

Municipal Corporation of Gurugram (MCG)

Monsoon Preparedness & Flood Hotspot Management

WARD-WISE FLOOD HOTSPOT REPORT

For Use by Junior Engineers (JEs) at Ward Level

Ward Summary

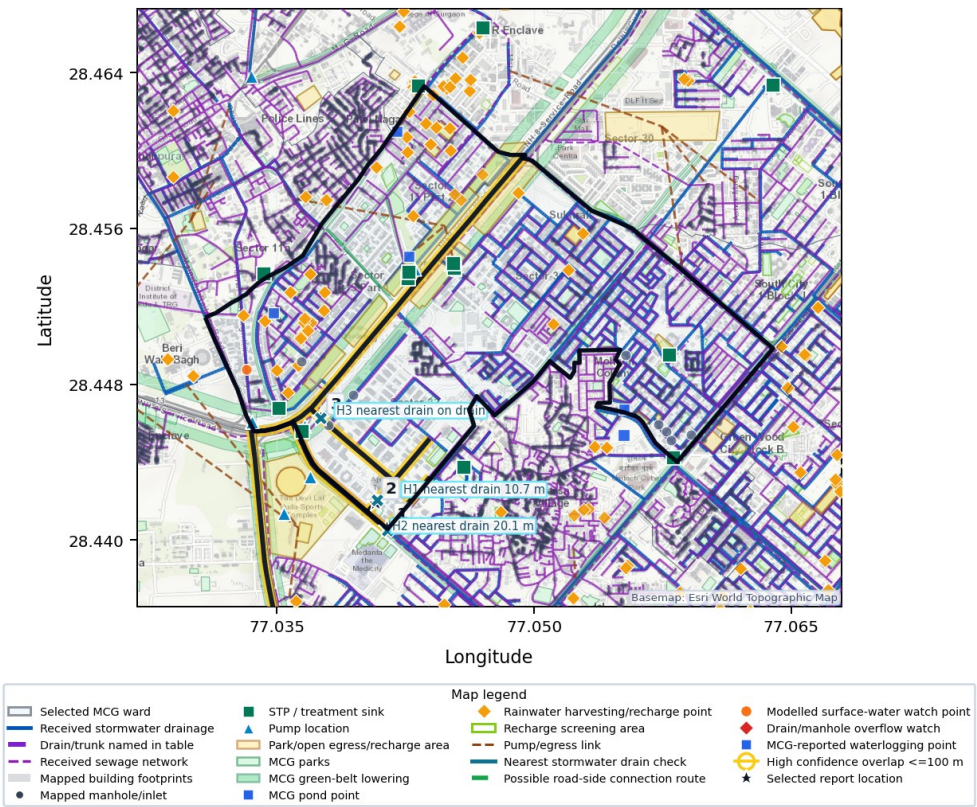
WARD NUMBER	MCG IDENTIFIED LOCATIONS	MODEL IDENTIFIED LOCATIONS
13	5	12
Ward Name / Area Covered	Kirti nagar; GreenWood City; Prem Puri Jharsa; SECTOR 15; Sector 31; Sector 32A; Sector 40	
Zone	Zone VI	
Division	Zone VI	
Assigned JE	Rakesh Kumar 9810954286	
Report Date	29 July 2026	
Approved FloodAstra baseline	Approved June 5 current-assets baseline	
Utility assets	MCG/GMDA utility assets supplied up to 5 June 2026	
Rainfall used	July 2025 reported event, 133 mm / 12 h	
Hydraulic model	Apple MLX GPU; continuous city surface; roads, buildings, storm drains, sewers, manholes and recharge structures coupled dynamically	
Published depth range	0 to 1.50 m from field-reportable cells only	
Desilting / work status	8 mapped MCG work-status segments overlap this ward; 8 marked completed; 0 marked in progress. Confirm current completion with MCG field records.	
Priority action	Inspect drain/manhole overflow watch points, inlet condition, desilting status and downstream flow continuity	

Official Ward Contact Roster

Role	Supplied MCG contact
Councillor	Shri Pawan Kumar BJP 9818890184
Executive Engineer (EE)	Sh. Sandeep Kumar Dhundhwal, EE, 9910329207
Assistant Engineer (AE)	Sh. Ashish Chhachhia, AE, 9717104355
JE Development	Rakesh Kumar 9810954286
JE Enforcement	Ankit Kapoor 8802588667
JE Horticulture	Gulshan Yadav 9821395258; Mukesh Kumar 9821395223
JE Electrical	Devender 9999397898

Ward Action Map

Ward 13: drainage, sewage and hotspot action map



Blue lines are received stormwater drains. Purple dashed lines are received sewage lines. Green areas are MCG parks/green-belt lowering assets; blue squares are MCG pond points; amber diamonds are rainwater-harvesting/recharge points. Gray building footprints are used only to avoid suggesting routes through buildings. Cyan lines show the hotspot-to-stormwater-drain check. Green dashed lines show a possible road-side route where one was found.

This ward map shows 6,571 stormwater line segments, 18,363 sewage line segments, 4,106 manhole/inlet points, 19 STP/treatment points, 387 MCG park polygons, 2 pond points, 98 green-belt lowering areas and 472 rainwater-harvesting/recharge points from the approved GIS packet.

Field Action Summary

#	Location	Expected water	Mapped drain option	First field action
H1	Back side Govt. School, Islampur	maximum modelled depth 0.84 m; average within 50 m 0.30 m; water remains above 15 cm for 9.2 h.	map label 510 (storm) near Back side Govt. School, Islampur is 10.7 m away. The mapped roadside option is 10.7 m long and is not yet field-approved.	Check water backing up at the manhole; verify trunk drain level before pumping.
H2	Back side Govt. School, Islampur	maximum modelled depth 0.67 m; average within 50 m 0.60 m; water remains above 15 cm for 9.5 h.	mapped stormwater drain near Back side Govt. School, Islampur is 20.1 m away. The mapped roadside option is 42.9 m long and is not yet field-approved.	Check water backing up at the manhole; verify trunk drain level before pumping.
H3	Near House No.239 Sector-15 Part-I	maximum modelled depth 0.56 m; average within 50 m 0.30 m; water remains above 15 cm for 9.6 h.	mapped stormwater drain near Near House No.239 Sector-15 Part-I is 0.60 m away. The mapped roadside option is 3.80 m long and is not yet field-approved.	Check water backing up at the manhole; verify trunk drain level before pumping.

Complete Ward Location Register

No.	Source	Location	Lat	Lon	Expected water	How to use this point
R0 1	MCG	Sector 15 part II along citizen park	28.45457	77.04267	0.08 m; above 15 cm for 6 min	Confirm at this location
R0 2	MCG	Bandh road, specifically near H no 1094 Sec 15 Part -II	28.46098	77.04201	0.45 m; above 15 cm for 13 min	Confirm at this location
R0 3	MCG	Jubli park sector 31	28.45382	77.04545	0.28 m; above 15 cm for 16 min	Confirm at this location
R0 4	MCG	Sector 40 house no 1114	28.44672	77.05523	0.30 m; above 15 cm for 15 min	Confirm at this location
R0 5	MCG	Near House No.239 Sector-15 Part-I	28.45168	77.03481	0.32 m; above 15 cm for 9 min	Confirm at this location
M0 1	Overflow watch	Back side Govt. School, Islampur	28.44062	77.04142	0.84 m; above 15 cm for 9.2 h	Confirm at this location

No.	Source	Location	Lat	Lon	Expected water	How to use this point
M0 2	Overflow watch	Back side Govt. School, Islampur	28.44191	77.04072	0.67 m; above 15 cm for 9.5 h	Confirm at this location
M0 3	Overflow watch	Near House No.239 Sector-15 Part-I	28.44625	77.03753	0.56 m; above 15 cm for 9.6 h	Confirm at this location
M0 4	Overflow watch	Sec 39 E Pocket back side cyber park	28.44540	77.05917	0.57 m; above 15 cm for 4.8 h	Confirm at this location
M0 5	Overflow watch	Near House No.239 Sector-15 Part-I	28.44591	77.03800	0.73 m; above 15 cm for 11.1 h	Confirm at this location
M0 6	Model depth	Court road	28.44876	77.03320	1.04 m; above 15 cm for 10.8 h	Confirm at this location
M0 7	Overflow watch	Near House No.239 Sector-15 Part-I	28.44743	77.03947	0.60 m; above 15 cm for 8.1 h	Confirm at this location
M0 8	Overflow watch	Near House No.239 Sector-15 Part-I	28.44917	77.03642	0.73 m; above 15 cm for 10.7 h	Confirm at this location
M0 9	Overflow watch	Sec 39 E Pocket back side cyber park	28.44557	77.05769	0.36 m; above 15 cm for 8.6 h	Confirm at this location
M1 0	Overflow watch	Sector 40 house no 1114	28.44951	77.05532	0.79 m; above 15 cm for 11.2 h	Confirm at this location
M1 1	Overflow watch	Sec 39 E Pocket back side cyber park	28.44512	77.05797	0.30 m; above 15 cm for 4.4 h	Confirm at this location
M1 2	Overflow watch	Sec 39 E Pocket back side cyber park	28.44594	77.05724	0.40 m; above 15 cm for 9.8 h	Confirm at this location

Hotspot-wise Details

HOTSPOT 1

1. Hotspot Identification

Hotspot Name	Back side Govt. School, Islampur
Latitude / Longitude	28.44062, 77.04142

Open location	Use the link below to open this point on Google Maps.
---------------	---

Google Map Links for Hotspot and Assets

Use these links for the field pin, nearby drainage/sewage assets and mapped support assets used in this report.

[H1: hotspot pin](#)

[H1: mapped receiving stormwater drain - map label 510 \(10.7 m\)](#)

[H1: nearest mapped stormwater line \(0.00 m\)](#)

[H1: mapped action drain - map label SWD-LINE-1090 \(0.00 m\)](#)

[H1: mapped main stormwater drain \(7.00 m\)](#)

[H1: nearest mapped sewage line \(8.90 m\)](#)

[H1: possible roadside connection route](#)

[H1: mapped pump - TDL Stadium; capacity 50.0 L/s \(528 m\)](#)

[H1: open/green receptor or park \(257 m\)](#)

[H1: MCG park - 1025; ward 12 \(58.6 m\)](#)

[H1: MCG pond - "Jharsa \(Khasra No. 142, Backside of cyber park\)" \(1,450 m\)](#)

[H1: MCG green-belt lowering area - Existing \(4.50 m\)](#)

[H1: rainwater-harvesting/recharge point - Sector - 39,in green belt near Community center \(recorded as non-functional\) \(107 m\)](#)

[H1: groundwater recharge screening area \(56.8 m\)](#)

[H1: nearest STP/treatment point - MICRO STP H.NO.197 SECTOR-39; capacity 50.0 KLD \(559 m\)](#)

[H1: nearest manhole/inlet \(47.2 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.44062, 77.04142
Water concern	maximum modelled depth 0.84 m; average within 50 m 0.30 m; water remains above 15 cm for 9.2 h.
Nearest stormwater drain	map label 510 (storm) near Back side Govt. School, Islampur is 10.7 m away. The mapped roadside option is 10.7 m long and is not yet field-approved.
Roadside connection checks	Mapped roadside option: approximately 10.7 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 6.70 m and 4.10 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.

Nearby MCG sewage line	MCG sewage line is about 8.90 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Check water backing up at the manhole; verify trunk drain level before pumping.
Before monsoon	Inspect and desilt map label 510 (storm) near Back side Govt. School, Islampur (10.7 m) if silt/choking is seen.
Escalate if	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

2. Source

☐ MCG record	☒ Model-selected point
-------------------------------------	--

3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
------------------------------	---------------------------------	-------------------------------	---

4. Flood Timing and Depth

At H1, record observed water depth, time, inlet condition and receiving-drain level. Compare these with the model estimate before work begins.

Field measure	Unit	Model estimate	Selected rainfall
Ponded water within 50 m	m ³	2,381 m ³	July 2025 rain
Time water remains above 15 cm	hours	9.2	July 2025 rain
Time to exceed 15 cm after rain starts	hours	3.4	July 2025 rain
Maximum depth at this point	m	0.84 m	July 2025 rain
Average depth within 50 m	m	0.30 m	July 2025 rain
Maximum modelled flow speed	m/s	0.02 m/s	July 2025 rain

H1: record observed water depth and time, then photograph the inlet and receiving-drain level before work starts.

5. Recommendations

a. Drainage and Sewage Checks

Stormwater check: map label 510 (storm) near Back side Govt. School, Islampur is about 10.7 m away and the mapped roadside option is about 10.7 m long. Open the inlet and receiving-drain access point, then use a clean-water flow test or observe the next rainfall to confirm that water reaches the drain without backing up. Sewage check: an MCG sewage line is about 8.90 m away. Inspect the nearest manhole for rising water, but never use the sewage line as a stormwater or pump outlet.

b. Possible New Stormwater Connection

Mapped option: approximately 10.7 m of roadside connection to map label 510 (storm) near Back side Govt. School, Islampur, which is 10.7 m away directly. Before sanctioning work, measure the source and receiving-drain levels, confirm continuous fall toward the drain, mark utility crossings and check that the

receiving drain can accept the added flow. Do not construct if any one of these checks fails.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to map label 510 (storm) near Back side Govt. School, Islampur. Record silt depth and the free opening at each point. Desilt only where silt narrows the waterway or a clean-water flow test shows restriction; clear the full restricted reach and take before/after photographs.

d. Temporary Pump Decision

S.No.	Pump Location	Discharge Point	Pump Capacity / Type
1	H1 / local low point	Nearest mapped pump: TDL Stadium; capacity 50.0 L/s; discharge point to be confirmed at site.	Confirm at site
2	Alternate discharge check for H1	Do not discharge to the nearby sewage line (8.90 m from H1); check safe storm drain/open area after checking route to map label 510 (storm) near Back side Govt. School, Islampur (10.7 m).	Use only if site access and discharge permission are clear for H1.
3	Gravity route to map label 510 (storm) near Back side Govt. School, Islampur (10.7 m)	Use gravity only if water from H1 can visibly enter map label 510 (storm) near Back side Govt. School, Islampur (10.7 m) after inlet and drain-level check.	No pump needed only if flow into map label 510 (storm) near Back side Govt. School, Islampur (10.7 m) is confirmed at site.

e. New Drain or Inlet Decision

For H1, nearest main stormwater drain is 7 m away; check road inlet level, drain level and downstream discharge before routing or pumping. Map screening used depth/persistence/drain return, 50 m local flood-volume estimate, screened park/open receptors, storm-drain proximity, sewer proximity caution, and site visit constraints. H1: survey the mapped 10.7 m roadside option to map label 510 (storm) near Back side Govt. School, Islampur, which is 10.7 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.

f. Rainwater Harvesting Check

Nearby open/receptor area: distance 257 m; possible temporary storage 23,364 m³; class priority. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 23,364 m³; Check slope, access, permission and overflow route.

6. Site Visit Checklist for H1

Site check	Yes	No	Notes
Waterlogging seen at this pin	☐	☐	H1: 28.44062, 77.04142
Nearest drain/trunk visible	☐	☐	map label 510 (storm) near Back side Govt. School, Islampur (10.7 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 10.7 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 6.70 m and 4.10 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Levels at both ends measured	☐	☐	Record source and receiving-drain levels; confirm continuous fall and a lower downstream water level.
Inlet/manhole blockage checked	☐	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Silt visible in drain	☐	☐	Check map label 510 (storm) near Back side Govt. School, Islampur (10.7 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 8.90 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
Safe pump discharge route available	☐	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Road/access safety checked	☐	☐	4 m from Chowdhury Baktawar Singh Road (secondary)
Photos taken and attached	☐	☐	Photo label should include H1.
Needs escalation to senior engineer	☐	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

7. Field Decision Box for H1

Decision	Select	Field note
Clean inlet/blockage immediately	[]	Check water backing up at the manhole; verify trunk drain level before pumping.
Inspect/desilt stormwater drain	[]	Inspect and desilt map label 510 (storm) near Back side Govt. School, Islampur (10.7 m) if silt/choking is seen.
Survey a new roadside connection	[]	H1: survey the mapped 10.7 m roadside option to map label 510 (storm) near Back side Govt. School, Islampur, which is 10.7 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.
Use a temporary pump	[]	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Escalate or restrict access	[]	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

HOTSPOT 2

1. Hotspot Identification

Hotspot Name	Back side Govt. School, Islampur
Latitude / Longitude	28.44191, 77.04072
Open location	Use the link below to open this point on Google Maps.

Google Map Links for Hotspot and Assets

Use these links for the field pin, nearby drainage/sewage assets and mapped support assets used in this report.

[H2: hotspot pin](#)

[H2: mapped receiving stormwater drain \(20.1 m\)](#)

[H2: nearest mapped stormwater line \(0.00 m\)](#)

[H2: mapped action drain - map label SWD-LINE-1080 \(0.00 m\)](#)

[H2: mapped main stormwater drain \(71.4 m\)](#)

[H2: nearest mapped sewage line \(6.20 m\)](#)

[H2: possible roadside connection route](#)

[H2: mapped pump - TDL Stadium; capacity 50.0 L/s \(400 m\)](#)

[H2: open/green receptor or park \(144 m\)](#)

[H2: MCG park - SECTOR 32; ward 13 \(28.8 m\)](#)

[H2: MCG pond - "Jharsa \(Khasra No. 142, Backside of cyber park\)" \(1,470 m\)](#)

[H2: MCG green-belt lowering area - Existing \(51.7 m\)](#)

[H2: rainwater-harvesting/recharge point - Sector - 39,in green belt near Community center \(recorded as non-functional\) \(170 m\)](#)

[H2: groundwater recharge screening area \(143 m\)](#)

[H2: nearest STP/treatment point - MICRO STP H.NO.197 SECTOR-39; capacity 50.0 KLD \(547 m\)](#)

[H2: nearest manhole/inlet \(177 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.44191, 77.04072
Water concern	maximum modelled depth 0.67 m; average within 50 m 0.60 m; water remains above 15 cm for 9.5 h.

Nearest stormwater drain	mapped stormwater drain near Back side Govt. School, Islampur is 20.1 m away. The mapped roadside option is 42.9 m long and is not yet field-approved.
Roadside connection checks	Mapped roadside option: approximately 42.9 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 31.1 m and 11.8 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Nearby MCG sewage line	MCG sewage line is about 6.20 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Check water backing up at the manhole; verify trunk drain level before pumping.
Before monsoon	Inspect and desilt mapped stormwater drain near Back side Govt. School, Islampur (20.1 m) if silt/choking is seen.
Escalate if	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

2. Source

☐ MCG record	☒ Model-selected point
-------------------------------------	--

3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
------------------------------	---------------------------------	-------------------------------	---

4. Flood Timing and Depth

At H2, record observed water depth, time, inlet condition and receiving-drain level. Compare these with the model estimate before work begins.

Field measure	Unit	Model estimate	Selected rainfall
Ponded water within 50 m	m³	1,945 m³	July 2025 rain
Time water remains above 15 cm	hours	9.5	July 2025 rain
Time to exceed 15 cm after rain starts	hours	4.2	July 2025 rain
Maximum depth at this point	m	0.67 m	July 2025 rain
Average depth within 50 m	m	0.60 m	July 2025 rain
Maximum modelled flow speed	m/s	0.00 m/s	July 2025 rain

H2: record observed water depth and time, then photograph the inlet and receiving-drain level before work starts.

5. Recommendations

a. Drainage and Sewage Checks

Stormwater check: mapped stormwater drain near Back side Govt. School, Islampur is about 20.1 m away and the mapped roadside option is about 42.9 m long. Open the inlet and receiving-drain access point, then

use a clean-water flow test or observe the next rainfall to confirm that water reaches the drain without backing up. Sewage check: an MCG sewage line is about 6.20 m away. Inspect the nearest manhole for rising water, but never use the sewage line as a stormwater or pump outlet.

b. Possible New Stormwater Connection

Mapped option: approximately 42.9 m of roadside connection to mapped stormwater drain near Back side Govt. School, Islampur, which is 20.1 m away directly. Before sanctioning work, measure the source and receiving-drain levels, confirm continuous fall toward the drain, mark utility crossings and check that the receiving drain can accept the added flow. Do not construct if any one of these checks fails.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to mapped stormwater drain near Back side Govt. School, Islampur. Record silt depth and the free opening at each point. Desilt only where silt narrows the waterway or a clean-water flow test shows restriction; clear the full restricted reach and take before/after photographs.

d. Temporary Pump Decision

S.No.	Pump Location	Discharge Point	Pump Capacity / Type
1	H2 / local low point	Nearest mapped pump: TDL Stadium; capacity 50.0 L/s; discharge point to be confirmed at site.	Confirm at site
2	Alternate discharge check for H2	Do not discharge to the nearby sewage line (6.20 m from H2); check safe storm drain/open area after checking route to mapped stormwater drain near Back side Govt. School, Islampur (20.1 m).	Use only if site access and discharge permission are clear for H2.
3	Gravity route to mapped stormwater drain near Back side Govt. School, Islampur (20.1 m)	Use gravity only if water from H2 can visibly enter mapped stormwater drain near Back side Govt. School, Islampur (20.1 m) after inlet and drain-level check.	No pump needed only if flow into mapped stormwater drain near Back side Govt. School, Islampur (20.1 m) is confirmed at site.

e. New Drain or Inlet Decision

For H2, inspect the nearest stormwater drain, inlet blockage, silt and downstream continuity. Use a pump route only if flow into mapped stormwater drain near Back side Govt. School, Islampur (20.1 m) cannot be restored. H2: survey the mapped 42.9 m roadside option to mapped stormwater drain near Back side Govt. School, Islampur, which is 20.1 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.

f. Rainwater Harvesting Check

Nearby open/receptor area: distance 144 m; possible temporary storage 23,364 m³; class priority. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 23,364 m³; Check slope, access, permission and overflow route.

6. Site Visit Checklist for H2

Site check	Yes	No	Notes
Waterlogging seen at this pin	☐	☐	H2: 28.44191, 77.04072
Nearest drain/trunk visible	☐	☐	mapped stormwater drain near Back side Govt. School, Islampur (20.1 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 42.9 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 31.1 m and 11.8 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Levels at both ends measured	☐	☐	Record source and receiving-drain levels; confirm continuous fall and a lower downstream water level.
Inlet/manhole blockage checked	☐	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Silt visible in drain	☐	☐	Check mapped stormwater drain near Back side Govt. School, Islampur (20.1 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 6.20 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
Safe pump discharge route available	☐	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Road/access safety checked	☐	☐	69 m from Chowdhury Baktawar Singh Road (secondary)
Photos taken and attached	☐	☐	Photo label should include H2.
Needs escalation to senior engineer	☐	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

7. Field Decision Box for H2

Decision	Select	Field note
Clean inlet/blockage immediately	[]	Check water backing up at the manhole; verify trunk drain level before pumping.
Inspect/desilt stormwater drain	[]	Inspect and desilt mapped stormwater drain near Back side Govt. School, Islampur (20.1 m) if silt/choking is seen.
Survey a new roadside connection	[]	H2: survey the mapped 42.9 m roadside option to mapped stormwater drain near Back side Govt. School, Islampur, which is 20.1 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.
Use a temporary pump	[]	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Escalate or restrict access	[]	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

HOTSPOT 3

1. Hotspot Identification

Hotspot Name	Near House No.239 Sector-15 Part-I
Latitude / Longitude	28.44625, 77.03753
Open location	Use the link below to open this point on Google Maps.

Google Map Links for Hotspot and Assets

Use these links for the field pin, nearby drainage/sewage assets and mapped support assets used in this report.

[H3: hotspot pin](#)

[H3: mapped receiving stormwater drain \(0.60 m\)](#)

[H3: nearest mapped stormwater line \(0.60 m\)](#)

[H3: mapped action drain - map label SWD-LINE-1082 \(0.60 m\)](#)

[H3: mapped main stormwater drain \(78.7 m\)](#)

[H3: nearest mapped sewage line \(0.70 m\)](#)

[H3: possible roadside connection route](#)

[H3: mapped pump - Rajiv Chowk, Sector-32; capacity 11.7 L/s \(98.9 m\)](#)

[H3: open/green receptor or park \(161 m\)](#)

[H3: MCG park - SECTOR 38; ward 12 \(200 m\)](#)

[H3: MCG pond - "Jharsa \(Khasra No. 142, Backside of cyber park\)" \(1,733 m\)](#)

[H3: MCG green-belt lowering area - Proposed \(0.00 m\)](#)

[H3: rainwater-harvesting/recharge point - Near h.no-74, Sector 15 \(recorded as functional\) \(235 m\)](#)

[H3: groundwater recharge screening area \(161 m\)](#)

[H3: nearest STP/treatment point - SEWER DISPOSAL, RAJEEV CHOWK ,SEC.32 \(128 m\)](#)

[H3: nearest manhole/inlet \(241 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.44625, 77.03753
Water concern	maximum modelled depth 0.56 m; average within 50 m 0.30 m; water remains above 15 cm for 9.6 h.

Nearest stormwater drain	mapped stormwater drain near Near House No.239 Sector-15 Part-I is 0.60 m away. The mapped roadside option is 3.80 m long and is not yet field-approved.
Roadside connection checks	Mapped roadside option: approximately 3.80 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 2.10 m and 1.60 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Nearby MCG sewage line	MCG sewage line is about 0.70 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Check water backing up at the manhole; verify trunk drain level before pumping.
Before monsoon	Inspect and desilt mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m) if silt/choking is seen.
Escalate if	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

2. Source

☐ MCG record	☒ Model-selected point
-------------------------------------	--

3. Field Priority Level

☐ LOW	☐ MEDIUM	☐ HIGH	☒ VERY HIGH
------------------------------	---------------------------------	-------------------------------	---

4. Flood Timing and Depth

At H3, record observed water depth, time, inlet condition and receiving-drain level. Compare these with the model estimate before work begins.

Field measure	Unit	Model estimate	Selected rainfall
Ponded water within 50 m	m³	1,706 m³	July 2025 rain
Time water remains above 15 cm	hours	9.6	July 2025 rain
Time to exceed 15 cm after rain starts	hours	5.2	July 2025 rain
Maximum depth at this point	m	0.56 m	July 2025 rain
Average depth within 50 m	m	0.30 m	July 2025 rain
Maximum modelled flow speed	m/s	0.01 m/s	July 2025 rain

H3: record observed water depth and time, then photograph the inlet and receiving-drain level before work starts.

5. Recommendations

a. Drainage and Sewage Checks

Stormwater check: mapped stormwater drain near Near House No.239 Sector-15 Part-I is about 0.60 m away and the mapped roadside option is about 3.80 m long. Open the inlet and receiving-drain access point,

then use a clean-water flow test or observe the next rainfall to confirm that water reaches the drain without backing up. Sewage check: an MCG sewage line is about 0.70 m away. Inspect the nearest manhole for rising water, but never use the sewage line as a stormwater or pump outlet.

b. Possible New Stormwater Connection

Mapped option: approximately 3.80 m of roadside connection to mapped stormwater drain near Near House No.239 Sector-15 Part-I, which is 0.60 m away directly. Before sanctioning work, measure the source and receiving-drain levels, confirm continuous fall toward the drain, mark utility crossings and check that the receiving drain can accept the added flow. Do not construct if any one of these checks fails.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to mapped stormwater drain near Near House No.239 Sector-15 Part-I. Record silt depth and the free opening at each point. Desilt only where silt narrows the waterway or a clean-water flow test shows restriction; clear the full restricted reach and take before/after photographs.

d. Temporary Pump Decision

S.No.	Pump Location	Discharge Point	Pump Capacity / Type
1	H3 / local low point	Nearest mapped pump: Rajiv Chowk, Sector-32; capacity 11.7 L/s; likely discharge: MCG-DESILT-SEWER-28697.	Confirm at site
2	Alternate discharge check for H3	Do not discharge to the nearby sewage line (0.70 m from H3); check safe storm drain/open area after checking route to mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m).	Use only if site access and discharge permission are clear for H3.
3	Gravity route to mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m)	Use gravity only if water from H3 can visibly enter mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m) after inlet and drain-level check.	No pump needed only if flow into mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m) is confirmed at site.

e. New Drain or Inlet Decision

For H3, inspect the nearest stormwater drain, inlet blockage, silt and downstream continuity. Use a pump route only if flow into mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m) cannot be restored. H3: survey the mapped 3.80 m roadside option to mapped stormwater drain near Near House No.239 Sector-15 Part-I, which is 0.60 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.

f. Rainwater Harvesting Check

Nearby open/receptor area: distance 161 m; possible temporary storage 3,759 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 3,759 m³; Check slope, access, permission and overflow route.

6. Site Visit Checklist for H3

Site check	Yes	No	Notes
Waterlogging seen at this pin	☐	☐	H3: 28.44625, 77.03753
Nearest drain/trunk visible	☐	☐	mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 3.80 m from this point to the receiving stormwater drain. The map follows roads and avoids mapped buildings. The route starts and ends at the nearest road points, about 2.10 m and 1.60 m from the mapped locations. Before approval, survey the level at both ends, confirm continuous fall toward the drain, mark every utility crossing and check that the receiving drain can accept flow. Do not construct if any check fails.
Levels at both ends measured	☐	☐	Record source and receiving-drain levels; confirm continuous fall and a lower downstream water level.
Inlet/manhole blockage checked	☐	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Silt visible in drain	☐	☐	Check mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 0.70 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
Safe pump discharge route available	☐	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Road/access safety checked	☐	☐	47 m from secondary_link
Photos taken and attached	☐	☐	Photo label should include H3.
Needs escalation to senior engineer	☐	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.

7. Field Decision Box for H3

Decision	Select	Field note
Clean inlet/blockage immediately	☐	Check water backing up at the manhole; verify trunk drain level before pumping.
Inspect/desilt stormwater drain	☐	Inspect and desilt mapped stormwater drain near Near House No.239 Sector-15 Part-I (0.60 m) if silt/choking is seen.
Survey a new roadside connection	☐	H3: survey the mapped 3.80 m roadside option to mapped stormwater drain near Near House No.239 Sector-15 Part-I, which is 0.60 m away directly. Measure levels at the source and receiving drain, confirm continuous fall, mark utilities and verify that the drain has capacity. Approve construction only when all four checks pass.
Use a temporary pump	☐	Keep pump ready only after checking manhole/trunk level; pump capacity to be checked at site.
Escalate or restrict access	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.