

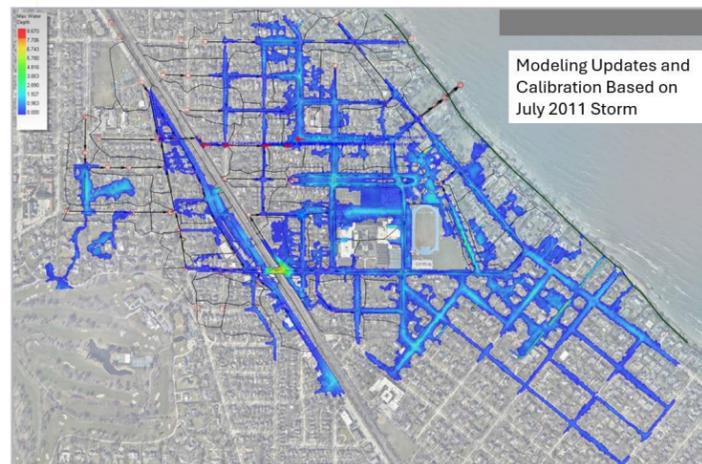
Stormwater Management Study: Evaluation of Stormwater Improvements For Eastern Winnetka

Village of Winnetka Council Check-In

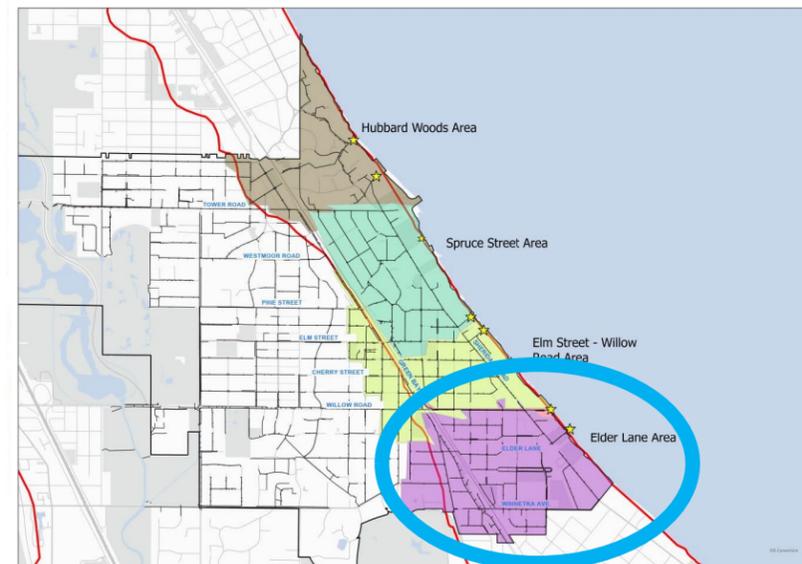
September 10, 2024



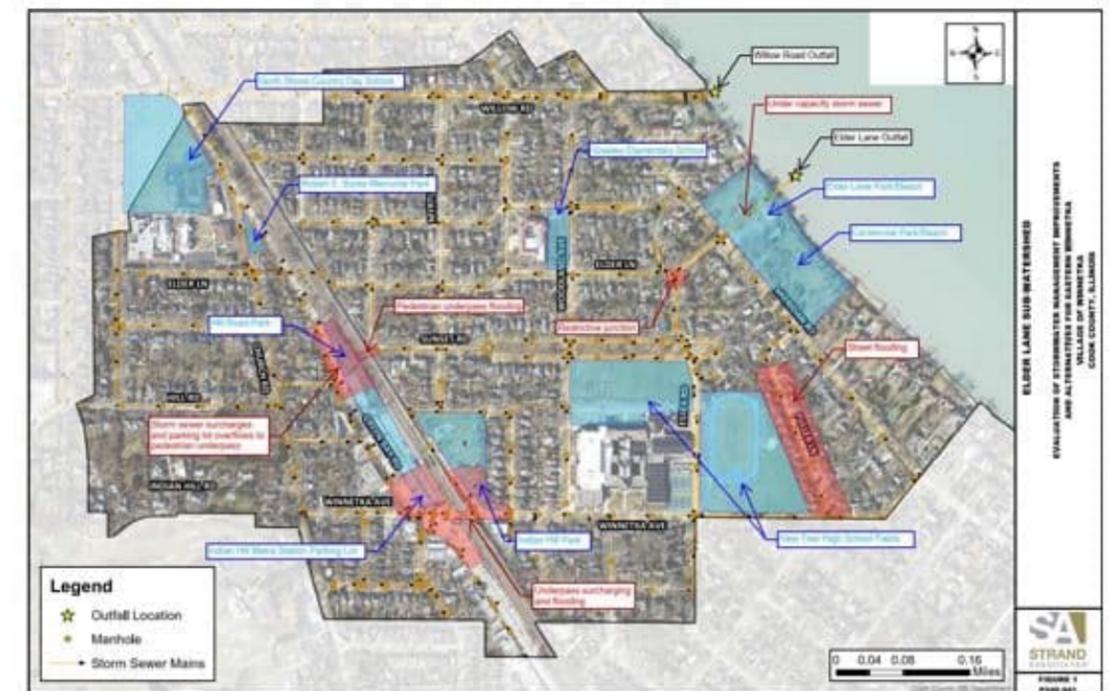
Stormwater Management Study Scope



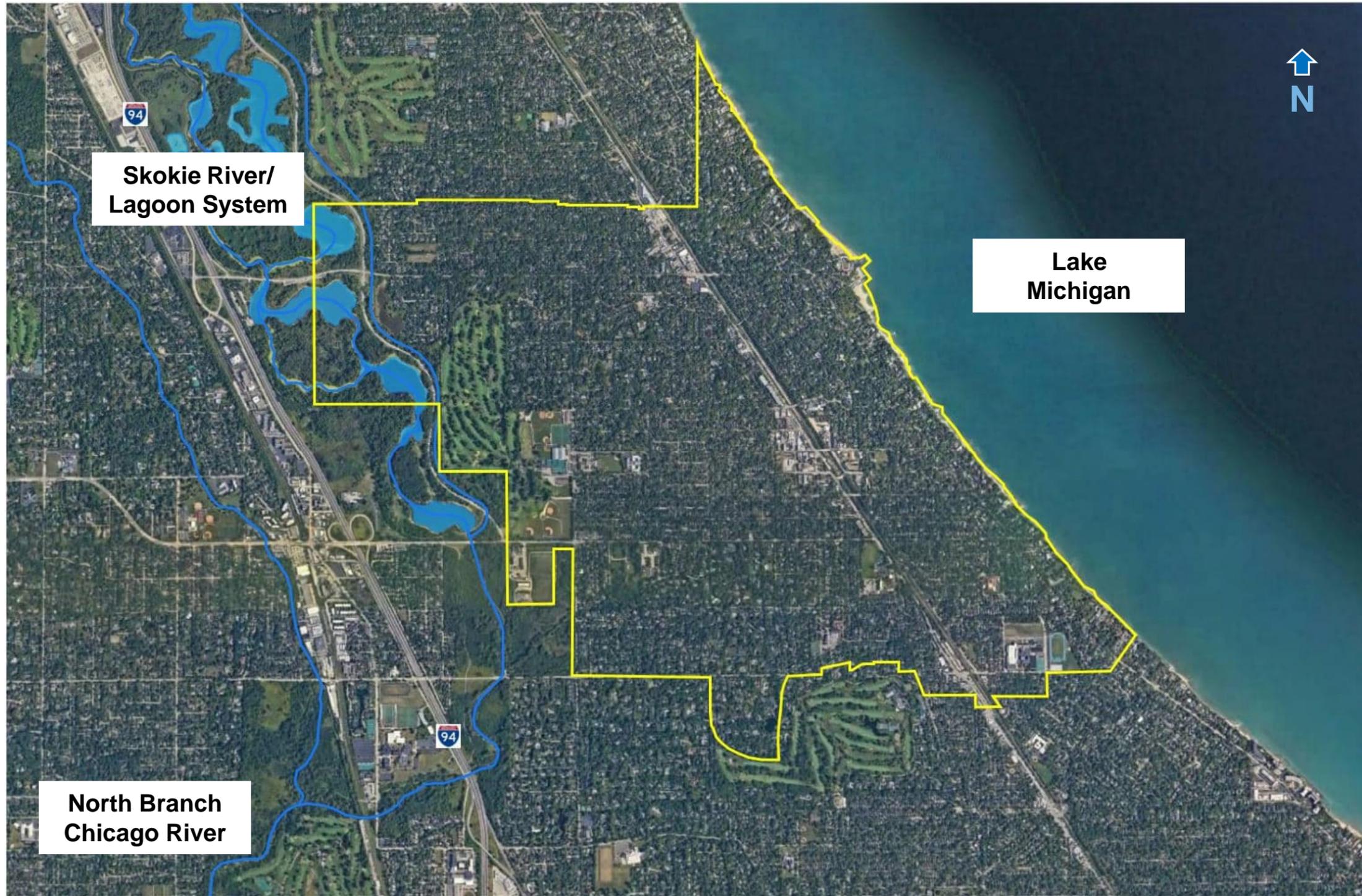
Establishment of Existing Conditions



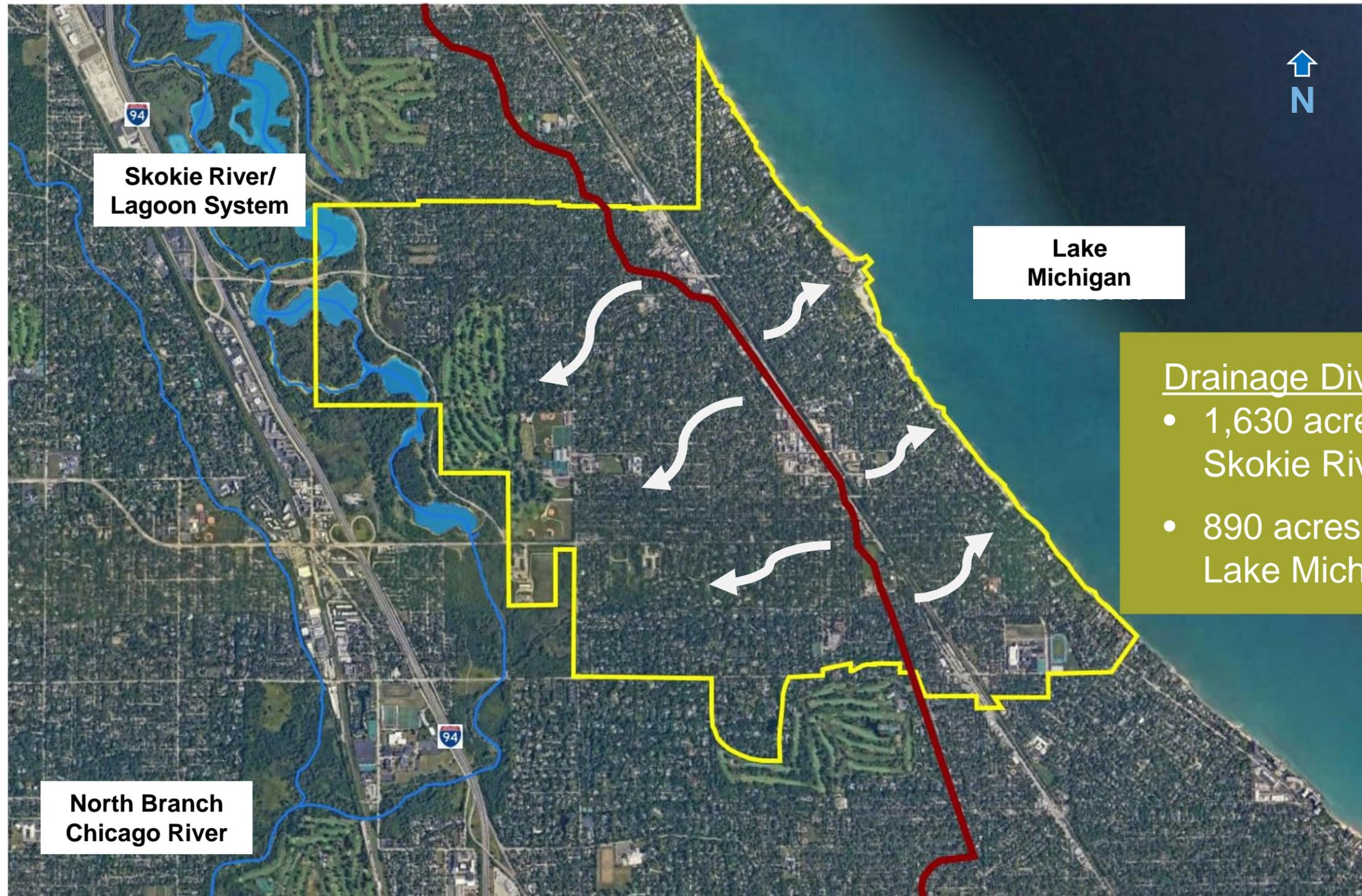
Focus on Elder Lane Area



Winnetka's Major Water Features



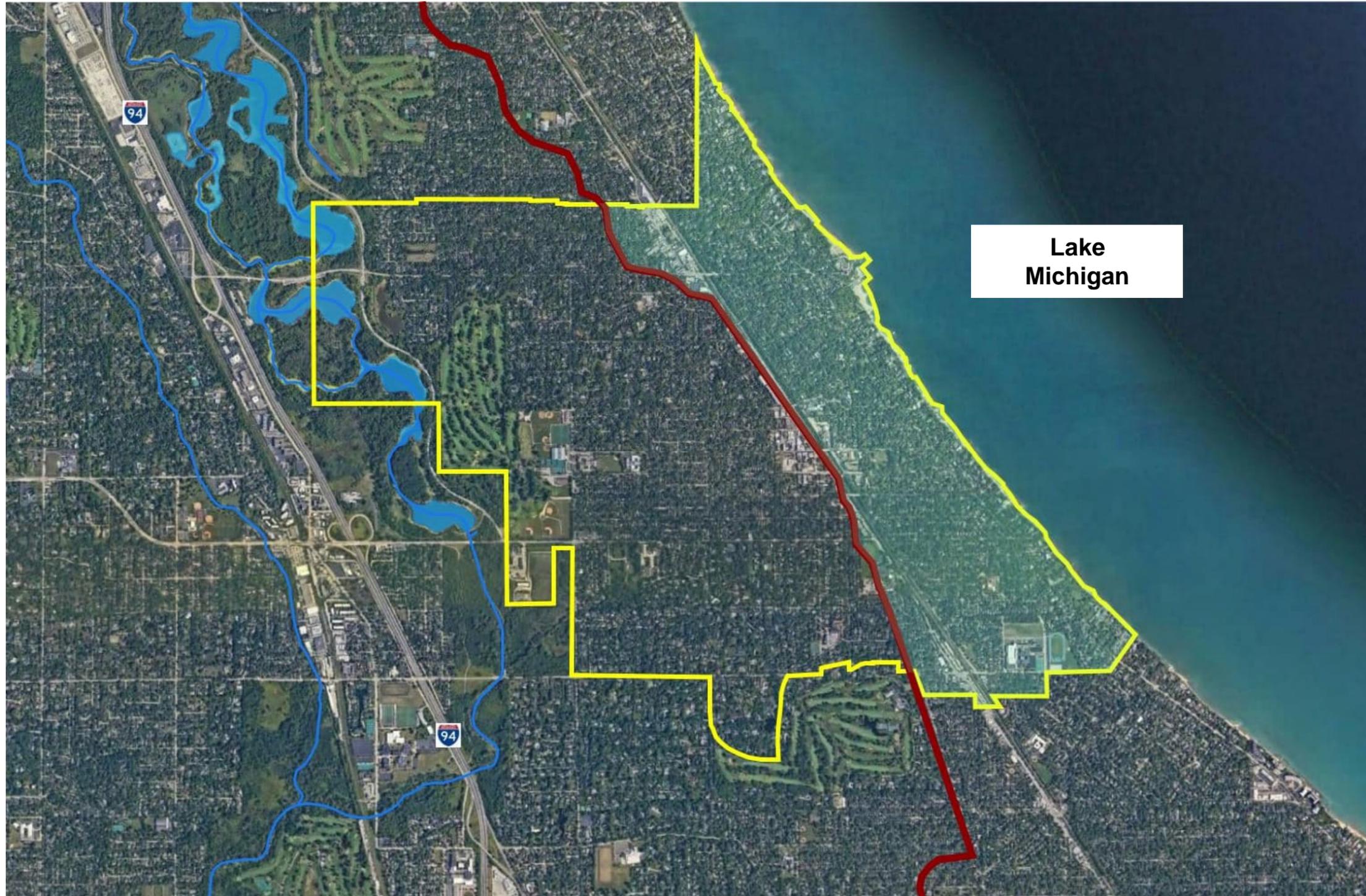
Continental Drainage Divide



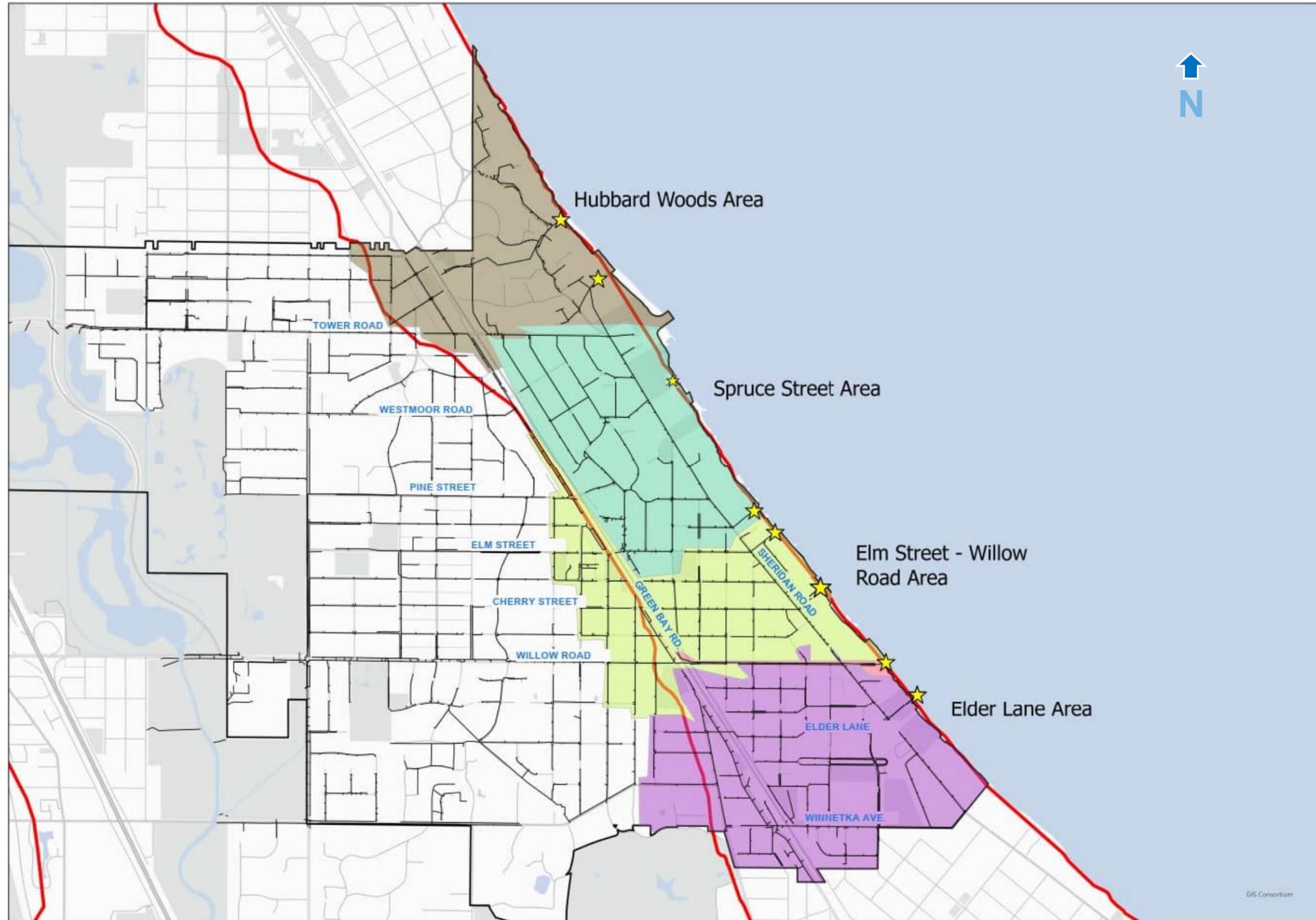
Drainage Divide

- 1,630 acres west to Skokie River
- 890 acres east to Lake Michigan

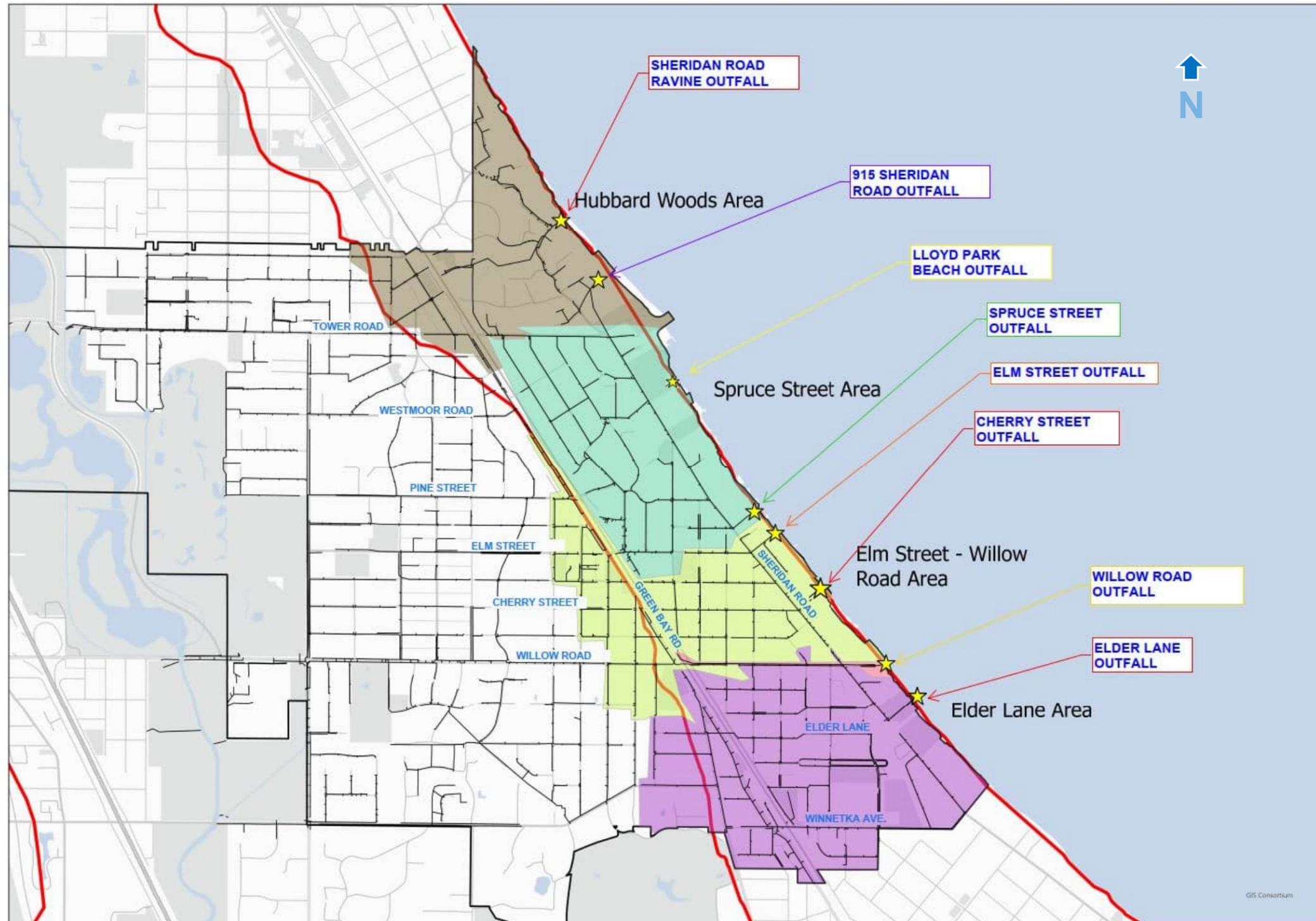
Eastern Winnetka Study Area (Lake Michigan Watershed)



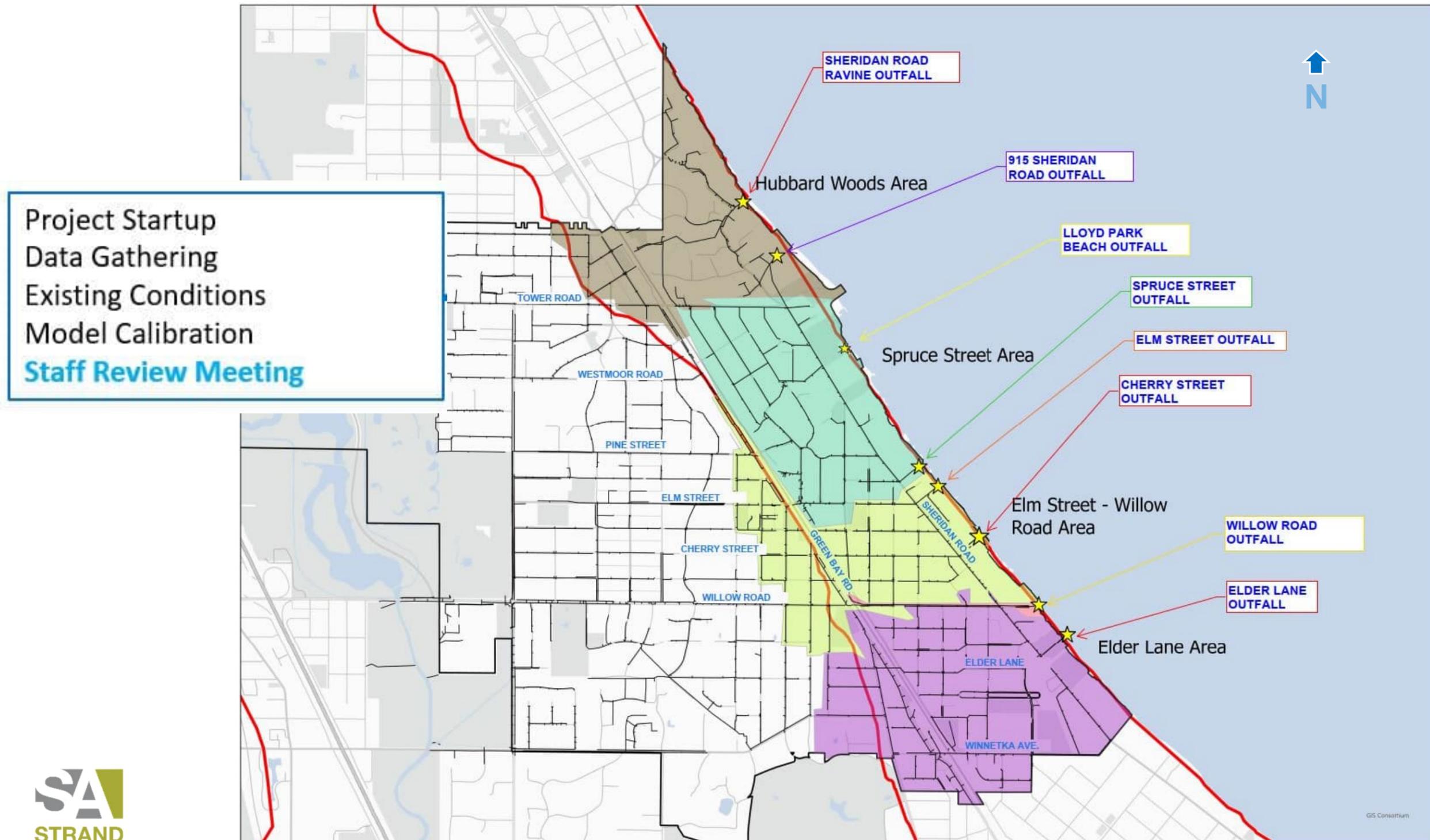
Lake Michigan Watershed and Four Sub-Areas



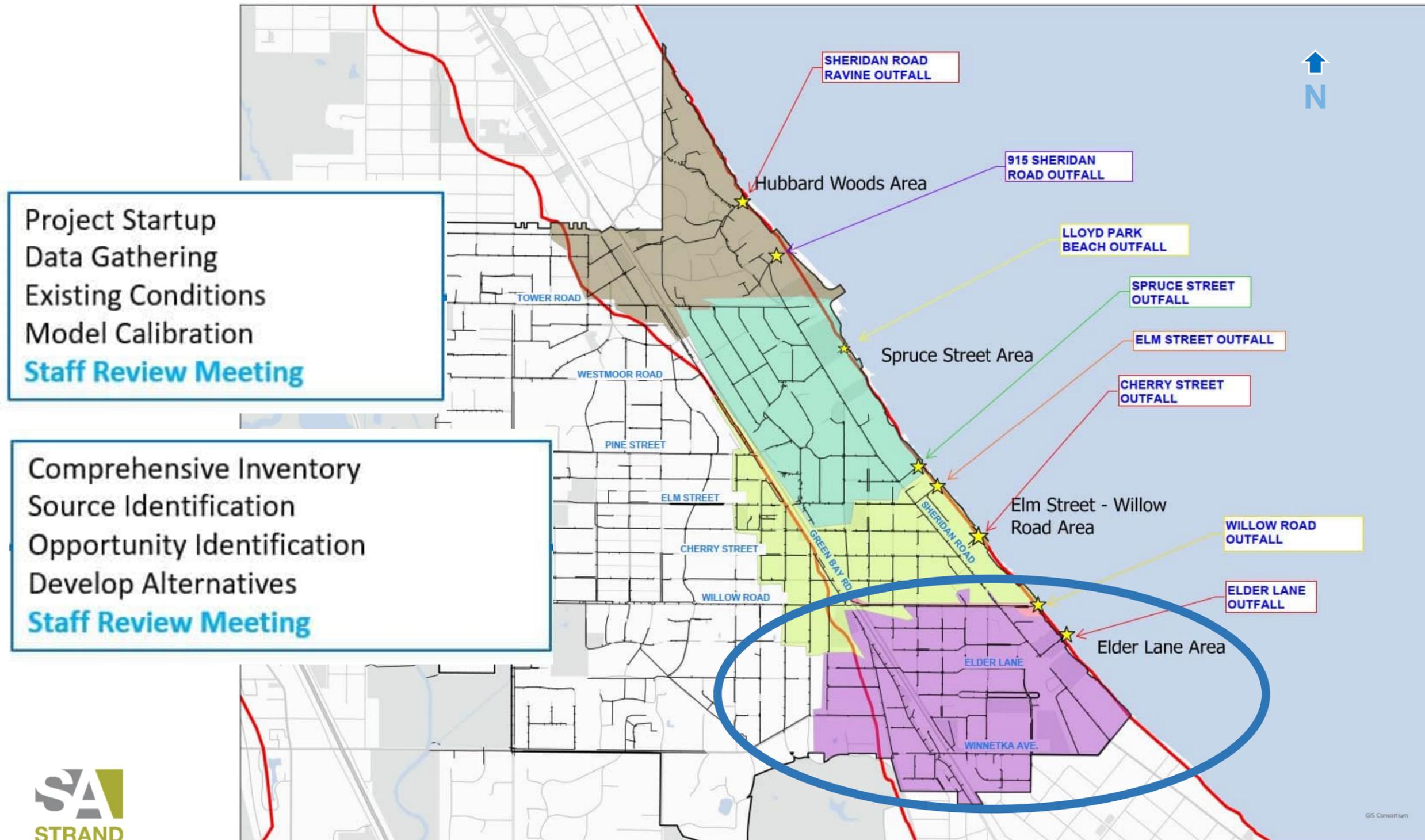
Lake Michigan Watershed and Eight Existing Outfalls



Stormwater Management Study to Date



Stormwater Management Study – Elder Lane Sub-Area

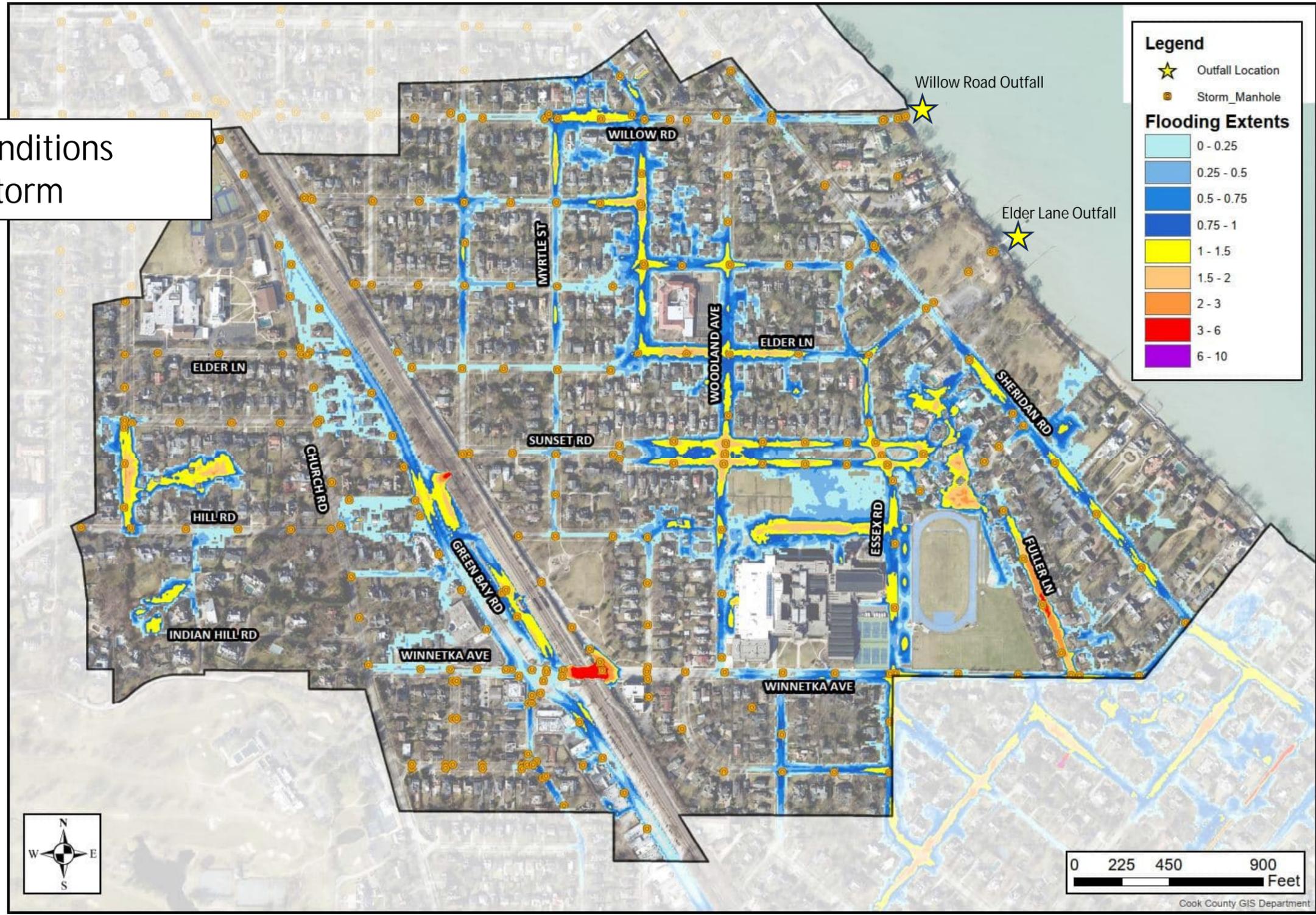


Project Startup
 Data Gathering
 Existing Conditions
 Model Calibration
Staff Review Meeting

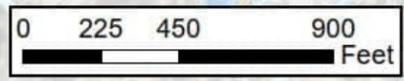
Comprehensive Inventory
 Source Identification
 Opportunity Identification
 Develop Alternatives
Staff Review Meeting

Elder Lane Sub-Area

Existing Conditions
100-Year Storm

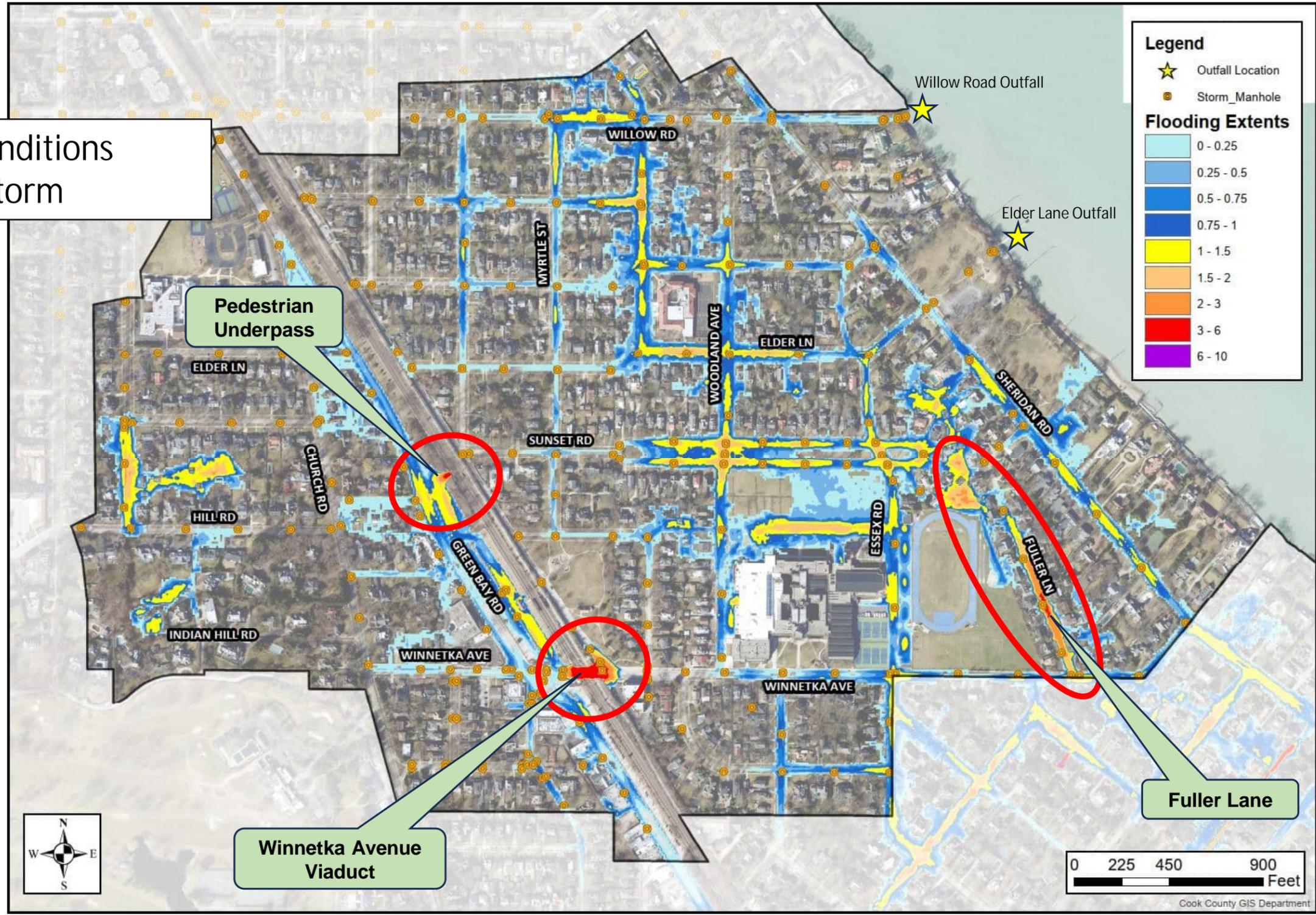


ELDER LANE EXISTING CONDITIONS
FLOOD EXTENTS 100-YEAR, 2-HOUR STORM
 EVALUATION OF STORMWATER MANAGEMENT IMPROVEMENTS
 AND ALTERNATIVES FOR EASTERN WINNETKA
 VILLAGE OF WINNETKA
 COOK COUNTY, ILLINOIS



Elder Lane Sub-Area

Existing Conditions
100-Year Storm



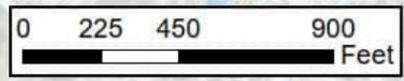
Legend

- ☆ Outfall Location
- Storm_Manhole

Flooding Extents

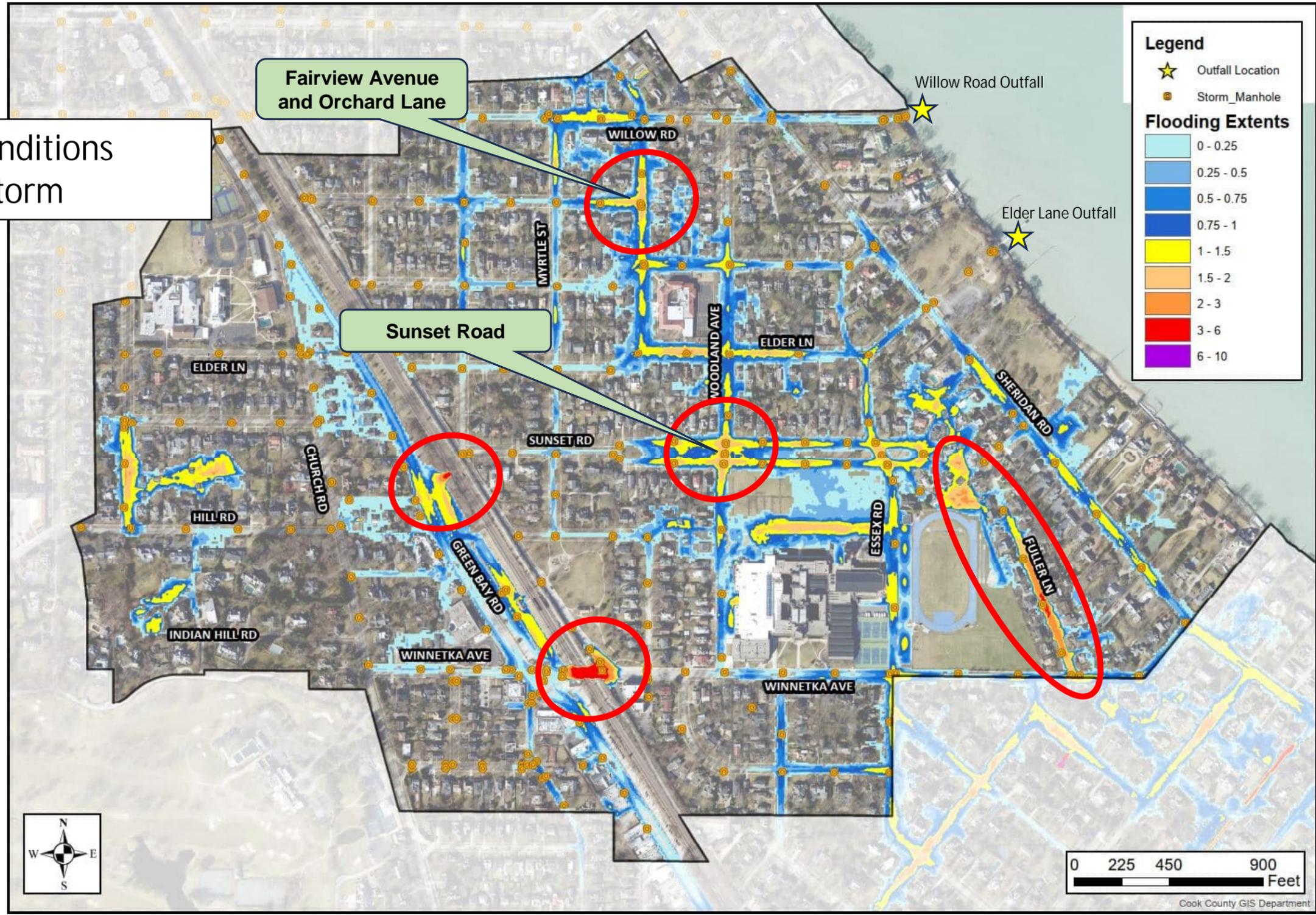
Light Blue	0 - 0.25
Blue	0.25 - 0.5
Dark Blue	0.5 - 0.75
Blue-Black	0.75 - 1
Yellow	1 - 1.5
Orange	1.5 - 2
Red-Orange	2 - 3
Red	3 - 6
Purple	6 - 10

ELDER LANE EXISTING CONDITIONS
FLOOD EXTENTS 100-YEAR, 2-HOUR STORM
EVALUATION OF STORMWATER MANAGEMENT IMPROVEMENTS
AND ALTERNATIVES FOR EASTERN WINNETKA
VILLAGE OF WINNETKA
COOK COUNTY, ILLINOIS



Elder Lane Sub-Area

Existing Conditions
100-Year Storm



Legend

- ☆ Outfall Location
- Storm_Manhole

Flooding Extents

- 0 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- 0.75 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 3
- 3 - 6
- 6 - 10

ELDER LANE EXISTING CONDITIONS
FLOOD EXTENTS 100-YEAR, 2-HOUR STORM
 EVALUATION OF STORMWATER MANAGEMENT IMPROVEMENTS
 AND ALTERNATIVES FOR EASTERN WINNETKA
 VILLAGE OF WINNETKA
 COOK COUNTY, ILLINOIS

SA
STRAND
 ASSOCIATES®

FIGURE 6
1619.043



0 225 450 900
 Feet
 Cook County GIS Department

Elder Lane Sub-Area

Existing Conditions
2-Year Storm



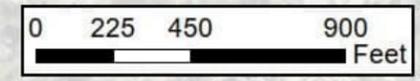
Legend

- ★ Outfall Location
- Storm_Manhole

Flooding Extents

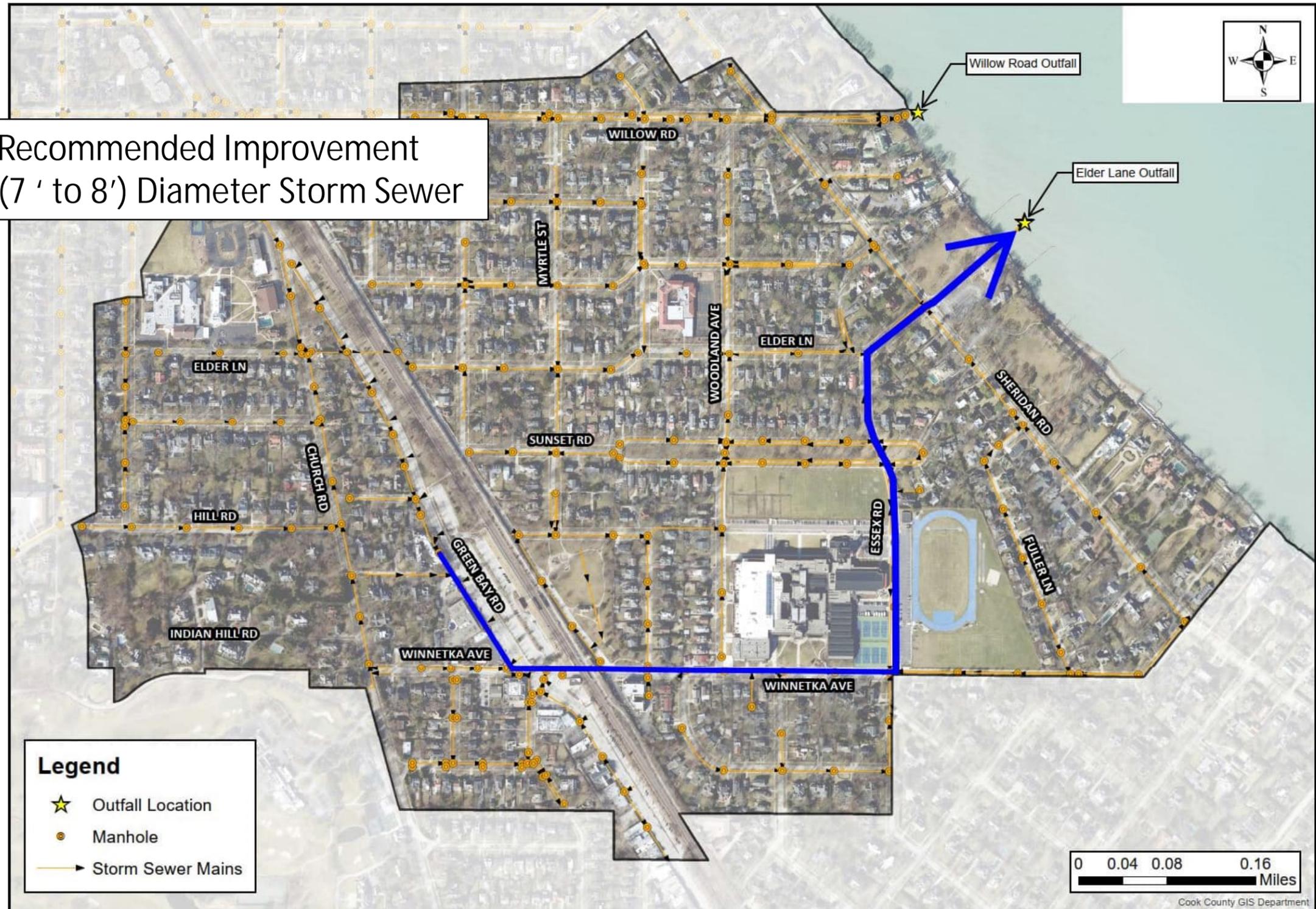
Light Blue	0 - 0.25
Blue	0.25 - 0.5
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ELDER LANE EXISTING CONDITIONS
FLOOD EXTENTS 2-YEAR, 2-HOUR STORM
EVALUATION OF STORMWATER MANAGEMENT IMPROVEMENTS
AND ALTERNATIVES FOR EASTERN WINNETKA
VILLAGE OF WINNETKA
COOK COUNTY, ILLINOIS



Large Storm Sewer Through Elder Lane Sub-Area

Previously Recommended Improvement
84" to 96" (7' to 8') Diameter Storm Sewer



Legend

- ★ Outfall Location
- Manhole
- Storm Sewer Mains

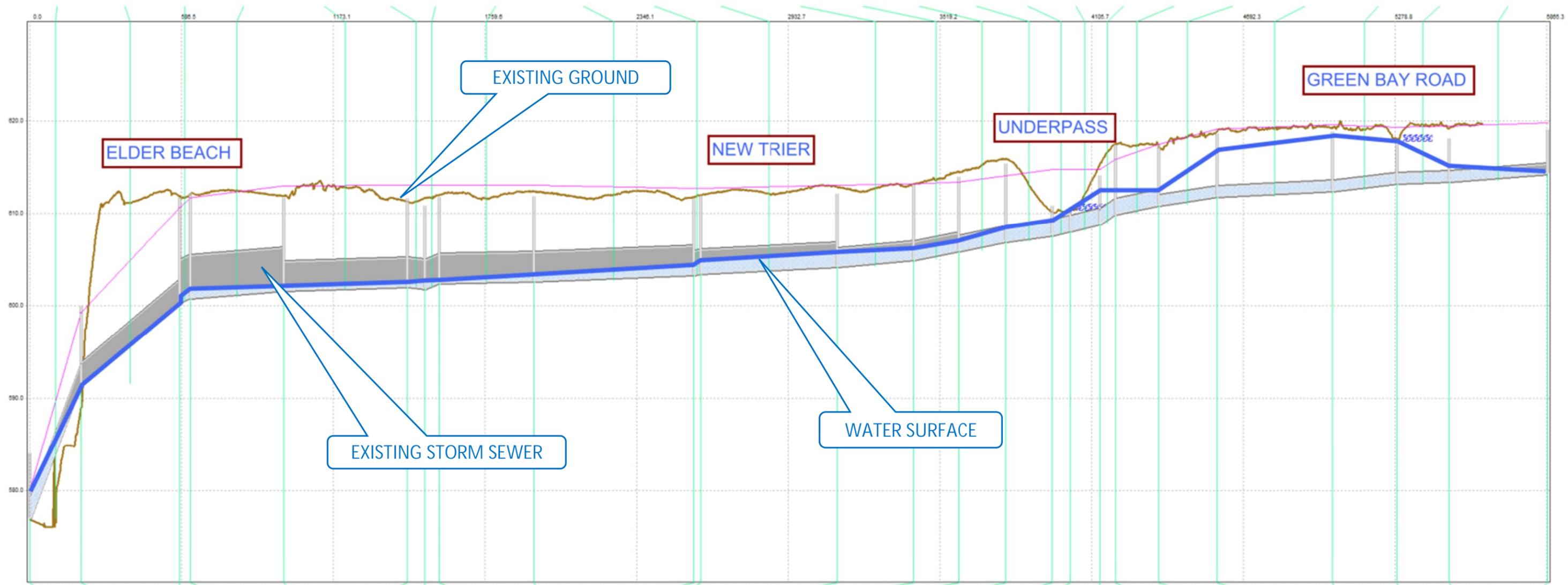
ELDER LANE SUB-WATERSHED
 EVALUATION OF STORMWATER MANAGEMENT IMPROVEMENTS
 AND ALTERNATIVES FOR EASTERN WINNETKA
 VILLAGE OF WINNETKA
 COOK COUNTY, ILLINOIS

FIGURE 1
P240.041



Cook County GIS Department

Profile of Storm Sewer Through Elder Lane Sub-Area



	KK4-1.1	N930	KK4-4	KK4-5	KK4-6	KK5-20	KK5-19	KK5-18	KK5-15	KK5-6	KK5-7	KK5-9	KK5-10	KK5-11	KK5-12	KK5-13	KK2-1.1	KK2-1	KK2-2	KK2-3	KK2-16	KK2-14	KK2-12	KK2-11	KK2-10
Storm	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2
Node Name	KK4-1.1	N930	KK4-4	KK4-5	KK4-6	KK5-20	KK5-19	KK5-18	KK5-15	KK5-6	KK5-7	KK5-9	KK5-10	KK5-11	KK5-12	KK5-13	KK2-1.1	KK2-1	KK2-2	KK2-3	KK2-16	KK2-14	KK2-12	KK2-11	KK2-10
Ground Elevat	584.000	599.996	611.711	612.165	611.706	611.610	610.830	611.770	611.843	611.620	611.899	612.096	613.127	613.976	615.380	610.814	610.180	614.070	617.383	617.464	618.603	618.825	617.617	618.104	619.027
Invert Elevatio	577.000	591.410	599.960	600.920	601.730	602.130	601.930	602.530	602.730	603.430	603.530	604.330	605.030	606.030	607.030	607.730	608.179	608.930	609.730	610.930	611.930	612.530	613.330	613.530	614.330
Pending Type	None	Link Spill Crest																							

Elder Lane Sub-Area

Existing Conditions
2-Year Storm



Legend

- ★ Outfall Location
- Storm_Manhole

Flooding Extents

- 0 - 0.25
- 0.25 - 0.5
- 0.5 - 0.75
- 0.75 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 3
- 3 - 6
- 6 - 10

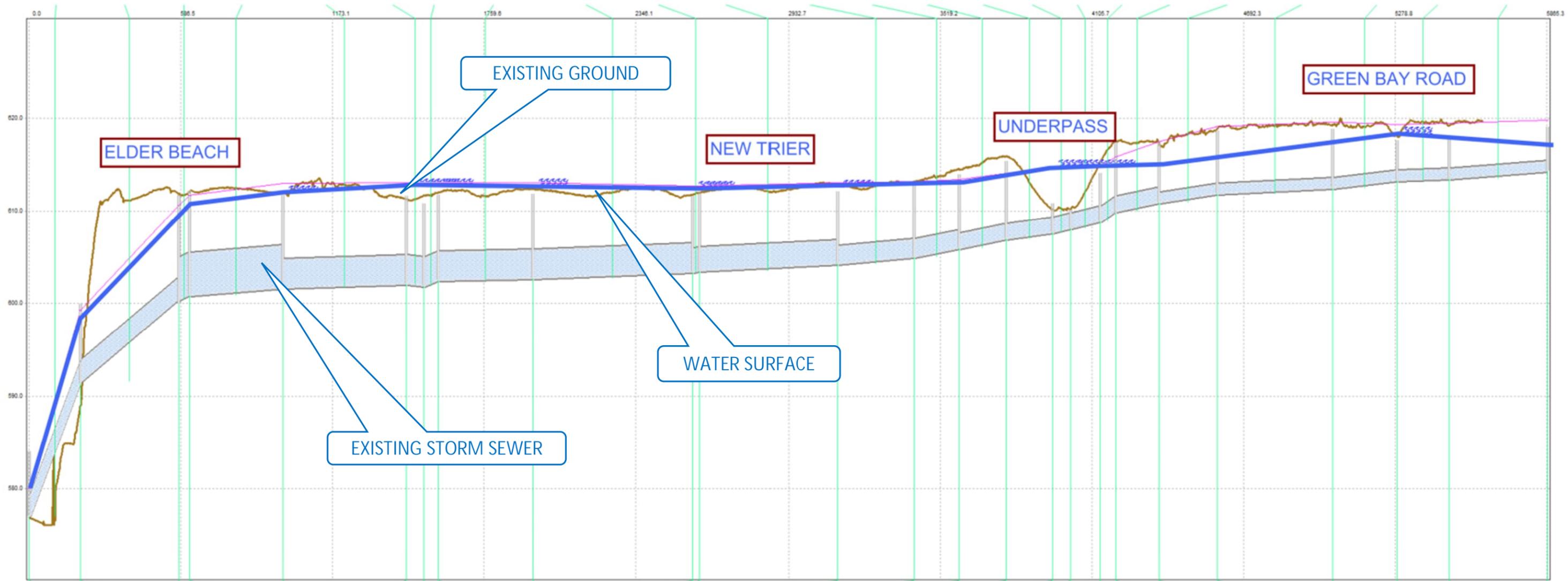
ELDER LANE EXISTING CONDITIONS
FLOOD EXTENTS 2-YEAR, 2-HOUR STORM
EVALUATION OF STORMWATER MANAGEMENT IMPROVEMENTS
AND ALTERNATIVES FOR EASTERN WINNETKA
VILLAGE OF WINNETKA
COOK COUNTY, ILLINOIS


FIGURE 1
1619.043



0 225 450 900 Feet
Cook County GIS Department

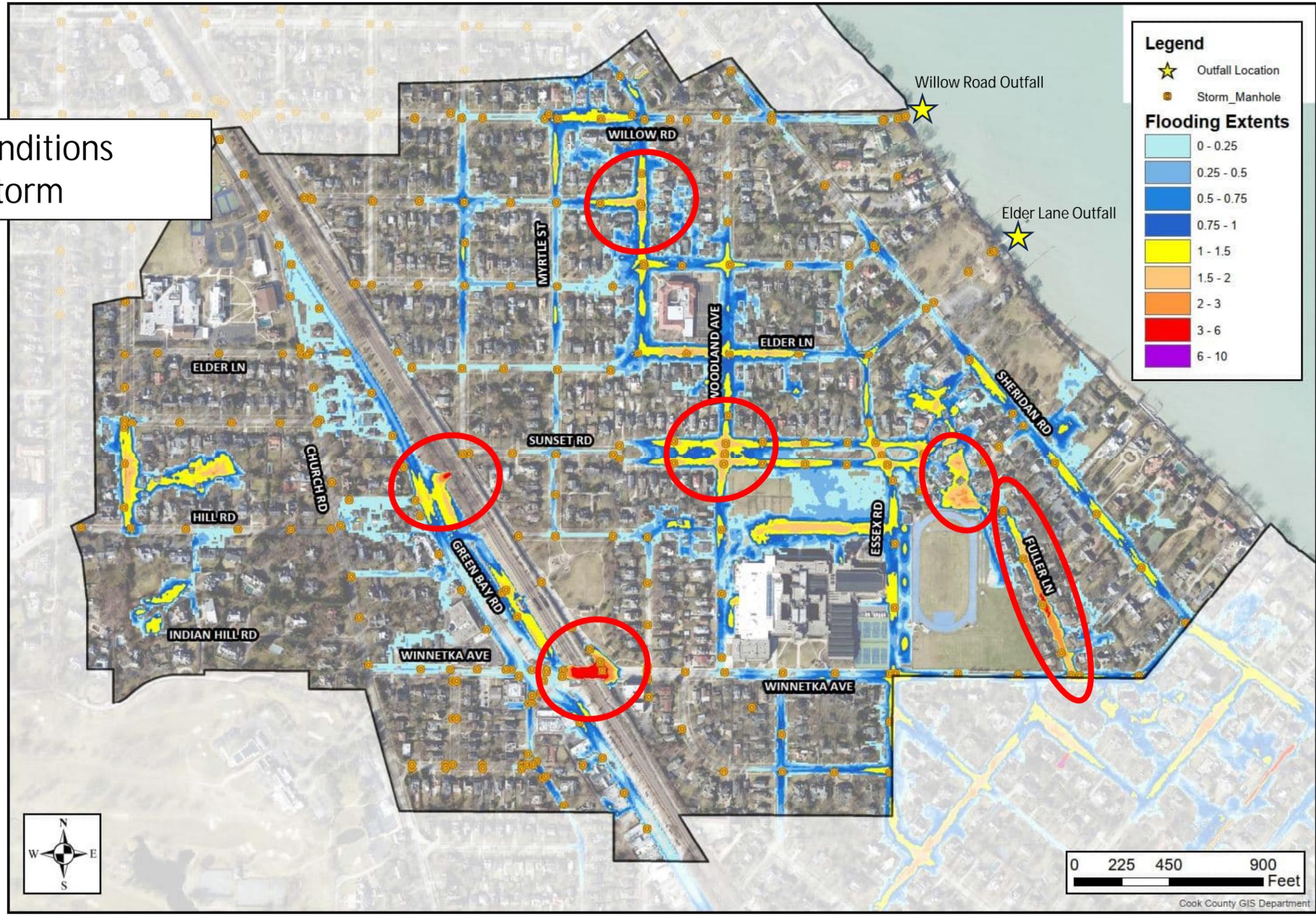
Profile of Storm Sewer Through Elder Lane Sub-Area – 100 Year Storm



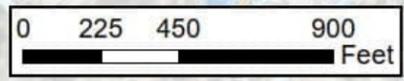
	KK4-1.1	N930	KK4-4	KK4-5	KK4-6	KK5-20	KK5-19	KK5-18	KK5-15	KK5-6	KK5-7	KK5-9	KK5-10	KK5-11	KK5-12	KK5-13	KK2-1.1	KK2-1	KK2-2	KK2-3	KK2-16	KK2-14	KK2-12	KK2-11	KK2-10
Storm	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2	100-2
Node Name	KK4-1.1	N930	KK4-4	KK4-5	KK4-6	KK5-20	KK5-19	KK5-18	KK5-15	KK5-6	KK5-7	KK5-9	KK5-10	KK5-11	KK5-12	KK5-13	KK2-1.1	KK2-1	KK2-2	KK2-3	KK2-16	KK2-14	KK2-12	KK2-11	KK2-10
Ground Elevat	584.000	599.996	611.711	612.165	611.706	611.610	610.830	611.770	611.843	611.620	611.899	612.096	613.127	613.976	615.380	610.814	610.180	614.070	617.383	617.464	618.603	618.825	617.617	618.104	619.027
Invert Elevatio	577.000	591.410	599.960	600.920	601.730	602.130	601.930	602.530	602.730	603.430	603.530	604.330	605.030	606.030	607.030	607.730	608.179	608.930	609.730	610.930	611.930	612.530	613.330	613.530	614.330
Ponding Type	None	Link Spill Crest																							

Elder Lane Alternatives Evaluation

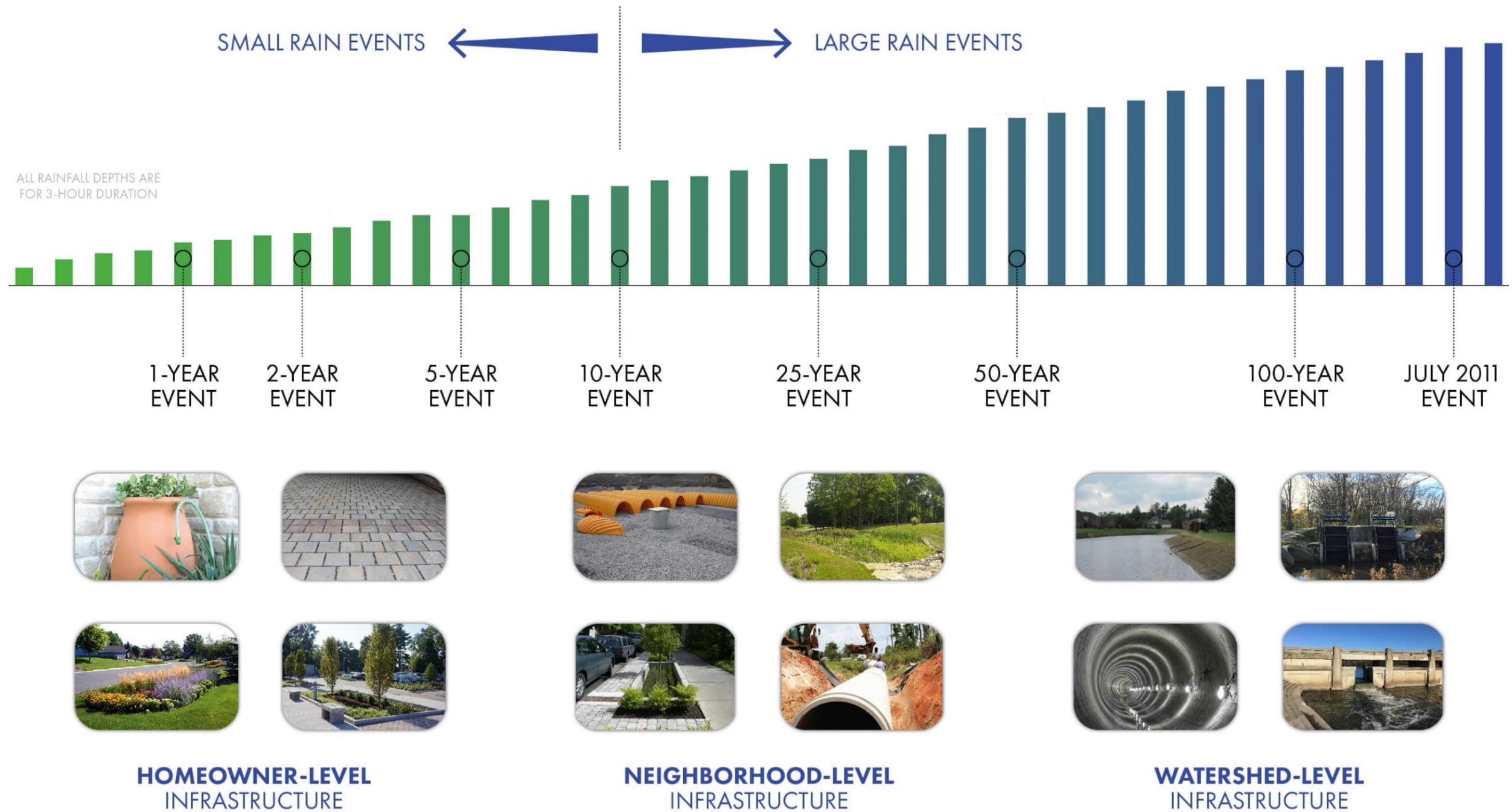
Existing Conditions
100-Year Storm



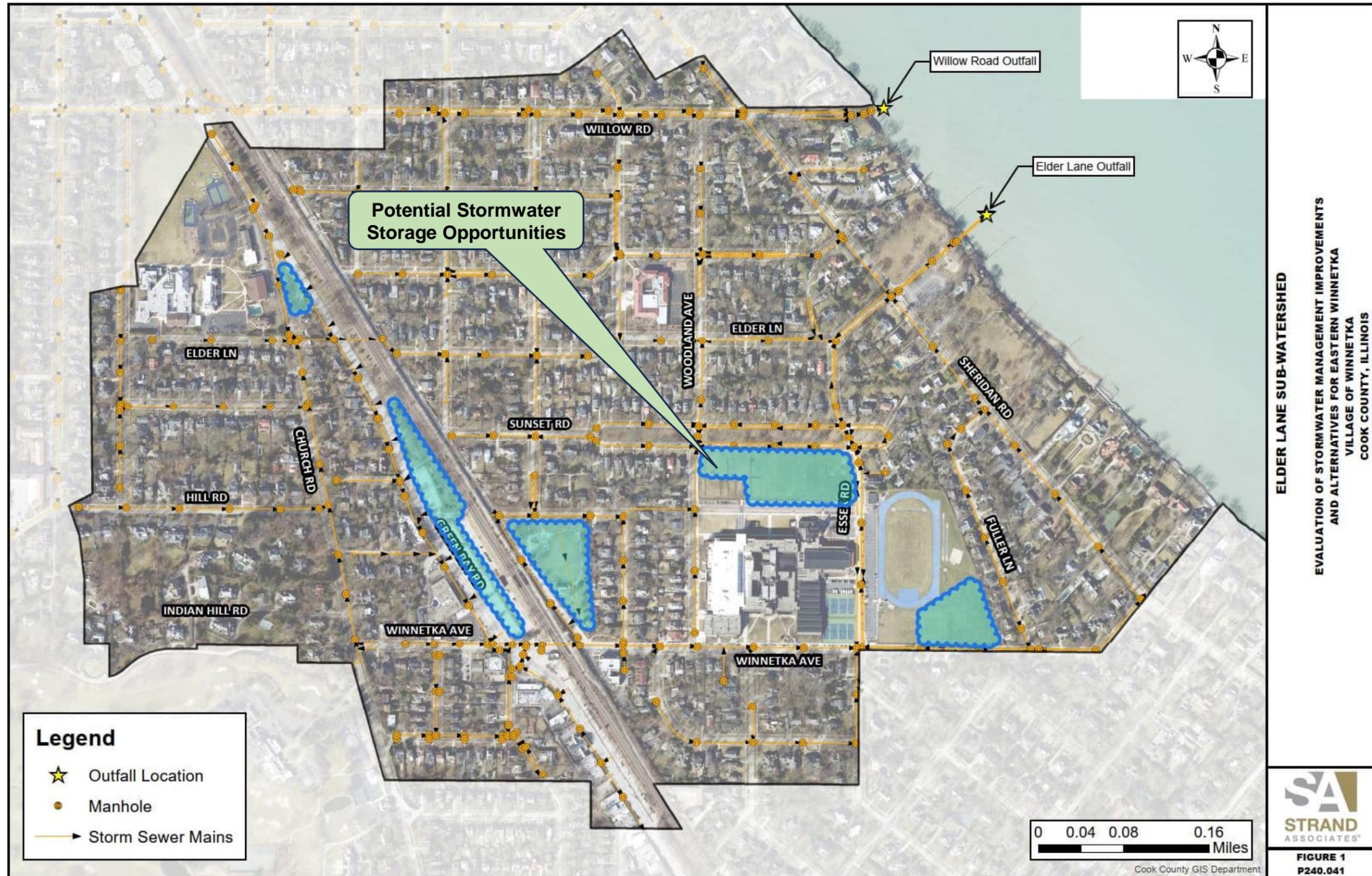
ELDER LANE EXISTING CONDITIONS
FLOOD EXTENTS 100-YEAR, 2-HOUR STORM
 EVALUATION OF STORMWATER MANAGEMENT IMPROVEMENTS
 AND ALTERNATIVES FOR EASTERN WINNETKA
 VILLAGE OF WINNETKA
 COOK COUNTY, ILLINOIS



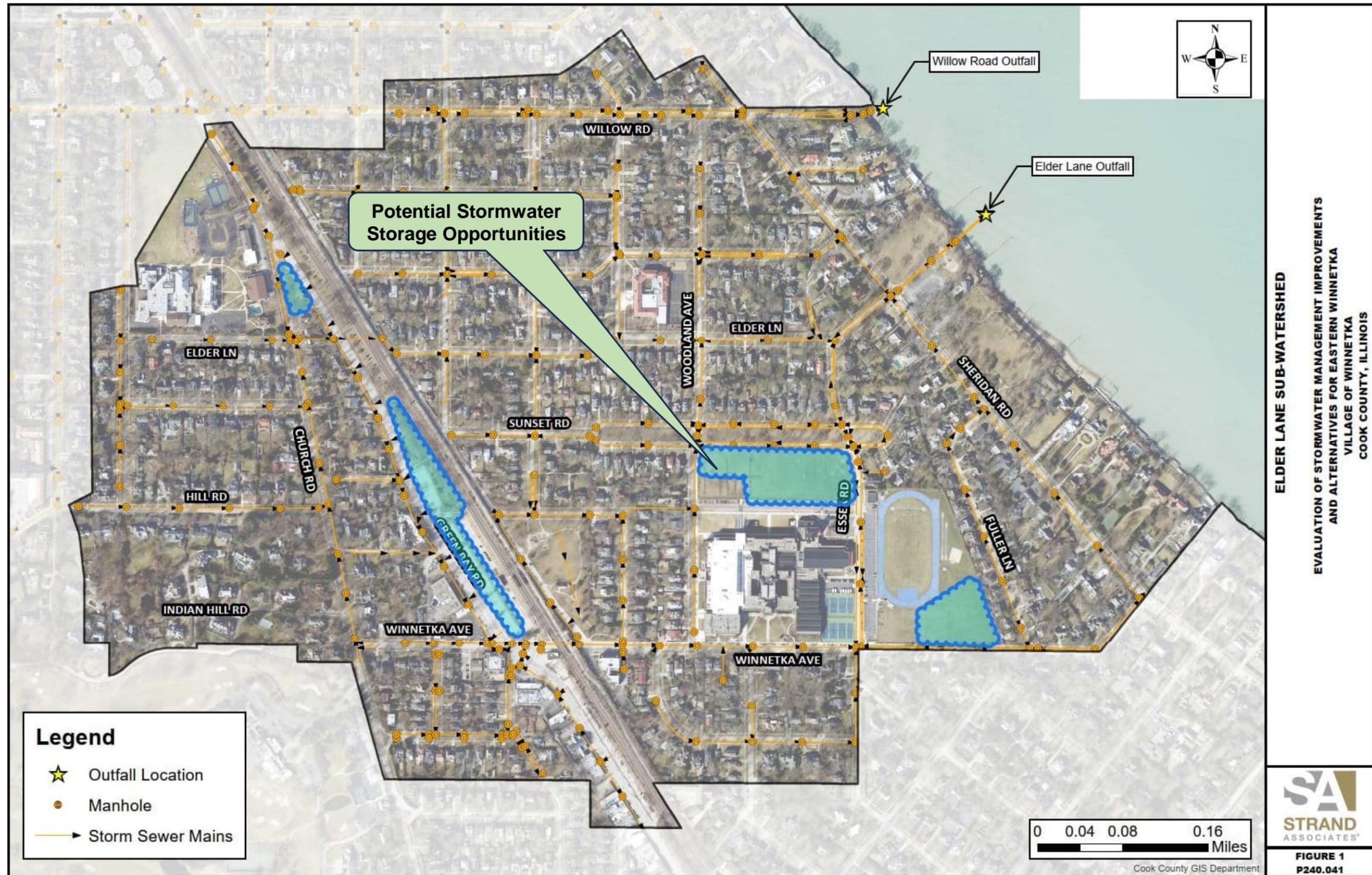
Alternatives Evaluation – Identifying Strategies



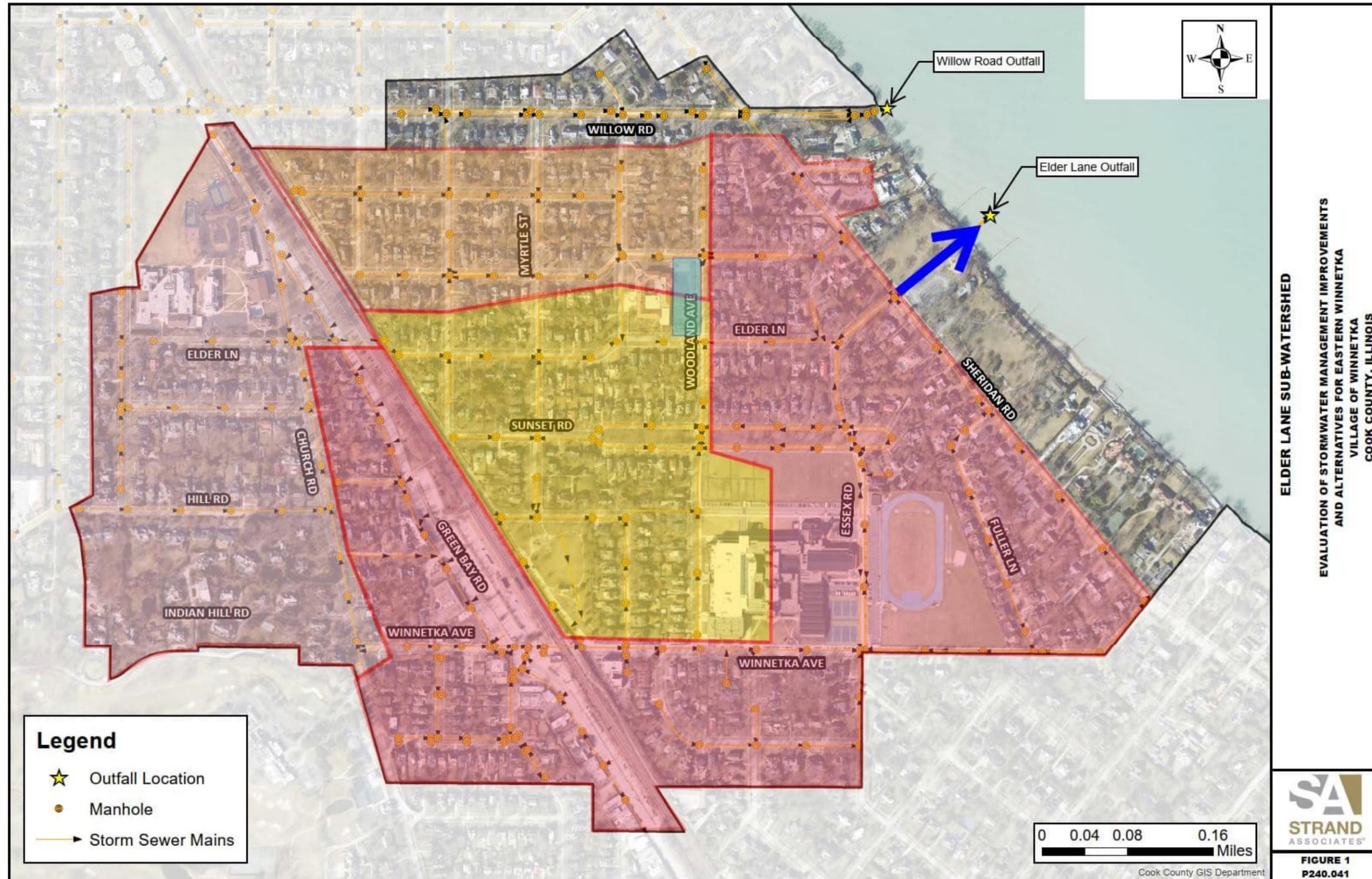
Elder Lane Alternatives Evaluation - Storage



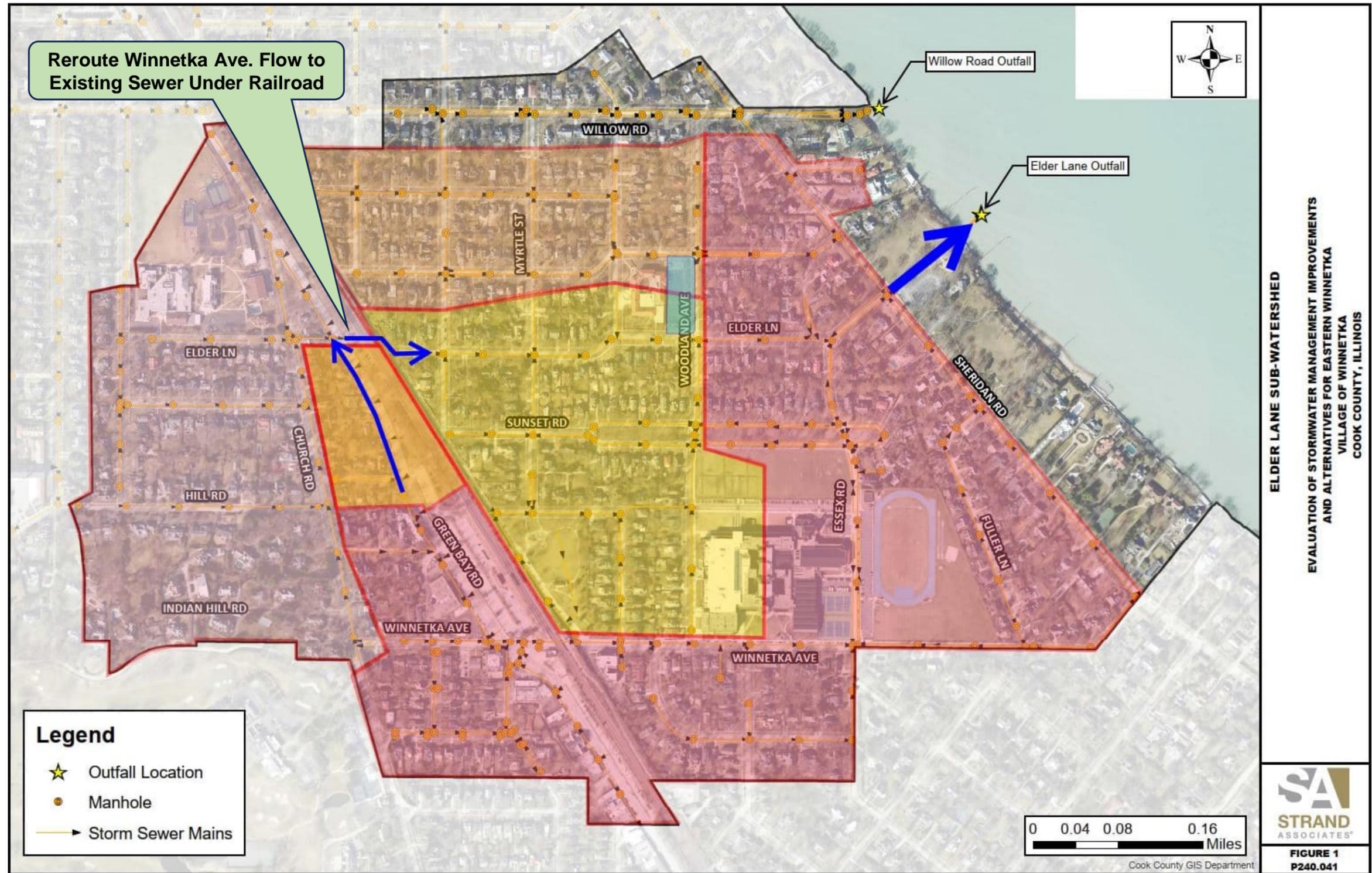
Elder Lane Alternatives Evaluation - Storage



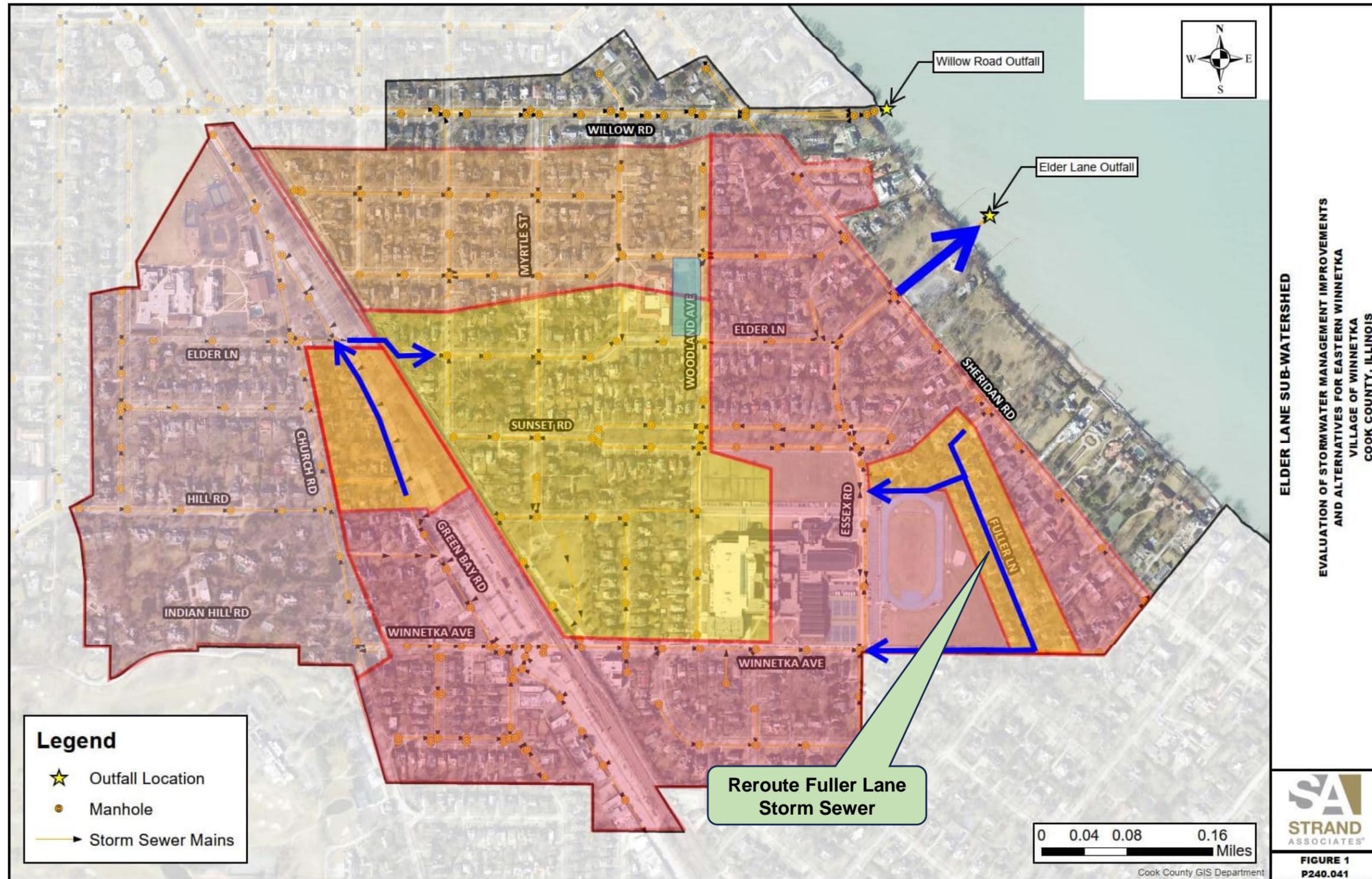
Elder Lane Alternatives Evaluation - Conveyance



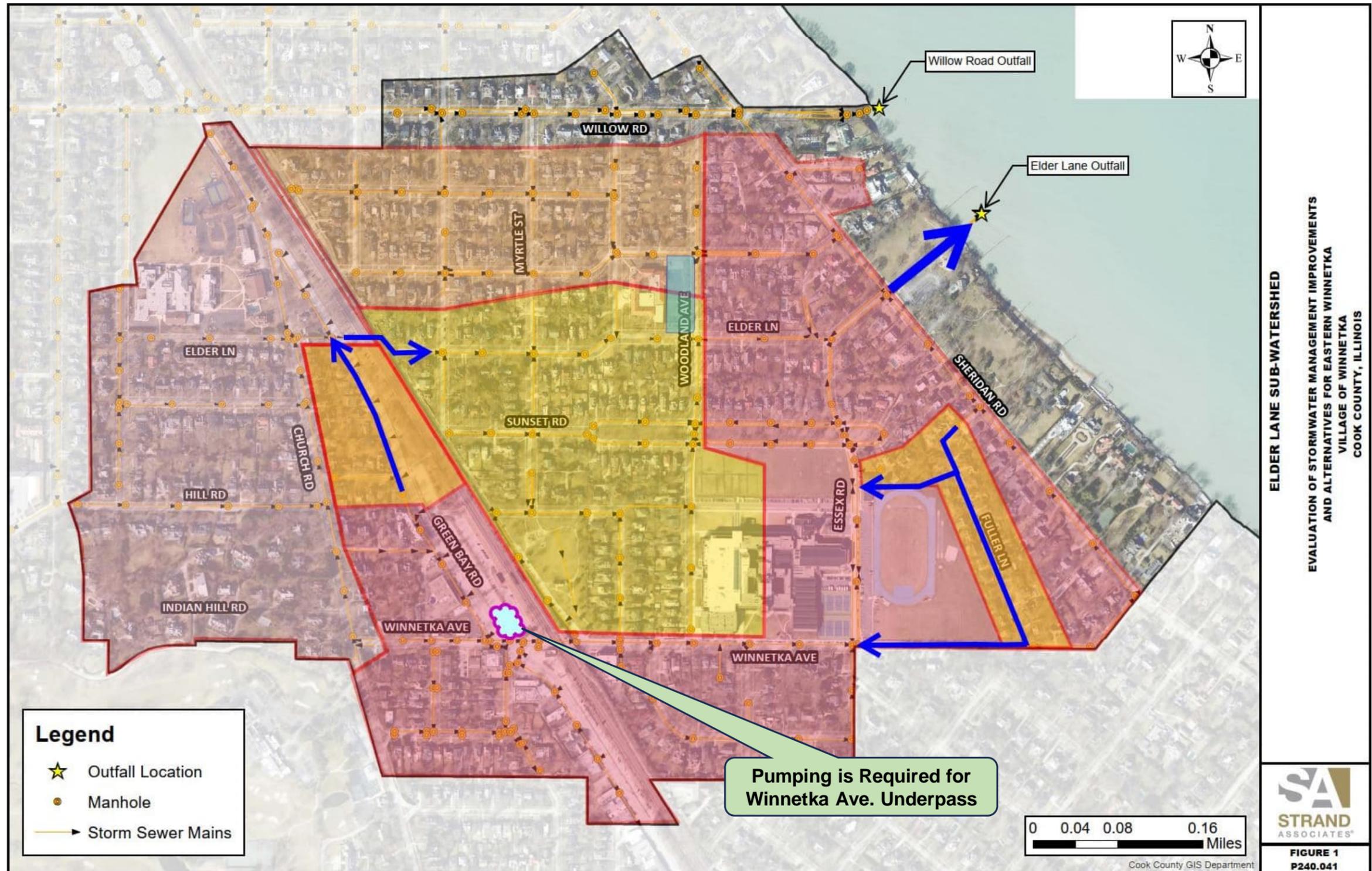
Elder Lane Alternatives Evaluation - Conveyance



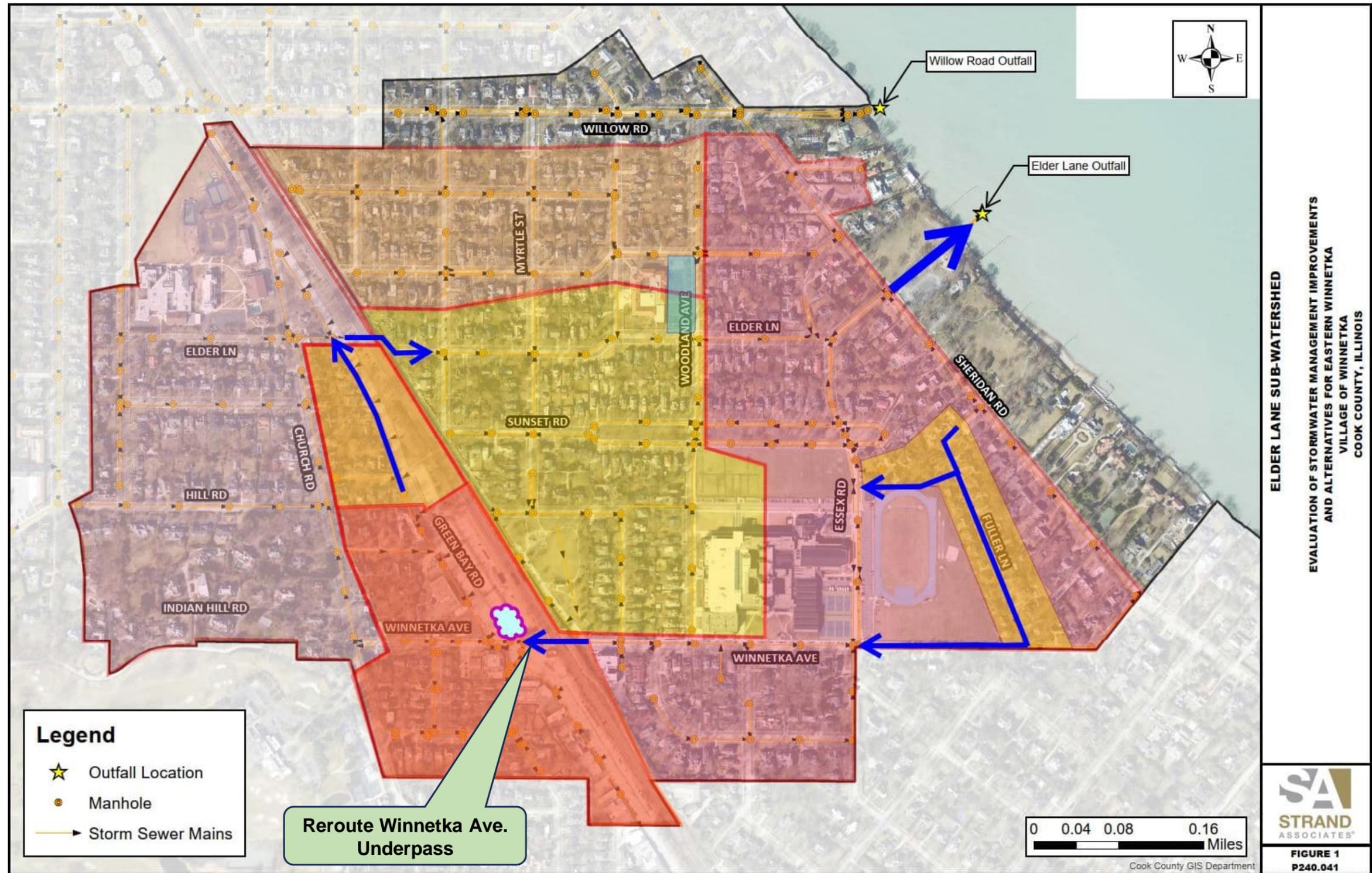
Elder Lane Alternatives Evaluation - Conveyance



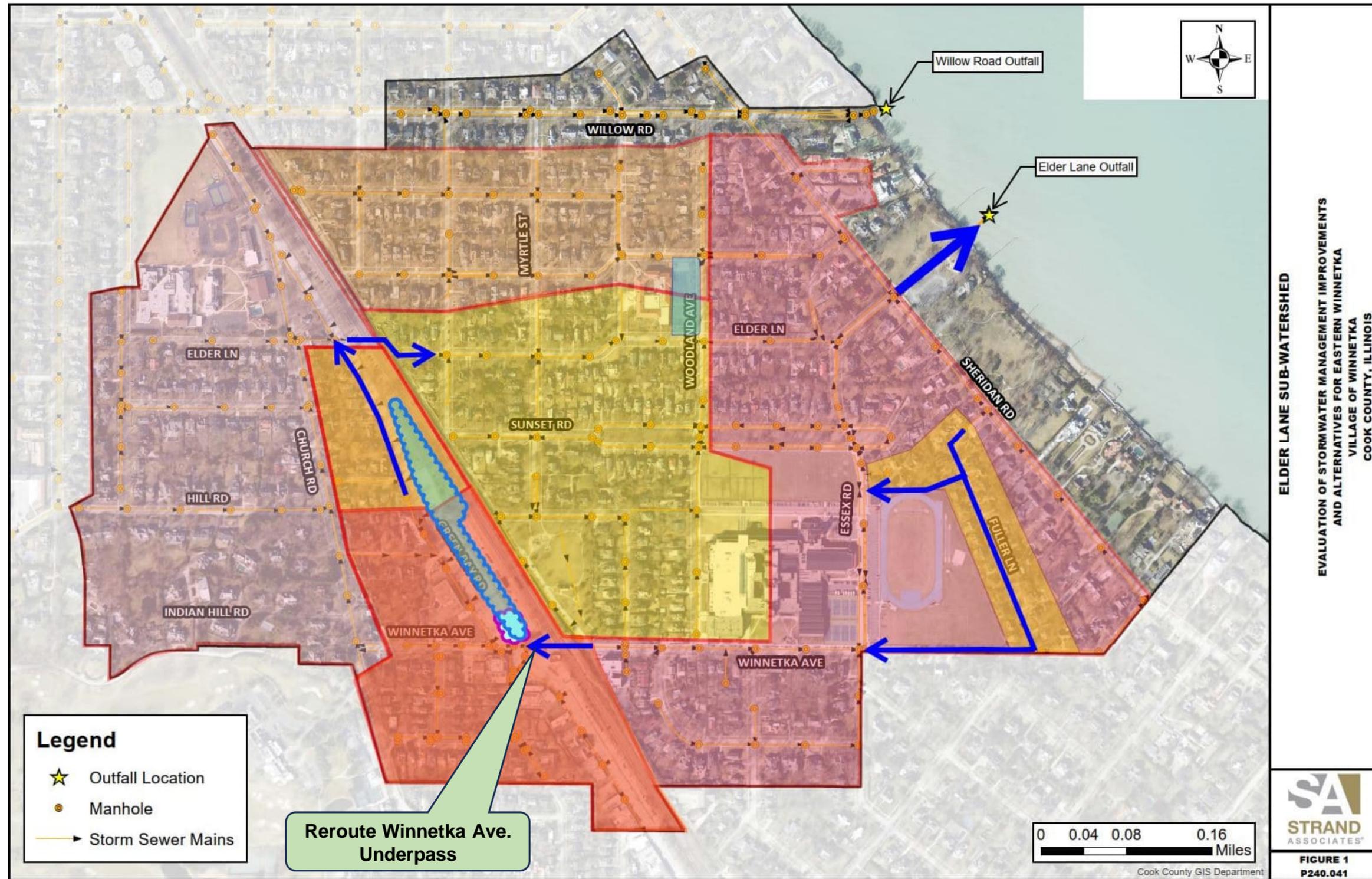
Elder Lane Alternatives Evaluation - Conveyance



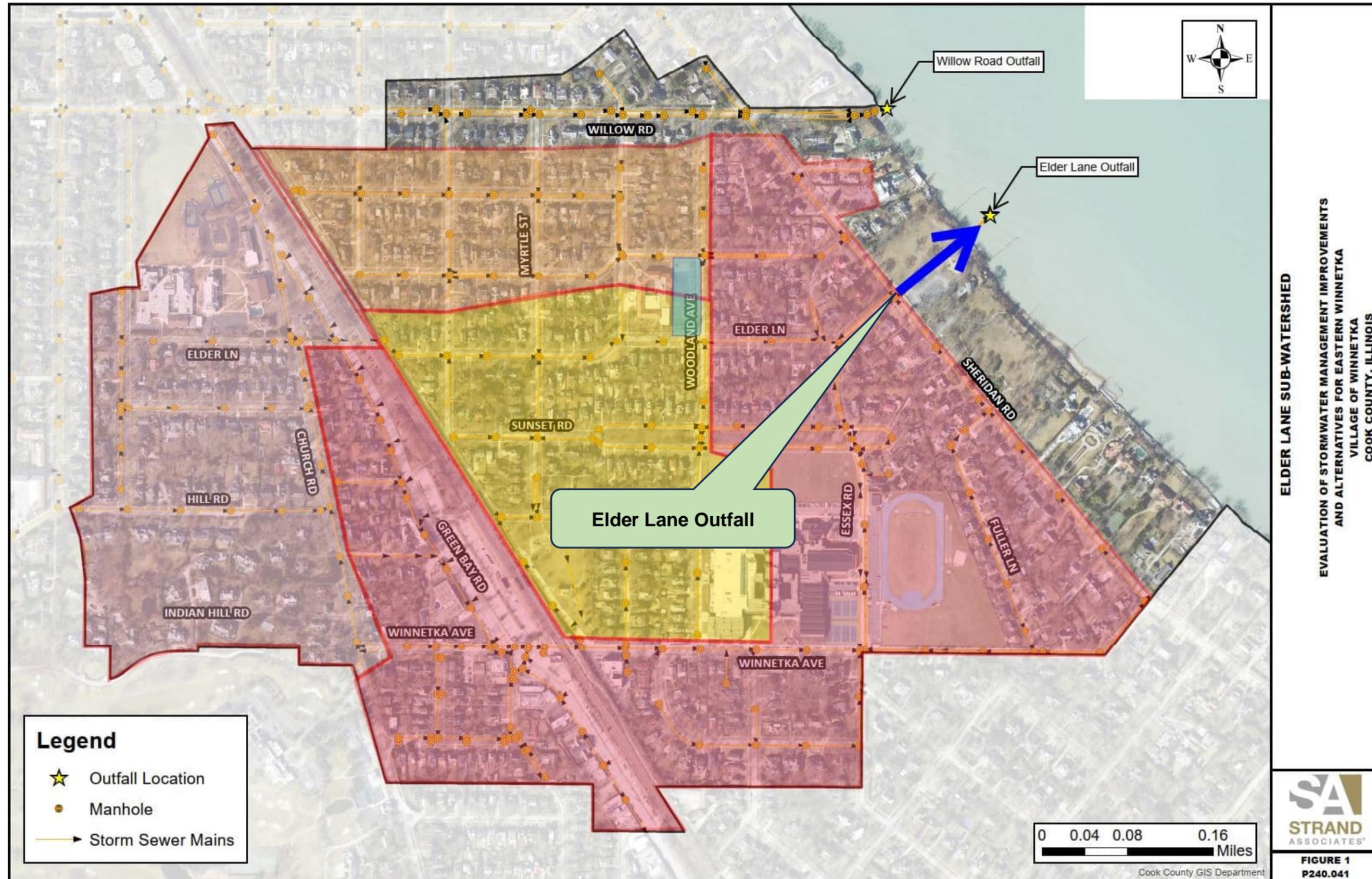
Elder Lane Alternatives Evaluation - Conveyance



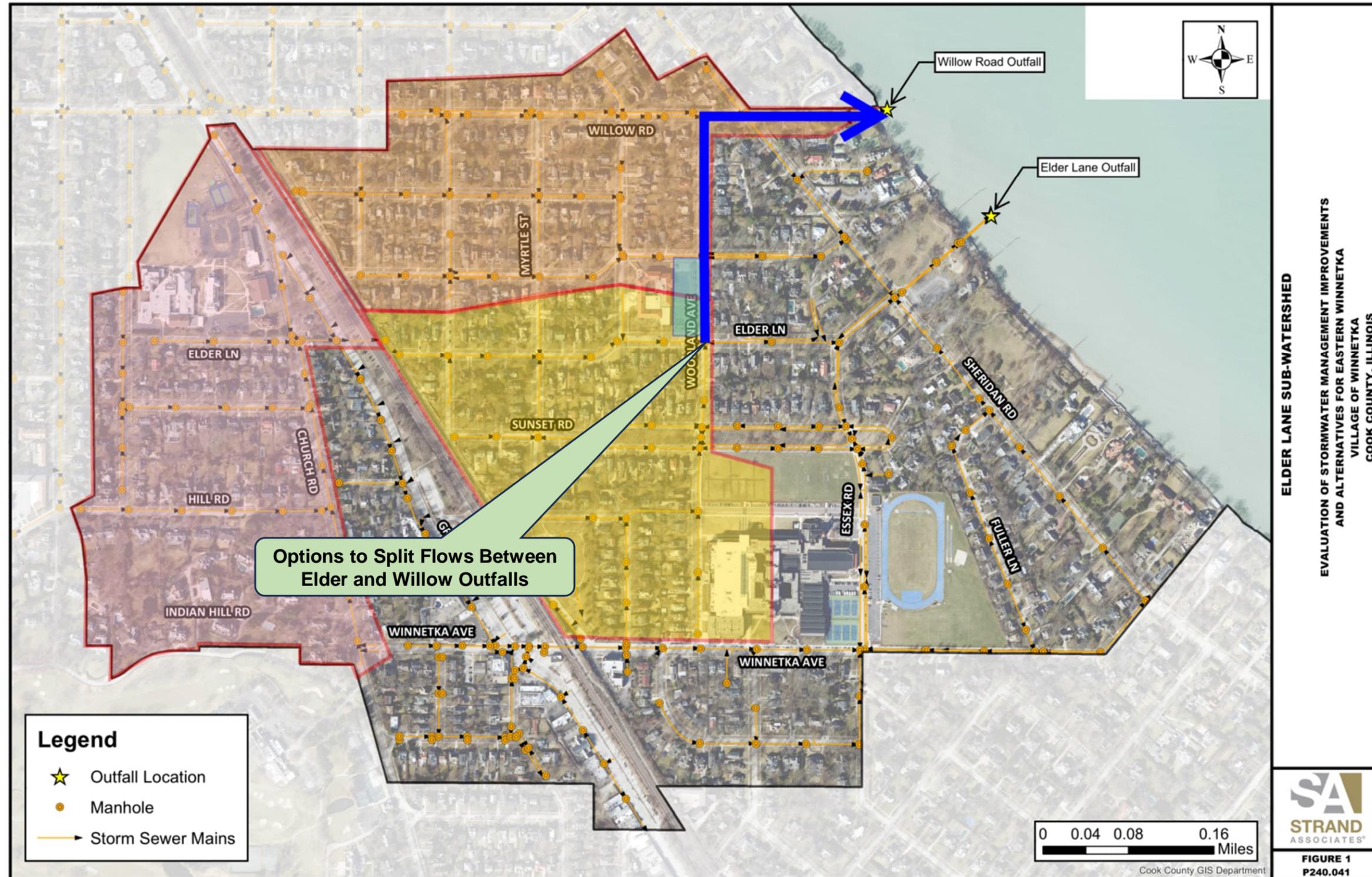
Elder Lane Alternatives Evaluation - Conveyance



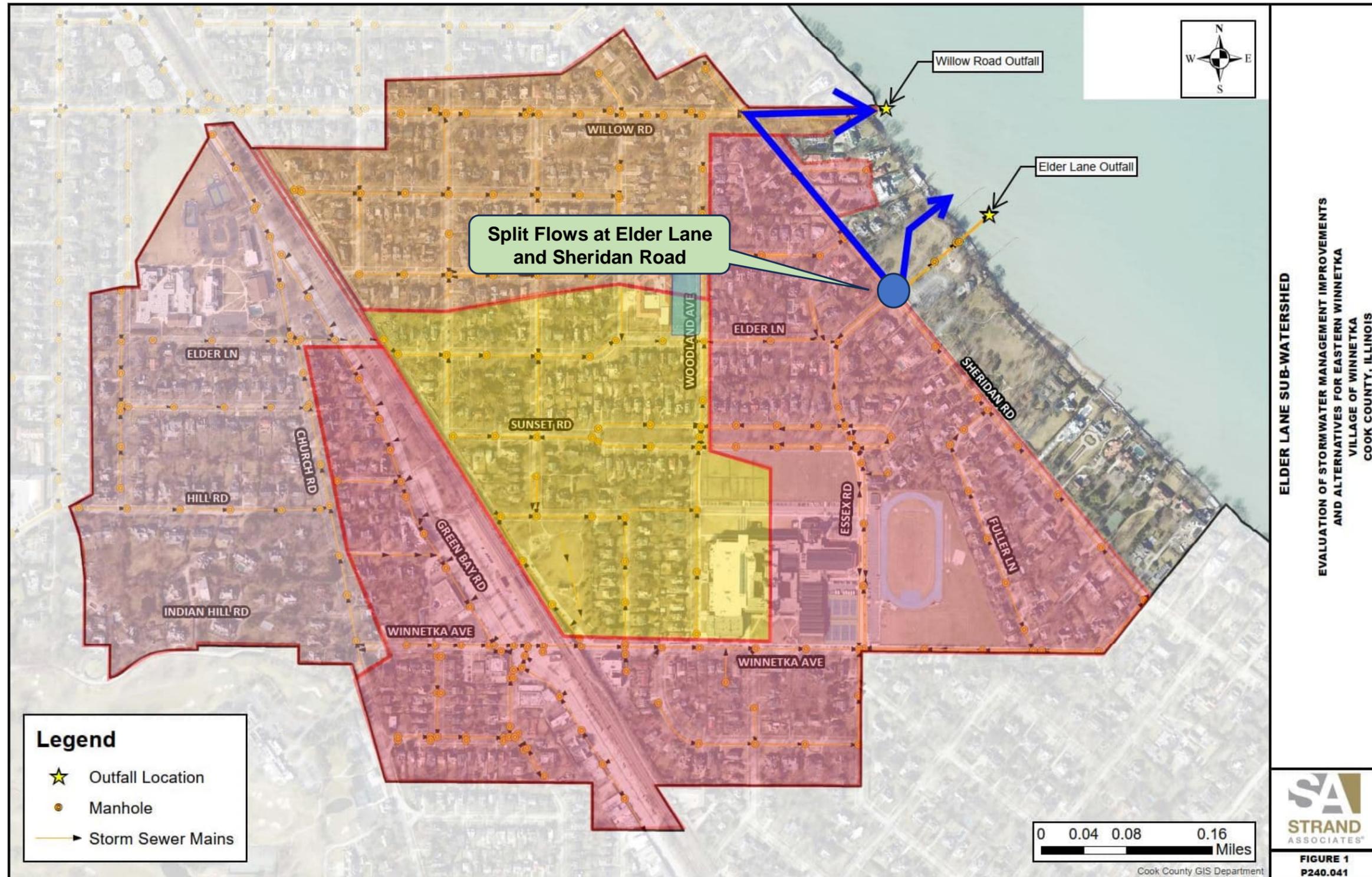
Elder Lane Alternatives Evaluation - Conveyance



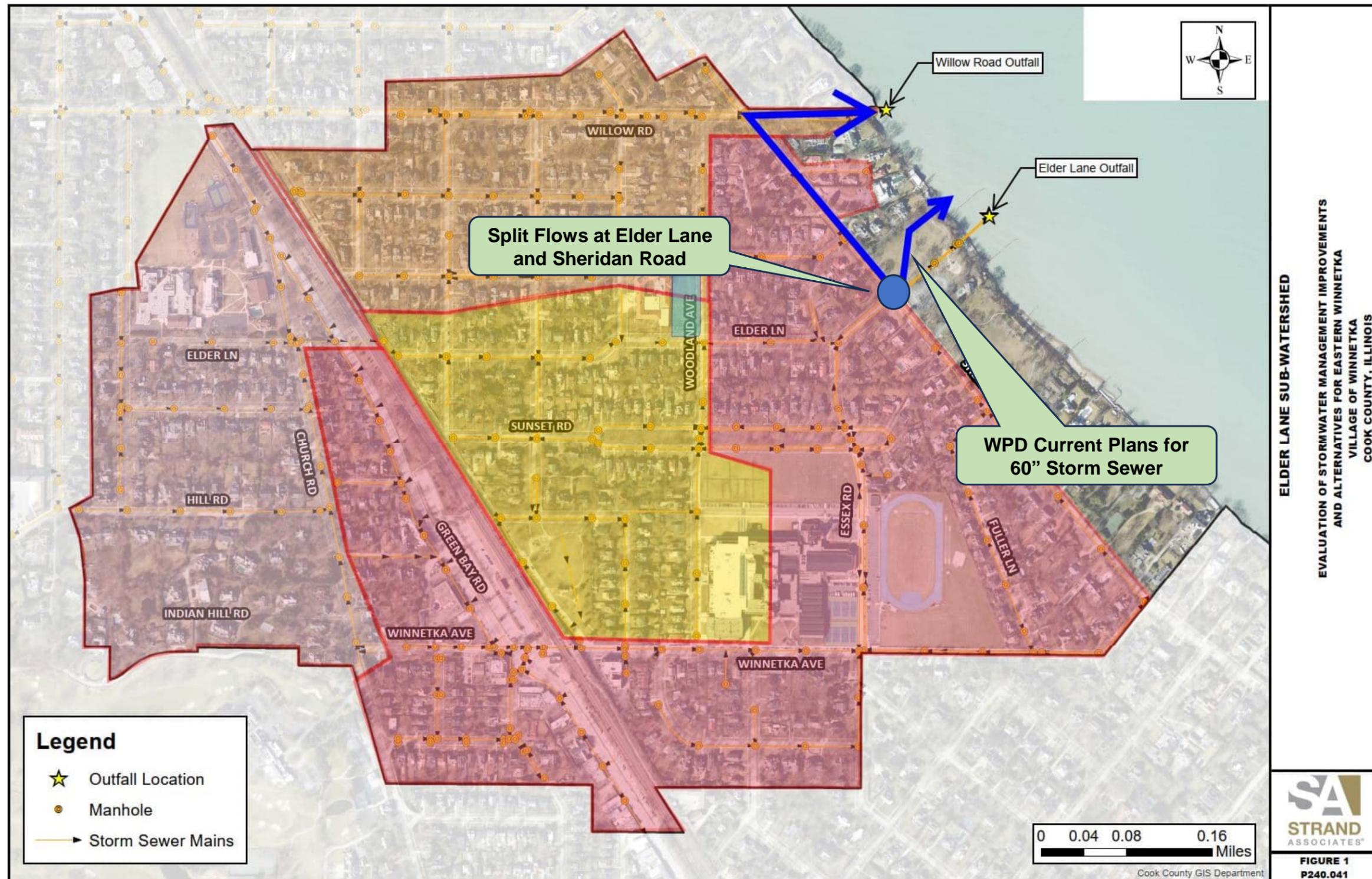
Elder Lane Alternatives Evaluation - Conveyance



Elder Lane Alternatives Evaluation - Conveyance



Elder Lane Alternatives Evaluation - Conveyance



Elder Lane Alternatives Evaluation

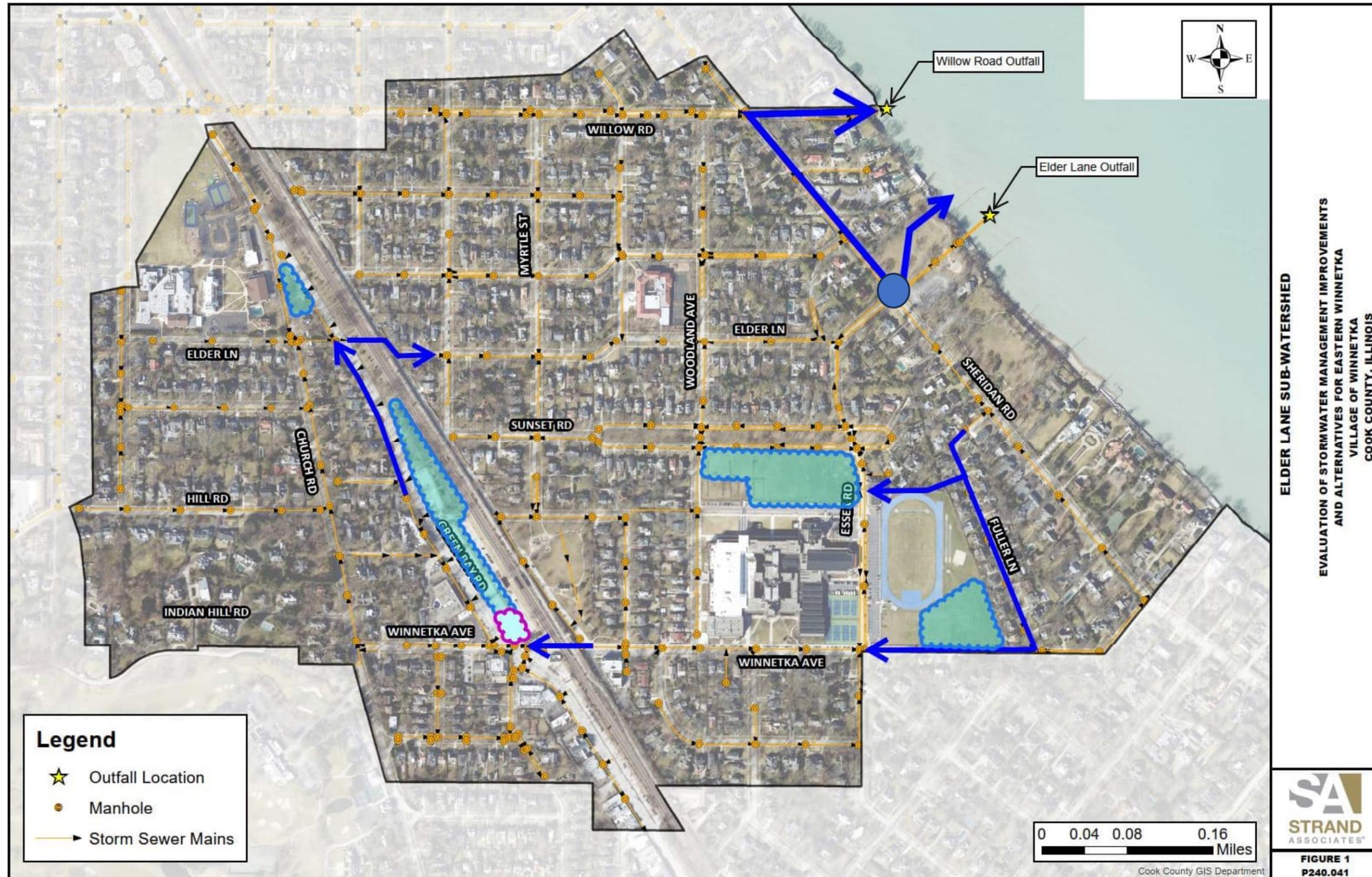
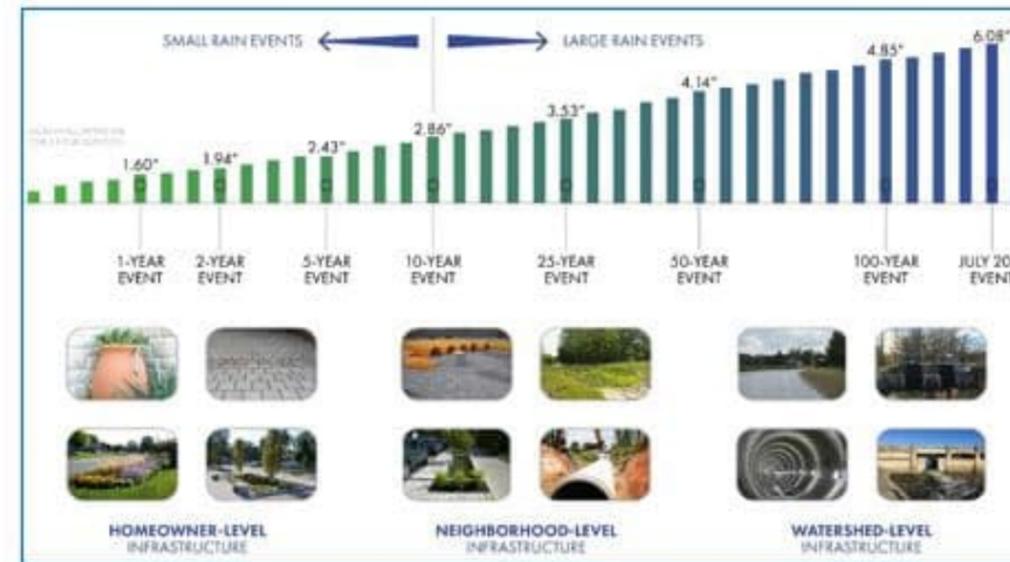
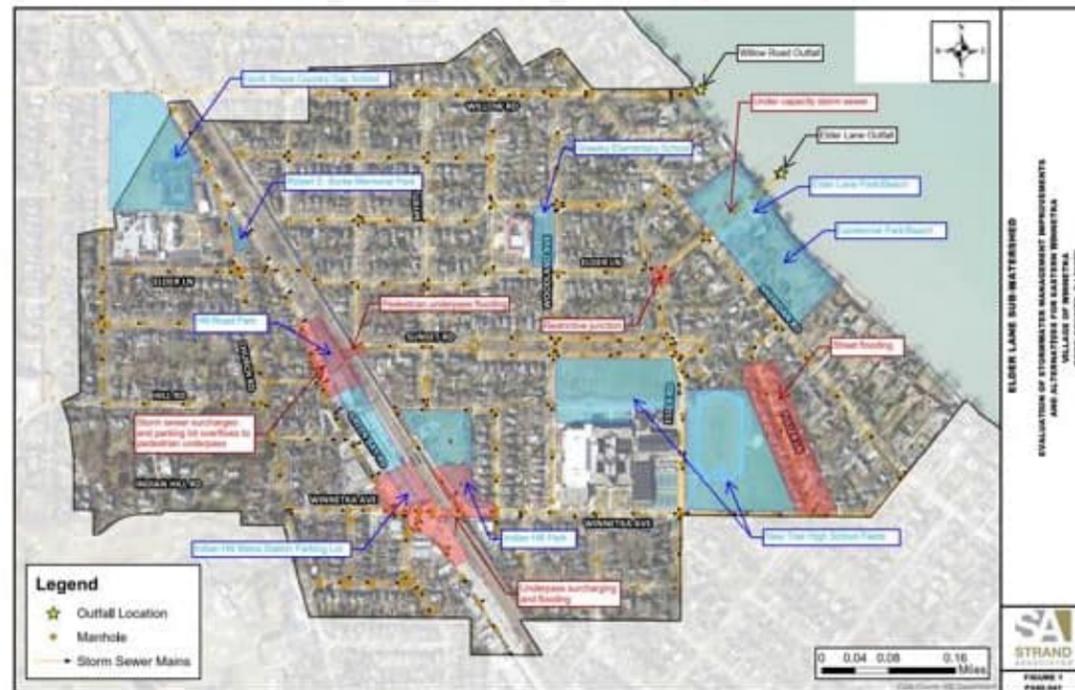
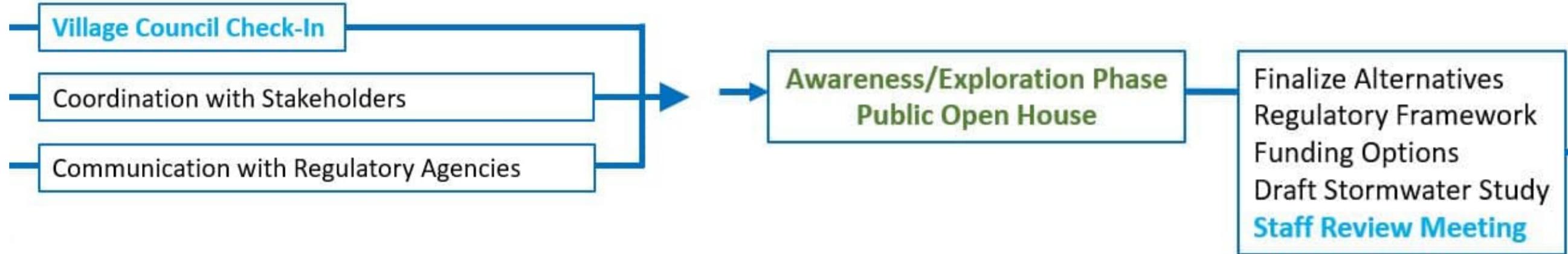


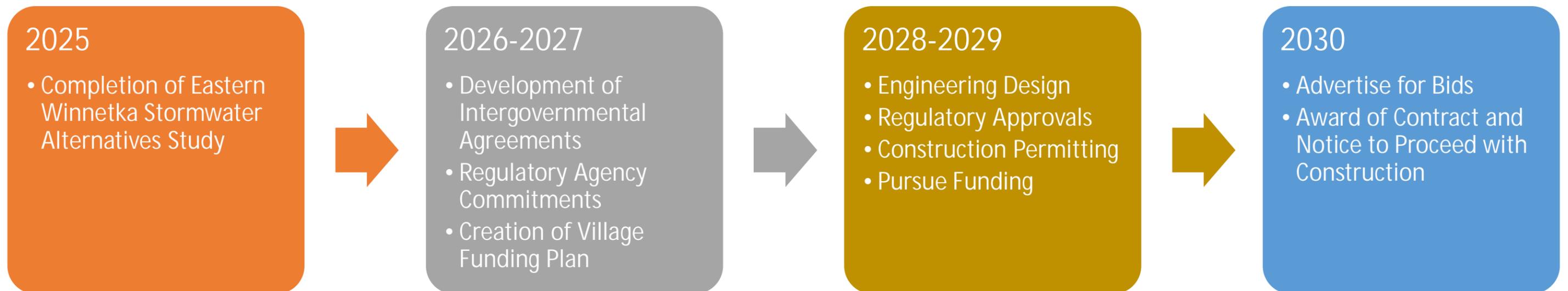
FIGURE 1
P240.041

Stormwater Management Study Scope



Share Understanding of Magnitude and Limitations to Potential Alternatives

Eastern Winnetka Stormwater Management Timeline





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