#### A DISCUSSION WITH ELECTED AND CITY OFFICIALS

ROLAND PARK CIVIC LEAGUE OCTOBER 10, 2023 Aging Infrastructure and Climate Change: How Can We Better Prepare?

#### Overview

#### Affected areas in recent storm

- History of Flooding in the Area
- Impact of Latest Event
- Analysis of Underlying Issue
- Recommendations for Action

#### Some opening thoughts:

- Recognize challenge of climate change and aging infrastructure
- Greatly appreciate attention and responsiveness thus far
- Seeking both short- and long-term solutions
- Understand we all have a role to play

# Areas affected by the Storm event 9/12 – 9/13

Area	Neighbors Representing	Is this an issue with clogged/ inadequate storm drains?
Gladstone/ Roland/ Valley Lane	Ned Bartlett	Y
Deepdene/ West side	Susanna Lewis	Y
Hillside/ Edgevale/ Beechdale and Plover Lane	Eric Lin	Y
Indian Lane	Charlotte Hager	Y
4200 Wickford	Ben Stone	Y
Rye Lane	Melanie Harwood	
Oakdale/ Underground Streams	Ed Goodlander	Y
Wyndhurst Station/ Wilmslow Road and Park Lane	Chase Hoffberger, Chris Marshall, George Hearn, Margaret Wright, Martha Holleman	Y (in part, but/ and also the bottleneck in the Stony Run at the tunnel under Wyndhurst)

### Gladstone Ave

Valley Ln

Ned Bartlett



### Details of some communications with DPW

- 10/27/19: Gladstone at Roland "wheel high" water overflowed down Valley Lane
- 1/25/21: Same as above plus Roland at Wyndhurst Ave. "wheel high" water
- 8 calls in 2021 to DPW for clogged drains at Roland and Valley Lane and pot holes on Valley Lane- 3 call confirmations were closed without any action taken
- 11/1/21: 6 of the above calls were documented in letter to Jason W. Mitchell, DPW Director
- 11/22/21 & 11/23/21: DPW checked Valley Lane and Beechdale at Roland
- 11/30/21: 3 men worked until 7 pm on drains on Roland Avenue at Valley Lane

   Verbal communication: Drains are blocked or were never built to drain to Baltimore City Storm Water Management system
- 2022: Valley Lane surface debris cleared by residents multiple times as done in previous decades
- 2/19/23: Call for Valley Lane surface debris and pot holes

#### Drain North of Valley Lane at Roland 9/13/23

The North and South drains are both constantly blocked with every rain event, despite being cleared frequently of mud, sand, leaves and snow by residents.



Debris on Club Road South of Valley Lane headed to Beechdale 9/13/23

This is just a sample photo of how much debris was washed down with this exceptional storm.

Both Valley Lane and the northbound lane of Club road had to be closed from Beechdale to Valley Lane.



#### Valley Lane pot holes Before Repair 9/13/23

Watch Carefully!



#### Valley Lane pot holes After Repair 9/19/23

Not much change in some locations!



West side of Roland Avenue Drain just South of Valley Lane

Small pipe in small drain is easily overwhelmed



#### Adequate Drain on Saint Johns Road at Club Road

Drain at Southeast corner of intersection drains well and is cleared easily and often by neighbors



### What is the Root Cause of Poor Drainage?

We are asking DPW for an exploration of all the drains on Roland Avenue from Deepdene to Beechdale/Wyndhurst Ave. (both sides) for:

1. Connection of these drains to area overall Storm Water Management

2. Small size of Storm Water Inlet Grates from Deepdene to Beechdale/Wyndhurst Ave. which are always filled with debris

3. Lack of Drains on Roland Avenue from Beechdale/Wyndhurst Ave. to Cold Spring Lane

### Deepdene Rd

Susanna Lewis





#### Deepdene Rd Background Information

The West side of Deepdene Road sits in a valley between Longwood Road and Roland Park Country School and runs downhill from Roland Avenue. The storm water drainage on Deepdene Road has several challenges:

- The storm drains along the 100 and 200 blocks of Deepdene Road get clogged every heavy rainstorm, causing a large volume of water to run down the street rather than through the drains.
- The drain in front of Litchfield Path (at 113 Deepdene Rd) collects water running down Deepdene Rd and also from up the hill at Longwood Rd/Blackberry Lane. This drain gets overwhelmed every rainstorm.
- The creek on RPCS's property and other runoff overflows onto Deepdene Rd in heavy storms.



### **Storm Damage**

- The intense storm in September overwhelmed the drain at 113 Deepdene Rd and resulted in severe road buckling, cracking, and potholes from 113 down through the 200 block of Deepdene Rd.
- Pieces of clay pipe and bricks from 113's storm drain broke loose and floated down the road.

### **Repairs Needed**

- DPW determined that the pipe running from 113's storm drain to the grassy area next to RPCS across the street needs to be repaired/replaced and that the water overflow is likely because of a failure in a bend of this drain pipe.
- However, it's unclear why the whole road buckled (DPW says there are no drainage pipes running down Deepdene where the road buckled [?]).
  - It would be great if this were investigated further to figure out why the road is so eroded and ended up buckling.

### Edgevale Rd Hillside Rd Plover Ln Beechdale Rd

Eric Lin



#### West of Roland Ave between Indian Ln and Club Rd



### BCC creek storm drainage



#### Water flow due to Topography of area



### Plover Ln (June 2018)



### Plover Ln (September 2023)



#### Street Damage



- Indian Ln
- Beechdale Rd at Edgevale Rd
- Valley Ln

### House flooding



### Potential solutions

- Study of current storm drainage system
- Augment storm drainage system
  - Roland Ave
  - Indian Ln
  - Beechdale Rd
  - Club Rd
  - Edgevale Rd
- Divert Edgevale Rd into BCC creek system along Edgevale Rd before bottom of the hill at the main intersection
- Augment storm drainage at intersection of Edgevale Rd and Beechdale Rd
- Regular street and storm drain cleanings

### Indian Ln

Charlotte Hager



### Indian Lane







### Wickford Rd Rye Path

Ben Stone



# Wickford Road: Background and history

- Located at the southeastern corner of Roland Park, Wickford Road is one of the lowest points in the neighborhood and much of Roland Park drains here.
- Basements in this area have flooded in the past, but never to this scale.
- Flooding is not just stormwater, but in some cases sewage as well.
- West alley has been regraded so that it slopes towards yards – all rainfall ends up in backyards and basements.
- Flooding is a problem during non-historic rainfalls too



Name	Address	Description of flooding on your property	Estimated cost of flooding damage	Historic flooding information	Solutions you'd like to see to prevent flooding in the fut
Ben Stone & Anna Muessig	4212 Wickford Rd	2-3 inches in finished basement, entered through basement door, mostly caused by runoff from back alley (west of Wickford) flowing directly into yard and basement.	\$25,000	uncertain; runoff from alley is a problem during every storm and causes debris and flooding in yard during every storm we've experienced since we moved in.	Regrading of alley west of Wickford so that run off is directed to storm drain storm drain(s) added to alley.
Brian Holmes, Eugenie Jenkins	600 West University Pkwy	1-2 inches of water in the basement coming from the florr drain in the middle of the basement		We have 1-2 inches of water coming from the floor drain everytime it rains heavily. We think the floor drain may be connected to a storm drain that runs behind our house and is clogged on our property so it is not within the purview of the city. While we were not home at the time of the flooding, our housesitter said her car, parked on University, suffered no water damage, though apparently there was considerable flooding on University as well as Wickford according to neighbors.	
Christy Schoedel & John Segal	4243 Wickford Rd	small amount fo wated in basement, floor drain and our sump pump could not handle the volume. Our gardens were flooded from the alley and the sink hole was directly behind our garden, washed out some of our retaining wall			the storm drain on the north side of Overhill and Wickford Roads, which wa replaced 5 years ago, is horribly inadequate for the volume coming from bo upper section of Wickford (north of Overhill) and the wated coming down th above Overhill. Storm drains at lower end of Wickford, near University need enlarged and their connected pipes to creek or other drainage as they are r large enough to handle the volume of water coming down Wickford.
Dan and Leigh Caputo	4227 Wickford Rd	Some damage to concrete seams in alley and misplaced stones abutting Wickford	\$100		Perform maintenance of Stoney Run above the Overhill Rd bridge to all wa pass under the bridge unobstructed - specifically clear out the large amoun debris - repair cracks/damage to concrete in alley to prevent more damage
Toni and Scott Armstrong	4232 wickford rd	Significant sewage backflow from drains flooding half the basement. All contaminated areas had to be removed. Our basement is out living room, play room, and guest bedroom. Everyone in our home has been sick since the storm. Toni has had it the worst with strep causing pneumonia, ear infection and sinus infection. She is on her second round of antibiotics.	\$15,000	Whenever the sewer clogs we get backflow. Never to this amount though.	Have city pay for our backflow valve installation and stop allowing the storn to kick over to the sewer system.
Lulu and George Kauffman	602 W University Pkwy	Since July 4th we have been getting several inches of water and mud/sludge in our basement through the floor drain every time it storms. The historic flood left us with 2 feet of water. We lost a deep freezer, a refrigerator, 3 dresser drawers, a pet litter robot, hundreds of dollars of meats and fish. We have to have our hotwater heater, our HVAC unit and our furnace serviced twice throughout this period due to the water damage.	\$9,500	This has been happeing since July 4th. We have had our lines scoped, dye tested and photographed. Our lines are clean. We have been told that there is a blockage on our neighbors portion of the storm drain that runs behind the homes on university pkwy. [10 to 15 years ago a similar blockage occurred but on the city part of the line and after DPW cleared it we have had no problem until this July. DPW has come out and said they do not own the drains because a private company (Roland Park ) installed them. Roland Park civic league or roads and maintenance state they do not own the drains, it seems absurd that the city does not take ownership of these drains, anywhere else in the city, the drain would be owned and maintained by the city.	I would like to see the city take ownershi; of these drains and subsequently maintain, be it through replacement or repair.
Genya and Sam Hopkins	4200 Wickford Rd	1/2 inch of silt and water spread throughout the basement floor. We also had drainage from the alley behind the house which drained through our garden down to Wickford Rd	\$37,000	we lost both cars in front of our house due to flooding up to the cup holders in each car. Geico replaced them at full value	the drains in front of our house on both sides of the street weren't working p so we had 4 feet of water at one point in front of our house.
Cara Bruce & Dave Newman	4219 Wickford Rd	1-2 inches of water in our basement - we recently moved in so we had boxes full of unpacked things in the basement, all destroyed, had to get our hot water heater serviced due to water damage, lost 1 car in front of the house, it was totaled from water damage	\$15,000	we recently moved in so we have no idea but are hoping this isn't normal	storm drains maintained and I completely agree with the backflow valve ins idea listed above

# Wickford Road: September flooding

- \$100,000+ damage (from neighbors who reported)
- Multiple cars completely flooded on Wickford
- Basements with 3+ feet of water via basement doors and basement floor drains
- 4'+ on lowest point of Wickford near University
- Sinkholes and damage along west alley
- River of water from east alley



## Wickford Road: Requests

- Water needs to be managed uphill from Wickford on Overhill and west alley
- Regrade west alley and add storm drain
- Repair/expand storm drains on Wickford and Overhill
- Install backflow valve to prevent stormwater from entering sewer system



### Oakdale Rd

Ed Goodlander







### Wyndhurst Station Wilmslow Road Park Lane

Chase Hoffberger Chris Marshall George Hearn Margaret Wright Martha Holleman



# History

- Intense flooding starting in 2015 (five major events 2015 -2016)
- Water jams at tunnel under Wyndhurst Ave.:
  - Comes up and over road, joins with run off there, rushes down Wilmslow and seeks its way back to the stream
  - Backs up and over banks into parking lots and businesses at Wyndhurst Station
- Identified four precipitating causes (in 2016)
  - Increased development in the watershed
  - Narrowness of tunnel/culvert under Wyndhurst Ave.
  - Traffic calming bumpouts on Wyndhurst Ave. that blocked storm drains
  - Climate change! (cloudburst phenomenon)
- Addressing flooding and erosion a priority recommendation of the Stony Run Master Plan
- Bumpouts removed in 2017
- No flooding since... until...







# Latest Event

- Water from the back up at the tunnel joined with other extreme run off from Wyndhurst Ave. and Park Lane
- Wilmslow Road destroyed (eroded down to sub-surface); has since been completely repaved.
- Sheets of asphalt washed into park gardens and stream.
- Severe flooding of businesses at Wyndhurst Station:
  - Losses to inventory
  - Extensive damage to physical structures
- Wilmslow Road neighbors experienced property damage:
  - Two cars totaled by the owner's insurance company
  - Flooded basements w/ accompanying losses along the entire street
- Severe erosion along the Stony Run south of Wyndhurst Ave. where the stream bank has been undercut, tree roots have been exposed and bank is threatened with falling in
- Sink hole in the walking path across from 4906 Wilmslow has re-opened
- Top surface of walking path washed away







### Community Recommendations for Next Steps

- Join with other Roland Park/Wyndhurst neighbors in requesting complete study of and recommended repairs to the storm water drainage system
- Request Rec and Parks repair/restore and stabilize the walking path
- Advocate that schools in the watershed reduce impervious surfaces, assess and improve effectiveness
  of current storm water management structures, and slow/absorb run off by restoring the forested
  border
- Request DPW complete/share updated hydrology and hydraulics for the Stony Run and develop/implement a comprehensive plan for stormwater management
- Alongside and/or as part of this comprehensive plan:
  - Remove the old railroad structure just north of the Wyndhurst Ave. underpass (that serves to channel the water/ increase intensity)
  - Slow the water down before it reaches the underpass at Wyndhurst Ave. and work with businesses/ schools as necessary to do so (by restoring the forested border, removing parking lots, opening up side channels, deepening and widening the existing channel, restoring wetlands...)
  - More quickly move water off the road and back into the stream bed (review previous proposals to introduce new drains and channels)
  - Widen the underpass so that water flows through and does not back up and over Wyndhurst Ave.
- Explore use of storm water credits and federal infrastructure \$\$ to fund the above... as well as whatever funds had been allocated but not used for stream restoration in 2018.



### Discussion



