

Catchment ID: BB07

#### UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 1 -- Catchment Information

Subwatershed: Bear Branch				
Location of Catchment Centroid on ADC Map:	Year: 2001	Page: 4	Grid:	F5
State Plane Coordinates of Outfall Location:	X: <u>1351333</u>		/: <u>518589</u>	
Closest Road Intersection to Outfall: Harvest Bend	Lane and Marymont	Drive		
Outfall SDI ID or Outfall Description: Outfalls to Lau	rel Lakes			
Objective: Demonstration / Impairment(s) (Sheet 1)				
Drainage Area (ac): 52.1	Impervious Area	(ac): <u>32.1</u>		
Percent Impervious: 62%	Soil Recharge Fa	actor (S): 0.129		
WQ <sub>v</sub> (required): 2.6	Re <sub>v</sub> (required): 0	.06		
Predominant Land Use: commercial	Mean Depth to G	Ground Water:	>=5ft	
Sanitary System: ☐ Septic ☑ Municipal Sewer	Water Supply:	On Site Well	Public Water	
Storm Drainage System Within Catchment				
Piped: Open Channels:	25%			
Area Drained by System: 95%				
Location in Catchment: Headwaters Middle	☐ Lower ✓ All			
Open Channel Lining- Vegetation: 95%	Riprap: 5%	Concrete: 09	% Other:	0%
Existing IMP(s) / BMP(s)				
SDI ID: 85127A Type (number from Sheets	4 & 5): <mark>16</mark>	Age: 17		
Closest Road Intersection to IMP / BMP: Cherr	ry Lane and Laurel	Place	<del></del>	
Catchment Area Treated (ac): 13.57	Percentage C	atchment Treated	d: 26%	
WQ <sub>v</sub> Provided: ☐YES ☑NO Re <sub>v</sub> Provided	: ☐YES ☑NO	C <sub>p</sub> Provided:	YES	✓NO
SDI ID: Type (number from Sheets	4 & 5):	Age:		
Closest Road Intersection to IMP / BMP:			_	
Catchment Area Treated (ac) :	Percentage C	atchment Treated	d:	
WQ <sub>v</sub> Provided: ☐YES ☐NO Re <sub>v</sub> Provided			YES	□NO
SDI ID: Type (number from Sheets	4 & 5):	Age:		
Closest Road Intersection to IMP / BMP:	· · · · · · · · · · · · · · · · · · ·			
Catchment Area Treated (ac) :	Percentage C	atchment Treated	d:	
WQ <sub>v</sub> Provided: YES NO Re <sub>v</sub> Provided		C <sub>n</sub> Provided:	YES	□NO

Catchment ID: BB07

# UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 1 -- Catchment Information (concluded)

CATCHMENT SUMMARY				
WQ <sub>v</sub> (provided):	0.7	Re <sub>v</sub> (provided) :	0.1	
Area Treated (ac):	13.57	Impervious Area Treated (ac):	8.36	
Area Treated (%):	26%	Impervious Area Treated (%):	26%	
Comments				

Site ID: GGPL Catchment ID: BB07

#### UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 2 -- Site Information

Site Name: Granville Gude Park and Lakehouse	Address: Mulberry Street, Laurel MD 20707
Site Owner: Mayor and City Council of Laurel	
State Plane Coordinates of Site Centroid:	X: <u>1351349</u> Y: <u>518437</u> Date: <u>4/15/03</u>
Personnel: PM	Weather: sunny, 80F deg
Area (ac): 7.5	Impervious Area (ac): 0.4
Percent Impervious: 6%	Soil Recharge Factor (S): 0.124
WQ <sub>v</sub> (required): 0.065	Re <sub>v</sub> (required): 0.008
Property Area (ac): 7.5	Property Area Included in Site: 100%
Amount of Catchment Occupied by Site: 14	<del>1</del> %_
Storm Drainage System Within Site	
Piped: <u>0%</u> Open Channels: <u>100</u>	Area Drained by System: 20%
Open Channel Lining - Vegetation: 80% Ripra	ap: Concrete: O% Other: O%
Existing IMP(s) / BMP(s) (Indentified on Pag	o 1 FORM 1 Catchment Information)
	ion: Excellent Good Average Fair Poor
	ion: Excellent Good Average Fair Poor
SDI ID: Condit	ion: Excellent Good Average Fair Poor
Site Information	
Type of Pavement:	Gravel Grid Pavers Other brick
Pavement Condition:	✓ Average ☐ Fair ☐ Poor
Underdrains can be easily directed to existing sto	rm drains or daylighted: ☑ YES ☐ NO
Gutter/Exterior Downspouts Present:  YES	□NO
Roof Connected Directly to Storm Drain: YES	□NO
Roof Drains onto Impervious Surface:	□NO
Obvious Existing Drainage Problems:	ktensive
Steep Slopes Present:	erate
Existing Landscaping:	erate Average  Limited None
Mature / Specimen Trees: ☐ Extensive ☐ Mod	erate Average  Limited None
Area Available for Aboveground BMPs:	ktensive
Existing Cover of Potential Aboveground BMP Lo	cations:
	Pavement Other Impervious

Site ID: GGPL Catchment ID: BB07

#### UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 2 -- Site Information (concluded)

Commercial / Insti	tutional			
Islands Present: □ Y	ES 🗸 NO	Curb Present Around Island:	YES NO	
Ground Level of Island Relative to Pavement:				
Island Landscaping:		Gravel Grass Mulch Hert Trees (2 - 6 in. DBH) Trees (>6 in. DB	paceous Plants Shrubs	
Trees have sufficient	spacing to allow IMPs	YES NO		
Parking area that can	be directed to potential trea	tment area with little grading:	100%	
SITE SUMMARY				
$WQ_v$ (provided) :	0.06	Re <sub>v</sub> (provided):	0.01	
Area Treated (ac) :	3.75	Impervious Area Treated (ac):	0.33	
Area Treated (%):	50	Impervious Area Treated (%):	83	
Photographs				
No. <u>563</u>	Description: looking	g west at east side of building		
No. <u>564</u>	Description: looking east at west side of building			
No. <u>565</u>	Description: looking north at south side of building			
No. <u>566</u>	Description: looking south at north side of building			
No	Description:			
No				
lo Description:				
No	Description			
lo Description:				
No	Description:			
Comments Roof dra	ains could easily be disconn	ected - storm drains are not that deep.		

Site ID: GGPL Catchment ID: GB07

#### UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 2 -- Site Information





563 564





IMP / BMP ID: 1	Site ID: GGPL	Catchment ID: BB07

New LID IMP □ SWM BMP Retrofit □ New SWM BMP □ Type (Sheets 4 & 5): 7
State Plane Coordinates of IMP / BMP Centroid: X: Y:
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 4, 7, 16
Treatment Area Ownership: ☐ Transportation ROW ☐ Utility ROW ☐ County ☑ Other Government ☐ Private ☐ Other City of Laurel
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO
Limited Impact to Adjacent Properties: ☑ YES ☐ NO
Area Accessible for Construction: ☑ YES ☐ NO
Area Accessible for Maintenance: ☑ YES ☐ NO
Limited Permitting Issues: ☑YES ☐NO
Jurisdictional Wetlands Impacted: YES NO
Forest Retention Area Impacted: YES NO
Conservation Easement Impacted: ☐ YES ☑ NO
Utilities Present: ☑ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other
Utilities Impacted: ☑ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other
Impacted Utilities: Above Gound Underground
Critical Area Impacted: ☐ YES ☑ NO
Mature / Specimen Trees Impacted: ☐ YES ☑ NO
Existing Landscaping Impacted:
Underdrain Needed: ☐ YES ☐ NO Underdrains Can Discharge: ☐ YES ☐ NO
Soils are Suitable: Tes No Ground Water Table Level Suitable: Tes No
Estimate IMP / BMP drainage area included on site: 0.011 ac 100%
Retrofit of Existing SWM BMP
SDI ID: Add Forebay: DNO
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO
Provide Additional Storage Volume:   YES NO
Excavation / Raise the Embankment:

IMP / BMP ID: 1	Site ID: GGPL	Catchment ID: BB07

IMP / BMP SUM	MARY			
WQ <sub>v</sub> (provided):	Undetermined	_	Re <sub>v</sub> (provided):	0.000
Area Treated (ac):	0.01	-	Impervious Area Treated (ac):	0.01
Photographs				
No. <u>11</u>		Description:	roof area	
No		Description:		
Comments				
IMP area = 499 so				



IMP / BMP ID: 2	Site ID: GGPL	Catchment ID: BB07

New LID IMP ■ SWM BMP Retrofit ■ New SWM BMP ■ Type (Sheets 4 & 5): 5
State Plane Coordinates of IMP / BMP Centroid: X: Y:
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 7, 16
Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private  Other City of Laurel
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO
Limited Impact to Adjacent Properties: ☑ YES ☐ NO
Area Accessible for Construction:   ✓ YES   NO
Area Accessible for Maintenance:   YES   NO
Limited Permitting Issues: ☑ YES ☐ NO
Jurisdictional Wetlands Impacted: ☐ YES ☑ NO
Forest Retention Area Impacted: TYES NO
Conservation Easement Impacted: TYES VNO
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☑ Water ☑ Sewer ☐ Other
Utilities Impacted: ☑ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other
Impacted Utilities:
Critical Area Impacted: ☐ YES ☑ NO
Mature / Specimen Trees Impacted: ☐ YES ☑ NO
Existing Landscaping Impacted:   YES  NO
Underdrain Needed: ☐ YES ☑ NO Underdrains Can Discharge: ☐ YES ☐ NO
Soils are Suitable: YES NO Ground Water Table Level Suitable: YES NO
Estimate IMP / BMP drainage area included on site: 0.04 ac 100%
Retrofit of Existing SWM BMP
SDI ID: Add Forebay: NO
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO
Provide Additional Storage Volume:   YES   NO
Excavation / Raise the Embankment:

IMP / BMP ID: 2	Site ID: GGPL	Catchment ID: BB07

IMP / BMP SUMM	MARY	
WQ <sub>v</sub> (provided):	Undetermined	Re <sub>v</sub> (provided): 0.000
Area Treated (ac):	0.04	Impervious Area Treated (ac): 0.04
Photographs		
No. <u>10</u>	Description	on: typical location
No	Description	on:
Comments  Downspouts will be	Rain barrels and cisterns will ave to be disconnected.	be used where feasible. Will also use planter boxes.
Downopouto Will Tit	avo to be disserificated.	



IMP / BMP ID: 3	Site ID: GGPL	Catchment ID: BB07

New LID IMP ■ SWM BMP Retrofit ■ New SWM BMP ■ Type (Sheets 4 & 5): 45
State Plane Coordinates of IMP / BMP Centroid: X: Y:
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 7, 16
Treatment Area Ownership: Transportation ROW Utility ROW County Other Government Private  Other City of Laurel
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO
Limited Impact to Adjacent Properties: ☑ YES ☐ NO
Area Accessible for Construction:   ✓ YES   NO
Area Accessible for Maintenance:   YES   NO
Limited Permitting Issues: ☑ YES ☐ NO
Jurisdictional Wetlands Impacted: ☐ YES ☑ NO
Forest Retention Area Impacted: TYES NO
Conservation Easement Impacted: TYES VNO
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☑ Water ☑ Sewer ☐ Other
Utilities Impacted: ☑ None ☐ Natural Gas ☐ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other
Impacted Utilities: Above Gound Underground
Critical Area Impacted: ☐ YES ☑ NO
Mature / Specimen Trees Impacted: ☐ YES ☑ NO
Existing Landscaping Impacted:   YES  NO
Underdrain Needed: ☐ YES ☑ NO Underdrains Can Discharge: ☐ YES ☐ NO
Soils are Suitable: YES NO Ground Water Table Level Suitable: YES NO
Estimate IMP / BMP drainage area included on site: 0.04 ac 100%
Retrofit of Existing SWM BMP
SDI ID: Add Forebay: NO
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO
Provide Additional Storage Volume:   YES   NO
Excavation / Raise the Embankment:

IMP / BMP ID: 3	Site ID: GGPL	Catchment ID: BB07	

IMP / BMP SUMM	MARY		
WQ <sub>v</sub> (provided):	Undetermined		Re <sub>v</sub> (provided): 0.000
Area Treated (ac):	0.04		Impervious Area Treated (ac): 0.04
Photographs			
No. <u>9</u>		Description:	typical location
No		Description:	
Comments  Downspouts will ha	Planter boxes will bave to be disconned		feasible. Will also use rain barrels and cisterns.



IMP / BMP ID: 4	Site ID: GGPL	Catchment ID: BB07

New LID IMP ✓ SWM BMP Retrofit ✓ New SWM	M BMP □ Type (Sheets 4 & 5): <u>50</u>
State Plane Coordinates of IMP / BMP Centroid:	X:Y:
Sketch Location of Footprint (with Approximate Dimension	ns) and Drainage Boundary on Site Map
Identify all Impairments Addressed by Recommendation (	(Sheet 1): <u>1, 2, 3, 4, 7, 16</u>
Treatment Area Ownership: Transportation ROW Utilit	ity ROW County Other Government Private
Infrastructure / Structures / Buildings Impacted:	✓ NO
Limited Impact to Adjacent Properties: ☑ YES ☐ NO	
Area Accessible for Construction: ☑ YES ☐ NO	
Area Accessible for Maintenance: ☑ YES ☐ NO	
Limited Permitting Issues: ✓ YES □ NO	
Jurisdictional Wetlands Impacted: ☐ YES ☑ NO	
Forest Retention Area Impacted:	
Conservation Easement Impacted: ☐ YES ☑ NO	
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone	ne 🗌 Cable 🗹 Water 🗹 Sewer 🔲 Other
Utilities Impacted: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone	ne 🗌 Cable 🔲 Water 🔲 Sewer 🔲 Other
Impacted Utilities: ☐ Above Gound ☑ Underground	
Critical Area Impacted: ☐ YES ☑ NO	
Mature / Specimen Trees Impacted: ☐ YES ☑ NO	
Existing Landscaping Impacted:	
Underdrain Needed: ☑ YES ☐ NO Underdra	ains Can Discharge: ☑ YES ☐ NO
Soils are Suitable: ☑ YES ☐ NO Ground V	Water Table Level Suitable: ☑ YES ☐ NO
Estimate IMP / BMP drainage area included on site:	<u>0.45</u> ac <u>100%</u>
Retrofit of Existing SWM BMP	
SDI ID: Ad	dd Forebay: ☐ YES ☐ NO
Modify Outlet Stucture: ☐ YES ☐ NO Ad	dd Aquatic Bench: YES NO
Grade Bottom of Facility: ☐ YES ☐ NO Pla	ant Native Vegetation: ☐YES ☐NO
Provide Additional Storage Volume: TYES NO	
Excavation / Raise the Embankment:	

IMP / BMP ID: 4	Site ID: GGPL	Catchment ID: BB07

IMP / BN	IP SUMMAR	Y	
WQ <sub>v</sub> (pro	vided):	0.008	Re <sub>v</sub> (provided): 0.001
Area Trea	ated (ac):	0.45	Impervious Area Treated (ac):0.05
Photogr	aphs		
No.	12	Description:	looking east
No.	13	Description:	looking west
No.		Description:	
		a of propsed IMP appears to ousness, therefore 1/2 in. of	be poorly drained. Underdrains may be needed. runoff was used

IMP / BMP ID: 4 Site ID: GGPL

FORM 3 -- Opportunities and Constraints of Potential Management Practice

#### UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS)





Catchment ID: BB07

IMP / BMP ID: 5	Site ID: GGPL	Catchment ID: BB07

New LID IMP ✓ SWM BMP Retrofit ✓ New SWM BMP ✓ Type (Sheets 4 & 5): 50
State Plane Coordinates of IMP / BMP Centroid: X: Y:
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16
Treatment Area Ownership: ☐ Transportation ROW ☐ Utility ROW ☐ County ☑ Other Government ☐ Private ☐ Other City of Laurel
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO
Limited Impact to Adjacent Properties: ☑ YES ☐ NO
Area Accessible for Construction: ☑ YES ☐ NO
Area Accessible for Maintenance: ☑ YES ☐ NO
Limited Permitting Issues: ☑YES ☐NO
Jurisdictional Wetlands Impacted: ☐ YES ☑ NO
Forest Retention Area Impacted: YES NO
Conservation Easement Impacted: ☐ YES ☑ NO
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☑ Water ☑ Sewer ☐ Other
Utilities Impacted: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other
Impacted Utilities: Above Gound  Underground
Critical Area Impacted: ☐ YES ☑ NO
Mature / Specimen Trees Impacted: ☐ YES ☑ NO
Existing Landscaping Impacted: TYES VI NO
Underdrain Needed: ☑ YES ☐ NO Underdrains Can Discharge: ☑ YES ☐ NO
Soils are Suitable: ☑ YES ☐ NO Ground Water Table Level Suitable: ☑ YES ☐ NO
Estimate IMP / BMP drainage area included on site: 0.27 ac 100%
Retrofit of Existing SWM BMP
SDI ID: Add Forebay: DNO
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO
Provide Additional Storage Volume: NO
Excavation / Raise the Embankment:

IMP / BMP ID: 5	Site ID: GGPL	Catchment ID: BB07

IMP / E	BMP SUMMAR	Υ		
WQ <sub>v</sub> (p	rovided):	0.006	Re <sub>v</sub> (provided):	0.001
Area Tr	eated (ac):	0.27	Impervious Area Treated (ac):	0.06
Photog	graphs			
No.	14	Description:	looking east	
No.	15	Description:	looking west	
No.		Description:		
	ents Are ats 25% of the december 4 ats 25% at the december 4 at th	drainage area	be poorly drained. Underdrains may be need	ed.

IMP / BMP ID: 5 Site ID: GGPL

## UPPER PATUXENT RIVER WATERSHED RESTORATION ACTION STRATEGY (WRAS) FORM 3 -- Opportunities and Constraints of Potential Management Practice





Catchment ID: BB07

IMP / BMP ID: 6	Site ID: GGPL	Catchment ID: BB07

New LID IMP ☑ SWM BMP Retrofit ☐ New S	WM ВМР □ Ту	pe (Sheets 4 & 5):	50		
State Plane Coordinates of IMP / BMP Centroid: X: Y:					
Sketch Location of Footprint (with Approximate Dimens	sions) and Drainage B	oundary on Site M	ар		
Identify all Impairments Addressed by Recommendation	n (Sheet 1): 1, 2	, 3, 4, 7, 16			
Treatment Area Ownership: Transportation ROW Other City of Laurel	Jtility ROW County	✓ Other Government	Private		
Infrastructure / Structures / Buildings Impacted:	ES 🗸 NO				
Area Accessible for Construction:   ✓ YES   NO					
Area Accessible for Maintenance: ☑ YES ☐ NO					
Limited Permitting Issues: ☑ YES ☐ NO					
Jurisdictional Wetlands Impacted: ☐ YES ☑ NO					
Forest Retention Area Impacted:					
Conservation Easement Impacted:					
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Teleph	none Cable Water	✓ Sewer			
Utilities Impacted: ☐ None ☐ Natural Gas ☑ Electric ☑ Teleph	none Cable Water	Sewer Other			
Impacted Utilities: Above Gound Underground					
Critical Area Impacted: ☐ YES ☑ NO					
Mature / Specimen Trees Impacted: ☐ YES ☑ NO					
Existing Landscaping Impacted:					
Underdrain Needed: ☑ YES ☐ NO Underd	Irains Can Discharge:	✓ YES NO			
Soils are Suitable: ☑ YES ☐ NO Ground	d Water Table Level S	Suitable: ☑ <sub>YES</sub>	□NO		
Estimate IMP / BMP drainage area included on site:	ac		100%		
Retrofit of Existing SWM BMP					
SDI ID:	Add Forebay: ☐ YE	s  NO			
Modify Outlet Stucture: ☐ YES ☐ NO	Add Aquatic Bench:	YES NO			
Grade Bottom of Facility: ☐YES ☐NO	Plant Native Vegetati	on: YES NO			
Provide Additional Storage Volume:   NO  NO					
Excavation / Raise the Embankment:					

IMP / BMP ID: 6 Site ID: GGPL Catchment ID: BB07
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IMP / BMP SUMN	MARY	
$WQ_{v}$ (provided):	0.002	Re <sub>v</sub> (provided): 0.000
Area Treated (ac): 0.08		Impervious Area Treated (ac): 0.02
Photographs		
No. <u>4</u>	Description:	looking south
No	Description:	
Comments		be poorly drained. Underdrains may be needed.
Combined with GG		
IMP size = 803 sq	п.	



IMP / BN	/IP ID: <mark>7</mark>	Site ID: GGPL	Catchment ID: BB07

New LID IMP ■ SWM BMP Retrofit ■ New SWM BMP ■ Type (Sheets 4 & 5): 38				
State Plane Coordinates of IMP / BMP Centroid: X: Y:				
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map				
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16				
Treatment Area Ownership: ☐ Transportation ROW ☐ Utility ROW ☐ County ☑ Other Government ☐ Private ☐ Other ☐ City of Laurel				
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO				
Limited Impact to Adjacent Properties: ☑ YES ☐ NO				
Area Accessible for Construction: ☑ YES ☐ NO				
Area Accessible for Maintenance: VYES NO				
Limited Permitting Issues: ☑ YES ☐ NO				
Jurisdictional Wetlands Impacted: TYES INO				
Forest Retention Area Impacted: TYES NO				
Conservation Easement Impacted: TYES NO				
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☑ Water ☑ Sewer ☐ Other				
Utilities Impacted: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other				
Impacted Utilities: Above Gound				
Critical Area Impacted: YES NO				
Mature / Specimen Trees Impacted: ☐ YES ☑ NO				
Existing Landscaping Impacted:  VES NO				
Underdrain Needed: ☑ YES ☐ NO Underdrains Can Discharge: ☑ YES ☐ NO				
Soils are Suitable: ☑ YES ☐ NO Ground Water Table Level Suitable: ☑ YES ☐ NO				
Estimate IMP / BMP drainage area included on site: 1.45 ac 100%				
Retrofit of Existing SWM BMP				
SDI ID: Add Forebay: DNO				
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO				
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO				
Provide Additional Storage Volume: TYES NO				
Excavation / Raise the Embankment:				

IMP / BMP ID: 7	Site ID: GGPL	Catchment ID: BB07

IMP/BN	IP SUMN	MARY		
WQ <sub>v</sub> (provided):       0.024         Area Treated (ac):       1.45		0.024	Re <sub>v</sub> (provided):	0.002
		1.45	Impervious Area Treated (ac):	0.18
Photogra	aphs			
No.	5	Description:	looking south	
No.	6	Description:	looking west	
No.		Description:		
Commer			o be poorly drained. Underdrains may be nee	ded.
		perviousness, therefore 1/2 in. of	runoff was used	
IMP area	= 1,666 \$	t pa		





IMP / BMP ID: 8	Site ID: GGPL	Catchment ID: BB07

New LID IMP ✓ SWM BMP Retrofit ✓ New SWM BMP ✓ Type (Sheets 4 & 5): 38				
State Plane Coordinates of IMP / BMP Centroid: X: Y:				
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map				
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 2, 3, 4, 7, 16				
Treatment Area Ownership: ☐ Transportation ROW ☐ Utility ROW ☐ County ☑ Other Government ☐ Private ☐ Other ☐ City of Laurel				
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO				
Limited Impact to Adjacent Properties: ☑ YES ☐ NO				
Area Accessible for Construction: ☑ YES ☐ NO				
Area Accessible for Maintenance: VYES NO				
Limited Permitting Issues: ☑ YES ☐ NO				
Jurisdictional Wetlands Impacted: TYES INO				
Forest Retention Area Impacted: TYES NO				
Conservation Easement Impacted: TYES NO				
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☑ Water ☑ Sewer ☐ Other				
Utilities Impacted: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other				
Impacted Utilities:				
Critical Area Impacted: YES NO				
Mature / Specimen Trees Impacted: ☐ YES ☑ NO				
Existing Landscaping Impacted:  VES NO				
Underdrain Needed: ☑ YES ☐ NO Underdrains Can Discharge: ☑ YES ☐ NO				
Soils are Suitable: ☑ YES ☐ NO Ground Water Table Level Suitable: ☑ YES ☐ NO				
Estimate IMP / BMP drainage area included on site: 1.5 ac 100%				
Retrofit of Existing SWM BMP				
SDI ID: Add Forebay: DNO				
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO				
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO				
Provide Additional Storage Volume: TYES NO				
Excavation / Raise the Embankment:				

IMP / BMP ID: 8	Site ID: GGPL	Catchment ID: BB07

IMP / BI	MP SUMM	ARY	
WQ <sub>v</sub> (provided):		0.025	Re <sub>v</sub> (provided): 0.001
Area Tre	ated (ac):	1.50	Impervious Area Treated (ac): 0.02
Photog	raphs		
No.	2	Description:	looking west
No.	3		looking east
No.		Description:	
Comme	-		o be poorly drained. Underdrains may be needed.
	-	erviousness, therefore 1/2 in. of	runoff was used
iiviP area	a = 876  sq f	l .	





IMP / BMP ID: 9	Site ID: GGPL	Catchment ID: BB07

New LID IMP ☑ SWM BMP Retrofit □ New SWM BMP □ Type (Sheets 4 & 5): <u>59</u>					
State Plane Coordinates of IMP / BMP Centroid: X: Y:					
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map					
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 3, 7, 16					
Treatment Area Ownership: ☐ Transportation ROW ☐ Utility ROW ☐ County ☑ Other Government ☐ Private ☐ Other City of Laurel					
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO					
Limited Impact to Adjacent Properties: ☑ YES ☐ NO					
Area Accessible for Construction: ☑ YES ☐ NO					
Area Accessible for Maintenance: ☑ YES ☐ NO					
Limited Permitting Issues: ☑YES ☐NO					
Jurisdictional Wetlands Impacted: ☐ YES ☑ NO					
Forest Retention Area Impacted: YES NO					
Conservation Easement Impacted: ☐ YES ☑ NO					
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☑ Water ☑ Sewer ☐ Other					
Utilities Impacted: ☐ None ☐ Natural Gas ☑ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other					
Impacted Utilities: Above Gound  Underground					
Critical Area Impacted: TYES NO					
Mature / Specimen Trees Impacted: ☐ YES ☑ NO					
Existing Landscaping Impacted:					
Underdrain Needed: ☐ YES ☑ NO Underdrains Can Discharge: ☐ YES ☐ NO					
Soils are Suitable:   YES NO Ground Water Table Level Suitable:   YES NO					
Estimate IMP / BMP drainage area included on site: 0.83 ac 100%					
Retrofit of Existing SWM BMP					
SDI ID: Add Forebay: DNO					
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO					
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO					
Provide Additional Storage Volume: YES NO					
Excavation / Raise the Embankment:					

IMP / BMP ID: 9	Site ID: GGPL	Catchment ID: BB07	

	BMP SUMMARY provided): Undet	ermined	Re <sub>v</sub> (provided): n/a	
Area Treated (ac): 0.83		0.83	Impervious Area Treated (ac): n/a	
Photo	graphs			
No.	16	Description:	looking north at "a"	
No.	8	Description:	looking south at "a"	
No.	17	Description:	looking north at "b"	
No.	1	Description:	looking south at "b"	
No.	7		looking west at "c"	
No.		Description:		
No.		Description:		
No.		Description:		
Comm	nents			
		ocations = 36,150 sq ft		
	2.20 0. 100 2	33,133,34		





8 16







IMP / BMP ID: 10 Site ID: GGPL Catchment ID: BB07

New LID IMP □ SWM BMP Retrofit □ New SWM BMP □ Type (Sheets 4 & 5): 52					
State Plane Coordinates of IMP / BMP Centroid: X: Y:					
Sketch Location of Footprint (with Approximate Dimensions) and Drainage Boundary on Site Map					
Identify all Impairments Addressed by Recommendation (Sheet 1): 1, 3, 7, 16					
Treatment Area Ownership: ☐ Transportation ROW ☐ Utility ROW ☐ County ☑ Other Government ☐ Private ☐ Other ☐ City of Laurel					
Infrastructure / Structures / Buildings Impacted: ☐ YES ☑ NO					
Limited Impact to Adjacent Properties: ☑ YES ☐ NO					
Area Accessible for Construction: ☑ YES ☐ NO					
Area Accessible for Maintenance: ☑ YES ☐ NO					
Limited Permitting Issues: ☑YES ☐NO					
Jurisdictional Wetlands Impacted: ☐ YES ☑ NO					
Forest Retention Area Impacted: YES NO					
Conservation Easement Impacted: ☐ YES ☑ NO					
Utilities Present: ☐ None ☐ Natural Gas ☑ Electric ☑ Telephone ☐ Cable ☑ Water ☑ Sewer ☐ Other					
Utilities Impacted: ☐ None ☐ Natural Gas ☑ Electric ☐ Telephone ☐ Cable ☐ Water ☐ Sewer ☐ Other					
Impacted Utilities: Above Gound  Underground					
Critical Area Impacted: TYES NO					
Mature / Specimen Trees Impacted: ☐ YES ☑ NO					
Existing Landscaping Impacted:					
Underdrain Needed: ☐ YES ☑ NO Underdrains Can Discharge: ☐ YES ☐ NO					
Soils are Suitable: Tes No Ground Water Table Level Suitable: Tes No					
Estimate IMP / BMP drainage area included on site: 0.83 ac 100%					
Retrofit of Existing SWM BMP					
SDI ID: Add Forebay: DNO					
Modify Outlet Stucture: ☐ YES ☐ NO Add Aquatic Bench: ☐ YES ☐ NO					
Grade Bottom of Facility: ☐ YES ☐ NO Plant Native Vegetation: ☐ YES ☐ NO					
Provide Additional Storage Volume:   YES NO					
Excavation / Raise the Embankment:					

IMP / BMP ID: 10 Site ID: GGPL Catchment ID: BB07

IMP/	BMP SUMMARY			
WQ <sub>v</sub> (provided): Undetermined			Re <sub>v</sub> (provided): n/a	
Area T	reated (ac):	0.83	Impervious Area Treated (ac): n/a	
Photo	graphs			
No.	16	Description:	looking north at "a"	
No.	8	Description:	looking south at "a"	
No.	17	Description:	looking north at "b"	
No.	1	Description:	looking south at "b"	
No.	7	Description:	looking west at "c"	
No.		Description:		
No.		Description:		
No.		Description:		
	g of firework displa	area cannot be used becau ys and viewing of stage pro ocations = 36,150 sq ft	se space is used by public for recreation, ductions.	





8 16





