

Site Drainage Areas (SDAs)

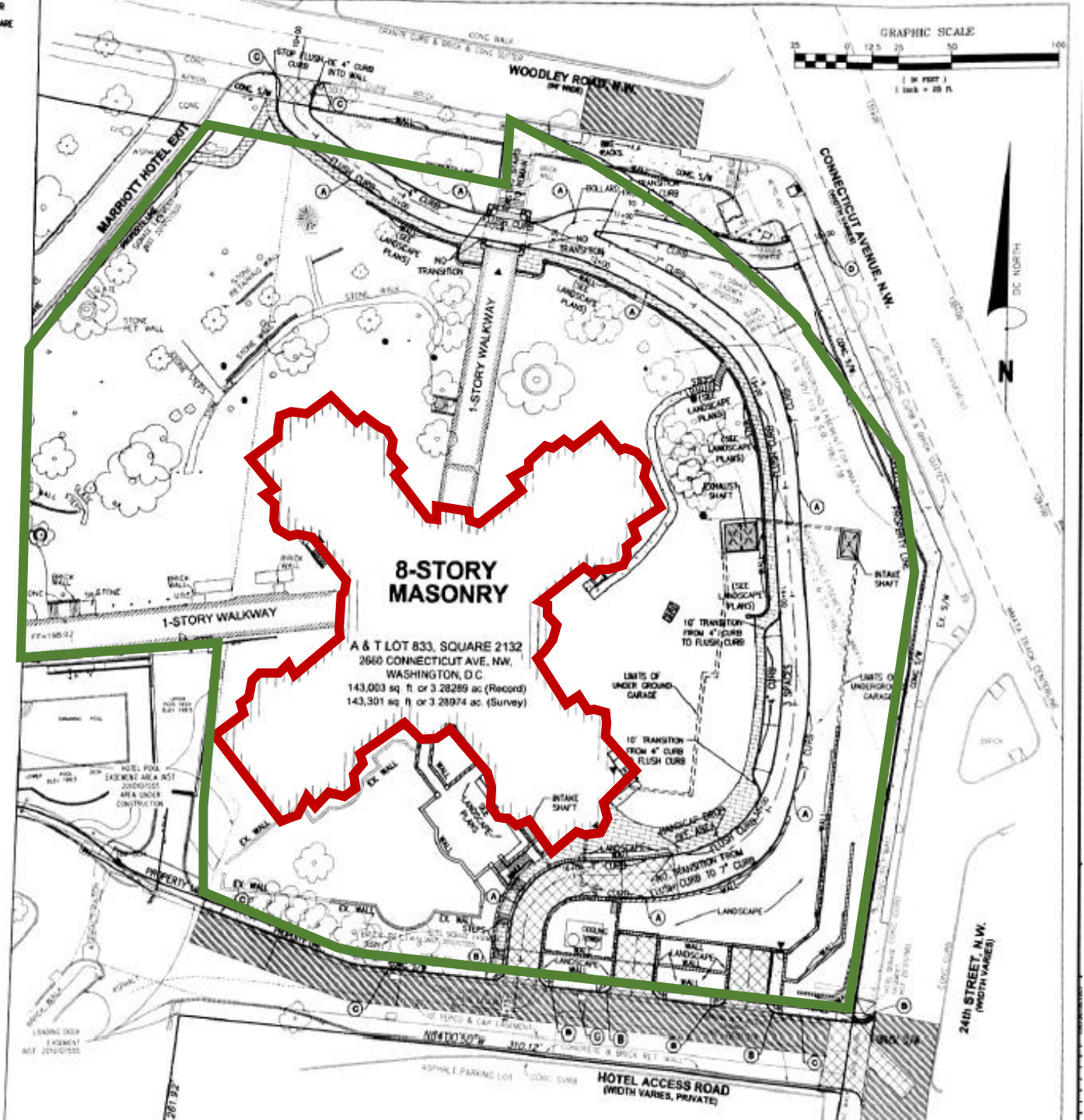
vs.

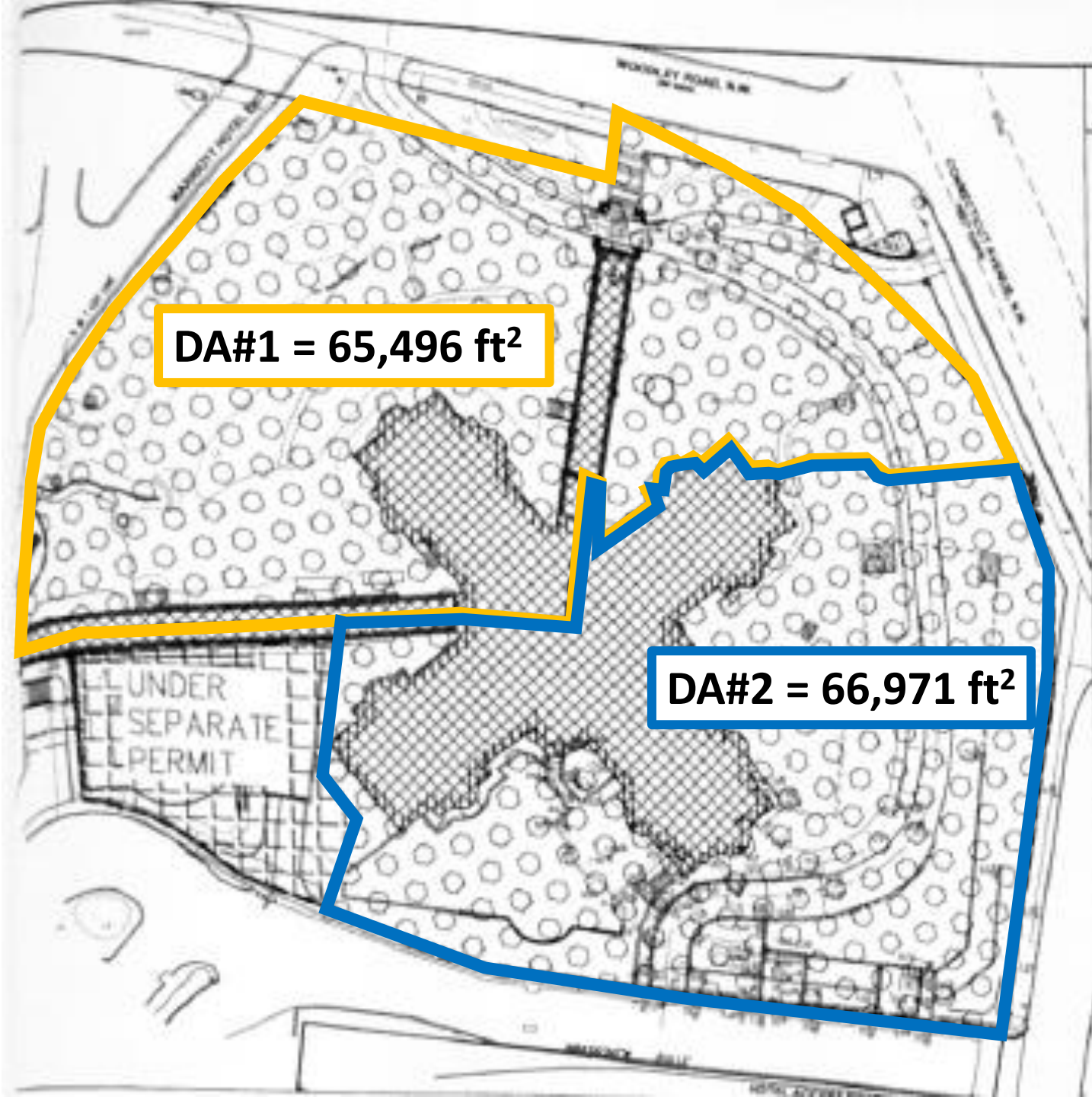
Contributing Drainage Areas (CDAs)

- Building is undergoing a complete renovation.
- Surrounding land is being regraded with new sidewalks and construction of an underground parking facility.

Building = Major Substantial Improvement (0.8")

Land Area = Major Land Disturbing (1.2")





**DA#1 = 65,496 ft<sup>2</sup>**

**DA#2 = 66,971 ft<sup>2</sup>**

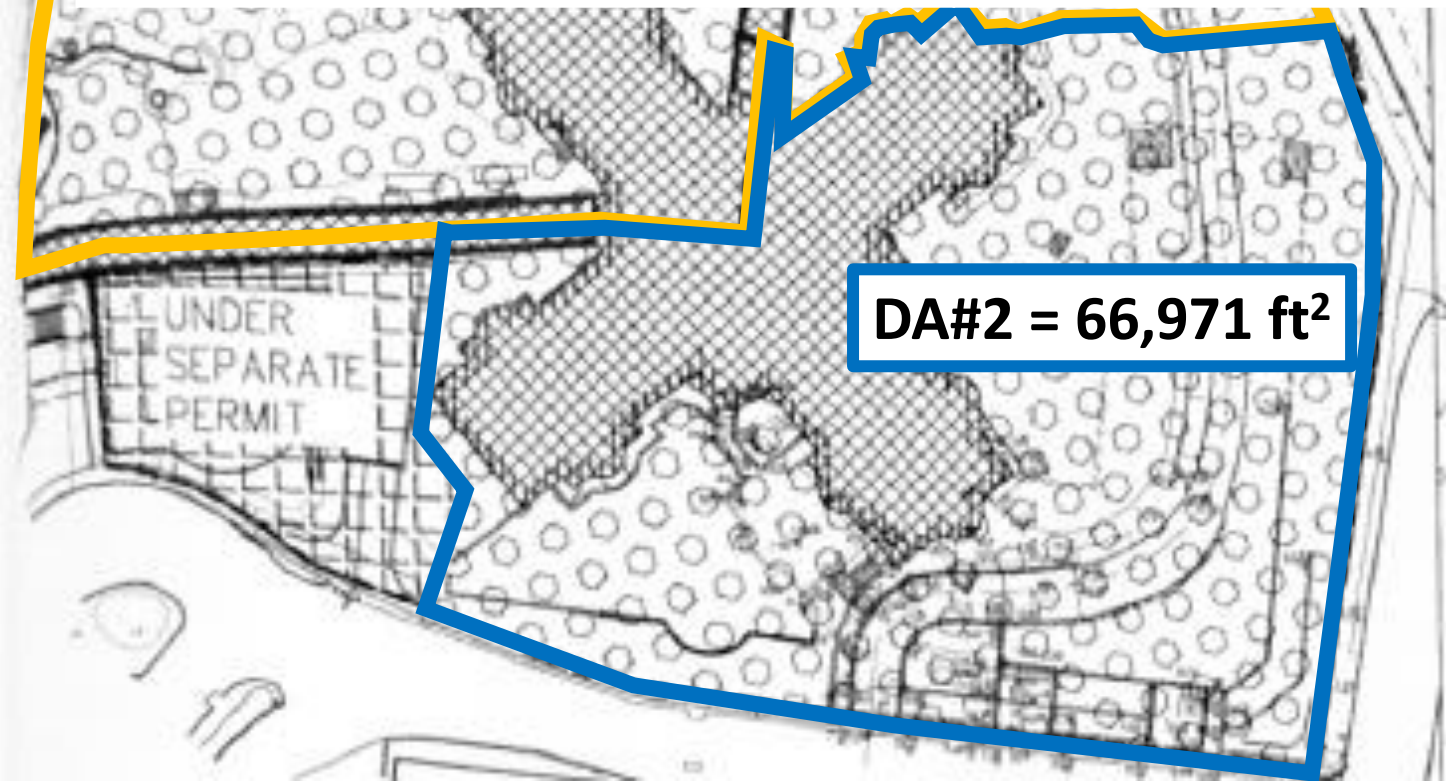
# Site Drainage Areas

# Site Drainage Area #1

DA#1 = 65,496 ft<sup>2</sup>

Major Land Disturbing (1.2-inch)	Land Area (ft <sup>2</sup> )	Rv	SWRv (ft <sup>3</sup> )
Impervious Cover (sidewalks, etc.)	11,197	0.95	1,064
Compacted Cover (grass, landscaping)	43,685	0.25	1,092
BMP (bioretention)	1,489	0.95	141
<b>MLD Total</b>			<b>2,297</b>
Major Substantial Improvement (0.8-inch)	Land Area (ft <sup>2</sup> )	Rv	SWRv (ft <sup>3</sup> )
Impervious Cover (building)	9,125	0.95	578
<b>Total</b>	<b>65,496</b>		<b>2,875</b>

Major Land Disturbing (1.2-inch)	Land Area (ft <sup>2</sup> )	Rv	SWRv (ft <sup>3</sup> )
Impervious Cover (sidewalks, etc.)	11,704	0.95	1,112
Compacted Cover (grass, landscaping)	27,289	0.25	682
BMP (bioretention, green roof)	9,878	0.95	938
MLD Total			2,732
Major Substantial Improvement (0.8-inch)	Land Area (ft <sup>2</sup> )	Rv	SWRv (ft <sup>3</sup> )
Impervious Cover (building)	18,100	0.95	1,146
<b>Total</b>	<b>66,971</b>		<b>3,878</b>



Site Drainage Area #2

# Total SWRv for Site

**Site Drainage Area #1**

**2,875 ft<sup>3</sup>**

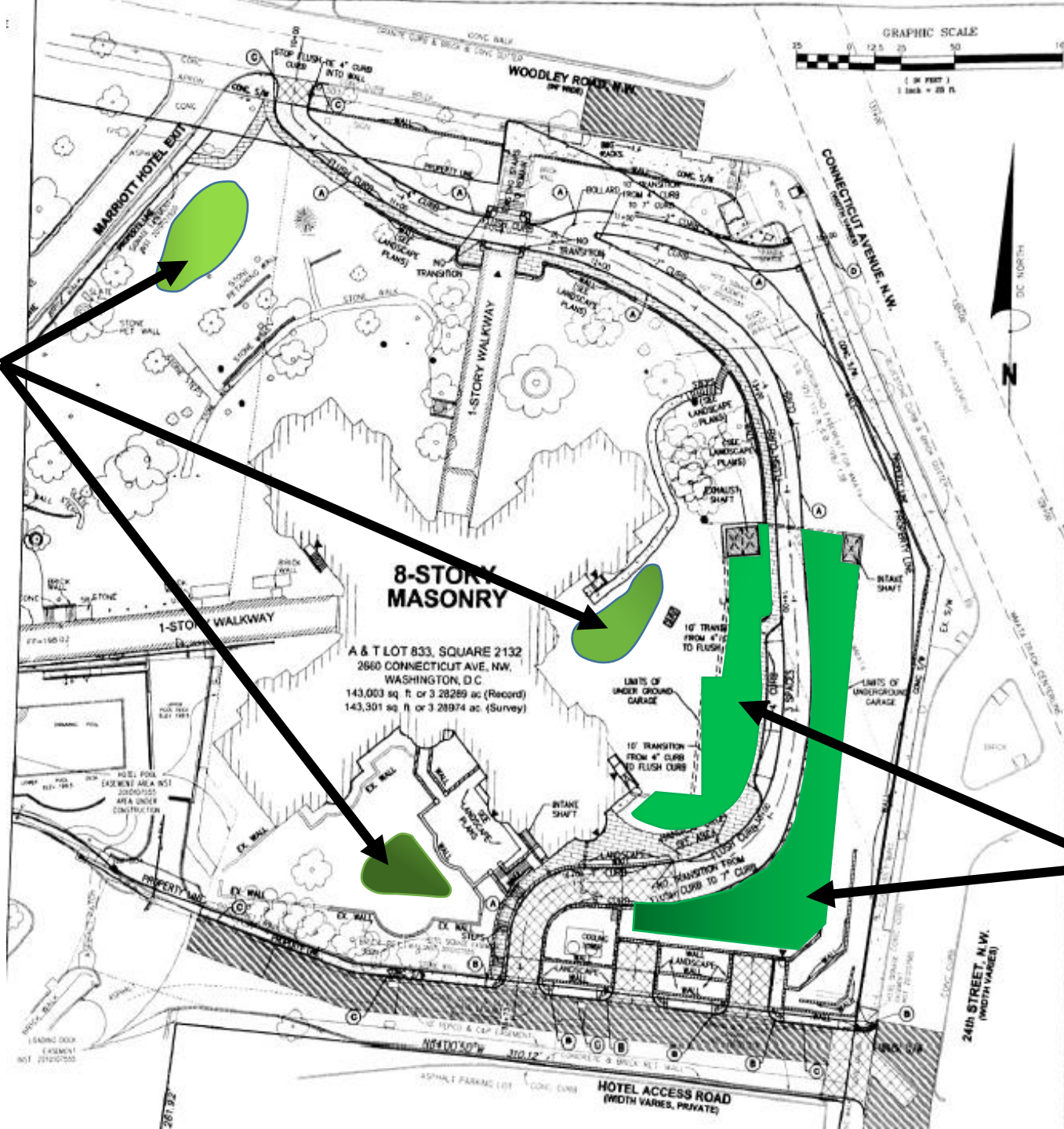
**Site Drainage Area #2**

**3,878 ft<sup>3</sup>**

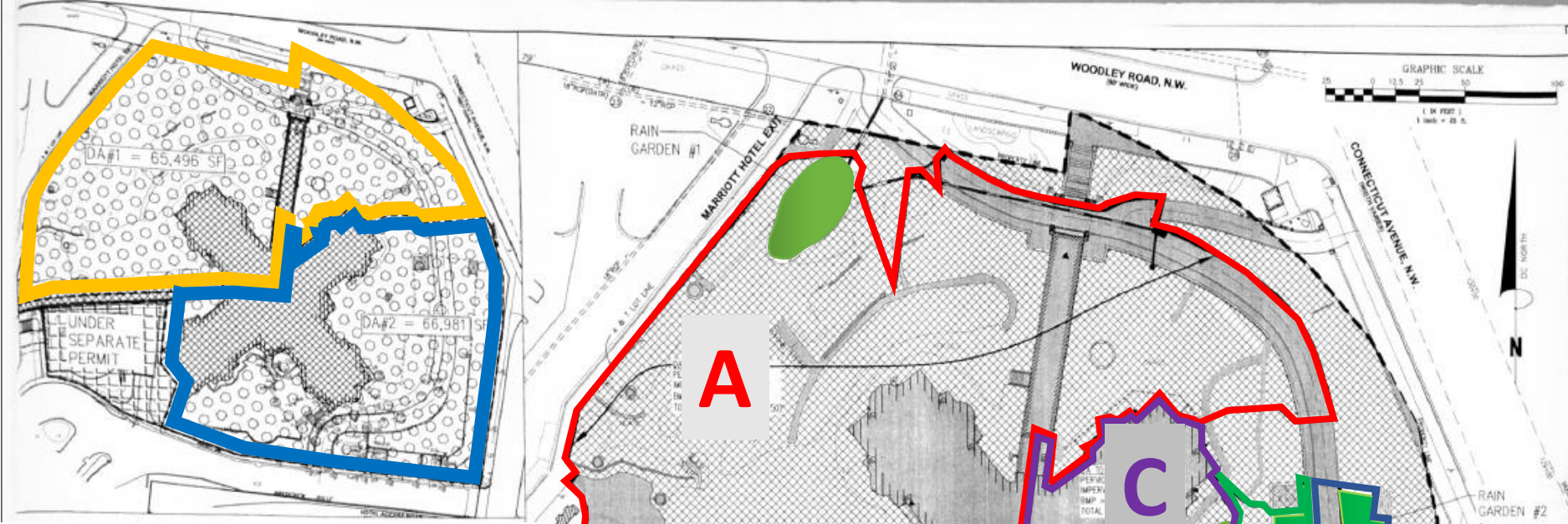
**Total = 6,753**

BMP Locations

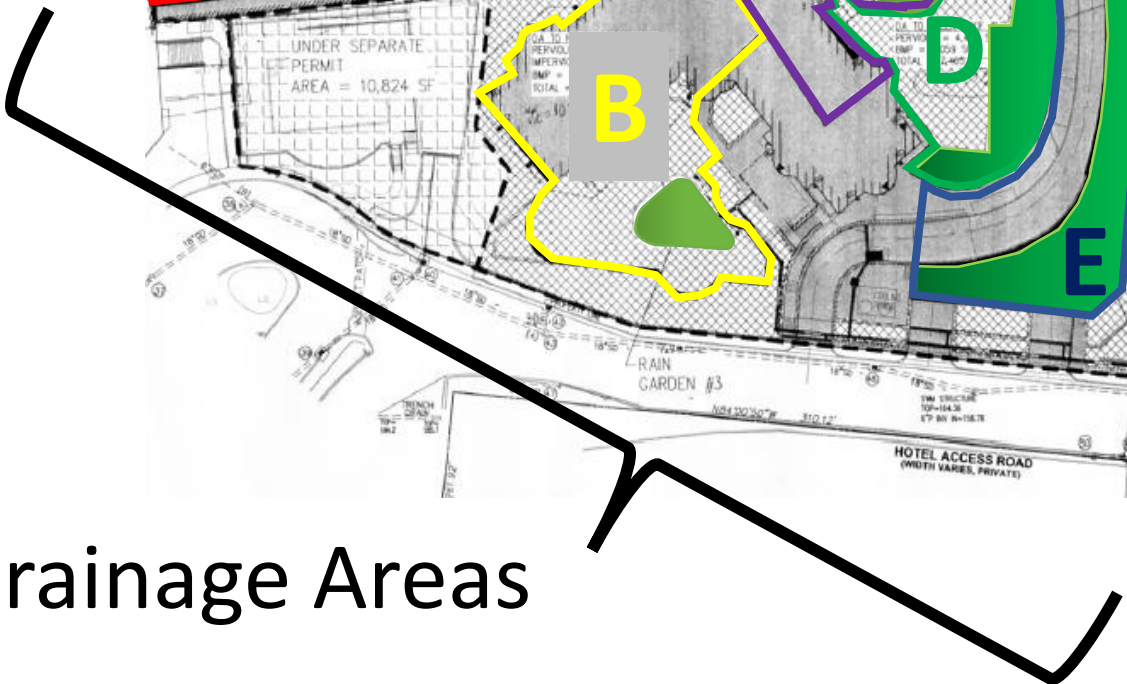
Bioretention



Green Roof

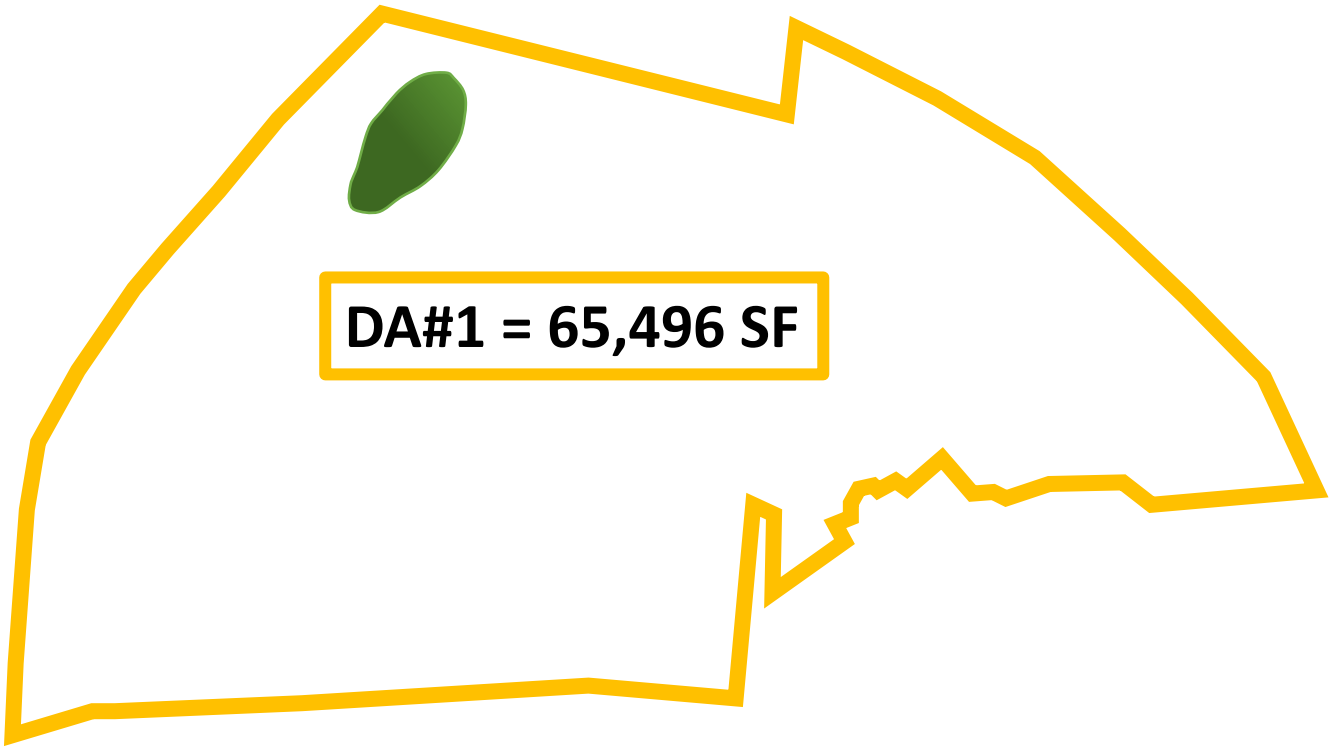


Site Drainage Areas



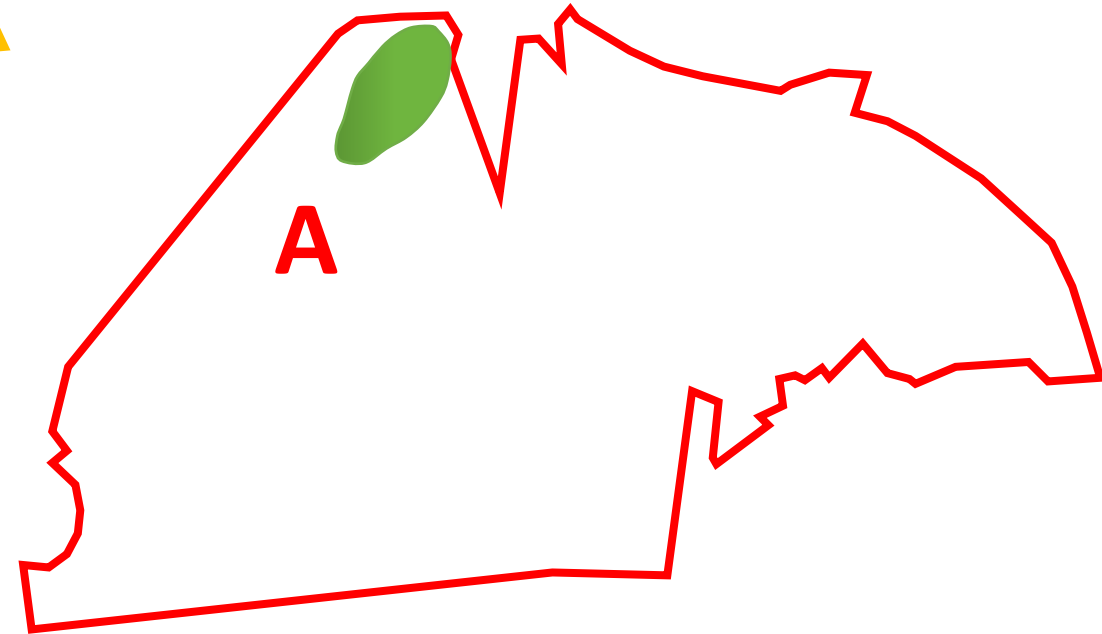
Contributing Drainage Areas



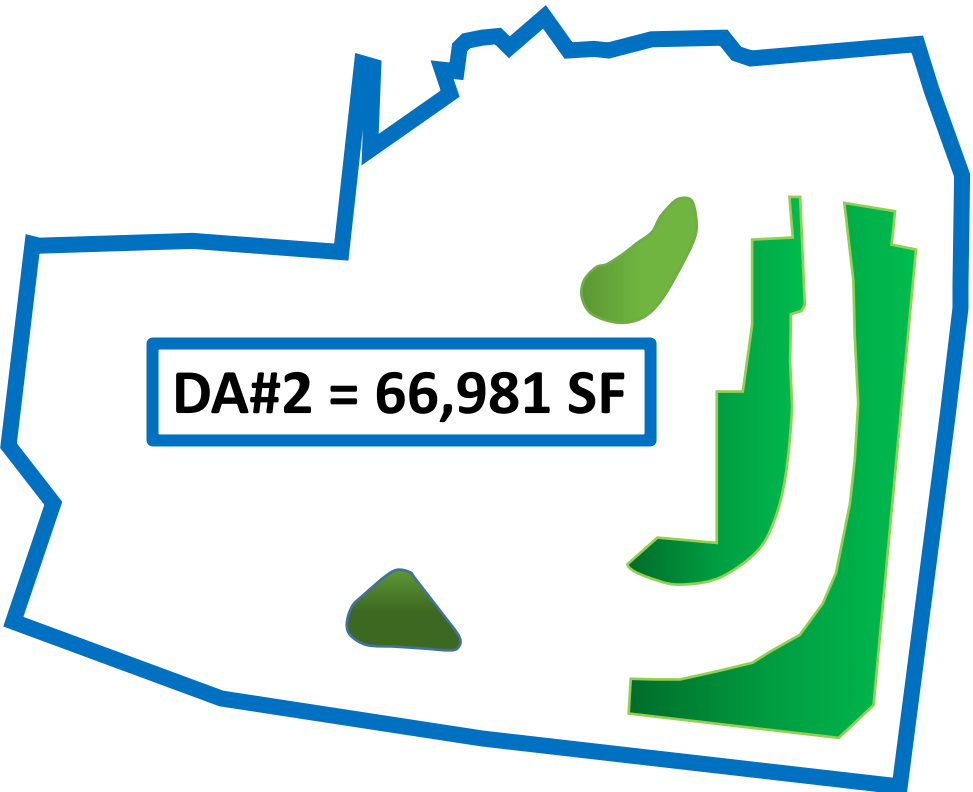


SDA #1 SWRv (1.2-inch) = 2,875 ft<sup>3</sup>

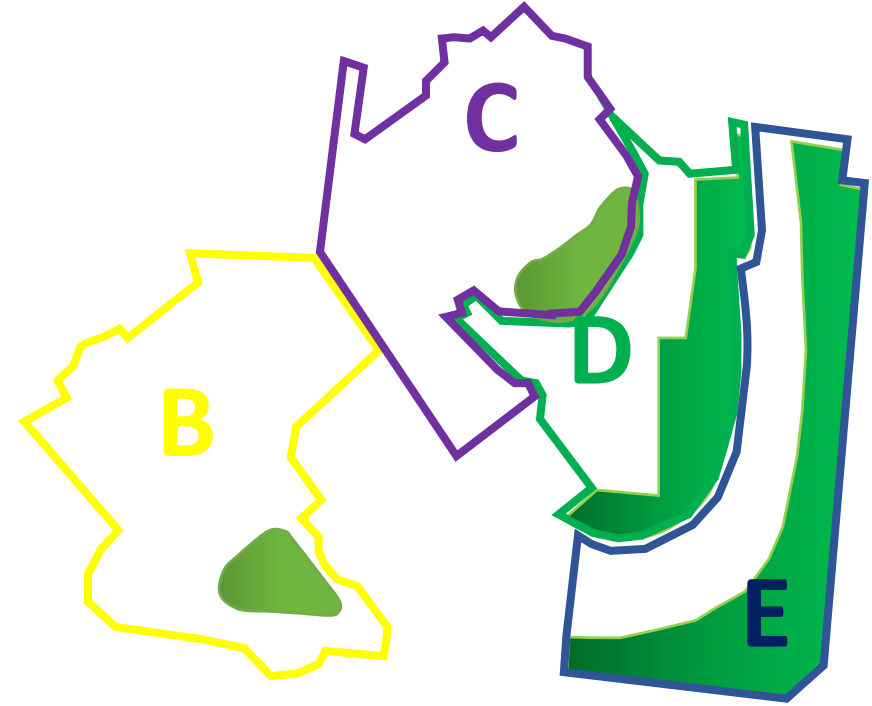
Land Cover Type	CDA Area (ft <sup>2</sup> )	Rv	SWRv (ft <sup>3</sup> ) (1.7-in)
Impervious Cover	18,067	0.95	2,432
Compacted Cover	36,566	0.25	1,295
BMP	1,489	0.95	200
Total	56,122		3,927



Storage Volume Bioretention 3,076 ft<sup>3</sup>



SDA #2 SWRv (1.2-inch) = 3,878 ft<sup>3</sup>



BMP	SWRv (ft <sup>3</sup> ) (1.7-inch)	Storage Volume (ft <sup>3</sup> )
B	997	1,047
C	1,314	1,402
D	923	859
E	1,241	1,157
<b>Total</b>	<b>4,475</b>	<b>4,465</b>

Maximum Retention Volume 4,327 ft<sup>3</sup>

# Total SWRv for Site

**Site Drainage Area #1**

**2,875 ft<sup>3</sup>**

**Site Drainage Area #2**

**3,878 ft<sup>3</sup>**

**Total = 6,753**

**Maximum Retention Volume BMP A**

**3,076 ft<sup>3</sup>**

**Maximum Retention Volume BMPs B - E**

**4,327 ft<sup>3</sup>**

**Total = 7,403**

***Met their stormwater obligation!***