

<u>EDUCATION</u>	UNIVERSITY OF THE PHILIPPINES Bachelor of Science in Civil Engineering	Manila, Philippines 1982
<u>LICENSES</u>	Registered Professional Civil Engineer in New York, California, Pennsylvania, Connecticut, District of Columbia, Arizona, Florida, Georgia, Hawaii, Kansas, Massachusetts, Missouri, North Carolina, Nevada, Texas, Washington, Virginia, Ohio and the Philippines.	
<u>PROFESSIONAL ASSOCIATIONS</u>	<p>Past-President, Structural Engineers Association of New York (SEAoNY); Member, SEER Committee</p> <p>Certified in the Practice of Structural Engineering, Structural Engineering Certification Board (SECB)</p> <p>Member, American Society of Civil Engineers (ASCE)</p> <p>Member, American Concrete Institute (ACI)</p> <p>Member, The Architectural League of New York</p> <p>Member, CoreNet Global</p> <p>Member, Vertical Construction Business Practice Committee of American Council of Engineering Companies New York Metro Region (ACEC-NY)</p> <p>Member, 2018 Code Revision Managing Committee of New York City Department of Buildings (representing SEAoNY)</p> <p>Member, SEER Committee of National Council of Structural Engineers Associations (representing SEAoNY); Past Member of Board of Directors 2015-2017</p> <p>Member, Healthcare Committee of New York Building Congress</p>	
<u>EXPERIENCE</u>	GILSANZ MURRAY STEFICEK PARTNER	May 2000 to Present
	<p>Staten Island University Hospital Central Utility Plant - Staten Island, NY GMS is working with Northwell Health to design a new 12,000 sf Central Utility Plant building with new chillers, boilers, pumps, switchgear, cooling towers and generators. The new building will be built on piles.</p> <p>12 West 48th Street – New York, NY GMS is providing structural engineering services for this new 24,000 sf, 4 to 5 story building plus cellar retail building with three solid walls and a detailed curtainwall at storefront.</p> <p>Tom Ford, 680 Madison Avenue – New York, NY GMS is providing structural engineering services for the renovation of this retail space on upper Madison Avenue in NYC. The work includes creating a new double-height space at the entry, design of supports for equipment and a new safe as well as design for a new floating stair.</p> <p>Private Residence in Greenwich Village– New York, NY GMS provided structural engineering for the conversion of a 60' by 70', 4-story plus basement office building on a corner-lot in a Landmarked area of Greenwich Village,</p>	

Manhattan into a single family residence. The work included 20 feet of excavation and underpinning of the perimeter masonry walls for the construction of a full length pool, removal of 3-floors of interior masonry bearing walls to be replaced with new steel columns and foundations, partial slab replacement to achieve increased ceiling heights, and upgrading the existing roof to an occupiable space.

9/11 Tribute Center, 88 Greenwich Street, New York, NY

GMS provided structural design services for this 40,000 square foot gallery fit-out to relocate the 9/11 Tribute Center. Services included designing structural supports for a new 2-story elevator, two new stairs, infill of existing stair openings as well as reinforcement of floor framing for Public Assembly live loads. Design also included support for permanent art installations and exhibits. The center will serve as an educational and inspirational space for visitors.

Memorial Sloan Kettering Cancer Center Gamma Knife – New York, NY

GMS is providing structural engineering services to reinforce the existing structure to support the installation of gamma knife radiosurgery equipment.

Staten Island University Hospital Central Utility Plant - Staten Island, NY

GMS is working with NSLIJ to design a new 12,000 sf Central Utility Plant building with new chillers, boilers, pumps, switchgear, cooling towers and generators. The new building will be built on piles.

Gensler NYC, 1700 Broadway, New York, NY

Renovation of 125,000 sf for this global architectural firm's NY headquarters. The office includes 5 floors of typical workplace, conference rooms, town hall public assembly spaces, and pantries approximately 95% open to 5% closed work space. The floors are connected with a large atrium containing four (4) individual stair runs, suspended walkways, and a visualization theater to display the firm's projects.

PNC Bank Branches – Various Locations

Since 2004, GMS has been providing structural engineering services for the Bank Branch Roll-out in NY, NJ, VA, DC, MD, DE, NC, GA, OH, KY, PA, FL, MI, IL and WI, adapting regional prototype designs for new PNC Bank Branches. To date, we have designed over 200 high performance bank branches, each about 5,000 SF. All branches of PNC Banks are LEED™ Certified.

Eaton Hotel - 1201 K Street NW, Washington, D.C.

GMS is a member of the redevelopment team working with this Hotel Company to establish their first property in the US. This hotel is composed of a nine story tower constructed in 1962 with a covered roof top pool with integrated below-grade parking garage and a five story building constructed in 1942.

JP Morgan Chase New York HQ – 270 Park Avenue, NY, NY

Provide structural design services for the phased Tenant fit-out and Infrastructure Upgrade for the approximately 2,000,000 square foot 270 Park complex comprising a

52 story tower along Park Avenue and a 14 story building along Madison. The project includes the total gut and renovation of all the floors for the use of the various JPMC units and the total gut and replacement of the building infrastructure. The scope included the construction of a 5000 square foot auxiliary chiller plant on the 11th floor set back of the Madison Building and construction documents for the repair of the underside of the building which is built over the Metro North tracks. The project when completed is projected to have platinum LEED™ Certification.

Newark International Airport – Newark, NJ

Preparation and submission to the Port Authority of structural calculations for extension of the handrails and food counters for three eatery expansions: Currito Cantina, Earl of Sandwich and Ruby Tuesday all in Terminal A.

Lenox Hill Hospital – Roof Mounted 1500kw Emergency Generator

This project involves the design of supports and dunnage for a new generator on the roof of Main/Uri. Several existing columns in Main will be reinforced to accommodate the generator load. GMS also designed the supports for the fuel oil line rated encasement in Wolman and supports for the new bus ducts to the new MERs from 3rd to 12th floors and conduit supports from the generator level to 13th floor in Lachman.

Jimmy Choo – Hawaii, Texas, Nevada, New York

Since 2013, GMS has been providing structural engineering services for new Jimmy Choo retail locations in several states. The projects have included design services for storefront supports, seismic supports for millwork shelving, mechanical equipment supports for seismic loads, and structural supports for large chandeliers.

Celine - 870 Madison Avenue, NY, NY

GMS provided structural engineering services for the renovation of 4500 sf on the lower floors of this townhouse for Celine's Madison Avenue Flagship store. The new store includes a new architectural stair up to the second floor. GMS designed the bracing for the new stair opening, reinforced the retail floors for an increased deflection requirement and provided structural demolition drawings and structural special inspection services.

Prada – 595 Madison, 575 Broadway, and Tysons Galleria in Mclean, VA

Since 2012, we have provided structural engineering services for Prada retail locations. The interior fit-outs have consisted of the structural design of new stairs, storage mezzanines, display cases, storefronts, infill of existing openings, and design modifications to an existing opening to accommodate a new stair.

Longchamp - 713 Madison Avenue, New York, NY

713 Madison is a gut renovation of a 5-story, mixed-use, 7500 sf townhouse. There is an addition to the rear consisting of a total square footage of 4000 sf, as well as a one story penthouse of 1100 sf. The existing wood framing was replaced with steel and concrete on metal deck, and the rear addition has similar floor construction on CMU

bearing walls. The new roof addition is constructed of cold-formed steel. The entire structure is placed on 9 inch steel encased concrete piles.

The SculptureCenter – 44-19 Purves Street, Long Island City, Queens, NY

The SculptureCenter is located in a former trolley repair shop in Long Island City and the new renovation was completed in October 2014. The project created a larger, more accessible facility including a new 2,000 square foot, one-story entrance lobby with bookshop, coatroom, seating area, and restrooms; an elevator and stairway to the lower level galleries.

Microsoft Pop-Up – New York, NY

GMS provided structural engineering services for the renovation of the storefront, exterior signage, light supports, ceiling, and MEP equipment to create the new 2,500 sf pop-up shop, which coincided with the launch of the Windows Surface tablet.

Lenox Hill Hospital – New 208V Electric Service

Also known as the 5th take off, this project involves the installation of a new BV-9 Con Edison Bus Vault along 77th Street. The project involves interaction with the MTA, the DOT, and with Con Edison as well as the design of the vault, MERs and equipment supports. GMS will also perform the Structural Special Inspections for the work.

685 Third Avenue – New York, NY

GMS provided structural engineering services for the renovation of the lobby of 685 Third Avenue at 44th Street. The project involves the creation of a double height lobby space, a new entry canopy, new lobby stairs, new ADA elevator and installation of new architectural feature walls, as well as, renovation of the adjacent 4,000sf public park which includes a 27-foot tall living wall and water feature along the entire 100-foot long property line at the East side of the park.

Lenox Hill Hospital – Interventional/Surgical Suite 11F Uris

The project involves the design of a new Hybrid OR at the 11th Floor of the Uris Building. The scope also includes the design of supports for new MEP equipment to be installed in the terrace of the West Building and reinforcement of the existing framing.

Artist's Foundation - 745 Washington Street, New York, NY

Complete renovation of a 9,900 sf, two story townhouse for use as the Foundation headquarters. The structure was reinforced to support the artist's sculptures and a new green roof over most of the surface. The two large existing skylights were replaced with "eyebrow" skylights which also support extra soil and planting.

Lenox Hill Hospital – Electrical Emergency Power Separation of Branches

GMS designed the support of conduits and equipment for the emergency separation of electrical branches. The work is located in the Uris, Lachman and Wolman Buildings and at the MERT.

HELP 1 Family Residence - 515 Blake Avenue, Brooklyn, NY

Rehabilitation of the Help 1 Family Residence housing complex includes 200 dwelling units enclosed within two, 3-story buildings that face each other across a large central courtyard. The focus is upgrading the residential buildings and portions of the administration building.

Empire State Building – New York, NY

Provide structural engineering services for a seismic assessment study.

Bank of America Call Center – Providence, RI

Structural design for the rehabilitation of a 200,000 square foot steel framed building into a call center. The scope of work included the design of dunnage for 10 roof top HVAC units, reinforcement of beams and columns for the additional load, new stairs, elevator shafts, loading docks and equipment foundations.

Bank of America – 40 West 57th Street, 28th Floor, New York, NY

Structural review of existing slab for proposed UPS loads.

Commerce Bank – Various Locations

Renovation and upgrade of various bank branches throughout New York and New Jersey.

CitiGroup Inc. – 399 Park Avenue, New York, NY

Structural work associated with the renovation of 2 floors of office space. The scope of work included the review and reinforcement of the lateral system on the second floor as a result of the removal of an existing beam for a stair opening. Other work included the design of the monumental stairs and handrails, new elevator openings and roof equipment dunnage.

Lenox Hill Hospital – Replace Cobalt with Linear Accelerator and Renovate Suite (Tomotherapy)

The project involves the design of foundations for new tomotherapy equipment and lead wall and ceiling shielding supports. GMS is also performing the Special Inspections for the project

METLIFE Building – 575 Fifth Avenue, NY, NY

Provide structural design services for the gut renovation of the lobby and retail spaces from the concourse to the 3rd floor. The design accommodates the reinforcement of the existing structural elements as part of the re-configured space, which removed floor slabs and walls. Eight (8) new escalators and a new elevator to serve the concourse up to the 3rd floor are part of the project as well as a 40' high interior feature wall and a new curtain wall for the retail spaces.

Lenox Hill Hospital – IT Closets

The project involves the conversion of an existing elevator shaft at Main into an IT closet. This included infill of the shaft at all floors and design of supports for

equipment and conduits/ductworks. The scope included the design of supports for new MERs. The project also involved the design of new roof dunnage for new chillers and AHUs. GMS is also performing the Special Inspections

Empire State Building Co-Generation Plant Study – New York, NY

Perform a Structural Design Study to reinforce the existing cooling tower framing on the west side of the Empire State Building to support an intermediate platform below the cooling tower platform to support a proposed co-generation plant. Performed coordination with the MEP engineers, the Architect and the contractor

Empire State Building Electrical Upgrade – New York, NY

Provide structural engineering services for the conversion of an existing air shaft into electrical closets for the new bus duct from the concourse level to the 80th floor. The scope includes the stabilization and removal of the existing duct and the addition of new platforms, bus duct supports and new door openings at each floor level.

Lenox Hill Hospital – CATH Lab Upgrade 11F Wolman

Involves the design of ceiling and base supports for Phillips Cath Lab equipment, UPS and MEP equipment for the Upgrades of Labs B, C, D, E and F. GMS is also performing the Special Inspections.

Merrill Lynch HVAC/Chiller Plant Upgrade – Levittown, PA

Provide structural design services for a new chiller platform to support a new 40,000 pound chiller plant, pipe and conduit supports and foundations for additional pumps and HVAC equipment. Review an existing interstitial steel grid to support additional chiller pipes and provide additional reinforcement.

Merrill Lynch 2N Plant UPS Room – Levittown, PA

Provide structural design services for a new interstitial steel grid to support new electrical conduits from UPS and electrical equipment. Provide stability details for the existing structural walls and columns during excavation work for the electrical conduits in the new UPS Room. The new room is approximately 5600 sf.

Lenox Hill Hospital – Siemens 1.5TR MRI Upgrade

Design of framing supports for a new roof access opening for rigging the new equipment; design of re-installation of shielding and design of new dunnage for roof top equipment.

Lenox Hill Hospital – Interventional Radiology Lab

Design of ceiling and base supports for new IR Lab equipment on the 3rd Floor of the Uris Building. The scope also includes MER equipment supports and RTU supports.

Pfizer World HQ Generator Project – New York, NY

Structural design for the installation of 1500 & 2000 KW emergency generators on the roofs of buildings 219 E 42nd Street, 235 E 42nd Street and 685 3rd Avenue forming part

of the Pfizer World HQ Campus.

Feasibility Study for AIG Permanent Generator Plant – 70 Pine St., NYC

Structural design services to review schemes for the creation of a permanent generator plant utilizing 4 – 2000 KW generators within designated interior spaces inside 70 Pine Street. The study included preliminary design of supports and dunnage for the generators, load banks switchgear and other electrical and mechanical equipment. The study also included preliminary blast design for the walls, floors and ceilings of the generator plant.

Lenox Hill Hospital – 76th Street Ramp and ADA Entrance

The scope involves the design of supports for a new ramp at the Main Entry on 76th Street including the supports for a new automatic floor mounted door openers. GMS performed the Special Inspections.

Lenox Hill Hospital – 14th Floor Wolman Chiller Study

Review of Capacity of Wolman for proposed chiller plant. This study was undertaken in conjunction with the Facilities Planning Project on-going at the time.

Lenox Hill Hospital – 480V Transformer Vault Study

The scope involves the structural study for the feasibility of supporting new 480V transformers above the 3rd floor AHU on the Main Building. The report will include preliminary structural framing to understand the scope of work required in reinforcing the base building structure to support the new loads.

WEPN Transmitter Building – Secaucus, NJ

Provide structural design services for the slab on pile foundation of a new 1,000 square foot pre-cast transmitter building located in the meadowlands area of Secaucus. The design also includes pile supported pads for the transformer and satellite antenna.

Tomotherapy Suite – Hackensack University Hospital Cancer Center, NJ

Provide structural design services for a new 1,200 square foot tomotherapy suite. The design includes a lead brick shielded wall and ceiling, foundations for the equipment gantry and patient couch and the lead shielding.

Lenox Hill Hospital 3T MRI – New York, NY

Provide structural design for the reinforcement of the existing 3rd floor structure to support a new 10,000 pound 3T MRI including an isolated concrete floating slab and a radiation shield support for the walls, ceiling and floor.

NY Cardio – New York, NY

Provide structural design for the reinforcing of 2 floors to support medical equipment and high density file systems.

Visiting Nurse Service of NY – 1200 Waters Place, Bronx, NY

Structural design of steel roof dunnage for new AHU equipment supports for ceiling mounted folding partitions, framing for new slab openings, supports for glass doors and supports for a new high density filing system.

Visiting Nurse Service of NY – 241 37th Street, Brooklyn, NY

Structural design for the supports of new roof top equipment including reinforcement to the existing roof framing and supports for a new ceiling mounted folding partition.

Visiting Nurse Service of NY – 1250 Broadway, New York, NY

Structural review of existing supports for movable partitions on the 6th and 10th floors and serve as engineer of record.

Staten Island University Hospital – Staten Island, NY

8 story, 130,000 square foot hospital and a 40,000 square foot one story addition to an existing wing.

Rehabilitation of Engine Co. 235-206 Firehouse – 206 Monroe St, Brooklyn, NY

Structural Design for the upgrade and rehabilitation of an existing landmark-type firehouse constructed in the late 1800's to meet new equipment requirements and specifications.

Rehabilitation of Engine Co. 217 Firehouse – 940 DeKalb Ave, Brooklyn, NY

Structural Design for the upgrade and rehabilitation of an existing landmark-type firehouse constructed in the late 1800's to meet new equipment requirements and specifications.

Rehabilitation of Engine Co. 259 Firehouse – Long Island City, NY

Structural Design for the upgrade and rehabilitation of an existing three story firehouse with cellar originally constructed in the late 1800's to meet new equipment requirements and specifications. The design involved the replacement of the existing apparatus floor to support HS20-44 and Tower Ladder Truck equipment, relocation of interior columns to provide an additional vehicle bay and upgrade of foundations and upper floor framing.

Farrell Limousine Services – New York, NY

Assessment and preparation of repair documents to bring the existing structure into conformance with the building code as a parking facility.

Taino Towers Central Refrigeration Plant Upgrade – Harlem, NYC

Provide structural design services to review schemes for the rigging of the new chiller plant equipment, including infilling of openings thru the waffle slab structure created to facilitate rigging of the equipment. Design of equipment pads and foundations.

Con Edison 24th Street Sub Station – New York, NY

Design of a 4 story, 100 foot high sub-station. Structure is composed of composite

steel beams, slab on metal deck and concrete encased columns. The lateral system was made up of braced frames. Foundations were a combination of 40 ton mini-piles and piers bearing on the bedrock. The design had to take into consideration the impact of 300 ton transformers on the adjacent 6th avenue subway. Performed coordination with the MEP engineers, the Architect and the below-ground utilities groups of Con Edison.

NBC Transmitter Room – New York, NY

Structural Engineering Services for the support of equipment on the 77th and 78th Floors of the Empire State Building

WPIX – New York, NY

Structural Engineering Services for the upgrade of shaft 95C from the 77th through 84th floors of the Empire State Building. Support of WPIX RF lines on the 84th Floor as well.

Empire State Building Visitor Center Renovation – New York, NY

Review of the attachment of Handrail posts to the existing 2nd Floor slab.

Empire State Building Elevator Emergency Power Project – New York, NY

Structural design of supports for new risers from the first floor to the 84th floor and pull boxes on floors 22, 27, 46, 60, 68 and 84 within the shaft; Structural design of a new platform on the 27th floor for access to the new ATS; Structural modification of existing platforms; Review of existing original structural design plans of floors 10, 22, 27, 46, 60, 68, and 70 for impact of new equipment loads; Review the existing original structural design plans of the 83rd floor for impact of new loads from a new generator and electrical equipment; Review the existing original structural design plans of the 84th floor for impact of new loads from a new oil tank, electrical equipment and new block walls located in various locations within the floor.

Empire State Building – New York, NY

Provided assistance with the evaluation of the existing building steel to allow for piping supports, anchoring and expansion for the proposed replacement medium pressure steam risers.

Empire State Building, Lower Lobby Level – New York, NY

Design of seven slab infills on the lower lobby level north-east corner (former Houlahan's space) and provided repair specifications for various holes in the ground floor slab.

Empire State Building, Elevator G – New York, NY

Investigation of the capacity of the existing 82nd floor building beams and elevator sheave beams to support the elevator cab and equipment (G Bank) as a result of an increase in weight due to the renovation of the elevator cab.

Empire State Building – CBS, New York, NY

Review floor structure at the existing 85th floor to confirm capacity to support the proposed loads from a HDTV combiner and a High VHF combiner.

EISAI Inc., NJ Relocation – Woodcliff Lake, NJ

Provide structural design services for interior tenant build out of approximately 208,000 square feet of new office space. Review core and shell structure to support high density file systems, movable partitions, kitchen equipment, openings through the slab for ducts and pipes, HVAC and mechanical equipment and rolling grille doors and provide reinforcement and additional steel as required.

Trey Beck Loft – Hudson Street, New York, NY

Provide structural design for the renovation of a two story apartment in TRIBECA. The scope of works includes the removal of parts of the 8th floor to create a two story living space, the design of a glass bridge, reinforcing the roof structure to support a new swimming pool and terrace.

LaGuardia Community College Garage – Queens, NY

Structural Condition Survey of a 1920's one-story building with basement.

Instituto Cervantes, Amster Yard – 211-215 East 49th Street, New York, NY

Structural design of a Landmark Five Building, 6 storey campus including the addition of a basement auditorium on the existing footprint of the facility while preserving the original exterior façade and walls.

Carlisle Factory – Long Island City, NY

Structural design for existing reinforced concrete flat slab building, including new floor opening for equipment conveyor belt, roof equipment dunnage, repair of lintels and spandrel beams at the existing façade. Analysis to determine capacity of flat slab was performed using STAAD finite element analysis.

New Utrecht High School – Brooklyn, NY

Structural repair and upgrade of a 1920's building. The scope included the repair/replacement of steel beams at the natatorium ceiling, repair of brick walls and repair/replacement of the entry stairs.

The Association House, Bldg. 66 – Creedmoor Hospital, NY

Structural design for the rehabilitation of an 80 year old, 2 story concrete building for upgrading to a modern housing facility.

Central Taxihold Facility Upgrade, JFK International Airport – Jamaica, NY

Design of 2 one-story buildings using load bearing CMU walls and supported on piled foundations.

111 East 78th Street – New York, NY

Rehabilitation and enlargement of a landmarked 6 story brownstone including the design of a new lateral load system, new concrete and metal deck floors on steel

beams, new passenger elevator, reinforced concrete load bearing CMU walls for the enlargement and excavation of the basement and underpinning of the existing foundation walls.

138 West 83rd Street – New York, NY

Structural upgrade of a two-story landmarked brownstone with basement for conversion into a private garage with a vehicle elevator and offices.

610 Park Avenue – New York, NY

Structural design for the renovation of a penthouse apartment including the addition of a new pavilion and a landscaped terrace.

DO and CO New York Catering Facility – Queens, NY

Renovation of one-story building for conversion into a flight service kitchen, including the rework of the existing reinforced concrete grade beams, piles caps to accommodate new equipment lifts, new equipment supports on the roof and ceiling, design enlargements to structure.

Shoys Project – St. Croix, US Virgin Islands

Structural design for “hardscape” features for a 15 acre formal garden. Includes parking areas, retaining walls, swimming pools, terraces, walkways, pergolas, pathways, fountains, auxiliary and support buildings.

TECHNOPLUS CONSTRUCTION CORP.

October 1990 to April 2000

STRUCTURAL ENGINEER

USAID Ports Development Project – Philippines

Structural design for nationwide ports program as part of the USAID grant to the Philippines. Includes feasibility studies and site surveys.

United Airlines Corporate Offices – Philippines

Structural design for rehabilitation and upgrade of corporate, airport traffic and cargo offices.

Major Homes – Cabuyao, Laguna, Philippines

Structural design and construction supervision of 350 townhouse units and site development of a 25-acre residential subdivision project.

Sangitan Public Market – Cabanatuan, Philippines

45,000 sf one-story structure with structural steel trusses on reinforced concrete beams and columns

TCGI ENGINEERS

November 1982 to October 1990

STRUCTURAL ENGINEER

300 Units Navy Family Housing, US Naval Base – Subic Bay, Philippines

Townhouses with load bearing concrete masonry unit shear walls. The structural design was based on the Navy NAVFAC P-355 design Manual.

Consolidated Support Facility, US Naval Base – Subic Bay, Philippines

Two story, 50,000 sf. reinforced concrete moment resisting space frame building. The structural design was based on the Navy NAVFAC P-355 design Manual.

Kalayaan Elementary School, DODDS – Subic Bay, Philippines

25,000 sf. reinforced concrete box type shear wall building. The structural design was based on the Navy NAVFAC P-355 design Manual.

Airmen's Open Mess, Clark Air Base – Philippines

Structural conditions survey and evaluation of 2 story, 30,000 sf. wood building. The structural design was based on the Air Force AFM 88-3 design Manual.