



# ENGINEERING

MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, LEED, ENERGY SERVICES, & COMMISSIONING

WDG | ENGINEERS

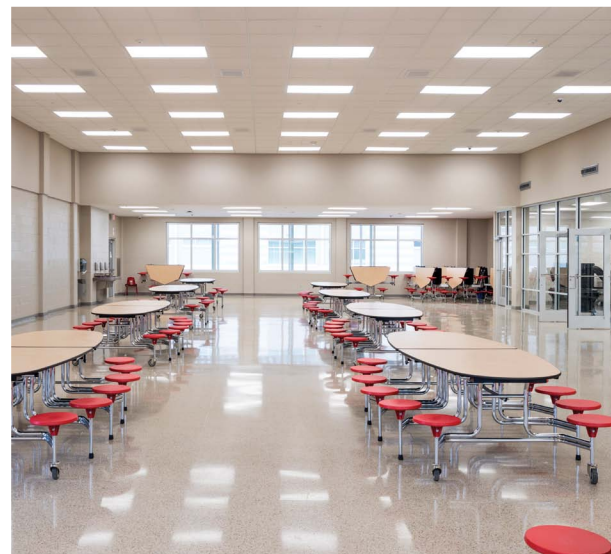


WDG | Engineers is committed to providing value-driven engineering services. Our engineering team works with every client to determine their goals for their building infrastructure. We are committed to designing projects that maximize the value our clients receive from their investment. We devote our talents and resources to completing projects on schedule and within our clients' budgetary constraints, providing real-time communication and customer service every step of the way.

# mechanical, plumbing, electrical & fire protection

WDG has extensive engineering experience in healthcare and hospitals, commercial buildings, data centers, college campuses, recreation complexes, hospitality, laboratories and research facilities, industrial buildings, governmental facilities, retail and mixed-use centers, education facilities and condominiums.

Our client list includes Ochsner Health System, Valero Energy Corporation, Honeywell International, Tulane University, Mercedes-Benz Superdome, Hotel Monteleone, Folger Coffee Company, and the Port of New Orleans.





# hospitality



## ROYAL SONESTA HOTEL

NEW ORLEANS, LA

WDG Engineers provided mechanical, electrical, and plumbing engineering services for a new rooftop health spa and Restaurant R'evolution at the Royal Sonesta Hotel and to the main kitchen in the Desire Oyster Bar. Design services included mechanical, plumbing, electrical power, lighting, fire suppression and detection. Other projects at the Royal Sonesta include emergency power, water intrusion studies, chiller replacement, cooling tower replacement, and multiple air handling unit upgrades.



## HOTEL MONTELEONE

NEW ORLEANS, LA

WDG provided mechanical, electrical, plumbing, and fire protection engineering services for a \$40,000,000 renovation of the Hotel Monteleone in the French Quarter over a four year period. WDG's work included renovations of the lobby, ballroom and famed Carousel Bar. Other projects at the hotel included facade restoration and updates, a new health spa, chiller and cooling tower replacements, electrical substation upgrades, air handling unit replacements, domestic water booster pump system improvements, water softeners, sprinkler system upgrades and kitchen renovations.

## WINDSOR COURT HOTEL SPA

NEW ORLEANS, LA

WDG Engineers provided mechanical, electrical, and plumbing engineering services for a conversion of upper floor meeting rooms and the guest rooms into a new 4,500 square foot health spa at the Windsor Court Hotel in New Orleans.



## PARAGON CASINO & RESORT

MARKSVILLE, LA

WDG provided mechanical, electrical, plumbing and fire protection engineering design for a 20,000 square foot casino floor expansion for the Paragon Casino. WDG assisted in the successful completion of the fast-track project, which was constructed and opened in 14 weeks. Other projects for Paragon include the Legends Steakhouse, Golf Clubhouse and Cart Facility, and the Fire Pump and Water Tower Upgrade.



# retail & restaurants



## DISTRICT DONUTS

ELMWOOD, LA

WDG provided mechanical, electrical, plumbing, and fire protection engineering services for the District Donuts Elmwood and Baton Rouge locations. Our engineering team coordinated restaurant equipment, grease exhaust hoods, fire alarm and suppression systems, and guided the selection of lighting fixtures.

### OTHER RETAIL & RESTAURANT PROJECTS:

- ARTZ BAGELS
- ACME OYSTER HOUSE SECOND FLOOR EXPANSION
- ARNAUD'S RESTAURANT EXPANSION
- CVS PHARMACY
- DRAGO'S SEAFOOD RESTAURANT ADDITION & RENOVATION
- PRIME FITNESS RX
- RESTAURANT REVOLUTION
- ROBERT FRESH MARKET
- WOOD FIRED BISTRO RENOVATION
- WENDY'S RESTAURANTS
- SMOOTHIE KING

## CITY GREENS

NEW ORLEANS, LA

WDG provided mechanical, electrical, plumbing, and fire protection engineering services for a new salad specialty restaurant in an existing high-rise building in the New Orleans Central Business District. Work included relocation of existing facilities, monitoring of energy usage and customized lighting design.



# breweries



## SECOND LINE BREWERY

NEW ORLEANS, LA

WDG provided mechanical, electrical, and plumbing engineering for the renovation of an existing 12,500 square foot building in Mid City. The program for Second Line Brewery included brewing and canning spaces, office spaces, and storage spaces.

## URBAN SOUTH BREWERY

NEW ORLEANS, LA

WDG provided mechanical, electrical and plumbing engineering design services for the development of a new brewery and tap room located in an existing warehouse space in New Orleans. The tap room is open to the public and includes a bar and seating area with views into the brewing facilities. Additional features include a walk-in cooler, restrooms, brewing and warehouse space, finishes, fixtures and partition. Infrastructure upgrades include new mechanical and utility rooms, an ADA-compliant front door ramp, lighting, power, HVAC and plumbing design.



## PARLEAUX BEER LAB

NEW ORLEANS, LA

WDG provided mechanical, electrical, plumbing engineering design services for the renovation and build-out of a craft brewery and taproom located in New Orleans' Bywater neighborhood.



# healthcare

## OCHSNER HEALTH SYSTEMS SOUTHEAST NEUROSCIENCE CENTER

NEW ORLEANS, LA

WDG has provided mechanical, electrical and plumbing engineering design services for additions and renovations within the following areas of Ochsner Medical Center:

- Vascular Laboratory
- Nursery
- Nephrology
- Nursing
- Labor and Delivery
- Dermatology
- Pharmacy (USP 797 compliance)
- Imaging (X-Ray, CT, MRI, PET Scan)
- Nuclear Medicine
- Electrophysiology
- Bone Marrow
- Transplant
- Infusion
- Cancer Center
- Ear Nose & Throat
- Urology
- Transplant
- OB Clinic
- Stereotactics
- Operating Rooms
- Stem Cell Laboratory
- Internal Medicine
- Psychiatry
- Cardiac Rehabilitation
- Emergency Department

In addition, WDG has provided various infrastructure improvements including switchgear replacements and upgrades, medical gas system improvements, and facilities for life safety and standby generator systems.

## EAST JEFFERSON GENERAL HOSPITAL GENERATOR REPLACEMENT

METAIRIE, LA

WDG provided electrical engineering services for the replacement of the 13.8kV switchgear at East Jefferson General Hospital in Metairie, Louisiana. The scope of services includes relocation of an existing standby generator, new generator controls on the two existing standby generators, new diesel fuel storage facilities, a new diesel delivery system, two new services from Entergy, and an interconnection agreement with the utility which will enable the hospital to test their standby generators at full load without any outages. The new diesel system enables the hospital to operate at its maximum electrical load of 5.5 MW for 7 days without refueling. All new facilities are elevated to approximately 12 feet above grade to mitigate flooding risk. The project was funded by CDBG and DHH, along with East Jefferson General Hospital.



## CHARITY & UNIVERSITY HOSPITALS CONSOLIDATION MASTERPLAN

NEW ORLEANS, LA

In 2003, the State of Louisiana contracted with NBBJ to develop a master plan to consolidate Charity and University Hospitals into a new state-of-the-art teaching hospital facility. WDG Engineers developed the mechanical and electrical engineering requirements for the Master Plan.

## SOUTHEAST NEUROSCIENCE CENTER

GRAY, LA

Southeast Neuroscience Center is a 15,000 square foot facility containing exam rooms, offices, and support spaces for a neuroscience clinic in Gray, LA. WDG provided engineering services from schematic design through construction observation.



## ADDICTION RECOVERY RESOURCES CLINIC

METAIRIE, LA

WDG provided mechanical, electrical and plumbing engineering design for a new 8,000 square foot Addiction Recovery Clinic containing offices, detoxification rooms, treatment rooms, and a counseling center. The clinic is accessible to daily patients as well as those in crisis.





# industrial & transportation



## NEW ORLEANS PUBLIC BELT RAILROAD CENTENNIAL RENOVATIONS

NEW ORLEANS, LA

WDG was selected by the New Orleans Public Belt Railroad's Board of Directors to provide engineering design services for the restoration and an addition to the organization's 100-year-old facilities. Located in Uptown New Orleans along the riverfront, work consisted of the Administration Building, Round-House Service Building, Storage Facility and rail car sheds to house antique coaches.

## MURPHY OIL QUALITY CONTROL LABORATORY BUILDING

MERAUX, LA

WDG provided engineering design services for a new blast resistant 15,000 square foot Quality Control Laboratory. The laboratory contains 21 chemical fume hoods and 15 general exhaust valves to maintain flow and pressure relationships in the main laboratory, hydrofluoric acid laboratory and knock engine octane test room. The HVAC system is a variable air volume system with chilled water cooling, SCR-controlled electric heating, and DDC controls for precise temperature, humidity, and air flow control. Special acid-resistant plumbing systems and an extensive laboratory gas distribution system were provided for this facility.

## ASSOCIATED TERMINALS OFFICE BUILDING ST. BERNARD PORT, HARBOR, & TERMINAL DISTRICT

ARABI, LA

WDG provided mechanical and electrical engineering design services for the major exterior and interior renovation of an existing shell office building.



## TURN SERVICES ADMINISTRATION & OPERATIONS COMPLEX

NEW ORLEANS, LA

WDG provided mechanical, electrical, and plumbing engineering services for the adaptive-reuse of a historical building located in the New Orleans Bywater. The new owners of the property converted the existing two-part building to office space. The facility includes regulatory compliance offices, sales offices and executive offices. It also includes space for tug boat monitoring and dispatch and the gathering of tug crew supplies as well as an area for boat engine maintenance. WDG was presented with an Award of Merit from AIA Louisiana, in the category of Restoration/ Rehabilitation/ Adaptive Reuse.



## VALERO MERAUX ADMINISTRATION BUILDING

MERAUX, LA

WDG provided mechanical, electrical, and plumbing engineering design services for a new 42,000 square feet administration building at Valero's Meraux campus. The building contains administrative offices, conference rooms, a breakroom, a training room, a main control room, and an emergency operations center. Additionally the program features a medical clinic and fitness center for employees.

## NEW ORLEANS INTERNATIONAL AIRPORT NORTH TERMINAL ENERGY MODELING & BUILDING ENVELOPE DESIGN

NEW ORLEANS, LA

WDG provided engineering services for Heery International. Scope of work included validating energy models provided by others and conducting periodic review of building envelope drawings and specifications.

## JULIA STREET CRUISE TERMINAL RENOVATION & EXPANSION

NEW ORLEANS, LA

WDG Engineers provided comprehensive engineering design services as well as project and construction management to the Port of New Orleans for the renovation and expansion of the Cruise Ship Terminal located at the Julia Street Wharf. From 2000 to 2002, WDG provided engineering design services for ongoing renovations to the Julia Street terminal which included a six-lane automobile and bus drive-in and drop-off area with lighted walkways, entrance canopy, additional waiting areas, ticket counters, new bathrooms and the design of a 12,000 square foot baggage pick-up area.

## FOLGERS - VARIOUS PROJECTS

NEW ORLEANS, LA

Since 2009, WDG has been providing mechanical, electrical, and plumbing engineering design services for dozens of projects for Folgers facilities, owned by The J.M. Smucker Company. The projects—including office renovations, warehouse additions, and HVAC design for two new administration buildings—were completed for various Folgers facilities located throughout the Greater New Orleans area.



# education & community



## BELLE CHASSE HIGH SCHOOL & MIDDLE SCHOOL

BELLE CHASSE, LA

WDG provided mechanical, electrical, and plumbing engineering services for the design of several new athletic buildings for the Belle Chasse public schools. Work included a new concessions and restroom building at Belle Chasse Middle School and a relocated baseball field on the high school's campus. High school facilities include a new field house, press box, concessions area, locker rooms, bleachers, dugouts and restroom areas for the women's softball team and the high school football team. Middle School project components include a concession/kitchen prep area, locker room facilities, deck/patio viewing area and restrooms.

## ALICE M. HARTE ELEMENTARY SCHOOL

NEW ORLEANS, LA

WDG was selected by the Recovery School District in association with Orleans Parish School Board to provide mechanical, electrical, and plumbing engineering design and construction contract administration services for the replacement charter school. The school was designed and constructed to meet LEED Silver certification.



## MAIN LIBRARY RENOVATIONS

NEW ORLEANS, LA

Due to a combination of Hurricane Katrina damage and deferred maintenance over fifty years, the City of New Orleans Main Library building required various repairs. WDG surveyed existing conditions and provided a scoping document with budget estimates to establish the final scope of work. WDG also provided full construction documents for mechanical improvements of ten air handler units, replacement of the electrical switchgear, elevator upgrades, improved security, as well as interior and exterior renovations of the library to remove barriers and improve ADA accessibility.



## TULANE UNIVERSITY CENTRAL PLANT

NEW ORLEANS, LA

WDG provided mechanical and electrical engineering for the replacement and renovation of the electrical switchgear in the central plant damaged in Hurricane Katrina. This resulted in increased capacity of the chilled water plant and improved services for the entire campus-wide chilled water distribution system (by means of engineering techniques and automated controls). Included in this work was the demolition of the Logistics Building and construction of an addition to the Power Plant. The new addition accommodates a 4500 ton chiller, pumps, cooling towers, control system, 480V and 4160V electrical switchgear and space for logistical support.

## MAHALIA JACKSON EARLY CHILDHOOD LEARNING AND COMMUNITY CENTER

NEW ORLEANS, LA

WDG provided mechanical, electrical, plumbing and fire protection engineering for the complete renovation of a 50,000 square foot elementary school, converting it into the Mahalia Jackson Early Childhood Learning and Community Center.

## XAVIER UNIVERSITY OF LOUISIANA

NEW ORLEANS, LA

WDG Engineers was hired by Siemens Building Technologies, Inc. to coordinate the implementation of a demand flow chilled water pumping system test at Xavier University. Analysis of flow diagrams was conducted to determine the required modifications for variable flow system implementation. Additionally, WDG performed pressure loss calculations associated with required piping modifications and developed schematic drawings of the central plant chilled water system.



# sports & recreation



## ROSENWALD CENTER - MULTI-USE COMMUNITY CENTER NEW ORLEANS, LA

WDG was selected to assess damages and provide a Comprehensive Damage Report for the City of New Orleans and FEMA after the building was severely damaged due to Hurricane Katrina. WDG provided engineering services in the design of the new facility, and the coordination of the repairs to the existing pool.

The new facility incorporates indoor basketball courts, weight rooms, multi-purpose rooms, snack bar areas and public meeting rooms. Outdoor facilities include the pool and pool house, a baseball field, children’s play area and a walking track. The complex is designed to exceed the current code requirements for disaster durability so that it may be utilized as a storm shelter in the event of a hurricane.

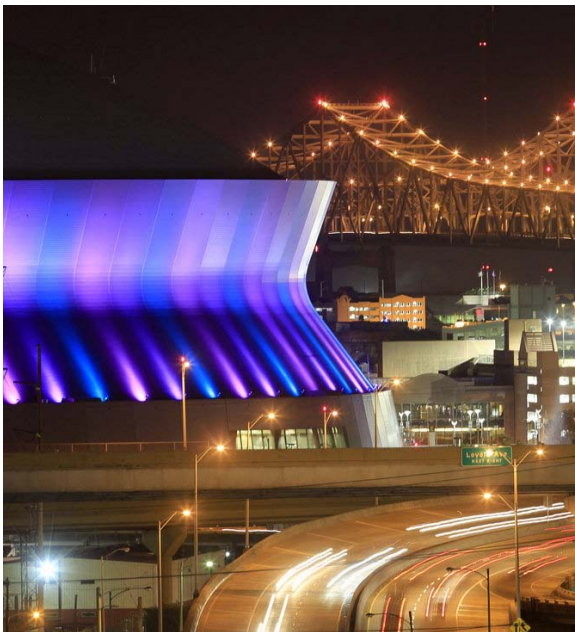


## ZEPHYR FIELD BASEBALL STADIUM NEW ORLEANS, LA

WDG provided electrical engineering services for modifications and upgrades to the lighting and power systems at Zephyr Field. Other projects with Zephyr Field include plumbing and electrical engineering for renovations to the administrative offices.

## MERCEDES BENZ SUPERDOME - NFL STADIUM NEW ORLEANS, LA

WDG designed mechanical, electrical, plumbing systems and fire protection improvements for the 2009-2011 Superdome Enhancement Project. Work included the renovation and expansion of the plaza concourse with additional concessions and toilet facilities, the addition of two event floor level clubs, relocation of the press box to the upper level, and the addition of new suites where the press box was located. Other mechanical and electrical work included food service additions and modifications, HVAC modifications, addition/renovation of eighteen public restrooms to include high efficiency/low water consumption water closets, urinals, and lavatories, lighting upgrades, LED exterior lighting system design, and substation replacement. Code related improvements included modifications to facilities for ADA compliance, fire alarm system work, and sprinkler system work.



## CHAMPIONS SQUARE STADIUM NEW ORLEANS, LA

WDG designed mechanical, electrical, and plumbing system improvements, including fire protection, for a 121,000 square foot outdoor festival venue, which opened in August of 2010 as a tribute to fans following the Saints Super Bowl XLIV. WDG provided engineering design solutions to convert the existing New Orleans Center building into an open-air assembly area. Infrastructure design included electrical and plumbing systems for the sound stage and various LED screens, concessions, and on-site permanent restroom facilities.



# commissioning & energy

## COMMISSIONING (Cx)

WDG Engineers has been a leading provider of commissioning services for LEED accreditation and building efficiency in the Gulf Coast region since 2009. Our engineers are experienced in current LEED practices and regularly work with architects, building owners and facility managers to provide solutions for optimal systems performance.

Commissioning bridges the gap between the design team and the construction team, creating a system of professional engineering oversight for commonly overlooked details in the mechanical and electrical systems.

WDG’s commissioning team is experienced in working with projects in all industries. Working within LEED guidelines, we act as an independent consultant to help the owner both receive appropriate LEED certification for their structure, and also have a building that performs at it’s most efficient. Our commissioning agents work independent of design and construction teams, representing the owner, to help create a building that performs as it was intended well into the future. Our experts have worked on projects of all sizes to provide independent consultation per the standards of LEED commissioning.

WDG’s engineering team works with professional services firms from the advent of a project to consult on best practices for LEED Fundamental and Enhanced commissioning to provide a plan to the owner.



### CENTURY LINK

MONROE, LOUISIANA

WDG provided LEED fundamental and enhanced commissioning services for the 300,000 square foot CenturyLink Technology Center located in Monroe, LA. The scope included developing a commissioning plan and building envelope commissioning.



## ENERGY SERVICES

WDG Engineers is committed to improving building performance and energy efficiency through sound engineering and applied building science. Our Energy Team has conducted over 500 energy audits, totaling over 10 million square feet of residential, commercial, and industrial space. We use high-quality analytics and diagnostics to make cost-effective recommendations and provide mechanical design and construction management services to realize energy, water, and monetary savings. We will work with utility, state, and federal programs to secure financial incentives.

### 909 POYDRAS

NEW ORLEANS, LA

WDG provided mechanical, electrical, plumbing, fire protection and network design engineering for the renovation of the 34th and 36th floors at 909 Poydras Street. The total area of renovation is approximately 45,000 sf. The project included full network design.

### VALERO MERAUX ADMINISTRATION BUILDING

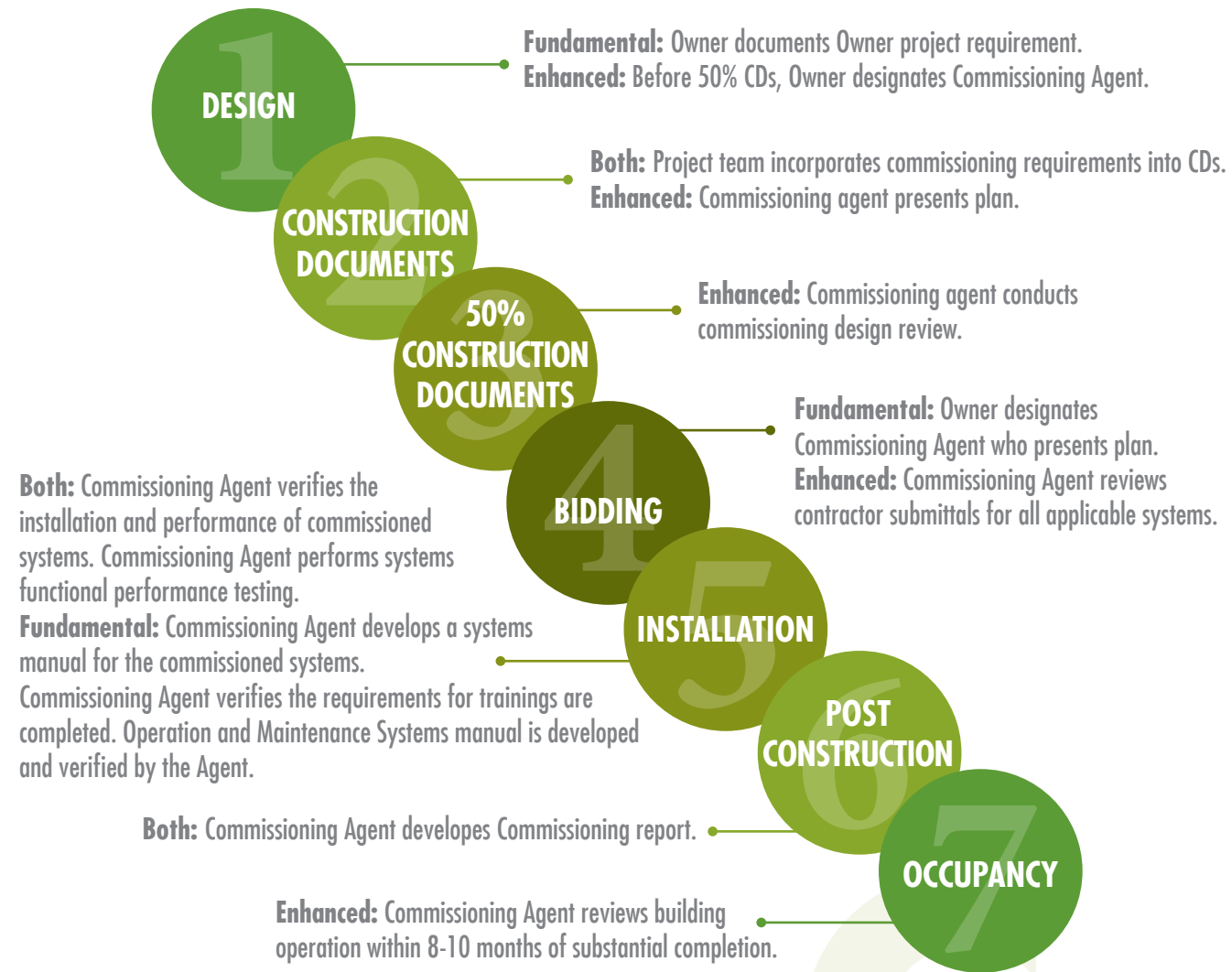
MERAUX, LA

WDG provided LEED fundamental and enhanced commissioning services for the 42,000 square foot new administration building at Valero’s Meraux campus. The scope included developing a commissioning plan and building envelope commissioning.



# LEED

## COMMISSIONING CREDITS



## engineering services

### MECHANICAL

Heating, Ventilation and Air Conditioning  
Temperature and humidity control  
Steam systems  
Hot water systems  
Compressed air systems  
Chilled water systems  
Laboratory gas and fume exhaust systems

### ELECTRICAL

Lighting  
Generation systems  
Power flow analysis  
Medium voltage  
Low voltage  
UPS systems  
Data centers  
Communication systems  
Arc flash studies

### PLUMBING

Domestic Water Systems  
Water Heating Systems  
Sanitary Waste and Vent Systems  
Laboratory/Acid Waste and Vent Systems  
Oil and Solid Separator Systems  
Process Water Systems  
Fire Protection Systems

### ENERGY EFFICIENCY/BUILDING PERFORMANCE

Energy Benchmarking and Portfolio Review  
Energy Auditing  
Energy Modeling  
Green Building Certification  
Commissioning  
Retro-Commissioning  
Construction Management  
Quality Control Inspections

## safety & efficiency

We make life safety a priority and design all facilities with energy efficiency in mind. Our MEP engineering team provides building commissioning and retro-commissioning services to owners and clients of all types in and around New Orleans and the Gulf South. To learn more about maintaining an efficient, cost-effective and comfortable facility, please see our information on LEED Commissioning Services.

## damage assessments

### ORLEANS PARISH SCHOOL BOARD SCHOOL ASSESSMENTS AND ASSOCIATED HURRICANE KATRINA REPAIRS

WDG was selected by the Orleans Parish School Board for engineering design and construction management services for eleven Hurricane Katrina damaged schools. WDG's responsibilities included the establishment of scope, facility and roof inspections, reviewing and analyzing FEMA paperwork, engineering design and placement of temporary equipment and repairs. The schools included were: Warren Easton High School, Ben Franklin High School, Lusher Elementary School, Hansberry School, St. Simon Peter, Bethune, Priestly, Our Lady of Lourdes, Eleanor McMain, Alice M. Harte, and Philis Wheatley. WDG had direct contact with FEMA representatives during these projects and coordinated with FEMA on all temporary facilities.





WDG | ENGINEERS

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WDG is certified by the City of New Orleans  
as a State and Local Disadvantaged Business  
Enterprise (DBE) and by the State of Louisiana as  
a Small Entrepreneurship (Hudson/SE) vendor.

For further information about WDG's work, please visit [www.wdgnola.com](http://www.wdgnola.com)  
or check us out on social media

