GOVERNMENT OF THE PUNJAB
IRRIGATION DEPARTMENT

FLOOD FIGHTING PLAN OF GUJRANWALA DRANAGE DIVISION FOR THE YEAR 2026

GUJRANWALA DRAINAGE DIVISION,

GUJRANWALA

Lahore Irrigation Zone,
Lahore.

Lahore Drainage Circle,
Lahore.

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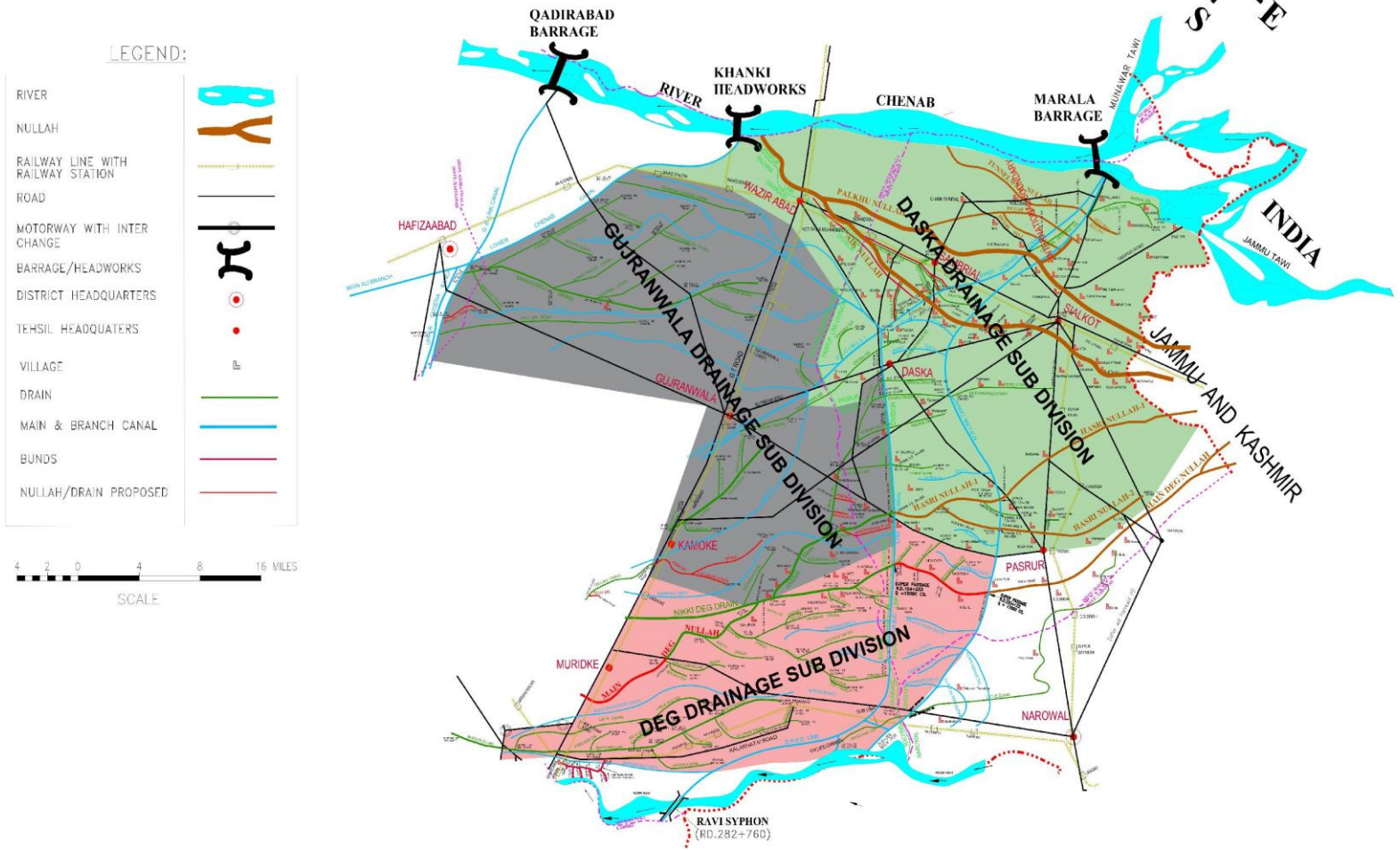
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FLOOD FIGHTING PLAN – 2026

PART – A

IRRIGATION DEPARTMENT

INDEX PLAN
GUJRANWALA DRAINAGE DIVISION
GUJRANWALA



Chapter – 1

Salient Feature of Gujranwala Drainage Division, Gujranwala.

1.1 Location

The jurisdiction of Gujranwala Drainage Division, Gujranwala falls within Gujranwala and Sheikhupura and Sialkot Districts.

The fertility of area of these districts is directly related to the efficiency of the drainage facilities provided to these districts. The area of Gujranwala & Sialkot District is the outfall area of the Rachna Doab. It has to carry the surface run off and the inter-flows of the Upper Districts i.e. Gujranwala, Sialkot and Narowal.

1.2 General Description

The important natural Nullah in the jurisdiction of Gujranwala Drainage Division Gujranwala. These Nullahs enter in to Pakistan from Indian held Kashmir. During monsoon season, these Nullahs spill over at different locations creating havoc for human life and property.

Apart from this arrangement, a comprehensive drainage system has been provided to these areas, which cater for the drainage for the catchment area. This drainage network mainly comprises: -

1. Aik Nullah Drainage System
2. Deg Nullah Drainage System
3. Palkhu Nullah Drainage System
4. Sangowali Drainage System
5. Daska Drainage System
6. Hasri Drainage System
7. Independent Drains

The above drainage systems outfall into Main Deg Nullah, Nikki Deg Drain and Q.B. Link, U.C.C Canal, Hassri Nullah, Aik Nullah, Palku Nullah, River Chenab and M&R link canal. This Division has no. of Drains, large and small. These drainage system act as a backbone for the riverain Districts, which are bounded by the Q.B Link Canal, LCC, U.C.C BRBD Link & Mr Link Canal and River Chenab and Ravi.

After construction of Lahore –Sialkot (M-11) Motorway, the natural flow lines in District Sialkot have been interrupted causing heading up of surface

runoff along Motorway (M-11). The surface runoff (sheet flow) goes into the natural or man-made drainage networks and causes overflow / spillage from drains situated in the vicinity of Sambrial City. Worst situation was experienced during monsoon 2017.

Five bunds constructed in Tehsil Daska of District Sialkot in order to save the important towns and other public infrastructure of vital importance from major inundation to drains. These are tabulated as below: -

Khanna Flood Protection Bund

This Bund has been constructed between Syphon RD 34+100 MR Link Canal & Syphon RD 35+800 Upper Chenab Canal. This Bund is situated along left side of connecting Drain. The length of this Bund is 1.14 Miles having top width as 15 ft. Its slope towards Drain side is 3:1 and towards country side is 2:1. This Bund was constructed in 1929 for the protection of agricultural lands and Villages Dugri, Moazmabad, Sundar Pur and Bidarpur etc. The capacity of syphon at R.D 34+100 M.R Link Canal (the source of Khana Bund) is 2560 cs. The present condition of this Bund against said discharge is quite safe and no emergency has been experienced in the past.

Moulowali Flood Protection Bund

Moulowali flood protection bund starts from syphon R.D 83+720 of Upper Chenab Canal and ends at R.D 8+000 Begowala flood protection bund. This bund is situated along right side of Moulowali drain and southern side of Sambrial city. The total length of this bund is 2.34 miles having top width 15 ft. Its side slope towards drain is 3:1 at country side is 2:1.

This bund was constructed during 1929 for the protection of agricultural lands, Sialkot Wazirabad railway track and road, Sambrial city. The discharge of syphon R.D 83+720 Upper Chenab Canal is 490cs which passes easily from Moulowali drain with out damaging the Moulowali bund, The present condition of this bund against said discharge is quite safe and no emergency has been experienced in the past.

Begowala Flood Protection Bund

Begowala flood protection bund starts from syphon R.D 90+275 of Upper Chenab Canal and ends at R.D 20+540 of Aik drain. This bund is situated along right side of Begowala drain and southern side of Sambrail city. The total length of this bund is 10.88 miles having top width 15 ft. Its side slope towards drain is 3:1 and country side is 2:1. This bund was constructed during 1929 for the protection of

agricultural lands, Sambrail city, Randir, kotli arian, Rohila, Sialkot – Wazirabad railway track and road, also to protect industries along Sambrial- Wazirabad road. The full capacity discharge of Begowala drain is 1346 cs which passes easily from Begowala drain with out damaging the Begowala bund. The present condition of this bund against said discharge is quite safe and no emergency has been experienced in the past.

Passia Flood Protection Bund

Passia flood protection bund starts from syphon R.D 115+900 of Upper Chenab Canal and connects Aik flood protection bund. The total length of this bund is 2.6 miles having top width 15 ft. Its side slope towards drain is 3:1 and country side is 2:1. This bund was constructed during 1929 for the protection of agricultural lands, villages Passia, Gojra, Bhaday Chack,Ghartal and Daska –Wazirabad road. The full capacity discharge of syphon R.D 115+900 (the source of passia bund) is 490 cs, which passes easily from Passis drain without damaging the Passia flood protection bund. The present condition of this bund against said discharge is quite safe and no emergency has been experienced in the past.

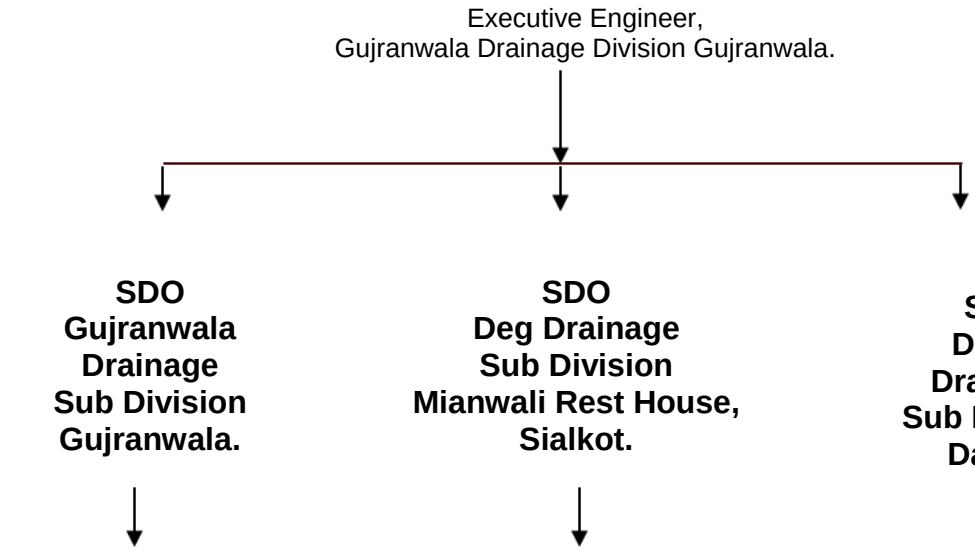
Aik Flood Protection Bund

Aik flood protection bund start from Head Regulator near Wain village and ends at Sialkot –Wazir abad road at Laddo pully near Wazirabad. This bund is situated along left side of Aik drain and northern side of Daska-Wazirabad road. The total length of this bund is 9.94 miles having top width 15 ft. Its side slope towards drain is 3:1 and country side is 2:1. This bund was constructed during 1929 for the protection of agricultural lands, villages Gojara, Ghartal, Bhaday chak, Kandan sian, Bhonanwali, Bholamusa, Kambanwala, Kotli Khanu, Kot Shah Muhammad, Wazir abad city and Daska Wazirabad road. The designed discharge of Wain Head Regulator is 2500 cs which passes easily from Aik drain. No emergency has been experienced in the past, because said discharge 2500 Cs passes safely from the Aik drain.

1.3 Administration setup

The Administrative setup of the Division is as under.

ADMINISTRATIVE SETUP / ORGANIZATIONAL CHART OF GUJRANWALA DRAINAGE DIVISION GUJRANWALA.



1. Ghakkar Section	1. Mianwali Section	1. S & I Section
2. Kamoke Section	2. Gharial Section	2. Marala Section
3. Gujranwala Section	3. Tapiala Section	3. Daska Section
4. Pandoki Section		4. Khambaranwala Section
5. Philoki Section		5. Sambrial Section

Chapter – 2

Flood protection and River Training Works

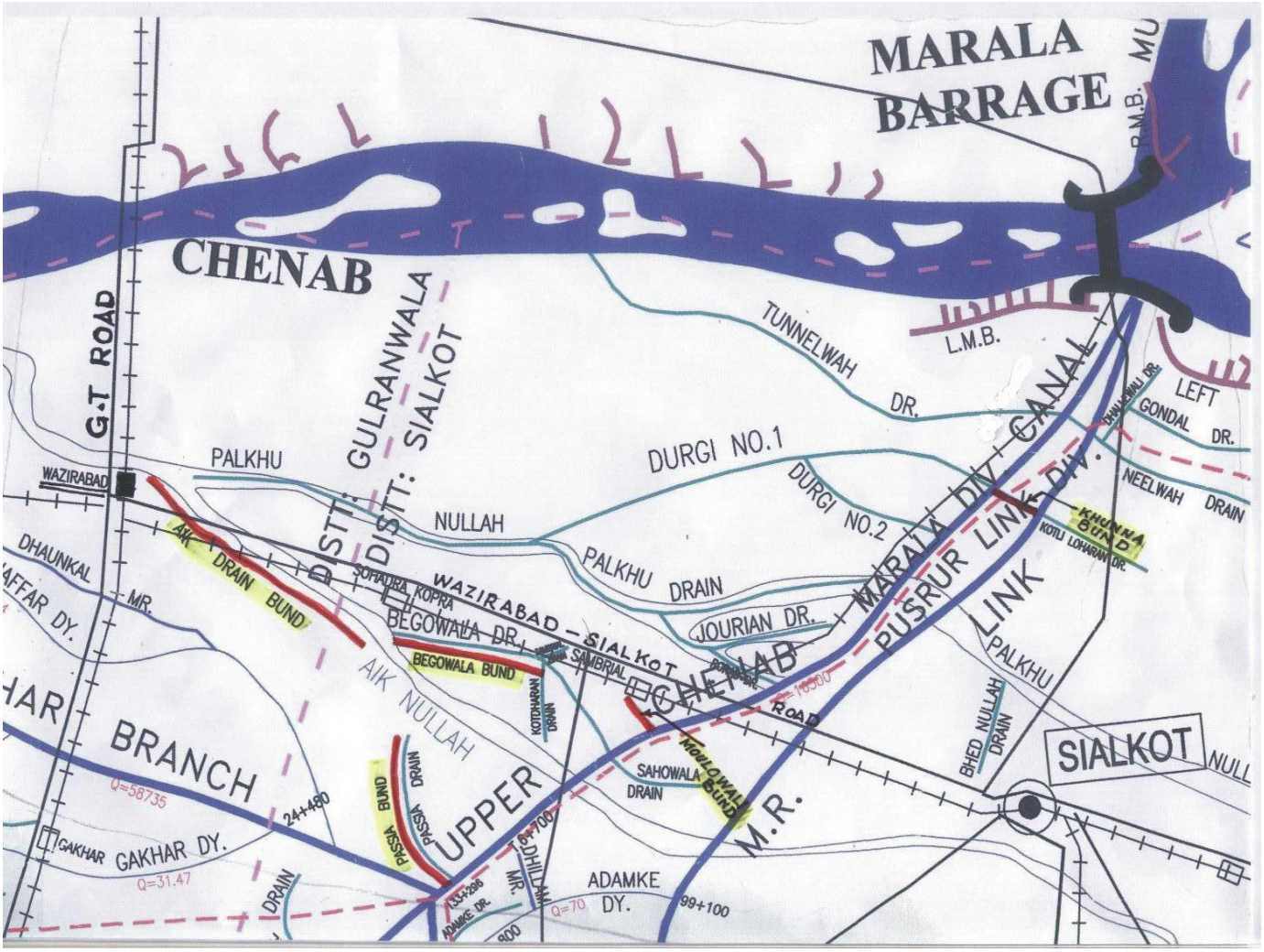
2.1 Data of Flood Bunds/Embankments along Drains/Nullahs in Gujranwala Drainage Division, Gujranwala.

Sr. No.	Name of Channel/Nullah with location	Length (Miles)	Year of Construction	Top width (Ft)	Side Slope	
					Inner	Outer
Flood protection Bunds along Drain						
1	Bagowala Drain Bund 0-53 +500	10.88	1987	15	3:1	3:1
2	Mullowali Dran Bund 0-11+700	2.34	1939	15	3:1	3:1
3	Passia Drain Bund 0-13+000	2.6	1929	15	3:1	3:1
4	Khanna Flood protection Bund RD: 34+100 MR Link to RD: 35+800 UCC	1.14	2009	15	3:1	3:1
5.	Flood Embankment along left side of Aik Drain.	9.94	1939	15	2:1	3:1

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2.2 Location Map

Location map of bunds of Daska Drainage Sub Division



Chapter – 3

Brief History of Past Flood Events

Sialkot & Gujranwala (some part) District had experienced worst flood during the year 2014. Drains in the area over flew and floodwater entered into Sialkot City causing devastation Due to newly constructed Motorway, which erupted the natural flood plain, causing heading up of the surface run off and inundated vast area and was alarmed to human life. Accumulative surface run off found its way through the drains, which had lost their carrying capacity due to deferred maintenance for the last couple of years. The drains flow all along Motorway to their outfalls and floodwater entered into the abadies of Sialkot, Wazirabad City.

FLOODS 2007:

The left food bund of Deg Nullah also washed away in reach RD 4500-5400 and a ring bund was constructed for the passage of flood to save the further damage. The winter rains also played havoc as the gauge rose to 6.5 ft on 13-3-2007, 14-3-2007 and also on 21-3-2007. Some damages were also restored on the nose of spur RD 4500. After this, during moon soon 2007, there were small freshets of low flood intensity in Deg Nullah and Aik Nullah, which passed safely without causing any damage to infrastructures in the area.

FLOODS 2008:

During 2008, flood bunds along Deg Nullah U/s Kingra Bridge were badly damaged. Flood fighting was made by the Department successfully to save the adjoining villages, abadies and other infrastructures in the area. For the most damaged and critical reaches, a work namely “Repairing flood bund along Deg Nullah U/S Kingra Bridge” was executed for the safety of the people and properties of adjoining villages.

FLOODS 2009:

During flood season 2009, the abnormal flood was received in Deg Nullah with high magnitude velocity. The duration or high flood was also more than 18nours. These long duration and high velocity attacked the bunds in different reaches. Flood fighting was made by the department successfully to save the bunds, adjoining villages and other infrastructures in he area. For damaged &

critical reaches, the works namely Strengthening let fio0d protection bund u/s KingrabridgeRD.7+000 to 8+500/R repairing flood protection bund RD.1+800 to 2+500/R are in progress for the safety of the people and proprieties of adjoining villages as well as government infrastructures i.e. Bridges culverts roads, schools, etc.

FLOODS 2010:

During the third & fourth week of July 2010, Heavy rainfalls occurred in Jammu & Kashmir which caused frequent freshet in Deg Nullah. On 22.07.2010, a freshet of High magnitude of about **42000 Cs** passed through Deg Nullah. The stream of flow changed its behaviour abruptly and hit the left Flood Embankment between reach R.D. 8+000 to 10+000 which was checked by using sand bags and Bamboos for support of sand bangs against slipping. The situation maintained till 05.08.2010.

On 06.08.2010, a freshet having discharge magnitude of about **40000** to **42000 Cs** occurred in the morning hours at 08:30 AM and attacked severely on the eroded bank in reach RD 8+000 to 9+000. The duration of the peak spanned up to30 hours. Due to abrupt change in flow behaviour of Deg Nullah the velocity of Flood Water as experienced was 10-12 ft/ sec. Furthermore, freshets of high magnitude passed through Deg Nullah from time to time.

FLOODS 2011:

During the month July & August 2011, heavy rainfalls occurred in Jammu &Kashmir which caused frequent freshet of magnitude ranges 10000Cs to 2200OCson 07/07/2011, 14/07/2011, 21/07/2011 and 25/07/2011 in Deg Nullah. The stream of flow hit the left Flood Embankment between Spurs which was controlled by using sand bags and Bamboos for Support of sand bags against slipping. The situation Continued till 10/08/2011.

On 12.08.2011, a freshet of High magnitude of about **30000 Cs** occurred and attacked severely on shank and mole head spurs No. 3 & 4. The stone aprons of Spurs were launched during the freshet which were restored later on.

FLOODS 2012:

During the month August 2012, heavy rain falls occurred in Jammu & Kashmir which caused frequent freshet of magnitude ranges 10000Cs to 21000Cs on01/08/2012 and 24/08/2012 in Deg Nullah. The stream of flow changed its course from left Flood Embankment to its old creeks due to construction of 04 Nos, Spurs in reach RD 7+500 to S9+500

FLOODS 2013:

During the July - August 2013, Heavy rainfalls were occurred which caused frequent freshet in Deg and Aik Nullah. On 20/07/2013, 02/08/2013 & 09/08/2013, a freshet of High magnitude of about 26889, 26889 & 29783 Cs passed through Deg Nullah On 20/07/2013, 15/08/2013 & 16/08/2013, a freshet having discharge magnitude of about 33024, 40711 & 40711 Cs passed through Aik Nullah. The spill water accumulated along left bank of MR Link Canal RD 104+000 to RD 305+000/L& BRBD Link Canal RD 10+000 to 111+000/L.

Water came due to heavy rain tall in the catchment areas of Nullahs in India Occupied Jammu & Kashmir. The water spilt out from the banks of these Nullahs. This water hit MR Link Canal on left bank. A part of this water passed through the Sypons and Inlets upto their design capacities and balance were accumulated along left banks, there by damaging the crops, properties and even human lives. This inundation urged the inhabitants to cut the bank of the canal at their own. This practice is reported when this water touches BRBD Link Canal on its left bank.

FLOODS 2014:

During the month of September 2014, heavy rainfalls occurred which caused frequent freshet in Deg and Aik Nullah. On 05/09/2014 & 06/09/2014afreshet of High magnitude of about 75102 Cs passed through Deg Nullah. On05/09/2014 &06/09/2014 and a freshet having discharge magnitude of about 25296s 44356 Cs passed through Aik Nullah. The spill water accumulated along left bank of MR Link Canal RD 117+000 to RD 304+000/L & BRBD Link Canal RD 10+000 to104-000/L The Zamindars of the area made cuts from RD.117+000 to RD 304+000/L of MR Link Canal and RD 10+000 to 164+000/L of BRBD Link Canal for the drain off flood rain water into Canals On 6th September morning. exceptional high discharge of 75102 Cs was recorded in the Deg Nullah at Kingra Bridge but the full effect of this flood could not approach the reach of Nullah under the jurisdiction of this Division due to occurrence of breaches in the upper reach Of Narowal Flood water passed without making any considerable damages through the channelized reach of Nullah having capacity of12000 Cs from BRBD canal to Muridke- Narowal road. Upstream of BRBD canal and downstream of Muridke-Narowal road up to its outfall where Nullah is not

channelized, flood water spilled over and huge damages were occurred. Vast area of Tehsil Muridke, Ferozwal and Sheikhupura inundated not only due to this flood water but sheet flow from breached sites of Narowal contributes much to make the conditions worst and developed breaches in the Deg.

HASSRI NULLAH & LURRIKI DRAIN:

Lurrki Main Drain (RD. 0+000 to 7+000) originates from the Siphon at RD 37+000/R of BRBD Canal with the design discharge capacity of 462 Cs. where as capacity of the siphon is 1850 Cs. Discharge of Daska-I & Il Drains and most of the spill of Aik Nullah on the left side of BRBD Canal is accommodated in Lurriki Drain. Lurriki Drain outfalls into Hassri Main Drain at R.D. 75+000/R with the design capacity of 980 Cs.

Hassri Main Drain having design capacity of 2/50 Cs at source, accommodates the Discharge of Hassri Nullah-I after passing through the siphons at RD 85+500& RDD86+040 of BRBD with design capacities of 5000 Cs. and 2500 Cs. Respectively During the food season of 2013, excessive discharges in the Lurriki and Hassri Drains spilled over and adopted its natural route / low lying area towards Kamoki City after inundating lands of Sheeniwala, Kotli Nagra, Tokrian, Hameedpur etc villages.

Flood water entered and inundated a part of Kamoki City and made huge losses there. It is worth mentioning here that there are about 80 culverts under the Railway Line passing through the city area, which confirms that flood water used to adopt this route in the past.

After flood season 2013, to safeguard the Kamoki City area and other abadies of the area, an embankment was constructed along the rignt side of the Lurriki Drain and Hassri Drain from R.D 0-000 to 37+000/R and R.D. 54+500 to 75+000/R respectively.

During the flood season of 2014, exceptional high floods were observed in the Nullah and drains of District Sialkot, Gujranwala and Sheikhupura, from 6th August to 8th August Lurriki Drain discharge also raised upto1180 Cs at source against design discharge of 462 Cs at BRBD. Similarly, Hassri Drain also reached exceptional high flood levels with the discharge of 11126 CS. against design capacity of 5000 Cs at outfall. Higher level of flood water in Hassri Drain, hardly allowed entering the flood water of Lurriki Drain. Due to this blockage and construction of embankment along right side of the Lurriki Drain flood water

started over spill from left side of the Lurriki Drain and inundated lands and abadies of villages Wandala Sandhwan, Ramke, Aminpur Syedan etc severely.

Ultimately to get some relief people on the left side of the Lurriki Drain made cuts in the embankment forcefully, from R.D 1+000 to 10+000/R and R.D. 17+000-18+000/R.

Immediately action was taken with the help of Police and Local Civil Administration to stop further damages to the embankment and FIR was got registered against the culprits.

Flood water of Lurriki Drain passed through these said cuts inundated the hundreds of acres of the villages Sheeniwala, Kotli Nagra, Tokrian, Hameedpur etc before it entered into Kamoki, but due to 2/000 ft. intact portion of embankment and diverting the flood water into Hassri Drain and Sadhoki Disty very less / manageable effect of sheet flow reached Kamoki.

It is evident from the above explained site experiences that construction of embankment could not achieve the objectives in full due to its adverse action on the left side area of the drain and excessive discharges in the Luriki and Hassri Drain against their design discharge. During peak flood days' site was visited by the Superintending Engineer, Lahore Drainage Circle, Lahore and Local Public Representatives. 0 seek out the comprehensive solution District Coordination Officer, Gujranwala presided over a meeting in the office of Assistant Commissioner

Kamoki in this regard on 04/10/2014 besides site visit along with Local MPA, MNA and Irrigation Staff on 26/09/2014.

As an outcome of all discussions and site visit following proposals were finalized by Department to safeguard the Kamoki City and agricultural lands of the area.

1) **Remodelling of Lurikki & Hassri System.**

The peak discharges in the Lurikki and Hassri Drains observed during flood season 2014 can only be accommodated by enhancing the capacity or Lurikki drain from 980 to 2000 Cs and Hassri drain from 5000 to 7110 Cs downstream of super passage at Sadhoki Disty. It is further proposed that Lurriki Drain from R.D. O+O00 to 13+600 will also be re-aligned and constructed parallel to the Hassri Drainin a length 15600 ft. passing through independent new proposed super passage at Sadhoki Disty with a capacity of 2000 Cs. This proposed reach of Luriki Drain will ultimately meet at R.D. 64+400/R of Hassri

Drain in a parallel manner to overcome the situation of blockage of Lurriki Drain water by Hassri Drain during peak flood days.

2) **Kamoki Escape Channel / Drain.**

Apart from above proposed remedy / solution to save the Kamoki city from the threat of flood water there must be an escape channel /drain starting from a safe distance or Kamoki urban area to accommodate the flood water in case of any disaster occurs in future. It is proposed to construct a drain, namely Kamoke drain of36 Mile in length having discharge capacity of 260 CS. and remodelling of Drajke Drain as this proposed drain will outfall into Drajke Drain.

An ADP Scheme namely **"Flood Protection of Kamoke & adjoining areas"** was prepared & approved by the Government, work on the Scheme is in progress and mostly flood inundation problems or area will be solved after completion of scheme. Another PSDP scheme for **"Channelization or Deg Nullah"** has also been approved, the execution of scheme will be started before onset of flood 2017.

FLOOD 2015:

A spell of heavy rainfall in catchment area of Deg Nullah started in 2nd week of July 2015 and flow began increase gradually. Hence rainfall and un precedent freshet occurred which Caused frequent flood having high magnitude about 33329 Cs on 10.07.2015 in Deg Nullah.

Due to meandering action of flow of Nullah, change its behaviour abruptly, erosion along left embankment between RD. 11+600 to 11+950 started due to parallel flow in some length. The magnitude and velocity was too high that hit the spur RD. 7+000IL and launched/damaged the apron of said spur.

Afterwards the freshet trend developed toward just U/S Hanjli Bridge, it caused launched /damaged. The pitching and apron of flood protection bund and guide bank of bridge which was protected by dumping of stone on war footed basis. The situation had been controlled with engineering solution & instructions of higher officers.

FLOOD 2016:

Exceptionally high flood of about 38127 Cs passed through Aik Nullah on 27-07-2016 at 09:00 P.M. The discharge at Ura Bridge was 596 Cs on 27.07.2016 at 02:00 P.M, gauge abruptly rose 16 ft within 4 hours and discharge

passed through Nullah was 28651 Cs at 06:00 P.M against the capacity of 25000 Cs. In next 3 hours, the discharge in Aik Nullah rose to 38127 Cs at 09:00 P.M. and became into exceptionally high flood, resultantly the Nullah over topped in some reaches and breached at R.D 149+500/L in city area due to highest H. F.L attained.

A parallel flow along right side on Haji Pura flood Protection Bund was seriously observed during exceptionally high flood and eroded some patches of protection wall. A serious erosion occurred at R.D 135-136 resultantly brick wall in a length of 130 ft on Haji Pura Bund was collapsed and other eroded sites were controlled by placing the sand bags and bushing.

A series of breaches occurred D/s Daska Road Bridge where the work was not taken up due to complication of land issue.

Similarly, freshet of high magnitude of about 35102 Cs passed through Deg Nullah on 27.07.2016 at 0r00 PM. The freshet safely passed upto Choor Bridge but breaches occurred on left side on D/S Choor bridge. The water accumulated along left bank of M.R Link Canal and a part of this water passed through syphons and inlets upto design capacity. Resultantly the spilled over water accumulated along left bank of BRBD Link Canal at RD.92+000 to 120+000 after passing through M.R Link Canal. All inlets were opened and operational on27.07.2016 before receipt of flood.

FLOOD 2017 IN AIK NULLAH.

Aik Nullah is widened upto 160 ft and banks are constructed on both Sides of the Nullah upto Bridge RD.102+990 which is also to be widened under the Flood Protection of Sialkot Against Aik & Palkhu Nullah project. There is a gap or about 100 ft on the left side of under construction embankment due to the grave yard of Christian community. On the morning of 1st August, 2017, flood was received in Aik Nullah at this point 1.e. RD.103+000 and water spilled over through this gap, where the bank has not yet been constructed at site as the Irrigation Department is engaged with the Christian Community for shirting or the graves. Now, the spilled water is flowing along the periphery of village Ismail Awan and will ultimately opt its natural route and cross the Siphon of MR Link. No damage was observed at site. Ample machinery and manpower were available to fill the gap without loss of time.

FLOOD 2017 IN DEG NULLAH:

During flood 2017, the situation of Deg Nullah remained normal and maximum discharge recorded at Kingra road Bridge was 21597 Cs on 09-08-2017.

During the first week of September 2017, heavy rainfalls occurred in occupied Kashmir and upper & Northern parts of the Punjab due to collision of monsoon and western seasonal low pressure coming from Behra-e-Arab which caused frequent freshets in Deg Nullah on 01-09-2017. A freshet having magnitude of about 17233 Cs observed in Deg Nulah. The stream of flow changed its behaviour abruptly and hit main embankment on right side in between RD.5+000 to 6+000 US

Choor Bridge and eroded the Nullah side slope of Bank upto top edge in length of 300ft which was protected by launching the trees and sand bags on war footed basis to safe the abadies i.e. village Jatoke & Kotli etc agricultural land, infrastructures and matured valuable crops as temporary solution.

FLOOD 2017 IN DEG NULLAH:

The Palkhu is a natural Nullah which originates from the hilly catchment area across the border and enters in Pakistan territory from occupied Jammu & Kashmir near vains village in the East of Sialkot city. The design Discharge of Nullah is 1000 Cs, but maximum observed Discharge on 06 Sept-2014 was 3031Cs during flood 2017 maximum recorded discharge was 3070Cs on 02-08-2017. ADP scheme namely flood protection of Sialkot against Aik & Palkhu Nullah" is in progress. The widening of channel upto design parameters has almost been completed. Flo0d water overtopped between RD.216-217L but was controlled on the same day. No Significant loss was observed in any kind.

During rainy/ flood season 2017, mostly normal rain fall was observed in District Sheikhupura and heavy rain tall observed in District Gujranwala and Narowal and Rachna Drainage Division effected excessive discharge of District Sialkot Drain sand Nullahs which ultimately entered in to the Jurisdiction of Rachna Drainage Division and the sheet flow rainy water in the Nullahs & drains was received too enough due to the rain tall in the catchment area in Jammu & Kashmir on July & August 2017.

The highest discharge in Deg Nullah was observed 15900 Cs on 02-08-2017 and it resulted out flanked water from various places and it timely controlled.

The highest discharge in Nikki Deg Drain was observed 6800 Cs on 02-08-2017 it resulted out flanked water from various places and damages to crops by

outflanked water Nikki Deg Drain from R.D 186+000 187+000/R near Village Ladhawala Virkan and Tamboli but it timely controlled. The existing full capacity level of the drain is higher side to NSL. Scheme for remodelling of Nikki Deg Drain has been approved and in future the bed level lowered equal to NSL and no situation like this will be occurred during flood.

The capacity of Hassri Main Drain enhanced from 4435 Cs to 7110 Cs and Lurriki Main drain 980 Cs to 1975 Cs. Due to enhance the capacity the flood water was passes safely during flood.

Due to normal rains in area of District Sheikhupura Laila & Bhed Drain flows normally and smoothly.

FLOOD 2018 IN DEG NULLAH:

On 30-06-2018, a freshet having magnitude of about 6848 Cs was observed in Deg Nullah. The flood water hit main embankment on right side and started eroding the site which was protected by dumping stone from reserve stock of stone after getting approval from the competent authority on war footing basis to save the abadies i.e. village Jatoke & Kotli etc agricultural land infrastructures and matured valuable crops as temporary solution. Keeping in view the above situation, the competent authorities were approved the construction of three 3 No. spurs for protecting the site which have been constructed at site and now the Site is safe

The fertility of area of these districts is directly related to the efficiency of the drainage facilities provided to these districts. The area of Sheikhupura District is the outfall area or the Rachna Doab. It has to carry the surface run off and the inter-flows of the Upper Districts i.e. Gujranwala, Sialkot and Narowal. Rachna Drainage Division has to face the sheet flow/ spill of Deg Nullah, Hassri Main Drain, Lurriki Drain, Nikki Deg & Bhed Nullah received rainy/ flood water in District Gujranwala & Sheikhupura through Super passages & syphons on M. R. Link canal and B. R. B.D. Link Canal.

During rainy/flood season 2018, mostly normal rain fall was observed in District Sheikhupura and heavy rain tall observed in District Gujranwala and Narowal and Rachna Drainage Division effected excessive discharge of District Sialkot Drains and Nullahs which ultimately entered in to the Jurisdiction of Rachna Drainage Division and the sheet flow / rainy water in the Nullahs & drains was received too enough due to the rain tall in the catchment area in Jammu & Kashmir in flood season 2018.

The highest discharge in Deg Nullah was observed 19170 Cs on 23-09-2018 at Kingra Bridge and it resulted out flanked water from various places in villages Changi, Koti Baba Heera, Mianwali Bangla, Satrah and Khery Sokin Wind in District Sialkot which was timely controlled and no damage occurred in District Gujranwala & Sheikhupura.

Remodelling of Nikki Deg Drain is in progress and critical reaches were taken up so the flood water passes safely during flood season.

The capacity of Hassri Main Drain enhanced from 4435 Cs to 7110 Cs and Lurriki Main drain 980 Cs to 1975 Cs. Due to enhancement of capacity the flood water was passed safely during flood season.

Due to normal rains in area of District Sheikhupura Laila & Bhed Drain flows normally and smoothly.

FLOOD 2019 IN DEG NULLAH:

A freshet of 12200 Cs hit the Right embankment of Deg Nullah RD. 5-6 Right on 17-08-2019 and caused serious erosion between spur No. 1 and 2. The flood fighting was done by launching of trees bamboos and plastic bags to save the embankment.

FLOOD 2020 IN PALKU & AIK NULLAH:

A freshet of 4450 Cs hit Palku Nullah by Sheet Flow of local rain and from LOC, India on 27-August-2020, which caused the Palku Nullah to beach from RD 222+000-223+000 and other locations.

Similarly, Freshet of 4500 Cs Passed through Aik Nullah in reach Rd 97+000 to D/s on 27-08-2020 which caused the Aik Nullah to overtop water and breached from various locations

FLOOD 2021.

No emergency has been experienced during flood 2021. All the structures, embankments remained quite safe against flood.

FLOOD 2022.

No emergency has been experienced during flood 2022. All the structures, embankments remained quite safe against flood.

FLOOD 2023.

No emergency has been experienced during flood 2023. All the structures, embankments remained quite safe against flood.

FLOOD 2024.

No emergency has been experienced during flood 2024. All the structures, embankments remained quite safe against flood.

FLOOD 2025.

During rainy / flood season 2025, Kingrah Bridge received 77742 Cs: of Flash flooding from Jammu and Kashmir on 26.08.2025 at the same time heavy rain fall occurred in the catchment area of the local drainage system. The strata of the whole area are sandy / alluvial and due to the flash flooding, berms / banks eroded at different points in whole reach of Nullah Deg, Nikki Deg, Aik Nullah, Hassri I & II Drain, Dugri I & II, Tunnelwah Nullah, Sahowala Drain. At many points the excessive water was spilled out from the banks of channel, but by the efforts of flied formation, effectively machinery was deployed and the flood water was contained by providing the additional dowels at different points of the banks but restoration of these channels is utmost required before coming flood season

Chapter – 4

Design Data, Historic Peak Flood Data & Previous Five Years Flood Data of Head Works / Barrages and Other Control Points

4.1 Flood Limits

Not Related

4.2 Time Lags of Floods

Not Related

4.3 Highest Floods

Not Related

4.4 Peak discharges

Not Related

Chapter – 5

Flood Fighting Strategy

Flood Embankments / Protection Bunds

Bunds along drains are not designed to provide protection against the rivers but to check spills from drains. Accordingly, less watching arrangement are required as compared to that on rivers.

Nikki Deg Drain RD 149+578 to 233+278

Sub Divisional Officer, Gujranwala Drainage Sub Division along with Sub Engineer Kamoki section will be in-charge of watching operation. 1 No watching camp will be established at Dholan Village and will has necessary watching material. Day & night watching operation will be exercised during floods.

Flood fighting strategy at different limits of Aik, Deg Nullah:

A heavy flood is expected in Nullah Aik & Deg. Strict watching arrangement will be started by 15th June 2025 according to the scale fixed by the department as per this flood fighting plan. The pre-flood arrangements necessarily required are given below.

STAGE-I

i. Low Flood:-

Deg Nullah	Aik Nullah
10000	2000

When river discharges ranges between these limits, watching establishment shall be deploy for two shifts in a day. Sub Engineer, concerned will supervise the entire watching operation. Sub Divisional Officer concerned will act as the officer in-charge of watching operation.

STAGE- II

ii. **Medium Floods**.

Deg Nullah	Aik Nullah
10000-15000	2000-9000

Supervisory staff will be same as in stage-1.

STAGE- III

iii. **High Floods**.

Deg Nullah	Aik Nullah
15000-30000	9000-16000

Supervisory staff will be same as in stage-. But Excavators, Front blade tractor would be hired to control the situation.

STAGE- IV

iv. **Exceptional High Floods**.

Deg Nullah	Aik Nullah
Above 30000 Cs	Above 16000 Cs

Watching establishment would be increased from 1st three stage as per requirement. Similarly, Machinery deployment would be increase.

Drains

Worst situation was faced during heavy rains in monsoon, many drain was over flowed at many places and storm water entered in City areas and damaged public property.

For watching arrangement, a camp will be established under the supervision of Sub Divisional officer and Sub Engineer. Necessary watching material such as lanterns, Axes, Torches, Kassi etc, will be arranged. Day & night watching will be arranged in 3 shifts in case of heavy rainfall and heading up of flow in drains. Civil Administration of Sialkot & Gujranwala City will be informed accordingly well in time for assistance by Sub Divisional Officer Incharge.

General

All the Sub Divisional Officers will keep a close liaison with Executive Engineer, Gujranwala Drainage Division, Gujranwala and Civil Administration. They being responsible for respective jurisdiction will take proper action to cope with the alarming situation. They will arrange communication of rainfall / flood position and colossal damages, to all concerned quarters. The rain gauges and flow position in various drains especially Aik Nullah below Motorway will be regularly recorded under their supervision through regular establishment in normal season and through work charge gauge readers in case of flood/ rains.

Sub Divisional Officer In charge may direct other Sub Engineers to shift their camps at vulnerable points along with their establishment.

Municipal Committee Gujranwala, Sialkot will be checking overflow from drain, passing through the City, by making necessary arrangements such as raising bank level along right bank of drain and arranging earth filled jute bags during rainy season. Local bodies will consult drainage staff for technical guidance and hydrological data required for fixing optimum top level of right bank along drains.

Chapter – 6

Flood damages restoration works

During rainy / flood season 2025, Kingrah Bridge received 77742 Cs: of Flash flooding from Jammu and Kashmir on 26.08.2025 at the same time heavy rain fall occurred in the catchment area of the local drainage system. Due to the reason below mentioned drainage system / Nullahs damaged badly which needs restoration for smooth flowing of flood water. The competent authority sanctioned the estimate of this work after approval as well as fulfilment of all codal / procedural formalities Detail of works is as under: -

1. Flood restoration works of Main Deg Nullah from RD 191+000 to RD 418+000.
2. Flood restoration works of Aik Nullah from RD 0+000 to RD 97+000.
3. Flood restoration works of Dugri Nullah I & II
4. Flood restoration works of Tunnel wah Nullah from RD 0+000 to RD 83+000
5. Flood restoration works of Niki Deg Drain from RD 145+778 to RD 233+278

Chapter – 7

Flood Fighting Arrangements

7.1 Pre-Flood Arrangement

All the bunds are inspected by a committee constituted by the Secretary to Government of the Punjab, Irrigation Department in May of every year. Inspection of all bunds and spurs by the Team of Military personals is also carried out before the flood season to ensure that the bunds are safe against the coming flood season.

To provide swift and disposal of any information related to flood situation in order to intimate prompt action, Gauge readers are appointed at Deg Nullah & Aik Nullah. Camps are established on all vulnerable sites to monitor the situation during flood season. Cell Phones are provided and generator sets are installed at important/ vulnerable reaches. The flood watching material is procured and shifted to the camp sites.

Keeping in new the possibility of receiving floods, precautionary measures have to be taken from 1st July to 15th October. Watching Establishment is employed for the flood season as per limits of flood already fixed for various magnitude of Discharge in Deg, Aik Nullah & Palkhu Nullah.

1. Arrangements for the establishment of flood centres in the office of Executive Engineer, Gujranwala Drainage Division, and Sub Divisional Officer Daska Drainage Sub Division at Daska, Sub Divisional Officer Gujranwala Drainage Sub Division Gujranwala, and Sub Divisional Officer Development Sub Division-Ill at Mianwali Benglow will be finalized.

2. All flood fighting material and work charge establishment arrangements will be framed well before the season.

3. No reserve stock for stone is sanctioned, hence no stone available.

7.2 Watching Establishment

In view of possibility of receiving timely flood warnings, precautionary measures have to be taken from 1st July to 15th October, every year. The watching establishment is employed for the flood season as per limits of floods already fixed for various magnitude of discharge in the Nullahs i.e. Aik Nullah and Deg Nullah. In case the flood is not received, the establishment will be utilized in filling rain cuts etc.

Sr. No.	Structure Name	Length (Miles)	Flood Limits							
			Normal Flood Season		Low Flood		Medium / High Flood		Very High / Exp. High Flood	
			Men	Shift	Men	Shift	Men	Shift	Men	Shift
			1 Person / 2 Mile (1 Shift)		1 Person / Mile (1 Shift)		2 Person / Mile (2 Shift)		5 Person / Mile (3 Shift)	
1	Bopalwala Aik Nullah	14.20	7	1	14	1	28	2	70	3
2	Chak Choda Aik Nullah	4.17	2	1	4	1	28	2	20	3
3	Sahowala Drain	3.73	2	1	4	1	28	2	20	3
4	Dugri Nullah 01	15.72	8	1	16	1	32	2	80	3
5	Tunnelwah Nullah	15.15	8	1	16	1	32	2	80	3
6	Daska Drain 01	2.80	1	1	2	1	4	2	10	3
7	Nikki Deg Drain	16.60	8	1	16	1	32	2	80	3
8	Main Deg Nullah	42.98	21	1	42	1	84	2	210	3
TOTAL: -			**57**		**114**		**226**		**570**	

7.3 Arrangement at Sensitive Sites

(i) The normal strength for watching at sensitive sites along flood protection Bund and Drains / Nullahs will be increased two or three time during high flood / exceptionally high flood on need bases.

(ii) The establishment can be increased after consultation with Superintending Engineer, Lahore Drainage Circle, Lahore in emergency & in accordance with site requirements.

The same establishment will be responsible for maintenance of flood bunds and drains / Nullahs during flood season. Establishment will also be responsible for filling gharas / rain cuts etc as occurred due to rains during the monsoon season.

Established Camps Details							
Sr. No.	**Structure Name**	**Length (Miles)**	**Vulnerable sites**		**No. of Camps Established Except Vulnerable Points**		
					Normal Flood season/Low Flood	**Medium/High Flood**	**Very High/Exp. High Flood**
			Reach	**No. of Camps**	**15 Miles**	**7 Miles**	**5 Miles**
1	Bopalwala Aik Nullah	14.20	76+000	1	0	0	0
2	Chak Choda Aik Nullah	4.17	80+000	1	0	0	0
3	Sahowala Drain	3.73	93+500	1	0	0	0
4	Dugri Nullah 01	15.72	27+000	1	0	0	0
5	Tunnelwah Nullah	15.15	62+000	1	0	0	0
6	Daska Drain 01	2.80	11+000	1	0	0	0
7	Nikki Deg Drain	16.60	225+000	1	0	0	0
8	Main Deg Nullah	42.98	400+100	1	0	0	0
Total				**8**	**0**	**0**	**0**

7.4 Watching Material

Minimum requirement of Flood Fighting Material for Permanent Camp.

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

Minimum requirement of Flood Fighting Material for Temporary Camp.

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

7.5 Arrangement for Sounding & Probing

Not related.

7.6 Lighting Arrangement

Detail given in the list of watching material at sr. No. 7.4 above.

7.7 Ration Arrangement

The Food Department will mobilize their sources for supplying foods for Human and cattle population.

7.8 P.O.L Arrangement for Vehicle

P.O.L facilities/ arrangements will be made by the Civil Administration.

7.9 Transportation

Transportation facilities will be provided by the Civil Authorities

7.10 Law and order

Law and order situation will be tackled by the Civil Administration with the help of Police Department

7.11 Medical arrangement for Labour

Health Department will be responsible for mobilizing their sources to carrying out necessary operation for providing medical facilities to the labour.

7.12 Liaison with other Departments

All the flood embankments bunds are required to be inspected during the month of March, so as to identify weak points and if necessary, after repairing such sites, the Certificate regarding hydraulic fitness of bunds is to be submitted.

The flood embankments are inspected by a committee constituted by the Secretary Irrigation Department in May every year. Fitness of bunds is ensured before the flood season, keeping in view the priorities are fixed according to resources

The Executive Engineer, Gujranwala Drainage Division, Gujranwala and Sub Divisional Officer Gujranwala will keep close liaison with the District Administration of Gujranwala District during flood season.

7.13 Role of the Army

Army shall be deployed through District Administration if deemed necessary. All necessary arrangements for evacuation of affected people will be done by Army.

7.14 Duties of Telephone Attendant

The duties of telephone attendant are to apprise the Department Civil Administration about the flood situation during the rain / flood season i.e 15-06-2026 to 15-10-2026.

7.15 Wireless Arrangements

Wireless system arrangement will be made available for the vehicles under use of Officers of Gujranwala Drainage Division during the period of 15-06-2026 to 15-10-2026.

Chapter – 8

Detail of Encroachment

There is no encroachment on flood bunds / embankments in the jurisdiction of Gujranwala Drainage Division Gujranwala.

Total No. of Encroachment	Removed	Balance	Action to be taken
Nil	Nil	Nil	Nil

Chapter- 9

Duty Roster/ Flood Fighting Program

Staff of Gujranwala Drainage Division Gujranwala, looking after flood bunds and drains, has to be very vigilant throughout the monsoon season and set on alert during day and night from 15th June up to 15th October. The flood watching camps are to be established with the onset of monsoon season at vulnerable points with adequate materials and arrangements to cope with any flood / rain emergency. The concerned Sub Divisional officers are responsible for reporting about any mishaps to the Executive Engineer, Superintending Engineer, Chief Engineer and Secretary Irrigation Department. It is also the duty of Sub Divisional officer to deliver written messages well in time, to the District Administration concerned about the flood / weather forecast, flood situation and any other mishaps.

Sr. #	Officer/Official	Station / place of duty	Jurisdiction
1	Executive Engineer, Gujranwala Drainage Division, Gujranwala Gujranwala	Gujranwala	Executive Engineer, being overall in-charge of Gujranwala Drainage Division is responsible to look after flood bunds in his jurisdiction of Narowal, Hafizabad, Gujranwala and Sialkot Districts.
2	Sub Divisional Officer, Gujranwala Drainage Sub Division	Gujranwala	Inspection and checking of Flood protection works along Niki Deg and Deg Nullah in district Gujranwala and all Drains falls in the Jurisdiction
3	Sub Divisional Officer Deg Drainage Sub Division Deg Rest House	Mianwali Rest House	Inspection and checking of Flood protection works along Niki Deg and Deg Nullah in district Sialkot and all Drains falls in the Jurisdiction
4	Sub Divisional Officer Daska Drainage Sub Division Daska	Daska	Inspection and checking Aik Nullah R.D 0+000 TO 96+500 out fall to M.R Link Canal and all Drains falls in the jurisdiction of Daska Drainage Sub Division

On receipt of any flood warning from Flood Warning Centre and provincial Disaster management Authority, the flood controlling officer will inform immediately to the following: -

1. Executive Engineer, Gujranwala Drainage Division, Gujranwala
2- Executive Engineer, UCC Division, Gujranwala.
3- Superintending Engineer, Lahore Drainage Circle, Lahore.
4- Chief Engineer, Irrigation Lahore Zone, Lahore.
5- Director Regulation Punjab, Lahore.
6- Chief Engineer, Drainage & Flood Zone, Lahore.

7- Secretary to Govt. of the Punjab, Irrigation Department, Lahore

8- District Police Officer, Sialkot

9- District Police Officer, Gujranwala.

The flood controlling office at Gujranwala under the supervision of Flood Sub Division, Control Officer / Sub Divisional Officer, Gujranwala Drainage Sub Division, Gujranwala will inform Executive Engineers, UCC Division, Gujranwala, and Marala Division Marala, Superintending Engineer, Lahore Drainage Circle Lahore, Chief Engineer, Irrigation, Lahore, Director Regulation, Flood Control Office of District Sialkot, Secretary, Irrigation Department, Punjab Lahore. Any un-wanted happening will be reported to the Executive Engineer, Gujranwala Drainage Division, Gujranwala and all others concerned promptly.

All necessary arrangements for evacuation of the effected people will be done by District Administration and Army. Health Department will have its own arrangements to provide medical aid at the spot. All other departments such as WAPDA, Communication and Works, Police and Administration would be requested for co-operation, if required by the staff of Gujranwala Drainage Division, Gujranwala so as to fight against the flood.

Chapter – 10

Emergency Telephone Nos.

SR. NO.	DESIGNATION	OFFICE	RESIDENCE
1	Secretary, Irrigation Punjab	042-99212117-18 Fax: 042-99212116	042-99200954
2	Chief Engineer, Irrigation Lahore Zone	042-99212085-90 Fax: 042-99212084	042-35182339
3	Chief Engineer, D&F Punjab, Lahore.	042-99230602 Fax: 042-99230731	-
4	Superintending Engineer, L.D.C. Lahore	042-99250306	-
5	Executive Engineer, U.C.C. Division Gujranwala	055-9200199	055-9200199
6	Wireless Control, Gujranwala	055-9200624	-
7	Mr. Nisar Ahmad, Executive Engineer, Gujranwala Drainage Division Gujranwala	042-36862909	0301-9222296
8	District Co-ordination Officer, Gujranwala	055-9200043	055-9200051
9	Sr. Superintendent of Police, Gujranwala.	055-9200695	-
10	Assistant Commissioner, Gujranwala.	055-9200029	-
11	Assistant Commissioner, Kamoki	055-6608566	-
12	District Headquarters Hospital, GRW.	055-9200110	-
13	Executive Engineer, Highway Div: GRW.	055-9230069	-
14	Executive Engineer, WAPDA Div: GRW	055-9200519	-
15	Executive Engineer, Building Gujranwala	-	-
16	Director Flood, D&F Punjab, Lahore.	042-99233552	-
17	Flood Warning Centre Lahore.	042-99205372	-
18	Rescue 1122 Gujranwala	055-9201390	-
19	Mr. Saqib Nadeem, Sub Division Officer Gujranwala Drainage Sub Division Gujranwala.	0332-5223552 0343-2423552	-
20	Mr. Saqib Nadeem, Sub Division Officer Deg Drainage Sub Division at Mianwali Bangla	0332-5223552 0343-2423552	-
21	Mr. Saqlain Nawaz, Sub Division Officer Daska Drainage Sub Division Daska.	0344-4966588	-

Chapter – 11

Standard operating procedure (SOP) for Breaching Sections

11.1 History of the Breaching Section

There is no approved breaching section in the jurisdiction of Gujranwala Drainage Division Gujranwala.

11.2 Location, Design, Quantity and Variety of the explosive required for detonation.

Not Related.

11.3 Arrangement of explosives and security of explosive stores

Not Related.

11.4 List of security staff alongwith detail of their training etc

Not Related.

11.5 Detail of Mechanical means as a standby arrangement in case of detonation failure.

Not Related.

11.6 Duty Roster in case of critical situation

Not Related.

11.7 Breaching Committee with their action plan

Not Related.

11.8 List of the villages likely to be inundated in case of breach

Not Related.

11.9 Announcements and detail of evacuation arrangements.

Not Related.

11.10 Detail of coordination with Civil / Army Authorities.

Not Related.

11.11 Parallel Communication arrangements.

Not Related.

11.12 Index Plan.

Attached.

Superintending Engineer
Lahore Drainage Circle,
Lahore

Executive Engineer,
Gujranwala Drainage Division,
Gujranwala

Chief Engineer,
Irrigation Lahore Zone,
Lahore.

PART – B

Chapter – 12

Vulnerable Sites on Flood Bund / Structures.

12.1 Apprehended breaches in Flood Bunds/ Structures.

The following are the sites of Drains in District Sialkot & Gujranwala.

District Sialkot

Site No. 1 Village Bopalwala Aik Nullah.

Site No. 2 Village Chak Choday Aik Nullah.

Site No. 3 Sahowala Drain R.D 15-16.

Site No. 4 Dugri Nullah - I

Site No. 5 Tunnelwah Nullah

Site No. 6 Daska Drain – I

District Gujranwala

Site No. 7 Nikki Deg Drain R.D 224-225.

Site No. 8 Main Deg Nullah R.D 400+100.

12.2 Operation of breaching sections.

There is no breaching section exist in this Division.

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

Not related.

Chapter – 13 (Site # 1)

NAME OF SITE: - Village Bhopal Wala Aik Nullah

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 1

Daska Drainage Sub Division

i) Village = Bhopal wala, Chak Choday, etc

Abadi = 250000 person

13.3 Strategy and action taken be explained in detail.

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

i) The camp will be established at Bhopal wala of Aik Nallah during the flood season to cope with any situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Sambrial Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
01	Bhopal Wala Village	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Muhammad Rizwan (Sub Engineer) 0300-8532231

Work Charged Beldars: - 20 Nos in two shifts. (Day & Night)

Mates: - 05 Nos in two shifts.

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 1 Daska Drainage Sub Division

i)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sambrial
	Excavator Machine	2 Nos
	Tractor with Front Blade	02 Nos
	Tractor with Trollies	04 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

i) MR Link Canal.

Roads

i) Sambrial - Daska Road.

Health Centre

i) Rural Health Centre Sambrial.

Police Station

Sambrial

Telephone Exchange

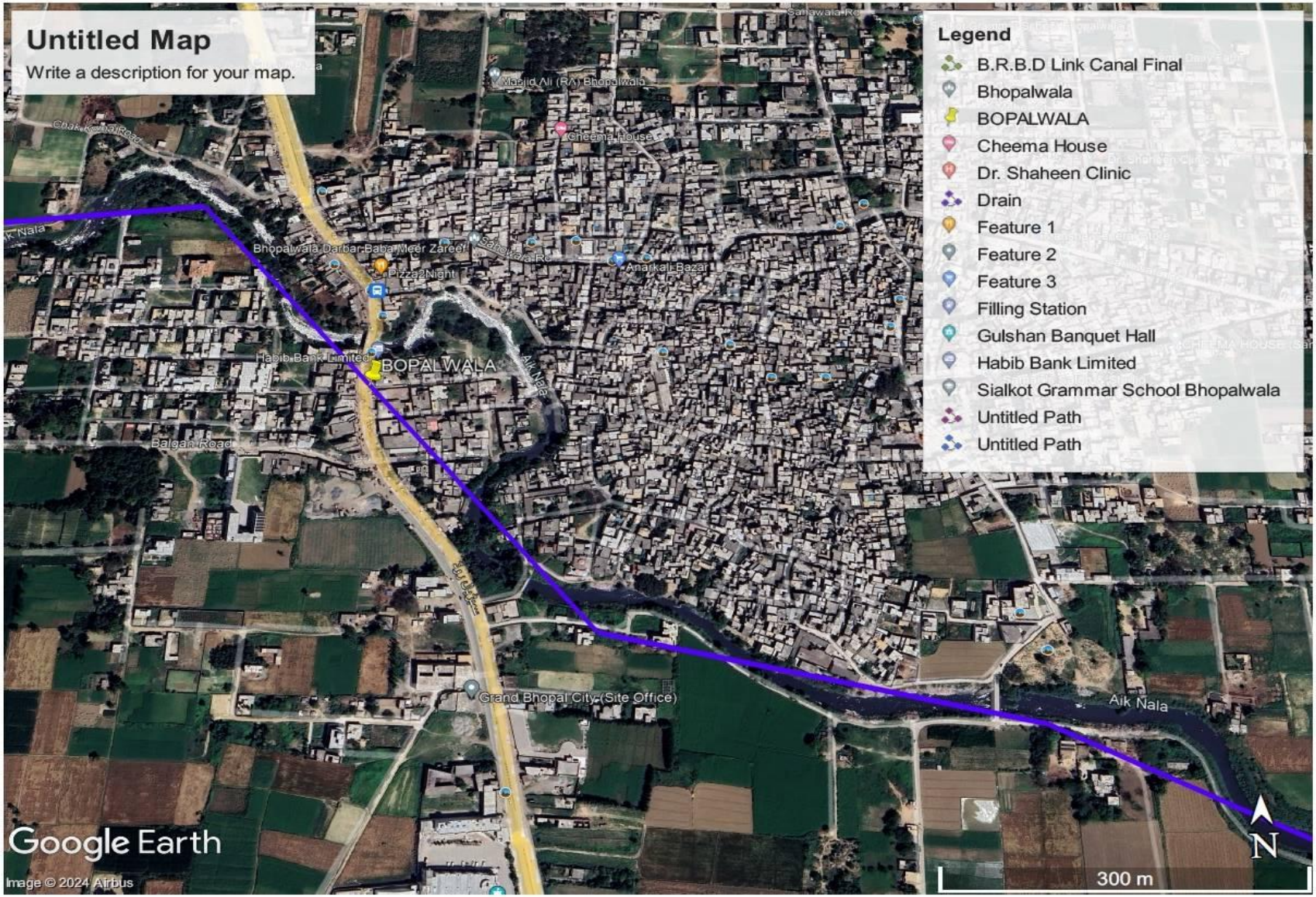
-

Army infrastructure

-

Grid Station.

-


Untitled Map
Write a description for your map.
Legend
B.R.B.D Link Canal Final
Bhopalwala
BOPALWALA
Cheema House
Dr. Shaheen Clinic
Drain
Feature 1
Feature 2
Feature 3
Filling Station
Gulshan Banquet Hall
Habib Bank Limited
Sialkot Grammar School Bhopalwala
Untitled Path
Untitled Path
Bhopalwala Darbar Baba Meer Zareef
Pizza2Night
Anarkali Bazar
Habib Bank Limited
BOPALWALA
Balgan Road
Grand Bhopal City (Site Office)
Aik Nala
Google Earth
Image © 2024 Airbus
N
300 m

Chapter – 13 (Site # 2)

NAME OF SITE:- Village Chak Choday Aik Nullah R.D 84+000

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 2

Daska Drainage Sub Division

ii) Village = Chak Choday, Jamke Cheema, etc

Abadi = 450000 person

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

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

ii) The camp will be established at village Chak Choday, Aik Nallah during the flood season to cope with any situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Sambrial Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
02	Chak Choday, Jamke Cheema Village	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Muhammad Rizwan (Sub Engineer) 0300-8532231

Work Charged Beldar :- 10 Nos

Mates: - ---------

13.3.4 **Departmental Machinery available**

Required Machinery has been intimated.

13.3.5 **Machinery available from Private Source.**

Site No. 2 Daska Drainage Sub Division

i)	Name of owner: -	Ameer Khan
	Contact No: -	0300-7432434
	Location: -	Gujranwala
	Excavator Machine	2 Nos
	Tractor with Front Blade	02 Nos
	Tractor with Trollies	04 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

MR Link & U.C.C Canal.

Roads

Health Centre

Rural Health Centre Sambrial

Police Station

Sambrial

Telephone Exchange

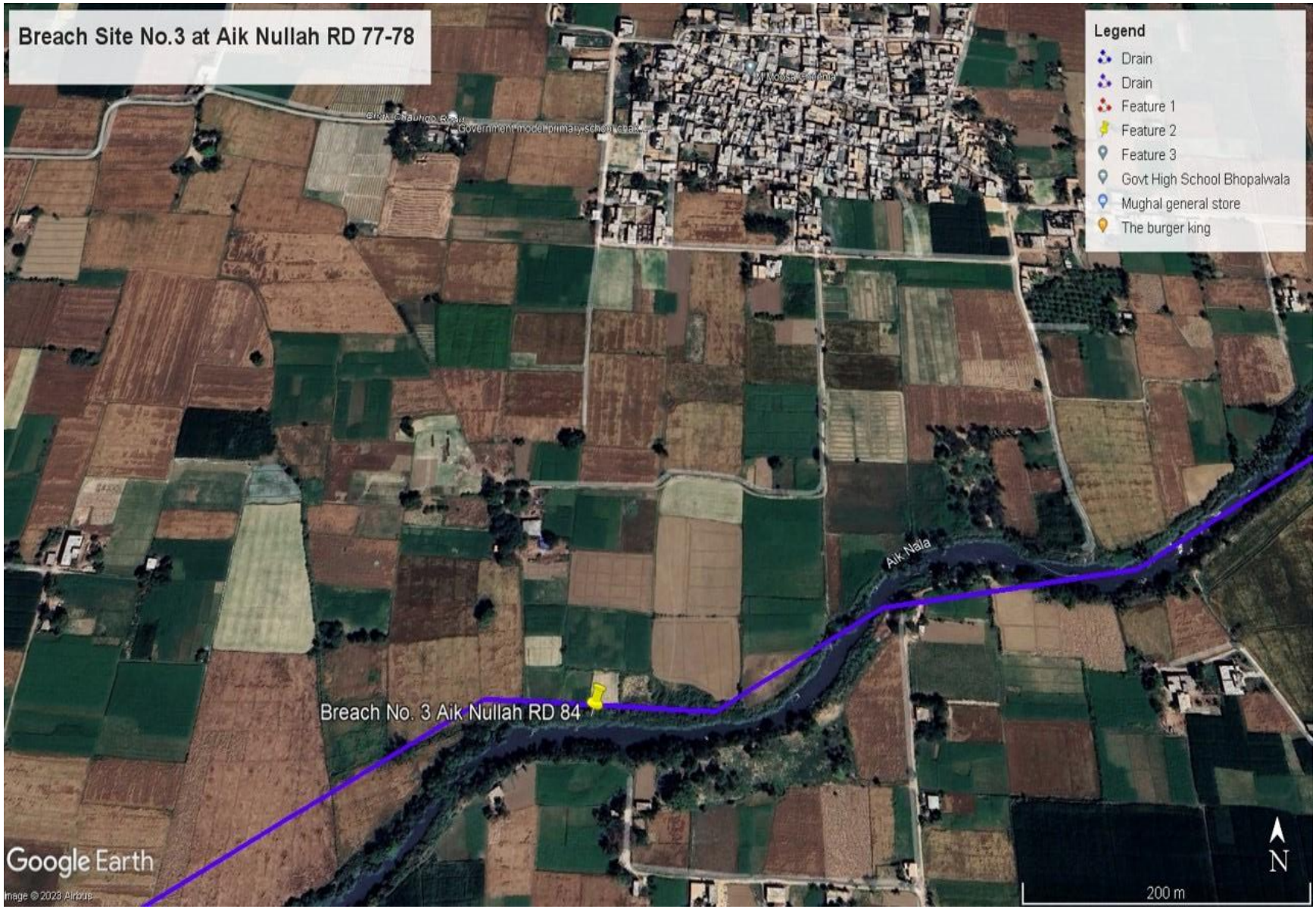
-

Army infrastructure

-

Grid Station.

-


Breach Site No.3 at Aik Nullah RD 77-78
Legend
Drain
Drain
Feature 1
Feature 2
Feature 3
Govt High School Bhopalwala
Mughal general store
The burger king
Aik Nala
Breach No. 3 Aik Nullah RD 84
Google Earth
Image © 2023 Airbus
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200 m

Chapter – 13 (Site # 3)

NAME OF SITE:- Sahowala Drain RD 15 – 16

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 3

Daska Drainage Sub Division

i) Village = Sahowala Drain RD: 15-16

Abadi = 40000 person

13.3 Strategy and action taken be explained in detail.

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

i) The camp will be established at village Sahowal Drain RD: 15-16 during the Season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Sambrial will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
03	Sahowala Drain RD: 15-16	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Muhammad Rizwan (Sub Engineer) 0300-8532231

Work Charged Beldars:- 15

Mates: - 2

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 3 Daska Drainage Sub Division

i)	Name of owner: -	Ameer Khan
	Contact No: -	0300-7432434
	Location: -	Gujranwala
	Excavator Machine	2 Nos
	Tractor with Front Blade	02 Nos
	Tractor with Trollies	04 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

MR Link & U.C.C Canal.

Roads

Health Centre

Rural Health Centre Sambrial

Police Station

Sambrial

Telephone Exchange

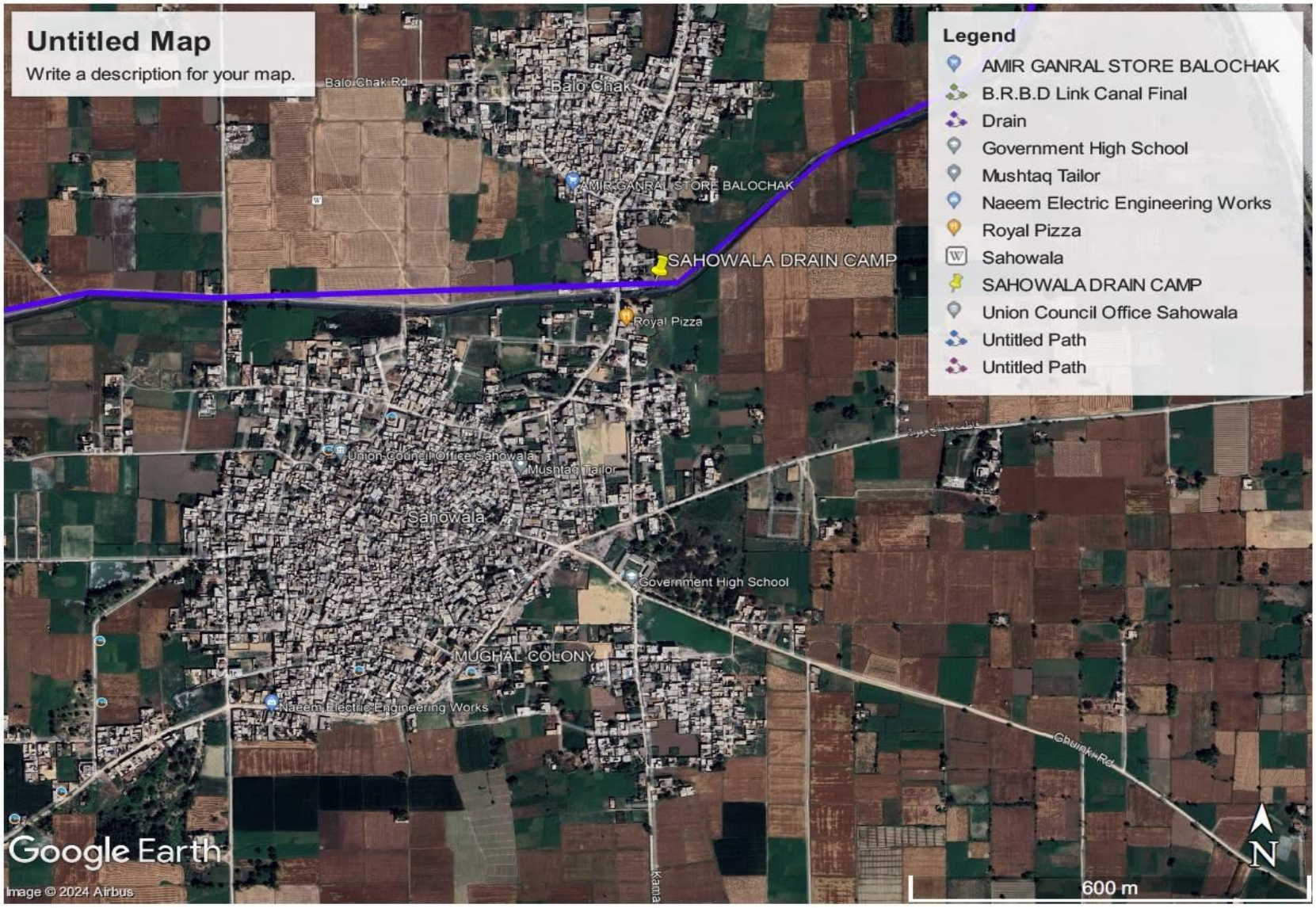
-

Army infrastructure

-

Grid Station.

-


Untitled Map
Write a description for your map.
Balo Chak Rd
Balo Chak
AMIR GANRAL STORE BALOCHAK
SAHOWALA DRAIN CAMP
Royal Pizza
Union Council Office Sahowala
Mushtaq Tailor
Sahowala
Government High School
MUGHAL COLONY
Naeem Electric Engineering Works
Gbulaki Rd
Legend
AMIR GANRAL STORE BALOCHAK
B.R.B.D Link Canal Final
Drain
Government High School
Mushtaq Tailor
Naeem Electric Engineering Works
Royal Pizza
Sahowala
SAHOWALA DRAIN CAMP
Union Council Office Sahowala
Untitled Path
Untitled Path
Google Earth
Image © 2024 Airbus
600 m
N

Chapter – 13 (Site # 4)

NAME OF SITE:- Dugri Nullah – I

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 4

Daska Drainage Sub Division

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

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

i) The camp will be established on Marala Drainage section.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Marala Drainage Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
04	Marala Draining Section	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Hafiz Nadeem Abbass (Sub Engineer) 0311-7515499 0340-6589742

Work Charged Beldars:- 12.

Mates: - ---

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

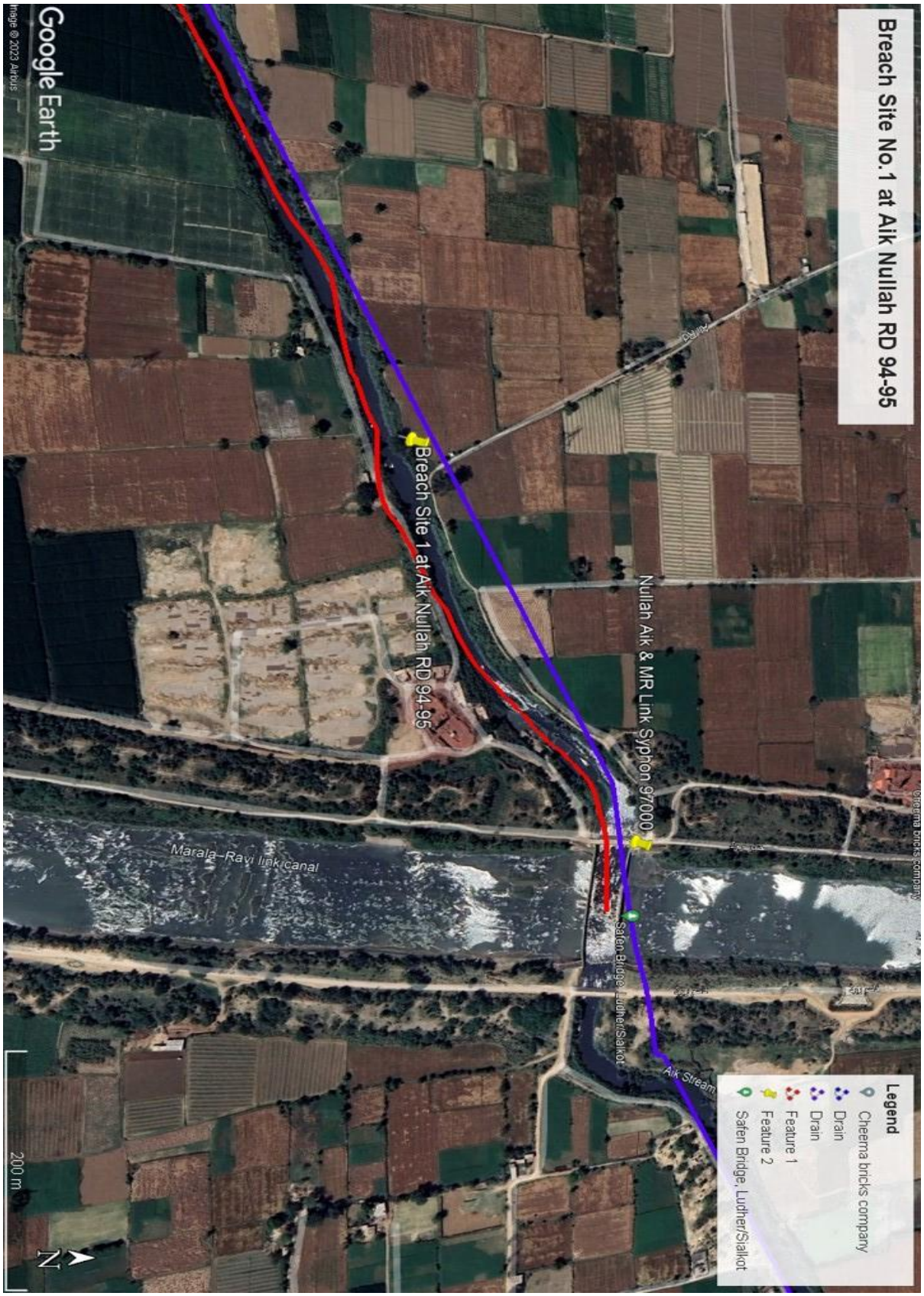
13.3.5 Machinery available from Private Source.

Site No. 4 Daska Drainage Sub Division

ii)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sialkot
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	


Breach Site No.1 at Aik Nullah RD 94-95
Legend
Cheema bricks company
Drain
Drain
Feature 1
Feature 2
Safen Bridge, Ludher/Sialkot
Nullah Aik & MR Link Syphon 97000
Breach Site 1 at Aik Nullah RD 94-95
Marala-Ravi link canal
Aik Stream
Safen Bridge Ludher/Sialkot
Google Earth
200 m
N

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13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

Roads

-------.

Health Centre

Sambrial.

Police Station

Sambrial.

Telephone Exchange

-

Army infrastructure

-

Grid Station.

-

Chapter – 13 (Site # 5)

NAME OF SITE:- Tunnelwah Nullah.

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 5

Daska Drainage Sub Division

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

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

i) The camp will be established at village Tunnelwah Nullah during the Flood season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Marala Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
05	Near Village Tunnelwah	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Hafiz Nadeem Abbass (Sub Engineer) 0311-7515499 0340-6589742

Work Charged Beldars:- 12.

Mates: - 2

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 5 Daska Drainage Sub Division

iii)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sialkot
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

MR Link Canal

Roads

-------.

Health Centre

Sambrial.

Police Station

Sambrial.

Telephone Exchange

-

Army infrastructure

-

Grid Station.

-


Untitled Map
Write a description for your map.
Legend
AIK NULLAH BRIDGE LSM
Ali CHEEMA dairy farm
B.R.B.D Link Canal Final
Chak Chaudo Camp site
Clinic (Govt)
Drain
Feature 1
Untitled Path
Untitled Path
Jamia Masjid Kotli Ranjhan (Ahl E Sunnah)
Ranjha Cattle Farm
Equipo Quirurgico WELMED
TANALWAH NALA CAMP SITE
Tan Nāla
Upper Chenab Canal
Nandipur Canal
Koofa Cricket Ground
Google Earth
© 2023 Google
Image © 2024 Maxar Technologies
Image © 2024 Airbus
N
300 m

Chapter – 13 (Site # 6)

NAME OF SITE:- Daska Drain - I

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 6

ii) Village = Daska etc.
Abadi = 25000 person

Daska Drainage Sub Division

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

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

The camp will be established on Daska I Drain during the Flood season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Sambrial Section will be the in-charge of camp site.
Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
06	Daska Drain I	Muhammad Saqlain Nawaz (SDO) 0344-4966588	Muhammad Frasat (Sub Engineer) 0302-6439938

Work Charged Beldars:- 30 Nos in two shifts

Mates: - 06 Nos in two shifts

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 6 Daska Drainage Sub Division

iv)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sambrial
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

Roads

Sialkot –Daska road.

Health Centre

Rural health Daska

Police Station

Daska

Telephone Exchange

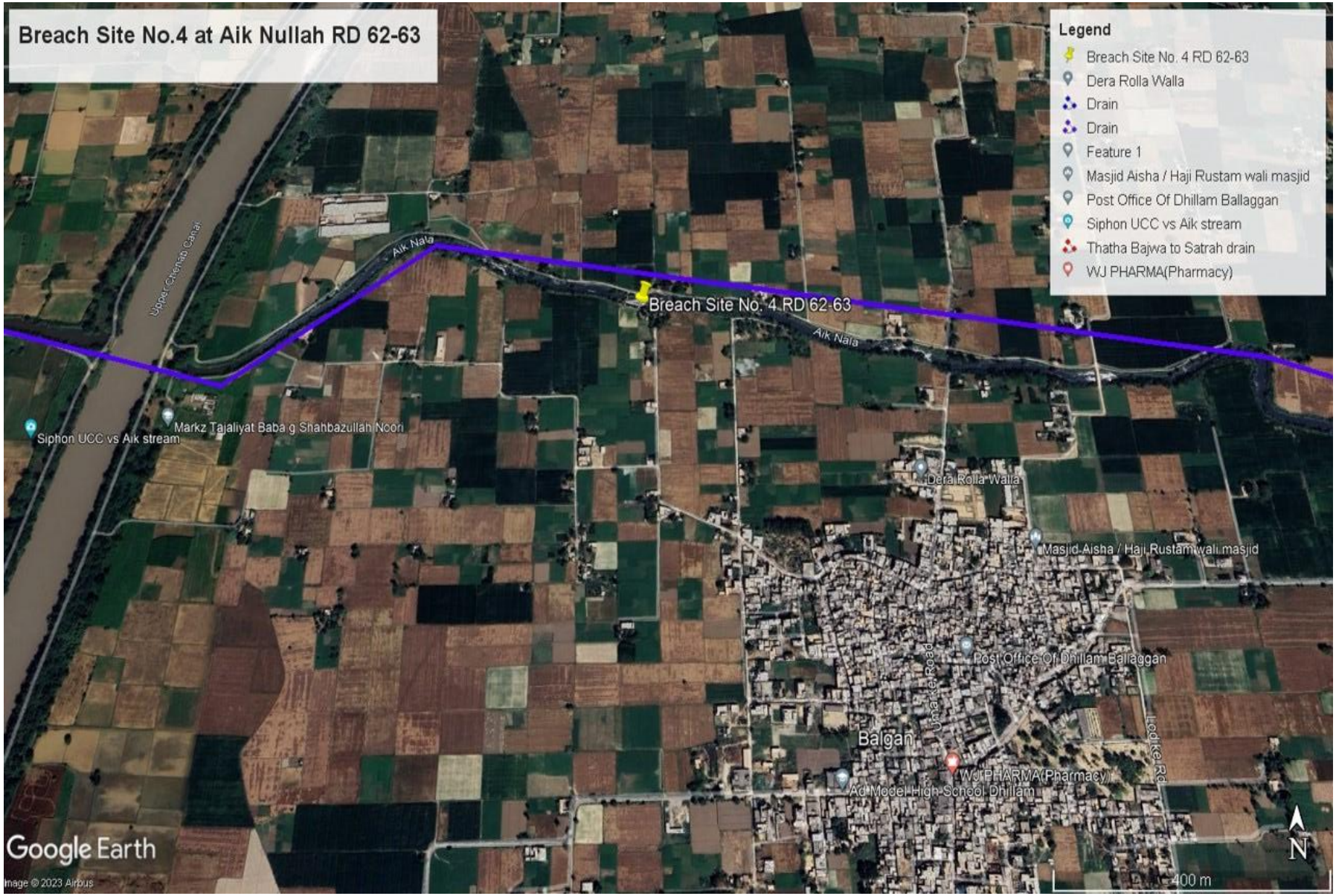
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Army infrastructure

-

Grid Station.

-


Breach Site No.4 at Aik Nullah RD 62-63
Legend
Breach Site No. 4 RD 62-63
Dera Rolla Walla
Drain
Drain
Feature 1
Masjid Aisha / Haji Rustam wali masjid
Post Office Of Dhillam Ballaggan
Siphon UCC vs Aik stream
Thatha Bajwa to Satrah drain
WJ PHARMA(Pharmacy)
Upper Chenab Canal
Aik Nala
Breach Site No. 4 RD 62-63
Aik Nala
Siphon UCC vs Aik stream
Markz Tajaliyat Baba g Shahbazullah Noori
Dera Rolla Walla
Masjid Aisha / Haji Rustam wali masjid
Post Office Of Dhillam Ballaggan
Balgan
WJ PHARMA(Pharmacy)
Ad Model High School Dhillam
Google Earth
Image © 2023 Airbus
400 m
N

Chapter – 13 (Site # 7)

NAME OF SITE:- Nikki Deg Drain R.D 224-225

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 7

ii) Village = Changi
Abadi = 15000 person

Deg Drainage Sub Division

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

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

The camp will be established at village BRBD 104+000 during the flood season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Mianwali Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
07	Village Changi	Saqib Nadeem (SDO) 0332-5223552 0343-2423552	Javed Iqbal (Sub Engineer) 0300-4484585

Work Charged Beldars:- 12

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 7 Daska Drainage Sub Division

I)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sambrial
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

BRBD Canal

Roads

Health Centre

Police Station

Satrah

Telephone Exchange

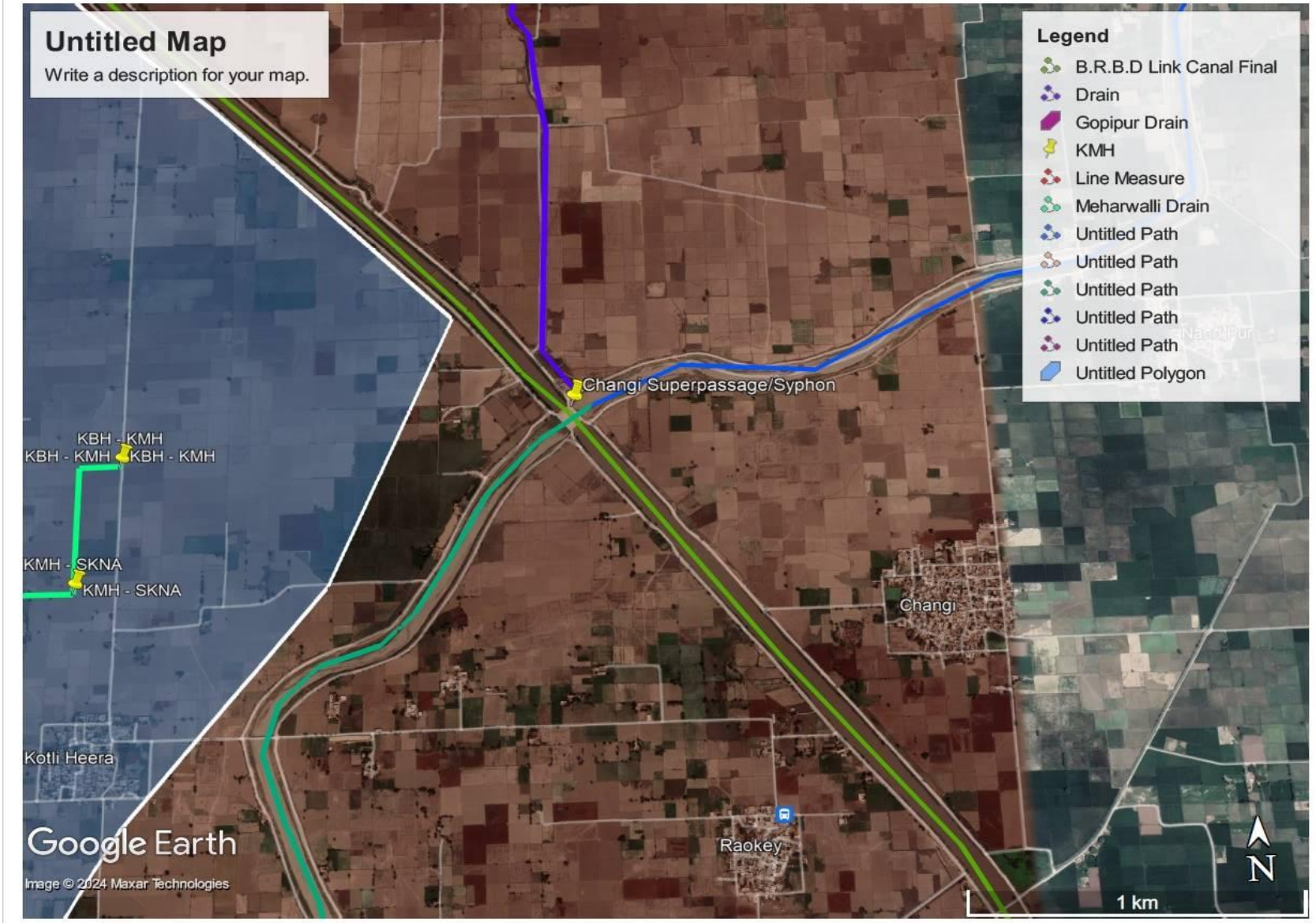
-

Army infrastructure

-

Grid Station.

-


Untitled Map
Write a description for your map.
Legend
B.R.B.D Link Canal Final
Drain
Gopipur Drain
KMH
Line Measure
Meharwalli Drain
Untitled Path
Untitled Path
Untitled Path
Untitled Path
Untitled Path
Untitled Polygon
Changi Superpassage/Syphon
KBH - KMH
KBH - KMH
KBH - KMH
KMH - SKNA
KMH - SKNA
Changi
Kotli Heera
Raokey
Google Earth
Image © 2024 Maxar Technologies
N
1 km

Chapter – 13 (Site # 8)

NAME OF SITE:- Main Deg Nullah R.D 400+100

Emergency Contingency Plan for vulnerable site.

13.1 Plan showing route of flood water coming out of the breach supported with levels.

Plan Attached

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

Site No. 8

Deg Drainage Sub Division

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

Strategy to be adopted has been explained in detail in chapter 5 of flood fighting plan.

13.3.1 Arrangements

13.3.2 Establishment of Flood Fighting Camps

The camp will be established at village Dhollen during the Flood season to cope with any emergent situation.

13.3.3 Duties of Officer / Officials and Their Camp Sites.

The Sub Engineer Gharyal Section will be the in-charge of camp site.

Contact No. is given below: -

Camp No.	Location	Name of officer	Name of official
08	Village Dhollan	Saqib Nadeem (SDO) 0332-5223552 0343-2423552	Hassan Shahid (Sub Engineer) 0306-7770548

Work Charged Beldars:- 10

Mates: -

13.3.4 Departmental Machinery available

Required Machinery has been intimated.

13.3.5 Machinery available from Private Source.

Site No. 8 Deg Drainage Sub Division

i)	Name of owner: -	Ameer Khan
	Contact No: -	0300-8610564
	Location: -	Sambrial
	Excavator Machine	2 Nos
	Tractor with Front Blade	2 Nos
	Tractor with Trollies	4 Nos

13.3.6 Flood Fighting / Watching Material. Required
13.3.7 Flood Fighting / Watching Material. Available

Sr. No	Item	Unit	Total Required Quantity	Available Quantity	Balance Quantity	Remarks
1	Shouldari/Tent 18x36	No	01	0	01	Quantity will be purchased before flood 2026
2	Chairs	No	06	0	06	
3	Table 4x3’	No	01	0	01	
4	Generator (2-5 KVA)	No	01	0	01	
5	Pedestal Fans 24”	No	01	0	01	
6	Charpois	No	02	0	02	
7	Symbolic Jackets	No	50	0	50	
8	Polyethylene Sheet 0.03 mm	Kg	100	0	100	
9	Bamboos (2.5" dia and 10 ft long)	No	100	0	100	
10	Water Cooler (30 Liter)	No	01	0	01	
11	Portable Umbrella	No	02	0	02	
12	Life Jackets	No	05	0	05	
13	Utensils (10 person serving)	No	01	0	01	
14	Jute 3. To 5 Cft Plastic bags 1.25 Cft	No	1000	0	1000	
15	Walkie Talkie Set	Sets	02	0	02	
16	Raincoats	No	10	0	10	
17	LED flood light 500 watt	No	10	0	10	
18	Extension Cable (10 ft) 7/44	No	02	0	02	
19	Rechargeable torches	No	20	0	20	
20	Kassi	Kg	20	0	20	
21	Axes	No	20	0	20	
22	G.I. Buckets	No	05	0	05	
23	7/44 cable	Feet	500	0	500	
24	Sutli	Kg	02	0	02	
25	Sewing Needles	No	10	0	10	
26	Emergency Medical Kit	No	1	0	1	
27	Wire crates (3x3x3) (only at those camps near river action and where reserve stock exists)	No	100	0	100	

13.4 Detail of other infrastructure like Electric, Sui Gas, Telephone installations, Road network, other Buildings, Canals and Drainage network.

Canals

Dholen Minor

Roads

Health Centre

Police Station

Telephone Exchange

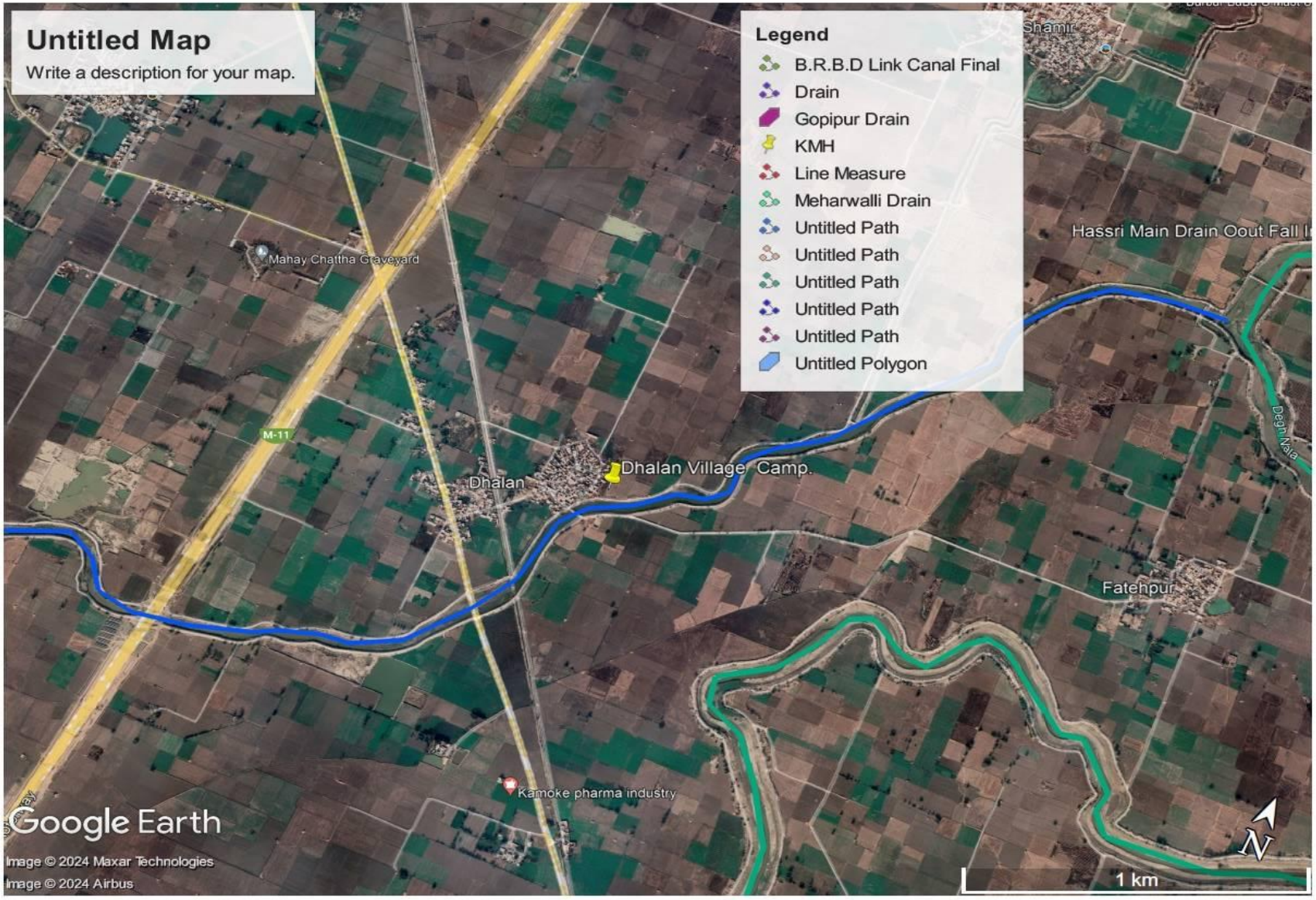
-

Army infrastructure

-

Grid Station.

-


Untitled Map
Write a description for your map.
Legend
B.R.B.D Link Canal Final
Drain
Gopipur Drain
KMH
Line Measure
Meharwalli Drain
Untitled Path
Untitled Path
Untitled Path
Untitled Path
Untitled Path
Untitled Polygon
Mahay Chattha Graveyard
M-11
Dhalan
Dhalan Village Camp.
Hassri Main Drain Oout Fall I
Fatehpur
Kamoke pharma industry
Google Earth
Image © 2024 Maxar Technologies
Image © 2024 Airbus
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Chapter – 14

ACTION PLAN

14.1 RE-SHUFFLING / RECOUPING PLAN OF RESERVE STONE DEPARTMENTALLY

No reserve stone sanctioned in respect of Gujranwala Drainage Division Gujranwala.

14.2 DETAIL OF INLET/OUTLET CROSSING ALONG WITH CLOSING METHODOLOGY

There is no inlet / outlet crossing the flood embankments.

14.3 DEPLOYMENT OF MACHINERY (NORMAL TO LOW FLOOD)

Attached as **Annexure-A.**

14.4 DEPLOYMENT OF MACHINERY (MEDIUM TO HIGH FLOOD)

Attached as **Annexure-B**.

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

Attached as **Annexure-C**.

14.6 POLICE DEPLOYMENT PLAN

Sr. No.	Vulnerable sites used for illegal cuts during floods	Concerned Canal Division	Concerned Police Station and District	Police Personnel to be deployed		Remarks (If any)
				Inspection /SI/ASI	Constables	
1.	8 No. Vulnerable sites fall in GDD GRW	Gujranwala Canal Division, UCC	Satrah / Wahndoo / Sambrial / Head Marala & Daska Police Station	ASI-5	20 Nos.	-

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

There is no requirement of 500kg or 1000 kg bags.

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

Not required as there is no river embankment in the Division.

14.9 ANY OTHER DETAIL AS PER SOPS APPROVED BY THE ADMINISTRATIVE DEPARTMENT.

Follows

DEPLOYMENT OF MACHINERY
(NORMAL TO LOW FLOOD)

Sr. No.	Name of Structure	Length (Mile)	Excavator	Trolleys	Dumpers	Tractor with front blade (1 per 15-mile reach)
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Bopalwala Aik Nullah	14.20	S.E shall allow deputation of one (1) excavator & four (4) Trolleys during low flood at camps/vulnerable points & LMB / RMB.		-	1
2	Chak Choda Aik Nullah	4.17			-	1
3	Sahowala Drain	3.73			-	1
4	Dugri Nullah 01	15.72			-	1
5	Tunnelwah Nullah	15.15			-	1
6	Daska Drain 01	2.80			-	1
7	Nikki Deg Drain	16.60			-	1
8	Main Deg Nullah	42.98			-	3
Total:-		**115.35**	**0**	**0**	**-**	**10**

DEPLOYMENT OF MACHINERY
(MEDIUM TO HIGH FLOOD)

Sr. No.	Name of Structure	Length (Mile)	Excavator	Trolleys	Dumpers	Tractor with front blade
			1 per 7 mile reach	4 per 7 mile reach	2 per 7 mile reach	1 per 7 mile reach
1	2	3	4	5	6	7
1	Bopalwala Aik Nullah	14.20	2	8	4	2
2	Chak Choda Aik Nullah	4.17	1	2	1	1
3	Sahowala Drain	3.73	1	2	1	1
4	Dugri Nullah 01	15.72	2	8	4	2
5	Tunnelwah Nullah	15.15	2	8	4	2
6	Daska Drain 01	2.80	1	1	1	1
7	Nikki Deg Drain	16.60	2	8	4	2
8	Main Deg Nullah	42.98	6	24	12	6
Total:-		**115.35**	**17**	**61**	**31**	**17**

DEPLOYMENT OF MACHINERY
(VERY HIGH TO EXCEPTIONALLY HIGH FLOOD)

Sr. No.	Name of Structure	Length (Mile)	Excavator		Trolleys	Dumpers	Tractor with front blade	
			Very High Flood	Exp. High Flood	4 per 5 mile reach	2 per 5 mile reach	Very High Flood	Exp. High Flood
			1 per 5 mile reach	2 per 5 mile reach			1 per 5 mile reach	2 per 5 mile reach
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	Bopalwala Aik Nullah	14.20	3	6	12	6	3	6
2	Chak Choda Aik Nullah	4.17	1	2	4	2	1	2
3	Sahowala Drain	3.73	1	2	4	2	1	2
4	Dugri Nullah 01	15.72	3	6	12	6	3	6
5	Tunnelwah Nullah	15.15	3	6	12	6	3	6
6	Daska Drain 01	2.80	1	2	4	2	1	2
7	Nikki Deg Drain	16.60	3	6	12	6	3	6
8	Main Deg Nullah	42.98	8	16	32	16	8	16
Total:-		**115.35**	**23**	**46**	**92**	**46**	**23**	**46**

CHAPTER-15

15 BACKUP DIVISIONS

The Gujranwala Drainage Division, UCC, Gujranwala is allied canal Division and the jurisdiction of both Divisions i.e. Gujranwala Drainage Division and Gujranwala Canal Division, UCC are parallel with District Gujranwala.

Superintending Engineer,
Lahore Drainage Circle,
Lahore.

Executive Engineer,
Rachna Drainage Division,
Sheikhupura.

Chief Engineer,
Irrigation Lahore Zone,
Lahore.

Subject: - **REPORT OF COMMITTEE FOR FINALIZATION OF MACHINERY & HUMAN RESOURCE REQUIREMENTS FOR FLOOD FIGHTING PLAN (FFP)**

A committee was constituted by the Administrative Department vide No.SO(Floods)VII-22/2017 dated 26.12.2025 to standardize emergency response protocols and optimize the deployment of machinery and human resources across various irrigation infrastructures (river-wise) for the Flood Fighting Plan (FFP). The composition of the committee was as follow:

Chief Engineer, D&F Zone, Lahore.	**Convener**
Superintending Engineer, Project Circle DG Khan.	**Member / Rep. of DG Khan Zone**
Superintending Engineer, Bahawalpur Canal Circle.	**Member / Rep. of Bahawalpur Zone**
Superintending Engineer, Mailsi Canal Circle, Multan.	**Member / Rep. of Multan Zone**
Superintending Engineer, Sukhrawa Canal Circle, Sahiwal.	**Member / Rep. of Sahiwal Zone**
Superintending Engineer, LCC(West) Canal Circle, Faisalabad.	**Member / Rep. of Faisalabad Zone**
Superintending Engineer, Mandi Bahauddin Canal Circle	**Member / Rep. of Sargodha Zone**
Superintending Engineer, Link Circle, Lahore.	**Member / Rep. of Lahore Zone**

2. The TORs of the committee are as follows:

i. The committee shall set the benchmark point relative to which the machinery and human resources will be deployed in case of flood for each river.

ii. The committee shall determine the specific number of human resources required per mile to ensure 24/7 monitoring for embankments / structures against different flood levels (low, medium, high, V.High & Ex-High) and immediate breach response.

iii. The committee shall define minimum number of work charge / manpower for watch and ward that must be hired via outsourcing for flood season.

iv. The committee shall determine the machinery requirement (excavators, dumpers, tractors with trolleys) for different irrigation infrastructures (embankments / structures), including standby locations against different flood levels (low, medium, high, V.High & Ex-High).

Accordingly, a meeting of the committee was convened online on 30.12.2025. The meeting primarily focused on the criteria for deployment of human resources and machinery for effective flood fighting operations. During the discussion, it was emphasized on the importance of proper assessment and coordination at all levels. During the first meeting, it was decided that all SEs shall discuss the requirement of manpower, labor, equipment, and machinery with Executive Engineers of their zones of different rivers to assess the actual requirements for flood fighting plans. It was decided that the consolidated requirements, after due consultation, shall be submitted for further deliberations.

The second meeting was held on 12.01.2026 to deliberate on requirements gathered by the Superintending Engineers for developing a singlecriteria for the flood fighting plan. After detailed deliberations, the following criteria for establishment of camps, deployment of machinery and human resources, and material for each camp across various irrigation infrastructures (river-wise) for the Flood Fighting Plan (FFP) were agreed upon:

1. General Manpower Hiring (Maintenance Phase)

Total manpower requirement for watching and maintenance of flood embankment during the flood season from 15th June to 15th October (the entire flood season) as per the following criteria:

1.1 Watching Establishment Criteria

Normal Flood Season -	1 person/2 mile	(1 Shift)
Low Flood –	1 person/mile	(1 Shift)
Medium /High flood	2 person/mile/shift	(2 Shift)
Very High/Exceptionally High	5 person/mile/shift	(3 Shift)

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

SE MBN

- Keeping the track motorable

Mate: 1 No. for every gang of 12 Beldars at all flood ranges.

1.2 Establishment of Camps criteria

Normal Flood Season:	15 miles/ Vulnerable points
Low Flood:	15 miles
Medium Flood/High flood	7 miles
Very High/Exceptionally High	5 miles

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

2. Flood Fighting Material:

Flood Fighting Material should be purchased on the basis of the worst-case scenario, i.e. for exceptionally high flood. The minimum requirement is as follows:

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

SR. #	ITEM	UNIT	Total Required Qty	Available Qty	Balance Qty	Remarks
1.	Shouldari / Tent	No	01			
2.	Chairs	No	06			
3.	Table	No	01			
4.	Generator (2-3 KVA)	No	01			
5.	Pedestal Fans	No	01			
6.	Charpois	No	02			
7.	Symbolic Jackets	No	50			
8.	Polyethene Sheet	Kg	100			
9.	Bamboos (4" dia and 10 ft long)	No	100			
10.	Water Coller	No	01			
11.	Portable umbrella	No	02			
12.	Life Jackets	No	05			

3

SR. #	ITEM	UNIT	Total Required Qty	Available Qty	Balance Qty	Remarks
13.	Utensils (10 person serving)	No	01			
14.	Jute/Plastic bags	No	1000			
15.	Walke Talkie Set	Sets	02			
16.	Raincoats	No	10			
17.	LED flood light	No	10			
18.	Extension Cable (10 ft)	No	02			
19.	Rechargeable torches	No	20			
20.	Kassi	No	20			
21.	Axes	No	20			
22.	G.I Buckets	No	05			
23.	7/44 cable	Feet	500			
24.	Sutli	Kg	02			
25.	Sewing Needles	No	10			
26.	Emergency Medical Kit	No	1			
27.	Wire crates (3x3x3) (at only those camp near river action and reserve stock exists)	No	100			

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

SR. #	ITEM	UNIT	Total Required Qty	SR. #	ITEM	UNIT	Total Required Qty
1.	Shouldari / Tent	No	01	2.	Walke Talkie Set	Sets	01
3.	Chairs	No	06	4.	Raincoats	No	10
5.	Table	No	01	6.	LED flood light	No	10

7.	Generator (2-3KVA)	No	01	8.	Extension Cable (10 ft)	No	02
9.	Pedestal Fans	No	01	10.	Rechargeable torches	No	20
11.	Charpois	No	02	12.	Kassi	No	20
13.	Symbolic Jackets	No	50	14.	Axes	No	20
15.	Water Coller	No	01	16.	G.I Buckets	No	05
17.	Portable umbrella	No	02	18.	7/44 cable	Feet	500
19.	Utensils (10 person serving)	No	01	20.	Sutli	Kg	02
21.	Jute/Plastic bags	No	500	22.	Sewing Needles	No	10

Machinery, Camps and Watching Establishment Requirements by Flood Level:

Flood Level	Flood Camp	Excavators	Trolleys	Dumpers	Tractor with Front blade	Beldars (per mile)	Mate
Normal	1 per 15 mile reach	As per recommendations (ii)		-	1 per 15 mile reach	1 person/2 mile (1 Shift)	1 mate per 12 beldars
Low						1 person/mile (1 Shift)	
Medium	1 per 7 mile reach	1 per 7 mile reach	4 per 7 mile reach	2 per 7 mile reach	1 per 7 mile reach	2 person/mile/shift (2 Shift)	
High							
Very High	1 per 5 mile reach	1 per 5 mile reach	4 per 5 mile reach	2 per 5 mile reach	1 per 5 mile reach	5 person/mile/shift (3 Shift)	
Exp. High		2 per 5 mile reach			2 per 5 mile reach		

***Chowkidar:** 1 per flood camp (24/7) for all flood levels.

Minimum Requirement of Machinery at Breaching Section

At each breaching section there should be arrangement of two (2) Excavators, one (1) Dozer and three (3) Dumpers at Exceptionally high flood.

Recommendations for Operation During Flood

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

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

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

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

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

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

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

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

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

SE MBN

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

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

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

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

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

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DG Khan

(Abdul Qayyum Qadume) 19/01
Member / SE, Mailsi Canal
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