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@UHFacilities

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UNIVERSITY of HOUSTON

FACILITIES/CONSTRUCTION MANAGEMENT



FROM THE EDITOR

This is our second issue of "Facilities in Review", the bi-annual publication of the University of Houston department of Facilities/Construction Management (F/CM). Developing the first issue, fall 2015, as with many firsts, was an exciting undertaking, full of creativity, idea sharing, lots of outreach, brainstorming, numerous photo sessions and LOTS and LOTS of writing. I daresay, the Facilities Communications Team has learned a great deal about the many facets of the Facilities department so that we could paint a full picture of all that is accomplished.

The idea behind this publication has been to help inform and educate the campus community at-large about all the wonderful ways that F/CM serves the campus built-environment and the faculty, staff and students who are its users. The magazine's "beat" covers both components of F/CM – Facilities Services (the operational and maintenance side of Facilities) and Facilities Planning and Construction (the construction side of Facilities).

Readers will see two continuing series in the magazine, SHOP TALK and BUILDING BUILDINGS. "Shop Talk" highlights the various shops that

comprise Facilities Services, sharing anecdotal information about the teams, including shop metric data when applicable and special programs such as the new online key request. "Building Buildings" highlights and features some of the remarkable new construction and renovation projects which are transforming our Tier One campus like the Guy V. Lewis Basketball Development Facility and the Cullen Fountain renovation.

In addition to these recurring sections, readers will find information about our employees and their accomplishments both on campus and off through spotlight articles, feature articles like the one in this issue about the preparation for the GOP debate at the Moores Opera House in February, and so much more. The pages are full of photos and interesting graphics which help add interest and visual enhancement.

A lot of work and dedication to telling the Facilities story has gone into developing this publication – it is our desire that it be interesting, educational, informative, and a pleasure to read. On behalf of myself and the entire Facilities Communications Team, thank you for your interest.

Jacquie Vargas,

Communications and Marketing Manager for Facilities/Construction Management

FACILITIES RAISES \$3,000 FOR MARCH OF DIMES

UH hosted the March of Dimes' March for Babies Walk for the 20th year, and expected 35,000 participants. Team Facilities joined in on the fundraising in the months leading up to the walk with a goal of raising \$2,000 for the cause. Team Captain Cindy Galvez organized fundraisers of all sorts, from desserts on St. Patrick's day, to breakfast tacos, and a baked potato sale. "March of Dimes does great things for babies and their parents. I think it is important to give back to the community and I felt that this was my opportunity to help others," expressed Cindy. At the time of the walk, Facilities beat their goal and raised \$3,000.



CINDY GALVEZ,

CINDY GALVEZ, Facilities Team Captain for March of Dimes

TEAM FACILITIES at The March for Babies Walk at UH.









CLEAN SHOP PROGRAM CREATES SPACE

This spring, the first phase of the clean shop program was implemented within the HVAC Shop. Facilities Services Clean Shop Program helps promote safety and awareness of the surroundings while maximizing space. The program utilizes the 6S model. Originally developed by Hiroyuki Hirano for manufacturing companies in Japan the principles of 6S translate well to laboratories, repair facilities, and even the corporate office. Almost any workplace environment will benefit from the structure and efficiency that this model provides. 6S is a system, a philosophy and a culture. There are six pillars.

SORT

(Organization) Keeping only what is necessary and discard everything else – when in doubt, throw it out!

STANDARDIZE

(Standardizing Cleanup)
The State that exists when
the First Three Pillars
or "S's" are properly
maintained!

SET IN ORDER

(Orderliness) Arranging and label only necessary items for easy use and return by anyone!

SUSTAIN

(Sustaining the Discipline) Making a habit of properly maintaining correct procedures!

SHINE

(Cleanliness) Keeping everything swept and clean for inspection!

SAFETY

(Accident Prevention)
Awareness of all
activities to identify
and eliminate hazards
for a zero accident and
injury-free workplace!

After using these principles, we were able to gain three work space areas for offices and a new break-room and kitchen area for the HVAC team. We were also able to add model breakroom furniture to utilize the new space. Phase II is currently in progress and will be finished by November 2016. For questions on the 6S Principles or the Clean Shop Program, connect with Central Facilities Services Manager Rufus Kemp.



BUILDING COORDINATOR PROGRAM

Streamlining Facilities communications across campus.



The diversity of university programs, functions and activities often requires coordination and collaboration between building operations, building occupants, and various campus departments. The Building Coordinator Program helps facilitate the communications between these components and represents user needs within each building. These relationships between building occupants and key campus support units and partners such as Facilities/Construction Management, Public Safety, Environmental Health and Life Safety, Research, Academic Affairs, and Student Affairs help to enhance and improve facility services on campus which is the goal of the BC program. This program provides a forum for discussion and resolution of occupancy problems, training and development of building coordinator roles, opportunities for involvement in broader initiatives such as sustainability, safety and security, outreach programs, and communications and marketing.

Building coordinators (BC) are typically full-time university employees, selected and assigned by university leadership to fulfill the unique BC role. They generally will have a defined role in campus emergency and disaster preparedness in addition to building management; the BC responsibilities are in addition to the employee's other job duties. Each building has a primary and a secondary building coordinator assigned to represent building occupants and users and serve as building liaison to other campus departments and units. They help facility emergency preparedness planning and notify occupants of access interruptions, power outages, and have other responsibilities as the need arises.

The Building Coordinator Program facilitates quarterly meetings, annual trainings and other workshops and meetings throughout the year. Fire extinguisher training was provided to building coordinators this semester with the partnering of the Fire Marshal's Office.

Although every building user can submit a FIX-IT work request using any of the 4 Ways to FIX-IT, building coordinators can be a point of contact to escalate custodial and maintenance services along while finding out questions on energy management, heating and cooling, fire and environmental safety, building security, construction planning and project management activities within the facilities. For a complete list of building coordinators and their contact information, as well as other useful resource materials, please visit the building coordinator pages on the Facilities Services website located at:

www.uh.edu/facilities-services/bcp











The mural has embedded arabic caligraphy that reads:

"Knowledge is the food of genius, and my son, let no opportunity escape you to treasure up knowledge."

-Sam Houston



EMPLOYEES ONLY



Dean Ruck, has worked at UH for over 26 years. He first worked in the University's Art Department in the wood and metal shop where he taught some classes and helped manage their facilities. For the last 16 years, he has coordinated projects for FPC. His current assignments include the Cougar Substation expansion and the campus wide key access control cards. That is what keeps him busy at UH.

In his spare time, Ruck is an artist -- which is putting it simply. By Googling his name an array of websites come up with the different art pieces that he has completed with his collaborator Dan Havel. While perusing the list of websites, one announces that Havel Ruck Projects was named 2014 Texas Artist of the Year by the Art League Houston. Further exploration shows that their best known work was Inversion. This piece of art constructed in the spring of 2005 was literally a house that became a vortex of amazement. Using the wood from the house that would soon be demolished, they constructed a work of art that stopped traffic on Montrose. In October 2005, the house was demolished as planned but the pictures live forever and are posted internationally across the web. Inversion was even featured in the 2012 issue of Ripley's Believe It or Not. Havel Ruck Projects have numerous pieces in the collection of the Museum of Fine Arts Houston and other private collections. New projects are also in the works for 2016. For more information on Ruck, visit deanruck.com.

Services Building and the Auto Fleet shop. In fact, his passion goes beyond any walls! Juan has developed a passion for saltwater fishing. When he was 21, he had his first experience with salt-water fishing with his friend Albert and did not enjoy it much. He was scared of fishing because he did not understand the whole process. He has come a long way from being scared of fishing to spending 20-30 hours a week working on projects as a volunteer for Texas Parks and Wildlife. On the weeknights he helps with special events all along the gulf-coast which could include anything from a trip to the VA hospital to show them how to fly-cast or to helping the Boy Scouts with Angler education. (http://tpwd.texas.gov/education/anglereducation)

Ten years ago, Juan starting getting more into the education portion

Juan Urbano has a passion that goes beyond the walls of the General

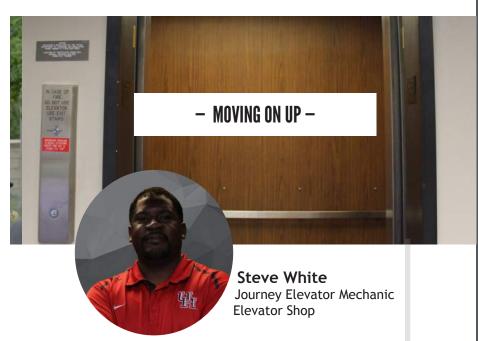
Ten years ago, Juan starting getting more into the education portion of fishing when he began to take his kids and the neighborhood kids on fishing trips. He contacted the Texas Parks and Wildlife himself because he decided to learn more about how to do it and do it the right way. The information he learned included habitats, fish species indentification, knot tying and rules and regulations.

In the fall of 2015, Juan was asked to complete a grant application through the Recreational Boating and Fishing Foundation. The specific grant was designated as the George H. W. Bush Vamos A Pescar Education Fund. Juan's church, Our Lady of Guadalupe, is the official recipient of the grant and the proposal was to host five family events, one per month. As an over achiever, Juan scheduled six events between the designated timeline of April 2016 through November 2016.









Congratulations to Steven White who has worked his way up in the Facilities Services career ladder. Steve, as he prefers to be called, started working at UH in February 2007 on the Moves & Events crew. He quickly caught the attention of the Elevator shop supervisor because of his hard work and dedication. They saw true potential. Steve finally applied for the position of Elevator helper after much convincing. The day he submitted his application form he was interviewed at 10:00am and was offered the job by noon.

Following the available career path, he was eventually moved up to Elevator Apprentice. Steve soon began to take the necessary courses through the National Association of Elevator Contractors to work towards becoming a Certified Elevator Technician. This certification involves reading and studying over 40 chapters with a comprehension test for each one. It also includes mentoring time with supervisors while they access and observe on the job. After fours years of studying and tests, Steve White is now certified and has been promoted to Journey Elevator Mechanic. When asked about his next career goal, he indicated that eventually he would like to study for the Elevator Inspection certificate. Steve laughingly said he tells his customers, "If it goes up and down, you are good. If it starts to go sideways, call me." If an opportunity presents itself to talk with Steve, be sure to ask him about his wife who works at UH in the Career Center at CEMO, his 3 kids and how he fixed elevator #6 in the library.





2016 Journey Elevator Mechanic



2009 Elevator Apprentince



2008 Elevator Helper



2007 Moves and Events Crew Member

TAPPA Conference 2016 a "huge success" says president, Jim Norcom.

The TAPPA 2016 Educational Conference & Business Partner Fair was held April 16th - 19th at the Hilton Hotel & Conference Center in College Station, hosted by Texas A&M/SSC. "It was a huge success," commented TAPPA president Jim Norcom Principal Construction Project Manager for Facilities Planning & Construction.

Four hundred twenty three registrants engaged in problem solving and networking with peers and industry professionals through continuing education classes and technical sessions ranging from architectural design to grounds & landscaping.

Ninety exhibitors displayed the latest technologies and discussed new innovations & techniques to aid in meeting the current and future challenges faced by facilities managers today.

Many engaging networking opportunities were highlighted during events like the Sunday Golf Tournament, 1st Time Attendee Reception, Casino night event and the Texas A&M campus tour.

"The best takeaway we can hope for at any conference is to provide the attendees with enough information to bring back to their institution at least one new resource to improve performance and fiscal savings," expressed Norcom.

Entertaining events included TAPPA's Got Talent contest on Monday night and the Elvis impersonator at the closing banquet.

A new development at the TAPPA event was the use of the Guidebook mobile app. Participants used the app to connect with friends and other attendees, scanned the QR codes placed at various locations in the vendor show for the Scavenger Hunt to win prizes, and to vote during the election of Officers and Directors via the live polling feature. Guidebook enhanced the communication and overall experience of the event.

Check out TAPPA's website for 2016 event photos at www.tappa.net.

Save the date for TAPPA 2017 hosted by TCU in Fort Worth, April 8-11, 2017.





NEW AND IMPROVED

ONLINE KEY REQUESTS ROLL OUT CAMPUS WIDE.

"We thought of

for that."

every possibility for

our design accounts

-Lawrence Dang,

a key request, and

UH facilities ditched paper forms and embraced the 21st century with their new online key request application. This project has been on the horizon since the work order system FAMIS was first purchased

by the University. The program came with a key request service built in, although

it only let the user request one key at a time, but the average user requests 3-4 keys at a time. For this reason, the Lock Shop and Key Access Services (KAS) resolved to use a paper form system, requiring printing, scanning and signing of certifying signatories.

The online key request project kicked off when student worker Lawrence Dang graduated from the UH with his bachelors in Computer Information Systems. Now, a full time Application Developer, Dang was able to dedicate his time to the project. He began with 3-4 months of extensive planning and research on the requirements of the application.

The next phase took about one month and consisted of coding and putting test information on the database.

Every week, he would meet with his supervisor Khanh Hodges and Penny Brungardt, a returning retiree for Key Access Services. The team would assess the needs of the application and run through key request scenarios. This technique called agile programming, one that he learned in his classes at UH, called for him to make the foundation of the design perfect and flexible the first time so that only minor tweaks would have to be made later.

The biggest challenge was fitting all of the complex processes into the application and making them automated. For example, each department can have their own rules such as limiting their approver to one person. In addition, key approvers can change often due to employee promotion and turnaround. "We thought of every possibility for a key request, and our design accounts for that," Dang explains.

The application was then ready for beta testing. The service was opened to departments such as Moore's School of Music, Bauer, Mathematics, and Science and Research Building 1. The testing phase lasted 2

months, as bugs were reported and sugges-

tions were given. Dang applied his studies in the College of Technology, "I learned the importance of listening to the customer, and I implemented all of their

suggestions as best I could."

Finally the online key request service was ready to roll out campus wide on April 29th, 2016. The KAS team has reported positive customer feedback with customers preferring this user and eco friendly alternative. With the paper form system, a key request could take up to one week, but now with the online requests, a key can be processed in one afternoon. About his work, Dang said, "The best part is that people are using it, and they're happy. That makes me happy." Between January 1st, 2016 and May 31st, 2016.

1,110 requests were Application Developer processed and 1,643 keys were distributed.

> KAS is working on the campus yearly key audit which will be released in the fall 2016 semester along with a customer satisfaction survey to gauge the service level.

> In the future, Information Technology and KAS hope to implement key requests for building master and sub master keys because those are the only keys that the application does not yet support for security reasons.

With the paper form system, a key request could take up to one week, but now with the online requests, a key can be processed in one afternoon.

DEBATE GREATS

The GOP Debate Came to The Moores Opera House in February 2016

PREVENTATIVE MAINTENANCE:

The best defense is thorough PM.
Problems were identified as early as
November 2015 in order to prevent any
issues on the day of the debate.

The Electric Shop repaired all nonfunctional lighting in the interiors and exteriors of the Opera House. This project required specialized equipment to be able to reach the high ceilings of the theater and maneuver around the seating. The crew actually re-lamped the facility so that all lightbulbs were uniform and upgraded with energy efficient

LED lights. In conjunction with Grounds, exterior landscape lighting was also upgraded and some lights were even re-wired.

Leading up to the event, the crew also provided portable power to media tents and added lighting in trees along dimly lit walkways .

FULL HOUSE:

All 800 theater seats were hand polished by two Facilities employees.

Facilities Services worked as a team to prepare the campus for the national spotlight.

University of Houston hosted a Republican Presidential Debate on February 25, 2016 in Moores Opera House. After the national event concluded, Supervisor for Moores Opera House Jason Burton and Manager for Moores Opera House Thom Guthrie were able to take

a breath and let out a sigh of relief. They also took time to explain the details for the advanced preparations that occurred and the extent of how UH Facilities went above and beyond their expectations.

Advanced Preparation

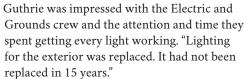
Even before the public announcement was made, UH Facilities was reviewing what needed to be accomplished before February in order to get the facility looking pristine.

UH Facilities Manager Mike Wheeler said "Details are the key." Every corner needed to be cleaned, scrubbed, painted, polished

or some variation thereof. "It has never been in this good of shape or in this fine of shape since its opening." said Thom Guthrie. He continued, "The workers are so professional from Facilities." From replacing stained ceiling tiles to polishing the floors, it was going to be done.

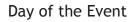
Wheeler said that he constantly reminded the Facilities staff as they worked long hard hours, "This is one of the biggest events that we might be able to participate in during our time here. Be proud." This statement kept the staff encouraged.

Landscaping was done all around the Opera House. "Grounds did an exceptional job." said Mike Wheeler. This started over one month out from the event.



Painting the inside of the Opera House was a big endeavor. There was a lift that had to be rented. This lift would not simply fit in the aisles but seats had to be removed. Facilities Staff Member Jerry Gowl was very attentive with protecting the wooden seats. When the seats were removed, the standing studs were covered. Every single seat that was removed was put back into its original spot in an orderly fashion which took great ingenuity. Many

of those seats have been named by donors so they must remain in the exact location.



Safety was a big concern for this event which included coordination from Secret Service and Homeland Security. Mike Wheeler, as the primary UH Facilities contact for this event, had to be present while a contractor installed perimeter fencing beginning 10pm on Wednesday and completed at 2:30am Thursday. He then had to be



ON CALL:

General Maintenance, Fire Alarm, HVAC, Auto Shop, Elevator, Custodial, and Electric crews all stationed members on site during the event.

General Maintenance removed
chairs from the auditorium to allow
for more cameras and assisted with news
media setup and takedown in addition to
touching up paint, repairing flooring, and
removing bicycles per request of the
Secret Service.

Grounds expended over 800
man hours in preparation for
the debate. Landscaping around
the entry, statue garden, and all the
plantings along Entrance 16 were
replaced.

Minor In-House Construction created security entry access and secured windows at Fine arts, required by Secret Service. They also painted the Opera House lobby and 2nd floor corridors, oversaw carpet cleaning, and installed banners (with assistance from the Elevator crew) at Alumni, M.D. Anderson Library, and Moores School of Music.



back on campus at 7:30am since lockdown for the area began at 8am Thursday morning. Only those with credentials were allowed in the area once the perimeter was arranged and Mike Wheeler was the only one with credentials from Facilities. Credentials included a background check done prior to the event.

In order to have space inside the Opera House for the boom equipment, chairs had to be removed. They were then returned after the event without even being asked and they went back in perfectly. "We do not even know where they were stored during the event but they came back without a scratch." explained Guthrie.

All day Thursday, UH Facilities trucks blocked the entrances including 2 garbage trucks, 2 loaders and 1 box truck which acted as secondary security barricades. The Solid Waste and Recycle crew even washed their garbage truck in preparation to make it more presentable to the public. The trucks achieved the intent of protecting the area.

"(UH Facilities) were remarkably responsive during the actual debate day." proclaimed Guthrie. "Mike Wheeler was immediately available and was an excellent point of contact."

There are differing opinions on how the candidates did that evening during the Republican Debate. There is no debate though that UH Facilities did great.

CUSTODIAL SERVICES

The custodial team performed various projects in preparation for the event in all spaces scheduled to be used during the event and other areas associated with it (deep cleaning, floor work, detail cleaning) in addition to providing custodial support during the event. Because the buildings were still on regular scheduled activities until the day prior to the event, most of the work was completed either on the weekend before the event or after hours, during the night as to not interfere with the building's activities. "All my staff

members are hardworking; however, I have to recognize the shining star of this entire project: Sonia Rodriguez, lead custodian for the evening shift. Her commitment, dedication and focus made a huge difference in making this a success," expressed Liliana Simmonds, Custodial Services Manager. The other 4 members of the team, including Debra Jones, lead custodian from the night shift, and custodians Walter Owen, Andrea Martinez and Aracely Gomez all performed exemplary work.



SONIA RODRIGUEZ, Lead Custodian for the evening shift



ELECTRIC

in-house remodels and renovations completed

corrected work orders completed

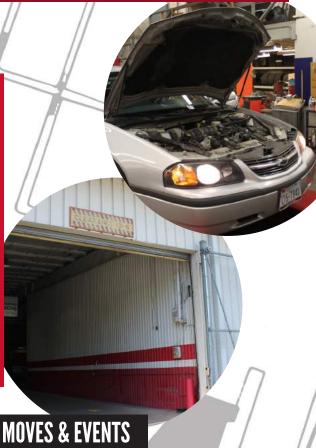
preventative maintenance work orders completed

The Electric Shop has added three new Electrical Helpers and one Generator Mechanic to the crew. With the increasing workloads these positions were much needed and welcomed to help keep up with the customer and campus needs. The team purchased two new towable trailer mounted generators to be used on campus. This will be a great benefit to the University over time. Owning the equipment as opposed to renting it when needed will save the University money in the long run. Other accomplishments include development plans for deferred maintenance, infrastructure improvements, critical repairs, and planned preventive maintenance projects.

ELEVATOR

The Elevator Shop has partnered with Facilities Planning and Construction in Elevator Modernization on campus from proprietary equipment to non-proprietary. This initiative will save the University in maintenance costs and will be more sustainable.

The Houston Room in the Student Service Center also received an upgrade when Elevator shop installed a new wheelchair lift.



"Roy, Myrlin, and their team have always provided excellent service in providing furniture and equipment moves for any of my departments."

- CRWC

"The Moves and Events crew went above and beyond to make sure all of our needs were met in a timely and effective manner. They were excellent!"

College of Pharmacy

checked during summer

The process for checking battery powered door locks requires new innovative tools for diagnostic and battery strength testing. While the team walks each floor, they connect to every lock, checking and updating programming, or even lubricating moving parts of the lock to make sure that the doors are secure and in working condition. The team is challenged to schedule work so that they have the least noticeable presence in the facilities.

AUTO FLEET

In Spring 2016 the Auto Shop provided assistance to Moves and Events with moving items from Bayou Oaks as part of a project headed by Theron Mathis. In Summer 2016, The Auto Fleet assisted Wortham House management with upkeep of the property and assigned equipment.





THE CREW PREPARES FOR FALL MOVE-INS

Make readies, the process of getting a campus living space ready for the next occupant, happen year round, but in the summer the General Maintenance crew works from May 15th until August 15th to prepare student housing. The system they use counts each make ready by bed instead of rooms to account for multiple beds per dorm room or apartment. Each of the 6,495 beds managed by General Maintenance is accounted for in their master spreadsheet. However, because of summer camps and seminars, the number of beds that must be turned over can increase. Last year there were 8,900 beds that had to go through the make ready process, but this summer more are expected.

Each day, there are approximately 30 people on the make ready crew, and it takes an average of 1 hour and 15 minutes per bed, translating to about 10,000 man hours towards make readies per summer. The teams go into the room and assess items on their checklist such as paint, appliances, cabinet doors, plumbing, and window blinds. The checklist ensures that all elements of the room are in working order and good condition for the next occupant. After General Maintenance completes a make ready on a bed, Custodial crews come in to finish the job.

Craig Whitfield, General Maintenance
Manager, sets up
a live database
using Google
Sheets, and
shares it
with General
Maintenance
supervisors so

that they can update completed work on their iPads while out on campus. In addition, the document is shared with Custodial Services and Housing to enact a collaborative effort between the three entities. Custodial can see in real time which beds have been completed so they know when they can come in to clean. Housing knows when the beds are ready, and can notify the other groups of the dates that they need to fill the rooms. Minor In-House Construction also assists with make readies by adding a few workers each day to the Maintenance

During the summer, make readies are the top priority. In addition to housing facilities, General Maintenance and Custodial perform make readies on every classroom, which includes assessing all of the tables, chairs, and walls.



1.75 man hours



13,000 man hours for housing in Summer 2016



6495 beds managed by General



30 people on make ready crews each day

STANDARDIZING INITIATIVES INCREASE SUSTAINABLITY

Hand Dryers

The average person washes their hands around fifteen times a day. This makes for a lot of paper towels used. Hand dryers have continued to replace paper towel dispensers in restrooms as a sustainable initiative throughout the world and UH is no exception. Currently, the problem remains that there are multiple hand dryers and paper towel dispensers on campus. It is the goal that eventually, all restrooms on campus will have one model of hand dryer. It has now been determined that all new restrooms at the University will get the same model of hand dryer. With this simple change, paper usage is reduced which in turn saves trees. In addition to reducing paper usage, the soft costs in paper towel dispensers is involved. The towels must be ordered, delivered to Facilities, transported to the individual buildings, and then put into the dispensers on a

daily basis. Using towels to dry hands also includes the emptying of the trash and taking it to a dumpster. With each step, an employee is using time, energy and often a motorized vehicle to accomplish the task. Using the same model of hand dryer in each restroom would also limit the number of stock items needed for repairs. Another sustainable drive spearheaded by Facilities.

Interior Paint Pallete

In an effort to support sustainability, Facilities Manager Craig Whitfield was determined campus. On the surface, it might be hard to understand the connection between paint and sustainability but it is definitely for offices and classrooms to be painted of paint was being purchased. With each project, paint was leftover. Hundreds of half-empty paint cans were being stored. Although Whitfield began to use the paint for repurpose projects, he was convinced that even more could be done to help. Whitfield made a proposal to Associate Vice iver who agreed to support the implementation of an Interior Paint Palette. Although still in the process of being approved by Presidential staff, Whitfield has been beta-testing the colors and customers have had no complaints about the choices available. "Limiting the color choices will decrease the number of left-over paint by more than 90%. Long-term, this one small step will be huge for sustainability on campus." states Whitfield.

WORK HARD, PLAY HARD

The First Annual General Maintenance Chilli Cook-Off

General Maintenance hosted their first annual Chili Cook-Off in February 2016. Employees brought their special chili recipes at lunch time. Judges David Banks, Jonnie King, and Ashton Kosar deliberated in another room as they ranked the anonymous recipes based on criteria such as aroma, flavor, and texture. Jack Enoch FMP Facilities Supervisor said, "We had a great turn out and everyone had a blast. Each chili was unique and made the competition fun and exciting." Third place was awarded to Lisa Bourque, and second was awarded to Scott Smart. When first place was announced to be Steven Pratt, he jumped out of his chair and began to dance.







FACILITATING EDUCATION

Central Plant Tours give UH students a look at real life applications of engineering.

The Tours

The University of Houston's Central Plant team gave a tour to engineering students during the spring semester in order to promote awareness about the equipment

used in a working plant. The purpose of the tours is to educate engineering students on how the production of the campus heating and cooling systems work. Central Plant Supervisor Morris Woodard has given many of these tours himself. "I love to talk," he jokes. Woodard has been working for Central Plant for 4 years after he retired from working for Exxon Mobile for 33 years. He began at UH as an operator and recently he has been promoted to supervisor.

The tour showed the students the chillers, boilers, and

cooling towers in the plant and explained how they worked and how they are operated. The biggest takeaway that Woodard wants students to realize is that all of the systems are intertwined. If one goes down such as electricity, then the water, heating and cooling will also go down. "We have a lot of redundancy so that if anything goes down, we can switch it over," explains Woodard.

About Central Plant

"This is the heart of the campus." remarked a proud Stationary Engineer Ron Martinez. This statement is more true than most people realize. If an analogy of the human

body were used, Central Plant would be considered the heart that pumps to the rest of the body using the 3.5 miles of underground utility distribution tunnels to reach each part of the campus. The Central Plant crew is made up of seventeen staff members that rotate between three shifts. It is open 24 hours a day, 7 days a week, 365 days a year. Readings are taken manually every two hours to confirm that all systems are working properly. Digital readings are available at a glance on a monitor, but manual checking is used in order to ensure the reliability of the computers and the safety of the campus.



Morris Woodard, Central Plant Supervisor

Safety is a priority and is worked into every procedure at Central Plant. They realize that they are dealing with thousands of tons of refrigerant, water, and steam it is still dangerous work. "These guys are important. They put themselves in harm's way everyday," Woodard said about his crew.

WHAT DOES HAVING 42,000 STUDENTS MEAN?

STEAM DEMAND
70,000
pounds per hour

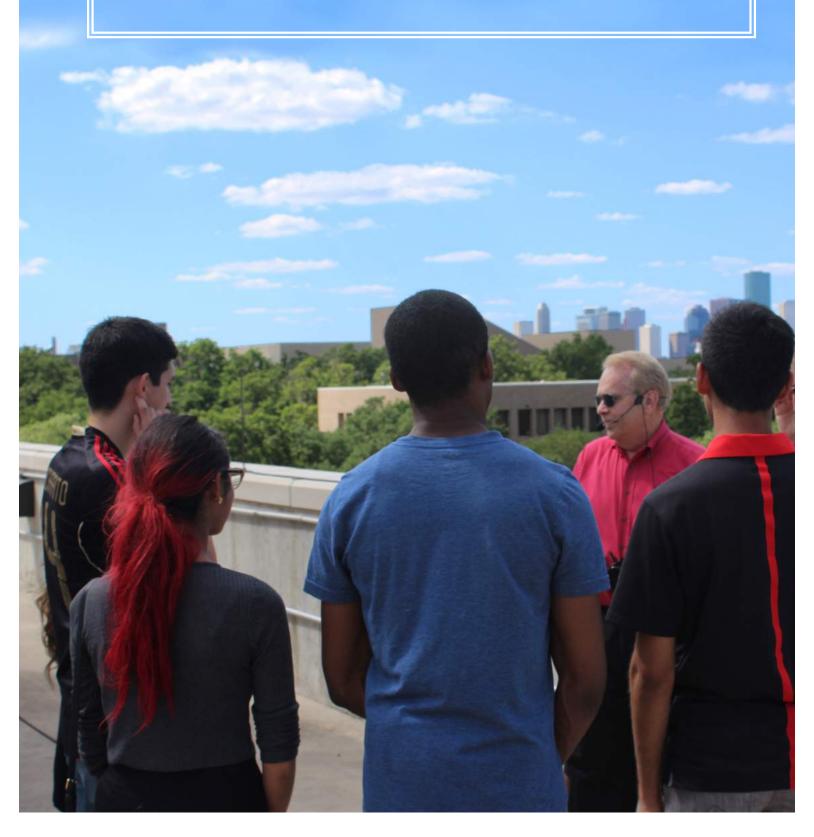
CHILLED WATER DEMAND

18,000
tons

ELECTRICAL DEMAND

40,000

KVA



BUILDING BUILDINGS

0

Delivering exceptional and enduring projects through facilities

planning and project management services.

UNIVERSITY of HOUSTON

FACILITIES PLANNING AND CONSTRUCTION

INTRODUCTION

NEW EXECUTIVE DIRECTOR OF FPC: JAMES D. WOFFORD, JR.

James D. Wofford Jr., AIA has been named Executive Director, Facilities Planning and Construction for the University of Houston System and the University of Houston.

A registered architect in the state of Texas and native Houstonian, Wofford graduated from the University of Houston with a bachelor's degree in Architecture. His professional qualifications include being a member of the American Institute of Architects, the Texas Society of Architects and the Houston chapter of the AIA.

Wofford began his career managing corporate projects as part of Houston Lighting and Power Company's Architecture department. Most recently, he was a senior manager for the Jones Lang LaSalle projects group at the ExxonMobil Houston campus. He has managed the design and construction of multiple large scale, worldwide corporate headquarter projects and mission critical projects as part of Hewlett Packard's Global Real Estate Organization, CEPM Mission Critical Group.

Wofford is LEED GA certified and a chapter executive vice president and charter member of the 7x24 Exchange Texas South, an organization for those who design, build, use and maintain mission-critical enterprise information infrastructures.

With 35 years of experience managing projects in the corporate and the mission critical environments, Wofford has been involved with millions of square feet of project management services and several hundreds of millions of dollars of spend on ground-up construction

and renovation of data centers, labs, classrooms, call centers and office interiors in the United States and Canada as well as developing markets in Costa Rica and Panama. Clients and employers include

ExxonMobil, JLL, HP, HL&P, General Motors, Disney, American Airlines, CIBC, Halliburton, TD Bank of Canada and Valero.

He was tasked with leading multiple disciplines and sometimes cross cultural teams in the preparing of cost effective design and delivery solutions.

Additionally, he has a strong desire to serve his community - Wofford is a life member of the Houston Livestock Show and Rodeo and actively participates on several of the organization's commit-

tees.

As Executive Director, Wofford looks forward to providing leadership and direction to Facilities Planning & Construction. He will manage the department's budget and human resources while maintaining direct responsibility and monitoring of the university's activities pertaining to long range planning and facilities development. This will include the construction of buildings, utilities, site work and renovation/remodeling projects at the University as well as the component campuses.

well as the component campuses.

"I am excited to join the University of Houston team and to be able to reciprocate all that the University has provided towards my education." stated Wofford. He continued to say, "I look forward to helping continue to drive Dr. Khator's vision of a Carnegie-designated Tier One public research university."



"I am excited to join the University of Houston team and to be able to reciprocate all that the University has provided towards my education."

-James D. Wofford, Jr. Executive Director of FPC

TIER ONE ACCOMMODATIONS

UH BASKETBALL TEAMS PUT NEW PRACTICE FACILITY TO USE.

The UH
basketball teams
have been making use
of the new Guy V. Lewis
Development Facility this spring.
The facility is named after former
head coach Guy V. Lewis who led the
Cougars to five Final Four appearances
in a thirty career that earned him induction
into Naismith Basketball Hall of Fame. The
project which began in October 2014 and opened
in January 2016, cost \$25 million to build.

In a candid interview with Associate Athletic Director for Capital & Special Projects T. J. Meagher, we found out interesting information about the new basketball facility. Consisting of three floors, the first floor has separate gyms for both men and women, practice courts that are generously spaced, strength/conditioning space and a sports medicine area. "We are capable of performing rehab and other necessary functions to keep the student athletes healthy and maintaining performance at high levels," explains T. J. Meagher

The second floor is an exclusive area with a hospitality space where the teams come together to have nutritional meals. This floor also consists of locker rooms with an extravagant LED ribbon board feature that flashes graphics to help motivate team members to always strive for excellence.

Exclusively for coaches and staff, the third floor overlooks the other two floors. One of the main goals with this facility was to maximize the investment which came about when Dr. Khator saw the potential in athletics and got involved, helping set an industry









LEASING NEW LAB

ERP BUILDING 5 TRANSFORMED TO STATE-OF-THE-ART WET LAB FOR SCIENCE STARTUPS







Since acquiring the Energy Research Park in 2009, the University of Houston had a long-term plan of making the park a hub for student and faculty research as well as up-and-coming business and technology startups. Many of the ERP buildings have undergone extensive renovations and upgrades as part of this plan. Now, Building 5 can be added to that group.

Over the last 18 months, ERP Building 5 was transformed into a state-of-the-art chemical wet lab. The new Innovation Lab, along with the Innovation Center inside Building 4, will serve as an incubator for chemical and materials sciences startups. The renovation, which was completed in early June, is the result of a collaborative effort by the Office of Real Estate Services, the Division of Research and Facilities Planning and Construction.

"The new Innovation Lab will be the home for leasable space for research-based startup businesses," said Jason Trippier, director of UHS Properties. "The laboratory and office space will support the development and growth of promising seed and early-stage business ventures, and will open opportunities to find third-party investment support."

ERP Building 5 Transformed into State-Of-The-Art Wet Lab for Startups

The 30,000-square-foot building comprises 28 fume hoods, 250 lab benches, a break room, a conference room, large labs and supporting labs. Each room contains natural lighting, increasing the facility's energy efficiency. The building also has its own emergency generator to protect specimens in case of a power outage.

"This was a really exciting project. It's one of those projects I want to put on my resume," said Joujou Zebdaoui, principal project manager who oversaw the renovation. "There were a lot of challenges considering it's an older building, but we were able to address them quickly and complete the renovation on schedule and on budget."

Over the past several years, the University has developed a strong innovation ecosystem that supports startup ventures through incubator and accelerator programs. More than ten new startups emerge from UH each year, many of which are powered by UH alumni, students and faculty. Intellectual property commercialized by these startups have helped generate more than \$22 million in licensing revenue in fiscal year 2015, making UH the top university in the nation for licensing revenue among public universities without a medical school.



UH LANDMARK RECEIVES RENOVATIONS

After almost 45 years of service and operation, the fountain nestled in the plaza surrounded by E. Cullen, Farish Hall, Roy Cullen and the Science Building is being restored and repaired. The project will repair water leaks and fix the fountain's lighting.

Permanent repairs, currently underway, commenced just after spring 2016 graduation with the installation of construction fencing and signage around the perimeter. The water was drained from the fountain basin by Facilities Services maintenance crews in preparation of the project work.

The fountain restoration project, managed by Facilities Planning and Construction, will repair and restore this iconic campus landmark, keeping it operating for years to come. This water centerpiece has served as a popular photo backdrop for visitors, students, faculty and staff and with the surrounding verdant landscaping, shaded avenues and relaxing water sounds, it is a favorite campus studying and gathering location. The sculpture, "Waterfall, Stele and River", by the artist Lee Kelly, adds additional visual enhancement and interest to this beautiful campus location.

The project is scheduled for completion during the Fall 2016 semester. With the completion of this project, the fountain will continue to serve as a popular iconic image and an enjoyable meeting place and study hub for the campus community for years to come.





MREB TO OPEN FALL 2016

The Multidisciplinary Research and Engineering Building (MREB) located next to CEMO Hall and the Engineering Complex is on-time for its substantial completion opening in October 2016. This state-of-the-art 120,000 gross square foot building has five floors containing laboratories, pristine conference rooms, useful office space, and multiple training rooms.

The building's main entrance, located on the side facing CEMO Hall, leads directly into the lobby which evokes pride with its shining polished concrete floor, beautiful wood slat accents, and Cougar red enhancements. The fenestration elements - windows, doors, openings - were designed and placed for intentional effect. The conference rooms and breakrooms have large windows that make for an impressive scenic view and help provide ample natural lighting as colleagues meet and network.

Another building feature includes the "plug-and-play" labs. The lab furniture features moveable tables and shelving, giving the researchers versatility since the labs can be redesigned and reconfigured to accommodate specific experiments.

Overall, the building has an industrial appearance with exposed ceilings and ductwork, polished concrete floors, and wire grate accents on the staircases. Senior Project Manager





RESTROOM RE-VAMP

In December 2015, work began on a renovation project of the restrooms located in the Roy Cullen building, which is home to numerous classrooms, the English department, and the Language and Culture Center.

The primary purpose of the project was to upgrade the restrooms to comply with regulations of the Americans with Disabilities Act (ADA). In addition to the ADA upgrades, the restrooms were completely renovated with new wall and floor coverings, light fixtures, and plumbing.

UH Facilities Planning and Construction Project Manager for the renovation, Barry Simmons, says that every effort was made to minimize the impact of the project to the students, staff, and building. During the Spring semester, construction was limited to after school hours and weekends. Simmons also stated that precautions were taken to ensure campus safety during the renovation project. There was a security guard present during contractor work to help minimize impact to the building and campus. Daily custodial service after construction ensured a clean building for students and staff, and a daily site walk to confirm that there were no safety hazards to students or staff.

The restrooms were completed and opened on June 28, 2016.



LEEK STREET LOT RETURNED TO GREEN SPACE

The University of Houston has restored three temporary parking lots, returning them to the original green space. The University, in a five-year agreement with the Leek Street neighborhood, has been using the lots as temporary parking spaces. The agreement period has ended, and the parking lots are permanently taken offline and will no longer be used for parking.





PROJECTS IN DESIGN

THE CORE PROJECT: PROPOSED RENOVATION OF LEGACY BUILDINGS CREATES CENTENNIAL COURT

Renovations will yield classrooms, incubators, commuter dens, and collaborative co-working spaces. The core projects also include a facility program for new1000-1200 bed residential facility to replace the Quadrangle. The program was successfully submitted to the Board of



NEW FACILITY: FOOTBALL PRACTICE STADIUM



The Indoor Football Practice Facility & Weight Room will be located in the parking lot area across from the football practice fields on Holman Street. It is expected to be an 80,000 SF building in addition to a weight room and a 120 yard field with a ceiling height of 65 to 70 feet.

COMPONENT CAMPUSES

UHD Girard St. Welcome Center and Parking Garage

This addition gave the Downtown Campus its first dedicated, purposebuilt facility for testing, officially welcoming new students. This was an integral addition with a replacement parking garage, for a campus already challenged by tight spaces.



Completed: Fall 2015

UHD Science and Technology Building

A new building approximately 115,000 SF housing Computer Science, Engineering Technology, Natural Science, Research Labs and all required supporting spaces.



Estimated Completion: Spring 2019

UH Victoria Site Grading

When the Arlington Apartments were demolished, 234 piers under the building slab were below grade. It was determined that leaving the piers would provide additional support for the new buildings that will site on top



Completed: July 2016

UH Victoria RCED

The UH-Victoria Academic and Economic Development Building is a three-story, multi-use facility of approximately 63,000 square feet. It is relatively small but a wonderful design that enhances the quality of the UHV campus.



Completed: October 2015

UHCL Rec Center

In the design process for a new 78,000 square feet Recreation and Wellness Center. This facility will be a great addition to UHCL's expanding campus, student body, and programming.

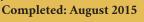


Estimated Completion: Fall 2018

CITY OF HOUSTON

Metro Sound Wall

FPC worked with the City of Houston METRO during the construction of the sound wall that was funded by the city and located on Scott Street.







CONSTRUCTION CONTINUES



The Health and Biomedical Sciences Building II (HBSB II) is noticeably taking shape. The 300,000 square foot building is scheduled for completion in the next 16 months, weather permitting.

Each week more concrete is being poured as forms are continuously moved to complete the next section of the nine story, state-of-the-art building. HBSB II will be directly adjacent to HBSB I and J. Davis Armistead, with hallways connecting the three buildings. "Research will be seamless across the buildings," remarked UH Facilities Principal Project Manager Trent Williams. In order to accomplish the smooth transition on the first floor, precast planks are being removed so that the elevations are at the same height.

MAXIMIZING POTENTIAL

Thorough planning was necessary not just to connect the buildings, but to make the most efficient use of the space and architectural specifications for the labs. Normally, mechanical equipment would be located at the top of the building, but labs need exhaust to go up, so they need to be as close as possible to the roof. On the other hand, classroom areas need a lot of air conditioning

hand, classroom areas need a lot of air conditioning to cool them, and the farther they are from the mechanical equipment, the more cubic feet of air duct space is required. In HBSB

II, the mechanical room is on the

sixth floor, maximizing space by allowing exhaust from the labs to travel up and air conditioning to travel up and down efficiently. After the mechanical floor plan was complete, this economical use of space left more available space for offices and an executive suite was added to the seventh floor.

On the third floor, two College of Pharmacy classrooms with the capacity for 200 students each are being built with no columns in the middle that would obstruct the views of the students.

Although this may not seem unusual, planning classrooms of this size with no columns was a challenge. HBSB II is designed so that there are no floors above those classrooms, eliminating the need for supporting columns in the middle of the class, thereby giving every student a great view of the front of the classroom and

the professor.

"NOW, RESEARCH WILL BE SEAMLESS ACROSS THE BUILDINGS."

> - Trent Williams, Project Manager





Even the support structure for the new building required a specialized design. The foundation for Armistead prevented the support columns for HBSB II from being vertical, so they were instead installed at an angle. The columns are just as sturdy and will be unnoticable when the building is complete.



The natural light in the auditorium style classrooms will create a productive learning environment.



At the top of the site, rebar towers over the floor that will soon be poured.



A new loading dock was created that will serve HBSB I and II.

SPREADING THE WORD

FACILITIES COMMUNICATIONS CONNECTS WITH STUDENTS



New Student Orientation

During the summer, UH Facilities Communications has been interacting with new students by attending twenty New Student Orientation events and making them aware of the 4 Ways to Fix-It process. Our goal is to educate incoming students to be able to submit a request including residence halls, classrooms or other public areas that may require our attention. The communications team also interacted with incoming honors students in May at the Scholars Invitational which

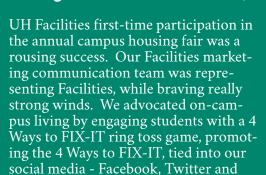
for selected students.
"These are great opportunities to show new students how supportive Facilities is of the campus community and that we are here to help." explains



Every incoming student for Fall 2016 received this magnet promoting UH Facilities gained over 200 followers this semester on Twitter and Facebook after continuous promotions. Follow us @UHFacilities

Housing Fair

Snapchat.



Students had to follow us on our social media in order to play the game. Prizes included keychains, water bottles, flashlights and umbrellas. We gave everyone a 4 Ways to FIX-IT keychain for participation. We educated the students about the 4 Ways to FIX-IT as each of them took their turn.

As a result of our efforts, more students now know about self-reporting facilities issues that they encounter. We hope to continue to promote the 4 Ways to FIX-IT so that more students can help us keep our campus community running at its best. Our team is excited to be able to share our updates with the students of the University of Houston as we continue to grow, maintain and upkeep our campus.









Water from UH20 stations ranked highest in a blind taste test.

During the annual nationwide RecycleMania competition, UH double filtered water from UH2O water stations was voted as the number one choice by participants in a blind taste test challenge. UH water competed against well known brands, Dasani and Ozarka. In order to promote the UH2O Water filling stations, UH Facilities organized a social media competition called Grin2Win. Participants who posted pictures with UH2O water stations were entered into a drawing to win a UH Facilities Umbrella made from recycled materials. Winners were awarded every week in April. This initiative increased student interest in Facilities while promoting sustainability and our water stations at the same time.

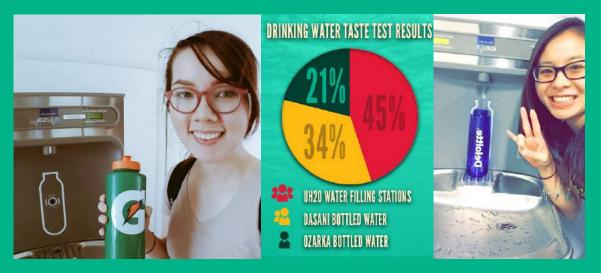


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