Annual Report 2012

Facilities Management Department A Division of Business and Finance













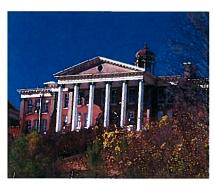








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Our Vision



WESTERN MICHIGAN UNIVERSITY



Facilities Management Department

Our vision is to be an exemplary higher education facilities management organization.

We will be known for

- Excellent service to the University community
- Excellence in stewardship of the campus environment
- Professional and effective communication
- High standards for professional and personal accountability
- Practicing sustainable development and management of campus resources











Administration

It is our vision to lead and provide support services to FM Divisions and Units so they are successful.

Planning

It is our vision to be forward thinking partners in the future development of the physical campus, exploring bold solutions and dynamic approaches to implement the university's mission and goals while balancing the interests of the various members of the university community.

Projects

It is our vision to design and deliver superior projects through creative problem solving, knowledge, expertise and effective project management.

Engineering

It is our vision to build facility excellence through innovation, state of the art technical support, expertise, and collaboration.

Operations

It is our vision to exceed our customer's expectations through responsive, caring, and fiscally responsible service.

A Message from the Associate VP for Facilities Management

Insights from 2012...

2012 was a very active year for Facilities Management Department (FM). Strategic planning, an increase in capital project activity, process improvement in Operations, and staff changes marked the highlights of the year.

Western Michigan University completed an extensive strategic planning process. I was pleased to be on the University Committee that worked throughout the year to complete the plan. Implementing the plan in the Business and Finance Division and the FM Department was a significant task of engaging the staff, creating goals, and achieving outcomes that are in alignment with the University's Strategic Plan. The entire FM team took great pride collaborating with internal FM Units and departments across campus to meet our goals and accomplish the many items listed in this annual report.

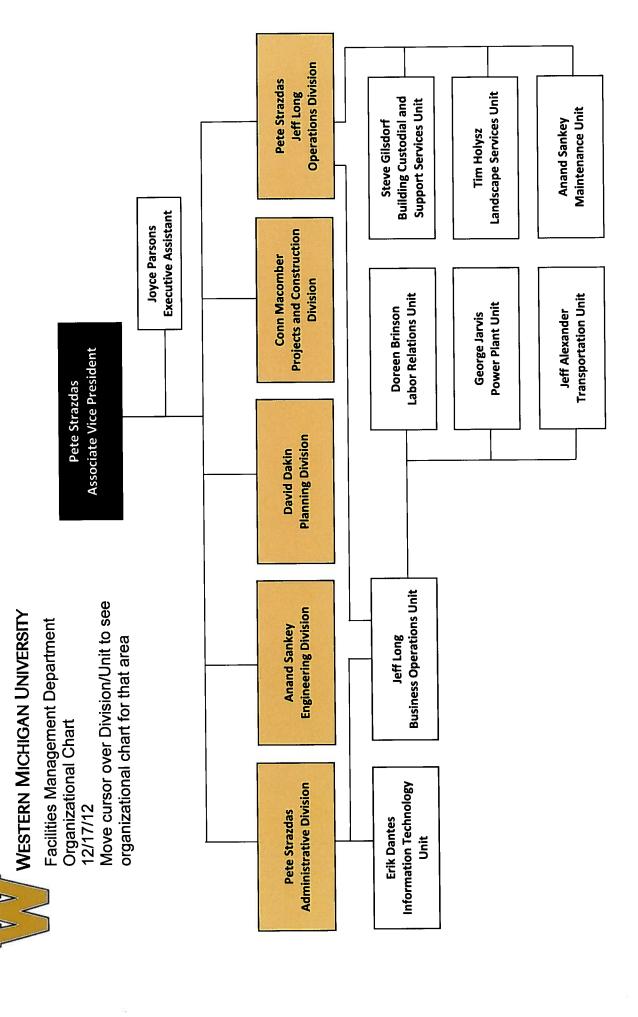


Peter J. Strazdas

We experienced an increase in capital project planning and construction. Our teams completed the Lee Honors College expansion and the new Sangren Hall building. Delivering the largest project in the history of our main campus on time and below budget was a significant challenge and achievement. We completed demolition of the NW Unit and the old Sangren Hall building. We started construction for the Western View phase two housing project and the Legacy Archives facility. Planning was started for a new dining unit, residence halls, and East Campus buildings. Furthermore, the new Medical School building project is well into design and demolition has started on this high profile project. Another cycle of capital renewal projects were completed after a thorough review of the entire facility portfolio. Engineering was very active and completed the first campus-wide energy audit, BIM initiative, asset audits, and supporting all FM areas. Sustainability continues to be a major focus with results such as a PV solar array by the Miller parking deck and soon to be on Sangren Hall, 21 charging stations, five all electric vans, and a reduction in campus-wide energy consumption.

The Operations Units focused on a new labor contract, organization process improvement, customer service focus, and delivering services in a consistent and professional manner. They also experienced staff changes with a new Custodial Director and several management positions in some Units. The excellent work and leadership across all FM Units and Divisions were validated by several awards and publications. Tree Campus USA, Leadership in Energy and Environmental Design (LEED) certifications and publications, Michigan Turfgrass Environmental Stewardship Program certification, storm water grants and publications, Building Information Modeling (BIM) publications, and the Association of Physical Plant Administrators' (APPA) best practices award were some of the highlights of the recognition earned. FM staff presented at several regional and national conferences and were successful with several grants.

The entire FM Department is lean and has achieved a lot over the past year with our limited resources. All of this can be attributed to an excellent staff of dedicated facility professionals and the support we receive from the Vice President of Business and Finance.



Administration Division

Business Operations

The following is an overview of Facilities Management projects and each Division and Unit's budget and employee count.

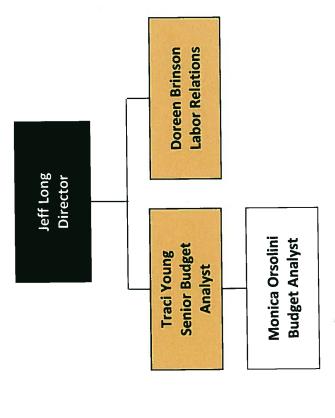
FM PROJECTS JANUARY 2012-DECEMBER 2012					
Total Number of Active Projects	612				
Total of Project Budgets	\$ 205,659,564				
Total Billed	\$ 116,778,273				

В	UDG	ETS & EMPLOYE	EINFORMATION	
	Budget FY 2012	Benefit Eligible	Non-benefit Eligible	
		Employees	Employees	
Planning	\$	366,881	3	-
Construction & Projects	\$	2,095,551	25	13
Engineering	\$	980,000	8	5
Operations				
Maintenance	\$	9,606,631	103	27
Custodial	\$	9,903,686	184	15
Transportation	\$	323,925	4	1
Power Plant	\$	19,859,187	17	2
Landscape	\$	4,103,333	64	40
	\$	43,796,762	372	85
Administration				
Network Services	\$	290,750	3	2
Associate VP	\$	307,988	2	-
Business Operations &				
Labor Relations	\$	225,791	4	3
	\$	824,529	9	5
	\$	48,063,723	417	108



WESTERN MICHIGAN UNIVERSITY

Facilities Management Department Business Operations Organizational Chart 12/13/12



Information Technology Unit



- New MAPS page for the University and WMU Mobile app.
- Windows 7 rollout for Engineering and Operations
- AutoDesk 2013 suite deployment
- Improve backup and DR site
- Install LiftNet, new elevator monitoring system
- Added significant VMWare infrastructure
- Begin Active Directory integration
- Added NetApp storage array for both VM infrastructure and Active Directory initiative.
- Deploy Android phones replacing Blackberry
- AirRave deployment in PowerPlant
- Purchase and begin process for Famis upgrade
- Building number assignment for Office for Sustainability, Western View phase 2, Legacy collection
- DB25 exports for scheduling BAS for unoccupied spaces.
- Upgrade PDA for MobileTMA
- Further looked into BIM and integrating with our current systems.
- Assisted with hosting of the MiAPPA conference.
- Google Maps mashup for technicians
- Assist with PV array/Envoy system
- ZenWorks 11 install for workstation configuration
- EnergyCAP upgrades
- Regularly attend ECCC (Electronic Change Control Committee)

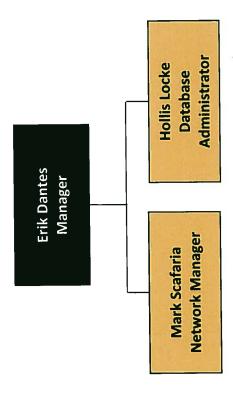
FACILITIES MANAGEMENT DEPARTMENT

- RoofPro upgrades
- Collect and generate reports from Classroom and Space Audits
- Maintain older Famis infrastructure to complete the FAMIS space survey
- 2012 Parking Maps



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Facilities Management Department Information Technology Organizational Chart 12/14/12



Labor Relations Unit

- Contributed to the successful negotiations with AFSCME and settled the contract prior to
 expiration. I conducted thorough research into the longevity that is offered at the other
 state Universities and the facts clearly indicated that we were in a minority who continued
 to offer longevity to new hires. Once I presented the research there was little to debate; I
 consider this one of the major accomplishments of the contract.
- Designed and delivered training to all AFSCME supervisors with the Labor Relations Director; we conducted 4 sessions with approximately 100 attending.
- Settled multiple disciplinary issues (including lengthy suspensions) with the Union agreeing
 not to grieve the discipline; this was the result of working patiently and respectfully with the
 Union leadership.
- Worked closely with the Director of BCSS as he acclimated himself to the University's
 procedures and the AFSCME agreement. Held monthly meeting with BCSS supervisors to
 enhance their understanding of contract administration and their role as supervisor. After
 the graduate intern began working with the Director I assisted in designing continual
 training which reinforced the work done earlier with Dr. Dam.
- Began weekly meetings with the FM Directors; the initial WeCARE program was initiated with this group.
- Developed a tracking system for all vacancies within FM that is updated bi-weekly.
- Contributed to multiple interview teams in the hiring of supervisors, managers, and administrative support staff.
- Worked closely with the Power Plant Training Committee and Director in authoring the lengthy proposal for a national CACUBO award; the proposal resulted in the Power Plant receiving a national award for the Apprenticeship Program.
- Build relationships with AFSCME leadership (critical if there is a major shift in leadership positions).
- Worked closely with the Power Plant Training Committee and Director in submitting one of the apprentices for the prestigious Givens award which is an annual award for outstanding apprentices within the State of Michigan; our apprentice won the award which is a huge achievement.
- Worked closely with Maintenance/Engineering Director to ensure that the social events for the MIAPPA were successful; the detail involved in this project was immense and the end result was a great success.

Planning Division

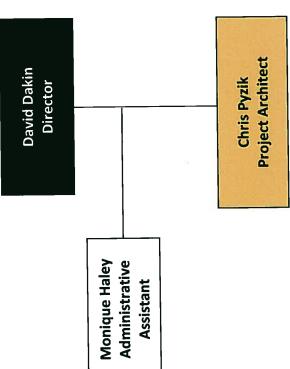


- Western Michigan University's School of Medicine project is underway.
- WMU School of Medicine accreditation visit, an enormous success.
- Another significant section of campus made pedestrian.
- The next phase of campus housing and dining underway.
- A comprehensive effort towards a solution for East Campus.
- A revised smaller scale version of the archives project was analyzed, sited, and started.



WESTERN MICHIGAN UNIVERSITY

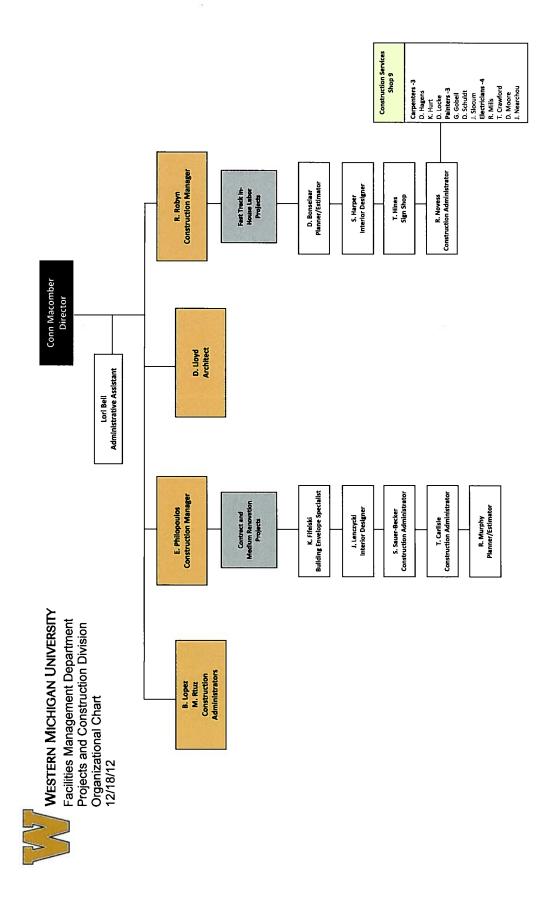
Facilities Management Department Planning Division Organizational Chart 12/17/12



Projects and Construction Division



- Sangren completed on time and below budget Complete 100 percent
- Apartments were delivered on time and below budget Complete 100 percent
- NWU completed on time and below budget Complete 100 percent
- Furniture on website for campus clients Complete 100 percent
- Design charrettes were conducted weekly during design phase Complete 100 percent
- Fewer complaints but still are receiving more than we would like. Numbers are down to less than one per month for over 300 projects in process and at 50 percent

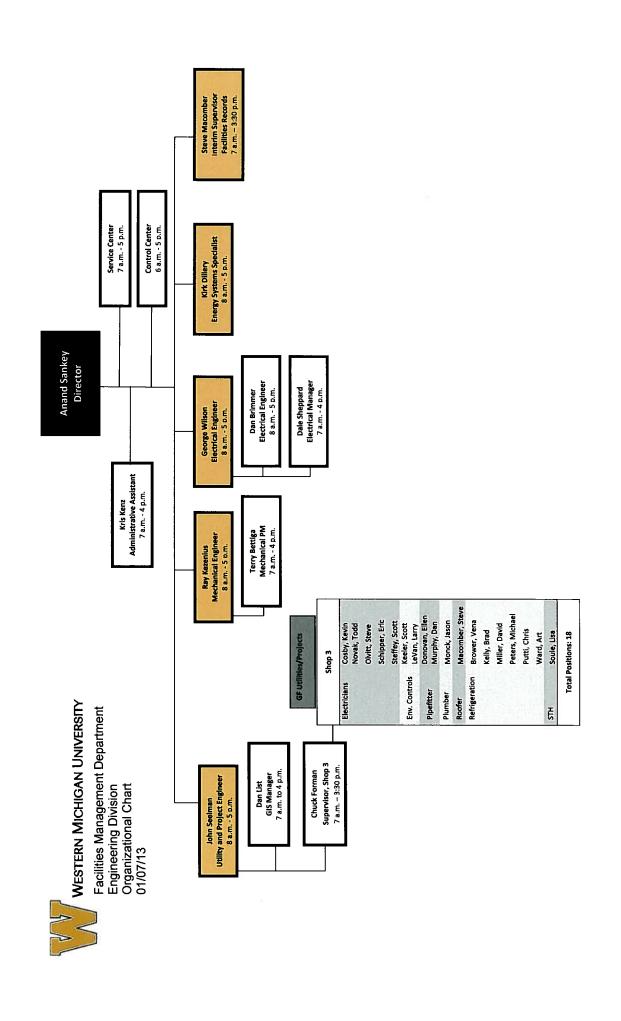


Engineering Division



- Completed campus-wide energy audit. Honeywell confirmed that we have done an exceptional job with our conservation efforts. "No low hanging fruit at WMU."
- Completed campus-wide infrastructure renewal analysis, presented recommendations, and secured funding
- Completed Deferred Maintenance Presentation for General Fund and Student Affairs
- Completed structural integrity analysis of exterior lighting banner worthy
- Overhauled steam trap testing program to include various frequencies for testing based on steam pressure and potential energy losses
- Accepted parking lots and roads condition analysis and implementation of roads projects responsibility
- Accepted campus-wide storm water management program including best management practices and grant oversight
- Continued to enhance BIM data entry for campus buildings added equipment location and critical equipment to models for over 70 buildings
- Created Building Information Modeling Guidelines for New Construction
- Completed files consolidation between Campus Services and Physical Plant buildings into Central Document storage area
- Created Commissioning Guidelines for Request for Proposals
- Upgraded campus-wide hard and software electrical sub metering program
- Updated campus-wide electrical infrastructure single line diagram
- Developed seven-year high voltage switch gear maintenance program
- Bid chiller maintenance contract for 28 chillers, reduced annual cost
- Completed energy optimization program rebates for equipment upgrades and natural gas received over \$40,000 in rebates

- Implemented "utility usage statements" to campus building coordinators via monthly electronic statements
- Acquired two additional LEED EBOM certifications: Chemistry and Brown Hall
- Provided oversight with capital construction projects West Michigan Substation,
 Schneider Chiller Plant, Noble Lodge, Lawson Arena, Sangren Hall, Lee Honors College,
 Western View 2, School of Medicine, Legacy Collection
- Currently participating with New Dining Facility and Residence Halls Design
- Implemented technical support open-issue tracking process via work order system
- Administered and assisted with project management of 90 projects
- Enhanced Building Automation webpage navigation capabilities
- Purchased, and currently implementing, continuous commissioning initiatives AHU runtime, Exhaust Fan and Outside Air Flow via central software package
- Upgraded Geographical Information System database and web interface software
- Implemented campus-wide ground water level evaluation trending
- Continued to assist Environmental Health and Emergency Management with emission and storm water permitting requirements, generator run hours, outfalls surveys, cleaning of storm structures
- Finalized wireless trap testing devices for campus vaults, moving forward with a large implementation program across 53 vaults (two phases)
- Coordinated campus energy conservation projects lighting and controls, water conservation, insulation, chiller optimization.
- Continued trending and documentation of utility usage during campus closures MLK, July 4th, Thanksgiving, Winter Holiday Closure
- Participating in Billion Dollar Green Challenge
- Participating in Stars Program
- Initiated "Share Your Program" presentations with various departments to inform Engineering Team of their programs and how we interact with them for campus success: Parking Services, Dining Services, Sindecuse, Admissions and Orientation, Athletics
- Created Professional Development Series with Midwest Consulting to promote time management, work load management, better communication and customer service.
- Developed night-load program in conjunction with Power House for generation capabilities
- Supported life-safety upgrades and fire alarm design and implementation at Trimpe, Korhman, Burnhams, Lee Honors College
- Installed generator for both Short Road residences (President Residence and Gilmore Alumni House)
- Implemented chiller optimization program across six chiller plants to increase efficiency and reduce operating costs
- Received award from APPA for Steam Trap Program
- Completed 2nd module of APPA Institute (four modules in all)



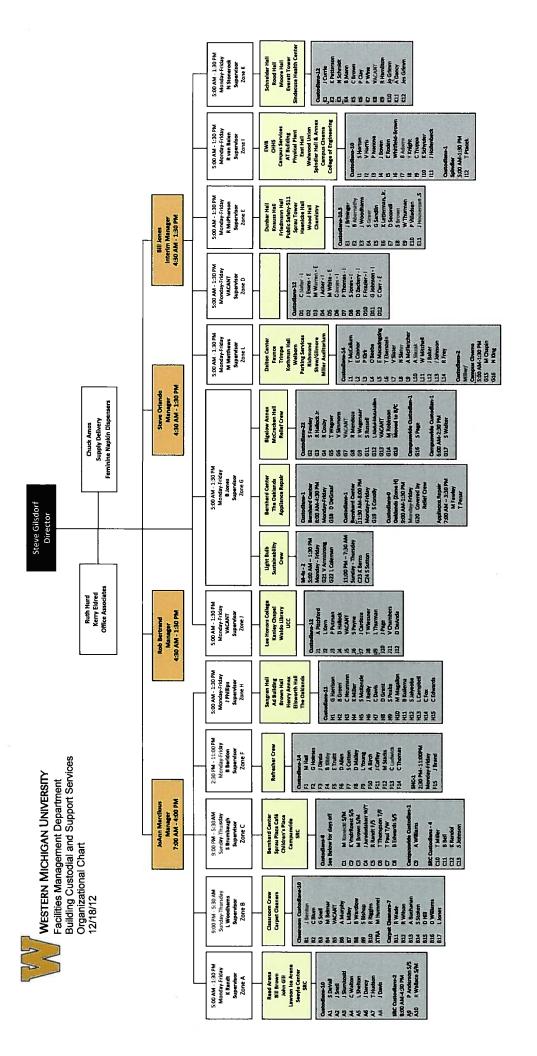
Operations Division

Building Custodial and Support Services Unit



- Improved effectiveness of discipline and provided training for BCSS leadership team on management-labor relations
 - Ongoing education has been taking place with the FM Labor Relations Coordinator once a month attending supervisor meetings to discuss the discipline process and the importance of good management-labor relations.
 - BCSS director has met with other directors and FM Labor Relations person to determine other processes for discipline.
 - Consistency and the need to follow the prescribed process in the contract have been discussed in order to improve "stick-y-ness".
 - Additional contract awareness training has been provided to make supervisors aware of contract changes.
 - A committee has been developed to bring about an "FM Employee Handbook" to assist with consistency.
- Improved departmental communication create unity throughout department, to include all shifts (Strategy 1: Communication and Leadership)
 - Supervisor meetings now include all 3 shifts
 - All supervisors are directed to include both managers and directors in their email communication to building coordinators, as well as, affected co-supervisors
 - o All management is encouraged to share information with others that will have direct impact on other's areas of responsibility
 - Re-enforcement of the BCSS vision and mission is occurring at the director level, tying the ongoing projects to what is set as a goal

- Department is now tracking various data to share with the employees and administration (kudos, attendance, injury)
- Management is developing a feedback bulletin board to address and cull employee concerns and provide an avenue for feedback to management and response to the employee by management.
- Improved customer relations
 - Supervisors are required to make contact with their building coordinators a minimum of three times a week and to report contacts in weekly report
 - O Supervisors are required to be in their buildings and available to employees and customers throughout the day, starting ½ hour after start of shift
 - Managers are required to walk buildings on a daily basis, 2-3 hours is the expected time frame
 - o Managers are required to meet with building coordinators once a quarter
 - o Director meets with building coordinators once a year
 - Customer satisfaction survey is given to building coordinators once a year to monitor customer satisfaction and to highlight areas of performance and need; supervisors and employees are being empowered to make decisions on the spot for needed special cleaning circumstances to eliminate the need for gaining upper management approval and increase the speed of response.
 - O Website has been updated to include scheduled cleaning tasks per building and daily/weekly basis. Website also includes: definitions of the various levels of APPA cleaning; a queue for floor work and carpet work so customers can see what's ahead; a program for floor work and carpet work is being developed, so expectations in some areas can be developed i.e. every May the Dalton practice rooms are stripped and refinished.
- Implemented Specialty Team Cleaning Pilot Buildings- Specialty Team Cleaning has been found to produce great results. Two pilot buildings have been utilizing the new specialty team cleaning procedures to great success. Procedures will be rolled out throughout the rest of campus over the next two 2 years.
- Conducted a Space Audit- A space audit was conducted to verify area square footage, floor surface type, wall surface type, room numbers and if the space actually exists.



Landscape Services Unit



Accomplishments

Concrete

Deferred Maintenance Concrete Sidewalk Removals/Replacements and Safety Hazard Eliminations:

- Faunce Student Services; added speed bump in access drive
- Kohrman Hall; removed brick and replaced with colored concrete
- GV Pond; removed and repaired large expanses of walkway from Valley I intersection to Sangren
- Trustee Fountain; removed and replaced many sections of deteriorated walks
- Valley Drive; installed new 8' walk from Howard to Rankin
- Haenicke Hall; removed and replaced large expanse of walkway, adding access ramp from Lot 61
- Miller Circle Drive; removed and replaced large expanse of deteriorated walkway
- Lawson Ice Arena; removed four parking islands and replaced with asphalt for easier accessibility by media trucks for hockey games
- 1201 Short Road; removed brick walk and patio and replaced with colored, stamped concrete
- Valley II/Eicher-Lefevre; removed and replaced front entrance steps

Repaired and Patched Steps in Several Locations:

- Valley I Dining Services loading dock
- Spindler; from Lot 12 to Lot 10
- Howard Street pedestrian bridge to Western Avenue
- Haenicke Hall connecting to Wood Hall
- East Hall leading to Archives
- Brick on Miller Auditorium verandah
- Repaired/re-laid brick walks and steps surrounding Lee Honors
- French Hall; re-coated slurry

Hardware, Fencing & Furniture

- Purchased and installed two carousel tables w/umbrellas at Knauss Hall
- Purchased and installed six new carousel tables w/umbrellas at WVA-I
- Refurbished 20 plexus benches and baskets and redistributed them throughout campus
- Rebuilt large expanse of chain link fence at 1201 Short Road back yard
- Waldo Stadium; installed new fencing to enclose/protect gas meter from vandals
- Repaired chain link and decorative fences at numerous locations:
- Several small sections along the MDOT non-motorized path
- Davis Street practice fields
- Parkview Avenue Soccer Complex
- Valley III; west side along property line
- Physical Plant gate to Lot 8
- Valley I, east side along property line near Greenlawn
- Power Plant perimeter fence
- Various work orders for minor hand rail repairs throughout the year

Landscape Enhancements

- Direct planning of landscapes on two major projects; Sangren and Lee Honors
- Re-landscaped Flag Pole area including enhancements to the front of Wesley, Lee Honors and sundial
- Re-landscaped WMU entrance signs at:
 - o CEAS
 - o Howard and Stadium
 - Howard and West Michigan
 - o Valley Drive
- Re-landscaped 1201 Short Road after the patio and generator projects
- Rebuilt and moved benches and table from Lot 61/Rood Hall bus stop to new Wilbur Street station and re-landscaped the area
- Re-landscaped Kanley Chapel Tower area with fresh new plant materials
- Re-landscaped Davis/Zimmerman entrance step area near the courtyard and Bistro 3, allowing access to courtyard for maintenance and landscape
- Re-landscaped French Hall entrance

- Re-landscaped Dalton Center Orpheus Cour
- Refurbished the Kercher Memorial Gardens at Dalton
- Re-landscaped several sections at the round-a-bout boulevard; removed old tired plant materials and replaced with new grasses, plants and sod
- Re-landscaped the south and east side of Welborn; removed old plants and replaced with plant material from other campus areas
- Enhancements at two of the center Elmwood courtyards; added ornamental grasses with perennials and annuals for color
- Campus Services front entrance was enhanced by adding colorful perennials and annuals
- Construction of a labyrinth at the Oakland Drive side of CHHS; a Lee Honors College student supervised project
- Re-landscaped SRC perennial bed by the WMU Seal
- Re-landscaped north side of Lee Honors along fences; removed old overgrown plant materials and added fresh mulch
- WVA-I; added to the hillside prairie plantings behind Buildings II and III, and added irrigation along Western Avenue to enhance eye appeal
- Enhanced Moore Hall north entrance by replacing sod with daylilies
- We now have trees on wheels! Added five large planters to hold trees and placed them among the Fountain Plaza tables
- Power washed campus kiosks to prepare them for painting
- Power washed over 100 building entrances; brightened and lightened
- Continuation of our dumpster painting program; we're about halfway through the total
 128 campus containers
- Repainted over 40 planters and filled with colorful annuals
- Removed graffiti as it appeared; hot spots continue to be East Hall, Howard Street bridges, walks around GV Pond area, and the round-a-bout tunnel
- Sprayed Round-up to control weeds at campus shrub beds, tree wells, parking lots, curb lines, sidewalks, fence lines, etc.
- Mulched approximately 70 percent of campus shrub beds and tree wells using shredded bark
- Summer parking lot sweeping accomplished which will help keep contaminates and fines out of the storm water system
- Professional Lake Management applications to control algae at GV and CEAS ponds

Annual Flowers

- Installation of 8,000 square feet of annual flower beds:
 - o The 3-D floral peacock at Miller Circle Drive
 - o Miller Circle Drive
 - Chemistry Building/Waldo Library
 - o Haenicke Hall
 - o Schneider Hall/Fetzer Center

- o Gilmore Theatre
- o University Seal at SRC
- o French Hall
- o Lee Honors
- o Bernhard Center
- o Ellsworth Hall
- o Kohrman Hall
- o Welborn Hall
- o Trimpe Building
- o RCVA
- o Moore Hall
- o CHHS
- o Little Theatre
- o Walwood
- o 1201 and 1219 Short Road
- Various "hidden" gardens around campus:
 - Bigelow
 - Hoekje
 - Sangren Hill steps
 - Valley Residence Halls
 - Draper-Siedschlag
 - Zimmerman
 - Davis
 - Burnhams
 - Elmwood Apartments
- Installed five flower trees at the Chemistry Building
- 190 plus planters circulate around campus
- 38,000 square feet of existing perennial and grass gardens

Campus Trees

- Fourth consecutive year to obtain the distinction of Tree Campus USA awarded through the Arbor Day Foundation
- The University Tree Walk was improved and expanded as part of Sangren's new landscape

Tree History - 1991 to 2012:

- Trees Planted = 1,445 total
 - Purchased/planted and/or transplanted from WMU Parkview Nursery
 - o 165 trees purchased for replacements; spring/summer 2012
 - o 31 trees replacement trees purchased for Fall 2012
 - 82 new trees for Sangren landscape

Trees Transplanted = 298 total

- Taken from various building construction projects and moved/transplanted to different sites throughout campus
 - Largest group of trees (72) were transplanted due to Chemistry Building project
- Tree Take-Downs = 635 total
 - Storm damaged, health and safety hazards
 - Trees in building construction zones too large to safely and/or successfully transplant
 - Largest group of tree removals at one time (65), due to 1992 October snow and ice storm
 - 71 trees taken down in 2012 due to poor health, storm damages and construction zones

Natural Areas

KLEINSTUCK PRESERVE

48 acre nature preserve owned and managed by WMU

Research

- Kalamazoo Nature Center avian monitoring
- Hanes Fund Grant, ecological inventory
- Soil sampling analysis, MSU grad student

Education

- St. Augustine Cathedral School-adoption of an area
- Kazoo School-caring for native planting plots
- Montessori School-caring for native planting plots
- Stewards of Kleinstuck Programs: Hot Cocoa Stroll, Frog Walk, Aldo Leopold's "Green Fire" movie (268 total people attended events)

Ecological Improvements

- Stewards of Kleinstuck held 16 workdays-focused on removing invasives and planting natives
- Stewards of Kleinstuck led 223 volunteers and together, put in 730.5 volunteer hours
- Worked on restoration projects in 7 acres
- Redesign of trails to minimize ecological impact
- Planted 2,470 native grasses and wildflowers grown in WMU's Finch Plant Science Greenhouse
- Planted 43 native shrubs
- Sowed 2.25 million native seeds

Infrastructure Improvements

- Stabilized Kazoo School trail entrance
- Preliminary designs for marsh platform
- New entrance signage

ASYLUM LAKE PRESERVE

274 acre nature preserve owned and managed by WMU Research

- Dr. Gill, WMU Biology Department: Effect of anthropogenic noise on the behavior of
 - MSU Great Lakes Bioenergy Research Center: Effects of biofuels (switchgrass) on native populations of birds, insects, and the surrounding prairie habitat
- Dr. Koretsky, WMU Geosciences Department: Influence of road salt deicers on lake water chemistry and mixing

Education

- Kalamazoo Nature Center "No Child Left Inside" event
- WMU First Year Experience volunteer day
- WMU Environmental Field Geochemistry Course
- WMU Hydrogeology Field Course

Ecological Improvements

- Spillway improvement/erosion control
- Ecological restoration work by Wildtype, LTD in woodland habitats. Invasive brush and ground cover were removed. They will continue this winter by burning the brush piles.

Infrastructure Improvements

- New bench installed near stream
- Northeast trail improvement- emergency vehicle accessible/ADA accessible

Storm Water

- Collaboration with FTC&H to develop a storm water master plan for WMU campus
- Collaboration with Kieser & Associates to develop vegetation and infrastructure maintenance plans for existing storm water BMPs on campus
- Visit by the Michigan Director of Dept. Environmental Quality

Grant facilitation:

DEQ CMI Water Quality Monitoring Grant

Scope: Monitoring of existing storm water BMPs to quantify effectiveness

DEQ CMI Grant Implementing Low Impact Development at Asylum Lake in West Fork Watershed

Scope: Grant is currently being reviewed by the DEQ for a proposed change of scope. Five new BMPs on campus were proposed.

Sustainability/LEED-EB Initiatives

- FM Landscape Services achieved certification in the Michigan Turfgrass Environmental Stewardship Program (MTESP)
- Addition of "French fry" mower using Dining Services used cooking oil
- Adhere to all mowing protocols

- Adhere to all fertilizing protocols
 - o Non-phosphorus fertilizers used on all campus lawns
 - Compost tea is being used to lessen the impact of commercial fertilizers and build micro-biotic action in the soil
- We are moving towards a pesticide free campus. Two new tools have been introduced in the Green Industry that hold great potential for replacing "heavy duty" pesticides.
 We've just completed our fourth season of not using 24D or similar products.
- Use of IPM Practices for all pest control activities:
 - o We apply the least toxic pesticide only after proper protocols are followed using all strategies of IM practices first and foremost. All pesticides are scrutinized by our Environmental Health and Safety department and the director's approval is needed before we are allowed to use a product. Two major factors determine whether or not a product can be used; human toxicity and environmental effects. When a chemical is approved, everyone involved receives safety training.
- Adhere to all storm water management protocols including storm water pollution prevention initiatives and maintenance plans.
- Computerization of irrigation systems to the BAS (building automated systems) which uses ET (evaporation rates to water) for "smart watering."
- Recycle the following materials:
 - o Yard waste
 - Wooden pallets
 - o Concrete rubble
 - o Asphalt
- Our equipment is subject to a strict preventative maintenance (PM) program during the
 off-season winter months. All landscape services equipment, from Bobcat skid loaders
 to Workman carts; from riding mowers and push mowers to weed whips and blowers
 and everything in between are taken apart and repaired and/or in some cases rebuilt
 (i.e., engines) before the growing season begins.
- Our mechanic keeps a maintenance log on each piece of equipment he services; for PM's, repairs, and routine maintenance (i.e., oil changes). We can determine the longevity of individual pieces of equipment by reviewing the mechanic's log. This allows us to prioritize replacements based on costs and operating efficiencies.
- Snow removal tactics:
 - It is now standard practice for new and/or renovated buildings that snow melt systems be installed at all entrances, close proximity steps, and handicap ramps.
 This covers all the buildings listed: Brown Hall, Chemistry, RCVA, South Kohrman, and CEAS.
 - O Campus wide, we have been using beet juice, pre-wetting our bulk salt and using a mix of 80% natural brine with 20% beet juice as an anti-icer (sprayed before the snowfall). Our overall reduction in salt usage has dropped 28% since the 2008-09 winter season. To clarify, we have a total of 123.6 lane miles to de-ice for every snow/ice event. This figure includes roads, sidewalks, and parking lots. We use an average of 237.8 pounds of beet juice treated-salt per lane mile. In 2008-09, before

beet juice, we used an average of 330.09 pounds of untreated salt per lane mile. Continued use and a more aggressive strategy with anti-icing practices will help lower even more our salt usage.

Athletics

- Projects
 - o Built new visitor's bullpen mound
 - o IM softball skins expanded and edged w/additional stone dust
 - o IM softball diamond removed and planted w/grass seed
 - Hyames and Ebert skins were laser graded
 - Waldo Stadium and Seelye Center turf was deep cleaned
- Support for Athletic Events
 - 23 baseball games; 14 softball games; 15 soccer games; 7 football games; 1 outdoor track meet; 1 indoor track meet; 1 cross country meet; 8 tennis matches; 33 basketball games; 6 gymnastic meets; 9 volleyball matches
- Support for Athletic Camps
 - o Football, basketball, baseball, softball, volleyball
- Support for SRC Events
 - IM softball games; IM football games; IM soccer games; tarps for events in SRC;
 Lacrosse Club team
- Support for Special Events and Community Events
 - USTA Tennis Tournaments; ITA Tennis Tournament; KVA Football Tournament; Rocket Football; Drum Corps International; Girls on the Run; Community baseball games; GK Baseball and Softball; Baseball Scout Day; Senior softball games; St. Augustine's track day; LGBT Party; Homecoming March Down; Special Olympics; USA Volleyball
- Employee Training Opportunities
 - Michigan Sports Turf Managers Association Seminar; Hearing protection training; asbestos training

Equipment Improvements

- Replaced five trucks
 - Three plow trucks w/salters
 - o 2 trucks for arborists and irrigation tradesperson
- Replaced Teco aerial lift bucket truck w/hybrid aerial bucket truck
- Replaced one tractor blower
- Purchased small John Deere tractor w/various implements; mower, blower, broom, blade, etc.
- Purchased a new storage shed for equipment
- Replaced one tank sprayer for compost tea applications
- Miscellaneous small equipment was replaced as needed; weed whips, blowers, etc.

Support for Special Events & Community Activities

- Sculpture Tour
- Bronco Bash
- Homecoming
- Soap Box Derby
- Campus Classic 5K Run
- Athletic Events
 - o CommUniverCity Night
 - Home Football Games (6)
 - USTA @ Sorenson Courts and Welcome Party at Miller
 - o KVA football games
 - Rocket football games
 - High school baseball rental
- BTR Bike Race
- Student Garden Organization
- Fall Welcome Activities
- Residence Hall Move-In/Move-Out
- Various Residence Hall Life activities
- Tree Walks and Garden Tours for staff and students
- WMU Commencements
- Kalamazoo Holiday Parade
- WMU United Way
- Kalamazoo In Bloom
- Asylum Lake Preserves
- Kalamazoo City Parks
- Composting on WMU Orchard Property
- Advising and consultation
- Kalamazoo Pesticide/Herbicide Advisory Committee
- John F. Kennedy Center Five Senses Garden
- Special Olympics Polar Plunge
- Various Dedication events
- Spring and Fall Into the Streets
- Stewards of Kleinstuck

Additional Support to Other Departments

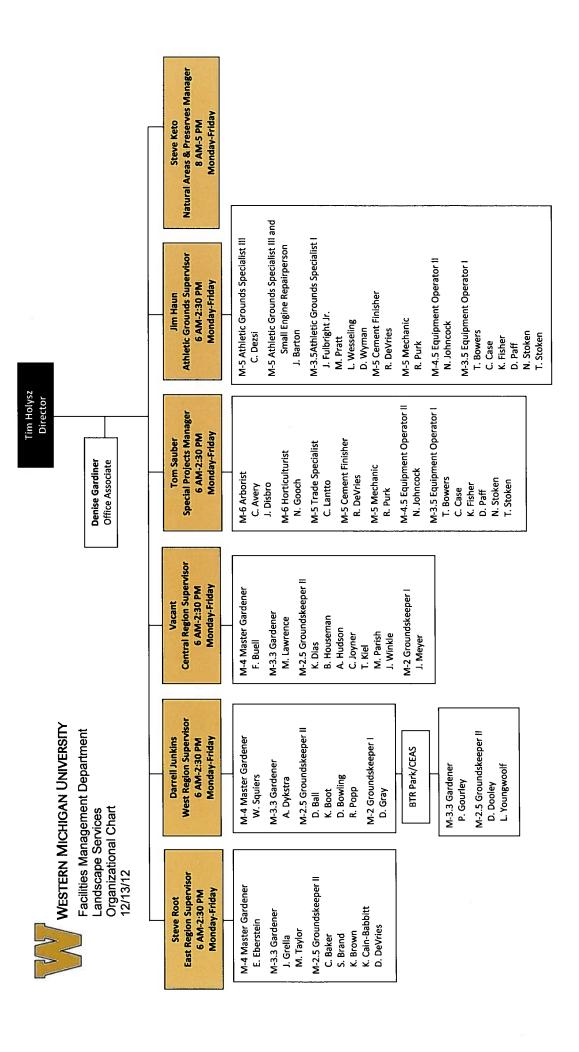
- Coordinate AFSCME uniform fitting/ordering process for FM Department
- Assist Logistical Services by delivering large, bulky items
- Assist Maintenance Services by transporting heavy items and staging equipment
- Pallet recovery/recycling; campus wide
- Assist ESEM w/disposal of research animals
- Assist Parking Services with various needs
- Assist Student Activities with various events

FACILITIES MANAGEMENT DEPARTMENT

- Assist Athletics with various events and activities
- Assist University Relations with events and activities
- Change flags/banners at Tent Promenade for International Student Services

Departmental Recognitions

- Renewal of our status as a "Tree Campus USA" through the National Arbor Day Foundation for the fourth consecutive year
- The Michigan Department of Agriculture and Rural Development (MDARD) recognized FM Landscape Services for its efforts to ensure environmental stewardship and enhance wildlife habitat. WMU achieved certification in the Michigan Turfgrass Environmental Stewardship Program (MTESP); a nationally recognized program to advance environmental stewardship and increase compliance of Michigan's Turfgrass industry related to environmental risks associated w/well head protection; pesticide and fertilizer handling, application and record keeping; fuel storage; irrigation and water use; management areas; and emergency response. Western Michigan University's Landscape Services has gone above and beyond environmental compliance requirements to prevent pollution, protect water resources, and conserve energy that collectively benefits the environment.



Maintenance Services Unit



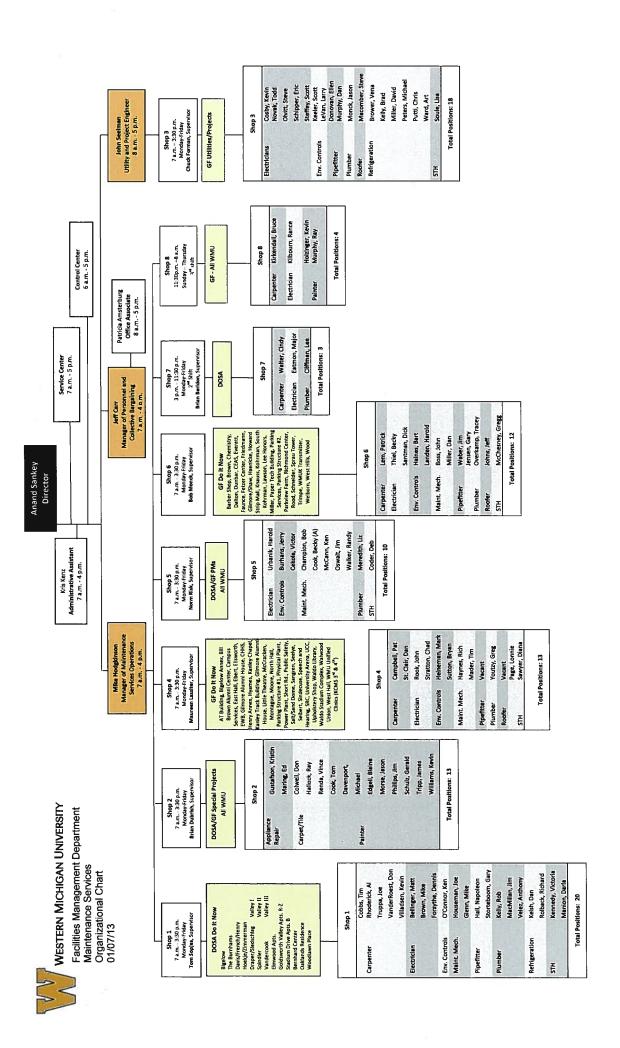
- Streamlined overtime posting for trades including overtime charges, timeline for posting and reporting
- Created productivity trending report for work force using data to determine improvement methods
- Created injury trending report for work force using data to determine if added safety measures need to be implemented
- Utilizing TMA module to document all unit safety, certification and education training
- Completed I-9 forms records, retention and security requirements
- Implemented daily emails to supervisors for priority work orders when overdue FR24/48
- Implemented new off-campus travel process improvement with various departments
- Implemented process to encourage campus stores utilization before off campus purchases
- Updated status board for operations streamlined outages, attendance, warranty issues
- Light Bulb Sustainability Program implemented campus-wide, also began mass re-lamping program
- Implemented vehicle washing program to reduce maintenance cost and improve professionalism.
- Created joint supervision between Building Custodial and Maintenance on 2nd shift
- Completed the sixth annual general fund classroom and public space facility condition audit
- Updated and posted contact information for each classroom and residence hall for maintenance and OIT service needs
- Expanded Maintenance Service Center to Building Custodial and Landscape Services in line with one-stop service for Facilities Management (FM Service Center)
- Created new procedure to process web requests and issue them to repair shops within four
 (4) minutes

FACILITIES MANAGEMENT DEPARTMENT

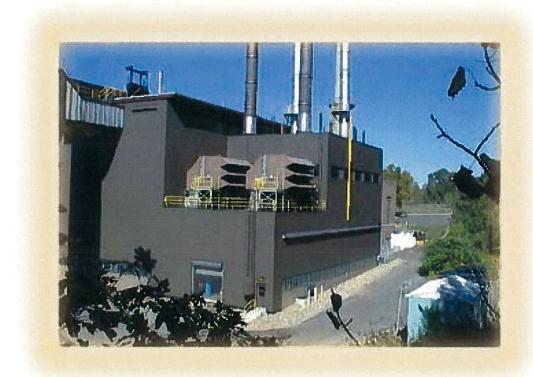
- Upgraded online I-Service Desk web request for customers to ensure accurate information is being provided for more efficient response
- Expanded Bronco Fix It access to Go WMU webpage for staff and students
- FM Service Center created "Top 5" most frequently requested services. This information is being used to proactively troubleshoot re-occurring problem and minimize return calls.
- Completed 20,542 Service work orders, completed 13,851 PM work orders. Total work orders completed: 34,393
- Work orders submitted online (Bronco Fix It): 11,092
- Revised and enhanced online customer service survey questions, streamlined process for management review and follow up of feedback scoring
- Third shift Maintenance crew workload has been streamlined to focus on summer general fund space audit improvements
- Organized "attic "stock /spare parts availability at central staging area to re-use
- Implemented common trades meetings with respective trades
- Created focus group for central trade/decentralized trade shops
- Initiated "How my Driving" signs on maintenance vehicles to encourage responsible driving
- Created customer service "Hang Tags" to use after completing service calls to let the client know we have responded to their request
- Held Annual Maintenance Services Meeting provided goals for unit, updated policy handbook and answered general questions from the team
- Initiated Predictive Maintenance program for bearing analysis utilizing in house trades creating baseline, trending thus minimizing unscheduled HVAC failures
- Preventative Maintenance Program is going through a comprehensive re-structuring
- Successfully completed 2012-2015 WMU-ASCFME Contract
- Collective Bargaining Items five disciplines, five 2nd step grievances
- Hired eight new AFSCME employees (one was terminated during probation)
- Hired one new management personnel
- Created on boarding/orientation manual for new employees
- Completed or coordinated 46 training/testing session for Maintenance trades and management
- Maintenance Services represented FM with Everyone Counts program
- Served on the Excellence in Diversity Awards Committee
- Served on PSSO Executive Board
- Participated in Central HR Leadership Series
- Attended Response to Hate conference at Michigan State
- Attended annual Career and Student Employment Student Employee Summit
- Participated in Service Learning training session
- Attended TMA Annual Conference
- Completed and updated Maintenance Services seniority list
- Completed process with Union for High Voltage designation
- Completed Uniform buy-back program and provided new annual uniforms
- Created parts requisition policy with University stores

FACILITIES MANAGEMENT DEPARTMENT

- Created process to help supervisors assist AFSCME workers with annual leave usage/balance
- Attended monthly safety committee meeting and attend GRC loss prevention meeting
- Improved and revised online "Event Request Form" for campus community to have a central place for requesting facilities needs for special events
- Created "Students First Service" Brochure to be included in welcome packages
- Provided information for Deferred Maintenance 2012-2013 General Fund and Student Affairs
- Collaborated with Enrollment Management for campus tours to enhance on-campus visitors' experience.



Robert Beam Power Plant Unit



Accomplishments

Personnel

This past year was primarily one of transition brought on by the retirement of our Instrument Crew Leader, Mr. David Prentice with over 30 years of experience, as well as Mr. Russ Northey, assistant manager with over 20 years of experience, both effective June 30. After an internal selection was completed, Mr. Arthur Priest was selected to be the new crew leader of the Instrumentation Shop. Hiring a qualified plant operator for the trailing open position proved to be more challenging than anticipated causing us to end the fiscal year down one position. Of great help was being able to retain the services of Mr. Northey on a temporary part time basis while we review various future plant staffing options which is a primary goal for next fiscal year. The incorporation of a three man relief crew rotation begun last year was successfully continued and appears to be a staple going forward at this time with future goals of possibly being able to add to it. There were no new graduates of the apprenticeship program this past year but several of the current apprentices are expected to complete the program during the course of next fiscal year led by Mr. Ron Uldriks. The in-house Training Committee continued their outstanding efforts in optimally scheduling classroom and on-the-job training time for the four current apprentices.

Projects

A primary objective of the power plant is for incremental improvements focusing on power plant reliability, redundancy and improved up time and service to our end user customers. This past year continued to see several advances in this regard. Some highlights in this regard were the installation of a backup air dryer on the compressed air system; a spare set of batteries and a battery tender for the engine generator starting system; installation of a variable frequency drive starter and controls on boiler feedwater pump #7; upgrade of the hot lime vessel lime feed supply piping incorporating a continuous flow loop to the top of the vessel; set up of a drop in ready flow element for the lime feed pumps; installation of new, more reliable flame scanners on HRSG's 7 & 8 and the installation of "steam blankets" on all boilers to facilitate hot layup and help mitigate the effects of thermal cycling to list a few. Further enhancing plant reliability was the four year servicing and calibration of the high voltage protective relays begun this past year and still in process.

A major project completed by plant staff was the total rework of the water treatment chemical injection system incorporating positive flow into the injections pumps and a new delivery system incorporating the use of hand delivered barrels in lieu of the supplier's more expensive bulk delivery by truck.

Building and site construction projects this past year included the installation of a new roof in the lobby area as well as a major storm line repair in the rear of the plant that incorporated the relatively new process of lining the existing damaged piping without having to excavate.

Safety is a primary concern at the power plant especially with all the work now being performed by power plant staff and we are once again glad to report zero lost time due to injury this past year. Ladder only access was eliminated to the Neutralization Room roof and the lime piping area roof through the installation of hatchway doors further enhancing a safe working environment.

Further enhancing the incremental improvement of plant operations are various initiatives undertaken by plant staff such as the updating and tagging of various utility systems within the plant such as compressed air, steam, condensate and water. In the process old abandoned lines are being identified and removed. Improvements in the utilization of the plant "smart phones" continue to be made as well as more direct involvement of plant staff with the operation and maintenance of the plant's data and acquisition system.

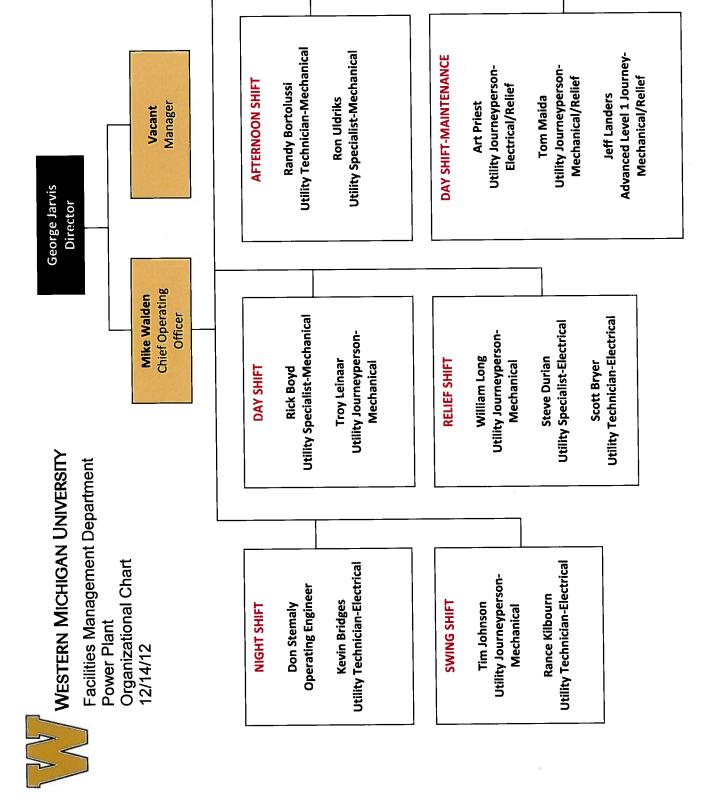
Production

Overall FY 11/12 gas turbine electric production was down approximately 1.7 million kwh's to 68.6 from 70.3 the prior year due to lower overall campus use and increased operational challenges this past year. The one downside this past year with the turbines was in their reliability with several unscheduled outages, some of which occurred during on-peak billing times. We have been working closely with Rolls Royce Energy Systems on addressing these

concerns and are optimistic that some major problems have been addressed and that next year should see better performance.

Thanks in part to the warm winter this past year but also to the continuing energy conservation efforts on campus, overall steam generation was below 600 million pounds (MLbs) to 578 MLbs - nearly 10% below last year's 637 million. It should be noted that through the many heat recovery capabilities of our system, that nearly 60% of this total production was produced as "free steam" recovered from the heat of the exhaust gas off the turbines which remained at 350 million pounds.

Overall total gas use was down slightly to 1.21 million mcf as compared to 1.28 the previous year reflecting the overall lower generation and use.



Transportation Services Unit



Accomplishments

We continue to strive for good communication with our customers, it is the most important tool we use and our goal remains the same, make our customers feel comfortable talking with us and ensure all of their concerns are addressed.

Preventative Maintenance

The scheduled maintenance of the university vehicles, equipment and generators proceeded as scheduled. Our student worker continued to do many of the oil changes and tire repairs allowing the mechanics time to concentrate on the more technical repairs. This year our student worker graduated, we have re-evaluated our work load and after consideration decided to add another full time vehicle mechanic, he starts work in mid-December.

Expenses

Our parts inventory is constantly being monitored and adjusted, all non-essential parts are removed from our inventory and replaced by new parts as vehicles are added or removed from the fleet.

Training

Throughout the year the mechanics have attended a series of training seminars one every other month. These seminars are ongoing and are an attempt at keeping the mechanics as up to date as possible with the newest designs and technologies.

Sustainability

Recycling continues to be a priority, we still use recycled antifreeze in all of the university vehicles. We also recycle our waste oil, waste antifreeze, used oil filters, metal, plastic, cardboard and paper products, batteries and we have our waste tires disposed of through a tire reclamation vendor.

Work Load

We continue to monitor the mechanic to workload ratio ensuring we stay at a sustainable level. In 2008 this same monitoring is what helped with the decision not to refill the vacated mechanic position until our workload increased. This year after a re-evaluation we decided to fill our vacant mechanic position which will bring us back to the staffing levels we had in 2008.

New Vehicle Purchases

Each year we evaluate the University vehicle fleet and this year there were only a few replacement purchases needed.

New Technologies

New and upcoming technologies are always at the top of the list when it comes to vehicle replacements. We continue to see a lot of new technologies but they are either in vehicle types not used by the university or they cost ineffective for our fleet at this time.



WESTERN MICHIGAN UNIVERSITY

Facilities Management Department Transportation Organizational Chart 12/14/12

