APPENDICES

APPENDIX A

COST BREAKDOWNS

Facilities Master Plan Cost Estimate

Notes

The following cost assessment for the Montgomery College Facilities Master Plan has been developed from the design documents dated December 3, 2015 prepared by Cho Benn Holback + Associates as well as the utility and building systems notes for cost adjustment from Montgomery College dated January 21, 2016, revised February 3, 2016.

The Facilities Master Plan involves costing out various buildings based on type and function for the Takoma Park/Silver Spring, Germantown, and Rockville campuses depending on new construction, renovation or demolition. Each building will have associated site work cost included.

The level of pricing forming the basis of these cost assessments is representative of current day costs of construction in the Maryland area, assuming that the project will be procured by a General Contractor with competitive bids received from a minimum of four responsive subcontractors per trade.

Duration: Construction schedule has not yet been established.

Contingency: We have included an estimate design contingency of 15% within the GSF costs to cover items that are not designed or included in the estimate. This contingency will decrease in value with each design submission until the contingency reaches zero.

Escalation: Each building cost represents present day cost. No escalation has been allowed for.

Assumptions: Each GSF price includes design contingency, bonds & insurance and GC overhead and profit. Price does not include escalation or FFE items.

Exclusions: We do not include the following items in this estimate:

- Design Fees or other consultant fees;
- Legal fees;
- Permits;
- Impact or other Government costs;
- Costs of owners on site representation during the course of construction;
- Costs resulting from owner requested changes or design changes arising during the course of construction;
- Costs arising from "sole source" procurement requirements;
- Utility company charges;
- Any special testing requirements or inspection costs;
- Structural monitoring of any adjacent structures;
- Utility company charges/fees;
- Computers, etc;
- Commissioning agent;
- Artwork;
- Communication systems equipment;
- Security system equipment;
- Telecommunications equipment;
- A/V equipment.

This cost estimate has been developed for comparative purposes ONLY and measurements are based upon a proximate quantity surveys as detailed as possible relative to the level of design and available documentation. Where quantities are not available, assumptions have been made on historical references to similar projects recently estimated by DMS.

This cost estimate is an opinion of probable costs based on fair market value, and is not a prediction of the anticipated low bid. DMS has no control over the costs of labor, material, the GC's or subcontractor's method of determining price or competitive bidding and market conditions.

MASTER SUMMARY TOTAL COST	
TAKOMA PARK/SILVER SPRING CAMPUS	$139,770,779
GERMANTOWN CAMPUS	$215,948,221
ROCKVILLE CAMPUS	$366,311,380
GRAND TOTAL	**$722,030,380**

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Takoma Park/Silver Spring Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
1	**Math and Science Center Building**	NEW	0	134,600	134,600	$377.19	$50,769,774	Includes cooling plant.
	Photovoltaic Panels					$2.17	$291,633	Assume 10% of roof area.
	Site Work					$37.72	$5,076,977	Includes all typical site work and large LOD, tennis court work.
	Site Work-Extend Utilities					$18.86	$2,538,489	Allows for all excessive extension of utilities beyond "normal conditions" plus Pepco upgrades.
	Site Work-Significant Drainage Remediation					$11.32	$1,523,093	
					Subtotal	**$447.25**	**$60,199,967**	
1a	**Falcon Hall**	DEMO	39,063	0	(39,063)	$15.00	$585,945	Associated site cost included.
					Subtotal	**$15.00**	**$585,945**	
1b	**Science South Building**	DEMO	23,757	0	(23,757)	$15.00	$356,355	Associated site cost included.
					Subtotal	**$15.00**	**$356,355**	

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Takoma Park/Silver Spring Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
2	**Library Learning Commons**	NEW	0	62,734	62,734	$349.65	$21,934,943	Includes heating and cooling
	Photovoltaic Panels					$3.25	$203,886	Assume 10% of roof area.
	Site Work					$34.97	$2,193,494	
	Site Work-Relocate Distribution Equipment					$6.99	$438,699	
	Site Work-IT Work/Electrical Ductbank					$3.50	$219,349	Includes IT ductbank plus creation of campus ductbank system.
					Subtotal	**$398.35**	**$24,990,371**	
2a	**Mathematics Pavilion**	DEMO	6,942	0	(6,942)	$15.00	$104,130	Associated site cost included.
					Subtotal	**$15.00**	**$104,130**	
2b	**North Pavilion**	DEMO	6,942	0	(6,942)	$15.00	$104,130	Associated site cost included.
					Subtotal	**$15.00**	**$104,130**	
3	**Math Building**	NEW	0	45,600	45,600	$330.35	$15,063,960	
	Photovoltaic Panels					$2.17	$98,800	Assume 10% of roof area.
	Site Work					$33.04	$1,506,396	
	Site Work-New Satellite Heating/Cooling Plant					$36.34	$1,657,036	Includes satellite plant as part of building, plus distribution piping.
	Site Work-Pepco Work					$6.61	$301,279	Distribution and transformer.
					Subtotal	**$408.50**	**$18,627,471**	

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Takoma Park/Silver Spring Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
3a	**Resource Center**	DEMO	44,906	0	(44,906)	$15.00	$673,590	Associated site cost included.
					Subtotal	**$15.00**	**$673,590**	
4	**Health and Fitness Building**	NEW	0	49,230	49,230	$335.00	$16,492,050	
	Site Work					$33.50	$1,649,205	
	Site Work-New Satellite Heating/Cooling Plant					$36.85	$1,814,126	Includes satellite plant as part of building, plus distribution piping.
	Site Work-Pepco Work					$6.70	$329,841	Distribution and transformer.
					Subtotal	**$412.05**	**$20,285,222**	
4a	**Science North Building**	DEMO	39,950	0	(39,950)	$15.00	$599,250	Associated site cost included.
					Subtotal	**$15.00**	**$599,250**	
4b	**Parking Structure - Below Grade**	NEW	0	220 spaces	220	$261.90	$7,700,000	Assume 29,400 GSF.
	Site Work			29,400		$26.19	$770,000	
	Site Work-Extensive Site Work			29,400		$13.10	$385,000	Includes curb cuts, driveways, regrading.
					Subtotal	**$301.19**	**$8,855,000**	

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Takoma Park/Silver Spring Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
5	**Pavilion One**	RENO	7,385	7,385	0	$297.18	$2,194,674	Includes site cost.
					Subtotal	**$297.18**	**$2,194,674**	
5	**Pavilion Two**	RENO	7,385	7,385	0	$297.18	$2,194,674	Includes site cost.
					Subtotal	**$297.18**	**$2,194,674**	
						TOTAL	**$139,770,779**	

Assumptions:

General: All cost are in todays dollars. No allowance has been made for escalation.
All cost include design contingency, bonds & insurance, contractors overhead and profit.
Cost do not allow for FFE items.

Site: Site cost assume new utilities to new and renovated buildings. Each building will receive appropriate pathways, lighting, landscaping, earthwork.
This equates to approximately 10% of the building costs based on similar jobs for MC and historical data. This factor will be applied to each building site costs.
Special site cost have been included for certain buildings that have specific site amenities.
Extra utility cost have been added for extensive connections or long length utility runs.

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Germantown Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
1	**Student Services Center**	NEW	0	95,000	95,000	$353.23	$33,556,850	
	Photovoltaic Panels					$3.25	$308,750	Assume 10% of roof area.
	Site Work					$35.32	$3,355,685	
	Special Site Work - Drop-Off Area and Parking, Relocate Transit Stop					$3.53	$335,569	
	Special Site Work - Traffic Circle and Landscaping					$1.77	$167,784	
	Special Utility Work - New PEPCO Feeder					$10.53	$1,000,000	
	Site Work-New Satellite Heating/Cooling Plant					$38.86	$3,691,254	Includes satellite plant as part of building, plus distribution piping.
					Subtotal	**$446.48**	**$42,415,891**	
2	**Science and Applied Studies Building**	DEMO	37,200	0	-37,200	$18.00	$669,600	
		NEW	55,800			$271.36	$15,141,888	
	Site Work					$27.14	$1,514,189	
					Subtotal	**$310.50**	**$17,325,677**	

Germantown Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
3	**Library Learning Commons**	NEW	0	70,200	70,200	$349.65	$24,545,430	
	Photovoltaic Panels					$3.25	$228,150	Assume 10% of roof area.
	Site Work					$34.97	$2,454,543	
	Site Work-Extensive					$10.49	$736,363	Includes added cost for steep site & significant exterior stairway.
	Special Site Work - Outdoor Terrace for Café, Pedestrian Path					$3.50	$245,454	Assume extensive pathways/terrace.
	Site Work-Pepco Work					$1.40	$98,182	Conduit and connection to existing electrical cable.
	Site Work-New Satellite Heating/Cooling Plant					$38.46	$2,699,997	Includes satellite plant as part of building, plus distribution piping.
					Subtotal	**$441.71**	**$31,008,119**	
4	**Humanities and Social Sciences Building**	RENO	75,700	75,700	0	$269.68	$20,414,776	
	Site Work					$26.97	$2,041,478	
					Subtotal	**$296.65**	**$22,456,254**	
5	**Parking Garage**	NEW	0	324,000	324,000	$64.32	$20,839,680	
	Photovoltaic Panels					$1.30	$421,200	Assume 10% of roof area.
	Site Work					$6.43	$2,083,968	
					Subtotal	**$72.05**	**$23,344,848**	

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Germantown Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
6	**Science / Math / Health Science**	NEW	0	34,200	34,200	$390.00	$13,338,000	
	Photovoltaic Panels					$6.50	$222,300	Assume 10% of roof area.
	Site Work					$39.00	$1,333,800	
	Special Site Work - Reconfigure Parking Lot				40,000	$5.00	$200,000	
	Site Work-Pepco Work					$1.56	$53,352	Conduit and connection to existing electrical cable.
	Site Work-New Satellite Heating/Cooling Plant					$42.90	$1,467,180	Includes satellite plant as part of building, plus distribution piping.
					Subtotal	**$485.81**	**$16,614,632**	
7	**Arts and Communications**	NEW	0	72,000	72,000	$313.54	$22,574,880	
	Photovoltaic Panels					$3.25	$234,000	Assume 10% of roof area.
	Site Work					$31.35	$2,257,488	
	Special Site Work - Pedestrian Path and Plaza					$3.14	$225,749	Assume extensive pathways.
	Site Work-New Satellite Heating/Cooling Plant					$34.49	$2,483,237	Includes satellite plant as part of building, plus distribution piping.
					Subtotal	**$385.77**	**$27,775,354**	

Germantown Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
8	**High Technology and Science Center**	RENO	10,000	16,600	6,600	$271.68	$4,509,888	
	Site Work					$27.17	$450,989	
	Site Work-Chilled Water/Ice Plant Renovation					$40.75	$676,483	
					Subtotal	**$339.60**	**$5,637,360**	
9	**Paul Peck Academic and Innovation Building**	RENO	34,413	34,413	0	$117.74	$4,051,787	Only first floor will be renovated, 34,413 GSF.
	Site Work					$11.77	$405,179	
					Subtotal	**$129.51**	**$4,456,965**	
10	**Physical Education Building Addition**	NEW	0	36,500	36,500	$335.00	$12,227,500	
	Photovoltaic Panels					$3.25	$118,625	Assume 10% of roof area.
	Site Work					$33.50	$1,222,750	
	Special Site Work - Reconfigure Parking Lot				16,500	$5.00	$82,500	
	Site work - Heating/Cooling Piping					$2.01	$73,365	New connections to campus heating/cooling distribution system. Split cost with renovation.
	Site Work-Pepco Work					$1.34	$48,910	Pepco electrical upgrade. Split cost with renovation
					Subtotal	**$377.36**	**$13,773,650**	

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Germantown Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
10	**Physical Education Building Renovation**	RENO	36,770	36,770	0	$270.00	$9,927,900	
	Photovoltaic Panels					$3.25	$119,503	Assume 10% of roof area.
	Site Work					$27.00	$992,790	
	Site Work - Heating/Cooling Piping					$1.62	$59,567	New connections to campus heating/cooling distribution system. Split costs with new addition.
	Site Work-Pepco Work					$1.08	$39,712	Pepco electrical upgrade. Split cost with new addition.
					Subtotal	**$302.95**	**$11,139,472**	
						TOTAL	**$215,948,221**	

Assumptions:

General: All cost are in todays dollars. No allowance has been made for escalation.
All cost include design contingency, bonds & insurance, contractors overhead and profit.
Cost do not allow for FFE items.

Site: Site cost assume new utilities to new and renovated buildings. Each building will receive appropriate pathways, lighting, landscaping, earthwork.
This equates to approximately 10% of the building costs based on similar jobs for MC and historical data. This factor will be applied to each building site costs.
Special site cost have been included for certain buildings that have specific site amenities.
Extra utility cost have been added for extensive connections or long length utility runs.

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Rockville Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
1	**South Campus Instruction Building**	RENO	29,900	29,900	0	$248.00	$7,415,200	
	Site Work					$24.80	$741,520	
	Site work - Heating/Cooling Piping					$4.96	$148,304	New connections to campus heating/cooling distribution system.
					Subtotal	**$277.76**	**$8,305,024**	
2a	**Campus Center**	NEW	0	128,000	128,000	$353.23	$45,213,440	
	Photovoltaic Panels					$1.63	$208,000	Assume 10% of roof area.
	Site Work					$35.32	$4,521,344	Includes relocation of trash/recycling facility and terrace.
	Special Site Work - Pedestrian Path					$3.53	$452,134	Assume extensive pathways.
	Site Work-New Satellite Heating/Cooling Plant					$28.26	$3,617,075	Includes satellite plant as part of building, plus distribution piping.
					Subtotal	**$421.97**	**$54,011,994**	
2b	**Existing Campus Center**	DEMO	74,300	0	(74,300)	$15.00	$1,114,500	
					Subtotal	**$15.00**	**$1,114,500**	

Rockville Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
3	**South Garage**	NEW	0	7 levels	7 levels	$169.93	$23,400,000	Assume 137,700 GSF.
	Photovoltaic Panels					$1.08	$149,175	Assume 10% of roof area.
	Site Work			900 spaces	137,700	$16.99	$2,340,000	
	Special Site Work - Reconfigure Parking Lot				130,000	$5.00	$650,000	
	Special Site Work - Relocate Transit Stops					$0.85	$117,000	
	Site Work-New Heating/Cooling Plant For South Campus					$50.98	$7,020,000	Second heating and cooling plant with ice storage for south campus.
	Site Work-New Heating/Cooling Piping					$3.40	$468,000	500 feet (x4 pipes) of new heating/cooling piping to campus loop system.
					Subtotal	**$247.96**	**$34,144,175**	
4	**Library Learning Commons**	NEW	0	117,158	117,158	$349.65	$40,964,295	
	Photovoltaic Panels					$1.63	$190,382	Assume 10% of roof area.
	Site Work, New Quad					$17.48	$2,048,215	
	Site Work-New Heating/Cooling Piping					$5.24	$614,464	New heating/cooling piping to campus loop system.
					Subtotal	**$374.00**	**$43,817,356**	

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Rockville Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
5	**Gordon and Marilyn Macklin Tower**	RENO	63,652	63,652	0	$240.59	$15,314,035	
	Photovoltaic Panels					$3.25	$206,869	Assume 10% of roof area.
	Site Work					$24.06	$1,531,403	
	Site Work-New Heating/Cooling Piping					$7.22	$459,421	Replace piping connections to central plant.
					Subtotal	**$275.12**	**$17,511,728**	
6	**Technical Training Center**	NEW	0	84,000	84,000	$315.00	$26,460,000	
	Photovoltaic Panels					$3.25	$273,000	Assume 10% of roof area.
	Site Work					$31.50	$2,646,000	
	Site Work-Storm Water					$1.86	$156,000	storm water piping, connect to exist. Line near baseball field.
	Site Work-New Satellite Heating/Cooling Plant					$34.65	$2,910,600	Includes satellite plant as part of building, plus distribution piping.
					Subtotal	**$386.26**	**$32,445,600**	
6a	**Interim Technical Training Center**	DEMO	9,360	0	(9,360)	$15.00	$140,400	Associated site cost included.
					Subtotal	**$15.00**	**$140,400**	
7	**Media Arts**	NEW	0	48,000	48,000	$345.00	$16,560,000	
	Photovoltaic Panels					$1.63	$78,000	Assume 10% of roof area.
	Site Work					$34.50	$1,656,000	
					Subtotal	**$381.13**	**$18,294,000**	

MONTGOMERY COLLEGE

FACILITIES MASTER PLAN

Rockville Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
7a	**Counseling and Advising Building**	DEMO	17,696	0	(17,696)	$15.00	$265,440	Associated site cost included.
					Subtotal	**$15.00**	**$265,440**	
8a	**Humanities and Social Science**	NEW	0	136,000	136,000	$332.80	$45,260,800	
	Photovoltaic Panels					$1.63	$221,000	Assume 10% of roof area.
	Site Work					$33.28	$4,526,080	
	Special Site Work - Pedestrian Path and Plaza					$3.33	$452,608	Assume extensive pathways.
	Site Work-New Heating/Cooling Plant For North Campus					$99.84	$13,578,240	New campus central heating/cooling plant.
					Subtotal	**$470.87**	**$64,038,728**	
8b	**Technical Center**	DEMO	55,908	0		$15.00	$838,620	Associated site cost included.
					Subtotal	**$15.00**	**$838,620**	
9	**Humanities Building**	RENO	73,912	73,912	0	$238.89	$17,656,838	
	Photovoltaic Panels					$2.17	$160,143	Assume 10% of roof area.
	Site Work					$23.89	$1,765,684	
	Site Work-New Heating/Cooling Piping					$7.17	$529,705	New heating/cooling connections to campus plant in Humanities and Social Science building
					Subtotal	**$272.11**	**$20,112,369**	

MONTGOMERY COLLEGE
FACILITIES MASTER PLAN

Rockville Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
10a	**Robert E. Parilla Performing Arts Center Renovation.**	RENO	28,000	28,000	0	$408.19	$11,429,320	
10a	**Performing Arts Center Addition**	ADD	0	28,325		$453.19	$12,836,607	Includes stand along pac chiller
	Site Work					$43.08	$2,426,593	Includes connections heating and cooling in s garage
	Special Site Work - Arts Walk phase 2, incl Amphitheater					$17.13	$485,319	
					Subtotal	**$482.52**	**$27,177,838**	
11	**Computer Science Building**	RENO	20,900	20,900		$261.45	$5,464,305	
	Site Work					$26.15	$546,431	
	Special Site Work - Complete Pedestrian Mall					$13.07	$273,215	
	Site Work - Distribution Piping					$10.46	$218,572	Upgrade heating/cooling to campus loop
					Subtotal	**$311.13**	**$6,502,523**	
12	**Physical Education Center**	RENO	84,949	84,949		$240.00	$20,387,760	Includes supplemental c package units
	Site Work					$24.00	$2,038,776	
	Site Work - Distribution Piping					$2.88	$244,653	Replace heating/cooling to campus loop
					Subtotal	**$266.88**	**$22,671,189**	

MONTGOMERY COLLEGE

FACILITIES MASTER PLAN

Rockville Campus

SEQUENCE	DESCRIPTION	RENO, ADD DEMO, NEW	EXISTING 2013 GSF	MASTER PLAN 2023 GSF	CHANGE GSF	$/GSF	COST	ASSUMPTIONS
13	**Mannakee Building**	RENO	42,102	42,102		$315.00	$13,262,130	
	Site Work					$31.50	$1,326,213	
	Special Site Work - Pedestrian Path and Landscaping					$1.58	$66,311	Assume extensive pathways/landscaping
	Site Work - Distribution Piping					$6.30	$265,243	New heating/cooling piping to campus loop
					Subtotal	**$354.38**	**$14,919,896**	
					TOTAL		**$366,311,380**	

Assumptions:

General: All cost are in todays dollars. No allowance has been made for escalation.
All cost include design contingency, bonds & insurance, contractors overhead and profit.
Cost do not allow for FFE items.

Site: Site cost assume new utilities to new and renovated buildings. Each building will receive appropriate pathways, lighting, landscaping, earthwork.
This equates to approximately 10% of the building costs based on similar jobs for MC and historical data. This factor will be applied to each building site costs.
Special site cost have been included for certain buildings that have specific site amenities.
Extra utility cost have been added for extensive connections or long length utility runs.

APPENDIX B

PROJECT ALTERNATIVES

Master Plan Building Project Space Summaries

The following is a master plan level planning effort for building projects recommended in the 2013 -2023 FMP. This preliminary effort is intended as a starting point for the facility programming and budgeting process for individual facility projects.

Takoma Park/Silver Spring Campus

1. Math and Science Center Building (73,555 NASF 134,600 GSF)

This new facility is proposed to include: laboratories and prep rooms, classrooms, a consolidated Math and Science Learning Center, faculty and staff offices, a greenhouse, a planetarium and support space for the math and science programs on the Campus. The building will house the following departments/units: Math, Biology, Chemistry, Engineering, Geology, Meteorology, Astronomy, Computer Science and Physics. The new building will accommodate growth of existing programs and provide opportunities for new offerings to meet demand, such as cybersecurity classes. The building will be located on the site currently occupied by Science South and Falcon Hall.

MATH AND SCIENCE CENTER BUILDING NASF/GSF

Classrooms	4,835
Math Class Labs	14,510
Natural Sciences Class and Project Labs	37,920
Math and Science Learning Center Computer Lab (24 Stations)	840
Math and Science Learning Center Individual Study (24 Stations)	840
Math and Science Learning Center Group Study (6 with 6 Stations each)	900
Math and Science Learning Center Tutoring Center (24 Stations)	840
Math and Science Learning Center Materials Review Room (24 Stations)	240
Math and Science Learning Center Service Desks and Support	400
Dean's Office	500
Natural Sciences Offices and Conference	2,780
Math Offices and Conference	3,320
Math and Science Center Learning Center	830
Greenhouse and Support Space	1,300
Planetarium	1,000
Media Production	340
Vending Lounge (Capacity of 20)	600
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
IT Staging and Repair/Storage	150
Loading Dock	200
Waste/Recycling/Trash	150

Housekeeping Supplies and Workrooms	250
Chemical Waste Transfer Storage	150
Building Storage	500
Total NASF	**73,555**
Total GSF @ 55% efficiency	**134,600**

2. Library Learning Commons (38,895 NASF 62,734 GSF)

This project replaces the existing Resource Center with a new Library Learning Commons. This new facility is proposed to include: student study space (group and individual), space to access library services, stack and library processing and service space, a Computer Training Center, a Social Sciences Learning Center, a Reading and Writing Learning Center, instructional space as well as a Media Resources Facility, offices and support space. The building will be located on the site currently occupied by the North and Mathematics Pavilions and will require the demolition of the North and Mathematics Pavilions.

LIBRARY LEARNING COMMONS NASF/GSF

Study (450 stations) includes the stations listed below:	11,250
Open Seating (60 stations)	0
Small Group Study for 4 (28 stations)	0
Large Group Study for 6 (42 stations)	0
Seminar Room for 10 (10 stations)	0
Worktable/Carrel/Workstation (220 stations)	0
Library Instruction Rooms (60 stations)	0
Computer Laboratory (30 stations)	0
Stack	7,500
Processing/Service	1,500
Computer Training Center (30+24 group study stations)	1,890
Social Sciences Learning Center (30+24 group study stations)	1,890
Reading & Writing Learning Center (75 +24 group study stations)	3,460
Center for Teaching and Learning Instructional Design Suite	1,600
Library Offices	1,660
Reading & Writing Learning Center Offices	1,160
Social Science Learning Center Offices	665
Center for Teaching and Learning Offices	665
Academic Computing Offices	665
Media Resources Facility	1,600
Media Resources Offices	665
HELP Desk	600

Vending Lounge	275
Patron Lounge	400
Library Staff Break Room	200
IT Staging and Repair/Storage	150
Storage	500
Loading Dock	200
Waste/Recycling/Trash	200
Housekeeping Supplies and Work Room	200
Total NASF	**38,895**
Total GSF @ 62% efficiency	**62,734**

3. Math Building (27,360 NASF, 45,600 GSF)

This new facility is proposed to provide space to meet the total enrollment projections for the Math program that can't be accommodated in the new Math and Science Center Building. It is intended to foster interdisciplinary collaboration between programs and is planned to include: classrooms, class laboratories, office and support space for Math and other academic disciplines.

MATH BUILDING NASF/GSF

Classrooms	4,500
Class Labs	17,500
Offices and Conference	3,800
Vending Lounge	200
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
IT Staging and Repair/Storage	150
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	200
Building Storage	500
Total NASF	**27,360**
Total GSF @ 60% efficiency	**45,600**

4. Health and Fitness Center (32,900 NASF 49,230 GSF and 220 Parking Spaces)

This project replaces Falcon Hall and provides for structured parking partially below grade. The new facility is in response to demolishing Falcon Hall and Science South Building to provide an adequate site for the new Math and Science Center Building and to eliminate the very poor conditions of and substantial deferred maintenance backlog in both buildings. The new Health and Fitness Center will be located on the site currently occupied by Science North Building and will house the Physical Education program and will include: large multi-purpose athletic training and activity spaces, office, general classrooms and support spaces. This facility will be used for multiple purposes including academic instruction, student, faculty, staff and community recreation and wellness, as well as for campus and community events. This project will also include the construction of an underground parking structure with a capacity of about 220 spaces.

This project will require demolition of Science North Building. However, until its demolition this facility will continue to be used for Math and Science instruction and support space until funding for the Health and Fitness Center has been secured.

HEALTH AND FITNESS CENTER NASF/GSF

Classrooms	1,800
Multi-Purpose Activity Center/Gymnasium	11,450
Offices and Conference	2,090
Fitness Center and Storage	5,650
Multi-Purpose Room	3,000
Aerobic/Dance Studio	2,000
Athletic Training Room	260
Equipment Room/Laundry	1,000
Faculty/Staff Locker Room (2 @ 800)	1,600
Team Room (2 @ 600)	1,200
Visiting Team Room (2 @ 600)	1,200
Officials Locker Room (2 @ 150)	300
PE/Athletic Storage	500
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	200
Building Storage	500
Total NASF	**32,900**
Total GSF @ 67% efficiency	**49,230**

5. Pavilions One and Two Renovation: (9,295 NASF, 14,771 GSF)

Both pavilions will be renovated to support humanities and social sciences as well as general instructional space for campus. Because of the relatively high FCI rating and deferred maintenance backlog, each of these buildings will need significant renovation and reinvestment in the future to ensure they continue to function to support the programs in the buildings and the campus in general. It is anticipated that the footprints and internal space configurations will not change substantially and that instructional and office space will be used to support the humanities and social science disciplines.

6. Child Care Center

The existing Child Care Center located on the corner of Philadelphia and Takoma Avenues will be vacated and is not scheduled for repurposing or reuse. The College has decided to discontinue offering childcare at the Takoma Park/Silver Spring campus and anticipates they will close this facility in the summer of 2016.

Discontinuing use of this facility will result in the elimination of 1,463 NASF of Daycare space and 239 NASF of office space all used in support of Student Services.

Germantown Campus

1. Student Services Center (54,150 NASF, 95,000 GSF)

The new Student Services Center will consolidate student support functions and resources, as well as student activities, which have traditionally been spread throughout the Campus. It will relocate the Admissions, Registration and Records, and Student Development and Student Life offices from the Science and Applied Studies Building and create substantially more space for study and student interaction to support a growing Campus. In addition the building will house a new larger cafeteria and bookstore.

STUDENT SERVICES CENTER NASF/GSF

Welcome Center (Counter, reception/waiting, student work area and student computers/work and storage)	1,500
Admissions & Recruitment Office Suite (Director, 3 FTE staff, workroom, counter/reception, conference room (5), pantry and storage)	1,350
Enrollment Services Office and Conference Suite (Director, 7 FTE staff, workroom, student computers, counter, reception, pantry and storage)	2,290
Financial Aid Office and Conference Suite (Director, 7 FTE staff, workroom, student computers, counter, reception, pantry and storage)	2,290
Cashiers Suite (Window/intake, workroom, supervisor, staff workstations and storage)	950
Disability Support Services Suite (Specialist, 4 FTE staff, counter/intake, reception, workroom, tutoring (6), pantry and storage)	2,450
Assessment Center and Support Suite (Director, manager, 3 FTE staff, counter, reception, assessment testing, special testing, pantry and storage)	2,230
Counseling Suite (13 FTE staff, counter/intake, reception, workroom, pantry and storage)	2,790
International and Multi-Cultural Center (3 FTE staff, reception, lounge, pantry and storage)	860
Student Life Suite (Director, 3 FTE staff, student org. workstations (12), reception, lounge, pantry and storage)	1,780
ACES Suite (Director, 1 FTE staff, reception, pantry and storage)	600
CTL/DELT Suite (Director, 11 FTE staff, workroom, training center (20), reception, pantry and storage	2,670
Offices (Germantown Development Project (2), Hillman Entrepreneurship, HR hoteling, MCPS TTI Instructors, C2C Veterans Services, Military Enrollment, Gateway, and Academic Initiatives, and growth. Total of 12 FTE)	1,440
Conference space shared (2 @ 20 capacity and 2 @ 10 capacity)	1,500
Provost Office Suite (includes Provost and staff, reception/waiting, conference room (20), workroom, pantry and storage)	2,400
Student Services Dean Suite (includes Deans and staff, reception/waiting, conference room (20), workroom, pantry and storage)	1,800
Campus Security Office and Support	1,200
Writing Center (60 Stations) and support	2,100
Learning Center Open Lab and Support	1,200
Food Service (kitchen, servery and storage)	6,800
Student Seating (300)	4,500
Student Meeting (2 @ 50 capacity and 1 @ 20 capacity)	3,000
MC Munchies and Copies	700

Store/Merchandising and Support	3,000
Lounge	1,000
New Mother's Room	100
Meditation/Reflection/Serenity Rooms	300
IT Staging and Repair	150
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	300
Building Storage	550
Total NASF	**54,150**
Total GSF @ 57% efficiency	**95,000**

2. Science and Applied Studies Building - Phase 2 Addition (31,806 NASF, 55,800 GSF)

This is the second phase of an on-going project to renovate and expand the Science and Applied Studies Building to develop a larger Physics, Engineering and Math Center to support current and projected student enrollment growth. The Phase 2 project will involve demolition of the existing two story wing on the south and redevelop it with a bigger three story addition. The proximity to the Bioscience Education Center will allow for shared use of facilities within both buildings, such as the Mathematics Accounting Physics Engineering Learning Center (MAPEL) in the Phase One renovation of the Science and Applied Studies Building and the Science Learning Center in the Bioscience Education Center.

The building is currently entered from the lower floor of the north side. There is no access on the south side of the building. To facilitate access to the Bioscience Education Center and the new quadrangle to the south, the circulation pattern will need to be reconfigured to provide for a new entrance from the second floor with egress to the south as part of the Phase 2 project. This new southern entrance provides a design opportunity to incorporate a student lounge or similar use to help activate the new quadrangle.

SCIENCE AND APPLIED SCIENCES PHASE TWO ADDITION NASF/GSF

Classrooms	5,400
Class Labs	20,996
Open Computer Labs	1,250
Offices and Conference	3,100
Vending Lounge	400
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
Building Storage	500
Total NASF	31,806
Total GSF @ 57% efficiency	55,800

3. Library Learning Commons Building (42,120 NASF, 70,200 GSF)

This building will act as a connecting hub between the main academic buildings and the future PIC MC buildings. It has been located to establish a new campus focal point/center between the campus core and the Holy Cross Germantown Hospital. The building is proposed at a maximum of three stories so that it does not block views from the High Technology and Science Center, or the Science and Applied Studies Building. It is sited south of the High Technology and Science Center. The massing will frame the view from the south quad to the proposed sites of the Pinkney Innovation Complex for Science and Technology at Montgomery College (PIC MC) and Holy Cross Germantown Hospital.

The new Library Learning Commons will house the Reading and Writing Learning Center, the Social Science Learning Center and its media and academic computing functions. General purpose and library learning classrooms will also be included in this new building. In addition to library and learning functions, the building will house a café that has good public access to serve students, faculty and staff as well as the future PIC MC occupants. It is envisioned that the café and adjacent spaces will be highly active spaces and will be designed to provide opportunities for informal interactions among College students and PIC MC occupants.

LIBRARY LEARNING COMMONS BUILDING NASF/GSF

Study (550 stations): the total area includes the breakdown of stations below	13,750
Open Seating (92 stations)	0
Small Group Study for Four (40 stations)	0
Large Group Study for 6 (48 stations)	0
Seminar Room for 10 (20 stations)	0
Worktable/Carrel/Workstation (260 stations)	0
Library Instruction Rooms (60 stations)	0
Computer Laboratory (30 stations)	0
Stack	9,105
Processing/Service	1,500
Computer Training Center (30+24 group study stations)	1,890
Social Sciences Learning Center (30+24 group study stations)	1,890
Reading & Writing Learning Center (75 +24 group study stations)	3,465
Library Offices	1,660
Reading & Writing Learning Center Offices	1,160
Social Science Learning Center Offices	665
Academic Computing Offices	665
HELP Desk	600
Media Resources Offices	670
Media Resources Facility	1,600
Café	1,600
Patron Lounge	400
Library Staff Break Room	200

IT Staging and Repair	150
Building Storage	550
Loading Dock	200
Waste/Recycling/Trash	200
Housekeeping Supplies and Work Room	200
Total NASF	**42,120**
Total GSF @ 60% efficiency	**70,200**

4. Humanities and Social Sciences Building Renovation (51,601 NASF, 75,700 GSF)

The library space within the Humanities & Social Sciences Building will be relocated to a new Library Learning Commons building and the cafeteria will be relocated to the new Student Services Center. After these relocations, the building will be comprehensively renovated and vacated space (23,340 NASF) will be altered and converted to classroom/laboratory, office and conference space for the Humanities and Social Science departments. The English Department Offices currently located in the Paul Peck Academic and Innovation Building will be relocated to the newly renovated space. The space vacated by this move will be reallocated for dedicated use by WD&CE.

HUMANITIES AND SOCIAL SCIENCES BUILDING RENOVATION NASF/GSF

Classrooms	11,700
Class Labs	3,150
English Dept. Office (Chair, Admin Support, Reception and Work Room)	700
Offices and Conference	6,640
Student Lounge and Vending	600
Storage	550
Total NASF	**23,340**

5. Parking Garage (800-1,000 spaces)

A 900 to 1,000 space parking garage is proposed for a site on Observation Drive north of the Paul Peck Academic and Innovation Building and to the west of the new Arts and Communications Building. It will alleviate the anticipated parking space deficit and replace spaces lost to the construction of the New Student Services Center and Arts and Communications Building.

6. Science / Math / Health Science Buildings (20,520 NASF, 34,200 GSF)

This is one of three buildings of similar size that will house additional space for the Biology, Chemistry, Physics, Engineering, Geosciences, Health and Cybersecurity programs and be sited at the south entrance of the Campus where Observation Drive and Goldenrod Lane meet at the roundabout. The new buildings have been planned to be built in phases to provide a high degree of flexibility to accommodate space for College programs as well as elements of public-private partnerships that have yet to be defined. These partnerships may include incubator space for emerging bio-technology and life science start-ups or facility space for mature and established corporate and non-profit partners that will create a mutually beneficial synergy by being located proximate to the College and its students, faculty and academic programs. The buildings will form a physical link to the proposed PIC MC, and frame the views from the south campus quad to Holy Cross Germantown Hospital.

SCIENCE/MATH/HEALTH SCIENCE BUILDING NASF/GSF

Classrooms	2,160
Math, Health and Cybersecurity Class Labs	4,200
Natural Science Class and Project Labs	6,480
Lab and Classroom Prep and Storage	2,100
Offices and Conference	3,670
Vending Lounge	400
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
IT Staging and Repair	150
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms (2)	200
Hazardous Materials Storage	150
Building Storage	500
Total NASF	**20,520**
Total GSF @ 60% efficiency	**34,200**

7. Arts and Communications Building (43,200 NASF, 72,000 GSF)

Together with the new Student Services Center the new Arts and Communications Building will define a new north gateway to the Campus. A new outdoor plaza on the north side of the building will visually connect the building with the new Student Services Center located across Observation Drive. This new building will also serve to better connect the campus to the Paul Peck Academic and Innovation Building.

The building will provide new discipline and general purpose classrooms and laboratories, and performance and support spaces to support the growing arts and communications programs on campus. These programs will be relocated from the Humanities and Social Sciences building to allow for backfill of that space as described previously.

ARTS AND COMMUNICATIONS BUILDING NASF/GSF

Classrooms	9,000
Class Labs (Art and Communication Arts Technology (CAT))	16,500
Art Exhibition	2,000
Multi-Purpose Performance Space and Support (dressing, scene shop and storage)	6,570
CTL Instructional Design Suite	2,000
Office and Conference (Art, CAT and CTL)	4,320
Lounge	600
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
IT Staging and Repair	150
Loading Dock	300
Waste/Recycling/Trash	300
Housekeeping Supplies and Workrooms	300
Building Storage	1,000
Total NASF	**43,200**
Total GSF @ 60% efficiency	**72,000**

8. Reallocation of Space within the High Technology and Science Center (45,492 NASF, 75,542 GSF)

Built in the 1990s, this building requires renovation and reallocation of approximately 10,000 NASF/16,600 GSF of space formerly occupied by the biotechnology lab and support spaces. This function and spaces have been relocated to the new Bioscience Education Center. The relocation of functions from this building will allow its reuse of the space for the Information Technology and Business Departments. Building system upgrades will also be required to extend the useful life and accommodate reallocation and alteration of space.

REALLOCATION OF SPACE WITHIN HIGH TECHNOLOGY AND SCIENCE CENTER

Classrooms	2,700
Class Labs	4,200
Offices and Conference	3,100
Total NASF	**10,000**
Total GSF @ 60% efficiency	**16,600**

9. Paul Peck Academic and Innovation Building Renovation (54,052 NASF, 68,826 GSF)

The Paul Peck Academic and Innovation Building was an existing commercial building, located adjacent to the Campus, which was purchased by the College to accommodate growing enrollments. This building is currently occupied on the first floor by occupants including English Department faculty and the Provost's Office that will be relocated to other buildings. After these relocations the first floor space of 33,684 GSF will be renovated and reconfigured for additional general classrooms and faculty offices that are dedicated to serving the Workforce Development & Continuing Education programs. The second floor of the building is currently leased to Montgomery County for use by its business incubator (Germantown Innovation Center – Montgomery County Department of Economic Development). Since this lease is long term this space is planned to remain in use for the business incubator for the ten year planning period. It should be noted that after renovation it is anticipated that the net to gross efficiency for the first floor will be approximately 60% and yield 20,315 NASF for programming.

PAUL PECK ACADEMIC AND INNOVATION BUILDING RENOVATION NASF/GSF

Classrooms	6,300
Class Labs	5,400
Office and Conference	4,615
Tutoring and Study	500
Existing Facilities and IT Operations and Maintenance to remain	3,500
Total NASF	**20,315**
Total GSF @ 60% efficiency	**33,684**

10. Addition to and Renovation of the Physical Education Building (21,900 NASF, 36,500 GSF addition only)

This project will involve a comprehensive renovation of the existing Physical Education facility and an addition to the building. The renovation will include extensive building envelope upgrades and repairs along with modernization of building systems. The addition will provide needed programming space to address enrollment growth for the Physical Education and Health programs as well as support campus and community events and recreation spaces. The addition will be located on the north side of the existing building. It will provide an entrance to the new fitness and recreation spaces from the west.

PHYSICAL EDUCATION CENTER ADDITION AND RENOVATION NASF/GSF

Classroom	900
Health and Physical Education Offices and Conference (8 FTE faculty/staff)	1,320
Athletic Offices and Conference (2 FTE)	330
Fitness Center and Storage	5,400
Multi-Purpose Room (2 @ 3,000 NASF)	6,000
Aerobic/Dance Studio	2,000
Athletic Training Room	250
Equipment Room/Laundry	1,000
Faculty/Staff Locker Room (2 @ 800)	1,600
Team Room (2 @ 500)	1,000
Visiting Team Room (2 @ 500)	1,000
Officials Locker Room (2 @ 150)	300
PE/Athletic Storage	500
Student Lounge	300
Total NASF	**21,900**
Total GSF @ 62% efficiency	**36,500**

Rockville Campus

1. South Campus Instruction Building (SB) Renovation (16,882 NASF, 29,900 GSF)

This project involves the renovation of 3,771 NASF in the SB for reallocation to and use by WD&CE and youth programs. English offices and instructional space will remain in the building until they are relocated to the new Humanities and Social Sciences Building. Other spaces to remain include retention of the Drawing Lab (900 NASF) used by the Art Department and the WD&CE Art Lab (625 NASF). Space currently occupied by WD&CE in the Campus Center will relocate to this building and the Mannakee Building.

SOUTH CAMPUS INSTRUCTION BUILDING NASF/GSF

Existing Classroom (English, WD&CE and General Use)	10,202
Existing Office and Lounge (English)	1,232
New Classroom, Class Lab and Office (WD&CE)	3,773
Existing Class Labs and Offices (WD&CE, and Art)	1,575
Total NASF	16,882
Total GSF @ 56% efficiency	29,900

2. New Campus Center (72,960 NASF, 128,000 GSF)

This project involves demolition of the existing Campus Center and replacement with a new four-story Campus Center. The building will be highly active and include: the Bookstore; a large dining hall and supporting kitchen and servery; the Hospitality Management program; student meeting, activity and lounge space; and classrooms to support Health, Physical Education and general purpose academic needs. New lobby and lounge space will be situated to engage the pedestrian mall on the west side of the building and the newly constructed new Student Services building across the pedestrian mall.

NEW CAMPUS CENTER NASF/GSF

Student Services/Life Office and Support	14,820
Class Labs (Health, PE and General Use)	7,350
Food Service and Support (kitchen, servery, offices, storage, etc.)	10,000
Student Seating (450)	6,750
Faculty/Staff Seating (100)	1,500
MC Munchies and MC Copies	1,000
Hospitality Management Class Labs	3,000
Hospitality Management Office and Conference	1,830
Bookstore, Retail, Offices and Support	8,000
Student Lounge and Study	3,600
Multipurpose Student Activities Space (300 capacity sub-dividable)	4,500
Meeting Rooms and Support (3 @ 50 capacity and 2 @ 25 capacity)	5,500
New Mother's Room	80
Meditation/Reflection/Serenity Room	80

Facilities Operations and Maintenance	2,000
IT Staging and Repair	150
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	450
Building Storage	2,000
Total NASF	**72,960**
Total GSF @ 57% efficiency	**128,000**

3. South Garage

This project is for construction of a new parking structure with a capacity of 900-1,000 new parking spaces. The structure is proposed to be seven levels and will be located across from the Robert E. Parilla Performing Arts Center and adjacent to the proposed Media Arts Building. The new Library Learning Commons is proposed to be constructed immediately after the garage is built, wrapping the north and west sides of the garage, and leaving just the south and east façade's exposed. These elevations will be screened with plantings and/or architectural elements.

4. Library Learning Commons (70,295 NASF, 117,158 GSF)

This project is for the construction of a new four-story Library to replace and expand the capacity of the current facility housed on three floors in the Gordon and Marilyn Macklin Tower. The building will be located at the southern end of the Campus, opposite the new Science Center and serving as a "wrapper" to the new South Garage. The west side of the building will be designed to engage the new Mall and create an anchor at the south side of the Campus.

LIBRARY LEARNING COMMONS NASF/GSF

Study (1,208 stations): the total area includes the breakdown off stations below:	30,200
Open Seating (90 stations)	0
Small Group Study for 4 (40 stations)	0
Large Group Study for 6 (60 stations)	0
Seminar Room for 10 (20 stations)	0
Worktable/Carrel/Workstation (878 stations)	0
Library Instruction Rooms (60 stations)	0
Computer Laboratory (60 stations)	0
Stack	20,000
Processing/Service	5,000
Library Offices	4,795
HELP Desk	1,000
Media Resources Facility	3,000
Faculty/Staff "Sand Box" Lab	2,000

Patron Lounge	600
Library Staff Break Room	400
Computer Server Room	500
IT Staging and Repair	200
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	250
Building Storage	2,000
Total NASF	**70,295**
Total GSF @ 60% efficiency	**117,158**

5. Gordon and Marilyn Macklin Tower Renovation (44,557 NASF, 63,652 GSF)

This project involves the alteration and reconfiguration of 44,557 NASF of space that currently houses the Campus Library. The existing space will be vacated with the construction of a new Library Learning Commons. The reclaimed space will be allocated for use by Academic Initiatives, expansion of the Reading and Writing Learning Center, general education classrooms for Reading and English, part time faculty and additional BMIS instructional space until the new Humanities and Social Sciences Building is constructed and the Humanities Building is renovated. The renovation will also improve and/or reconfigure MEP systems, accessibility and life safety systems.

GORDON AND MARILYN MACKLIN TOWER RENOVATION NASF/GSF

CTL Classrooms	2,700
CTL Office and Conference	2,500
CTL Testing and Tutoring	1,000
Existing Office and Conference for reuse	4,157
Classrooms (General Use, BMIS, Humanities and Social Sciences)	8,100
Class Labs (General Use, BMIS, Humanities and Social Sciences)	9,450
Additional PT Faculty Offices (General Use and Address Campus Deficit in various programs)	6,000
Flex/Swing Space – Allocation TBD	10,650
Total NASF	**44,557**
Total GSF @ 70% efficiency	**63,652**

6. Technical Training Center (50,400 NASF, 84,000 GSF)

This project replaces the current Interim Technical Training Center with a larger facility, and also serves to consolidate the Technical Training programs and Applied Technology programs currently housed in the Technical Center. The building is proposed as a low two-story mass housing the high bay automotive classrooms/labs, with a six-story tower fronting toward North Campus Drive, and marking the north vehicular entry to campus. The two-story building will be situated parallel to the track, and could possibly incorporate bleacher seating.

TECHNICAL TRAINING CENTER NASF/GSF

GIS and Applied Technology Classrooms	6,300
GIS Class Lab and Support	7,020
GIS and Applied Technology Office and Conference	2,990
Corporate Classroom ITTC Replacement	3,200
Auto Class Lab (4 areas with 6 stations each, support)	12,130
Auto Class Lab Support (Tire/Brake Repair, Tool Storage)	3,200
AT Class Labs	10,200
Study and Tutoring	2,000
Exhibit	800
Vending/Lounge	500
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
IT Staging and Repair	150
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	250
Hazardous Waste Transfer Storage	150
Building Storage	1,000
Total NASF	**50,400**
Total GSF @ 60% efficiency	**84,000**

7. Media Arts Building (28,800 NASF, 48,000 GSF)

This building expands the current Communication Arts Technology (CAT) program and consolidates the Fine and Communication Arts programs along the proposed Arts Walk at the southern end of the Campus. The building will include space for the CAT program that is being relocated from the Technical Center. The building will address existing space deficits and support growth in both CAT and the Fine Arts. Construction of this building will require demolition of the Counseling and Advising Building. The building is proposed at four stories and will include spaces for graphic design, art class labs and offices.

MEDIA ARTS BUILDING NASF/GSF

Communication Arts Technology (CAT) Class Labs and Support	18,000
Art Class Labs	2,400
CAT Classroom	2,100
Offices and Conference (Art and CAT)	3,340
Exhibition Gallery and Support	800
Lounge	300
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
IT Staging and Repair/Storage	150
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	250
Chemical Waste Storage	150
Building Storage	800
Total NASF	**28,800**
Total GSF @ 60% efficiency	**48,000**

8. Humanities and Social Science Building (81,600 NASF, 136,000 GSF)

This new building will be constructed on the footprint of the demolished Technical Center, and will accommodate the Humanities and Social Sciences programs as well as provide general purpose classrooms. The building will front onto green space forming a quad of sorts between the existing Humanities Building and the new Student Services Center.

9. Humanities Building Renovation (49,368 NASF, 73,912 GSF)

Completion of the new Humanities and Social Science Building will allow for alteration and reconfiguration of this building to expand both the Macklin Business Institute and Center for Entrepreneurship, provide additional space for the Business, Information Science and Management (BMIS) programs and continued use of classrooms for general education classes. The renovation will also improve accessibility, life safety systems and the central ice storage facility.

HUMANITIES AND SOCIAL SCIENCE BUILDING NASF/GSF

Classrooms	18,300
Education Labs and Support	5,800
PRAXIS/Statistics Lab and Support	1,180
Humanities Class Labs and Support	13,890
Social Science Labs and Support	6,500
Writing and Reading Center and Support	8,500
Humanities Offices and Conference	8,000
History, Political Science and Other Offices and Conference	5,200
Psychology Office and Conference	3,320
Education/Anthropology/Criminal Justice Office and Conference	5,000
Lounge/Vending	1,000
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
IT Staging and Repair	150
Loading Dock	200
Waste/Recycling/Trash	150
Housekeeping Supplies and Workrooms	250
Building Storage	2,000
Facilities Management and Operations	2,000
Total NASF	**81,600**
Total GSF @ 60% efficiency	**136,000**

HUMANITIES BUILDING RENOVATION NASF/GSF

BMIS Classrooms	13,500
BMIS Class Labs	12,600
BMIS Office, Conference and Support	6,640
Macklin Business Institute and Center for Entrepreneurship and Support	2,580
Existing Classrooms to remain not used by BMIS	6,787
Existing Class Labs to remain not used by BMIS	1,457
Existing Faculty Offices to remain not used by BMIS	5,804
Total NASF	**49,368**
Total GSF @ 67% efficiency	**73,912**

10. Robert E. Parilla Performing Arts Center Addition and Renovation (16,501 NASF, 28,000 GSF existing + 17,294 NASF, 28,325 GSF addition)

This building has a strong presence in the Montgomery County community, and will undergo a two-part renovation to optimize and improve its appeal to the Campus and the greater community. The renovation consists of an expansion of the auditorium and back-of-house spaces, life safety and accessibility improvements, and additions at the front, rear and sides to accommodate needed program space. The auditorium will be expanded from 500 seats up to 1,000 seats, with the addition of a balcony, upper level lobby and ancillary spaces. The dressing rooms, loading dock and storage spaces will be renovated, and an addition will be built to house meeting rooms, conference center and catering kitchen.

ROBERT E. PARILLA PERFORMING ARTS CENTER ADDITION AND RENOVATION NASF/GSF

Additional Seating	5,280
Expanded Scene Shop	1,000
Lighting Shop/Storage	500
Tool/Paint Rooms	300
Costume Storage/Fitting/Repair/Laundry	1,000
Additional Dressing Rooms (4) and Toilets (4)	750
Office and Conference	1,660
Music Labs	1,680
Meeting Space	2,375
Catering Kitchen and Support	750
Pre-Function Entrance Space	1,000
Additional Storage	1,000
Total NASF	**17,295**
Total GSF @ 61% efficiency	**28,235**

11. Computer Science Building (12,661 NASF, 20,900 GSF)

This building will be renovated. Classrooms, computer laboratories and offices will be refurbished and continue to provide support to Computer Science and Information Technology and serve as general instructional resources to all academic disciplines and students, as well as serve as swing space as needed. The main entry will continue to be located on the east side of the building so as to connect to the new Mall.

12. Physical Education Center and Outdoor Facilities (58,431 NASF, 84,949 GSF)

This project consists of a renovation of existing spaces including a fitness center, weight rooms, locker rooms, academic labs and support spaces for intercollegiate teams. Building systems upgrades will also be completed. Outdoor facilities may be reconfigured, and possibly shifting the baseball field to accommodate future building projects. In addition, the women's grass turf soccer field is in need of replacement or renewal. Supplemental Health and PE instructional space will be delivered in the new Campus Center.

13. Mannakee Building (34,359 NASF, 42,102 GSF)

This building will be renovated and reallocated to Workforce Development & Continuing Education (WD&CE) for administration functions and business training, for additional adjunct faculty and swing space as needed. It is anticipated that renovation and reconfiguration of the building will reduce the efficiency from 80% to an estimated 65%, which will provide 27,366 NASF in the 42,102 GSF.

MANNAKEE BUILDING NASF/GSF

Class Lab	14,300
Office, Conference and Support	2,790
Welcome Desk and Reception	300
Vending/Lounge	400
New Mother's Room	80
Meditation/Reflection/Serenity Room	80
Storage	300
Non-WD&CE Faculty and Staff Office and Swing Space	9,116
Total NASF	**27,366**
Total GSF @ 65% efficiency	**42,102**

Workforce Development & Continuing Education (WD&CE)

1. Reallocation Of The Paul Peck Academic and Innovation Building on the Germantown Campus

The Paul Peck Academic and Innovation Building is a former office building on Goldenrod Lane that was purchased by the College in 2011 and renovated for academic space.

See the Germantown Campus narrative.

2. Reallocation of South Campus Instruction Building to WD&CE at the Rockville Campus

This building will be reallocated to support WD&CE activities that are currently housed in the Campus Center. Renovations will be required.

See the Rockville Campus narrative.

3. Alteration of the Homer S. Gudelsky Institute for Technical Education and Replacement of the Interim Technical Training Center at the Rockville Campus

There is an on-going need to reconfirm WD&CE's program needs within the Homer S. Gudelsky Institute for Technical Education (GU) and reallocate space for new program initiatives and growth of existing activities.

A new building is proposed to replace and expand on the Interim Technical Training Center, and also house a consolidation of the Technical Training programs and the Applied Technology programs currently housed in Technical Center. The building is proposed as a low, two-story mass housing the high bay automotive classrooms/ labs, with a multi-story fronting toward North Campus Drive, and marking the north vehicular entry to campus. The two-story building will be situated parallel to the track, and could possibly incorporate bleacher seating.

See the Rockville Campus narrative.

4. Continued Leasing of Facilities at Westfield South Center (9,749 NASF)

To enlarge the WD&CE program in Wheaton, the College will lease or acquire, if possible, a new building within Westfield South Center to expand this campus. An alternative would be to acquire land and develop a new purpose-built facility of at least 22,500 GSF.

5. Continued Leasing of Facilities at Gaithersburg Business Training Center (14,347 NASF)

To enlarge the WD&CE program in Gaithersburg, the College will lease or acquire if possible a new building within Gaithersburg Business Training Center to expand this campus. An alternative would be to acquire land and develop a new purpose-built facility of at least 28,500 GSF.

6. Future East County Location

Given the growth in program offerings in the east County area, the College should continue to monitor and study the feasibility of leasing a facility or purchasing a facility to house WD&CE programs in this part of the County.

APPENDIX C

CITY OF TAKOMA PARK RESOLUTIONS

Introduced by: Councilmember Grimes

CITY OF TAKOMA PARK, MARYLAND
RESOLUTION 2015-57
PROVIDING COMMENT ON THE PROPOSED MONTGOMERY COLLEGE TAKOMA PARK/ SILVER SPRING 2016 – 2026 FACILITIES MASTER PLAN

WHEREAS, Montgomery College (the "College"), founded in 1946, is Maryland's oldest community college with three campuses, the first of which was established in 1950 and lies in part within the 1976 Takoma Park National Register Historic District; and

WHEREAS, the Takoma Park/Silver Spring campus is distinct from the other campuses because of its residential setting, compact site, its location partially within the 1976 Takoma Park National Register Historic District and its proximity and adjacency to residences both within the Takoma Park National Register Historic District as well as the local Montgomery County Takoma Park Historic District; and

WHEREAS, the College is in the process of updating its Facilities Master Plan, which is intended to serve as a framework for the development of each of the College's campuses in a manner that is cohesive, integrated, and visionary while addressing the individual campuses' space usage and academic and administrative requirements; and

WHEREAS, the College, on September 10, 2015, presented to the City and community members a Facilities Master Plan update schedule with a highly compressed timeline: Staff would perform analysis and develop concept alternatives in the period September 7 to November 30; present "final reports" in community meetings December 8-10, 2015; present to the Board of Trustees on December 14; and Board of Trustees approval in a January 25, 2016 vote; and forward the approved Facilities Master Plan to the Maryland Higher Education Commission, as required by law, by February 1, 2016; and

WHEREAS, the College has made no provisions for formal public comment on the proposed Facilities Master Plan, nor for College response to City or public comment, contrary to customary and best practices for a public entity in the development of a public document, and has averred that the Facilities Master Plan is exempt from Mandatory Referral to The Maryland - National Capital Park and Planning Commission, which would entail a 60-day review period; and

WHREAS, the general counsel of the Montgomery County Planning Department has communicated to Montgomery College that the department believe Mandatory Referral is required, despite contrary Montgomery College assertions; and

WHEREAS, the City of Takoma Park believes that public entities developing public documents – including Montgomery College in developing the Facilities Master Plan update – should provide adequate opportunity for public input; and,

WHEREAS, to accommodate the College's expansion needs, beginning in 2000, the Montgomery

County Executive, the Montgomery County Council, and the Montgomery County Planning Board agreed and financed a policy of westward expansion of College facilities and a "shift of uses from the east campus to the Georgia Avenue campus;" and

WHEREAS, both the County and the City, through their actions, have recognized the limited expansion potential of the Takoma Park core campus and wish to identify opportunities for sustainable short-term and long-term growth and expansion of the College in Silver Spring; and

WHEREAS, the Montgomery College Foundation owns a developable parcel on Burlington Avenue in Silver Spring, and the College could explore acquisition of significant commercial parcels along Fenton Street, south of Route 410 and immediately adjacent to existing College facilities, in Silver Spring, for new construction; and

WHEREAS, the Takoma Park Master Plan, adopted in December 2000 recommends "maintaining compatibility with adjacent residential communities" and providing pedestrian and bike linkages as the College expands; and

WHEREAS, the Montgomery College 2006-2016 Facilities Master Plan Update 09-27-10 states, "Most projects require the demolition of existing obsolete structures… include[ing] the existing Science North and Science South buildings," and the College has suggested that these plans, which have not yet been executed, will be carried over into the 2016-2026 Facilities Master Plan Update; and

WHEREAS, the City of Takoma Park is particularly concerned about scale, massing, and design of renovated and reconstructed buildings, including particularly the Science North and Science South buildings.; and

WHEREAS, the City is pleased with the engagement that the City and the College ultimately arrived at in the redesign of Pavilion 3, particularly regarding scale and massing, but notes with disappointment that the building was subsequently built higher than planned with no notice to the city or community; and

WHEREAS the City passed Resolution 2008-62: "Providing Comment on the Proposed Montgomery College Takoma Park/Silver Spring 2006 – 2016 Facilities Master Plan" and wishes to provide guidance – lacking a proposed 2016-2026 Facilities Master Plan Update to comment on – on elements the City seeks for inclusion in the 2016-2026 update.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF TAKOMA PARK, MARYLAND THAT the following comments reflect the Council's position on the development of the College's 2016- 2026 Facilities Master Plan Update.

Section 1. The Council recognizes the great value the College has for the community and is committed to working constructively and cooperatively with the College in identifying short and long-term solutions to its expansion needs.

Section 2. The Council supports redevelopment of the Takoma Park campus and the use of design guidelines and massing standards which reflect and preserve the architectural integrity and residential character and scale of the adjoining neighborhood and historic districts.

Section 3. The City asks that Fenton Avenue remain open for motor vehicle traffic for the duration of any constructions activities.

Section 4. The Council continues to advocate for the expansion of the Takoma Park/Silver Spring campus into South Silver Spring along Georgia and Burlington Avenues and calls for College acquisition of real-estate parcels along Fenton Avenue, south of Route 410, and use of the Burlington Avenue parcel owned by the Montgomery College Foundation, for any construction whose size, massing, or design is not compatible with those of buildings to be renovated, rebuilt, or replaced, and for any uses that are not safe and compatible for location in College buildings in, adjacent to, or near residences.

Section 5. The Council applauds the College's commitment to sustainability and LEED certification and endorses the College's efforts to develop a pedestrian and bicycling oriented campus and streetscape along New York Avenue and Fenton Street and to create attractive and environmentally sensitive linkages between the campus and Takoma Park, South Silver Spring, and Fenton Village.

Section 6. The Council protests the College's non-accommodation of adequate public comment and urges modification of the schedule and process to allow for timely, informed community input once the College has a draft proposal for discussion.

Section 7. The Council reminds Montgomery College of the importance of full and timely College compliance with the 2002 Agreement Between the City of Takoma Park, Montgomery College, Historic Takoma, Inc. and Montgomery County to Subject the Activities of Montgomery College in the Historic Preservation District of the City to Local Control.

Section 8. The City looks forward to working in partnership with the College in encouraging and promoting the use of alternative forms of transportation such as transit, shuttles and bicycling through appropriate policies and infrastructure improvements.

Adopted this 12th day of October, 2015.

Attest:

Jessie Carpenter, CMC
City Clerk

Agreement Between the City of Takoma Park, Montgomery College, Historic Takoma, Inc. and Montgomery County to Subject the Activities of Montgomery College in the Historic Preservation District of the City to Local Control

AGREEMENT

THIS AGREEMENT, made this 30th day of July , 2002, by and between the BOARD OF COMMUNITY COLLEGE TRUSTEES OF MONTGOMERY COUNTY (hereinafter referred to as "Montgomery College"), the CITY OF TAKOMA PARK, MARYLAND (hereinafter referred to as "City"), HISTORIC TAKOMA, INC. (hereinafter referred to as "Historic Takoma"), and MONTGOMERY COUNTY, MARYLAND (hereinafter referred to as "Montgomery County"),

W I T N E S S E T H :

WHEREAS, Montgomery College is a community college which is responsible for operating community college facilities in Montgomery County, including the City of Takoma Park and areas of Silver Spring, Maryland; and

WHEREAS, the City of Takoma Park is a municipality located in Montgomery County, Maryland; and

WHEREAS, Historic Takoma is an historic preservation organization which is incorporated and does business in the State of Maryland and the District of Columbia; and

WHEREAS, Montgomery County is a charter county of the State of Maryland and administers the Montgomery County Historic Preservation Ordinance, Montgomery County Code, as amended, Chapter 24A; and

WHEREAS, there was friction in the past between the College and the City of Takoma Park with respect to historic structures within the City of Takoma Park, and the City of Takoma Park and the College wish to avoid such friction in the future and continue their good and unique relationship; and

WHEREAS, to maintain their collaborative relationship, the parties wish to enter into an Agreement whereby Montgomery College voluntarily agrees under these unique circumstances to submit any and all plans for proposed development in the current or future historic preservation district in the City of Takoma Park, as further defined and delineated below, for review by the Montgomery County Historic Preservation Commission and further agrees to be subject to the provisions of the Montgomery County Code, Chapter 24A, for this development and proposed construction.

NOW, THEREFORE, in consideration of the premises and the mutual promises and covenants hereinafter contained, the parties hereto do agree, each with the other, as follows:

1. Montgomery College hereby agrees to submit any and all plans for proposed development in the current or

future historic preservation district in the City of Takoma Park as now constituted in the City of Takoma Park or henceforth expanded, saving and excepting property now owned by Montgomery College as depicted on Attachment B that is not in the Takoma Park historic district as it is presently defined[1]; Montgomery College further agrees to be subject to the provisions of the Montgomery County Code, Chapter 24A, Historic Preservation Ordinance, for all activities henceforth proposed to be conducted by Montgomery College in the historic preservation district of the City of Takoma Park as now constituted in the City of Takoma Park or henceforth expanded, saving and excepting property now owned by Montgomery College as depicted on Attachment B that is not in the Takoma Park historic district as it is presently defined.[2]

2. Montgomery College agrees to seek and obtain all local permit review within the designated historic district, including but not exclusive to building permits, plumbing permits, electrical permits, Fire Code permits, subdivision review, zoning applications, and demolition permits. Such permit review does not alter past and current practices of Montgomery College to be subject to other municipal regulations — such as forestation (trees), police, curb cuts and other regulations in the municipal rights of way, and stormwater management.

3. Montgomery College agrees that it shall consult with the City of Takoma Park and the local community when making any major or substantial changes or alterations to the existing structures designated on Appendix B ("Existing Structures").

4. The parties agree that this consultation envisioned in the prior paragraph will occur at the earliest practicable stage during the planning for any alteration, construction, or revitalization of the exterior of the existing buildings.

5. The parties agree that they have the authority to enter into this Agreement and to bind all entities in perpetuity for this Agreement.

6. The parties agree that this document may be recorded in the miscellaneous records of Montgomery County, and the City of Takoma Park may publish this agreement as part of or as an appendix to the City Code.

7. If any of the provisions of this Agreement are declared to be invalid by a Court of law, all other provisions shall remain in full force and effect.

8. If any parties fail to fulfill their obligation hereunder, any party to this agreement shall have the right to sue to enforce the terms of this agreement. The breaching party agrees to pay reasonable attorney fees and costs incurred by the other party in the event a final judgment is obtained against the breaching party.

9. Notwithstanding anything contained in this Agreement to the contrary, by entering into this Agreement, Montgomery College does not waive any position that it may take with respect to the jurisdiction of the Montgomery County Historic Preservation Commission to review the activities of Montgomery College or issues of compliance with or the applicability of the provisions of Chapter 24A, Montgomery County Code, except with respect to activities addressed specifically by this Agreement.

The Takoma Park Municipal Code is current through Ordinance 2015-58, passed December 7, 2015.

10. Each party shall at any time and from time to time hereafter take any and all steps to execute, acknowledge and deliver to the other party all further instruments and assurances that the other party may reasonably require for the purposes of giving full force and effect to the provisions of this Agreement.

11. The parties have incorporated in this Agreement their entire understanding. No oral statement or prior written matter extrinsic to this Agreement shall have any force or effect. The parties are not relying on any representation or warranties other than those expressly set forth herein.

12. No modification or waiver of any of the terms of this Agreement shall be valid unless in writing and executed with the same formality as this Agreement. No waiver of any breach or default hereunder shall be deemed a waiver of any subsequent breach or default of the same or similar nature.

13. Each party hereto declares that they have had independent legal advice by counsel of their own selection or the opportunity to obtain the same; that each fully understands the facts and has been fully informed of all legal rights and liabilities and the advisability of obtaining independent legal counsel; that after such advice and knowledge, each believes the Agreement to be fair and reasonable. This Agreement contains the entire understanding of the parties. There are no representations, warranties, promises, covenants or undertakings other than those expressly set forth herein.

14. This Agreement shall be binding on the parties hereto, their successors in interest and assigns. This Agreement shall be construed under the laws of the State of Maryland.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals this day and year first above written.

BOARD OF COMMUNITY COLLEGE TRUSTEES OF MONTGOMERY COUNTY

By: /s/ William E. Campbell

CITY OF TAKOMA PARK, MARYLAND

By: /s/ Kathryn H. Porter

HISTORIC TAKOMA, INC.

By: /s/ Lorraine J. Pearsall

MONTGOMERY COUNTY, MARYLAND

By: /s/ William M. Mooney, Jr.

Assistant Chief Administrative Officer

The Takoma Park Municipal Code is current through Ordinance 2015-58, passed December 7, 2015.

Approved as to Form and Legality

Office of the County Attorney

By: /s/ Eileen J. Basaman

Date: 7/26/2002

STATE OF MARYLAND

ss:

COUNTY OF MONTGOMERY

I HEREBY CERTIFY that on this 24th day of July , 2002, before me, the subscriber, a Notary Public in and for the State and County aforesaid, personally appeared William E. Campbell, EVP of the Board of Community College Trustees of Montgomery County, who is authorized to execute this document on behalf of said entity, and who made oath in due form of law that he executed the foregoing Agreement on behalf of the Board of Community College Trustees of Montgomery County for the purposes stated therein.

AS WITNESS my hand and Notarial Seal.

/s/ Helen B. Chapson

Notary Public

My Commission expires: 12/12/05

STATE OF MARYLAND

ss:

COUNTY OF MONTGOMERY

I HEREBY CERTIFY that on this 23rd day of July , 2002, before me, the subscriber, a Notary Public in and for the State and County aforesaid, personally appeared Kathryn H. Porter , Mayor of the City of Takoma Park, Maryland, who is authorized to execute this document on behalf of said entity, and who made oath in due form of law that she executed the foregoing Agreement on behalf of the City of Takoma Park, Maryland, for the purposes stated therein.

AS WITNESS my hand and Notarial Seal.

/s/ Jessie Carpenter

The Takoma Park Municipal Code is current through Ordinance 2015-58, passed December 7, 2015.

Notary Public

My Commission expires: 10-01-04

STATE OF MARYLAND

ss:

COUNTY OF MONTGOMERY

I HEREBY CERTIFY that on this 22nd day of July , 2002, before me, the subscriber, a Notary Public in and for the State and County aforesaid, personally appeared Lorraine J. Pearsall, President of Historic Takoma, Inc., who is authorized to execute this document on behalf of said entity, and who made oath in due form of law that she executed the foregoing Agreement on behalf of the Historic Takoma, Inc. for the purposes stated therein.

AS WITNESS my hand and Notarial Seal.

/s/ Gregory A. Logan

Notary Public

My Commission expires:

STATE OF MARYLAND

ss:

COUNTY OF MONTGOMERY

I HEREBY CERTIFY that on this 31 day of July , 2002, before me, the subscriber, a Notary Public in and for the State and County aforesaid, personally appeared William M. Mooney, Jr., Asst. CAO of Montgomery County, Maryland, who is authorized to execute this document on behalf of said entity, and who made oath in due form of law that he, as Assistant CAO executed the foregoing Agreement on behalf of the Montgomery County, Maryland for the purposes stated therein.

AS WITNESS my hand and Notarial Seal.

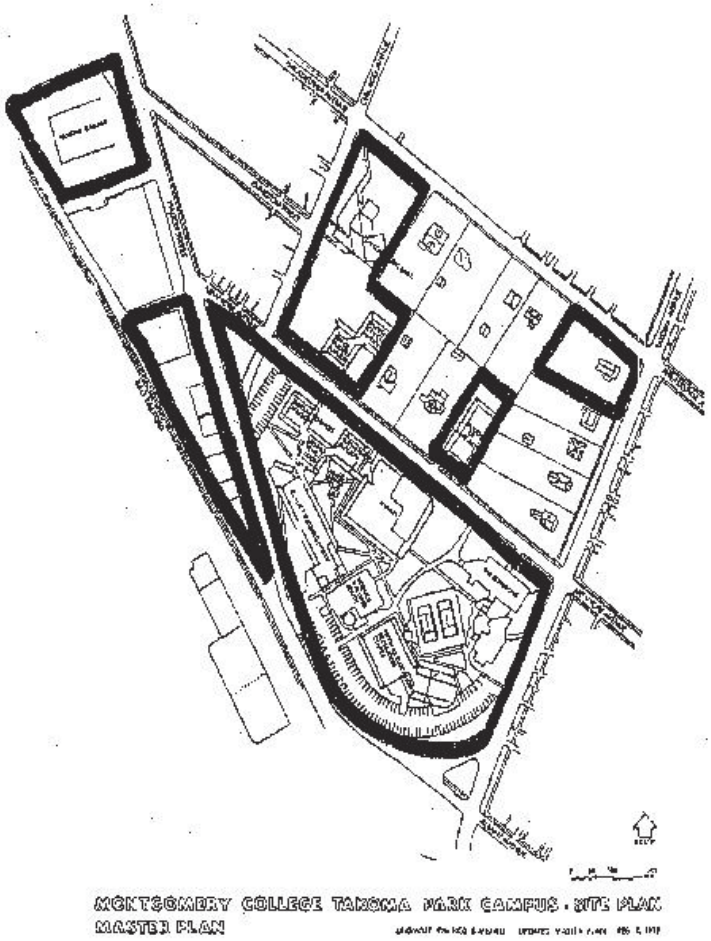
/s/ Cindy A. Sullivan

Notary Public

My Commission expires: January 1, 2004

Attachment B

The Takoma Park Municipal Code is current through Ordinance 2015-58, passed December 7, 2015.



[1] NOTE: The property that is presently used by Montgomery College as a child care facility is in the Takoma Park historic district and will be subject to the local historic preservation provisions under this agreement.

[2] NOTE: The property that is presently used by Montgomery College as a child care facility is in the Takoma Park historic District and will be subject to the local historic preservation provisions under this agreement.

The Takoma Park Municipal Code is current through Ordinance 2015-58, passed December 7, 2015.

APPENDIX D

MONTGOMERY COLLEGE GREEN ROUTINE

Montgomery College Green Routine

Resource Conservation Program Overview – Since the first energy crisis of the 1970s Montgomery College has been a leader in sustainability, energy and resource conservation and cost containment. Integrated life cycle management practices have reduced the College's environmental footprint while avoiding capital and operating cost. The following list is a brief description of the activities.

Strategic Master Planning – Managing a quality planning process whose goal is to integrate resource conservation principals into the College infrastructure and optimization of resources. Plans are developed for programs, space, facility condition assessment, utilities, information technology infrastructure, building automation, life safety systems, emergency response and environmental safety.

Storm Water Management – Minimizing environmental effects of storm water run-off by reducing impervious surfaces, increasing on-site infiltration and installing and maintaining storm water structures on the campus. Use of green roofs to reduce storm water run-off and reduce heat island effect.

Heat Island Effect – Use of high albiedo (reflective) roofs, green roofs and enhanced landscape to reduce the increase in urban temperatures due to absorption of solar radiation and heating in structures.

Light Pollution and Dark Sky – Best practices to optimize site lighting to provide appropriate lighting for occupants while reducing energy, reducing light pollution from spilling over into neighboring sites and limiting light pollution above the horizontal plane (Dark Sky).

Sustainable Sites – Goal to limit consumption of undeveloped land by redevelopment of urban sites or development of existing sites in order to minimize impact of campus expansion. Properties already served by transportation, storm water and utility infrastructure tend to minimize environmental impacts and preserve and improve existing urban settings. Improved transportation management practices.

Water Conservation – Best practices for conservation of water resources and sewer costs through specification, installation and maintenance of low water consuming devices. Use of drought resistant native plant species. Capture of condensate from air handling units and re-use as make-up water for cooling towers. Evaluation of rain water capture systems for domestic water use and storm water management reduction.

Montgomery College
OFFICE OF FACILITIES

Forest Conservation and Native Plant Species – Conservation and maintenance of natural cover trees and native plant species to provide impervious surface and reduce the heat island effect. Plant species that have long lives, are resistance to pests and drought, are less dependant on chemicals and watering.

Renewable Energy – Site generated solar electricity, site generated solar thermal energy conversion and purchase of renewable energy certificates (REC) reduce consumption of energy derived from other less environmentally friendly energy sources. Annually 160,000 kilowatt-hours (kWh) of photovoltaic (PV) electricity and 183,000 kWh(thermal equivalent) from evacuated tube collectors are generated college-wide. An additional 70kW of PV will be installed in the next five years and generate an additional 200,000 kWh of electricity. 60% of the Colleges electricity is obtained from wind energy RECs up from the original 5% which began in fiscal year 2005. This renewable energy displaces approximately 27 million pounds of carbon dioxide (CO2) annually

High Performance Buildings – Since 1985, new and renovated buildings have been designed, constructed and maintained to minimize the impact on the environment. Energy efficiency, occupant comfort, indoor environmental quality, daylighting, high performance building automation systems, high performance lighting systems, high performance envelope systems, whole building total quality commissioning, environmentally friendly building materials and site infrastructure are routinely integrated into building designs. The two new science buildings, one under construction and one in design are being submitted for U.S. Green Building Council (USGBC) LEED Gold Certification which exceeds the County Council mandated LEED Silver Certification.

Transportation Management – Encourage students to use public transportation by providing on-campus transportation facilities and free bus service on Montgomery County's Ride-On bus system. At the Takoma Park/ Silver Spring campus this has resulted in single person use of vehicles to be less than 50%. Full automation of parking management systems for issue of parking passes, tickets and payments.

Utility Management – Management of utility accounts, payment of bills, tracking consumption, auditing costs and utility database management is a basic function of utility cost center accounting. Maintaining accurate utility consumption records also provides measurement and verification of resource conservation program performance. Montgomery College has participated with other County Agencies in the procurement of deregulated natural gas and electricity procurement.

Utility Demand Management and Smart Grid Technologies – Since the early 1990s the College has incorporated demand management features in central plants that are able to reduce utility peak demand and capable of responding to Smart Grid pricing signals. All four central plants include ice thermal storage with low temperature high efficient chillers and ammonia (R-717) refrigerant. Ice is made at night during low demand rate periods and melted during the day during high demand rate periods reducing electrical demand charges and more efficiently using the utility grid. Colder chilled water is then made available to the system which reduces pumping energy and improves heat transfer performance. Ammonia is also a high efficient refrigerant with no global warming potential (GWP), no ozone depletion potential (ODP) and a low total equivalent warming index (TEWI). Building heating, cooling and power technologies (BHCP) are also incorporated which electrical demand while more efficiently using the available energy in the fuels. Three of the College's central plants use natural gas fired engine driven chillers during peak electrical periods to make chilled water for cooling while recovering waste exhaust and engine jacket heat for use in the central heating distribution system.

Operations and Maintenance – Operation and maintenance of College resources in a safe, reliable and economical manner which maximizes the educational experience while minimizing life cycle costs. Best practice use of cleaning and pesticide chemicals reduce costs and environmental impacts. Grounds and landscape best practice use of drought, disease and insect resistant native species and use of high efficiency, low emitting grounds equipment. Management of recycling programs. Best practice vehicle fleet management maximizes life cycle

costs. Use of recycled or reusable plastic instead of virgin materials such as woods or storage and moving containers.

Educational Programs – Credit, non-credit and certificate programs related to sustainable or "green" collar jobs are offered at the College while many traditional courses have integrated sustainable concepts into their syllabi. Montgomery College has partnered with Montgomery County Government, University of Maryland, and the State of Maryland to support the new Clean Energy Center at the University of Maryland Shady Grove with the intent to further promote and stimulate sustainable programs and "green" collar jobs training. The College is developing strategic partnerships with commercial enterprises in the local clean energy industry to identify and address the workforce needs of the industry through training.

Interagency Coordination – Coordination with government and professional organizations maximizes communication and shares resources such as energy management, deregulated utility management, procurement, building systems and information technology. Participate in development of Montgomery County Climate Protection Plan, Greenhouse Gas Inventory, Clean Energy Center and legislative green initiatives working groups. Participate with NIST & ASHRAE in building system research studies and building automation systems standards development

Occupant Awareness and Outreach – Publish annual Resource Conservation Plan and promote occupant awareness through various media outlet such as electronic and paper newsletter, e-mail distribution and management of the Montgomery College Speaker's Bureau. Support for student MC Student Green Club.

Environmental Safety – Since late 1970s, management of occupational and environmental safety issues, including OSHA, asbestos abatement, hazardous waste stream management, occupant awareness and indoor environmental quality (IEQ). Introduce use of alternatives such as citrus based solvents for automotive and printing shop and lab cleaning rather that volatile organic compounds (VOC).
Recycling – In calendar year 2008, Montgomery College recycled 69% of its waste stream, far exceeding the County's legally mandated 50% recycling requirement. This resulted in being awarded the County's Excellence in Recycling Award. This is the sixth such award in the past eight years for the College. This is also an increase in poundage of materials recycled from one million in 2002 to three million in 2008.

Building Automation Systems – Planning, design, operations and management of multivendor, open protocol (BACnet) fully integrated building automation systems. Integrating direct digital systems that control, monitor, operate and record heating and air conditioning systems (HVAC), lighting systems, occupancy sensing, electrical system, fire protection systems and security and access control.

Administrative Functions – Digital automation and management of administrative functions reduce time, paper and postage such as electronic processing and direct deposit of employee paychecks. Provide automated web based financial systems for student bill paying and transportation management functions such as parking stickers and traffic enforcement.

Information Technology Systems – Efficient management of information technology resources (IT). Use of high performance energy star equipment and low energy consuming LCD screens. Participation in interagency committees to share information and resources. Master planning for information technology life cycle infrastructure management. Use of e-mail and electronic newsletters rather than paper or mail distribution.

Procurement – Automation of procurement process to reduce time and paper. Use of electronic media to reach out to broader audience, opportunity for more competition and reduced cost. Purchase material using existing procurement contracts to reduce administrative duplication. Purchase energy star equipment to reduce energy consumption. Participate in interagency committees to share information and resources and work towards common procurement guidance for purchase of "green" materials.