

Edgewood Avenue Near Surface Collector Extension Project

Village Board Update

August 3, 2020



**CDM
Smith.**



Project Background – How did we get here?

- Significant rain events in 1996, 1997 and 1998 led to “Bottleneck Project” constructed in 1999
 - 1999 rain event – while “Bottleneck Project” under construction – led to formal dialogue with MMSD to explore further relief options
- July 2010 rain events led to Comprehensive Facility Plan and recommended improvements:
 - 2012 Basin 1 and Basin 6 Phase I projects (separated system)
 - 2014 Basin 6 Phase II (separated system)
 - 2016 NE Area Combined Sewer Improvements
 - SE Area Combined System recommendations complex and required additional collaboration with MMSD

Project Background – How did we get here?

- Further Actions/Additional Studies
 - 2012 Advanced Facility Plan for Storm Sewer Improvements to Achieve Partial Separation in the South Combined Sewer Area (Village)
 - 2014 Ad Hoc 110 Edgewood Drainage Study (MMSD)
 - 2014 MMSD, Village, City of Milwaukee and UWM begin evaluation of capacity issue
 - 2016 MMSD officially includes Edgewood improvements in its capital planning process
 - 2016 Village contracts for Combined Sewer Service Area Environmental Assessment
 - 2017 MMSD announces Edgewood NSC project

Presentation Agenda

- Overview of the Edgewood NSC project
- Preliminary engineering and design concept
- Preliminary alignment and construction approach
- Project construction areas, impacts and mitigation
- Public outreach plan

Problem and Project Purpose

- Problem: Recurring basement backups
- Objective: Reduce the risk of basement backups
- Project Purpose: Increase capacity of MMSD System, delivering increased outlet capacity for Shorewood's system

Project Summary

- 2300 feet of new 72-inch sewer
- Two overflow/diversion structures to receive flow from Shorewood's sewers on Murray and Maryland



Project Schedule and Status

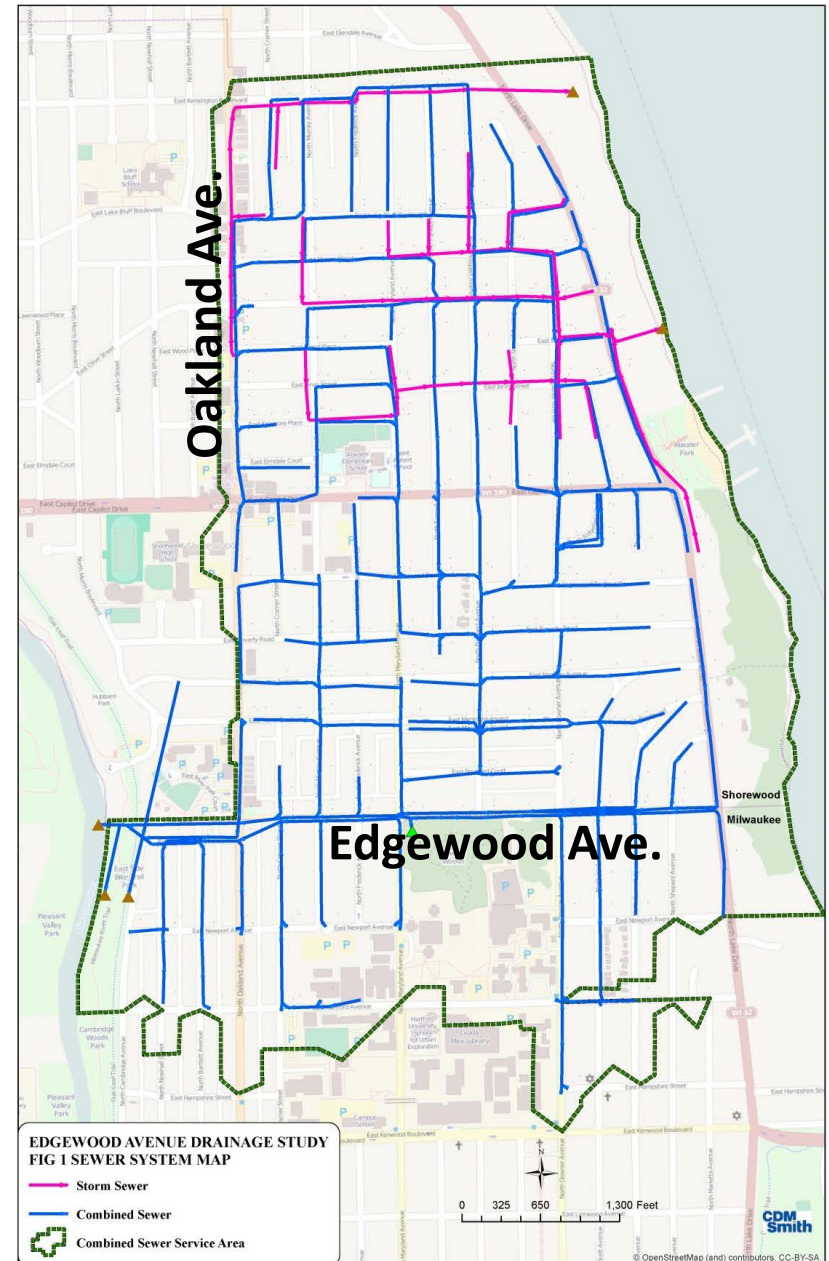
- Estimated design completion – March 2021
- Advertise – March 2021
- Construction award – June 2021
- Estimated construction start – July 2021
- Sewer construction complete/ready for operation – December 2022
- Construction complete – Spring 2023

Key Requirements for a Successful Project

- Minimize impacts to local residents and businesses, and transient public
- Minimize traffic closures and notify stakeholders of traffic impacts
- Maintain access into River Park from Oakland/Edgewood
- Cannot close Edgewood to traffic
- Provide safe work areas
- Communicate with key stakeholders and the public
- Restore construction-impacted areas acceptable to the Village

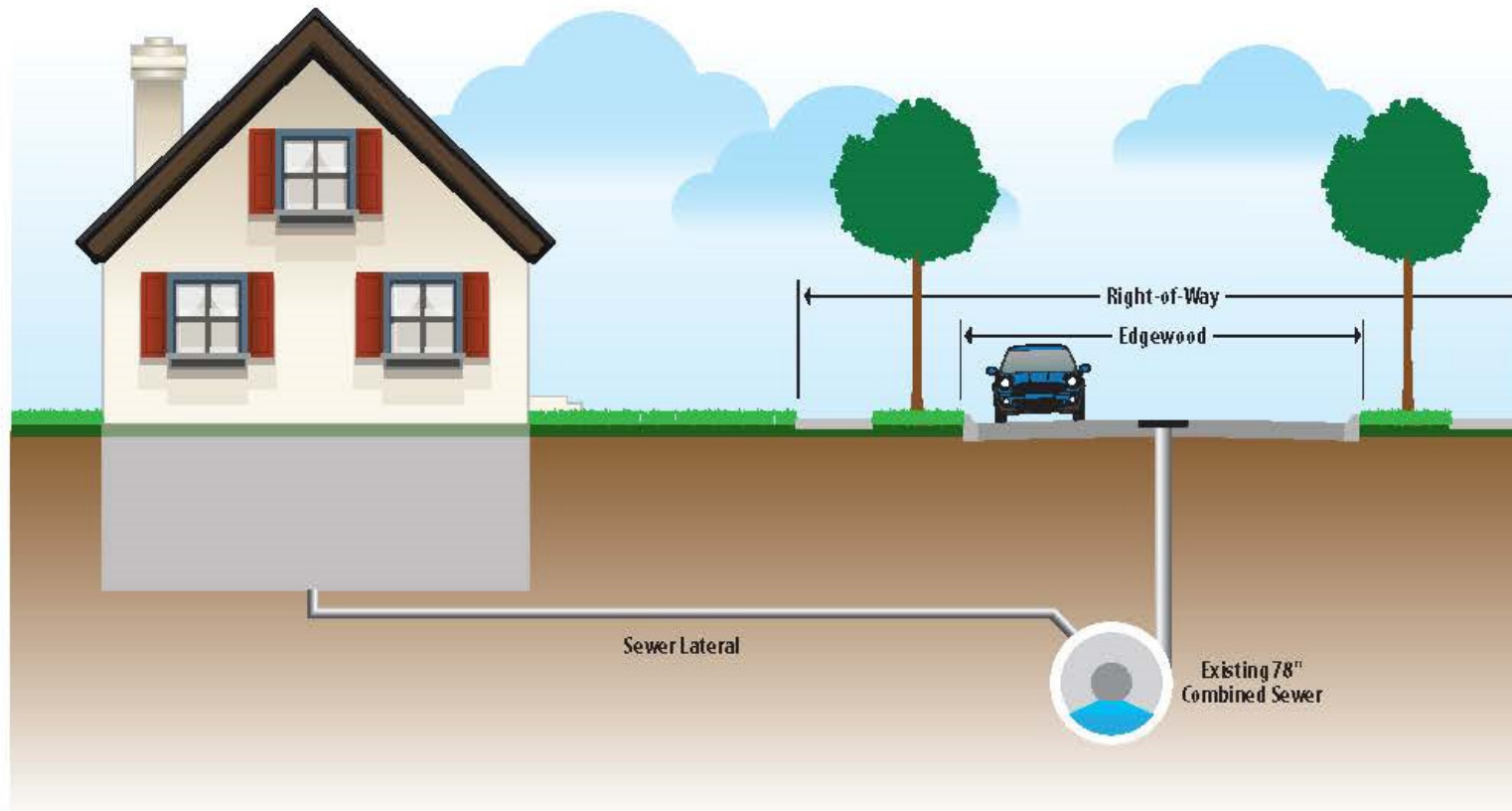
Analysis and Preliminary Engineering

- Evaluation of various alternatives to increase MMSD system capacity
- Provide connection for Shorewood Relief Sewer
- Recommended sewer design concept



Shorewood's Combined Sewer System Performance – Dry Weather Flow Conditions

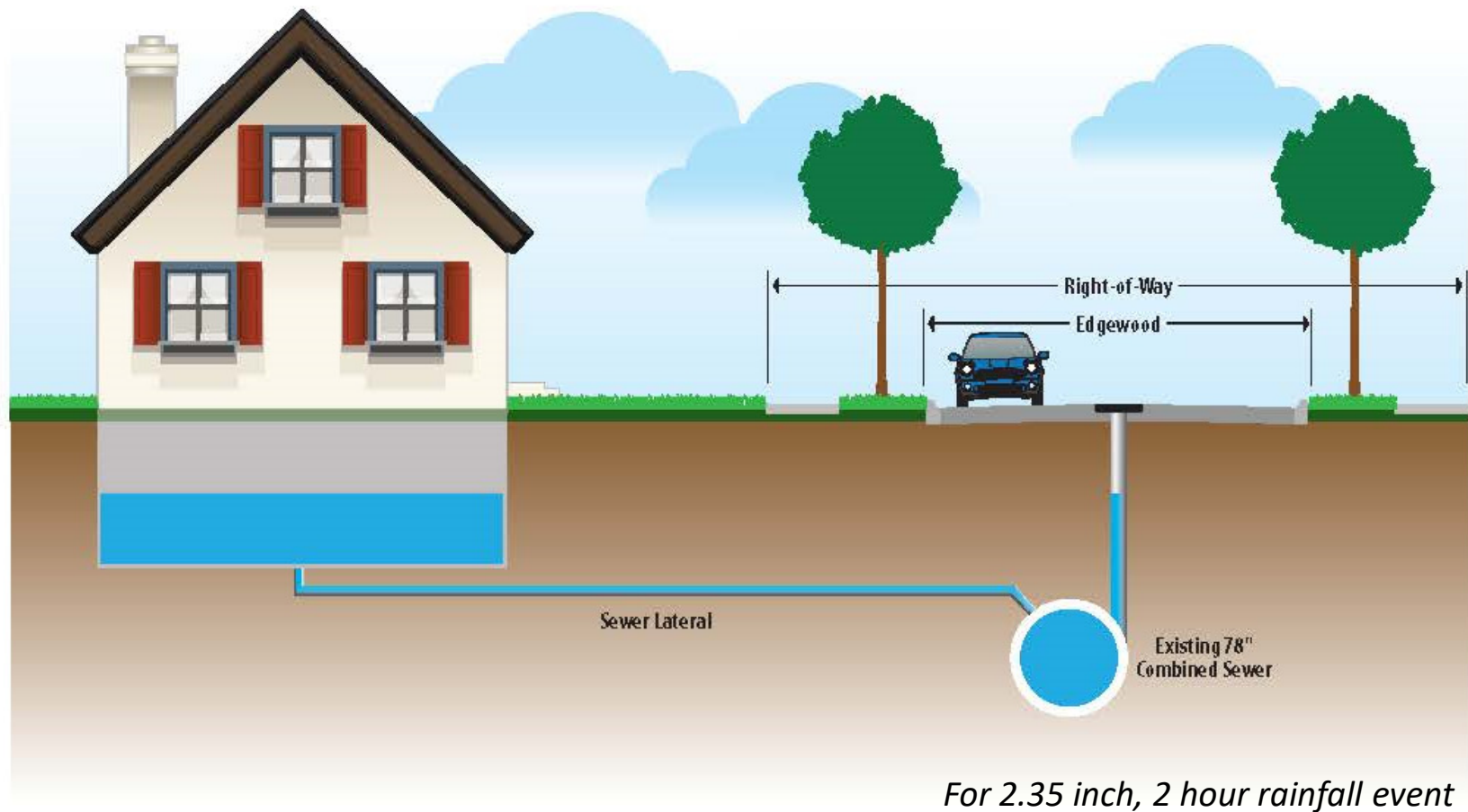
Dry Weather Existing Conditions



Dry weather flow conditions

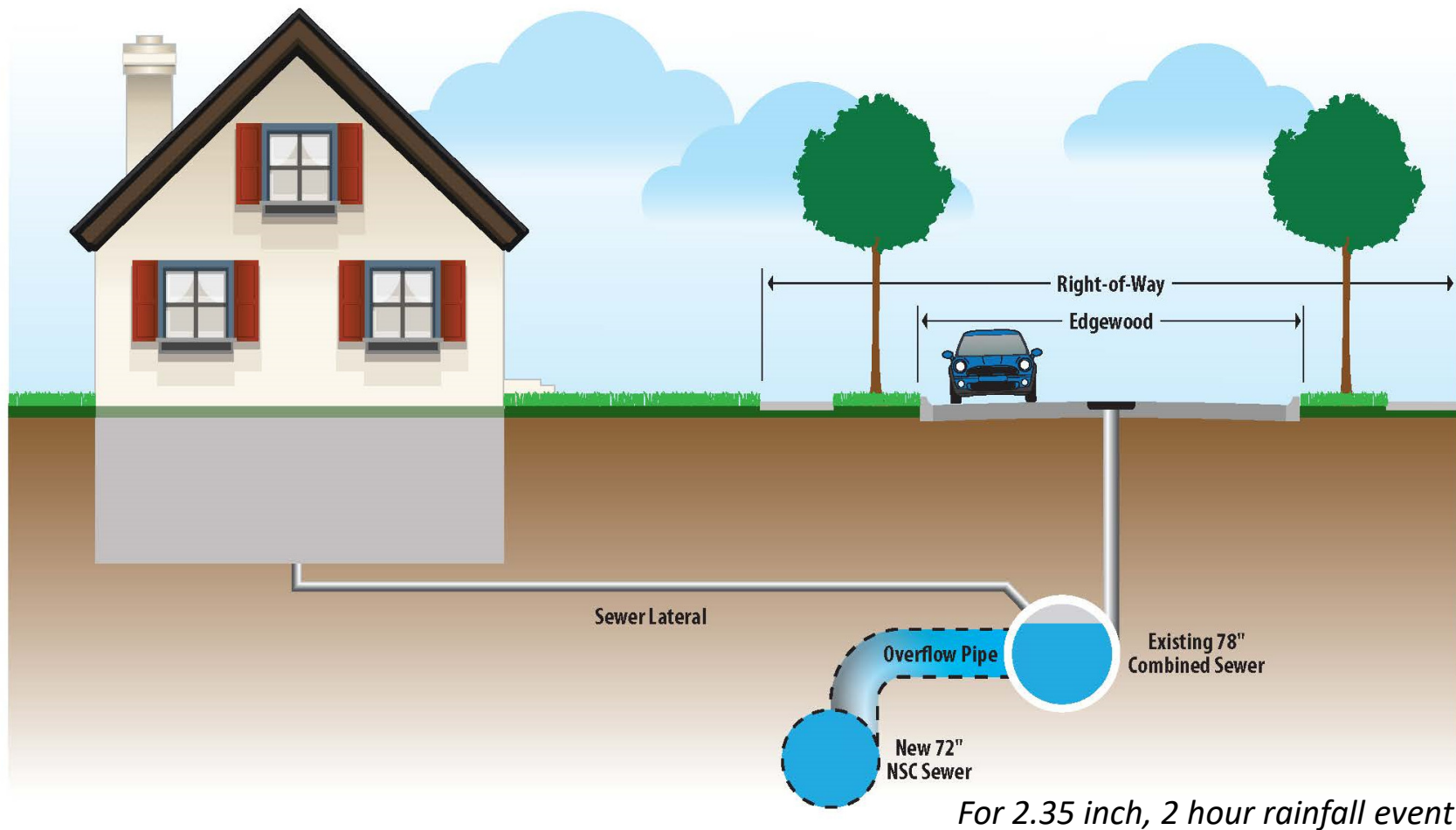
Shorewood's Combined Sewer System Performance – Wet Weather Flow Conditions

Wet Weather Existing Conditions



Shorewood's Combined Sewer System Performance – Wet Weather Flow Conditions with with New NSC Sewer

Wet Weather with New NSC Sewer



Preliminary Design NSC Extension Concept

- 2300 feet of 72-inch tunneled NSC from Maryland to NS-4
- Diversion structures at Murray and Maryland



Construction Area Impacts

- Impacts in 4 work areas
- Traffic closures
- Timing and duration of construction
- Construction in River Park and natural area near Milwaukee River
- Dust
- Noise
- Soil stockpile
- Settlement/Crack and damage survey
- Access



Maryland/Edgewood Intersection

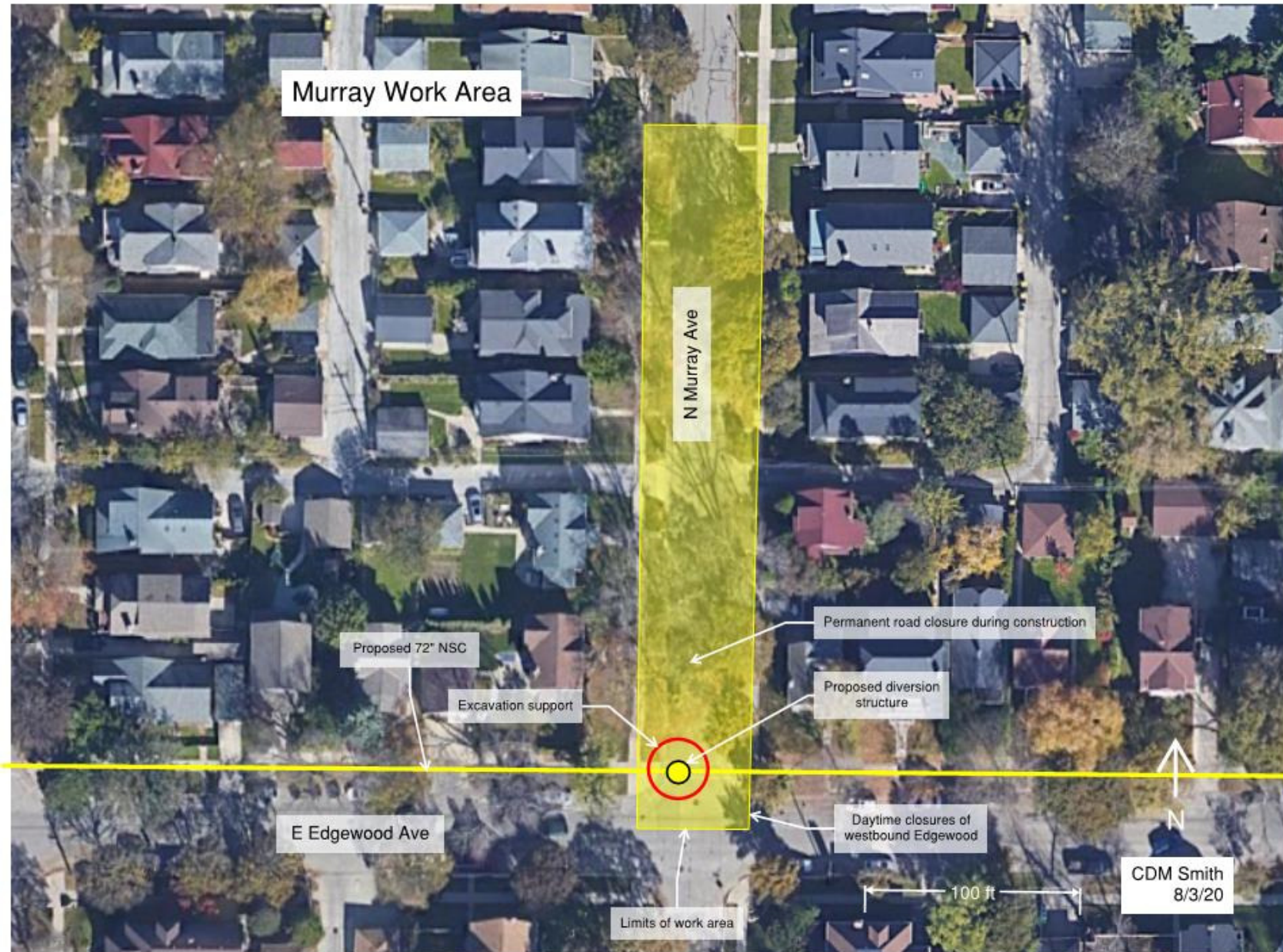


Connection Point to NS-4

Maryland and Edgewood Work Area



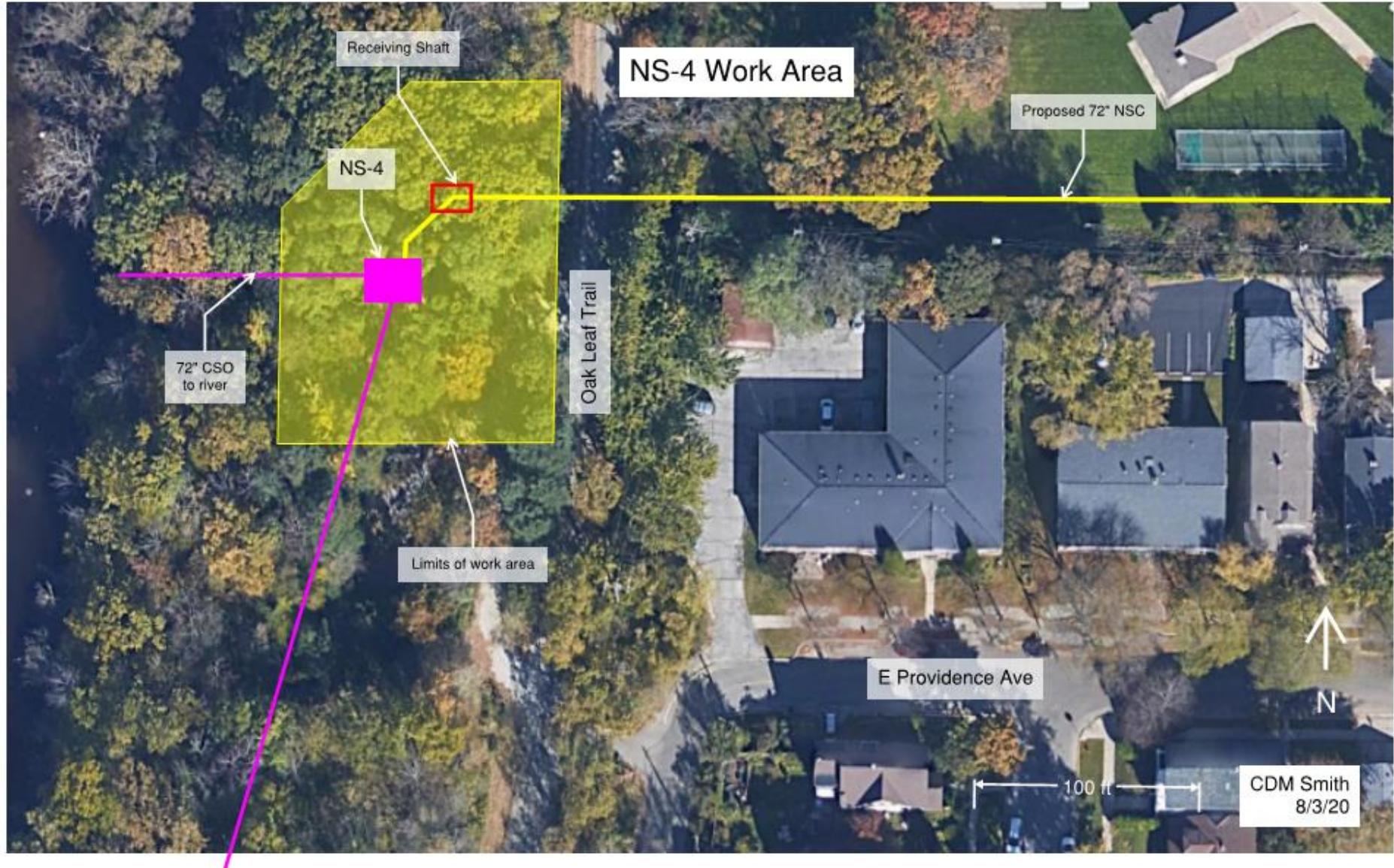
Murray and Edgewood Work Area



River Park Work Area



NS-4 Work Area



Green Infrastructure Example – N. Wilson Dr.



Green Infrastructure Example – N. Wilson Dr.



Public Outreach Plan

- Three planned outreach meetings
 - Neighborhood/Public – Fall 2020
 - Neighborhood/Public – First quarter 2021
 - Neighborhood/Public – Summer 2021



Image courtesy of Microsoft

Initial Public Outreach Meeting – Fall 2020

- Virtual Public Meeting - Present overall project, work areas, GI concept, construction impacts
- Targeted Impacted Residents and Users:
 - Local residents
 - River Park users
 - Oak Leaf Trail bicyclists
 - Others: UWM, Oakland BID, MTCS, Riverpark Apartments, Emergency Services
- Communication Approaches:
 - Mailers
 - Website updates (Village, MMSD, City)
 - Oak Leaf Trail signage
 - Handouts/Exhibits for Library display



Questions