



# The City of Revere Massachusetts

## Orvis Road Stormwater Drainage Installation Project



### Project Overview

#### The City of Revere Orvis Road Drainage Improvements

The Engineering Department and Department of Public Works identified the need for infrastructure improvements on Orvis Road. Specifically, a lack of drainage infrastructure causes groundwater and stormwater problems during rain events, especially during the winter months, resulting in roadway and area flooding and/or freezing and ice build-up. As a result, drainage infrastructure installation is planned for the lower part of Orvis Road, from the highpoint to Route 60/Squire Road.

Construction is scheduled to start August 14, 2023

This project includes, but is not necessarily limited to the installation of approximately 1,250 LF of 12” – 18” PVC and ductile iron drain pipe, 7 drain manholes, 10 catch basins, approximately 40 LF of 8” ductile iron water main (relocation) and permanent trench paving on Orvis Road and Route 60/Squire Road.

Excavation work will be suspended from November 2023 to April 2024 (weather dependent) and final trench paving will be completed during the spring of 2024 in a consecutive 30-day period. Completion will be no later than June 30th.

Example of a drainage manhole that will be installed.



### Schedule

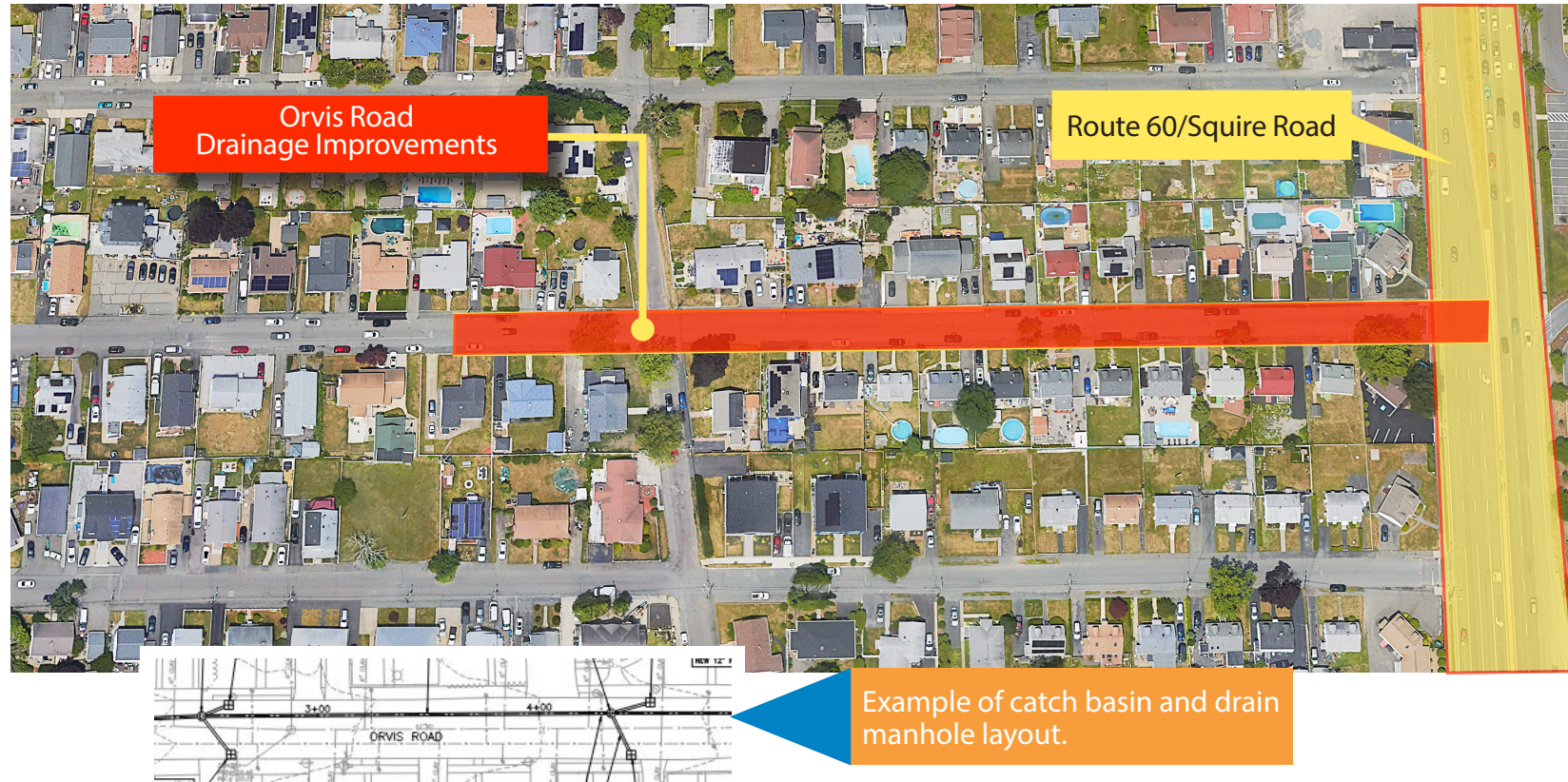
Year	Month	Phase
2022	JAN – DEC	Design
2023	JAN – APR	Design
	MAY – JUL	Construction Bidding
	AUG – DEC	Construction Begins August 2023
2024	JAN – FEB	
	MAR – MAY	Final Paving (schedule to be determined)
	JUNE	Project Complete June 2024

### Questions?

For questions related to this project, contact:  
Nicholas Rystrom, PE, City Engineer  
781-286-8152



# Location of Project Work and Summary of Improvements



## Stormwater Conveyance Benefits

Based on hydraulic modeling, the addition of new stormwater drainage piping and catch basins will have added capacity allowing for a slight reduction of flooding at the intersection of Route 60/Squire Road and Orvis Road by allowing for minor inline storage within the proposed drain line. Additionally, with the installation of upstream catch basins along the uphill slope of Orvis Road, the City will be reducing the amount of sheet flow over the roadway and into the drainage system leading into Squire Road reducing short-term flooding during smaller rain events. Further, the installed catch basins will be perforated, working to lower the ground water level over time.

## Water Quality Benefits

The proposed drainage system should lead to an improvement in stormwater quality. Offline catch basins with deep sumps and hoods are credited for a 25% Total Suspended Solids (TSS) removal for the upstream drainage area. The sumps will have the added benefit of reducing the amount of sediment material and floatables reaching the downstream stormwater collection system by catching and storing these materials upstream. Additionally, hoods help contain oil if any were to spill within the catchment area.



**City of Revere**

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*Chief of Infrastructure and Public Works*

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