-I has been prepared in view of proposals of Irrigation Research Institute Lahore and submitted to higher authorities.

On receipt of any flood warning, Sub Divisional Officer Flood Bund and Kasur Sub Division will make necessary arrangements. Sub Divisional Officer, Flood Bund and Sub Divisional Officer Kasur alongwith their field staff will camp at spur No.1 at RD.2300 of Shahdara Flood Protection Bund and at Shahpur Kanjran spur respectively. Duty roster and detail of camps along Mahmood Booti Bund, Lahore Protection Bund, Shahdara Flood Protection Bund, Shahpur Kanjran, Chung Spur, and Sharakpur Flood Protection Bund is available in Chapter-9 Page-30 & 31.

In case of High Flood, necessary arrangements for evacuation of affected people will be carried out by the Civil and Military authorities and the Engineering staff will remain busy in watching and protecting of the Flood Protection Works. The Lahore Division CBDC, Lahore will act as backup division once emergency is declared. All other Departments will have their own arrangements to provide help to the needy persons.

CHAPTER – 6

FLOOD DAMAGES / RESTORATION WORKS

OCCURRED DURING FLOOD 2018

-----NIL-----

CHAPTER – 7

FLOOD FIGHTING / WATCHING ARRANGEMENT

7.1 PRE-FLOOD ARRANGEMENT

1. Camping sites along the flood bunds at critical points will be declared and camps will be established over there.
2. Required flood fighting / watching material will be procured.
3. Procurement of stone to maintain the minimum limit of reserve stock will be ensured.
4. Information regarding earth moving machinery available in the local market will be gathered.
5. Site visits along with field formation to identify the most critical points and to develop consensus for course of action if such points / reaches become dangerous.
6. Arrangements will be made for the installation of base wireless station and mobile wireless sets in Government vehicles.
7. Total length of protection bunds will be divided into different beats and assigned duties of watching of flood protection works through gangs comprising regular and work charge establishment.
8. Special funds application based on estimated amounts of emergent works will be submitted.

STONE POSITION

Unit = 1.0 Lac Cft

| S.# | Section | Bund / Spur | Reserved stock limit as per yard stick | Minimum Qty required @ 50% | Exist as per record | Balance Quantity required |
|-----|-------------------------------|-------------------------|--|----------------------------|---------------------|---------------------------|
| 1 | Shahdara | | | | | |
| | | i) T-Spur No.1 | 1.00 | 0.500 | 0.0475 | 0.453 |
| | | ii) T-Spur No.2 | 1.00 | 0.500 | 0.241 | 0.259 |
| | | iii) T-Spur No.3 | 1.00 | 0.500 | 0.175 | 0.325 |
| | | iv) T-Spur No.4 | 1.00 | 0.500 | 0.1455 | 0.355 |
| | | v) Hockey Spur No.5 | 1.00 | 0.500 | 0.5909 | -0.091 |
| | | Total:- | 5.00 | 2.500 | 1.200 | 1.300 |
| 2 | Qadirabad | | | | | |
| | | i) J-Spur Qadirabad | 1.00 | 0.500 | 0.2065 | 0.294 |
| | | Total:- | 1.00 | 0.500 | 0.2065 | 0.294 |
| 3 | Sharkpur | | | | | |
| | | i) J-Spur No.1 | 1.00 | 0.500 | 0.699 | -0.199 |
| | | ii) T-Spur No.2 | 1.00 | 0.500 | 0.731 | -0.231 |
| | | iii) Earthen Spur No.3 | 0.00 | | 0.329 | -0.329 |
| | | iv) T-Spur No.4 | 1.00 | 0.500 | 0.209 | 0.291 |
| | | v) J-Spur No.5 | 1.00 | 0.500 | 0.000 | 0.500 |
| | | Total:- | 4.00 | 2.000 | 1.968 | 0.032 |
| 4 | Mehmood Booti | | | | | |
| | | i) Hockey Spur | 1.00 | 0.500 | 0.129 | 0.371 |
| | | ii) Sloping Spur | 0.50 | 0.250 | 0.000 | 0.250 |
| | | Total:- | 1.50 | 0.750 | 0.129 | 0.621 |
| 5 | Lahore Protection Bund | | | | | |
| | | i) J-Spur No.1 | 1.00 | 0.500 | 0.0287 | 0.471 |
| | | ii) J-Spur No.2 | 1.00 | 0.500 | 0.0040 | 0.496 |
| | | iii) J-Spur No.3 | 0.00 | 0.000 | 0.1059 | -0.106 |
| | | iv) J-Spur No.4 | 1.00 | 0.500 | 0.7180 | -0.218 |
| | | v) T-Spur No.5 | 1.00 | 0.500 | 0.0060 | 0.494 |
| | | Tie Bund | | | | |
| | | i) J-Spur No.1 | 1.00 | 0.500 | 0.000 | 0.500 |
| | | ii) L-Spur | 0.50 | 0.250 | 0.000 | 0.250 |
| | | iii) J-Spur No.2 | 1.00 | 0.500 | 0.000 | 0.500 |
| | | Total:- | 6.50 | 3.250 | 0.863 | 2.387 |
| 6 | Niaz Baig | | | | | |
| | | i) Shahpur Kanjran | 1.00 | 0.500 | 0.219 | 0.281 |
| | | ii) Mole & J-spur Chung | 1.00 | 0.500 | 0.645 | -0.145 |
| | | Total:- | 2.00 | 1.000 | 0.864 | 0.136 |
| | | G.Total:- | 20.00 | 10.000 | 5.230 | 4.770 |

7.2 WATCHING ESTABLISHMENT

| S.# | Particulars | Period | Coolies | | | | Mates | | | Vulnerable Points | Extra Collies for Vulnerable Points | |
|-----|---|--|-------------|-------------------------|--------------|---------------------|----------------------|-------------|-------------------|-------------------|-------------------------------------|-------|
| | | | No of beats | No of Collies per beat* | No of shifts | Total No of Collies | No of mates per beat | No of shift | Total No of mates | | Coolies | Mates |
| | | | | | | | | | | | | |
| 1 | Normal days of floods | 1 st June To 15 th October | 20 | 4 | 1 | 80 | 1 | 1 | 20 | 4 | 20 | 5 |
| 2 | Low Flood at Jassar 45000-75000 Cs | -do- | 20 | 8 | 2 | 320 | 1 | 2 | 40 | 4 | 60 | 5 |
| 3 | Medium flood at Jassar 75000-100000 | -do- | 20 | 8 | 3 | 480 | 1 | 2 | 120 | 8 | 120 | 10 |
| 4 | High Flood at Jassar 100000-150000 Cs | -do- | 20 | 10 | 3 | 600 | 2 | 3 | 120 | 8 | 120 | 10 |
| 5 | Very High Flood at Jassar 150000-200000 Cs | -do- | 20 | 15 | 3 | 900 | 2 | 3 | 120 | 10 | 150 | 15 |
| 6 | Exceptionally high flood at Jassar 200000 above | -do- | 20 | 20 | 3 | 1200 | 3 | 3 | 180 | 15 | 300 | 30 |

*1 beat = 10 RDs
= 10000 ft

ADDITIONAL ESTABLISHMENT

- | | |
|----------------------------|-------------------------------|
| 1) Chowkidar day and night | (2No per beat) = 2x20 = 40 No |
| 2) Gauge reader 3 shift | (1 No per shift)= 3x4 = 12 No |
| 3) Telephone attendant | (1 No per shift)= 3x4 = 12 No |

Justification:

Work charge establishment is needed in addition to regular establishment to combat the flood situation (shift duties). Therefore work charged watching establishment has been provided as per previous criteria.

7.3 ARRANGEMENT AT SENSITIVE SITES

Shahdara Flood Bund is the sensitive site due to breaching section close to it. Flood watching / fighting camp is provided over there with all logistics.

7.4 WATCHING MATERIAL

Total Quantity required against available quantity of different flood fighting / watching material for all flood fighting camps including sensitive sites are as below:-

| S.# | Item | Unit | Quantity required | Quantity Available | Balance Quantity required |
|------------|------------------------|-------------|--------------------------|---------------------------|----------------------------------|
| 1 | Kassies / Belchas | No | 80 | 80 | 80 |
| 2 | handle of Kassies | No | 80 | 70 | 10 |
| 3 | Toot Baskets | No | 265 | 160 | 100 |
| 4 | Torches chargeable | No | 600 | - | 600 |
| 5 | Torches (3- cell) | No | 39 | 39 | - |
| 6 | Dry Cell | Dozen | 19 | 19 | - |
| 7 | Bulb for Torches | No | 6 | 6 | - |
| 8 | Axes | No | 10 | 8 | 2 |
| 9 | Handle for axe | No | 50 | 5 | 45 |
| 10 | Generator | No | 2 | 1 | 1 |
| 11 | Electric wire 3/29 s/c | Coil | 9 | 3 | 6 |
| 12 | Electric wire 7/29 s/c | Coil | 3 | 3 | - |
| 13 | Insulation tape | No | 18 | 0 | 18 |
| 14 | Bulb Holder | No | 85 | 85 | - |
| 15 | Shouldaries | No | 10 | 4 | 6 |
| 16 | Swiss cottage tent | No | 1 | 1 | - |
| 17 | Darries | No | 10 | 7 | 3 |
| 18 | Camp chair | No | 36 | 24 | 12 |
| 19 | camp Table | No | 5 | 4 | 1 |
| 20 | Buckets G.I | No | 80 | 50 | 30 |
| 21 | Suttly Seiba | Bundle | 5 | 1 | 1 |

| | | | | | |
|----|---|------|-------|------|-------|
| 22 | Life Jacket | No | 18 | 12 | 6 |
| 23 | Sounding Rod | No | 4 | 1 | 3 |
| 24 | Long rubber shoes | Pair | 22 | 22 | - |
| 25 | Emergency Lights | No | 14 | - | 14 |
| 26 | Nylon Bags | No | 7000 | 7000 | - |
| 27 | U-clamp 5/8" dia | No | 100 | 100 | - |
| 28 | U-clamp 1/2" dia | No | 60 | 50 | - |
| 29 | Water cooler | No | 8 | - | 8 |
| 30 | Hand Umbrella | No | 5 | - | 5 |
| 31 | Measuring tape 100' | No | 5 | 5 | - |
| 32 | Manila rope | Rft | 200 | 200 | - |
| 33 | Steel wire rope 1/2" dia | Rft | 3000 | 200 | 2800 |
| 34 | Fiber glass boat | No | 2 | 1 | 1 |
| 35 | Bamboo 2 1/2" dia 8-10 ft long with one end sharp | No | 1000 | 20 | 980 |
| 36 | Digital Camera | No | 3 | - | 3 |
| 37 | G.I.Wire Crates | No | 58 | 58 | - |
| 38 | Hammer Heavy | No | 5 | 3 | 2 |
| 39 | Wrench | No | 7 | 3 | 4 |
| 40 | Pliers | No | 6 | 3 | 3 |
| 41 | Umbrella 10' | No | 1 | 0 | 1 |
| 42 | Gas lamp | No | 6 | 6 | - |
| 43 | Lantern | No | 50 | 50 | - |
| 44 | Energy Saver 45w | No | 100 | - | 100 |
| 45 | Jute bags | No | 2000 | 2000 | - |
| 46 | Electric Bulb 100 W | No | 100 | 70 | 30 |
| 47 | Electric Bulb 500 W | No | 50 | 40 | 10 |
| 48 | Electric Switch | No | 60 | 60 | - |
| 49 | Geo synthetic bags 500 kg | No | 5000 | | 5000 |
| 50 | Geo Synthetic Bags 1000 kg | No | 5000 | - | 5000 |
| 51 | Geo Sheet | Rft | 15000 | - | 15000 |
| 52 | Pegs | No | 500 | - | 500 |
| 53 | Charpaye Iron | No | 25 | - | 25 |
| 54 | Search Light | No | 12 | - | 12 |
| 55 | Petrol chain saw | No | 6 | - | 6 |
| 56 | Digital video camera | No | 2 | - | 2 |
| 57 | Fiber Glass Boat with Petrol engine | No | 2 | - | 2 |

7.5 ARRANGEMENT FOR SOUNDING & PROBING

It is available at Shahdara Flood Watching Camp at RD.2300 of Shahdara Flood Protection Bund.

7.6 LIGHTING ARRANGEMENT

Two Nos of generators with the capacity of 2 KVA each, are available in case of non-availability or failure of electricity at Shahdara Flood Watching Camp at RD.2300.

7.7 RATION ARRANGEMENT

Ration would be made available at site as per Government policy.

7.8 POL ARRANGEMENT FOR VEHICLES

POL for vehicle will be made available from existing funds under the head of POL.

7.9 TRANSPORTATION

All Government vehicles are in good running condition to perform flood duty.

7.10 LAW AND ORDER

It is the responsibility of local police. Close contact / liaison will be ensured with the civil administration.

7.11 MEDICAL ARRANGEMENT FOR LABOUR

First Aid / medicine boxes would be arranged at site by the Health Department along with other measures.

7.12 LIAISON WITH OTHER DEPARTMENTS

It would be ensured telephonically through official land line and private mobile numbers. The department liaison officer will be notified before the coming flood season.

7.13 ROLE OF THE ARMY

Besides arrangements of watching staff by Irrigation Department, additional volunteers will be requisitioned if needed from the army on special request. They will also take position for the rescue of the persons and live stock of flood affected areas on request of the Department.

7.14 DUTIES OF TELEPHONE ATTENDANT

He will record daily discharges at various control points and convey important information and messages etc 24 hours during flood season.

7.15 WIRELESS ARRANGEMENTS

Mobile wireless in Government vehicles would be installed during flood season. The requisition in this regard will be initiated.

CHAPTER – 8

DETAIL OF ENCROACHMENTS

There are encroachments inside the river along right as well as left side of River. On the left bank of the river Ravi, encroachments have developed inside the flood bunds all along the Mahmood Booti Bund and the Lahore Protection Bund. The workshops and small factories have developed along-with pacca houses within the river training works, which would create an alarming situation in case a medium flood passes downstream of Ravi Syphon. Other departments have provided facilities of electricity, telephone and sewerage to the inhabitants within the bunds area making things bad to worse. The list of Encroachment has already been circulated vide No.689-91/107-W Dated.21-03-2018 to Civil Administration to help the Department to remove these encroachments. The detail of encroachment including its type i.e. houses, shops and factories etc is attached herewith on next pages.

ENCROACHMENT ON BUNDS AND SPURS

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|-----|---|---|---|
| 1 | Nazir Ahmad, Haji Riaz and Sadiq Changhar etc | Spur No.4 at RD.2500 to 4000 | Illegal laying of sewer pipe in the toe of spur |
| 2 | Malik Asad. | T spur No.4 of Lahore Protection bund RD.4000 | illegal cutting of ramps / pitching |
| 3 | Unknow | T spur No.4 & 5 of Lahore Protection bund | illegal construction of Truck stand for goods |
| 4 | Unknow | T spur No.1 Mohammadia colony Gaoshala | illegal construction of Truck stand for goods |
| 5 | Nizami Motors | Spur No.1 at RD.1490 head Lahore Protection Bund | illegal construction of Truck stand for goods |
| 6 | Tanveer Tahir | Sharkpur Flood Protection Bund/T Spur No 4 R.D 26+860 | Illegal construction of Tubewel on head. |
| 7 | Contractor of Mineral Department. | Lahore Protection Bund between Spur No 4 & 5 | Illegal sand mining. |
| 8 | Contractor of Mineral Department. | Lahore Protection Bund between saggian and motorway bridges | Illegal construction of bunds for sand mining. |
| 9 | Malik Talib & Malik Alam | Spur No.5 Lahore Protection Bund R.D 5500 Head | Illegal water pump. |
| 10 | Malik Asad. | Spur No. 4 Lahore Protection Bund R.D 3400/L | Illegal construction |
| 11 | Malik Tahir. | Spur No 4Lahore Protection Bund R.D 3500/L | Illegal construction |
| 12 | Local Zamindars | Sharakpur Flood Protection Bund & its allied spurs. | Illegal cutting of ramps |
| 13 | Contractor of Mineral Department. | Shahdara Flood Protection Bund Spur No 4 | Illegal cutting of ramps for sand carriage. |
| 14 | Malik Tahir & others. | Shahdara Flood Protection Bund Spur No 4 R.D 0-1 | Illegal cutting of ramps for sand carriage |
| 15 | Malik Tahir | Spur No 2 of shahdra Flood Protection Bund T-head | Illegal obstruction of Bund |

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|------------|---------------------------|--|---|
| 16 | Malik Safdar | Spur No 5 of Lahore Protection Bund RD 4+000-4600 | Illegal laying of sewer |
| 17 | Malik Alam | Spur No 5 of Lahore Protection Bund RD 5+000 L/S | Excavation of earth/sand |
| 18 | Malik Alam | Spur No 5 of Lahore Protection Bund RD 5+000 R/S | Storage of sand |
| 19 | Abid Hussain | Spur No 5 of Lahore Protection Bund RD 5+000 L/S | Illegal installation of water pump & khurli |
| 20 | Haji Mustafa/Dr Shaheen | Spur No 5 of Lahore Protection Bund RD 2+000 R/S | Illegal Construction of Dera & house |
| 21 | Mohammad Arshad | Spur No 5 of Lahore Protection Bund RD 3+000 R/S | Illegal Construction of boundary wall |
| 22 | Haji Mohammad Ali | Spur No 5 of Lahore Protection Bund RD 5+000 R/S | Illegal Construction of wall & house |
| 23 | Ashfaq | Spur No 5 of Lahore Protection Bund RD 2+000 L/S | Illegal Construction of hotel |
| 24 | Unknown | Spur No 5 of Lahore Protection Bund RD 1+000 R/S | Illegal Construction of hotel |
| 25 | Asim Raza | Spur No 5 of Lahore Protection Bund RD 1+000 L/S | Illegal Construction of hotel |
| 26 | Rana Mohammad Iqbal | Spur No 5 of Lahore Protection Bund RD 4+500 | Illegal storage of Glass & garbage |
| 27 | Mohammad Nawaz | Spur No 5 of Lahore Protection Bund RD 3+500 L/S | Illegal storage of material |
| 28 | Mineral Department | Between Spur No 4 & 5 of Lahore Protection Bund RD 5+000 | Excavation of earth/sand |
| 29 | Mehar Akhtar | Spur No 1 of Lahore Protection Bund RD 1+000 | Illegal Construction of boundary wall |
| 30 | Sufi Mohammad | Spur No 1 of Lahore Protection Bund RD 1+000 | Illegal Construction of hotel |
| 31 | Haji Mushtaq | Spur No 1 of Lahore Protection Bund RD 0+500 | Illegal Construction goods stand |

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|------------|--|--|---|
| 32 | Muhammad jamil | Spur No 1 of Lahore Protection Bund RD 0+500 | Illegal Construction of boundary wall |
| 33 | Mian Abbas | Spur No 1 of Lahore Protection Bund RD 0+500 | Illegal Construction/Occupation of Govt land |
| 34 | Malik Farhat Abbas | Lahore Flood Protection Bund spur No.J-2 (Tie Bund) R.D 4+000 R/S | Illegal exeavation of earth from Govt Land |
| 35 | Unknown Persons | Spurs of Shahdara Flood Protection Bund | Illegal Making way for Tractor Trollies. |
| 36 | Shafat Ali, Ch: Karamat, Muhammad Munir, Muhammad Javwed and Others. | Shahdara Flood Protection Main Bund & spurs | Illegal Construction of Ramp by cutting Bund/Slops |
| 37 | Unknown Persons | Saggian Bridge River Ravi / R | Illegal Construction of Bund Near Saggian Bridge. |
| 38 | Muhammad Azhar | Lahore Flood Protection Bund Spur No.4 RD.1000/L | Illegal instalation of Sewarage Pipe top of Bund. |
| 39 | Muhammad Naeem | Lahore Flood Protection Bund Spur No.5 RD.2500/L | Illegal Construction of House. |
| 40 | Mohammad Ramzan S/O Kasam Gujjar | Lahore Flood Protection Bund Spur No.2 RD.3500/R, Spur No1 RD.1500/L | Obstruction on bund for cattles |
| 41 | Jamshad Iqbal | Lahore Flood Protection Bund Spur No.2 (Head Portion) | Damaged Pusta No.2 |
| 42 | Unknown Persons | Shahdara Flood Protection Bund spur No.5 RD.9500 | Illegal Cultivation of Govt. Land/cuts of slope/Bund. |
| 43 | Dad Muhammad Khan | Lahore Flood Protection Bund Spur No.5 RD.750/R | Illegal Occupation/Construction. |
| 44 | Jamshad Bao | Lahore Flood Protection Bund Spur No.2 RD.2800/R | Illegal Construction of Ramp on spur No.2. |
| 45 | Bodha Gujjar, Mushtaq Gujjar etc. | Lahore Flood Protection Bund Spur No.4 RD.2900-3000 | Illegal occupation of Govt: Land. |
| 46 | Mineral Department | Right Bank of River Ravi Downstream Saggian Bridge | Illegal obstruction of river bed |
| 47 | Unknown | Lahore Flood Protection Bund Spur No.5 RD.4500/L | Illegal Construction |

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|-----|---|--|------------------------------------|
| 48 | Unknown | Lahore Flood Protection Bund Spur No.5 RD.2500/R | Illegal Construction |
| 49 | Mohammad Majed,Abdul Rasheed | Shahdara Flood Protection Bund RD.4-5/L | Illegal Construction of Room |
| 50 | Mian Goga,wali Mohammad,abbas Khan Jaffar,Mohammad Maqbool,SyedIftikhar Shah, Allha Ditta,Mohammad Shari,Malik Zaheer,Mohammad Younis,Mohammad Zaka,lal Hussain,Malik Mohammad Akram,Mohammad Basheer(D/S of siggian bridge)Billa Khan,jaan Gul khan,Rehman khan,Fiaz,chand khan,Amanat khan,Ahmad shah khan,Dogar,Ghulam Rasool,Arif,Babar Bhatti,Haji Khizar,Malik Nawaz,Hakim Ali,Malik Sarwar,Sajjad(U/S of siggian Bridge) | Lahore Flood Protection Bund Downstream Saggian Bridge | Illegal Construction |
| 51 | Mian Goga,wali Mohammad,abbas Khan Jaffar,Mohammad Maqbool,SyedIftikhar Shah, Allha Ditta,Mohammad Shari,Malik Zaheer,Mohammad Younis,Mohammad Zaka,lal Hussain,Malik Mohammad Akram,Mohammad Basheer | Lahore Flood Protection Bund Downstream Saggian Bridge | Illegal Construction |
| 52 | Mohammad Akbar,Kala Mistry,Munshi khan,lal khan,Mohammad Rafique,Mohammad Hussain,Jaffar Hussain,Aziz khan,zafar khan,shan khan,Labha | Lahore Flood Protection Bund Spur No.5 R.D 0+000 To 3+000 | Illegal obstruction of Bund |
| 53 | Haji Nazir | Lahore Flood Protection Bund Spur No.1 R.D 1+000 R/S | Illegal Construction |
| 54 | Shoukat Ali | Lahore Flood Protection Bund Spur No.4 R.D 0+300 R/S | Illegal Construction |
| 55 | Mohammad Mushtaq | Lahore Flood Protection Bund Spur No.5 R.D 4+500 | Illegal Construction |
| 56 | Munir jutt,Mubarak jutt | Lahore Flood Protection Bund spur No.J-2 (Tie Bund)R.D 4+500 | Illegal occupation of Govt Quarter |
| 57 | Abdul Sattar khan | Lahore Flood Protection Bund spur No.J-2 (Tie Bund) R.D 4+500 | Illegal occupation of Govt Quarter |

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|-----|--|--|---|
| 58 | Unknown | Lahore Flood Protection Bund Downstream Saggian Bridge | Illegal Bund |
| 59 | Billa,Arshad,Sharif,Mian jawed,Mairaj Din,Labha Gujjar ,noni, Kanwar Din Nadeem ,Afzal,Chiragh,Irfan,Saleem,Manaha,Bahadar ,Goga ,Muhamad Rafiqe,Bashir,Javed,Amanat Ali,Muhammad Asif,Haji muhammad Sharif,Muhammad Ramzan,Umar,Jajhi,Inyat ,Muhammad Younas,Muhammad Sadiq, Asghar Ali,Muhammad Aslim ,Malik Akbar,Mlik kala,Malik Liaqat Ali,Bagha,Mian Javed,Mian Iqbal,Mairge Din,Babar ,Amjad,Riasat,,Sohny,Amjad,Shahbaz,Goga,Malik Ramzan,Jajah Shah,Sadiq,Riaz,Bashir,Lal Din Dar,Muhammad Sharif,Muhammad Latif ,Liaqat Ali,.Ibrahim,Haji Sajid,Haji Qadir,Muhammad Rafiq,mUHAMMAD hANIF Haji yasseen,Mubarak Ali,Malik Asharaf,Abdulghafoor,Muhammad Rafiq,Haji Taj,Noor Muhammad, Malik Jamil,Muhammad Latif,Safdar Ali,Sher Muhammad,Malik Shakeel,CH Hayat,Niamat Ali, | Shahdara Flood Protection Bund RD.0-10000 | Illegal Construction/Occupation of Shahdara Flood Protection Bund |
| 60 | Billa,Arshad,Sharif,Mian jawed,Mairaj Din,Labha Gujjar ,noni, Kanwar Din Nadeem ,Afzal,Chiragh,Irfan,Saleem,Manaha,Bahadar ,Goga ,Muhamad Rafiqe,Bashir,Javed,Amanat Ali,Muhammad Asif,Haji muhammad Sharif,Muhammad Ramzan,Umar,Jajhi,Inyat ,Muhammad Younas,Muhammad Sadiq, Asghar Ali,Muhammad Aslim ,Malik Akbar,Mlik kala,Malik Liaqat Ali,Bagha,Mian Javed,Mian Iqbal,Mairge Din,Babar ,Amjad,Riasat,,Sohny,Amjad,Shahbaz,Goga,Malik Ramzan,Jajah Shah,Sadiq,Riaz,Bashir,Lal Din Dar,Muhammad Sharif,Muhammad Latif ,Liaqat Ali,.Ibrahim,Haji Sajid,Haji Qadir,Muhammad Rafiq,mUHAMMAD hANIF Haji yasseen,Mubarak Ali,Malik Asharaf,Abdulghafoor,Muhammad Rafiq,Haji Taj,Noor Muhammad, Malik Jamil,Muhammad Latif,Safdar Ali,Sher Muhammad,Malik Shakeel,CH Hayat,Niamat Ali, | Shahdara Flood Protection Bund RD.0-10000 | Illegal Construction/Occupation of Govt land |

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|-----|--|---|--|
| 61 | Mohammad Shoukat, Mohammad Ashraf,haji Munir,kala gujjar,patthan taal wala,Mughal Sb,Mohammad Siddque,Sher Khan,Bhatti,Sh.Ahmad Din,Malik Brothers,Nadeem,pehlwan hotel wala, jaffar Khan,Allah Tawakal Building store, Moulvi Sardar,Rana Mohammad Iqbal,Malik Khadam. | Lahore Flood Protection Bund Spur No.5 RD 0+000 to 4+000 | Illegal Construction/Occupation of Govt land |
| 62 | Malik Akhtar,Mehar Sadiq,Nadeem,Malik Aslam,Iftikahr,Jabbar,Haji Mill wala,Nazir,Riasat,Bao Gujjar,Bao tali,Ch Khadam,Bao Ghaman,Haji Arshad,Dilshad Ghaman,Munir Shopping Baig,Abdullah,Abdullah,Aslam,Umer Hayat,Siddique,Basheer,Haji Billa Gujjar,Amin,Ashraf,Maqsood,Ashraf Gujjar,Shafaq,Ilyas Gujjar,Abbas Gujjar,Adress,Ch labbaha Bajwa,Haji Acid Feactory. | Mehmood Booti Bund RD.0-29300 R.D 0+000 -1+000 &2+000- 2+800 | Illegal construction on slopes of spur |
| 63 | Baba Anyat Ali | Lahore Flood Protection Bund spur No.J-2 (Tie Bund) R.D 4+500 | Illegal occupation of Govt Quarter |
| 64 | Mohammad Sharif | Shahdara Flood Protection Bund RD.11000-11500 | Illegal construction of wall |
| 65 | Mohammad Sharif | Shahdara Flood Protection Bund RD.11000-11500 | Illegal construction of wall |
| 66 | Mohammad Sharif | Shahdara Flood Protection Bund RD.11000-11500 | Illegal construction of wall |
| 67 | Malik Shoukat Ali | Lahore Flood Protection Bund Spur No.5 R.D 2+500 R/S | Illegal occupation of Govt Land |
| 68 | Mohammad Sharif | Shahdara Flood Protection Bund RD.11000-11500 | Illegal construction of wall for feactory |
| 69 | Mohammad Nazir Mehar | Lahore Flood Protection Bund Spur No.5 R.D 1+600 | Illegal occupation of Govt Land |
| 70 | Mr Jaffar Khan | Lahore Flood Protection Bund Spur No.5 R.D 2+100 | Illegal occupation of Govt Land |
| 71 | Nazir Ahmad | Lahore Flood Protection Bund Spur No.5 R.D 4+000 | Illegal occupation of Govt Land |

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|-----|---|--|--|
| 72 | Asif Material store & Rana Mohammad Iqbal | Lahore Flood Protection Bund Spur No.5 R.D 3+000 | Illegal occupation of Govt Land |
| 73 | Abdul Aziz Khan | Lahore Flood Protection Bund Spur No.5 R.D 2+500 R/S | Illegal construction of wooden tall |
| 74 | Mohammad Ali Gujjar,Baba Munir Hussain,Haji Mohammad Anwar,Malik Mohanmmad Tufail,Sh Tariq,Mohammad Ashraf,Dr Zulfiqar,Wasa,Mohammad Farooq Gujjar,Mohammad Amin,Ch Khadam ali,Abdul khalid/Mohammad Arif,abbas Khan,Gujjar Khan,Nawaz Khan,Malik Waseem/Malik Sajjad,Malik Nawaz,Mohammad Aslam Sial,Tahira Firdous,Saeed Butt,Chacha Jawed,Mohammad Saeed Bhindhra,Mohammad Baseer,Mian Sajjad,Bao Saleem,Ruby Oil,Mian Raees,Munawar hasan,Meero Khan,Mohammd Nawaz,Haji Abdul Rauf,Malik Shezad,Haji Sher Afzal,Wasa,Malik Aman-ul-llah,Mehar Umer Saeed,Haji Ghulam Nabi,Mohammad Asghar Khan,Haji Ahmad Ali,Haji Mohammad Arshad,Khalid Mehmood,Mohammad Latif,Haji Mohammad Rafique,Mohammad Nawaz/Momin Khan,Malik Abbas,Bagha,Zafar Khan,Shamim Bashrat,Haji Mohammd Ayub,Zaheer Sb,Rana Basheer Ahmad,Grave Yard,Mehar Jagheer,Jammal,Mian Riaz/Abdul Rehman,Mian Tariq,Azam Gujjar,Masood Steel industry,Anyat Pipe industry,Mian Liaqat Pak Eastern Engineering,Ashfaq,Mumtaz Filling Station,Abdul Majeed,Mohammad Ghafoor/Mohammad Munzoor,Mohammad Shafique,Haji Mohammad Anees,Mohammad Ibrar,Mohammad Yousuf,Haji Habib,Mohammad Saleem,Fiaz Steel Factory,Haji Ayub Shah,Sh Irfan,Haji Umer,Mian Naveed,Haji Mohammad Latif,Mohammad Khalid/Mohammad Sajjad,Mian Shehbaz/Mian Arif,Haji Morad,Sewrage Station,Municipal Land,Inam Butt,Tubewell Wasa No 5,Mohammad Tufail,Muzafar Brothers,Waheed Bhatti,Tubewell wasa No 4,Mohammad Ayub,Tubewell wasa No 1,Iftikhar Ahmad,Mohammad Yaqoob,Mohammad Jahanghir,Mohammad Jamil,Mohammad Waheed,Mohammad Akram, | Mehmood Booti Bund RD.0-29+300 | Sr # 1-40 illegal Construction of house,dera,oil store,hotel,tubewell,shop,house,store pipe,godown factory,markets,oil store,press factory Sr # 14-74 Illegal construction of sewrege drain by wasa,house,oil store,brick depot,wooden store,pipe factory,machinry godwen,nurcery,hotel,workshop,grave yard,steel factory,plot foundation,Sr # 75-83 Illegal construction of factories,steel industries,petrol pump,markets,pipe ,residential house,girder factory,oil store,estate agency,Sr # 100-117 sewerage drain,umraha office,residential houses, |

| S.# | Name of Encroacher | Location Bund / Spur (Pushta) R.D | Nature Of Encroachment |
|-----|---|--|---|
| 75 | Mohammad Basheer | Lahore Flood Protection Bund Spur No.5 | Illegal occupation of Govt Land |
| 76 | Mohammad Shoukat, Mohammad Ashraf,haji Munir,kala gujjar,patthan taal wala,Mughal Sb,Mohammad Siddque,Sher Khan,Bhatti,Sh.Ahmad Din,Malik Brothers,Nadeem,pehlwan hotel wala, jaffar Khan,Allah Tawakal Building store, Moulvi Sardar,Rana Mohammad Iqbal,Malik Khadam. | Lahore Flood Protection Bund Spur No.5 | Sr # 1-3 Hotel,workshop,wooden tall,Sr # 5-9 Building material wooden tall grocery store Sr # 10-22 Building material,Boring house,paan shop,weight machine and cattle fooder,building store,hotel,Plastic shop,Sr # 23-25 estate agency,stock of stone |
| 77 | Mohammad safdar | Lahore Flood Protection Bund Spur No.5 | Illegal construction of road for tractor trollies |
| 78 | Mohammad Jamsheed | Lahore Flood Protection Bund Spur No.5 R.D 4+000 | Illegal occupation of Govt Land |
| 79 | Gamma Gujjar,Hanif Gujjar,Bodha Gujjar | Lahore Flood Protection Bund Spur No.4 | Cattle form |
| 80 | Mohammad Shiukat,Mohammad Ashraf,Haji Munir,Kala Gujjar,Pathan Taal Wala Mughal,Mohammad Siddique,Sher Khan,Bhatti,Sh:Ahmed Din,Malik Brothers,Nadeem Pehlawan Hotel Wala,Jaffer Khan Allah tawaakal Building store,Molvi Sardar,Rana Mohammad Iqbal,Malik Khadam. | Lahore Flood Protection Bund Spur No.5 | Sr # 1-3 Hotel,workshop,wooden tall,Sr # 5-9 Building material wooden tall grocery store Sr # 10-22 Building material,Boring house,paan shop,weight machine and cattle fooder,building store,hotel,Plastic shop,Sr # 23-25 estate agency,stock of stone |
| 81 | Mohammad Bashir | Lahore Flood Protection Bund Spur No.5 | Illegal occupation of Govt Land |
| 82 | Mohammad Jamshed | Lahore Flood Protection Bund Spur No.5 R.D 4+000 R/S | Illegal Construction of wall By cutting spur slope 5' |
| 83 | Muhammad Abass | Lahore Flood Protection Bund Spur No.5 | Illegal Construction of wall in spur lands about 15' wide. |

CHAPTER – 9
DUTY ROSTER BATTLE STATIONS OF KEY
PERSONNEL DURING HIGH FLOOD FLOW

| S.# | Designation | Camping Station | Duty |
|------------|--|---|--|
| 1. | Executive Engineer, Lahore Drainage Division, Lahore. | At XEN Office Lahore Mustafabad Lahore Ph: No.042-99250327 | He will be the overall in charge of Lahore Drainage Division and will keep close contact with his staff and District Administration. He will also act as per flood situation keeping liaison with all concerned Departments related with flood activities. |
| 2. | Sub Divisional Officer, Flood Bund Sub Division, Lahore. | At Shahdara Hut No.1 RD.2300, of Shahdara Flood Protection Bund. | To monitor flood situation in River Ravi and keep watch on flood protection / River Training works of Shahdara, Mahmood Booti, Qadirabad and Lahore Protection section |
| 3. | Sub Divisional Officer, Kasur Drainage Sub Division, Lahore. | Shahpur Kanjran spur. | To monitor flood situation in River Ravi and keep watch on flood protection / River Training works in Niaz Baig section. |

DUTY ROSTER / FLOOD FIGHTING PROGRAMME

The section wise breakup of the bunds / spurs is given below:-

| Sr. # | Sub Engineer Section | Reach | Sub Division | Head quarter of Sub Engineer and location of stacking site of material. |
|-------|--------------------------------|---|----------------------------------|---|
| 1. | Mahmood Booti Section | Mahmood Booti Bund RD.0-29000 with spurs. | Flood Bund Sub Division, Lahore. | Camp at RD.7000 Hockey Spur of Mahmood Booti Bund. |
| 2. | Lahore Protection Bund Section | Lahore Protection Bund RD.0-23000 and spurs. Tie bund R.D 0-20000 and spurs. | -do- | T-head spur No.5 RD.19900 of Lahore Protection Bund |
| 3. | Shahdara Section | Shahdara Flood Protection Bund and spurs. | -do- | Camp at Hut No.1 RD.2300 Shahdara F.P.Bund. |
| 4. | Qadirabad Section | J-spur Qadirabad. 3 No sloppy spurs of Farkhabad & Diversion Bund at Qadirabad. | -do- | Camp at Qadirabad spur. |
| 5. | Sharakpur Section | Sharakpur F.P. Bund and its spurs. | -do- | Sharakpur F.P.Bund RD.32060 |
| 6. | Niaz Baig Section | J-head spur at Shahpur Kanjran, Chung | Kasur Drainage Sub Division | Camp at J-head spur Shahpur Kanjran |

CHAPTER – 10

EMERGENCY TELEPHONE NUMBERS

| S.# | Description of Department | Office Tel. No | Residence / Mobile Tel No. |
|------------|--|-------------------------------|-----------------------------------|
| 1 | Flood Control Cell (Irrigation Department) | 99212134 | - |
| 2 | Secretary Irrigation Department | 99212117-18 Fax No.9212116 | 99212116 |
| 3 | Flood Emergency center (Lahore Drainage Division) | 99250326 99250327 | - |
| 4 | Chief Engineer, Irrigation Lahore Zone, Lahore | 99212085-86 | 0333-4222519 |
| 5 | Superintending Engineer, Lahore Drainage Circle, Lahore | 99250309 99250306 | 0302-8637583 |
| 6 | Chief Engineer Drainage & Flood | 99230602 | |
| 7 | Director Flood | 99231614 | |
| 8 | Flood Forecasting Center 99205367-8 , 99205369-70, 99205157-8 | 99205371-72 | - |
| 9 | Canal Telegraph office Mustafa Abad | 99250318 | - |
| 10 | Executive Engineer, Rachna Drainage Division, Sheikhpura | 056-9200250 | 0322-4486727 |
| 11 | District Coordinator Officer (DCO) Sheikhpura | 056-9200151 | 99200153 |
| 12 | Brig 4-Core Munir Road Lahore Cantt: | 6699-3817 | - |
| 13 | D.C.O Lahore | 99211003-4 | 99200232 |
| 14 | Assistant Commissioner City Lahore | 99210608 | 0331-4428504 |
| 15 | Executive Engineer, Lahore Drainage Division | 99250326-27 | 0331-7112756 |
| 16 | SDO/River Survey Drainage Sub Division, LHR | 99250326-27 | 0302-9618608 |
| 17 | SDO / Kasur Drainage Sub Division, Lahore | 99250326-27 | 0333-8206776 |
| 18 | SDO/Flood Bund Sub Division, Lahore | 99250326-27 | 0347-6104059 |
| 19 | SDO/Lahore Drainage Sub Division, Lahore | 99250326-27 | 0333-4214510 |
| 20 | Flood Cell committee room of I&P Secretariat, Lahore | 99212134 | - |
| 21 | Flood watching camp at Shahdara Flood Protection. | 042-36142233 | - |
| 22 | District Emergency Officer | 99231717, 1122 | - |
| 23 | Provincial Disaster Management Authority | 042-99203301 | - |
| 24 | Executive Engineer CBDC Division Lahore | 99250194 | 0300-4017310 |
| 25 | Executive Engineer Chakbandi Division Lahore | 99250312 | 0300-4882718 |

LIST OF OFFICERS / OFFICIALS OF LAHORE DRAINAGE DIVISION LAHORE

| S.# | Name of Officer / Official | Designation | Sub Division / Section | Mobile No. |
|------------|-----------------------------------|-------------------------------|--|---------------------|
| | Syed Ali Hasnain | Sub Divisional Officer | Flood Bund Sub Division Lahore | 0347-6104059 |
| 1 | Naveed Shehzad | Sub Engineer | Shahdara | 0307-4428758 |
| 2 | Amjad Qureshi | Sub Engineer | Sharkpur | 0334-4157474 |
| 3 | Ali Ejaz | Sub Engineer | Mehmood Booti Bund | 0324-4606826 |
| 4 | Abdul Ghaffar | Sub Engineer | Lahore Protection Bund | 0304-0596078 |
| 5 | Abdul Ghaffar | Sub Engineer | Qadirabad | 0304-0596078 |
| 6 | Muhammad Ramzan | SDC | Flood Bund | 0307-4783695 |
| | Muhammad Ramzan Bhutta | Sub Divisional Officer | River Survey Drainage Sub Division Lahore | 0302-9618608 |
| 1 | Vacant | Sub Engineer | Lilliani | |
| 2 | M. Bilal | Sub Engineer | Bhai Pheru | 0308-4822408 |
| 3 | Gullfam Akram | Sub Engineer | Mall | 0300-2223300 |
| 4 | Gullfam Akram | Sub Engineer | Ibrahimabad | 0300-2223300 |
| 5 | Vacant | Sub Engineer | Chathianwala | |
| 6 | Vacant | Sub Engineer | Rukhanwala | |
| 7 | Vacant | Sub Engineer | Jamman | |
| 8 | Muhammad Aslam | | Sub Divisional Clerk | 0348-4089635 |
| | Muhammad Sadiq Rana | Sub Divisional Officer | Lahore Drainage Sub Division Lahore | 0333-4214510 |
| 1 | Saleem Ashraf | Sub Engineer | Ali Raza Abad | 0333-4974372 |
| 2 | Hashim Raza | Sub Engineer | Charrar | 0302-3370824 |
| 3 | Malik Bilal | Sub Engineer | Khana | 0335-6634354 |
| 4 | Iftkhar saleem | Sub Engineer | Barki | |
| 5 | Muhammad Ijaz | Sub Engineer | Bhasin | 0332-8369506 |
| 6 | Sajjad Ahmed | | Sub Divisional Clerk | 0300-9648076 |

| | Junaid Butt | Sub Divisional Officer | Kasur Drainage Sub Division Lahore | 0333-8206776 |
|---|--------------------|-------------------------------|---|---------------------|
| 1 | Azam Ali | Sub Engineer | Niaz Baig | 0322-7218487 |
| 2 | Shahid Sultan | Sub Engineer | Manga | 0300-4429808 |
| 3 | Arshad Mehmood | Sub Engineer | Raiwind-II | 0332-4433418 |
| 4 | Syed Qasim Raza | Sub Engineer | Raiwind-I | 0313-3356484 |
| 5 | Ahsan Maqsood | Sub Engineer | Raiwind-III | 0307-8500254 |
| 6 | Tahir Mehmood | | Sub Divisional Clerk | 0333-4268805 |

CHAPTER – 11

STANDARD OPERATING PROCEDURE(SOP) FOR BREACHING SECTIONS

11.1 HISTORY OF THE BREACHING SECTION

There is an approved breaching section between RD.55+000 to 65+000 of Shahdara Distributory Flood Bund. The critical R.L. 698.00 for the operation of this breaching section will be monitored on the gauge fixed at RD.15+150 of Shahdara Flood Protection Bund. It is estimated that a discharge of about 1.0 Lac Cs. will pass through the breaching section, if operated. This breaching section was operated twice after 1947 i.e. during 1955 and 1988.

There is densely populated area just downstream side of the breaching section. The operation of breaching section has to be done very carefully with prior warning to the inhabitants of the area. Heavy building, infrastructure and life losses occurred when this breaching section was operated during 1988 flood as the area is thickly populated. The other option is to enhance the waterway under Shahdara Railway Bridge and Road Bridge (old) adjacent to the Railway Bridge, so that the situation for operation of the breaching section could be averted in future.

Location of breaching Section and strategy to activate Breaching Section.

- Location of approved breaching section RD.55+000 to 65+000 (Shahdara Distributry flood protection Bund)
- Location of critical gauge Critical gauge is fixed at RD.15150 of Shahdara Flood Bund.

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

Relates to Gujranwala Division, UCC as Breaching Section is under their control.

11.3 ARRANGEMENT OF EXPLOSIVES AND SECURITY OF EXPLOSIVE SORES

Relates to Gujranwala Division, UCC as Breaching Section is under their control.

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

Relates to Gujranwala Division, UCC as Breaching Section is under their control.

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

Relates to Gujranwala Division, UCC as Breaching Section is under their control.

11.6 DUTY ROSTER IN CASE OF CRITICAL SITUATION

Relates to Gujranwala Division, UCC as Breaching Section is under their control.

11.7 BREACHING COMMITTEE WITH THEIR ACTION PLAN

If the water level in the river attains the critical level at critical gauge fixed at RD.15150 of Shahdara Flood Protection Bund and is in rising position, then the breaching section will be operated after the decision of the breaching operation committee comprising the following as per notification No.SO(Floods)VI-33/97 dated.15-07-2015.

- i. District Coordination Officer of the district in which the breaching section is located, who shall also be the convener of the Committee.
- ii. District Coordination Officer of the District, likely to be effected by the operation of breaching section or his representative (in case the area affected falls outside the district in which the breaching section is located).
- iii. Representative of the department owning the structure at which the breaching section is located (not less than the rank of Executive Engineer or equivalent).
- iv. Representative from C&W Department not below the rank of an Executive Engineer,
- v. Executive Engineer concerned of the Irrigation Department.
- vi. Representative from Pakistan Army not below the rank of a Lt. Colonel.

11.8 LIST OF THE VILLAGES & ABADIES LIKELY TO BE INUNDATED DURING VARIOUS FLOOD LIMITS

i) Low Flood (40000 Cs – 65000 Cs) Almost no areas inundated.

ii) AREAS LIKELY TO BE AFFECTED DURING LOW / MEDIUM FLOOD (65000 Cs – 90000 Cs)

A) LAHORE PROTECTION BUND

1. BETWEEN NEW ROAD BRIDGE SHAHDARA AND J-SPUR NO.1

- i) Muhammadi Colony ii) Gow Shala

2. BETWEEN J-SPUR NO.1 & J-SPUR NO.2

- i) Chiragh Park

3. BETWEEN J-SPUR NO.2 & J-SPUR NO.3

- i) Ameen Park ii) Chaudhary Park iii) New Shafiqabad

4. BETWEEN SPUR NO.3 & SAGGIAN BRIDGE

- i) Ghulshan Riaz Colony ii) Mughal Park

5. BETWEEN SAGGIAN BRIDGE & J-SPUR NO.4

- i) Akram Park ii) Sandha

6. BETWEEN J-SPUR NO.4 & T-SPUR NO.5

- i) Tufail Colony

7. BETWEEN T-SPUR NO.5 & MOTORWAY BRIDGE

- i) Fazal Colony ii) Shiblee Town
iii) Ismail Colony iv) Yousuf Nagar
v) Abu Bakar Siddique Colony vi) Shaheenabad

B) TIE BUND

1. BETWEEN MOTORWAY BRIDGE AND J-SPUR NO.1

- i) Talat Park (ii) Bhadroo Pind (iii) Malik Park

2. BETWEEN L-BUND AND J-SPUR NO.2

- l) New Shadewal Village

C) MEHMOOD BOOTI BUND

- i) Karol (ii) Jabbo (iii) Bhama (iv) Khokhar Road (V) Jhuggian

D) SOME OF THE OTHER VILLAGES ARE AS UNDER:

- | | | |
|-------------------------|-----------------------|----------------------|
| i. Babakwal | ii) Old Akbarabad | iii) Saadpur Dossair |
| iv) Toria Chotta | v) Toria Bara | vi) Bhyghanpura |
| vii) Rajia Araian | viii) Rahijian Phogan | ix) Shahpur Kanjran |
| x) Naul | xi) Khanke Jhuggian | xii) Babu Sabu |
| xiii) Din Muhammad Farm | | xiv) Farid Colony |
| xv) Mehrpur | xvi) Rangilpur | xvii) Nanu Dogar etc |

II) HIGH FLOOD, VERY HIGH FLOOD AND EXCEPTIONALLY HIGH FLOOD

The limit of high flood to exceptionally high flood ranges from 90000 Cs to 180000 Cs. The flood water touches the flood protection bunds at these limits and all the villages and abadies within the flood protection bunds are inundated.

**LIST OF THE VILLAGES LIKELY TO BE INUNDATED IN
CASE OF SHAHDARA DISTY FLOOD BUND BREACH
(INCLUDING INFRASTRUCTURE)**

1. Shahdara – Narowal Railway Line in front of breaching section upto (4-K.M).
2. Shahdara – Gujranwala Railway Line upto Kala Shah Kaku (10.54 KM)
3. Shahdara – Gujranwala dual carriage way (G.T. Road) upto Kala Shah Kaku
4. Shahdara – Sheikhpura Railway Line upto Missan Kalar Railway Station (9.65 K.M)
5. Shahdara – Sheikhpura road upto over head bridge of Motorway (8 KM)
6. Shahdara Distributory RD.65+000 to 100+000 (Upto Motorway)
7. Shahdara – Sharakpur road upto Motorway
8. Motorway from River Ravi to Kala Shah Kaku inter change and Bypass from G.T.Road to Motorway
9. **SHAHDARA / KALA KHATAI ROAD (BOTH SIDES)**
 - i. Industrial area between Shahdara Distributory and Kala Khatai Road (Haji Kot) including Flour Mills, dying / casting factories and foundries etc.
 - ii. Javed Park
 - iii. Barkat Town
 - iv. Jameel Park
 - v. Garvi Mohallah
 - vi. Ali Park etc
10. **G.T.ROAD (SHAHDARA / GUJHRANWALA) BOTH SIDES**
 - i. Scattered industry on both sides.
 - ii. Imamia Colony
 - iii. Feroze Wala

- iv. Shah Khalid Town
- v. Shami Park
- vi. Bashir Town
- vii. Rana Town
- viii. Khadija Town
- ix. Ittehad Chemicals Colony Kala Shah Kaku etc

11. KALA SHAH KAKU / MOTORWAY (L/S FACING LAHORE)

- i. Kallar
- ii. Missin
- iii. Dera Moulvian
- iv. Green View Cooperative Housing Society
- v. Gulfishan Town
- vi. Rangian Changian
- vii. Kot Abdul Malik Villages and proposed toll plaza on Motorway etc

12. SOME OF THE OTHER INFRASTRUCTURE / ABADIES ARE LISTED BELOW

- i. Nala Bhed
- ii. Nala Lela
- iii. Draghai Minor
- iv. Taj Colony
- v. Vandala Deyai Shah
- vi. Faisal Town
- vii. Sharakpur Khurd
- viii. Abul Khair

- ix. Kot Abdul Malik
- x. Thatha Khuda yar
- xi. Badoo
- xii. Canal Rest House Shahdara
- xiii. Karol etc

11.9 ANNOUNCEMENT AND DETAIL OF EVACUATION ARRANGEMENT

All announcements regarding evacuation will be made through District Administration by electronic media, radio, local Mosque and Loud speaker etc.

11.10 DETAIL OF COORDINATION WITH CIVIL / ARMY AUTHORITIES

If the water level in the river attains critical level i.e. 698.00 at gauge fixed at RD.15150 of Shahdara Flood Protection Bund and is in rising position then decision for operating breaching section will be obtained / taken by the committee as mentioned in Part-A, Section 11.7 (Page – 37)

11.11 PARALLEL COMMUNICATION ARRANGEMENTS

All communication will be made on wireless, special messengers and telephones mobile phones etc.

11.12 INDEX PLAN

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CHAPTER – 12

VULNERABLE SITES ON FLOOD BUNDS / STRUCTURES

No bund except the mentioned herein can breach even in exceptionally high flood.

12.1 APPREHENDED BREACHES IN FLOOD BUNDS

1. Shahdara Flood Protection Bund R.D 9±000 to 15±000.
2. Sharkpur Flood Protection Bund R.D 16±000 to 32±000.

12.2 OPERATION OF BREACHING SECTION

There is no Breaching Section in Lahore Drainage Division Lahore

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

3. No high / exceptionally flood has been experienced after 1988 and the flood bunds of Lahore Drainage Division Lahore are safe and sound.

CHAPTER – 13

EMERGENCY CONTINGENCY PLAN FOR VULNERABLE SITE (SITES) LISTED ABOVE/ EMERGENCY CONTINGENCY PLAN

SITE NO.1 SHAHDARA FLOOD PROTECTION BUND R.D 9+000 to 15+000

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

Route of flood water is shown at page No.50-A. The flood water after breach between RD.9±000 to 15±000 will enter in Shahdara Town and after inundating the abadies of Shahdara Town including Jada, Power House, Jia Mousa, Begum Kot & Farkhabad etc will finally dispose back into River near Saggian Bridge.

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

| S.# | Shahdara Bund R.D 9±000 to 15±000 |
|--------------|--|
| H.F.L | 694.00 |
| 1 | Shahdrah Town |
| 2 | Jada |
| 3 | Their |
| 4 | Qazi Park |
| 5 | Power House |
| 6 | Paracha Colony |
| 7 | Juspat |
| 8 | Gulshanabad |
| 9 | Rasool Park |
| 10 | Jia Mousa |
| 11 | Begum Kot |

| | |
|----|-----------|
| 12 | Farkhabad |
|----|-----------|

13.3 STRATEGY AND ACTION TAKEN BE EXPLAINED IN DETAIL.

Sub Divisional Officers and their staff would remain present and vigilant in the area round the clock during flood period. The flood information would be communicated by wireless, mobile phone or sent through special messenger employed for this purpose. In case of any emergency, the Sub Divisional Officer concerned would report the matter to the Executive Engineer, Lahore Drainage Division, Superintending Engineer, Lahore Drainage Circle, Chief Engineer, Irrigation Lahore Zone, Director Regulation, Chief Engineer, Drainage & Flood and Secretary Irrigation and Power Department, Punjab Lahore.

On receipt of any flood warning, Sub Divisional Officer Flood Bund Sub Division will make necessary arrangements. Sub Divisional Officer, Flood Bund alongwith their field staff will camp at spur No.1 at RD.2300 of Shahdara Flood Protection Bund respectively.

In case of High Flood, necessary arrangements for evacuation of affected people will be carried out by the Civil and Military authorities, and the Engineering staff will remain busy in watching and protecting of the Flood Protection Works. The Lahore Division CBDC, Lahore will act as backup division once emergency is declared. All other Departments will have their own arrangements to provide help to the needy persons.

13.3.1 ARRANGEMENTS

As above 13.3

13.3.2 ESTABLISHMENT OF FLOOD FIGHTING CAMPS

| S.# | Camping Site | Sub Engineer | Detail of Field Establishment | | | |
|-----|--------------|--------------|-------------------------------|------|--------|-------|
| | | | Mistry | Mate | Beldar | Total |
| | | | | | | |

| | | | | | | |
|----------------|--------------------------------|---|---|---|----|---------------|
| 1 | Shahdara Flood Protection Bund | 1 | 1 | 1 | 18 | 20 |
| Total:- | | | | | | 20 Nos |

13.3.3 DUTIES OF OFFICERS / OFFICIALS AND THEIR CAMP SITES

| S.# | Officers | Officials | Camping Station | Duty |
|------------|--|-------------------------------|---|--|
| 1 | Executive Engineer, Lahore Drainage Division, Lahore. | | At XEN Office Mustafabad Lahore | He will be the overall in charge of Lahore Drainage Division and will keep close contact with his staff and District Administration. He will also act as per flood situation keeping liaison with all concerned Departments related with flood activities, |
| 2. | Sub Divisional Officer, Flood Bund Sub Division, Lahore. | | At Shahdara Hut, at RD.2300, of Shahdara Flood Protection Bund. | To monitor flood situation in River Ravi and keep watch on flood protection / River Training works of Shahdara, Mahmood Booti, Qadirabad and Lahore Protection section |
| 3. | | Sub Engineer Shahdara Section | Camp at Gauge hut at RD.2300 Shahdara F.P. Bund. | To monitor flood situation in River Ravi and keep watch on flood protection / River Training works in Shahdara Flood Protection Bund and its spurs. |

13.3.4 DEPARTMENTAL MACHINERY AVAILABLE

No machinery is available in this Division.

13.3.5 MACHINERY AVAILABLE FROM PRIVATE SOURCE

The private machinery including Tractor trollies and excavators is available nearby at bund road. It may be arranged in emergent situation.

13.3.6 FLOOD FIGHTING MATERIAL REQUIRED

| S.# | Name of Items | Unit | Shahdara Bund R.D 9+000 to 15+000 |
|-----|--------------------------------|-------|--------------------------------------|
| 1 | Kassies / Belchas | No | 30 |
| 2 | handle of Kassies | No | 20 |
| 3 | Toot Baskets | No | 100 |
| 4 | Torches (3- cell) | No | 15 |
| 5 | Dry Cell | Dozen | 4 |
| 6 | Bulb for Torches | No | 30 |
| 7 | Axes | No | 6 |
| 8 | Handle for axe | No | 6 |
| 9 | Generator | No | 1 |
| 10 | Electric wire 3/29 | Coil | 1 |
| 11 | Insulation tape | No | 8 |
| 12 | Electric bulb 100 (W) | No | 100 |
| 13 | Electric bulb 200 (W) | No | 50 |
| 14 | Bulb Holder | No | 85 |
| 15 | Electric Switch | No | 60 |
| 16 | Shouldaries | No | 1 |
| 17 | Swiss cottage tent | No | 1 |
| 18 | Darries | No | 5 |
| 19 | camp chair | No | 6 |
| 20 | camp Table | No | 1 |
| 21 | Buckets G.I | No | 45 |
| 23 | Life Jacket | No | 6 |
| 24 | Sounding Rod | No | 2 |
| 25 | Long rubber shoes | Pair | 10 |
| 26 | Emergency Lights | No | 3 |
| 27 | Gunny bags | No | 1000 |
| 28 | Nylon Bags | No | 1000 |
| 29 | U-clamp 5/8" dia | No | 100 |
| 30 | U-clamp 1/2" dia | No | 50 |
| 31 | Water cooler | No | 2 |
| 32 | Measuring tape 50' | No | 6 |
| 33 | Steel wire rope 1/2" dia | Rft | 200 |
| 34 | Khaji Mats | No | 20 |
| 35 | Fiber glass boat | No | 2 |
| 36 | Bamboo 2 1/2" dia 8-10 ft long | No | 20 |
| 37 | Energy Saver 45W | No | 12 |
| 38 | Digital Camera | No | 1 |

13.3.7 FLOOD FIGHTING MATERIAL AVAILABLE

| S.# | Name of Items | Unit | Shahdara Bund R.D 9+000 to 15+000 |
|-----|--------------------------------|-------|--------------------------------------|
| 1 | Kassies / Belchas | No | 30 |
| 2 | handle of Kassies | No | 20 |
| 3 | Toot Baskets | No | 100 |
| 4 | Torches (3- cell) | No | 15 |
| 5 | Dry Cell | Dozen | 4 |
| 6 | Bulb for Torches | No | 6 |
| 7 | Axes | No | 6 |
| 8 | Handle for axe | No | 6 |
| 9 | Generator | No | 1 |
| 10 | Electric wire 3/29 | Coil | 1 |
| 11 | Insulation tape | No | 0 |
| 12 | Electric bulb 100 (W) | No | 70 |
| 13 | Electric bulb 500 (W) | No | 40 |
| 14 | Bulb Holder | No | 85 |
| 15 | Electric Switch | No | 60 |
| 16 | Shouldaries | No | 1 |
| 17 | Swiss cottage tent | No | 1 |
| 18 | Darries | No | 5 |
| 19 | camp chair | No | 6 |
| 20 | camp Table | No | 1 |
| 21 | Buckets G.I | No | 45 |
| 23 | Life Jacket | No | 6 |
| 24 | Sounding Rod | No | 2 |
| 25 | Long rubber shoes | Pair | 10 |
| 26 | Emergency Lights | No | 3 |
| 27 | Gunny bags | No | 1000 |
| 28 | Nylon Bags | No | 1000 |
| 29 | U-clamp 5/8" dia | No | 100 |
| 30 | U-clamp 1/2" dia | No | 50 |
| 31 | Water cooler | No | 0 |
| 32 | Measuring tape 50' | No | 3 |
| 33 | Steel wire rope 1/2" dia | Rft | 200 |
| 34 | Khaji Mats | No | 20 |
| 35 | Fiber glass boat | No | 0 |
| 36 | Bamboo 2 1/2" dia 8-10 ft long | No | 10 |
| 37 | Energy Saver 45W | No | 0 |
| 38 | Digital Camera | No | 0 |

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

More or less all the infrastructure lies in the areas already identified to be inundated. Installations like WAPDA poles / cables, Sui Gas pipe lines, Railway Lines, Town roads and residential / commercial / Industrial buildings etc exist in the area.

SITE NO.2 SHARKPUR FLOOD PROTECTION BUND R.D 16+000 to 32+000

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

Route of flood water is shown at page No.61 The flood water after breach will enter in Sharkpur Town and allied abadies including Sahajowal and Naul etc and finally dispose back into River beyond Deg Diversion Channel.

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

| S.# | Sharkpur Bund |
|--------------|----------------------|
| H.F.L | 675.70 |
| 1 | Sharakpur Town |
| 2 | Sahajowal |
| 3 | Bhoe Wal |
| 4 | Bheni |
| 5 | Ghazi pur |
| 6 | Naul |
| 7 | Dhana |

13.3 STRATEGY AND ACTION TAKEN BE EXPLAINED IN DETAIL.

Sub Divisional Officers and their staff would remain present and vigilant in the area round the clock during flood period. The flood information would be communicated by wireless, mobile phone or sent through special messenger

employed for this purpose. In case of any emergency, the Sub Divisional Officer concerned would report the matter to the Executive Engineer, Lahore Drainage Division, Superintending Engineer, Lahore Drainage Circle, Chief Engineer, Irrigation Lahore Zone, Director Regulation, Chief Engineer, Drainage & Flood and Secretary Irrigation and Power Department, Punjab Lahore.

On receipt of any flood warning, Sub Divisional Officer Flood Bund Sub Division will make necessary arrangements. Sub Divisional Officer, Flood Bund alongwith their field staff will camp at gauge reader hut at RD.32+060 of Sharkpur Flood Protection Bund.

In case of High Flood, necessary arrangements for evacuation of affected people will be carried out by the Civil and Military authorities, and the Engineering staff will remain busy in watching and protecting of the Flood Protection Works. The Lahore Division CBDC, Lahore will act as backup division once emergency is declared. All other Departments will have their own arrangements to provide help to the needy persons.

13.3.1 ARRANGEMENTS

As above 13.3

13.3.2 ESTABLISHMENT OF FLOOD FIGHTING CAMPS

| S. # | Camping Site | Sub Engineer | Detail of Field Establishment | | | |
|------|--------------------------------|--------------|-------------------------------|------|--------|---------------|
| | | | Mistry | Mate | Beldar | Total |
| 1 | Sharkpur Flood Protection Bund | 1 | 1 | 1 | 18 | 20 |
| | Total:- | | | | | 20 Nos |

13.3.3 DUTIES OF OFFICERS / OFFICIALS AND THEIR CAMP SITES

| S.# | Officers | Officials | Camping Station | Duty |
|-----|---|-----------|---------------------------------|--|
| 1 | Executive Engineer, Lahore Drainage Division, Lahore. | | At XEN Office Mustafabad Lahore | He will be the overall in charge of Lahore Drainage Division and will keep close contact with his staff and District Administration. He will also act as per flood situation keeping liaison with all concerned Departments related with flood activities, |

| | | | | |
|----|--|-------------------------------|---|--|
| 2. | Sub Divisional Officer, Flood Bund Sub Division, Lahore. | | At Shahdara Hut, at RD.2300, of Shahdara Flood Protection Bund. | To monitor flood situation in River Ravi and keep watch on flood protection / River Training works of Shahdara, Mahmood Booti, Qadirabad and Lahore Protection section |
| 3. | | Sub-Engineer Sharkpur Section | Camp at Gauge hut at RD.32+060 Sharkpur F.P. Bund. | To monitor flood situation in River Ravi and keep watch on flood protection / River Training works in Sharkpur Flood Protection Bund and its spurs. |

13.3.4 DEPARTMENTAL MACHINERY AVAILABLE

No machinery is available in this Division.

13.3.5 MACHINERY AVAILABLE FROM PRIVATE SOURCE

The private machinery including Tractor trollies and excavators is available at bund road Lahore. It may be arranged in emergent situation.

13.3.6 FLOOD FIGHTING MATERIAL REQUIRED

| S.# | Name of Items | Unit | SHARKPUR BUND R.D 16±000 to 32±000 |
|------------|----------------------|-------------|---|
| 1 | Kassies | No | 30 |
| 2 | Toot Baskets | No | 35 |
| 3 | Torches (3- cell) | No | 10 |
| 4 | Dry Cell | Dozen | 4 |
| 5 | Axe | No | 10 |
| 6 | Generator | No | 1 |
| 7 | Electric wire 3/29 | Coil | 1 |
| 8 | Insulation tape | No | 4 |
| 9 | Bulb Holder | No | 5 |
| 10 | Shouldaries | No | 1 |
| 11 | Darries | No | 2 |
| 12 | Office chair | No | 6 |
| 13 | Office Table | No | 1 |
| 14 | Life Jacket | No | 6 |
| 15 | Long rubber shoes | Pair | 6 |
| 16 | Emergency Lights | No | 2 |
| 17 | Nylon Bags | No | 1000 |
| 18 | Water cooler | No | 2 |
| 19 | Handle Umbrella | No | 1 |
| 20 | Measuring tape 100' | No | 2 |
| 21 | Energy Saver 18 w | No | 10 |
| 22 | Wrench | No | 2 |
| 23 | Pliers | No | 2 |
| 24 | Gas Lamp | No | 6 |
| 25 | Lantern | No | 5 |

13.3.7 FLOOD FIGHTING MATERIAL AVAILABLE

| S.# | Name of Items | Unit | Material Available at Sharkpur Bund R.D 16+000 to 32+000 |
|------------|----------------------|-------------|---|
| 1 | Kassies | No | 30 |
| 2 | Toot Baskets | No | 35 |
| 3 | Torches (3- cell) | No | 10 |
| 4 | Dry Cell | Dozen | 4 |
| 5 | Axe | No | 10 |
| 6 | Generator | No | 1 |
| 7 | Electric wire 3/29 | Coil | 1 |
| 8 | Insulation tape | No | 4 |
| 9 | Bulb Holder | No | 5 |
| 10 | Shouldaries | No | 1 |
| 11 | Darries | No | 2 |
| 12 | Office chair | No | 6 |
| 13 | Office Table | No | 1 |
| 14 | Life Jacket | No | 6 |
| 15 | Long rubber shoes | Pair | 6 |
| 16 | Emergency Lights | No | 2 |
| 17 | Nylon Bags | No | 1000 |
| 18 | Water cooler | No | 2 |
| 19 | Handle Umbrella | No | 1 |
| 20 | Measuring tape 100' | No | 2 |
| 21 | Energy Saver 18 w | No | 10 |
| 22 | Wrench | No | 2 |
| 23 | Pliers | No | 2 |
| 24 | Gas Lamp | No | 6 |
| 25 | Lantern | No | 5 |

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

More or less all the infrastructure lies in the areas already identified to be inundated.

CHAPTER – 14

ACTION PLAN

14.1 RE-SHUFFLING / RECOUPING PLAN OF RESERVE STONE DEPARTMENTALLY

Detail of Reserve Stone has been discussed in detail in Page No.16

14.2 DETAIL OF INLET / OUTLET CROSSING ALONG WITH CLOSING METHODOLOGY

There is no Inlet / Outlet crossing along with Flood Protection Bund.

14.3 DEPLOYMENT MACHINERY (MEDIUM TO HIGH FLOOD)

| Name of Structure | Length in Mile | Vulnerable Reach | Camp Location | Site In-charge by name & Cell No. | Machinery Deployed | | | | | Availability of Stone Cft |
|---------------------------------|----------------|------------------|---------------------------------|-----------------------------------|--------------------|-------|--------|------------|------------------------|---------------------------|
| | | | | | Excavator | Dozer | Dumper | with front | Labour (Beldar + Mate) | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Shahdara Flood Protection Bund | 3.15 | 9+000 to 15+000 | Hut at RD.2300 Shahdara F.P.B | Sub Engineer Shahdara Section | 1 | -- | 2 | | 20+2 | 1.664 |
| Sharkpur Flood Protection Bund | 6.41 | 16+000 to 32+000 | Hut at RD.32+060 Sharkpur F.P.B | Sub Engineer Sharkpur Section | 1 | - | 2 | | 20+2 | 1.967 |
| Mehmood Booti Bund | 5.80 | - | RD.7000 Hockey Spur of | Sub Engineer M.B.B Section | | | | | 20+2 | 0.235 |
| Lahore Protection Bund | 4.60 | - | T-head spur No.5 RD.19900 | Sub Engineer L.P.B Section | | | | | 20+2 | 0.661 |
| Qadirabad Flood Protection Bund | 2.05 | - | Qadirabad spur | Sub Engineer Qadirabad Section | | | | | 20+1 | 0.436 |
| J-Spur Shahpur | 3.03 | - | J-head spur | Sub Engineer | | | | | 20+1 | 0.864 |

| | | | | | | | | | | |
|-------------------------------|--|--|--------------------|----------------------|----------|----------|----------|--|---------------|--------------|
| Kanjran J-spur at Chung | | | Shahpur Kanjran | Niaz Baig Section | | | | | | |
| Total | | | | | 2 | - | 4 | | 120+10 | 5.827 |

14.4 DEPLOYMENT OF MACHINERY (HIGH TO VERY HIGH FLOOD)

| Name of Structure | Length in Mile | Vulnerable Reach | Camp Location | Site In-charge by name & Cell No. | Machinery Deployed | | | | | Availability of Stone Cft |
|--|----------------|------------------|---------------------------------|-----------------------------------|--------------------|----------|----------|------------|------------------------|---------------------------|
| | | | | | Excavator | Dozer | Dumper | with front | Labour (Beldar + Mate) | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Shahdara Flood Protection Bund | 3.15 | 9+000 to 15+000 | Hut at RD.2300 Shahdara F.P.B | Sub Engineer Shahdara Section | 1 | - | 2 | | 30+3 | 1.664 |
| Sharkpur Flood Protection Bund | 6.41 | 16+000 to 32+000 | Hut at RD.32+060 Sharkpur F.P.B | Sub Engineer Sharkpur Section | 1 | - | 2 | | 30+3 | 1.967 |
| Mehmood Booti Bund | 5.80 | - | RD.7000 Hockey Spur of | Sub Engineer M.B.B Section | | | | | 30+3 | 0.235 |
| Lahore Protection Bund | 4.60 | - | T-head spur No.5 RD.19900 | Sub Engineer L.P.B Section | | | | | 20+3 | 0.661 |
| Qadirabad Flood Protection Bund | 2.05 | - | Qadirabad spur | Sub Engineer Qadirabad Section | | | | | 20+2 | 0.436 |
| J-Spur Shahpur Kanjran J-spur at Chung | 3.03 | - | J-head spur Shahpur Kanjran | Sub Engineer Niaz Baig Section | | | | | 20+1 | 0.864 |
| Total | | | | | 2 | - | 4 | | 150+15 | 5.827 |

14.5 DEPLOYMENT OF MACHINERY (HIGH TO EXCEPTIONALLY HIGH FLOOD)

| Name of Structure | Length in Mile | Vulnerable Reach | Camp Location | Site In-charge by name & Cell No. | Machinery Deployed | | | | | Availability of Stone Cft |
|--|----------------|------------------|---------------------------------|-----------------------------------|--------------------|----------|----------|------------|------------------------|---------------------------|
| | | | | | Excavator | Dozer | Dumper | with front | Labour (Beldar + Mate) | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Shahdara Flood Protection Bund | 3.15 | 9+000 to 15+000 | Hut at RD.2300 Shahdara F.P.B | Sub Engineer Shahdara Section | 2 | - | 4 | | 50+5 | 1.664 |
| Sharkpur Flood Protection Bund | 6.41 | 16+000 to 32+000 | Hut at RD.32+060 Sharkpur F.P.B | Sub Engineer Sharkpur Section | 2 | - | 4 | | 50+5 | 1.967 |
| Mehmood Booti Bund | 5.80 | - | RD.7000 Hockey Spur of | Sub Engineer M.B.B Section | | | | | 50+5 | 0.235 |
| Lahore Protection Bund | 4.60 | - | T-head spur No.5 RD.19900 | Sub Engineer L.P.B Section | | | | | 50+5 | 0.661 |
| Qadirabad Flood Protection Bund | 2.05 | - | Qadirabad spur | Sub Engineer Qadirabad Section | | | | | 50+5 | 0.436 |
| J-Spur Shahpur Kanjran J-spur at Chung | 3.03 | - | J-head spur Shahpur Kanjran | Sub Engineer Niaz Baig Section | | | | | 50+5 | 0.864 |
| Total | | | | | 4 | - | 8 | | 150+15 | 5.827 |

LIST OF LOCAL CONTRACTORS

| Name of Govt. Contractor | Contact Number | Remarks |
|------------------------------|----------------|---|
| M/S Naseer Ahmed & Co | 0320-9469959 | Excavators and other machinery may be made available through these contractors. |
| M/S Malik Ashfaq & Co | 0300-8449133 | |
| M/S Bashir Ahmed Enterprises | 0300-4651754 | |

14.6 POLICE DEPLOYMENT PLAN

Proforma – 1

| Sr. | Site of Breaching Section | Concerned Canal Division | Concerned Police Station and District | Police Persons Deployed | | Remarks (if any) |
|-----|---------------------------|--------------------------|---------------------------------------|-----------------------------------|-----------|------------------|
| | | | | Inspector / Sub Inspector / A.S.I | Constable | |
| 1 | - | - | - | - | - | - |

Proforma – 2

| Sr. | Vulnerable sites used for illegal cuts during floods | Concerned Canal Division | Concerned Police Station and District | Police Persons Deployed | | Remarks (if any) |
|-----|--|--------------------------|---|-----------------------------------|-----------|------------------|
| | | | | Inspector / Sub Inspector / A.S.I | Constable | |
| 1 | Shahdara Flood Protection Bund 9+000 to 15+000 | Lahore Drainage Division | Shadara Police Station District Lahore | ASI=1 | 2 | - |
| 2 | Sharkpur Flood Protection Bund 16+000 to 32+000 | Lahore Drainage Division | Sharkpur Police Station District Sheikhpura | ASI=1 | 2 | -- |

| Sr. | Name of Barrage | Concerned Canal Division | Concerned Police Station and District | Police Persons Deployed | | Remarks (if any) |
|-----|-----------------|--------------------------|---------------------------------------|-----------------------------------|-----------|------------------|
| | | | | Inspector / Sub Inspector / A.S.I | Constable | |
| - | - | - | - | - | - | - |

14.7. DETAIL OF SYNTHETIC BAGS WITH CAPACITY OF 500 KG AND 1000 KG.

1. Synthetic Bags with capacity 500 KG = 0 No
2. Synthetic Bags with capacity 1000 KG = 0 No.

14.8 DETAIL OF POLYTHENE SHEETS OF BLACK COLOUR TO PROTECT UPSTREAM SLOPE AGAINST WAVE ACTION AND TO CONTROL SEEPAGE THROUGH EMBANKMENT.

Polythene sheets of black colour for protecting upstream slopes waves and control to seepage (Average 20 FT Width) 0 Rft

CHAPTER – 15

BACKUP DIVISION (IN CASE OF BREACH)

In case of Emergency/Breach Lahore Division CBDC will act as sister Division of Lahore Drainage Division Lahore.

LIVESTOCK DEPARTMENT, LAHORE



Email: adllahore.dist@gmail.com

LIVESTOCK EMERGENCY PREPAREDNESS PLAN, 2018

Livestock sector occupies a pivotal position both as a source of providing animal protein and earning foreign exchange by exporting Livestock products. It inevitably plays an important role in the socio economic life of the rural groups. This sector not only provides animal proteins and fat for human consumption but also provides bulk of motive power for agriculture operations. As a subsector, it comprises around 54.5% of the GDP contributed by the Agriculture sector, where-as its contribution to the total GDP is about 11.9% percent.

A mass vaccination campaign will be undertaken in Lahore District during flood season, to prevent and control the spread of various contagious and infectious diseases of animals and poultry.

OBJECTIVES:-

1. To provide vaccination and treatment coverage before, during and after the onset of 'Monsoon season'.
2. To protect and safeguard the livestock wealth of district Lahore from infectious and contagious diseases of epidemic in nature.
3. To curtail economic losses due to diseases.
4. To disseminate advisory services to the livestock farmers.

LIVESTOCK DISEASES HAVING ECONOMICAL CONCERN:-

1. Haemorrhagic Septacemia.
2. Foot and mouth Disease.
3. Enterotoxaemia in sheep and goat.

POULTRY DISEASES:-

1. New Castle Disease.
2. Fowl Pox.

MEASURES TO BE UNDERTAKEN:-

Animal health care and treatment facilities will be provided in the flood prone areas/ veterinary institutions during flood season.

This task will be accomplished through Veterinary Officers and Veterinary Assistants, working in Lahore District. While immune prophylaxis/vaccination as well as First Aid Veterinary cover will be carried out in the flood affected areas in a campaign form, in the vicinity of the established flood centers.

1. PROPHYLACTIC VACCINATION CAMPAIGN:-

Pre-flood vaccination campaign will be launched/commenced w.e.f.as per direction of the Admin Department by the field staff, under the supervision of Additional Director Livestock, Lahore. However, a campaign has already been completed against HSV Vaccine in the month of January & February in the District having the immunity for one year. During last year 312704 animals were vaccinated and was increased as 76218 than the previous year.

Necessary instructions will be circulated among the in-charge of veterinary institutions of the District Lahore, regarding the provision of first aid treatment cover to the sick, wounded animals and control of parasitic diseases.

2. FLOOD PRONE AREAS :-

The following are the flood prone areas in District Lahore:-

1. Shahdara
2. Thokar Niaz Baig
3. Chung
4. Raiwind
5. Bhaseen,
6. Manga-Mandi
7. Lakhodair.

3. CONSTITUTION OF TEAMS

Seven teams of Veterinary Assistants, supervised by veterinary officers of the respective areas will be constituted. These teams will provide maximum veterinary coverage to the Livestock population of the district Lahore, against the contagious as well as infectious diseases, particularly in flood prone areas. These teams will also render the advisory services to the Livestock owners/ breeders for the safety of their Livestock wealth, against any outbreak, or any sequel to heavy rains/ flood, under their jurisdiction.

4. FLOOD CENTERS/ SECTORS

Flood sectors will be established in five town's under Punjab Government, Lahore. The technical staff of Livestock Department, Govt of the Punjab, Lahore will be deputed in the flood centers in the rural areas of Lahore.

1. Ravi Zone
2. Allama Iqbal Zone
3. Aziz Bhatti Zone
4. Shalimar Zone
5. Wahga Zone

5. ESTABLISHMENT OF MOBILE LIVESTOCK RESCUE SERVICES.

Mobile teams headed by Veterinary Officers along with Veterinary Assistants shall be operational, as per demand of situation as rapid respond team for effective service delivery during Pre/Post flood activities by the Mobile Veterinary Dispensaries of the concerned area.

6. FOCAL PERSON

Dr. Sana Riaz, (VO), Lakhoki Lahore will be act as "Focal Person" for streamlining the work of flood arrangement and to coordinate among various department /stake holders to facilitate public /flood affectless.

6. RESERVES OF DRY FODDER AND STOCK OF ANIMAL FEED.

With a view to ensure the availability of the reserves of dry fodder and stock of animal feed, to combat any undue situation arising out of the anticipated flood/ rainfall during the current year, will be maintained at District level.

7. PROVISION OF ADDITIONAL FUNDS:-

- (a) Additional funds will be needed in the head of Repair & maintenance of vehicles and POL for the smooth running of District flood cell.
- (b) The Director Livestock, Lahore Division Lahore, will help to manage to earmark/ allocate the special grant/ funds amounting to Rs. 01 Million in the Head of “unforeseen” which will be made available to the Additional Director Livestock, Lahore for procurement of fodder and stock of animals feed, for the livestock wealth of the flood affected areas of the District, to envisage situation arising at the event any calamity.
- (c) Additional funds will also be required under the head of advertisement to create awareness among the Livestock farmers regarding adaptation of precautionary measures during the rainy/ flood season.

The Director Livestock, Lahore Division, Lahore will manage to earmark/ reserve the sufficient number of boats, in good working conditions which may be operational well in time, for the safety of flood affected farmers and their Livestock.

d. Sign Boards and Banners.

Sign Boards and banners will be displayed at main roads and at the site of Livestock flood relief centers.

e. Availability of Anti -Snake Venom.

The authorities will be requested to ensure the availability of Anti Snake Venom at flood centers. Supervisory Committee.

f. Availability of Tent age.

Constitution of Supervisory committee.

A supervisory committee comprising of Deputy Director (Tehsil Raiwind), Deputy Director (Tehsil City /Shalimar) and Veterinary Officer, In-charge (Flood Cell) will be constituted, to ensure smooth implementation, transparency and physical checking of flood activities and other allied matter.

| DETAIL OF FLOOD RELATED DATA | | |
|-------------------------------------|--|---------------------|
| 1. | Map of Lahore District Showing Veterinary Hospitals / Dispensaries / Centers and Flood Prone Areas | Annexure - A |
| 2. | Livestock Population data of District Lahore | Annexure –B |
| 3. | Detail of staff deputed at Flood Centers / Sectors | Annexure-C |

LIVESTOCK POPULATION.

| | |
|----------|--------|
| Cattle | 210592 |
| Buffalos | 394313 |
| Sheep | 50641 |
| Goat | 91038 |
| Camels | 2,272 |
| Horses | 8,196 |
| Mules | 875 |
| Asses | 41,746 |
| Poultry | 356800 |

ANNEXURE – C

DETAIL OF STAFF DEPUTED AT FLOOD CENTERS

| Sector No. | Name of Zone | Name of Flood Centre/Teams | I/C, Flood Centre | Name of V.A / A.I.T |
|---------------------------------|--|---|---|--|
| 1 | Ravi Zone | 1 CVH Shahdara | Dr. Fauzia Kokab AVO, I/C CVH Shadara 0337-9686494 | Mr. Asif Ghafor V.A. C.V.D. Shahddra 0337-9680047 |
| | | | | - |
| 2 | Samanabad / Allama Iqbal Zone | 2 CVH Niaz Baig | Dr. Alia Bano, S.V.O (H), I/C CVH Niaz Baig 0337-9680012 | Naseem Qasier V.A. C.V.H. Niaz Baig 0337-9680071 |
| | | | | Mr. Hanif AIT Thokar Niaz Baig 0337-9680085 |
| | | 3 CVH, Chung | Dr. Tooba Zaman SV.O(H), I/C CVH Chung 0337-9683653 | Mr. Muhammad Yamin, V.A. C.V.H Chung.0333-4226861 |
| | | | | Mr. Ali Sher V.A Maraka 0300- 4676440 |
| | | | | Mr. Waqar Ali V.AC.V.H, Shamkey Bhattian. 0345-4458603 |
| 4 CVH Shamkey Bhattian | Dr. Imran Qamar, VO ,Shamkey Bhattian | Mr. Zahoor Ahmad, V.A. Rangeel Pur, C.V.H, Shamkey Bhattian .0333-4282801 | | |
| | | Mr. Muhammad Yousaf V.A. C.V.H, Manga Mandi 0337- 9680070 | | |
| 5 | CVH Manga Mandi | Dr. Imran Qamar, VO, Shamkey Bhattian 0337-9680025 | Mr. Shabbir Ahmad, V.A. Manga Mandi, | |
| | | | | |
| 3 | AzizBhatti Zone | 6 CVH Lakhodair | Dr. Muhammad Iqbal, VO (H), I/C CVH Handu 0321-8414941 | Mr. William Jan, VA Manawan, CVH Hurbanspura 0337-9680079 |
| | | | | - |
| 4 | Shalimar Zone | 7CVH Handu Gujran | Dr. Muhammad Iqbal, VO (H), I/C CVH Handu 0321-8414941 | Mr. Maqsood Ahmed VA Handu Gurjan0300-4234644 |
| | | | | - |
| 5 | Wahga Zone | 8 CVH Jallo | Dr. Azhar Nazir, APV.OI/c CVH Jallo. 033379680080 | Mr. Asghar Kanju, V.A, A.I.T C.V.H. Jallo. 0337-9680080 |
| | | | | Saqib Shahzad, VA CVH Harbanspura 0321-7214020 |

| | | |
|---|-------------------------|-----------------------|
| 6 | Nishter Zone | No Flood Prone areas. |
| 7 | Gulberg Zone | No Flood Prone areas |
| 8 | Data Gunj Buksh Zone | No Flood Prone areas |

Dr. Abdul Qayum Naveed APVO I/C A.I. Section Lahore 0300-4349362 will work as focal person. Mr. Shaafi Nadeem, Junior clerk 0333-4292543 will work as operator for data compilation.

**AVAILABILITY OF VACCINE FOR FLOOD 2018, IN THE OFFICE OF
ADDITIONAL DIRECTOR LIVESTOCK LAHORE**

| Name of Vaccine | No. of Bottles | Doses |
|------------------------|-----------------------|--------------|
| H.S.V | 925 | 23125 |
| E.T.V | 40 | 1000 |
| N.D.V | 1000 | 200000 |
| P.P.R | 145 | 145000 |

**MONSOON
CONTINGENCY PLAN 2018
HEALTH DEPARTMENT**

DISTRICT PROFILE :

| Sr. # | Item Description | Number |
|--------------|------------------------------------|----------------------|
| 1. | Total Population | More than 10 Million |
| 2. | Geographical Area | 2014 Km ² |
| 3. | Number of Tehsils | 9 Towns + 1 Cantt |
| 4. | Number of Union Councils | 274 U.C + 20 wards |
| 5. | Number of Health Facilities | |
| 5.1 | BHUs | 37 |
| 5.2 | RHCs | 6 |
| 5.3 | THQs | 4 |
| 5.4 | DHQs/Tertiary Care Hospitals | 1 DHQ / 11Tertiary |
| 5.5 | MCH Centers | 66 |

RISK ANALYSIS :

| Sr. No. | Description | Number |
|----------------|--|---------------|
| 1 | Number of UCs affected in 2017 | Nil |
| 2 | Population affected in 2017 | Nil |
| 3 | Expected number of UCs at Risk in 2018 | 35 |
| 4 | Expected population at Risk in 2018 | 250000 |

PREPAREDNESS :

| Sr. No. | Description | Response |
|----------------|--|-------------------------------------|
| 1. | District Control Room established | To be established w.e.f. 01.06.2018 |
| 2. | Epidemic Response Teams notified and will be functional w.e.f 01.06.2018 | Yes |
| 3. | ERTs to be trained | Yes |
| 4. | Number of sub-warehouses established in the district | 10 |
| 5. | Essential Logistic supplies secured | Yes |
| 6. | Weekly DEWS reporting established | Yes |

EXPECTED BURDEN OF DISEASE :

| Sr. No. | Disease/ Problem |
|----------------|--------------------------------------|
| 1. | Acute Diarrhea |
| 2. | ARI |
| 3. | Malaria |
| 4. | PUO |
| 5. | Skin Infections |
| 6. | Injuries |
| 7. | Snake Bite |
| 8. | Dog Bite |
| 9. | Expected Malnourished Children |
| 10. | Expected Malnourished Pregnant Women |
| 11. | Eye infections |
| 12. | Others |

FIXED CENTERS & MOBILE TEAMS PLANNED :

| A | <u>FIXED CENTRES</u> | | B | NUMBER OF PLANNED MOBILE TEAMS | 20 |
|----------|--|----|----------|---------------------------------------|-----------|
| | <u>One for each Zone under DDOH</u> | | | Two for each Zone under DDOH | |
| 1 | MOs designated | 10 | 1 | MOs designated | 20 |
| 2 | WMOs designated | 10 | 2 | Entomologist / Technologist | 20 |
| 3 | LHVs designated | 10 | 3 | LHVs designated | 20 |
| 4 | Dispensers designated | 10 | 4 | Dispensers | 20 |
| 5 | V vaccinators designated | 10 | 5 | Vaccinators | 20 |
| 6 | CDC Supervisor | 10 | 6 | CDC Supervisor | 20 |
| 7 | Support Staff | 40 | 7 | Drivers | 20 |
| 8 | Sanitary Inspector | 10 | | | |
| 9 | Sanitary Patrol | 40 | | | |

DISEASE SURVEILLANCE & EPIDEMIC RESPONSE :

Initiation of DEWS reporting on daily basis after the declaration of emergency for timely detection and response to any epidemic.

MANAGEMENT & COORDINATION :

- The overall responsibility of management and coordination under overall supervision of CEO- DHA, Lahore.
- The Coordination Committee will comprise of District Health Officer PS, Deputy District Officers Health, DCNP, Entomologist, CDCO, DSV, DSI. District Health Department will keep close liaison with DDMA for overall guidance and mobilization of additional resources.
- The District Control Room (DCR) will start functioning w.e.f 1.06.2018 under the supervision of District Officer Health / District Entomologist contact No. 042-99200988, which will function round the clock till directions from the DGHS office. At least one official will be available in this cell with telephone facility 24/7. The duty roster of the DCR is given below:

| Sr. No. | Name of officials | Contact numbers |
|----------------|--|------------------------|
| 1. | Mr. Khalid Latif, Senior Technician | 0322-4660915 |
| 2. | Mr. Saeed Shah, Senior Clerk | 0334-9754238 |
| 3. | Mr. Sh. Ahsan Ahmed, Technician | 0321-7762082 |
| 4. | Mr. Imran Mehmood, Technician | 0323-4790196 |
| 5. | Mr. Maqsood Ahmed, DEO | 0344-8762236 |
| 6. | Mr. Muhammad Afzal, Junior Technician | 0322-4812289 |
| 7. | Mr. Muhammad Afzaal, Lab Attendant | 0307-5321146 |

TENTATIVE WORK PLAN :

| Sr. No | Activity | Time line | Responsibility |
|---------------|--|------------------|----------------------------------|
| 1. | Notification of Deputy Commissioner Team | Notified | CEO DHA Lahore |
| 2. | Arrangement of Deficient Stocks of logistics/Supplies | 15.06.2018 | -do- |
| 3. | Pre-positioning of Reserve Stocks at Designated Points/Health Facilities | 20.06.2018 | DDOH |
| 4. | Activation of District Control Room | 01.06.2018 | AE |
| 5. | Initiation of regular meetings of District Coordination Teams | 15.06.2018 | CEO DHA Lahore |
| 6. | Activation of District ERT | 01.06.2018 | DDOH Concerned |
| 7. | Training of Staff on DEWS | 01.06.2018 | DSC / WHO DEWS Coordinator |
| 8. | DEWS Reporting on Weekly Basis | 01.06.2018 | AE |
| 9. | Switching over to Daily Reporting Mode for DEWS | Yes, if required | |