

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

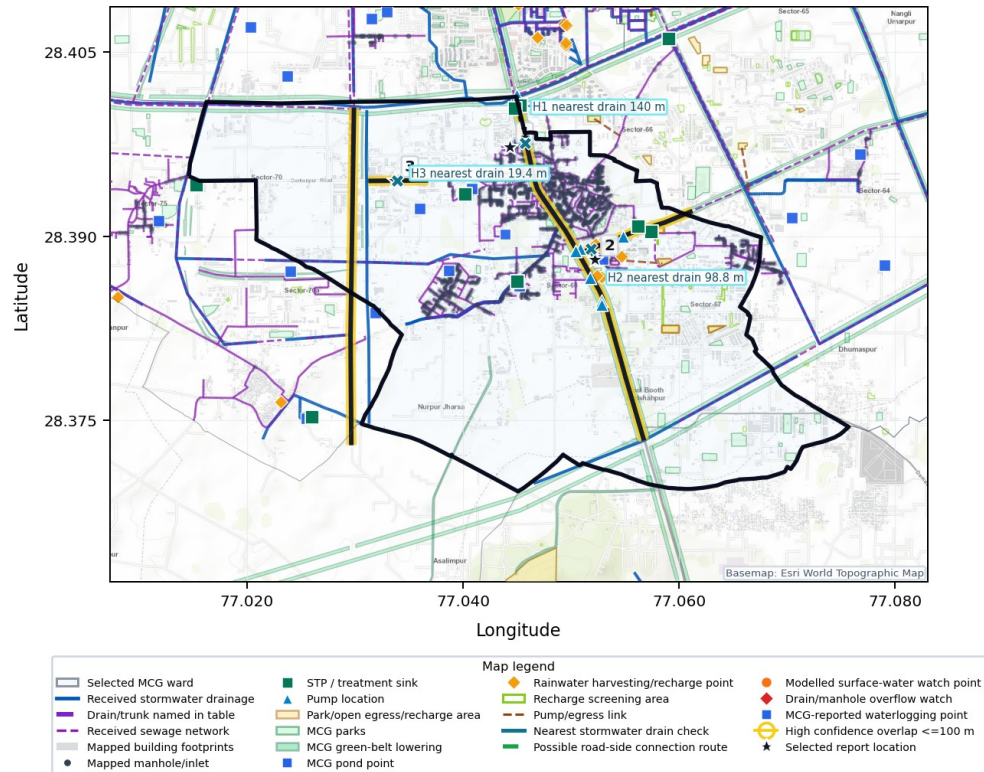
WARD NUMBER	MCG IDENTIFIED LOCATIONS	MODEL IDENTIFIED LOCATIONS
18	3	3
Ward Name / Area Covered	Badshahpur Village; Nurpur Jharsa; Ramgarh ki Dhani(Badshahpur village); Sector 67; Sector 68; Sector 69; Sector 70	
Zone	Zone II	
Division	Zone II	
Assigned JE	Rahul Khan 9821395267	
Report Date	29 July 2026	
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	11 mapped MCG work-status segments overlap this ward; 3 marked completed; 7 marked in progress; 1 other/unspecified. 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	Smt Jyoti Yadav BJP 9899539853
Executive Engineer (EE)	Sh. Pardeep Kumar, EE, 9821395225
Assistant Engineer (AE)	Sh. Manoj Ahlawat, AE, 9999965536
JE Development	Rahul Khan 9821395267
JE Enforcement	Kapil Yadav 9728822849
JE Horticulture	Priyadeep 8684870075
JE Electrical	Mohmmamd Azam 9467395603

Ward Action Map

Ward 18: 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 790 stormwater line segments, 4,078 sewage line segments, 1,392 manhole/inlet points, 12 STP/treatment points, 159 MCG park polygons, 17 pond points, 81 green-belt lowering areas and 64 rainwater-harvesting/recharge points from the approved GIS packet.

Field Action Summary

#	Location	Expected water	Mapped drain option	First field action
H1	Vatika Chowk	maximum modelled depth 0.47 m; average within 50 m 0.40 m; water remains above 15 cm for 3.4 h.	map label 27870 (storm) near Vatika Chowk is 140 m away. No field-approved connection route is recorded.	Check water backing up at the manhole; verify trunk drain level before pumping.
H2	RR Colony	maximum modelled depth 0.73 m; average within 50 m 0.60 m; water remains above 15 cm for 8.5 h.	map label 485 (storm) near RR Colony is 98.8 m away. No field-approved connection route is recorded.	Clear storm inlet; also check nearby sewage manhole overflow.
H3	Khota Colony	maximum modelled depth 0.49 m; average within 50 m 0.40 m; water remains above 15 cm for 11.0 h.	mapped stormwater drain near Khota Colony is 19.4 m away. The mapped roadside option is 21.7 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	Vatika Chowk	28.40042	77.04485	0.25 m; above 15 cm for 49 min	Confirm at this location
R0 2	MCG	Khota Colony	28.39014	77.04389	0.52 m; above 15 cm for 2.8 h	Confirm at this location
R0 3	MCG	RR Colony	28.38812	77.05294	0.54 m; above 15 cm for 4.4 h	Supported by model within 75 m
M0 1	Overflow watch	Vatika Chowk	28.39729	77.04432	0.47 m; above 15 cm for 3.4 h	Confirm at this location
M0 2	Model depth	RR Colony	28.38812	77.05218	0.73 m; above 15 cm for 8.5 h	Supported by MCG report within 75 m
M0 3	Overflow watch	Khota Colony	28.39454	77.03369	0.49 m; above 15 cm for 11.0 h	Confirm at this location

Hotspot-wise Details

HOTSPOT 1

1. Hotspot Identification

Hotspot Name	Vatika Chowk
Latitude / Longitude	28.39729, 77.04432
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 27870 \(140 m\)](#)

[H1: nearest mapped stormwater line - map label 27870 \(140 m\)](#)

[H1: mapped action drain \(154 m\)](#)

[H1: mapped main stormwater drain \(154 m\)](#)

[H1: nearest mapped sewage line \(0.10 m\)](#)

[H1: mapped pump - Vatika Chowk, Ch. 5+033 Vatika Chowk underpass; capacity 23.3 L/s \(471 m\)](#)

[H1: open/green receptor or park \(746 m\)](#)

[H1: MCG park - Sector 66; ward 15-18 \(264 m\)](#)

[H1: MCG pond - Badshahpur Pond Darbaripur Road \(513 m\)](#)

[H1: MCG green-belt lowering area - Proposed \(93.9 m\)](#)

[H1: rainwater-harvesting/recharge point - Badshapur Community Center \(recorded as non-functional\) \(179 m\)](#)

[H1: groundwater recharge screening area \(271 m\)](#)

[H1: nearest STP/treatment point - DISPOSAL RHS BADHSAPUR \(350 m\)](#)

[H1: nearest manhole/inlet \(0.10 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.39729, 77.04432
-------	--------------------

Water concern	maximum modelled depth 0.47 m; average within 50 m 0.40 m; water remains above 15 cm for 3.4 h.
Nearest stormwater drain	map label 27870 (storm) near Vatika Chowk is 140 m away. No field-approved connection route is recorded.
Roadside connection checks	No roadside connection route has been mapped without crossing a building. Before proposing work, survey a road alignment, measure the level at both ends, mark utilities and confirm continuous fall toward a stormwater drain that can accept flow.
Nearby MCG sewage line	MCG sewage line is at this point. 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 27870 (storm) near Vatika Chowk (140 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	1,915 m ³	July 2025 rain
Time water remains above 15 cm	hours	3.4	July 2025 rain
Time to exceed 15 cm after rain starts	hours	10.1	July 2025 rain
Maximum depth at this point	m	0.47 m	July 2025 rain
Average depth within 50 m	m	0.40 m	July 2025 rain
Maximum modelled flow speed	m/s	0.01 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 27870 (storm) near Vatika Chowk is about 140 m away, but no roadside connection is mapped. Trace the inlet to the drain and record any missing, crushed or blocked reach before

scheduling work. Sewage check: an MCG sewage line is at this point. Inspect the nearest manhole for rising water, but never use the sewage line as a stormwater or pump outlet.

b. Possible New Stormwater Connection

map label 27870 (storm) near Vatika Chowk is about 140 m away, but no building-free roadside route is mapped. Do not mark a new link construction-ready until the JE traces the alignment, measures levels at both ends, marks utilities, checks frontage/access and confirms that the receiving drain can accept flow.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to map label 27870 (storm) near Vatika Chowk. 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: Vatika Chowk, Ch. 5+033 Vatika Chowk underpass; capacity 23.3 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 (0.10 m from H1); check safe storm drain/open area after checking route to map label 27870 (storm) near Vatika Chowk (140 m).	Use only if site access and discharge permission are clear for H1.
3	Gravity route to map label 27870 (storm) near Vatika Chowk (140 m)	Use gravity only if water from H1 can visibly enter map label 27870 (storm) near Vatika Chowk (140 m) after inlet and drain-level check.	No pump needed only if flow into map label 27870 (storm) near Vatika Chowk (140 m) is confirmed at site.

e. New Drain or Inlet Decision

For H1, no screened pump/open receptor or main-drain drainage relief route within 50 m; field team should check a safe pump route. 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: map label 27870 (storm) near Vatika Chowk is 140 m away, but no building-free roadside route is mapped. Trace a road alignment, measure levels at both ends, mark utilities and confirm receiving-drain capacity before proposing construction.

f. Rainwater Harvesting Check

Nearby open/receptor area: distance 746 m; possible temporary storage 1,175 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible nearby storage: 1,175 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: 28.39729, 77.04432
Nearest drain/trunk visible	☐	☐	map label 27870 (storm) near Vatika Chowk (140 m)
Roadside connection route surveyed	☐	☐	No roadside connection route has been mapped without crossing a building. Before proposing work, survey a road alignment, measure the level at both ends, mark utilities and confirm continuous fall toward a stormwater drain that can accept flow.
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 27870 (storm) near Vatika Chowk (140 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is at this point. 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	☐	☐	136 m from 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 27870 (storm) near Vatika Chowk (140 m) if silt/choking is seen.
Survey a new roadside connection	☐	H1: map label 27870 (storm) near Vatika Chowk is 140 m away, but no building-free roadside route is mapped. Trace a road alignment, measure levels at both ends, mark utilities and confirm receiving-drain capacity before proposing construction.
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	RR Colony
Latitude / Longitude	28.38812, 77.05218
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 - map label 485 \(98.8 m\)](#)

[H2: nearest mapped stormwater line - map label 485 \(98.8 m\)](#)

[H2: mapped action drain \(98.8 m\)](#)

[H2: mapped main stormwater drain \(98.8 m\)](#)

[H2: nearest mapped sewage line \(3.90 m\)](#)

[H2: mapped pump - Badshahpur, Ch. 6+560 L/S, Kadarapur Mod \(Pillar no. 93\); capacity 11.7 L/s \(162 m\)](#)

[H2: open/green receptor or park - PARK; storage 297 m³ \(499 m\)](#)

[H2: MCG park - Badshapur; ward 18 \(83.3 m\)](#)

[H2: MCG pond - Badshapur Pond III Near Mandir \(725 m\)](#)

[H2: MCG green-belt lowering area - Proposed \(41.9 m\)](#)

[H2: rainwater-harvesting/recharge point - Badshapur Govt. Girls Senior Sec. School \(recorded as functional\) \(121 m\)](#)

[H2: groundwater recharge screening area - PARK; field-check \(499 m\)](#)

[H2: nearest STP/treatment point - DISPOSAL RR COLONY \(492 m\)](#)

[H2: nearest manhole/inlet \(75.4 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.38812, 77.05218
Water concern	maximum modelled depth 0.73 m; average within 50 m 0.60 m; water remains above 15 cm for 8.5 h.

Nearest stormwater drain	map label 485 (storm) near RR Colony is 98.8 m away. No field-approved connection route is recorded.
Roadside connection checks	No roadside connection route has been mapped without crossing a building. Before proposing work, survey a road alignment, measure the level at both ends, mark utilities and confirm continuous fall toward a stormwater drain that can accept flow.
Nearby MCG sewage line	MCG sewage line is about 3.90 m away. Check the nearest manhole for rising water. Do not discharge stormwater into this line.
First action at site	Clear storm inlet; also check nearby sewage manhole overflow.
Before monsoon	Inspect and desilt map label 485 (storm) near RR Colony (98.8 m) if silt/choking is seen.
Escalate if	Escalate if sewage manhole overflow is seen along with stormwater ponding.

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	m ³	1,778 m ³	July 2025 rain
Time water remains above 15 cm	hours	8.5	July 2025 rain
Time to exceed 15 cm after rain starts		Not resolved for this point	July 2025 rain
Maximum depth at this point	m	0.73 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: map label 485 (storm) near RR Colony is about 98.8 m away, but no roadside connection is mapped. Trace the inlet to the drain and record any missing, crushed or blocked reach before scheduling work. Sewage check: an MCG sewage line is about 3.90 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

map label 485 (storm) near RR Colony is about 98.8 m away, but no building-free roadside route is mapped. Do not mark a new link construction-ready until the JE traces the alignment, measures levels at both ends, marks utilities, checks frontage/access and confirms that the receiving drain can accept flow.

c. When to Desilt

Inspect the inlet, first upstream access point and first downstream access point leading to map label 485 (storm) near RR Colony. 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: Badshahpur, Ch. 6+560 L/S, Kadarpur Mod (Pillar no. 93); capacity 11.7 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 (3.90 m from H2); check safe storm drain/open area after checking route to map label 485 (storm) near RR Colony (98.8 m).	Use only if site access and discharge permission are clear for H2.
3	Gravity route to map label 485 (storm) near RR Colony (98.8 m)	Use gravity only if water from H2 can visibly enter map label 485 (storm) near RR Colony (98.8 m) after inlet and drain-level check.	No pump needed only if flow into map label 485 (storm) near RR Colony (98.8 m) is confirmed at site.

e. New Drain or Inlet Decision

For H2, no screened pump/open receptor or main-drain drainage relief route within 50 m; field team should check a safe pump route. 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. H2: map label 485 (storm) near RR Colony is 98.8 m away, but no building-free roadside route is mapped. Trace a road alignment, measure levels at both ends, mark utilities and confirm receiving-drain capacity before proposing construction.

f. Rainwater Harvesting Check

Nearby open/receptor area: PARK; distance 499 m; possible temporary storage 297 m³; class site visit. Use only after checking groundwater, water quality and ownership.

g. Temporary Diversion to Park or Pond

Possible receiving area: PARK; possible storage 297 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: 28.38812, 77.05218
Nearest drain/trunk visible	☐	☐	map label 485 (storm) near RR Colony (98.8 m)
Roadside connection route surveyed	☐	☐	No roadside connection route has been mapped without crossing a building. Before proposing work, survey a road alignment, measure the level at both ends, mark utilities and confirm continuous fall toward a stormwater drain that can accept flow.
Levels at both ends measured	☐	☐	Record source and receiving-drain levels; confirm continuous fall and a lower downstream water level.
Inlet/manhole blockage checked	☐	☐	Clear storm inlet; also check nearby sewage manhole overflow.
Silt visible in drain	☐	☐	Check map label 485 (storm) near RR Colony (98.8 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 3.90 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 if flow to map label 485 (storm) near RR Colony (98.8 m) does not start after inlet clearing.
Road/access safety checked	☐	☐	89 m from secondary
Photos taken and attached	☐	☐	Photo label should include H2.
Needs escalation to senior engineer	☐	☐	Escalate if sewage manhole overflow is seen along with stormwater ponding.

7. Field Decision Box for H2

Decision	Select	Field note
Clean inlet/blockage immediately	[]	Clear storm inlet; also check nearby sewage manhole overflow.
Inspect/desilt stormwater drain	[]	Inspect and desilt map label 485 (storm) near RR Colony (98.8 m) if silt/choking is seen.
Survey a new roadside connection	[]	H2: map label 485 (storm) near RR Colony is 98.8 m away, but no building-free roadside route is mapped. Trace a road alignment, measure levels at both ends, mark utilities and confirm receiving-drain capacity before proposing construction.
Use a temporary pump	[]	Keep pump ready only if flow to map label 485 (storm) near RR Colony (98.8 m) does not start after inlet clearing.
Escalate or restrict access	[]	Escalate if sewage manhole overflow is seen along with stormwater ponding.

HOTSPOT 3

1. Hotspot Identification

Hotspot Name	Khota Colony
Latitude / Longitude	28.39454, 77.03369
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 \(19.4 m\)](#)

[H3: nearest mapped stormwater line \(3.10 m\)](#)

[H3: mapped action drain - map label SWD-LINE-787 \(3.10 m\)](#)

[H3: mapped main stormwater drain \(382 m\)](#)

[H3: nearest mapped sewage line \(3.10 m\)](#)

[H3: possible roadside connection route](#)

[H3: mapped pump - Vatika Chowk, Ch. 5+033 Vatika Chowk underpass; capacity 23.3 L/s \(1,349 m\)](#)

[H3: MCG park - Sector 69; ward 18 \(215 m\)](#)

[H3: MCG pond - Badshahpur Pond Near Rain Basera \(332 m\)](#)

[H3: MCG green-belt lowering area - Existing \(242 m\)](#)

[H3: groundwater recharge screening area \(648 m\)](#)

[H3: nearest STP/treatment point - MICRO STP PARK BADSHAPUR JOHAD ,DARBARIPUR ROAD; capacity 50.0 KLD \(649 m\)](#)

[H3: nearest manhole/inlet \(239 m\)](#)

Scan QR code to open this hotspot on phone maps.



Hotspot Action Card

Go to	28.39454, 77.03369
Water concern	maximum modelled depth 0.49 m; average within 50 m 0.40 m; water remains above 15 cm for 11.0 h.
Nearest stormwater drain	mapped stormwater drain near Khota Colony is 19.4 m away. The mapped roadside option is 21.7 m long and is not yet field-approved.

Roadside connection checks	Mapped roadside option: approximately 21.7 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 15.4 m and 6.30 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 3.10 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 Khota Colony (19.4 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	m ³	2,821 m ³	July 2025 rain
Time water remains above 15 cm	hours	11.0	July 2025 rain
Time to exceed 15 cm after rain starts	hours	1.5	July 2025 rain
Maximum depth at this point	m	0.49 m	July 2025 rain
Average depth within 50 m	m	0.40 m	July 2025 rain
Maximum modelled flow speed	m/s	0.00 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 Khota Colony is about 19.4 m away and the mapped roadside option is about 21.7 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 3.10 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 21.7 m of roadside connection to mapped stormwater drain near Khota Colony, which is 19.4 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 Khota Colony. 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	No mapped pump is shown near H3. If water remains after inlet clearing, use a temporary pump only toward mapped stormwater drain near Khota Colony (19.4 m) or a verified open/green area; do not use the nearby sewage line (3.10 m from H3) as discharge.	392 L/s for 2-hour clearing; 196 L/s for 4-hour clearing; confirm pump head and hose route at H3.
2	Alternate discharge check for H3	Do not discharge to the nearby sewage line (3.10 m from H3); check safe storm drain/open area after checking route to mapped stormwater drain near Khota Colony (19.4 m).	Use only if site access and discharge permission are clear for H3.
3	Gravity route to mapped stormwater drain near Khota Colony (19.4 m)	Use gravity only if water from H3 can visibly enter mapped stormwater drain near Khota Colony (19.4 m) after inlet and drain-level check.	No pump needed only if flow into mapped stormwater drain near Khota Colony (19.4 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 Khota Colony (19.4 m) cannot be restored. H3: survey the mapped 21.7 m roadside option to mapped stormwater drain near Khota Colony, which is 19.4 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

Not identified/applicable in current approved data

g. Temporary Diversion to Park or Pond

Possible receiving area: Nearest main stormwater drain (map label MASTER-SWD-43) is 381 m away; check road inlet level, drain level and downstream discharge before routing Nearby landmark: Khota Colony.; possible storage Check slope, access, permission and overflow route.

6. Site Visit Checklist for H3

Site check	Yes	No	Notes
Waterlogging seen at this pin	☐	☐	H3: 28.39454, 77.03369
Nearest drain/trunk visible	☐	☐	mapped stormwater drain near Khota Colony (19.4 m)
Roadside connection route surveyed	☐	☐	Mapped roadside option: approximately 21.7 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 15.4 m and 6.30 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 Khota Colony (19.4 m).
Sewage manhole overflow checked	☐	☐	MCG sewage line is about 3.10 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; estimated 2 h pump need is about 392 L/s.
Road/access safety checked	☐	☐	2 m from local road residential
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 Khota Colony (19.4 m) if silt/choking is seen.
Survey a new roadside connection	☐	H3: survey the mapped 21.7 m roadside option to mapped stormwater drain near Khota Colony, which is 19.4 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; estimated 2 h pump need is about 392 L/s.
Escalate or restrict access	☐	Escalate if manhole overflow continues, trunk water level is high, or pumping has no safe discharge route.