Montana Agricultural Experiment Station LRBP Projects

2008-2009 Biennium (July 2007)

Priority	Location	Primary Type of Need/Item	State LRBP	New	Renovation
1A	Creston - Northwestern Agricultural Research Center	Dry Lab/Seed Processing Building	$ 338,400	Y	
1B	Sidney - Eastern Agricultural Research Center	Office/Lab/Classroom Building with Attached Greenhouse	$ 1,680,000	Y	
1C	Havre - Northern Agricultural Research Center	Office Building	$ 560,000	Y	
1D	Havre - Northern Agricultural Research Center	Lab Space	$ 480,000	Y	
1E	Havre - Northern Agricultural Research Center	Upper Calving Barn	$ 296,800	Y	
1F	Bozeman - Agricultural Research Farm	Reshape Pastures/Replace Perimeter Fence/Repair Corral Drainage	$ 136,000		Y
2A	Bozeman - Agricultural Research Farm	Repaint All Station Facilities	$ 52,000		Y
2A	Bozeman - Fort Ellis Research Farm	Repaint All Station Facilities	$ 52,000		Y
2B	Conrad - Western Triangle Agricultural Research Center	Seed Processing Lab	$ 240,000	Y	
2C	Bozeman - Arthur Post Agronomy Farm	Renovate/Replace Seed Storage Building	$ 400,000		Y
2D	Huntley - Southern Agricultural Research Center	Machine Storage Shed	$ 120,000	Y	
2E	Moccasin - Central Agricultural Research Center	Renovate Dairy Barn and Horse Barn	$ 72,800		Y
2F	Havre - Northern Agricultural Research Center	Working Facilities	$ 52,000	Y	
3A	Bozeman - Fort Ellis Research Farm	Replace Perimeter Fence/Provide Corral Panels/Drill Stem	$ 136,000		Y
3B	Havre - Northern Agricultural Research Center	Pesticide Storage Building	$ 52,000	Y	
3C	Moccasin - Central Agricultural Research Center	Upgrade Water System	$ 52,000		Y
3D	Huntley - Southern Agricultural Research Center	Irrigation System	$ 36,000		Y
3E	Norris - Red Bluff Research Ranch	Fencing Repair/Replacement	$ 31,200		Y
3F	Bozeman - Agricultural Research Farm	Install Irrigation System Supply Line	$ 72,800	Y	
3G	Norris - Red Bluff Research Ranch	Shop/Fuel Storage	$ 140,000	Y	
		New Construction Subtotal	$ 4,032,000		
		Renovation Subtotal	$ 968,000		
		Projects Total	**$ 5,000,000**		

PROJECTS

1.A. Dry Lab/Seed Processing Building (NWARC) $388,400

Headhouse to house seed cleaning, drying (plant/soil), grinding room with dust collection, workbenches, and herbicide spray chamber. This is to be constructed on the north side of existing greenhouse. The new building would be 3600 sf.

1.B. Office/Lab/Classroom Building with Attached Greenhouse (EARC) $1,680,000

Proposed new building to include 2200 sf office, 2800 square feet sample prep area, 5600 sf for two wet labs, 2400 sf common area for instrumentation, and 5600 sf greenhouse. Greenhouse to be kit-type, arch design, with roll-up walls. Lab area to include exhaust air system, vacuum, compressed air.

1.C. Office Building (NARC) $560,000

The current office building is located in one of the historic Fort Assiniboine buildings. This project would construct a new office building at the designated alternative site across the road, in keeping with the 1992 planning charrette. This new building would contain office space for an administrative assistant, four scientists and three research assistants, a meeting room for fifty, and bathrooms. Estimated necessary square footage to accomplish this is 6,000 sf.

1.D. Lab Space (NARC) $480,000

The Soils Lab is currently housed in a Fort Assiniboine building constructed in 1880, and the Agronomy Lab in one from 1908. Neither building is insulated or has plumbing, and both are dilapidated, historically significant, and ill-suited to the ARC needs. This project proposes a new building at the proposed site across the road. It would include an Agronomy Lab (2000 sf), Soils Lab (1000 sf), storage in each lab, a seed cleaning plant with dust collection system, seed processing, a drying room, and 1000-bushel storage. 4,000 sf total.

1.E. Upper Calving Barn (NARC) $296,800

The current barn was constructed in 1927, and is a 4,000 sf wood frame and shingled structure with some dirt and some concrete floors. It is sinking. The structure has no hot water or insulation, and the only heat source is a propane heater in the small office. This building serves as the livestock lab for pulling calves, and a “cowboy lounge” during the calving season. Replacement building will be 4,000 sf, 3200 of which will be barn and stalls and 800 of which will be the “cowboy lounge”, and will be sited in the location as the old one. This building will have a concrete floor, heat, electricity and water.

1.F. Reshape Pastures/Replace Perimeter Fence/Repair Corral Drainage (Bozeman) $136,000

This project would reshape the pastures to sizes and shapes that cooperate better with current and future uses. 70% of the brace posts in the perimeter fencing of this ranch are gone. While the existing fence is 4-wire type, a 6-wire style is desired. Management of animal waste disposal has been a concern at this facility. This project would slope the corrals for drainage and address animal care issues.

2.A. Repaint All Ranch Facilities (Bozeman) $52,000

The buildings on this ranch are in need of exterior upkeep and represent a wide variety of colors. Lack of maintenance over the years has led to a need to clean up and repaint almost every building at the facility. This issue is a problem to the extent that the Beef Council and MAES Advisory Council commented on the state of the buildings during a visit. Use of one color throughout the ranch would go far towards making a visual impact of the ranch as an entity, rather than as a bunch of adjacent buildings. The buildings are mostly in good shape, other than needing some paint. *To create a more cost effective bid (one), these are both listed as 2.A.*

2.A. Repaint All Farm Facilities (Bozeman) $52,000

The buildings on this farm are in need of exterior upkeep and a facelift. Lack of maintenance over the years has led to a need to clean up and repaint almost every building at the facility. Use of color more vibrant than the current gray color would go far towards making a visual impact of the farm as an entity, rather than as a bunch of adjacent buildings. The buildings are mostly in good shape, other than needing some paint. *To create a more cost effective bid (one), these are both listed as 2.A.*

2.B. Seed Processing Lab (WTARC) $240,000

New 2400 sf (40x60) building to include a drying room, dust collection system, space for scales and equipment. This is currently located in office building – should not be connected to office building due to health concerns. This project would also free up half of the machine storage building, which is currently being used for seed processing.

2.C. Renovate or Replace Seed Storage Facilities (Bozeman) $400,000

The nature of the work at this farm – that is, the creation of wheat and barley varieties – requires lots of space for seed segregation and storage. Currently, there are four dangerous quonsets that fulfill part of this need in an inefficient way. This project proposes demolishing the quonsets and replacing them with a new pole barn-type building. Budget allowing, this new building will include a lean-to, off one end to protect equipment from weather, thus satisfying another farm need. An underground gas tank currently exists between two of the quonsets, which would be abated with this project. New building proposed to be 70x100 feet with a 30x70 foot lean-to off the east end. New building to include drying room, concrete slab, basic electrical, and be large enough that one end of it could be easily converted to other purposes in the future, if needed.

2.D. Machine Storage Shed (SARC) $120,000

5000 sf structure to protect agricultural research field equipment from climate.

2.E. Renovate Dairy Barn and Horse Barn (CARC) $72,800

Reinsulate north wall of dairy barn. Upgrade electrical service. Replace overhead door with insulated type. Replace sliding doors of Horse Barn with insulated overhead type. Upgrade

electrical system. Install dust collection system. This renovation will house office and lab space. Add storage space to Horse Barn (if budget allows).

2.F. Working Facilities (NARC) $52,000

Replace corrals, S-turns, crowding gates, scale, covered cattle chute. Current facilities are old and need replacement.

3.A. Perimeter Fence/Provide Corral Panels/Drill Stem (Bozeman) $136,000

Approximately 10 miles of fencing at this farm is in need of replacement. 70% of the brace posts in the perimeter fencing of this farm are gone. While the existing fence is 4-wire type, a 6-wire style is desired. Reconfiguration of pasture fencing arrangement in one area would allow for a central servicing area to be formed that would be able to service four different pastures. Reconfiguration at the entrance to the pastures from the road would allow users to pull off the road to enter the pastures. New fence is also needed at the four pens along the highway; this fence should be 20 foot panel and stem-type, 5 feet high). In addition, it is desired to further divert and propel the natural water source, so that a continuous drinking water is available to cattle in each of the major grazing fields.

3.B. Pesticide Storage Building (NARC) $52,000

The current pesticide storage building is located near the Fort Assiniboine structures, and should be relocated or replaced at the site of the new shop, per the 1992 master planning charrette. A new waste management system would be designed and constructed for this new building location. Install loading ramp at fuel depot at the same time.

3.C. Water System (CARC) $52,000

Replace wellhead and dig for more pressure. Install cistern in shallow well system to accumulate water to meet peak water use.

3.D. Irrigation System (SARC) $36,000

Replace pump and pump house. Install tank for air injector. Separate this water supply from that for the Park. Install linear-type distribution system.

3.E. Fencing Repair/Replacement (Norris) $31,200

As this ranch is one of only three in the system that handle livestock, perimeter fencing is a higher priority issue here than at most centers. Much of the perimeter fence is beyond repair and needs replacing. The ranch has neither the staff, the time, nor the maintenance funding to repair the existing fencing, although they do have materials to do so. This project proposes replacing 10 miles of perimeter fence that is original from when the ranch was purchased by MAES in 1956. Proposed new fence as estimated is 6-wire high-tensile type.

3.F. Irrigation System (Bozeman) $72,800

This farm currently irrigates 75 acres with an inefficient and antiquated irrigation system infrastructure. This would allow for a modern system to be used to enhance resource use and

available personnel. This irrigation system includes control from a desktop computer to enhance efficiency.

3.G. Shop and Fuel Storage (Bozeman) $140,000

The existing shop is a structure attached to the historically significant Stage Stop building, is in disrepair, and is not designed to meet our needs. The proposed new shop will be built south of the highway and could include a chemical storage building or area as well as a hydraulic fuel storage area. It would be heated and have basic electrical service, and have a concrete floor. Proposed square footage is 2750, which is broken down into 2400 sf for the shop, 200 sf for fuel storage, and 150 sf for chemical storage.

Montana Agricultural Experiment Station
Long Range Building Plan
2008-2009 Biennium Projects

Location	*Farm/Ranch or Center*	*Allocation Distribution*
Bozeman	Arthur Post, Bozeman Ag Farm, Fort Ellis	$ 848,800
Conrad	Western Triangle	$ 240,000
Creston	Northwestern	$ 338,400
Havre	Northern	$ 1,440,800
Huntley	Southern	$ 156,000
Moccasin	Central	$ 124,800
Norris	Red Bluff	$ 171,200
Sidney	Eastern	$ 1,680,000
	Total State LRBP Funding	**$ 5,000,000**