

LOWER WARD | RESILIENT STORMWATER SYSTEMS PLANNING STUDY

City of Hyattsville | City Council Meeting
Monday, October 19, 2020

Lesley Riddle, Director | Hyattsville Dept. of Public Works
Emily Clifton, Senior Environmental Planner | LID Center



Weston & SampsonSM



LOWER WARD I RESILIENT STORMWATER SYSTEMS PLANNING STUDY



TEAM

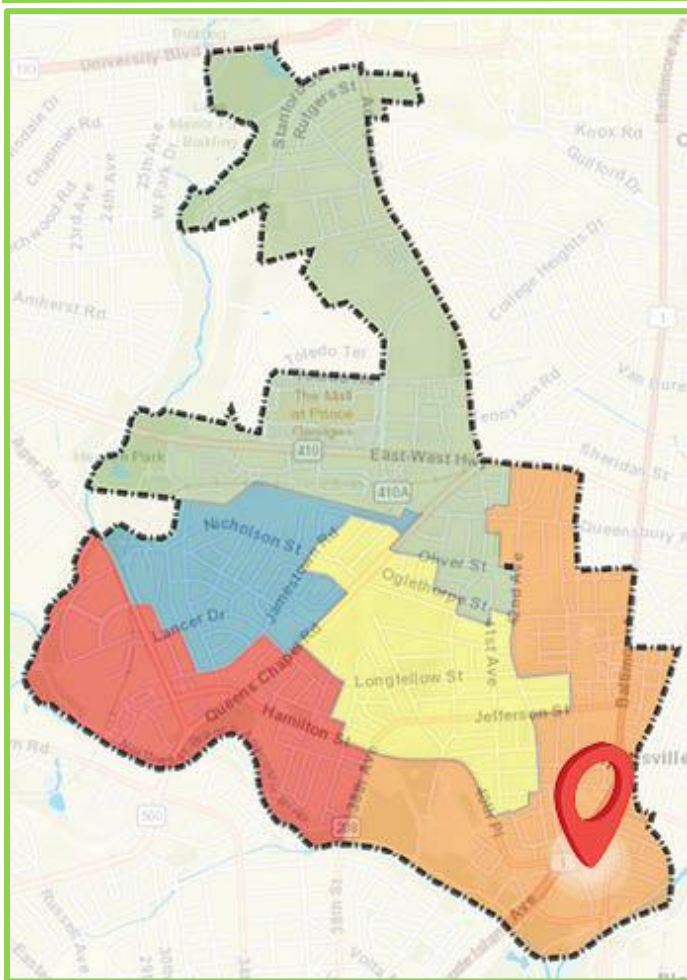


Weston & SampsonSM

FUNDER



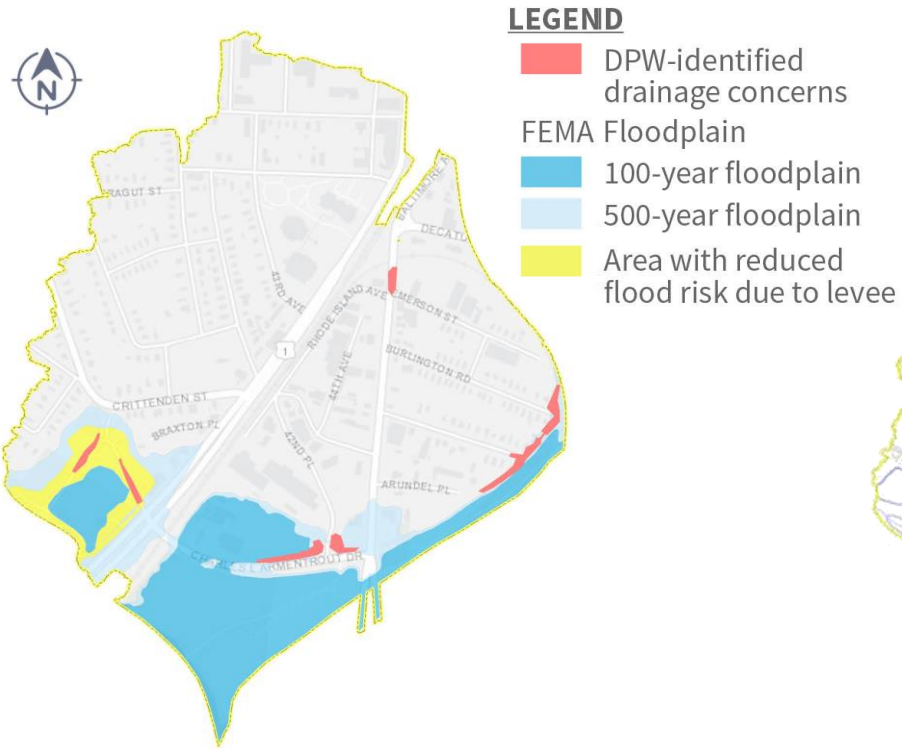
Hyattsville: Lower Ward I Resilient Stormwater Systems Planning Study



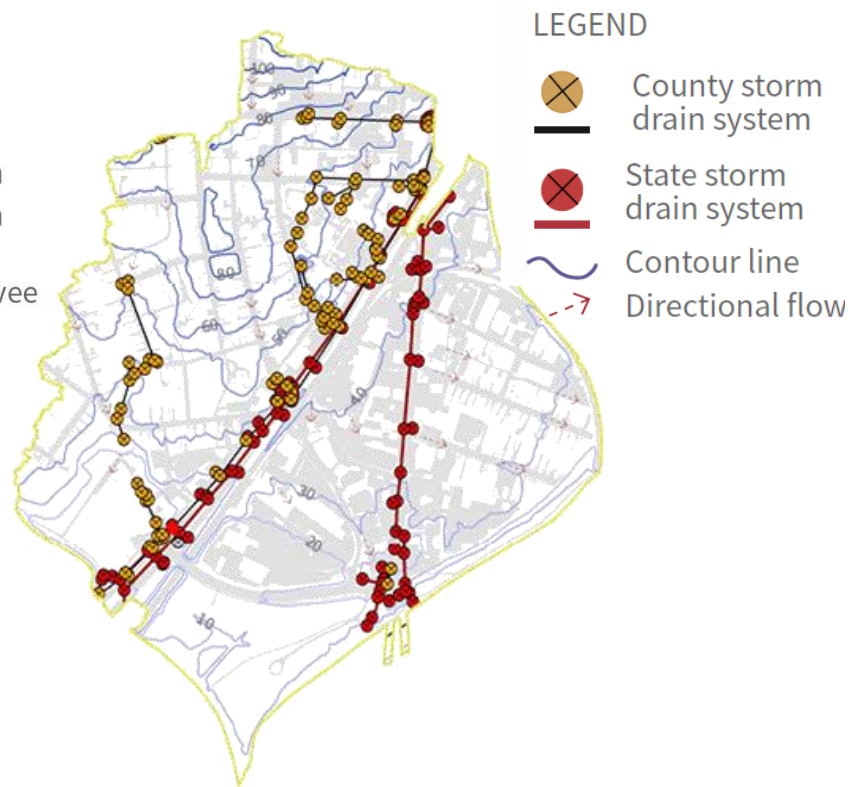
- Identify potential **green** & **grey** stormwater infrastructure improvements
 - ✓ Reduce localized flood risks
 - ✓ Improve water quality
- Incorporate future climate estimates on rainfall from the region

STEP I: EXISTING CONDITIONS

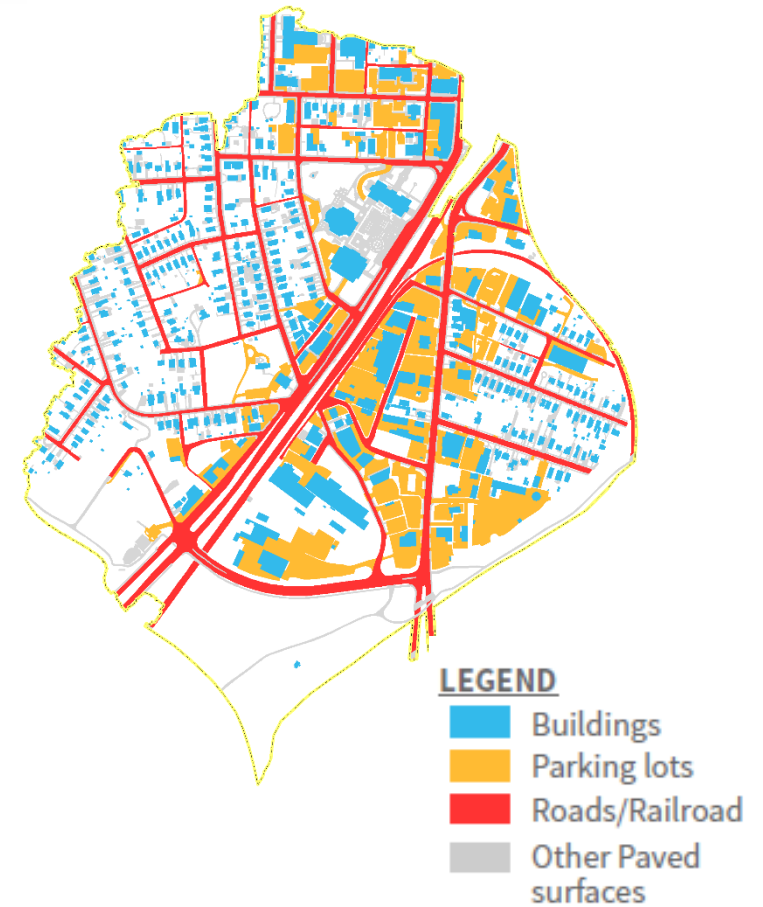
FEMA FLOODPLAIN + LOCALIZED FLOODING



STORM DRAIN SYSTEM (MAPPED ONLY)



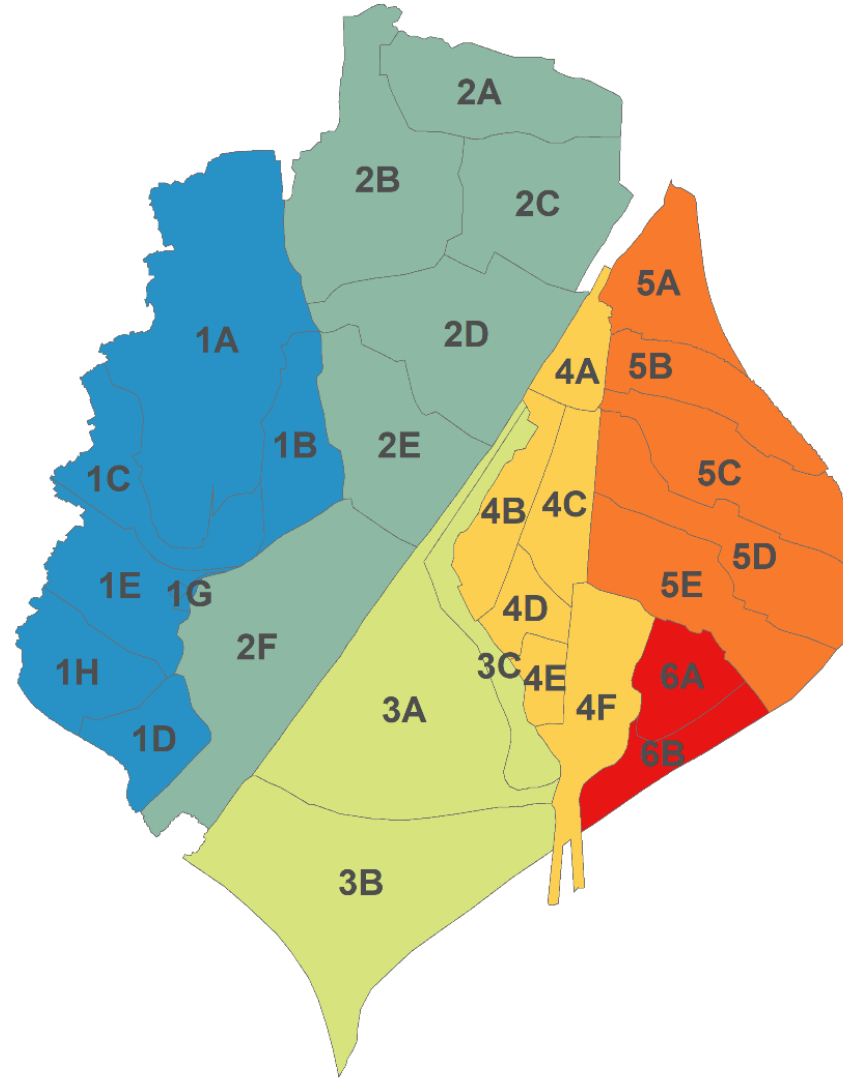
IMPERVIOUS AREA



STEP 2: STORMWATER SYSTEMS ANALYSIS

Storm Drain Vulnerability Assessment:

1. How well does it function currently?
2. How well will it function in the future based on climate change rainfall pattern projections?



Catchment	Percent Impervious
1	31%
2	62%
3	35%
4	83%
5	52%
6	46%

CURRENT

Frequency	Duration	Depth
10-year	6 hour	3.35 inches

FUTURE

Frequency	Duration	Depth
10-year	6 hour	4.19 inches

STEP 3: RETROFIT OPPORTUNITIES

9 Submerged Gravel Wetland



Identified Green Infrastructure Improvement:
Submerged Gravel Wetland



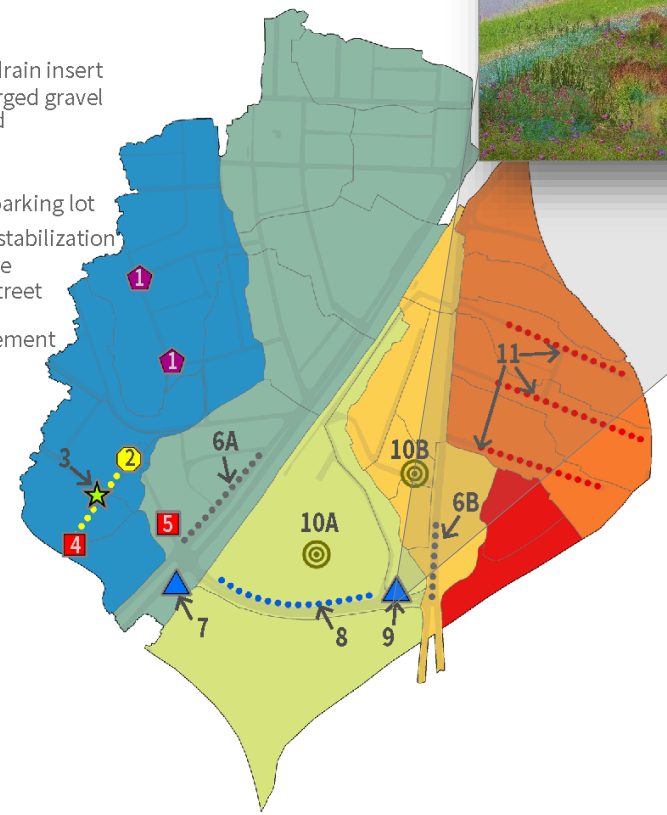
LEGEND

Retrofit Types

- Storm drain insert
- Submerged gravel wetland
- Culvert
- Green parking lot
- Outfall stabilization
- Bioswale
- Green street
- Curb improvement

Catchments

- 1
- 2
- 3
- 4
- 5
- 6



COST ESTIMATES

- Design + Install: ~\$350,000 to ~\$380,000

COORDINATING AGENCIES

- DPW&T, DoE

NEXT/FUTURE STEPS: DESIGN & IMPLEMENTATION

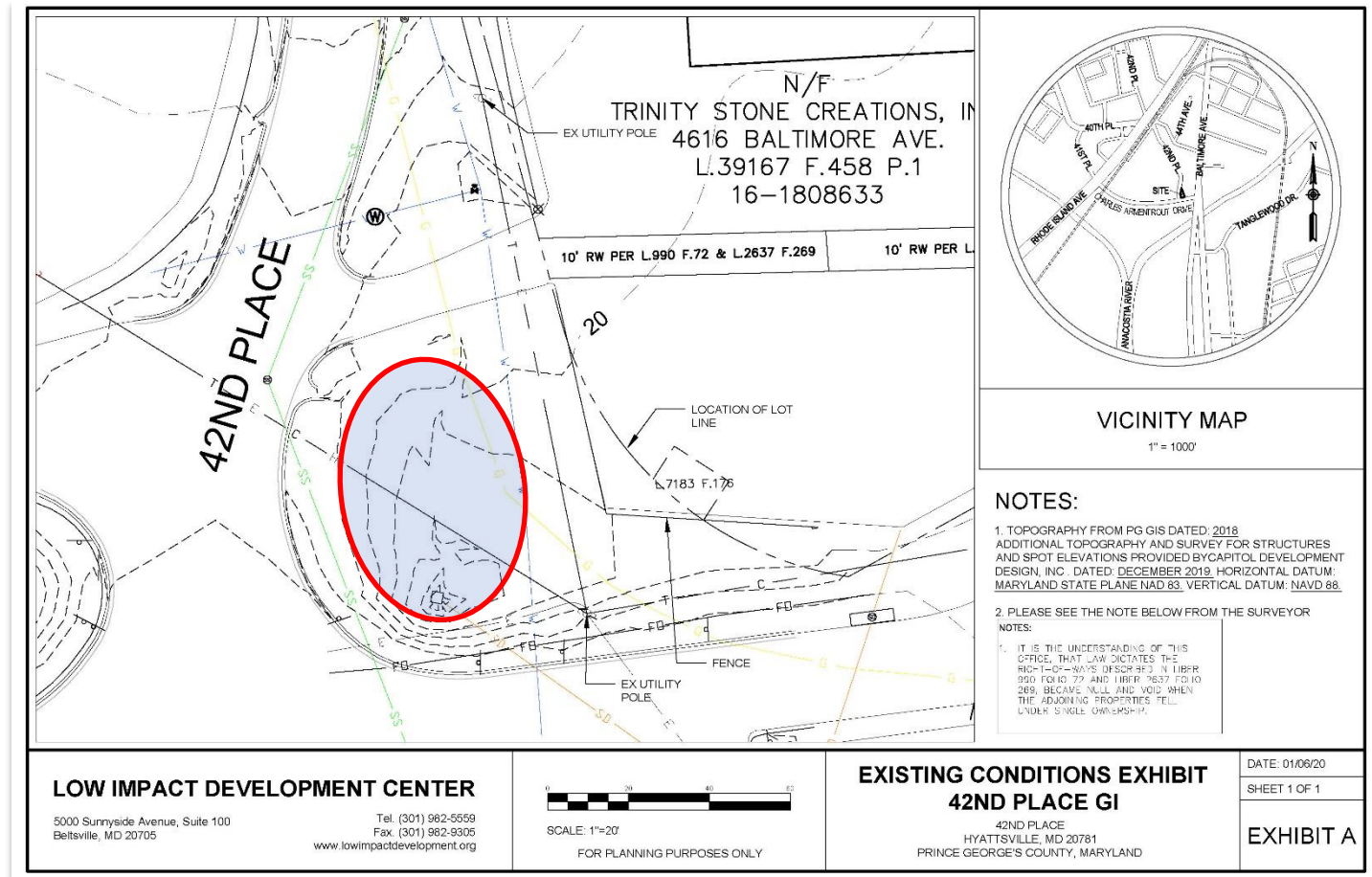
PROJECT DESIGN

- 42ND PLACE & CRITTENDEN: Project in design
- Funding provided by:



COMMUNITY ENGAGEMENT

- Previously scheduled Resilience and Beautification “meet and greet” postponed due to Covid-19
- Future date TBD



42ND Place and Crittenden Ave