

## Memorandum

To: Sam Hubbard, Development Planner  
From: Nanci Julius, P.E., Senior Civil Engineer  
Date: June 2, 2022  
Subject: 318 W Mueller St lot consolidation money-in-lieu of detention



This memo is provided in response to the petitioner's request to waive the money-in-lieu of detention.

The following sections of the Municipal Code and Manual of Practice pertaining to detention are provided for reference:

### **Chapter 29 Subdivision Control Regulations, Section 29-501 Required Improvements**

- A storm sewer system, separate and independent of the sanitary system, meeting all specifications of Chapter 22 and 23 of this Code.

### **Chapter 22 Sewers, Section 22-106, Storm Sewers and Surface Water**

a. New connections.

1. Combined Sewer Areas.

- (b) Detention shall be provided and/or permanent constrictions shall be built on the storm sewer system to control the flow into the existing combined system in accordance with the requirements of the Director of Engineering.

Chapter 22 further mentions that the design regulations shall follow the **Manual of Practice**, which is also considered the "requirements of the Director of Engineering."

With regard to the **Manual of Practice, Chapter 3, Storm Water Facilities**, this chapter elaborates on the requirements for storm water facilities. The particular circumstances for this project would be considered small development, and section 3.05E of the Manual of Practice states:

#### **3.05E - SMALL DEVELOPMENTS**

The Director of Engineering may exempt the Developer from the storm water holding reservoir requirements in circumstances when, in the Director's opinion, the immediate downstream flooding conditions will not be significantly worsened. A cash payment to the Village in the amount set out in Article 1.12 of this Manual will be required.

That amount is \$1.00/cu ft of required storage.

In July 2011, the Village experienced a record-breaking rain event that caused flooding issues for many residents. Storm water studies were analyzed in 2016 to provide the Village with potential improvements that could be done to improve uniform storm water service levels across the community. The Combined Sewer Tributary Area Flood Study final report was completed in March, 2017. The full report can be found in the attached link:

<https://www.vah.com/common/pages/DisplayFile.aspx?itemId=12455330>

Per the following sections of the report, 318 W Mueller St is immediately tributary to Area 2 for subbasins with potential basement backups. The study further proposes future relief combined sewers at the following locations in the vicinity of Area 2:

- 24" relief combined sewer on Euclid Ave (Ridge Ave to Fremont St)
- 15" combined sewer on Mitchell Ave (Hawthorne St to Elm St)
- 21" overflow connection between 21" combined sewer and 66" combined relief sewer at Salem Ave and Northwest Highway

Excerpts from the study are provided as attachments to this memo.

Per the Engineering Division's prior comments, staff is not in favor of waiving the money-in-lieu of detention for the 318 W Mueller St lot consolidation as this property is tributary to a combined sewer system that has experienced basement backups in the immediate area. Detention is also a code requirement. It also sets a bad precedence for future small subdivisions.

Taking into consideration that the proposed improvements to the home and the lot consolidation will not worsen the downstream flooding conditions, the money-in-lieu of detention is offered by code as an alternative to providing detention. Any fees collection for money-in-lieu for this project would apply to future system improvements.

c: Cris Papierniak, PE, Director of Public Works & Engineering



Location	Potential Improvements
Area 1 – NW HWY and Chicago Avenue	<ul style="list-style-type: none"> <li>▪ 1,350 feet of 24-inch relief combined sewer on NW HWY from Wilke Road to Yale Avenue</li> <li>▪ 2,000 feet of 36-inch relief combined sewer on NW HWY from Yale Avenue to Kasper Avenue, connecting to existing 66-inch relief combined sewer</li> </ul>
Area 2 – Ridge Avenue and Euclid Avenue / Walnut Avenue and Hawthorne Street	<ul style="list-style-type: none"> <li>▪ 1,350 feet of 24-inch relief combined sewer on Euclid Avenue from Ridge Avenue to Fremont Street</li> <li>▪ 1,110 feet of 15-inch combined sewer on Mitchell Avenue from Hawthorne Street to Elm Street</li> <li>▪ 21-inch overflow connection between 21-inch combined sewer and 66-inch combined relief sewer at Salem Avenue and NW HWY</li> <li>▪ Catch basin disconnection to the 12-inch combined sewer flowing South from Vine Street and Ridge Avenue and connecting back to the 15-inch combined sewer at the same intersection but flowing north to Elm Street</li> </ul>
Area 3 – Arlington Heights Road and Miner Street	<ul style="list-style-type: none"> <li>▪ 350 feet of 15-inch relief sewer on Eastman Street from Duntun Avenue to Evergreen Avenue</li> <li>▪ 350 feet of 30-inch relief sewer on Evergreen Avenue from Eastman Street to Miner Street</li> <li>▪ 350 feet of 30-inch relief sewer on Evergreen Avenue from Eastman Street to St. James Street, connecting to existing 36-inch</li> <li>▪ 700 feet of 24-inch relief sewer on Eastman Street from Arlington Heights Road to Belmont Avenue, making connections at Arlington Heights Road and Pine Avenue</li> <li>▪ 350 feet of 30-inch relief sewer going North on Belmont Avenue from Eastman Street to St. James Street and connecting to existing 36-inch sewer</li> <li>▪ 650 feet of 18-inch relief sewer going East on Fremont Street from Arlington Heights Road to Pine Avenue and then going South on Pine Avenue to St. James Street connecting to the 36-inch sewer</li> <li>▪ Replace 42-inch shallow combined sewer from Arlington Heights Road to Douglas Avenue with deeper 48-inch sewer from Arlington Heights Road to Haddow Avenue (1,000 feet) and 54-inch sewer from Haddow Avenue to Douglas Avenue (350 feet) and 25 feet of 60-inch sewer connecting to the existing 96-inch relief sewer</li> </ul>

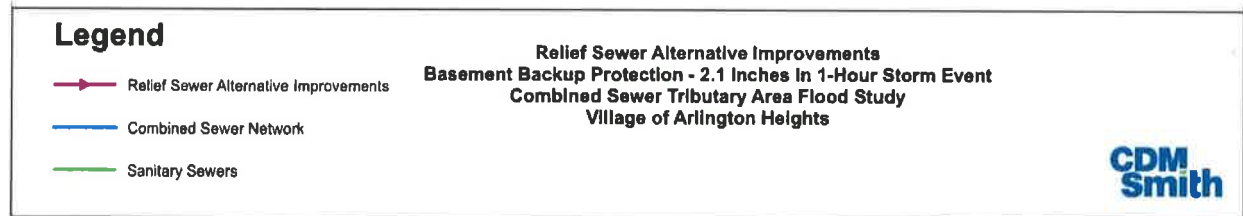
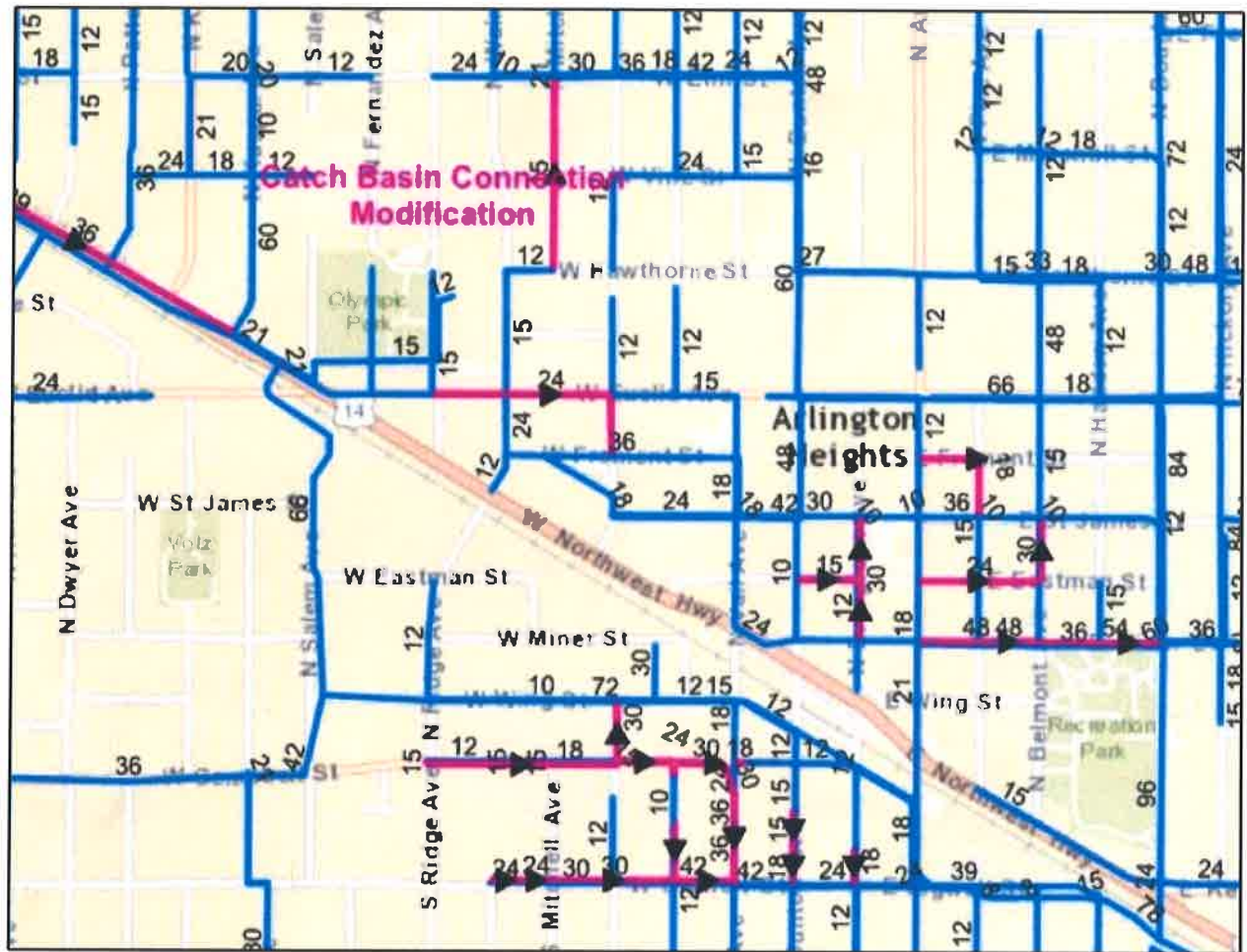


Figure E5-4. CSTA Relief Sewer Alternative Improvements for Village's Design Storm