STATE OF MONTANA

Subcommittee Additional Recommendations

LPW ARCHITECTURE

The Clark Enersen Partners

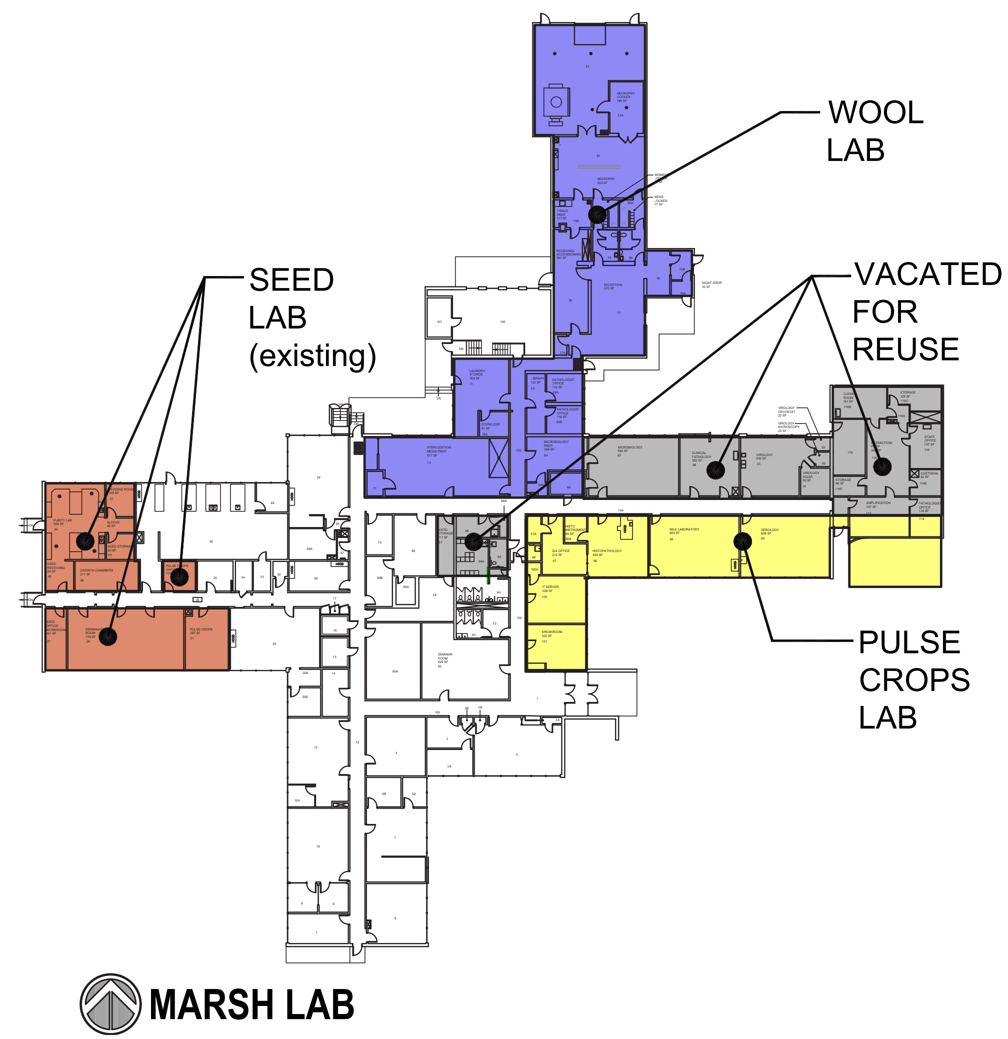
OPTION 1A

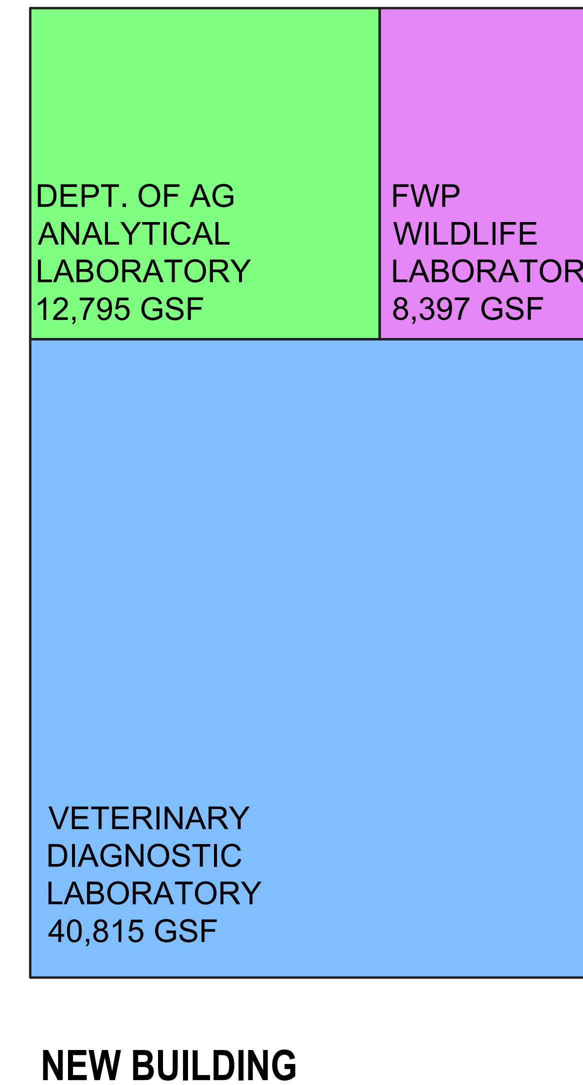
Option 1A is identical to Option 1 with the exception that the FWP Wildlife Laboratory will be housed in the new building in addition to the Department of Livestock Veterinary Diagnostic Laboratory and the Department of Agriculture Analytical Laboratory. The room list and gross square footage assumed for the new building is in accordance with the scope established in the Baseline Option and the reductions are similar to those shown in Option 1. In addition, the breakroom space for the VDL, Analytical Lab and FWP Lab has been combined. The overall scope of the new building assumes a 60% net to gross ratio for a total of 62,007 gross square feet. The projected construction cost of the new building excluding site and utility costs is approximately $505 per GSF.

Upon completion of the new facility, the space vacated by the VDL in the Marsh Lab Facility will then be renovated as shown in Option 1.

The complete tabulation of all spaces, square footages, estimated costs per gross square foot and estimated soft costs For Option 1A (excluding site work and utilities) is shown on the following pages. The costs for new construction have been escalated to a mid-point of construction in the Winter of 2021. The costs for renovation in the Marsh Complex have been escalated to a mid-point of construction in the Winter of 2022 due to the fact that renovations in the Marsh Complex cannot commence until the Veterinary Diagnostic Laboratory has vacated the space. The total project cost for option 1A is estimated to be approximately $43,324,000.

Option 1A





OPTION 1A FEATURES
Veterinary Diagnostic Laboratory, Dept. of Ag Analytical Lab and FWP Wildlife Lab in New Building
Wool Lab and Pulse Crops Lab in Newly renovated space in Marsh Lab Complex
Seed Lab expands into adjacent unrenovated space in Marsh Lab Complex
15,280 net SF of space vacated for reuse in Marsh Lab Complex, McCall Hall and Wool Lab
2,992 net SF of space vacated in FWP facility
Project Cot - $43,324,000

State of Montana
Combined State Lab Study
August 14, 2018

The Clark Enersen Partners

Option 1A

SPACE SUMMARY

New Building

Number	Area	Room No. (Existing Area (Net))	NSF (Existing Area (Net))	Qty (Proposed Area (Net))	NSF Ea. (Proposed Area (Net))	NSF (Proposed Area (Net))	NSF Diff. (Proposed Area (Net))	Net-to-Gross (Proposed Area (Gross))	GSF (Proposed Area (Gross))	Cost/GSF (Estimated Cost)	Cost (Estimated Cost)
1.0	**VETERINARY DIAGNOSTIC LAB**										
1.1	**Receiving/Accessioning**		**424**			**1,210**	**786**		**2,017**		**$ 670,542**
1.1.1	Walk-In Samples			1	363	363	363	60%	605	$ 300	$ 181,500
1.1.2	Conference Room			0	242	0	0	60%	0	$ 300	$ -
1.1.3	Unisex Restroom			0	121	0	0	60%	0	$ 350	$ -
1.1.4	Delivery and Night Drop-Off Vestibule	076A	33	1	121	121	88	60%	202	$ 325	$ 65,542
1.1.5	Processing & Accessioning	078	391	1	726	726	335	60%	1,210	$ 350	$ 423,500
1.2	**Necropsy & Prep**		**2,623**			**4,236**	**1,613**		**7,060**		**$ 4,003,917**
1.2.1	Necropsy Receiving	082	801	1	363	363	-438	60%	605	$ 400	$ 242,000
1.2.2	Live Animal Holding	082	115	1	363	363	248	60%	605	$ 400	$ 242,000
1.2.3	Tissue Trimming / Formalin Prep	078A	117	1	242	242	125	60%	403	$ 450	$ 181,500
1.2.4	BSL-2 Necropsy	081	622	1	726	726	104	60%	1,210	$ 750	$ 907,500
1.2.5	Evidence Storage	082	90	1	121	121	31	60%	202	$ 400	$ 80,667
1.2.6	Photography & Drug Storage			1	242	242	242	60%	403	$ 400	$ 161,333
1.2.7	Outgoing Cooler	082A	94	1	182	182	88	60%	303	$ 500	$ 151,667
1.2.8	Incoming Cooler w/ nightdrop	082A	94	1	182	182	88	60%	303	$ 500	$ 151,667
1.2.9	Lockers, Shower, Gowning & Boot Room	079A, 080A	330	1	1,089	1,089	759	60%	1,815	$ 550	$ 998,250
1.2.10	Necropsy Storage			1	121	121	121	60%	202	$ 400	$ 80,667
1.2.11	Incinerator	082	360	1	484	484	124	60%	807	$ 900	$ 726,000
1.2.12	Formalin fixed storage		0	1	121	121	121	60%	202	$ 400	$ 80,667
1.3	**Laboratory Sections & Support**		**5,668**			**10,349**	**4,681**		**17,248**		**$ 7,201,667**
	Clinical Pathology 1.3.1										
1.3.1.1	Clinical Pathology Laboratory	088	382	1	726	726	344	60%	1,210	$ 400	$ 484,000
1.3.1.2	Clinical Pathology Equipment Room			1	121	121	121	60%	202	$ 350	$ 70,583
1.3.1.3	Clinical Pathology Microscopy Room			1	121	121	121	60%	202	$ 400	$ 80,667
	Histology 1.3.2										
1.3.2.1	Histology Laboratory	096	409	1	726	726	317	60%	1,210	$ 400	$ 484,000
1.3.2.2	Histology Equipment Room	096A	65	1	182	182	117	60%	303	$ 350	$ 106,167
1.3.2.3	Histology Slide/Block Storage	067, 97A	152	1	363	363	211	60%	605	$ 350	$ 211,750
	Bacteriology 1.3.3										
1.3.3.1	Bacteriology Laboratory	087	584	1	726	726	142	60%	1,210	$ 400	$ 484,000
1.3.3.2	Bacteriology Dirty Room	084	284	1	121	121	-163	60%	202	$ 400	$ 80,667
1.3.3.3	Bacteriology Microscopy			1	121	121	121	60%	202	$ 400	$ 80,667
1.3.3.4	Bacteriology Equipment	086	81	1	182	182	101	60%	303	$ 350	$ 106,167
	Virology 1.3.4										
1.3.4.1	Virology Laboratory	090, 093	452	1	726	726	274	60%	1,210	$ 400	$ 484,000
1.3.4.2	Virology Fluorescent Microscopy	092	23	1	121	121	98	60%	202	$ 400	$ 80,667
1.3.4.3	Virology Equipment Room	091	90	1	182	182	92	60%	303	$ 350	$ 106,167
1.3.4.5	Virology Clean Room			1	121	121	121	60%	202	$ 400	$ 80,667
1.3.4.6	Virology Dirty Room			1	182	182	182	60%	303	$ 400	$ 121,333
	Serology 1.3.5										
1.3.5.1	Serology Laboratory	094	608	1	726	726	118	60%	1,210	$ 400	$ 484,000
1.3.5.2	Serology Centrifuge & Liquid Handling			1	182	182	182	60%	303	$ 400	$ 121,333
1.3.5.3	Serology Equipment Room			1	182	182	182	60%	303	$ 350	$ 106,167
	Molecular Diagnostics 1.3.6										
1.3.6.1	Molecular Diagnostics Sample Prep			1	363	363	363	60%	605	$ 400	$ 242,000
1.3.6.2	Molecular Diagnostics Extraction	116	346	1	363	363	17	60%	605	$ 400	$ 242,000
1.3.6.3	Molecular Diagnostics Clean Room	116B	181	1	182	182	1	60%	303	$ 400	$ 121,333
1.3.6.4	Molecular Diagnostics Amplification	112	257	1	182	182	-76	60%	303	$ 400	$ 121,000
1.3.6.5	Molecular Diagnostics Freezer Room			1	121	121	121	60%	202	$ 350	$ 70,583
1.3.6.6	Molecular Diagnostics Storage	116F	68	1	121	121	53	60%	202	$ 350	$ 70,583
	DNA Sequencing 1.3.7										
1.3.7.1	DNA Sequencing Laboratory Suite			0	726	0	0	60%	0	$ 400	$ -
	Milk 1.3.8										
1.3.8.1	Milk Laboratory	095	603	1	1,089	1,089	486	60%	1,815	$ 400	$ 726,000
1.3.8.2	Milk Laboratory Equipment			1	363	363	363	60%	605	$ 350	$ 211,750
	Food Safety 1.3.9										
1.3.9.1	Food Safety Laboratory			0	726	0	0	60%	0	$ 400	$ -
1.3.9.2	Food Safety Sterilization & Equipment			0	121	0	0	60%	0	$ 600	$ -
	Shared Laboratory Support 1.3.10										
1.3.10.1	Sterilization, Glassware & Pure Water	73	717	1	726	726	9	60%	1,210	$ 750	$ 907,500
1.3.10.2	Media Prep Lab	073	100	1	121	121	21	60%	202	$ 400	$ 80,667
1.3.10.3	Biohazard Sterilization	075A	81	1	121	121	40	60%	202	$ 750	$ 151,250
1.3.10.4	Freezer Farm			1	242	242	242	60%	403	$ 350	$ 141,167
1.3.10.5	Hazardous Waste	082	115	1	242	242	127	60%	403	$ 400	$ 161,333
1.3.10.6	Laundry Room	075	70	1	121	121	51	60%	202	$ 300	$ 60,500
1.3.10.7	Chemical Storage			1	182	182	182	60%	303	$ 400	$ 121,000
1.4	**Biocontainment**		**0**			**1,634**	**1,634**		**2,723**		**$ 1,951,667**
1.4.1	Lockers, Shower, Gowning & Boot Room			1	363	363	363	60%	605	$ 550	$ 332,750
1.4.2	Autoclave Sterilization			1	182	182	182	60%	303	$ 650	$ 197,167
1.4.3	Equipment Decontamination Airlock			1	121	121	121	60%	202	$ 650	$ 131,083
1.4.4	BSL-3 Laboratory			1	363	363	363	60%	605	$ 800	$ 484,000
1.4.5	BSL-3 Specialized Laboratory			2	121	242	242	60%	403	$ 800	$ 322,667
1.4.6	BSL-2 Enhanced Necropsy			1	363	363	363	60%	605	$ 800	$ 484,000
1.5	**Office & Support**		**2,834**			**7,060**	**4,226**		**11,767**		**$ 3,334,333**
1.5.1	Reception and Waiting	077	570	1	800	800	230	60%	1,333	$ 280	$ 373,333
1.5.2	Director Office	083B	116	1	140	140	24	60%	233	$ 280	$ 65,333
1.5.3	Associate Director Office			1	120	120	120	60%	200	$ 280	$ 56,000
1.5.4	Administrative Conference Room			1	300	300	300	60%	500	$ 280	$ 140,000
1.5.7	Pathologist Office	083A, 114	256	4	120	480	224	60%	800	$ 280	$ 224,000
1.5.8	Open Office			25	60	1,500	1,500	60%	2,500	$ 260	$ 650,000
1.5.9	Library/Rounds Room	083	122	1	300	300	178	60%	500	$ 280	$ 140,000
1.5.10	Conference Room			2	120	240	240	60%	400	$ 280	$ 112,000
1.5.11	Multipurpose/Seminar Room	060	629	1	800	800	171	60%	1,333	$ 300	$ 400,000
1.5.12	Break Room	101	300	1	600	600	300	60%	1,000	$ 300	$ 300,000
1.5.13	Shipping			1	120	120	120	60%	200	$ 300	$ 60,000
1.5.14	Staff Lockers			1	300	300	300	60%	500	$ 450	$ 225,000
1.5.15	Storage	075	318	1	1,000	1,000	682	60%	1,667	$ 250	$ 416,667
1.5.16	Server Room	100	308	1	120	120	-188	60%	200	$ 300	$ 60,000
	Subtotal - Veterinary Diagnostic Lab		**11,549**			**24,489**	**12,940**		**40,815**		**$ 17,162,125**

Number	Area	Room No.	NSF	Qty	NSF Ea.	NSF	NSF Diff.	Net-to-Gross	GSF	Cost/GSF	Cost
3.0	**FWP WILDLIFE LAB**										
3.1	**FWP Wildlife Lab**		**2,992**			**5,038**	**2,046**		**8,397**		**$ 3,520,283**
3.1.1	Reception & Open Office		470	1	242	242	-228	60%	403	$ 280	$ 112,933
3.1.2	Director Office		90	1	140	140	50	60%	233	$ 280	$ 65,333
3.1.3	Staff Office		272	2	120	240	-32	60%	400	$ 260	$ 104,000
3.1.4	Open Offce / Seasonal Labor		0	4	60	240	240	60%	400	$ 260	$ 104,000
3.1.5	Break Room			0	121	0	0	60%	0	$ 280	$ -
3.1.6	Work Room			1	121	121	121	60%	202	$ 280	$ 56,467
3.1.7	Office Storage Room			1	121	121	121	60%	202	$ 250	$ 50,417
3.1.8	Lockers, Shower, Gowning & Boot Room		280	1	484	484	204	60%	807	$ 550	$ 443,667
3.1.9	Sample Prep		221	1	242	242	21	60%	403	$ 400	$ 161,333
3.1.10	Necropsy		400	1	726	726	326	60%	1,210	$ 750	$ 907,500
3.1.11	Holding Cooler		135	1	182	182	47	60%	303	$ 500	$ 151,667
3.1.12	Holding Freezer		80	1	182	182	102	60%	303	$ 550	$ 166,833
3.1.13	Molecular Diagnostics & DNA Sequencing			1	1,089	1,089	1,089	60%	1,815	$ 400	$ 726,000
3.1.14	Laundry & Equipment Room		97	1	182	182	85	60%	303	$ 300	$ 91,000
3.1.15	Laboratory Storage		565	1	484	484	-81	60%	807	$ 320	$ 258,133
3.1.16	Garage		382	1	363	363	-19	60%	605	$ 200	$ 121,000
	Subtotal - FWP Wildlife Lab		**2,992**			**5,038**	**2,046**		**8,397**		**$ 3,520,283**

Number	Area	Room No.	NSF	Qty	NSF Ea.	NSF	NSF Diff.	Net-to-Gross	GSF	Cost/GSF	Cost
4.0	**ANALYTICAL LAB**										
4.1	**Laboratories & Support**		**5,055**			**6,414**	**1,359**		**10,690**		**$ 4,552,333**
	Feed & Fertilizer										
4.1.1	Feed/Fertilizer Sample Prep	001A, 001B	545	1	484	484	-61	60%	807	$ 430	$ 346,867
4.1.2	Feed/Fertilizer Sample Prep & Balance	012	216	1	242	242	26	60%	403	$ 430	$ 173,433
4.1.3	Feed/Fertilizer Chemistry Lab	019, 039	758	1	726	726	-32	60%	1,210	$ 430	$ 520,300
4.1.4	ICP Room	016, 016A	263	1	242	242	-21	60%	403	$ 480	$ 193,600
	Pesticide & Groundwater										
4.1.5	Pesticide Sample Prep	020	165	1	182	182	17	60%	303	$ 430	$ 130,433
4.1.6	Low-Level Pesticide/Groundwater Laboratory	001C	442	1	484	484	42	60%	807	$ 430	$ 346,867
4.1.7	Medium-Level Pesticide Laboratory	014	452	1	484	484	32	60%	807	$ 430	$ 346,867
4.1.8	High-Level Pesticide Laboratory	031	150	1	242	242	92	60%	403	$ 480	$ 193,600
4.1.9	Pesticide LCMS	024	248	1	484	484	236	60%	807	$ 430	$ 346,867
	Shared Space										
4.1.10	Feed/Fertilizer/Pesticide Lab	021, 038	649	1	726	726	77	60%	1,210	$ 430	$ 520,300
4.1.11	Feed/Pesticide GCMS	025	354	1	484	484	130	60%	807	$ 480	$ 387,200
4.1.12	Freezer/Standards Room	034	107	1	121	121	14	60%	202	$ 430	$ 86,717
4.1.13	Oven Room	038A	29	1	242	242	213	60%	403	$ 480	$ 193,600
4.1.14	Cooler Room	033	43	1	182	182	139	60%	303	$ 430	$ 130,433
4.1.15	Secured Sample Storage			1	121	121	121	60%	202	$ 430	$ 86,717
4.1.16	Hazardous Waste	032, 036	100	1	242	242	142	60%	403	$ 430	$ 173,433
4.1.17	Chemical Storage	013	195	1	242	242	47	60%	403	$ 430	$ 173,433
4.1.18	Receiving & Storage	001C	339	1	484	484	145	60%	807	$ 250	$ 201,667
4.2	**Office & Support**		**1,653**			**1,263**	**-390**		**2,105**		**$ 579,400**
4.2.1	Receiving & Reception	010	367	1	363	363	-4	60%	605	$ 280	$ 169,400
4.2.2	Bureau Chief Office	009	215	1	140	140	-75	60%	233	$ 280	$ 65,333
4.2.3	Program Managers Office	011	161	1	140	140	-21	60%	233	$ 280	$ 65,333
4.2.4	Staff Office	023, 026	578	1	300	300	-278	60%	500	$ 260	$ 130,000
4.2.5	Office Work Room	010	111	1	120	120	9	60%	200	$ 280	$ 56,000
4.2.6	Conference Room			1	200	200	200	60%	333	$ 280	$ 93,333
4.2.7	Break Room	008	221	0	200	0	-221	60%	0	$ 300	$ -
	Subtotal - Analytical Lab		**6,708**			**7,677**	**969**		**12,795**		**$ 8,652,017**

SUMMARY	**Existing NSF**	**21,249**	**Proposed NSF**	**37,204**	**15,955**	**Prop. GSF**	**62,007**	**Const. Cost** **$25,814,142**

CONSTRUCTION COST SUMMARY (New Building)			
Building Costs			
Building Construction		$	25,814,142
Contingency			
Design Contingency	*10%*	$	2,581,414
Escalation from June 2018 to January 2021			
Annual Escalation Rate	*4%*	$	2,925,307.36
Construction Cost (New Building)		**$**	**31,320,863**
1. Construction Cost per GSF =		*$*	*505.12*
2. Not including FFE, A/V, design fees, sitework, utilities, commissioning, testing			

Renovation in Marsh Lab Facility

Number	Area	Room No.	NSF	Qty	NSF Ea.	NSF	NSF Diff.	Net-to-Gross	GSF	Cost/GSF	Cost
2.0	**WOOL LAB**										
2.1	**Wool Lab**		**4,781**			**4,315**	**-466**		**6,346**		**$ 1,157,007**
2.1.1	Receiving Garage & Sample Storage	008, 010	1,563	1	1,452	1,452	-111	68%	2,135	$ 100	$ 213,529
2.1.2	Analytical Laboratory	102	292	1	363	363	71	68%	534	$ 275	$ 146,801
2.1.3	Wet Chemistry Laboratory	001, 003, 004	1,090	1	484	484	-606	68%	712	$ 275	$ 195,735
2.1.4	45-Person Classroom	101	458	1	908	908	450	68%	1,335	$ 275	$ 367,206
2.1.5	Director Office	107	157	1	140	140	-17	68%	206	$ 150	$ 30,882
2.1.6	Open Office	108	238	1	242	242	4	68%	356	$ 150	$ 53,382
2.1.7	Storage	002, 103, 105, Attic	825	1	726	726	-99	68%	1,068	$ 140	$ 149,471
2.1.8	Vacated Office	106	158	1	0	0	-158	68%	0	$ -	$ -
	Subtotal - Wool Lab		**4,781**			**4,315**	**-466**		**6,346**		**$ 1,157,007**
6.0	**PULSE LAB**										
6.1	**Pulse Lab**		**751**			**3,404**	**2,653**		**5,006**		**$ 1,373,860**
6.1.1	Sample Processing Laboratory	024	312	1	726	726	414	68%	1,068	$ 250	$ 266,912
6.1.2	Molecular Biology Laboratory	021	287	1	726	726	439	68%	1,068	$ 275	$ 293,603
6.1.3	Nematode Processing Laboratory			1	182	182	182	68%	268	$ 275	$ 73,603
6.1.4	Germinator/Growth Chamber Room	038	42	1	182	182	140	68%	268	$ 275	$ 73,603
6.1.5	Cold Room			1	121	121	121	68%	178	$ 400	$ 71,176
6.1.6	Laboratory Storage			1	121	121	121	68%	178	$ 275	$ 48,934
6.1.7	Greenhouse			1	484	484	484	68%	712	$ 400	$ 284,706
6.1.8	Headhouse			1	242	242	242	68%	356	$ 350	$ 124,559
6.1.9	Director Office	036	110	1	140	140	30	68%	206	$ 150	$ 30,882
6.1.10	Staff Area			8	60	480	480	68%	706	$ 150	$ 105,882
	Subtotal - Pulse Lab		**751**			**3,404**	**2,653**		**5,006**		**$ 1,373,860**

SUMMARY	**Existing NSF**	**5,532**	**Proposed NSF**	**7,719**	**2,187**	**Prop. GSF**	**11,351**	**Const. Cost** **$2,530,868**

CONSTRUCTION COST SUMMARY (Renovation)			
Building Costs			
Building Construction		$	2,530,868
Contingency			
Design Contingency	*15%*	$	379,630
Escalation from June 2018 to January 2022			
Annual Escalation Rate	*4%*	$	428,252.67
Construction Cost (Renovation)		**$**	**3,338,750**
1. Construction Cost per GSF =		*$*	*294.12*
2. Not including FFE, A/V, design fees, commissioning, testing			

TOTAL PROJECT COST SUMMARY			
Project Costs			
Construction Cost - New Building		$	31,320,863
Construction Cost - Renovation		$	3,338,750
Project Associated Costs	*25%*	$	8,664,903.41
Total Project Cost		**$**	**43,324,517**

OPTION 3A

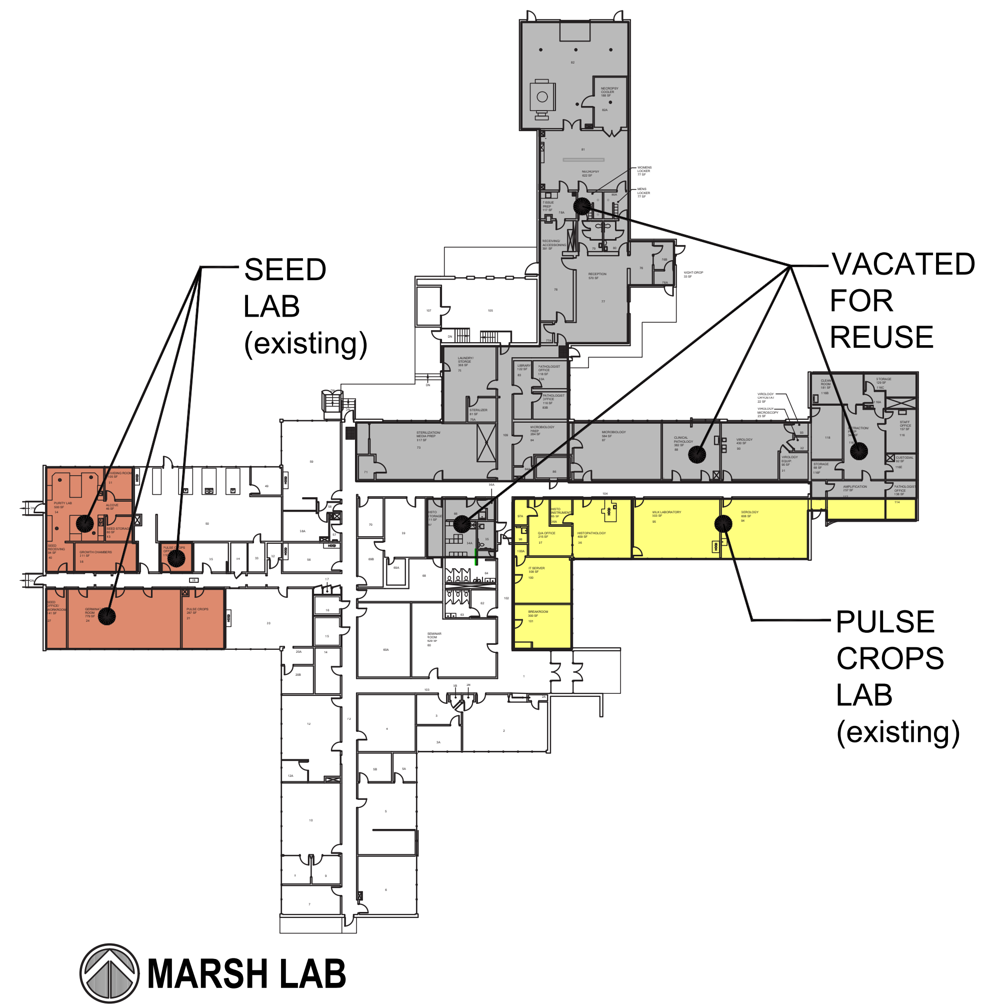
Option 3A is identical to Option 3 with the exception that the FWP Wildlife Laboratory will be housed in the new building in addition to the Department of Livestock Veterinary Diagnostic Laboratory. The overall scope of the new building assumes a 60% net to gross ratio for a total of 49,212 gross square feet. The projected construction cost of the new building excluding site and utility costs is approximately $510 per GSF.

Similar to Option 3, upon completion of the new facility, the space vacated by the VDL in the Marsh Lab Facility can be used to accommodate laboratory expansion by other existing tenants within the facility or by other programs with laboratory needs. After the Seed and Pulse Lab relocations, it is assumed that there will be approximately 8,600 net square feet of vacated space available for reuse.

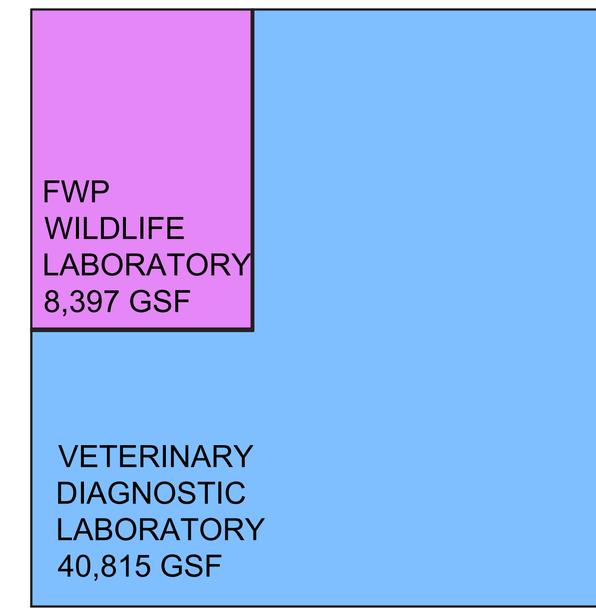
Under Option 3A, the Dept. of Ag Analytical Lab and the Wool Lab will be unaffected.

The complete tabulation of all spaces, square footages, estimated costs per gross square foot and estimated soft costs For Option 3A (excluding site work and utilities) is shown on the following pages. The costs for new construction have been escalated to a mid-point of construction in the Winter of 2021. The total project cost for option 3A is estimated to be $31,368,023.

Option 3A



MARSH LAB



NEW BUILDING

OPTION 3A FEATURES

Veterinary Diagnostic Laboratory and FWP Wildlife Lab in New Building
Pulse Crops Lab expands into unrenovated space in Marsh Lab Complex
Seed Lab expands into adjacent unrenovated space in Marsh Lab Complex
Dept. of Ag. Analytical Lab and Wool Lab remain in present locations
8,600 net SF of space vacated for reuse in Marsh Lab Complex
2,992 net SF of space vacated in FWP facility
Project Cost - $31,368,023

State of Montana
Combined State Lab Study
August 14, 2018

LPW ARCHITECTURE | The Clark Enersen Partners

Option 3A

SPACE SUMMARY		Existing Area (Net)		Proposed Area (Net)				Proposed Area (Gross)		Estimated Cost	
New Building											
1.0	**VETERINARY DIAGNOSTIC LAB**										
Number	Area	Room No.	NSF	Qty	NSF Ea.	NSF	NSF Diff.	Net-to-Gross	GSF	Cost/GSF	Cost
1.1	**Receiving/Accessioning**		**424**			**1,210**	**786**		**2,017**		**$ 670,542**
1.1.1	Walk-In Samples			1	363	363	363	60%	605	$ 300	$ 181,500
1.1.2	Conference Room			0	242	0	0	60%	0	$ 300	$ -
1.1.3	Unisex Restroom			0	121	0	0	60%	0	$ 350	$ -
1.1.4	Delivery and Night Drop-Off Vestibule	076A	33	1	121	121	88	60%	202	$ 325	$ 65,542
1.1.5	Processing & Accessioning	078	391	1	726	726	335	60%	1,210	$ 350	$ 423,500
1.2	**Necropsy & Prep**		**2,623**			**4,236**	**1,613**		**7,060**		**$ 4,003,917**
1.2.1	Necropsy Receiving	082	801	1	363	363	-438	60%	605	$ 400	$ 242,000
1.2.2	Live Animal Holding	082	115	1	363	363	248	60%	605	$ 400	$ 242,000
1.2.3	Tissue Trimming / Formalin Prep	078A	117	1	242	242	125	60%	403	$ 450	$ 181,500
1.2.4	BSL-2 Necropsy	081	622	1	726	726	104	60%	1,210	$ 750	$ 907,500
1.2.5	Evidence Storage	082	90	1	121	121	31	60%	202	$ 400	$ 80,667
1.2.6	Photography & Drug Storage			1	242	242	242	60%	403	$ 400	$ 161,333
1.2.7	Outgoing Cooler	082A	94	1	182	182	88	60%	303	$ 500	$ 151,667
1.2.8	Incoming Cooler w/ nightdrop	082A	94	1	182	182	88	60%	303	$ 500	$ 151,667
1.2.9	Lockers, Shower, Gowning & Boot Room	079A, 080A	330	1	1,089	1,089	759	60%	1,815	$ 550	$ 998,250
1.2.10	Necropsy Storage			1	121	121	121	60%	202	$ 400	$ 80,667
1.2.11	Incinerator	082	360	1	484	484	124	60%	807	$ 900	$ 726,000
1.2.12	Formalin fixed storage		0	1	121	121	121	60%	202	$ 400	$ 80,667
1.3	**Laboratory Sections & Support**		**5,668**			**10,349**	**4,681**		**17,248**		**$ 7,201,667**
	Clinical Pathology 1.3.1										
1.3.1.1	Clinical Pathology Laboratory	088	382	1	726	726	344	60%	1,210	$ 400	$ 484,000
1.3.1.2	Clinical Pathology Equipment Room			1	121	121	121	60%	202	$ 350	$ 70,583
1.3.1.3	Clinical Pathology Microscopy Room			1	121	121	121	60%	202	$ 400	$ 80,667
	Histology 1.3.2										
1.3.2.1	Histology Laboratory	096	409	1	726	726	317	60%	1,210	$ 400	$ 484,000
1.3.2.2	Histology Equipment Room	096A	65	1	182	182	117	60%	303	$ 350	$ 106,167
1.3.2.3	Histology Slide/Block Storage	067, 97A	152	1	363	363	211	60%	605	$ 350	$ 211,750
	Bacteriology 1.3.3										
1.3.3.1	Bacteriology Laboratory	087	584	1	726	726	142	60%	1,210	$ 400	$ 484,000
1.3.3.2	Bacteriology Dirty Room	084	284	1	121	121	-163	60%	202	$ 400	$ 80,667
1.3.3.3	Bacteriology Microscopy			1	121	121	121	60%	202	$ 400	$ 80,667
1.3.3.4	Bacteriology Equipment	086	81	1	182	182	101	60%	303	$ 350	$ 106,167
	Virology 1.3.4										
1.3.4.1	Virology Laboratory	090, 093	452	1	726	726	274	60%	1,210	$ 400	$ 484,000
1.3.4.2	Virology Fluorescent Microscopy	092	23	1	121	121	98	60%	202	$ 400	$ 80,667
1.3.4.3	Virology Equipment Room	091	90	1	182	182	92	60%	303	$ 350	$ 106,167
1.3.4.5	Virology Clean Room			1	121	121	121	60%	202	$ 400	$ 80,667
1.3.4.6	Virology Dirty Room			1	182	182	182	60%	303	$ 400	$ 121,333
	Serology 1.3.5										
1.3.5.1	Serology Laboratory	094	608	1	726	726	118	60%	1,210	$ 400	$ 484,000
1.3.5.2	Serology Centrifuge & Liquid Handling			1	182	182	182	60%	303	$ 400	$ 121,333
1.3.5.3	Serology Equipment Room			1	182	182	182	60%	303	$ 350	$ 106,167
	Molecular Diagnostics 1.3.6										
1.3.6.1	Molecular Diagnostics Sample Prep			1	363	363	363	60%	605	$ 400	$ 242,000
1.3.6.2	Molecular Diagnostics Extraction	116	346	1	363	363	17	60%	605	$ 400	$ 242,000
1.3.6.3	Molecular Diagnostics Clean Room	116B	181	1	182	182	1	60%	303	$ 400	$ 121,333
1.3.6.4	Molecular Diagnostics Amplification	112	257	1	182	182	-76	60%	303	$ 400	$ 121,000
1.3.6.5	Molecular Diagnostics Freezer Room			1	121	121	121	60%	202	$ 350	$ 70,583
1.3.6.6	Molecular Diagnostics Storage	116F	68	1	121	121	53	60%	202	$ 350	$ 70,583
	DNA Sequencing 1.3.7										
1.3.7.1	DNA Sequencing Laboratory Suite			0	726	0	0	60%	0	$ 400	$ -
	Milk 1.3.8										
1.3.8.1	Milk Laboratory	095	603	1	1,089	1,089	486	60%	1,815	$ 400	$ 726,000
1.3.8.2	Milk Laboratory Equipment			1	363	363	363	60%	605	$ 350	$ 211,750
	Food Safety 1.3.9										
1.3.9.1	Food Safety Laboratory			0	726	0	0	60%	0	$ 400	$ -
1.3.9.2	Food Safety Sterilization & Equipment			0	121	0	0	60%	0	$ 600	$ -
	Shared Laboratory Support 1.3.10										
1.3.10.1	Sterilization, Glassware & Pure Water	73	717	1	726	726	9	60%	1,210	$ 750	$ 907,500
1.3.10.2	Media Prep Lab	073	100	1	121	121	21	60%	202	$ 400	$ 80,667
1.3.10.3	Biohazard Sterilization	075A	81	1	121	121	40	60%	202	$ 750	$ 151,250
1.3.10.4	Freezer Farm			1	242	242	242	60%	403	$ 350	$ 141,167
1.3.10.5	Hazardous Waste	082	115	1	242	242	127	60%	403	$ 400	$ 161,333
1.3.10.6	Laundry Room	075	70	1	121	121	51	60%	202	$ 300	$ 60,500
1.3.10.7	Chemical Storage			1	182	182	182	60%	303	$ 400	$ 121,000
1.4	**Biocontainment**		**0**			**1,634**	**1,634**		**2,723**		**$ 1,951,667**
1.4.1	Lockers, Shower, Gowning & Boot Room			1	363	363	363	60%	605	$ 550	$ 332,750
1.4.2	Autoclave Sterilization			1	182	182	182	60%	303	$ 650	$ 197,167
1.4.3	Equipment Decontamination Airlock			1	121	121	121	60%	202	$ 650	$ 131,083
1.4.4	BSL-3 Laboratory			1	363	363	363	60%	605	$ 800	$ 484,000
1.4.5	BSL-3 Specialized Laboratory			2	121	242	242	60%	403	$ 800	$ 322,667
1.4.6	BSL-2 Enhanced Necropsy			1	363	363	363	60%	605	$ 800	$ 484,000
1.5	**Office & Support**		**2,834**			**7,060**	**4,226**		**11,767**		**$ 3,334,333**
1.5.1	Reception and Waiting	077	570	1	800	800	230	60%	1,333	$ 280	$ 373,333
1.5.2	Director Office	083B	116	1	140	140	24	60%	233	$ 280	$ 65,333
1.5.3	Associate Director Office			1	120	120	120	60%	200	$ 280	$ 56,000
1.5.4	Administrative Conference Room			1	300	300	300	60%	500	$ 280	$ 140,000
1.5.5	Business Manager Office			1	120	120	120	60%	200	$ 280	$ 56,000
1.5.6	Quality Manager Office	097	215	1	120	120	-95	60%	200	$ 280	$ 56,000
1.5.7	Pathologist Office	083A, 114	256	4	120	480	224	60%	800	$ 280	$ 224,000
1.5.8	Open Office			25	60	1,500	1,500	60%	2,500	$ 260	$ 650,000
1.5.9	Library/Rounds Room	083	122	1	300	300	178	60%	500	$ 280	$ 140,000
1.5.10	Conference Room			2	120	240	240	60%	400	$ 280	$ 112,000
1.5.11	Multipurpose/Seminar Room	060	629	1	800	800	171	60%	1,333	$ 300	$ 400,000
1.5.12	Break Room	101	300	1	600	600	300	60%	1,000	$ 300	$ 300,000
1.5.13	Shipping			1	120	120	120	60%	200	$ 300	$ 60,000
1.5.14	Staff Lockers			1	300	300	300	60%	500	$ 450	$ 225,000
1.5.15	Storage	075	318	1	1,000	1,000	682	60%	1,667	$ 250	$ 416,667
1.5.16	Server Room	100	308	1	120	120	-188	60%	200	$ 300	$ 60,000
	Subtotal - Veterinary Diagnostic Lab		**11,549**			**24,489**	**12,940**		**40,815**		**$ 17,162,125**

Number	Area	Room No.	NSF	Qty	NSF Ea.	NSF	NSF Diff.	Net-to-Gross	GSF	Cost/GSF	Cost
3.0	FWP WILDLIFE LAB										
3.1	FWP Wildlife Lab		2,992			5,038	2,046		8,397		$ 3,520,283
3.1.1	Reception & Open Office		470	1	242	242	-228	60%	403	$ 280	$ 112,933
3.1.2	Director Office		90	1	140	140	50	60%	233	$ 280	$ 65,333
3.1.3	Staff Office		272	2	120	240	-32	60%	400	$ 260	$ 104,000
3.1.4	Open Offce / Seasonal Labor		0	4	60	240	240	60%	400	$ 260	$ 104,000
3.1.5	Break Room			0	121	0	0	60%	0	$ 280	$ -
3.1.6	Work Room			1	121	121	121	60%	202	$ 280	$ 56,467
3.1.7	Office Storage Room			1	121	121	121	60%	202	$ 250	$ 50,417
3.1.8	Lockers, Shower, Gowning & Boot Room		280	1	484	484	204	60%	807	$ 550	$ 443,667
3.1.9	Sample Prep		221	1	242	242	21	60%	403	$ 400	$ 161,333
3.1.10	Necropsy		400	1	726	726	326	60%	1,210	$ 750	$ 907,500
3.1.11	Holding Cooler		135	1	182	182	47	60%	303	$ 500	$ 151,667
3.1.12	Holding Freezer		80	1	182	182	102	60%	303	$ 550	$ 166,833
3.1.13	Molecular Diagnostics & DNA Sequencing			1	1,089	1,089	1,089	60%	1,815	$ 400	$ 726,000
3.1.14	Laundry & Equipment Room		97	1	182	182	85	60%	303	$ 300	$ 91,000
3.1.15	Laboratory Storage		565	1	484	484	-81	60%	807	$ 320	$ 258,133
3.1.16	Garage		382	1	363	363	-19	60%	605	$ 200	$ 121,000
	Subtotal - FWP Wildlife Lab		2,992			5,038	2,046		8,397		$ 3,520,283
SUMMARY		Existing NSF	14,541	Proposed NSF		29,527	14,986	Prop. GSF	49,212	Const. Cost	$20,682,408

CONSTRUCTION COST SUMMARY (New Building)		
Building Costs		
Building Construction		$ 20,682,408
Contingency		
Design Contingency	*10%*	$ 2,068,241
Escalation from June 2018 to January 2021		
Annual Escalation Rate	*4%*	$ 2,343,769.63
Construction Cost (New Building)		**$ 25,094,419**
1. Construction Cost per GSF =		*$ 509.93*
2. Not including FFE, A/V, design fees, commissioning, testing		

TOTAL PROJECT COST SUMMARY		
Project Costs		
Construction Cost - New Building		$ 25,094,419
Project Associated Costs	*25%*	$ 6,273,604.70
Total Project Cost		**$ 31,368,023**
2. Not including FFE, A/V, design fees, commissioning, testing		