CAPITAL IMPROVEMENT PROGRAM
City of Missoula CIP Project Request Form FY 2012-2016

Program Category:	Project Title:		10 Project #	11 Project #	12 Project #
Community Service	**Central Maintenance Buildings and Tools**		CS-04	CS-05	**CS-11**

Note this project removes two prior CIP projects Central Maintenance Vehicle and Equipment Storage Buildings (CS 05) and City Shops Tools and Hoists (CS 12))

Description and justification of project and funding sources:

Funding this project will upgrade the central maintenance site at 1305 B Scott Street. The City of Missoula is in need of equipment covered storage. The most significant demand is for heated equipment storage. There is not enough heated storage space to keep our sweepers, emergency response, and snow removal equipment from freezing in the winter months. Currently winter response equipment shares space with ongoing shop activities which creates and atmosphere of confusion and poor indoor air quality. The existing covered storage canopies have some deterioration issues and will need to be replaced sooner than later. This leaves us with a demand for non-heated covered storage as well as heated equipment storage space. The second portion of this CIP project will provide some needed tools and hoists to improve the efficiency of the shop operations. The projects will be broken out as follows:

FY 2013 Purchase of one on car brake lathe for $7,000 and one light truck hoist for $8,000.
Fy 2013 Purchase and construction of one 40'wide by 170' long heated equipment storage building.
FY 2014 Purchase of a six tower hydraulic lift system for lifting large tandem axle trucks for $38,000.
FY 2014 Purchase and construction of two covered equipment storage sheds.
FY 2015 Demolition and removal of existing equipment storage canopies. Note, the original bid was $27,000 to remove them. There is a possibility they can be removed in exchange for some of the materials (beams).

Is this equipment prioritized on an equipment replacement schedule?	Yes	No	NA
			xx

Are there any site requirements:

REVENUE

How is this project going to be funded:

Funding Source	Accounting Code	FY12	FY13	FY14	FY15	FY16	Funded in Prior Years
General Fund Municipal Lease (Finance)			415,000	382,000	27000	-	
		-	415,000	382,000	27,000	-	-

EXPENSE

How is this project going to be spent:

Budgeted Funds	Accounting Code	FY12	FY13	FY14	FY15	FY16	Spent in Prior Years
A. Land Cost							
B. Construction Cost			400,000	352,000	27,000		
C. Contingencies (10% of B)							
D. Design & Engineering (15% of B)							
E. Percent for Art (1% of B)							
F. Equipment Costs			15,000	38,000			
G. Other							
		-	415,000	390,000	27,000	-	-

OPERATING BUDGET COSTS

Does this project have any additional impact on the operating budget:

Expense Object	Accounting Code	FY12	FY13	FY14	FY15	FY16	Spent in Prior Years
Personnel							
Supplies							
Purchased Services							
Fixed Charges							
Capital Outlay							
Debt Service							
		-	-	-	-	-	-

Description of additional operating budget impact:

Responsible Person:	Responsible Department:	Date Submitted to Finance	Today's Date and Time	Preparer's Initials	Total Score
Jack Stucky	**Public Works**	**3/1/2011**	5/23/2011 8:46	js	44

CAPITAL IMPROVEMENT PROGRAM

Project Rating

(See C.I.P. Instructions For Explanation of Criteria)

Program Category:	Project Title:		12 Project #
Community Service	Central Maintenance Buildings and Tools		CS-11

Qualitative Analysis	Yes	No	Comments
1. Is the project necessary to meet federal, state, or local legal requirements? This criterion includes projects mandated by Court Order to meet requirements of law or other requirements. Of special concern is that the project be accessible to the handicapped.		x	
2. Is the project necessary to fulfill a contractual requirement? This criterion includes Federal or State grants which require local participation. Indicate the Grant name and number in the comment column.		x	
3. Is this project urgently required? Will delay result in curtailment of an essential service? This statement should be checked "Yes" only if an emergency is clearly indicated; otherwise, answer "No". If "Yes", be sure to give full justification.		x	
4. Does the project provide for and/or improve public health and/or public safety? This criterion should be answered "No" unless public health and/or safety can be shown to be an urgent or critical factor.		x	

Quantitative Analysis	Raw Score Range	Comments	Weight	Total Score
5. Does the project result in maximum benefit to the community from the investment dollar?	(0-3) 2	Please see summary support page.	5	10
6. Does the project require speedy implementation in order to assure its maximum effectiveness?	(0-3) 2	There is a significant health concern with associated with starting multiple (5-15) diesel engines in the shop and letting them run to build up air brake pressure. The HVAC system cannot compensate fast enough. As the HVAC system brings in mass quantities of fresh air the heating units have to bring that air back up to room temperature. This creates and unhealthy costly venture.	4	8
7. Does the project conserve energy, cultural or natural resources, or reduce pollution?	(0-3) 2	Covered vehicles and equipment conserve energy, reduce pollution. Covering equipment especially construction equipment, contributes significantly to a reduction in ground water pollution. The heated storage will store sweepers and flushers to keep them from freezing and enable them to respond timely to winter sand and airborne particulate issues. Engine heaters use close to 1,000 amps and are left plugged in outside all winter. There is an energy saving to heat the environment to 45 degrees or 50 degrees instead of plugging equipment in or bringing the units into the existing shop at 65 degrees.	3	6
8. Does the project improve or expand upon essential City services where such services are recognized and accepted as being necessary and effective?	(0-2) 2	This project will improve the response times of the vehicles and equipment stored at the Central maintenance Facility. This includes sweepers, flushers, construction equipment, aerial lift trucks, snow plows, and street maintenance equipment such as pothole patchers and vacuum trucks.	4	8
9. Does the project specifically relate to the City's strategic planning priorities or other plans?	(0-3) 3	Organizational Management, this project will "increase organizational responsiveness internally and externally, including emergency preparedness". This project is about asset preservation and improved response to public service.	4	12
			Total Score	44

FY12 CIP#: CS-11

CENTRAL MAINTENANCE FACILITY VEHICLE BUILDINGS COST AND BENEFIT CONCERNS

RESPONSE TIME	Digging equipment out of the snow, cleaning it off and thawing it out, to be put to work, takes time. Time that is response time. Response times to snow removal, street sweeping, aerial lift trucks (signs, signal lights, trees etc.), and pothole patch equipment can be reduced by keeping this equipment covered and heated. Street sweepers, flushers, vacuum trucks, and Jetter equipment are stored wet and ready to use. They have to be stored in a heated facility to prevent freezing damage to the expensive pumps blowers and tanks. Draining these units prior to and after each use is often nearly impossible and adds significantly to response times.
GROUND WATER POLLUTION	Equipment that is exposed to the elements contributes to ground water pollution. Rain washes fuel, oil, hydraulic fluids and coolant off of equipment and into the storm drains. Exposure to sunlight contributes to premature failure of hoses and fittings, resulting in leaks and spilled fluids.
WEATHER DAMAGE	Equipment that is stored in a covered facility is less likely to be damaged by hail and other severe storms. Direct sunlight contributes to the premature failure of paint, rubber, interiors, and tires. UV light shortens equipment and equipment component life cycles. Tire, dry rot and sidewall weathering, costs thousands of dollars each year. Dash assemblies, steering wheels, and seats, deteriorate in the direct sun and fluctuating temperatures.
EMPLOYEE SAFETY	Employees trying to ready snow covered equipment are not only slower to respond, but more likely to be subjected to slip, trip, and fall injuries. Cleaning windshields, glass, and checking fluids on large snow covered units is an invitation to an accident.
EMERGENCY PREPAREDNESS	The City of Missoula depends on emergency response units everyday. Aerial lift trucks respond to down trees and inoperative street lights. Sanders, deicers, and other snow removal equipment response to freezing rain or sudden snow storms. Loaders and trucks respond to blocked roads and fallen trees. All of these emergency response times can be reduced with covered vehicle storage. In some extreme conditions, the length of the response time can save lives.
INDOOR AIR QUALITY	Currently, all of the seasonal, response, and wet equipment is jammed into the North end of the City shop. Not only does this slow down response times, moving equipment to try get to the needed vehicle, but, it creates a significant indoor air quality issue. Starting sweepers, plows, aerial trucks, and pothole patch trucks, running them long enough to build up the air system and release the brakes creates a great deal of exhaust. The operators and shop employees have to breathe these fumes until they can be vented outside. Vented fumes are replaced with air at ambient temperatures. This results in energy cost to heat the air up to 65-70 degrees.
HEATING ENERGY COSTS	Heating equipment storage facilities to 45-50 degrees to keep equipment from freezing is less expensive than storing it in the shop and bringing the indoor air temperature up to 65-70 degrees each time a unit enters or leaves the shop.

FY12#: CS-11

ON CAR BRAKE LATHE	DATA
Project Cost	$7,000.00
Total Labor Cost For Light Truck and Car Brake Work In FY 06.	$7,071.00
Total Number of Hours Spent on Light Car and Truck Brake Jobs in FY06	162.92
Total Number of Brake Jobs On Light Truck and Cars In FY 06	86
Total Parts Cost For Light Truck and Car Brake Work In FY 06.	49497
Total Number of Jobs That Could Require Brake Rotors Turned	58.00
*Estimated Time Spent Transporting Rotors and Waiting For Returned Rotors.	87.00
Total Cost Per Brake Job to Turn Rotors (Out Sourced).	40.00
Estimated Cost of FY06 Out Sourced Rotors Turned	$2,320.00
**Labor Rate Per Hour	$18.45
Total Expected Savings Per Year Turning Rotors In-House	$2,320.00
Total Expected Reduction In Vehicle Down Time In Hours	$87.00
Total Payback Period In Years	3.02

*Conservative 1.5 hours per brake job.
** Current bargaining unit contracted rate. This would be substantially more using the shop rate.
*** Downtime figure is conservative, often swing shift brake jobs have to be down until the mechanic returns the next day.
****This project will be a significant enhancement for the Police Department.

LIGHT TIRE AND BRAKE MOBIL HOIST	DATA
Project Cost	$8,000.00
*Estimated Hours Needed for Light Car and Truck Jobs Requiring a Hoist in FY06.	3,805.83
Total Number of Hoist Hours Available in FY06	3,107.00
Estimated Balance of Hours That A Third Hoist Could Have Been Used.	698.83
Projected Time Saving Using A Hoist	244.59
Total Expected Reduction in Down Time in Light Vehicle Hours	207.90
**Estimated Labor Cost Saving With a Third Hoist	$4,512.69

*Based on Brake, Exhaust, Steering, Alignment, and Tire Repair Work Orders FY06
** Current bargaining unit contracted rate. This would be substantially more using the shop rate.