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Tel. 718.595.5696 Kmallon@dep.nyc.gov Honorable Eric L. Adams Mayor of the City of New York City Hall New York, NY 10007

Honorable Adrienne Adams Speaker of the New York City Council 165-38A Baisley Blvd Jamaica, NY 11434

RE: City Council Reporting Requirements Pursuant to Local Law No. 56 of 2017, Council Int. No. 1198-A of 2016

Dear Mayor Adams and Speaker Adams:

This letter is submitted to provide an update to the initial report on the Southeast Queens Flood Mitigation Plan submitted on March 20th, 2018, which was pursuant to the requirements of Local Law No. 56 of 2017, Council Int. No 1198-A of 2016.

The intent of this report is to provide an update of the specific information required by §24-530.b of the Administrative Code of the City of New York, entitled Southeast Queens Flood Mitigation Plan (enacted by Local Law 56 of 2017). This section states,

"By no later than six months after the end of each fiscal year, beginning with the first fiscal year that commences more than one year after the effective date of the local law that added this section, the department of environmental protection shall submit to the mayor and speaker of the council a report on progress in implementing the plan required by subdivision a of this section during the prior fiscal year. Each such report shall include, but not be limited to, a description of any changes to such plan, a description of any changes in funds committed by or on behalf of the city in furtherance of such plan and a description of all funds expended by or on behalf of the city in furtherance of such plan."

This updated report, along with the attached table, summarizes DEP's fulfillment of the requirements for a flood mitigation plan in Queens Community Districts 12 and 13. DEP has also developed an interactive online map that shows the completed and ongoing construction in Southeast Queens. This map can be accessed by visiting: http://www.nyc.gov/dep/seqprojects

The Southeast Queens Mitigation Plan

As the City's water and wastewater utility, the New York City Department of Environmental Protection (DEP) is responsible for building and maintaining sewer infrastructure to manage sanitary waste and stormwater from homes and businesses. Southeast Queens (comprised of Queens Community Districts 412 and 413) experienced rapid residential and commercial growth from the 1920s through 1960s, and many of the natural watercourses that previously drained the area were paved over by developers, exacerbating flooding. The low-lying topography of the area and the enlargement of Idlewild/Kennedy Airport significantly complicated the installation of large storm sewers, making planned work extremely costly. Mayor de Blasio authorized \$1.5 billion over ten years for the Southeast Queens Flood Mitigation Plan. This has since been increased to \$2.6 billion through the approved 2024 September Plan.

Together with our partners at the Department of Design and Construction and the Department of Transportation, DEP has developed a four-pronged approach to improve conditions in the area:

- 1. Construct near term fixes, such as storm sewer extensions, targeted full size sewers, and green infrastructure to bring near term flooding relief.
- 2. Build neighborhood sewer projects where there is existing available capacity in the sewer system.
- 3. Create future capacity for further neighborhood sewer projects by investing in large spine sewers.
- 4. Evaluate opportunities to reduce groundwater flooding.

Together, these four approaches are delivering both immediate and long-lasting relief for many residents of Southeast Queens.

1. Quick Fixes

DEP has conducted an extensive engineering analysis to identify areas throughout the two community boards that have had the most severe flooding complaints over the past several years. Based on this analysis, DEP will:

- a. Utilize "when and where" contracts to install 3-6 blocks of targeted full-size sewers. Our partners at DOT may also make minor roadway improvements concurrent with the installation of the sewer improvements. To date, DEP has completed two "when and where" projects, one is in construction, and one is in procurement.
- b. Evaluate and install storm sewer extensions where feasible. Completed storm sewer extensions will be reported to the Council in the annual report each year.
- c. Target opportunities to install green infrastructure, such as rain gardens, subsurface detention facilities, and green roofs. Green infrastructure can naturally divert stormwater from the sewer system, which increases sewer capacity.

DEP constructs green infrastructure through public investments and public-private partnerships, in addition to requiring green infrastructure through regulations for new development and redevelopment construction projects. Public investments are made within streets and sidewalks through the right-of-way (ROW) green infrastructure program and on publicly owned lands with agency partners through the public onsite retrofit program. Financial incentives for private property owners to install green infrastructure are also a core part of DEP's stormwater management work. Green infrastructure in the planning, design or construction phase in southeastern Queens is summarized by program area below.

Right-of-way (ROW) Green Infrastructure

DEP constructed 170 GI practices in the streets and sidewalks around the Queens Village and Cambria Heights neighborhoods. DEP also completed an additional 53 green infrastructure practices in the Idlewild area in partnership with the New York Rising initiative. By managing stormwater runoff from roads and sidewalks, these practices are helping alleviate street flooding within Southeast Queens.

Public On-site Retrofit Green Infrastructure

Through partnerships with other city agencies, DEP is designing and implementing green infrastructure retrofits on publicly-owned lands like schools, parks, playgrounds, and housing sites.

In partnership with NYC School Construction Authority (SCA) and Department of Education (DOE), DEP has completed the following projects:

- Three rain gardens within schoolyard at P.S. 40
- Two rain gardens and synthetic turf field storage at P.S. 50
- Three rain gardens in side yard and curb/sidewalk upgrades at M.S. 72 in partnership with the Governor's Office of Storm Recovery
- A blue and green roof at P.S. 118
- Synthetic turf field storage and permeable pavers at P.S. 223 in partnership with the Trust for Public Land

In partnership with Parks, DEP has completed a new stormwater drain on Merrick Blvd to divert stormwater to bioretention within Roy Wilkins Park, as well as pond dredging and installation of an aeration fountain. Detective Keith Williams Parks has two green infrastructure assets at final design, and Cambria Park has one asset at final design.

Large-scale Medians

Through an in-house design team, DEP is identifying opportunities for large scale green infrastructure practices within publicly-owned medians. In 2023, construction began on three green street median projects in Queens Village. These medians are expected to be completed in early 2024 and will capture stormwater from major roadways in the vicinity of Martin Van Buren High School.

Cloudburst

DEP has also identified locations in Southeast Queens to implement "cloudburst projects." Cloudburst projects use a combination of green and grey infrastructure strategies to slow, delay, and divert stormwater and typically manage more stormwater than traditional green infrastructure. Cloudburst projects are designed to minimize the risks of nuisance flooding which can cause damage to property and infrastructure. DEP is currently in design phases for two cloudburst pilot projects in the St. Albans neighborhood and at South Jamacia Houses. In the St. Albans neighborhood, DEP is designing green infrastructure to manage stormwater in the right-of-way while also including cloudburst components to mitigate flooding. At the South Jamaica Houses, a NYCHA campus including eight city blocks in South Jamaica and is home to approximately 2,600 residents, DEP is designing on-site green infrastructure practices with cloudburst components. DEP anticipates beginning construction at South Jamaica houses this year. Additionally, DEP is designing cloudburst projects for two additional locations: Rufus King Park and Archie Signer Park.

2. Neighborhood Sewer Projects

In some cases, DEP determined that the most effective solution to address flooding is to construct neighborhood storm sewers that take advantage of existing downstream capacity in the system. To date, DEP has completed nineteen neighborhood sewer projects, has two in construction, and five in design phase. The status of all neighborhood sewer projects, including the projected registration year and funding level, can be seen in the attached table under "neighborhood sewers."

3. Spine Sewers

Trunk sewers build stormwater capacity for the future by creating new large conduits to move stormwater out of upland Southeast Queens into Jamaica Bay. In Southeast Queens, DEP must build additional trunk sewers to provide enough capacity to drain all of Community Districts 412 and 413. In 2023, DDC completed construction of SE823, the first trunk sewer project under the Southeast Queens Plan. Construction of project SE885AVWE is ongoing in 2023. This project is phase 2 of the 150th Street trunk, and it is being built by New York State DOT as part of the Van Wyck Expressway expansion project. DDC started construction of project SE-842A1 in October 2023. This project is Phase 1 of the Farmer's Boulevard trunk sewer.

Over the next year, DEP will continue planning efforts on additional spine sewer projects; until DEP finalizes the scope of work, the funds dedicated to the spine sewers appear in the attached table in line 46. DEP will update the Council each year as we complete planning and move funds out of this holding code into project specific budget codes.

4. Groundwater

DEP has entered into an agreement with the U.S. Geological Survey to measure groundwater table levels in Southeast Queens. The agreement will remain in effect for four years and is expected to cost \$5 million. The partnership with USGS will provide data to help inform and create an updated groundwater model, further allowing DEP to analyze the benefits of potential larger scale solutions to mitigate shallow groundwater. This effort will also create groundwater maps to inform other potential groundwater and flooding solutions, such as Bluebelt planning, on a citywide basis and provide data on salt-water intrusion inland caused by sea level rise.

Conclusion

To satisfy §24-530.b, DEP submits annual reports to the Council to demonstrate our progress in implementing the plan laid out above. For your convenience, the following table summarizes the total funding by project status.

SEQ Flood Mitigation Plan Summary		
Status	Baseline Funding (2/28/2018)	Project Total Funding (12/31/23)
Complete	\$23.1	\$426.6
Construction	\$144.6	\$360.3
Procurement	\$306.3	\$31.7
Design	\$187.7	\$185.4
Pre-Design	\$106.5	\$25.0
Funds in Holding Codes	\$509.0	\$896.5
Future Spine Sewer Funds	\$619.0	\$670.0
Total:	\$1,896.2 M	\$2,595.5 M

I trust you will find this information useful. If you have any questions or comments concerning any of the information provided in this report, please do not hesitate to contact me.

Sincerely, Katy Mella

Kathryn Mallon

Chief Operating Officer