

Memo To: Mayor and Council
From: Jim Burnet 
Subject: 2014 Capital
Date: January 11, 2014

Attached is a five year capital plan which includes Administration's recommended \$3,500,000 capital budget for 2014. The various department heads submitted capital budget requests of over \$5 million but those numbers were paired down to a more manageable number.

Monday eve, staff will be prepared to discuss certain general capital requests in detail. We ask that Council focus on general capital Monday evening, and to defer discussing utility capital until the utility budget presentation.

This Monday will be the first of two discussions on general capital. The 5 year capital plan will be further revised over the coming month, and it is recommended that a second discussion with final appropriations for general capital occur after the municipal operating and utility budgets have been presented.

Ray, Bob and I will be asking for Council's final approval of the Road Reconstruction budget this Monday evening so those projects can get underway as soon as possible.

In addition to the five year capital budget, a schedule of General Capital authorizations for the last 14 years is also attached. Our request for \$3,500,000 is in line with the historical average, which is an important first step in creating a balanced, projectable long term capital plan. A memo from the library requesting \$671,700 is also attached. Note that Administration reduced the library's request to \$450,000.

Capital Budget Short Term Goals/Priorities

- Discuss capital first and approve most pressing needs now.
- Finalize capital budget at end of budget cycle.
- Higher priority given to projects that could a) generate liability if not addressed, b) generate revenue to help payback, or c) increase productivity thus reducing operating cost/man hours.
- Continue to refine 5 year capital plan over coming year and revisit in the fall.

Capital Budget Long Term Goal: With the help of the Ad Hoc Capital Budget Strategic Planning Committee, we plan to develop a more structured capital process by addressing the following:

- Provide more data to council and create a more structured process.
- Publish the road/water main list so residents can see where their street is in the queue.
- Fund road projects earlier in the budget cycle, so work can occur in summer and not fall.
- Create a manageable list of projects annually.
- Minimize large dollar fluctuations, by budgeting a consistent dollar amount annually.
- Find long term funding sources for future capital needs.
- Extend 5 year capital plan to 10 years and improve long term forecasting so capital budget can better handle large projects like buildings, roofs, and fire trucks.

Borough of Madison
DRAFT 5 Year Capital Improvement Plan
January 11, 2014

<u>Department/ Projects</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>Totals</u>
Engineering						
Road Reconstruction	1,590,000	1,205,000	1,490,000	650,000	0	4,935,000
Milling and Overlay	75,000	459,000	309,500	600,000	310,000	1,753,500
Stormwater System	60,000	125,000	410,000	475,000	125,000	1,195,000
Sanitary Capital	300,000	175,000	175,000	175,000	150,000	975,000
Building Improvements	0	0	125,000	200,000	0	325,000
Parking Lots/Sidwalks	370,000	120,000	0	0	0	490,000
Subtotal	2,395,000	2,084,000	2,509,500	2,100,000	585,000	9,673,500
Public Works						
Roads & Parks	198,000	180,000	130,000	200,000	220,000	928,000
Sanitary Operating	100,000	100,000	100,000	100,000	100,000	500,000
Mechanics	160,000	60,000	0	0	0	220,000
Subtotal	458,000	340,000	230,000	300,000	320,000	1,648,000
Recreation						
						0
Police	84,103	198,000	150,000	730,000	55,000	1,217,103
Fire	68,000	691,000	89,500	76,500	31,500	956,500
Library	450,000	208,200	300,000	194,200	187,300	1,339,700
						0.00
General Capital	\$ 3,455,103	\$ 3,521,200	\$ 3,279,000	\$ 3,400,700	\$ 1,178,800	\$ 14,834,803
Electric Utility						
	740,000	830,000	860,000	45,000	405,000	2,880,000
Water Utility	220,000	210,000	510,000	510,000	510,000	1,960,000
Total Utility Capital	\$ 960,000	\$ 1,040,000	\$ 1,370,000	\$ 555,000	\$ 915,000	\$ 4,840,000

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: ENGINEERING

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>TOTALS</u>
Road Reconstruction						
North	435,000					435,000
Pine Tree	113,000					113,000
Durwood	113,000					113,000
Fletcher	113,000					113,000
Academy	305,000					305,000
Belmont	231,000					231,000
Vinton	280,000					280,000
Wilson		90,000				90,000
Ridgedale (North) *		500,000				500,000
Ridgedale (South) *			500,000			500,000
West		75,000				75,000
Kinney		130,000				130,000
Union Hill		120,000				120,000
Loantaka Terr		120,000				120,000
Elm St		170,000				170,000
Tracy			30,000			30,000
Wyndehurst			100,000			100,000
Crescent			130,000			130,000
Gibbons Pl			120,000			120,000
Lathrop			220,000			220,000
Park La			150,000			150,000
Overhill			100,000			100,000
Colonial			140,000			140,000
Prospect				650,000		650,000
						-
						-
Yearly Totals	\$ 1,590,000	\$ 1,205,000	\$ 1,490,000	\$ 650,000	\$ -	\$ 4,935,000

* Have submitted grant request to NJDOT for Ridgedale Ave North. Anticipate 50% of listed amount to be covered. DOT should respond to first grant by April 2014. We will submit a second grant this year for 2015 funding for Ridgedale Ave South.

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: ENGINEERING

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>TOTALS</u>
Milling and Overlay						
Division (ChatB limit)	50,000					\$ 50,000
Woodland (ChatB limit)	25,000					\$ 25,000
Union Hill		\$ 36,000				\$ 36,000
Sherwood		110,000				110,000
Longview		96,250				96,250
Morris Pl.		110,000				110,000
Candlewood		46,750				46,750
Danforth		60,000				60,000
Fox Chase			24,750			24,750
Stone Hedge			63,250			63,250
Union			30,250			30,250
Union Hill			77,000			77,000
Kensington			74,250			74,250
Elmer			40,000			40,000
Seven Oaks				80,000		80,000
Hunter				50,000		50,000
Overhill				50,000		50,000
John Marshall				50,000		50,000
Wisteria				40,000		40,000
Baumgartner				30,000		30,000
Ferndale				90,000		90,000
Fairwood				210,000		210,000
Forest					110,000	110,000
Glendale					80,000	80,000
Woodside					40,000	40,000
Oak Court					40,000	40,000
Holden La					40,000	40,000
Central (MCDOT)					40,000	40,000
Main (NJDOT)						-
						-
Yearly Totals	\$ 75,000	\$ 459,000	\$ 309,500	\$ 600,000	\$ 310,000	\$ 1,678,500

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: ENGINEERING

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>TOTALS</u>
Stormwater System						
Bardon (Replace Outfall)	\$ 15,000					\$ 15,000
Keep St (Add inlets - line)	20,000					20,000
Spring Garden (Permits)		10,000				10,000
Laurel Way (Add inlets)		20,000				20,000
Seven Oaks (Add inlets)		20,000				20,000
Central Ave (Design SWM)			15,000			15,000
Park Lane (Add inlets)			20,000			20,000
Elmer Box Culvert Collapse				400,000	400,000	800,000
BelleauWoods Culvert (HMG)		50,000	350,000			400,000
Rail Culvert Lining (Keep)				50,000		50,000
Rail Culvert Lining (Kings)					50,000	50,000
Rail Culvert Lining (Park)					50,000	50,000
SWM Compliance:						
Nassco Video Inspect	25,000					25,000
Stream Cleaning		25,000				25,000
Stream Stabilization			25,000			25,000
Outfall Rip Rap				25,000		25,000
Inlet Bar Grating					25,000	25,000
Sampling Events						-
Yearly Totals	\$ 60,000	\$ 125,000	\$ 410,000	\$ 475,000	\$ 125,000	\$ 1,595,000

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: ENGINEERING

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>TOTALS</u>
Sanitary Sewers						
North St. Odor and Force MN						\$ -
North St. Bldg, Valves, Pumps						-
Shunpike/ Candlewood Ps - Pumps						-
Shunpike/ Candlewood Ps - Genset						-
West End Ps - Check & Gates						-
Treadwell PS - Check & Gates						-
Misc PS Repairs:						-
North						-
Candlewood	50,000					50,000
Treadwell	50,000					50,000
West End	50,000					50,000
Lorraine		25,000				25,000
Rachael			25,000			25,000
Madison				25,000		25,000
MH/Main lining	100,000	100,000	100,000	100,000	100,000	500,000
Misc Video & Main Repiars	25,000	25,000	25,000	25,000	25,000	125,000
INI Reduction (flow, smoke, sample, enf)	25,000	25,000	25,000	25,000	25,000	125,000
Yearly Totals	\$ 300,000	\$ 175,000	\$ 175,000	\$ 175,000	\$ 150,000	\$ 975,000

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: ENGINEERING

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>TOTALS</u>
Building Improvements						
W&L Repairs						-
DPW Bldg. Repairs			\$ 125,000			\$ 125,000
Hartley Dodge (50 Kings)				200,000		200,000
Fire & Police (62 Kings)						-
Civic Center (28 Walnut)						-
Annex (10 Maple)						-
DPW (19 Dean)						-
Utility (10 John)						-
Library (45 Keep St)						-
Metc/ James (5 Green Vill)						-
Yearly Totals	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 125,000</u>	<u>\$ 200,000</u>	<u>\$ -</u>	<u>\$ 325,000</u>

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: ENGINEERING

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>TOTALS</u>
Parking Lot Improvement						
Community Pool						\$ -
HDM Sidewalk Repairs	\$ 50,000					
Downtown Sidewalk Repairs	\$ 20,000	\$ 20,000				
Cook Ave Plaza (140 sp)						-
Green Ave (51 sp)						-
Maple Ave (55 sp)						-
Kings Road #1 (101+16 sp)						-
Hartley Dodge (12 sp gb)		\$ 100,000				100,000
Fire & Police (48 sp)						-
Kings Road #3 (208 sp)						-
Elmer St (40 sp)						-
Waverly Green (40 sp)	\$ 200,000					200,000
Green Village/ Merchant (50 sp)						-
Pool (100 sp) Rink (64 sp)						-
Picnic (24 sp)						-
Memorial Field (42 sp)						-
Civic Center (64 sp)						-
DPW/ Impound (30 sp)						-
Utility (20 sp)						-
Library (50 sp)						-
Kirby East Street	\$ 100,000					100,000
MRC Lot Rec Center						-
Yearly Totals	\$ 370,000	\$ 120,000	\$ -	\$ -	\$ -	\$ 400,000

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: PUBLIC WORKS

Project Description	2014	2015	2016	2017	2018	TOTALS
Roads & Parks						
Loader	160,000					160,000
Replace small truck			40,000	40,000	40,000	120,000
Replace big truck		160,000		160,000	160,000	480,000
Pole barn for DPW	30,000					30,000
Lawn Mower 16' Cut			70,000			70,000
Lawn Mower		20,000	20,000		20,000	60,000
Civic Center new floor	8,000					8,000
Subtotal	\$ 198,000	\$ 180,000	\$ 130,000	\$ 200,000	\$ 220,000	\$ 928,000

* Exact details on fleet and equipment will be available Monday 1/13/14

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: PUBLIC WORKS

Sanitary Sewer	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
<i>Sewer</i>						
New Pumps	60,000	60,000	60,000	60,000	60,000	300,000
Station Upgrades	40,000	40,000	40,000	40,000	40,000	200,000

Subtotal	<u>\$ 100,000</u>	<u>\$ 100,000</u>	<u>\$100,000</u>	<u>\$100,000</u>	<u>\$100,000</u>	<u>\$ 500,000</u>
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**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: PUBLIC WORKS

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>TOTALS</u>
Mechanics						
Air Ventilator		60,000				60,000
Lift Replacement *	160,000					160,000
						0
Subtotal	\$ 160,000	\$ 60,000	\$ -	\$ -	\$ -	\$ 220,000

* Lift was originally installed in 1960. It was recently inspected and failed. Repair is not feasible.

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: POLICE

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Cameras @impound Yard/DPW/Range/Gas Pump	\$ 8,500				
Surveillance equipment for Detective Bureau	1,938.91				
County RMS (Records Management System/CAD)	32,164				
2 - Wireless radio systems for motor unit	2,500				
Detective/Admin Vehicle	30,000				
School Guard Winter Coats	9,000				
New pistol range sheds - Roof (Range house & Ports)		10,000			
Live Scan System Upgrade (Fingerprint system)		15,000			
Eventide System Upgrade (Phone recording system)		35,000			
New portable radios for each officer		108,000			
Patrol Vehicle		30,000			
New Camera System			100,000		
Second ALPR (Auto Plate Reader)			20,000		
Patrol Vehicle			30,000		
Desk equipment update & 911.				700,000	
Patrol Vehicle				30,000	
Full size pickup truck					25,000
Patrol vehicle					30,000
Yearly Totals	<u>84,102.91</u>	<u>198,000.00</u>	<u>150,000.00</u>	<u>730,000.00</u>	<u>55,000.00</u>

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: FIRE DEPARTMENT

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
Replace FF turnout gear	11,000	11,000	11,500	11,500	11,500	56,500
Replace 2000 Utility/Pickup Trck	57,000					57,000
Replace 1995 Rescue Truck		550,000				
Replace/Upgrage SCBA eqpmnt		130,000				130,000
Replace 2004 Utility/Pickup Trck			63,000			63,000
Replace 1996 Midwood Antenna			15,000			15,000
Replace 2007 Vehicle				47,000		
Replace 5" Large Diam Hose				18,000		
Replace 1998 Midwood Genset					20,000	20,000
Subtotal	<u>\$ 68,000</u>	<u>\$ 691,000</u>	<u>\$ 89,500</u>	<u>\$ 76,500</u>	<u>\$ 31,500</u>	<u>\$ 341,500</u>

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: LIBRARY

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
Replace HVAC	450,000					450,000
Repave/design parking lot		150,000				150,000
Pave staff parking lot		15,000				15,000
Roof replacement			300,000			300,000
Replace carpet-lobby, childrn				39,200		39,200
Replace carpet-lobby, Adult					87,300	87,300
Abate picture room		43,200				43,200
Refresh projects				100,000	100,000	200,000
Study upgrade-fire alarm sys				55,000		55,000
Generator ????						-
						-
Subtotal	<u><u>\$ 450,000</u></u>	<u><u>\$ 208,200</u></u>	<u><u>\$ 300,000</u></u>	<u><u>\$ 194,200</u></u>	<u><u>\$ 187,300</u></u>	<u><u>\$ 1,339,700</u></u>

* \$30,000 was spent in 2013 to keep the current HVAC system operating.

**Borough of Madison
5 Year Capital Improvement Plan**

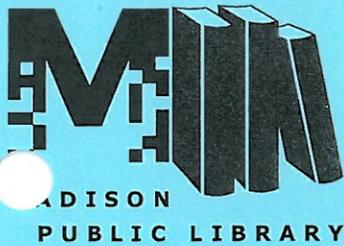
DEPARTMENT: ELECTRIC

<u>Project Description</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Replacement of battery tanks at both substations	\$ 25,000				
Replacement of Pilot wire relays in both substations and purchase of fiber-optic equipment for utilizing Rosenet fiber to communicate the Pilot Wire data between substations	35,000				
Replacement of pickup truck 137 (1997)	\$ 30,000				
Reconstruct underground primary distribution system at Union Hill & Independence Court		75,000			
Reconstruct underground primary distribution system at Madison Green Condominiums (Green Ave & Shunpike Rd)		75,000			
Replacement of pickup truck 136 (2000)		30,000			
Installation of new underground conduits, cable, light-piers, lamposts and fixtures on Kings Road from Prospect Street to Madison Ave.			210,000		
Replace Perimeter fencing on both substations				25,000	
Video surveillance systems for both substations				20,000	
Replacement of pickup truck 135 (2006)					30,000
Replace both double bucket trucks					375,000
Automated Metering Infrastructure	650,000	650,000	650,000		
Yearly Totals	\$ 740,000	\$ 830,000	\$ 860,000	\$ 45,000	\$ 405,000

**Borough of Madison
5 Year Capital Improvement Plan**

DEPARTMENT: WATER

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	
Back Hoe	130,000					130,000
New Genset at Well E	80,000					80,000
Mini Excavator		200,000				200,000
Well Upgrades	10,000	10,000	10,000	10,000	10,000	50,000
Automated Meters			500,000	500,000	500,000	1,500,000
						-
						-
Subtotal	\$ 220,000	\$ 210,000	\$ 510,000	\$ 510,000	\$ 510,000	\$ 1,960,000



January 8, 2014

TO: Mayor and Council

FROM: Library Board of Trustees

RE: 2014 Capital Budget Request

We submitted a capital budget request totaling \$671,700 to fund several projects: HVAC replacement \$450,000; Parking lot redesign/paving \$150,000; Carpet replacement \$28,500 and Picture Book Room abatement \$43,200. It has become clear that the HVAC project is our highest priority due to the many repair issues we have experienced in the past year. Over \$30,000 from the Library's 2013 budget was spent on HVAC repair calls.

We are submitting this memo in hopes that the Mayor and Council will support our request for this funding so that we can initiate all the steps necessary leading to HVAC installation in early 2014.

Outlined below is our capital plan for this year in response both to the immediate HVAC needs as well as the first steps in responding to our strategic planning process.

Library Planning

In 2012 the Madison Public Library undertook a strategic planning process led by consultants Library Development Solutions in Princeton, NJ. The planning process, funded in part by the Friends of the Library, involved Library Trustees and Friends of the Library Board members, government officials, library staff, community leaders as well as library users and non-users. Over 700 area residents responded to the survey and many others participated in focus group sessions and town hall meetings. The final product was a report titled "Communication and Commitment: A Strategic Plan for the Madison Public Library 2012 – 15."

The report summarizes the conclusion as follows:

"After discussion and review of the community information, the Advisory Strategic Planning Committee and Board of Trustees will move ahead with a plan to refresh and revitalize the Library, including a plan for creating new and inspiring spaces that will delight and satisfy the community and reimagine the Madison Public Library for the next several years. The Board of Trustees understands that taking little or no action to improve and enhance the Library's existing space jeopardizes the Library's long-term future and inhibits its ability to remain relevant. Therefore, an investment in the Madison Public Library is an investment in the future health of the Madison community."

We moved into 2013 hoping to get started on rehabilitating specific areas, particularly the Children's Services Department. Again, thanks to funding from the Friends of the Library, Suzan Globus of Globus Design Associates was hired to prepare a study of the usage of the existing library space. She recently completed her study with a presentation to an ad-hoc committee of Library Trustees and Supervisors. Her study offers a directional map of creative ways of re-using space to meet the needs of the 21st century library. Using the Study and input from Library staff, the Friends and others, the Trustees are currently evaluating a plan which would provide decisions and timetable for the Refresh project.

However, throughout the year we were hampered by major issues with the Library's HVAC system. In total, we spent over \$30,000 on these repairs, paid from the Library's budget. It became clear that before starting any renovation or rehabilitation, the HVAC issues needed resolution. Installation of a new HVAC system would involve resolution of other building issues.

With the support of the Borough Administration and Engineering Department, we approached the Mayor and Council requesting funds for completion of an engineering study of the Library's HVAC system. The funding was approved and EI Associates was hired to complete the design of a new HVAC system that utilizes the existing ductwork. EI has completed the design and offered a recommendation that the 5 rooftop units be replaced with more efficient VAV equipment.

2014 Building Goals

Therefore, we are approaching the Mayor and Council with a request to fund a replacement HVAC system at an estimated cost of \$450,000.

This year we hope to accomplish the HVAC replacement and initiate the Refresh projects called for in the Strategic Plan report. In summary, we hope to accomplish the following goals by year's end:

- Repair electric baseboard system throughout the Library
- Abate the lobby area ceiling to obtain access to HVAC ductwork
- Replace 5 HVAC rooftop units with VAV units
- Abate the Picture Book Room ceiling and rehabilitate the room for use as a program room as well as picture book storage
- Following HVAC installation, install a new drop ceiling and lighting system in the lobby area

Anticipated Timeline

January-March 2014

- Award abatement of lobby and Picture Book Room
- Repair electric baseboard system
- Solicit bids for HVAC project once funding is approved

March/April 2014

Abate the lobby and Picture Book Room ceilings
Our plans call for scraping the lobby ceiling and totally removing the Picture Book Room ceiling. This work will involve closing the main library building during the abatement. A satellite operation will be set up in the Chase Auditorium for some library operations.

April/May 2014

Rehabilitate the Picture Book Room
Install new drop ceiling, lighting system, carpeting, furnishings for opening prior to Summer Reading Program.
Award the HVAC project (for completion in September 2014)
Design the main lobby, desk, ceiling, and lighting system

May – August 2014

Bid the lobby desk, ceiling and lighting system

September 2014

Build the lobby, desk, ceiling, and lighting system
HVAC installation (coordinated with lobby ceiling work)
Upon completion General Contractor installs new ceiling and lighting system.
This work will involve closing the main library building during a portion of the project.

Funding Sources

We plan to use several funding sources to accomplish this work as outlined below:

- Existing capital funding under current ordinances
 - Baseboard heating system repair and abatement of lobby ceiling
- 2014 capital budget funds \$600,000
 - Replacement of 5 HVAC rooftop units and parking lot redesign/paving
- Library and Madison Public Library, Inc. gift funds designated for capital projects \$75,000
 - Abatement and rehabilitation of Picture Book Room
- Friends of the Library donated funds \$50,000
 - Rehabilitation of the Picture Book Room
- Capital campaign fundraising \$300,000 – 400,000
 - No firm budget number as yet as still working on Refresh components which will be better determined once the amounts from other phases are complete.
 - Support Refresh projects in the lobby and other Library areas

Summary

We view the above program as being accomplished through the partnership of the Borough using its capital funds, the Library using existing available funds from gifts from patrons and the Friends, and a public Capital Campaign. In order for the public Capital Campaign to succeed, we believe it essential that the Borough and the Library first demonstrate their support for the Plan, ensuring that the public knows that the Refresh is well underway and will be completed with their help.

Borough of Madison
 Schedule of General Capital Improvement Authorizations and Cancellations
 2000 Thru 2013

<u>Year</u>	Total Improvement Authorizations	Cancellations
2013	\$1,311,000	\$85,643
2012	\$1,856,000	\$499,241
2011	\$5,469,800	\$160,198
2010	\$1,793,600	\$2,237,900
2009	\$6,460,000	\$332,913
2008	\$22,149,000	\$338,044
2007	\$3,653,500	\$235,812
2006	\$4,451,500	\$362,236
2005	\$19,219,000	\$263,799
2004	\$3,766,700	\$96,580
2003	\$1,442,100	\$99,135
2002	\$963,400	\$408,758
2001	\$737,750	\$455,555
2000	\$2,918,300	\$424,040

Large Projects:

2013	Roads \$630,000
2012	Roads \$750,000, Sewers \$735,000
2011	Roads \$989,000, Athletic Fields \$3,500,000
2010	Roads \$788,000, Sewers \$530,000, Lincoln Place \$295,000
2009	Roads \$748,000, Athletic Fields \$2,760,000, Joint Meeting \$2,161,500
2008	Roads \$2,075,000, Sewers \$3,085,000, Real Property \$13,050,000 Building \$2,875,000
2007	Roads \$1,627,000, Sewers \$558,000, Rosenet \$230,000
2006	Roads \$780,000, Sewers \$68,000, Open Space \$1,800,000
2005	Roads \$422,000, Sewers \$65,000, Buildings \$18,750,000
2004	Roads \$461,000, Sidewalks \$1,000,000, Open Space \$1,117,000,
2003	Roads \$860,000, Civic Center \$184,000
2002	Roads \$667,000, Civic Center \$50,000
2001	Roads \$0, Telephone System \$193,000, Bike Plan \$155,000
2000	Roads \$825,000, Civic Center, \$1,135,000, Police Radio System \$275,000

EXECUTIVE SUMMARY

HISTORIC BACKGROUND

The former James Library, now the home of the Museum of Early Trades and Crafts (the Museum), is located at 9 Main Street, in the Borough of Madison, County of Morris, New Jersey. It was constructed between 1899 -1900, and was a gift to the people of Madison by philanthropist D. Willis James and his wife. It was designed by Willard Adden and Charles Bringham of New England in the Romanesque Revival style made popular by Henry Hobson Richardson in the 1870s and 1880s.

The design of the building – both interior and exterior -- is exceptional. The exterior is laid up in rusticated random granite ashlar and is adorned by decorative elements such as crockets and gargoyles and others from the medieval period. The interior is richly decorated with stenciling painted directly on the brick masonry walls.

In 1969, Edgar and Agnes Land received permission to use it to house their extensive collections of early trades and crafts when the building was vacated by the Madison Public Library in favor a newly built library on another site. They helped incorporate the Museum that year, which since that time has called this building its home.

The building is listed on the New Jersey and National Registers of Historic Places, both as an individual listing (1979/1980) and as part of the Madison Civic Commercial Historic District (1989/1991).

The building has been well-maintained over the years. An addition was constructed at the rear of the property in recent years, which provides an accessible entrance. It was awarded a New Jersey Historic Trust Grant in 1997 for repairs and upgrades, during which considerable work was done on the building. Architectural conditions assessments were reportedly conducted in 1990 and in 2007.

PROJECT GOAL AND PRESERVATION PHILOSOPHY

The goal of this Preservation Plan was to provide a clear direction on how to proceed with addressing the moisture ingress, which has begun to cause significant deterioration on the interior glazed bricks and stenciled plaster. Previous reports and repairs have failed to successfully prevent or identify the cause of the moisture ingress. The project team lead by Historic Building Architects, LLC approached the project using thermal imaging and material science as well as visual observation to identify the causes of moisture ingress.

CAUSES OF OBSERVED MOISTURE CONDITION

Concrete

1. The concrete floor in the basement has rising damp

Masonry

1. Biological growth on masonry typically indicates moisture retention.
2. The limestone is more porous than the granite and retains more moisture hence the darker biological growth on the limestone around windows, at corners of the tower, on horizontal limestone bands at gables, and along the watertable.
3. The gable copingstones have failing sealant joints at the head joints and at the intersection of the counter flashing with the roof allowing moisture into the masonry below.
4. Sealant joints used to repoint the masonry correlate with increased moisture in the thermal imaging, which indicates that moisture cannot evaporate through the mortar joint and is trapped in the stones.
5. Open joints correlate with the thermal imaging higher moisture level response indicating moisture is getting into the masonry walls, this also correlates with interior moisture observed.
6. Copper staining from gutters and open joints in the limestone indicates overflow of water resulting from undersized gutters. Refer to roof plan for drainage.
7. Interior efflorescence correlates to the higher moisture levels noted in the infrared.
8. Basement walls are saturated.

Roofs

1. The slate is absorbing moisture hence the biological growth
2. Contemporary repairs using sealant and surface applied flashing are failing
3. The gutters and downspouts are undersized
4. The gutter at the eaves is improperly installed allowing water to back up the roof.

SUMMARY OF PHASED SCOPE OF WORK RECOMMENDATIONS

Phase I Recommended Work (Immediate Work)

Site Work

Investigate, including video, clean out and make operational light well drains.

Verify operation of perimeter site drainage installed in 2010 along Train Track and Park Elevations. Install new below grade drains, as necessary.

Video all below grade roof drains and repair as necessary. Assume 50% replacement of 6 drains total.

Remove large shrubs and plant growth adjacent to Main Street Elevation and Park Elevation.

Remove sheetrock and insulation at walls and baseboard heating at perimeter in Archives room 010.

Concrete

Remove concrete floor in basement and install waterproofing and new concrete floor.

Investigate openings below grade in Hall 004 and install new covers and concrete reinforced slab with waterproofing.

Masonry

Rake out and repoint brick interior walls.

Rake out and repoint exterior stone walls, including cleaning of masonry to remove biological growth.

Rake out and repoint chimney.

Restore decorative carved limestone and gargoyles at top of Tower.

Rake out, repoint and install new lead caps at gable parapet limestone walls.

Reset displaced stone identified by structural engineer.

Rake out and repoint masonry and CMU at base of Conservatory.

Steel

Reset terra cotta finial with new stainless steel rod.

Wood

Repair wood floor in basement where Probe 1 is completed. Remove all debris prior to repairs.

Thermal & Moisture Protection

Remove counterflashing at gable limestone and install new reglet counterflashing with compressed mortar.

Install new metal TCS roof with related through wall scuppers for DS01 and DS10.

Replace existing undersized gutters with new TCS sized to allow proper water drainage.

Install new cricket in TCS at Chimney #1.

Reconfigure and replace decorative copper downspouts on Conservatory roof with new larger copper downspouts.

Verify size and video existing downspout on flat EPDM roof at Conservatory. Resize and make fully operational.

Install new metal flat pan roof.

Install new stepped counterflashing set in reglet joint with mortar.

Replace built-in gutter at Tower with new. Reline gargoyles and make operational.

Replace downspouts with larger diameter pipes to allow proper roof drainage.

Finishes

Remove paint and install new silicate paint on all interior masonry walls to be repointed.

Lightly vacuum with a soft bristle brush and removal all efflorescence from interior masonry walls.

Electrical

Complete all emergency electrical work recommended by Princeton Engineering Group, LLC.

Mechanical & Plumbing

Install new drain pan properly secured in attic above South Gallery.

Relocate baseboard radiators away from perimeter walls.

Phase II Recommended Work (Within 5 Years)

Masonry

Rake out and repoint brick interior walls.

Rake out and repoint exterior stone walls, including cleaning of masonry to remove biological growth.

Rake out and repoint chimney.

Finishes

Remove paint and install new silicate paint on all interior masonry walls to be repointed.

Mechanical & Plumbing

Install new mechanical exhaust in all bathrooms.

Phase III Recommended Work (Within 10 Years)

Masonry

Rake out and repoint all glazed brick exhibiting efflorescence damage.

Thermal & Moisture Protection

Remove red slate roof and install new S1 slate.

Temporarily remove terra cotta ridge and hip decorative tile, clean and reinstall. Allow for 10% replacement.

Install new Valley flashing.

Install new base flashing at all gable coping stones.

Openings

Restore all leaded windows and wood frames.

Restore all exterior wood doors and hardware.

Finishes

Remove paint and install new silicate paint on all interior masonry walls to be repointed.

Lightly vacuum with a soft bristle brush and removal all efflorescence from interior masonry walls.

Restore decorative stencil finishes over repointed brick.

Remove efflorescence from CMU.

Restore mosaic ceiling at entrance Portico.

Electrical

Install motion sensors for lights to conserve energy.

SUMMARY OF CONSTRUCTION COST BY PHASE

Estimated construction cost by phase is based on the cost estimate prepared by Daedalus Projects, Inc. dated February 28th 2012 specialists in estimating historic buildings. Estimates below include overhead and profit, estimated inflation for the cost of construction the anticipated year of construction in the left column. At this schematic design stage, we have also included a Design Contingency of 20% for unknown conditions not observed in this assessment report. Refer to Section VIII for more detailed information on the estimate.

<u>Phased Scope of Work</u>	<u>Estimated Construction Costs</u>	<u>Anticipated Commencement of Construction</u>
Phase I – Immediate Work	\$502,020	2013
<u>Phase II</u> – Work within 5 years	\$137,000	2018 (with inflation)
<u>Phase III</u> – Work within 10 years	\$1,101,668	2023 (with inflation)
TOTAL	1,740,688	

Professional services are not included in the construction cost above and are estimated between 12%-15% on the estimated construction costs shown.

PROJECT BUDGET OVERVIEW – IMMEDIATE WORK

The recommended immediate scope of work includes recommended work that the professional team consider urgent because it addresses conditions that, if not remediated are likely to cause rapid further moisture ingress and further damage to the interior walls. The estimate below includes immediate work only. The immediate work maybe further prioritized and broken down into smaller more manageable phases of work.

<u>Construction by Trade (CSI Standards)</u>	<u>Cost</u>
02-Site Work	\$32,783
03-Concrete Work	\$28,013
04-Masonry Restoration Work	\$205,100
05-Metal Restoration Work	\$6,000
06-Wood Restoration and Structural Repair Work	\$4,875
07-Thermal and Moisture Protection	\$110,200

09-Finishes	\$10,650
15-Electrical	\$50,900
16- Mechanical and Plumbing	\$53,500
Subtotal of Construction Costs	\$502,020
Professional Service Fees for Design Development through Construction Completion estimated at 10%	\$50,200
ESTIMATED PROJECT TOTAL (rounded up)	\$552,220

PROPOSED PROJECT SCHEDULE

SCHEMATIC DESIGN PHASE	
Begin Preservation Plan Report Completion	September 2011 February 2012
Apply for a the Morris County Historic Preservation Trust Fund Grant	March 2012
Morris County Historic Preservation Trust Fund Grant Announcement	July 2012
CONSTRUCTION DOCUMENT PHASE	
Begin Construction Documents (12 weeks)	July 2012
Submission of Construction Documents	December 2012
Client Review /Approval of Construction documents (2 weeks)	December 2012
Morris County Historic Preservation Trust Fund Grant Application 2013	March 2013
BIDDING AND NEGOTIATION PHASE	
Prequalify Contractors	March 2013
Bid Packages issued:	June 2013
Bids Received:	July 2013
Morris County Historic Preservation Trust Fund Grant Announcement	June 2013
Bids Reviewed and contractor selected by:	August 2013
CONSTRUCTION PHASE	
Contract signed and mobilization (2 weeks)	September 2013
Construction begins on site (8 months)	June 2014
Project Close out (2 weeks)	June 2014
Construction completed	July 2014

Note Morris County Historic Preservation Trust Fund Grant dates not yet confirmed.

End of Executive Summary

MAIN SUMMARY

DIVISION	Phase I	Phase II	Phase III
02-SITWORK	\$32,783		
03-CONCRETE	\$28,013		
04-MASONRY	\$205,100	\$131,500	\$22,500
05-STEEL	\$6,000		
06-WOODS AND PLASTICS	\$4,875		
07-THERMAL AND MOISTURE PROTECTION	\$110,200		\$516,993
08-OPENINGS			\$472,000
09-FINISHES	\$10,650	\$5,500	\$45,500
15-ELECTRICAL	\$50,900		\$44,675
16-MECHANICAL & PLUMBING	\$53,500		
Estimated Construction Cost	\$502,020	\$137,000	\$1,101,668