

DIVISION 00 – BIDDING AND CONTRACT REQUIREMENTSSECTION 000700 – GENERAL CONDITIONSGC-1. DEFINITIONS

A. As used in these Specifications, the following have the meaning shown opposite each:

1. BNL – Brookhaven Science Associates, operator of Brookhaven National Laboratory, and its authorized representatives of various Divisions and Departments.
2. FOD – BNL's Facilities & Operations Directorate.
3. MPO – BNL's Modernization Project Office and its authorized representative.
4. BNL Site – Land occupied by Brookhaven National Laboratory, Brookhaven Township, Suffolk County, New York.
5. Site – Immediate area of BNL Site assigned to Contractor for performance of work.
6. Work – Includes but is not limited to all labor, materials, tools, and equipment required and reasonably inferred by Contract to complete all construction.
7. Contractor – Person or entity identified in Lump Sum Contract and responsible for completion of all work.
8. Subcontractor – Person or entity directly contracting with Contractor including one who furnishes material worked to a special design according to Drawings and Specifications, but not including one who merely furnishes materials not so worked.

B. Words such as provide, furnish, install, and include, mean work by Contractor. Words such as approved, directed, and inspected, mean MPO's approval, direction and inspection.

C. In the interest of brevity, words such as "Contractor shall," have been omitted from some sections of the Specifications.

GC-2. SCALE OF DRAWINGS

A. Drawings are generally to scale, but Contractor shall follow indicated dimensions. Request clarification if discrepancies are noted. Scaling of drawings shall be at Contractor's own risk.

GC-3. REFERENCE DRAWINGS

A. Drawings of existing building and site are available for reference at MPO office.

GC-4. MANUFACTURERS' SPECIFICATIONS

- A. Conform to specified manufacturer's published specifications and installation instructions unless otherwise specified or indicated.
- B. Federal agencies, to the extent practicable, are required to amend procurement practices so as to minimize the purchase of products manufactured with ozone depleting substances. The Contractor shall, therefore, provide materials that use low or non-ozone depleting substances during their manufacture and/or installation. Materials that do not comply shall be identified in the contractors submittal for approval.
- C. Federal agencies, to the extent practicable, also are required to amend procurement practices so as to utilize, to the maximum extent, construction materials that have been produced with the use of recovered (recycled) materials. For the purposes of this project, where applicable, technical sections that may include building insulations, blast furnace slag containing cement and concrete, carpet, floor tiles, restroom partitions, signage, patio blocks and traffic barricades have been prepared in compliance with Federal Regulation 40 CFR Part 247.
- D. Should this Project be designed to be a high-performance, sustainable facility to receive LEED certification, the criteria will be designated in a separate specification Section 01352.

GC-5. VOLATILE ORGANIC COMPOUNDS (VOC'S)

- A. Volatile Organic Compounds (VOC's) and their emissions are controlled under the New York Codes, Rules and Regulations of the State of New York. Architectural surface coatings must comply with 6NYCRR Part 205, latest edition. Coating lines must comply with 6NYCRR Part 228, latest edition.
  - 1. For the purpose of the BNL location, Nassau, Suffolk, Westchester and Rockland Counties fall under the compliance rules of the New York City metropolitan area.
  - 2. All coatings and coated products to be used in the work, shall comply with the appropriate rules and regulations.

GC-6. PRICE-ANDERSON ACT

- A. Radiological protection is controlled under the requirements of Title 10, Code of Federal Regulations, Part 835, "Occupational Radiation Protection" (10 CFR Part 835).
- B. The provisions of this CFR apply to any activity carried out pursuant to this contract by the Contractor, its subcontractors, suppliers and employees, that has the potential to result in the exposure of an individual to radiation or radioactive material.
- C. The Contractor shall comply, in full, with all applicable requirements of this CFR and shall implement, document, report on, and maintain the required work documents, as necessary to ensure its full compliance.

**GC-7. BIOPREFERRED PROGRAM**

- A. Clause FAR 52.223.2 – Affirmative Procurement of Biobased Products Under Service and Construction Contracts applies to the work performed under this Contract. In the performance of this Contract, the Contractor shall make maximum use of biobased products that are United States Department of Agriculture (USDA)-designated items. These items can be found on the USDA Web site <http://www.biopreferred.gov/DesignationItemList.aspx>.

**GC-8. WORK PERMITS**

- A. The work of this Contract is controlled by the requirements of BNL Standards-Based Management System; “Work Planning and Control for Experiments and Operations,” latest edition.
- B. A Work Permit, prepared by BNL and signed by the Contractor, shall be posted or on hand at the project site. By signing the Work Permit, the Contractor indicates that they understand the hazards of the job and the permits required.
- C. A Tool Box Meeting shall be held by the Contractor to discuss any requirements noted on the Work Permit with all Contractor and Subcontractor personnel assigned to the Work. A Tool Box Meeting Log shall be kept on the Job Site and be available for auditing by BNL.

**GC-9. NOTICE TO PROCEED**

- A. The Contractor shall not knowingly, without formal notice from MPO, prematurely commence operations on the BNL Site. The Notice to Proceed will not be issued by MPO prior to receipt, by Contracts and Procurement, of all required bonds and insurance documents, and prior to receipt, and approval by MPO, of the required Safety Plan.
- B. The Notice to Proceed will be issued, in accordance with Clause A above, along with a BNL Integrated Safety Management (ISM) Flowdown Form. This form shall be completed by every Subcontractor to be used on this Project and returned to MPO, by the Contractor, as part of the requirements of the Supplementary Conditions Section “Shop Drawings, Manufacturers Data, and Samples,” Clause R, “Required Submittals.”
- C. Work may proceed, however, in the preparation and submittal of required submissions and the ordering of materials and equipment that do not require prior approval by MPO.

**GC-10. WORK HOURS**

- A. Perform all work on weekdays, excluding BNL holidays, between 8:00 a.m. and 5:00 p.m., unless otherwise specified or approved. BNL holiday list available upon request.
- B. Notify MPO 24 hours in advance to request approval to work outside of the above working hours. Advise MPO of all planned activities and submit a list of all contractor

and subcontractor employees who are expected on-site during the off-hour period. All employees working during off-hours must possess a valid BNL contractor employee photo identification badge (see GC-12).

- C. If off-hours work request is approved, MPO will notify BNL Police Headquarters and the Main Gate of the days and hours that work is planned. Failure to notify MPO will be cause for BNL Police to deny access to the job-site.

GC-11. CONSTRUCTION NOTIFICATION

- A. MPO must be notified and made aware of all construction work-in-progress.
- B. When construction has not been previously scheduled, notify MPO Construction Services each day before 9:00 a.m. of planned activities.
- C. MPO will provide telephone extension numbers.

GC-12. IDENTIFICATION OF EMPLOYEES

- A. All Contractor and Subcontractor employees must attend the Contractor/Vendor Orientation Training Course (see GC-13), and be approved by BNL in order to work on the BNL site. A contractor employee photo identification badge will then be issued in order to have access to the site.
- B. U.S. citizens must bring proof of citizenship, photo ID and proof of Social Security number. Acceptable citizenship proof is a passport, birth certificate, naturalization papers, voting eligibility, or similar documentation. Drivers' license, military ID cards, union cards, and Social Security cards are insufficient by themselves as proof of citizenship. Proof of Social Security number includes Social Security card, pay stub, W-2 form or medical insurance card. Handwritten documents are not acceptable. Upon arrival at the BNL Main Gate, they will be sent to the Visitors Trailer to receive a temporary pass, which allows them access to the site to attend CVO training.
- C. All Non-U.S. citizen workers, including Legal Permanent Residents, requiring access to BNL shall complete a BNL Form 473 located on the BNL home page, [www.bnl.gov](http://www.bnl.gov), Guest Registration link. Each worker shall provide the requested personal information and information concerning their company, forwarding the completed form to their designated BNL Project Manager. Non-U.S. citizens shall provide documentation showing eligibility to be in the United States. This includes a valid passport and visa. Other documentation, to include but not limited to, a permanent resident card, passport entry "process form 1-551", INS documents 1-94, 1-20, DS-2019, or 1-539 part 3 and proof of Social Security, may be necessary to establish legal status and work on the BNL site. Failure to provide proper documentation will result in access being denied until the required documents are provided. Foreign National Contractor employees must submit all required documents 30 days in advance of the required access date as access approvals may take up to 30 days. All Foreign National Contractor employees are

responsible to ensure they remain in legal INS status. BNL ID badges will expire on the expiration date of their current legal status or one year after issuance, whichever comes first. At that point they must reapply with updated documentation to continue eligibility to work at BNL.

- D. The Contractor shall assure that all Contractor and Subcontractor employees promptly obtain a current BNL contractor employee photo identification badge. Badges shall be obtained in the Badging Office on the Ground Floor of the Research Support Center, Bldg. 400, Monday through Thursday, 8:30 a.m. to 4:00 p.m, and Friday, 8:30 a.m. to 1:00 p.m. In order to keep badging times to a minimum, the Contractor should limit sending all of his employees at the same time. New contract workers will only be issued contractor ID badges (and granted access to the site) after completion of required safety training as well as presentation and approval of citizenship documents, BNL form 473 for foreign nationals, and proof of Social Security Number.
- E. Contractor and Subcontractor employees must wear the badge so as to be visible at all times while on-site.
- F. Contractor employee identification badges will be valid for the anticipated duration that the employee expects to require access to the Site as indicated on the C/VOT application. This period will be a maximum of one (1) year and will then require renewal, upon expiration, at the Badging Office, Bldg. 400. Badges will be provided at no cost to the Contractor. Immediately upon release of employees or project completion, Contractor's Superintendent shall return badges to the Badging Office. (BNL will retain badges for re-issue for one year.)
- G. Contractor employees shall report lost identification badges immediately to the Badging Office, Bldg. 400.

#### GC-13. CONTRACTOR TRAINING REQUIREMENTS

- A. All Contractor and Subcontractor employees are required to attend BNL's Contractor/Vendor Orientation Training on their first day on site.
- B. Contractor/Vendor Orientation Training is a one and one-half (1-1/2) hour overview of BNL and OSHA safety requirements. The orientation is offered 8:30 a.m. weekdays in Building 938. Upon completion of the orientation, a card will be issued that must be signed by Construction Inspection, Bldg. 650T. The Contractors' employee (U.S. citizens as well as foreign nationals) information must then be entered in the BNL Guest Information System (GIS). To facilitate this process, the following personnel are trained to enter data in GIS: Donna Pfeiffer in Building 129, and Claudia Hatton, Cindy Klemm and Denise Bingham-Miesell in Building 134C. The employee must then return to the Badging Office, Bldg. 400, to obtain the employee identification badge. This safety orientation will be valid for a period of one year. Satisfactory completion will be indicated by issue of employee identification badge.

- C. Contractor and Subcontractor employees who have not attended the Safety Orientation will be directed to stop work until they have done so.
- D. All Contractor and Subcontractor employees who may be required to “Work On or Near” electrical circuits within the BNL electrical distribution system are required to complete BNL’s Electrical Safety I training course. This course is available on the Web at <http://training.bnl.gov/course/electsaf1> , and is valid training for one (1) year.
- E. In addition to completing the course, each organization’s electrical work Foreman/ Supervisors must discuss NFPA 70E requirements and specific hazard and risk information with their staff. This job briefing should discuss specific electrical work procedures, protective equipment requirements and departmental contacts at the local application level. BNL can provide a document that can be used as guidance for this discussion. This job level discussion can be informal but a record of this briefing shall be documented.
- F. Contractor shall provide a list of workers that he authorizes to “Work On or Near” and perform LOTO. Contractor and Subcontractor employees who may be required to “Work On or Near” electrical circuits and who have not completed the Web-based BNL Electrical Safety 1 training and NFPA 70E briefing will not be allowed to perform such work until they have done so.
- G. All Contractor and Subcontractor employees who may be required to “Work On or Near” electrical circuits must complete an approved NFPA 70E training seminar. Contractor can provide equivalent “in house” NFPA 70E training to his/her employees in lieu of taking “outside” training from an authorized company. Contractor’s program shall follow the guidelines of NFPA 70E and thoroughly demonstrate that all employees have been properly trained in all facets associated with NFPA 70E. If the Contractor decides to provide his/her own NFPA 70E training, Contractor’s program shall be submitted to BNL for approval. All Contractor and Subcontractor employees that “Work On or Near” electrical circuits shall have taken and passed a CPR training program that has been approved by BNL.

#### GC-14. COORDINATION

- A. Arrange and coordinate work, be responsible for acts and omissions of all parties involved in the work, be responsible for satisfactory performance of all work, ensure that each trade is fully informed of full extent of work required, and coordinate installation of all equipment and shop fabricated material, including that supplied by BNL. BNL assumes no responsibility for contractual relations between Contractor and other parties.

#### GC-15. MEN AND MATERIALS

- A. Do not utilize men or materials which would cause work stoppage on BNL Site.
- B. Radiation Generating Devices are of special concern. The following industrial equipment, known to contain radiological sources or able to generate radiation, if brought to the BNL

Site, require the Contractor to notify the Project Manager, in advance, and require a Radiological Work Permit to be approved prior to their use on site. RWPs require Health Physics review.

1. Radiography Equipment
2. Moisture Density Gauges
3. Soil Density Gauges
4. X-Ray Equipment

GC-16. SUBCONTRACTOR REVIEW

- A. BNL reserves the right to review, to approve or disapprove proposed Subcontractors based upon past safety and performance quality. No later than two (2) weeks after signed Contract, submit directly to MPO, a complete list of proposed Subcontractors for review.
- B. Subcontractors must meet the current published OSHA DART Rate and Recordable Incidence Rates for construction in their trades. Subcontractors shall also have an insurance Experience Modification Rating equal to or less than one (1).

GC-17. PRE-CONSTRUCTION MEETING

- A. MPO will set up a Pre-Construction Meeting, at which time the ES&H issues, Safety Awareness issues, Submittal procedures, and Site Organization procedures will be addressed. The Contractor's Superintendants, Supervisors, and Foreman are required to attend the Pre-Construction Meeting.

GC-18. CONSTRUCTION SCHEDULE

- A. Within three (3) weeks after signed Contract, submit, directly to MPO, a detailed work schedule which must fall within number of weeks specified.
- B. When work falls behind schedule due to Contractor's fault or negligence, increase all labor and overtime to assure completion within schedule.
- C. BNL will utilize all available contractual remedies to enforce schedule compliance. Should the Contractor encounter delays caused by BNL, it is the Contractor's responsibility to promptly notify the contracting officer and to request an extension of the contract compliance date.

GC-19. JOB MEETINGS

- A. Job meetings will be held at the job site at least monthly unless otherwise designated by MPO.
- B. The Contractor and his field superintendent, and the subcontractors or vendors whose presence is necessary, shall attend job meetings.

- C. Decisions, instructions and interpretations agreed upon at such meetings will be recorded in a "Memorandum of Meeting" prepared by MPO and furnished to the Contractor and each attendee for necessary action.

GC-20. SUBSTITUTIONS

- A. Unless otherwise specified, substitutions may be made for items specified when substitutions are approved equals. Submit substitutions for approval in accordance with heading "SHOP DRAWINGS, MANUFACTURERS DATA, AND SAMPLES" in Supplementary Conditions.
- B. When proposing a substitution, submit:
  - 1. Shop Drawings providing complete descriptive and technical data. Submit samples and additional information when directed.
  - 2. Statement of effect on all other work in Contract.
- C. MPO reserves right to request drawings indicating all required revisions to Contract Drawings prior to giving approval.
- D. If a substitution is approved, be responsible for all resulting changes in work and for all systems, equipment and material, functioning as originally intended.

GC-21. CONTRACTOR'S MATERIALS REMOVALS

- A. Obtain property pass through MPO for removal of Contractor's materials and equipment from BNL Site. Schedule removals during specified work hours.

GC-22. TRANSPORTATION

- A. In transporting materials and equipment, use designated roads and railroad on BNL Site. Obtain information concerning these facilities from, and coordinate all transport operations with, MPO. When necessary to maintain work schedule, ship all materials, including Subcontractors' items, from point of origin to BNL Site by direct means equal to, or better than, express service.
- B. In transporting radioactive materials and waste, or hazardous waste, a DOE-MCAP approved transporter must perform the transportation. The MPO Waste Management Representative will coordinate all shipments of radioactive materials and waste, or hazardous waste.
- C. Shipments requiring a manifest (radioactive or hazardous) shall be prepared by a qualified broker. The broker shall sign as the shipper of record for radioactive shipments, with a qualified BNL Waste Management Representative approving the document. A Hazardous Waste Manifest shall be prepared by a qualified broker and signed by a BNL Waste Management Representative.

GC-23. TRAFFIC WAYS

- A. Schedule, confine, and perform work, as directed, so as not to interfere with BNL traffic on existing roads, walks, parking and other paved areas. Park all vehicles in designated parking areas. Load and unload vehicles where directed. Comply with all BNL traffic regulations. Violations will be backcharged from the Contract amount.

GC-24. CODES AND STANDARDS

- A. Meet requirements of BNL Standards-Based Management System (<https://sbms.bnl.gov>); ES&H Standards and other applicable SBMS standards, and all other codes and standards specified. In cases of conflict, the standard providing the greater protection shall govern.
- B. BNL is an ISO 14001 certified laboratory. It shall be the duty and the responsibility of the Contractor and his subs to comply with the BNL standards and procedures in the area of environmental control, hazardous waste generation, spill prevention, and all other standards specified herein.
- C. Copies are available for reference at MPO.

GC-25. FIRE PROTECTION AND DETECTION SYSTEMS

- A. Do not modify, disconnect and, in any way, impair systems without approval.
- B. Notify MPO forty-eight (48) hours in advance of all work on fire protection systems.

GC-26. OPEN FLAME OPERATIONS

- A. It shall be the duty and responsibility of the Contractor performing any cutting or welding to comply with the provisions of BNL Standards-Based Management System; ES&H Standards, and the National Fire Protection Association's National Fire Codes pertaining to such work.

The Contractor shall read and be familiar with the provisions of these standards and codes. The Contractor shall be responsible for all damages resulting from failure to so comply.

- B. Notify MPO forty-eight (48) hours in advance of cutting, welding, or similar open flame operations.
- C. Provide any required fire watch and take all required precautions where directed.
- D. MPO will make arrangements for a Cutting/Welding Permit. NO WORK shall proceed prior to the issuance of the written Cutting/Welding Permit nor shall work continue after expiration date of permit.

**GC-27. PROTECTION OF PROPERTY**

- A. Contractor shall be responsible for the security of property within the work site.
- B. Protect, with whatever means and methods required, all new and existing property from damage by and as a result of work in this Contract as approved, including disappearance. Refer to BSA LLC, General Terms and Conditions for Construction and Labor Hour Agreements, Article titled: Contractor's Responsibilities.
- C. Repair, refinish, replace and otherwise correct all damage, and replace all missing materials, as directed and approved by MPO.

**GC-28. TEMPORARY SERVICES**

- A. All requests by the Contractor for temporary services i.e. electric power, for their own use or for use by any subcontractor, shall be made only through their designated MPO contact.
- B. All methods, materials, and scheduling of temporary services shall be as directed and approved.
  - 1. BNL will furnish, without charge, sources of water and electric power and will perform initial tie-in and removal of same. MPO will, upon request, indicate locations.
  - 2. Contractor shall supply, install, maintain, and remove all equipment and required devices for temporary water, power, and lighting systems from point of initial tie-in as necessary to perform the work.

**GC-29. SERVICE INTERRUPTIONS**

- A. Do not interrupt service until directed. Notify MPO two (2) weeks in advance of all proposed service interruptions unless otherwise specified or directed.
- B. Keep all interruptions to a minimum. Complete all possible prior work and prefabrication, and have all labor and materials on Site, as approved, prior to interruption.

**GC-30. COORDINATION WITH BNL ACTIVITIES**

- A. Coordinate and schedule all work with all BNL activities and operations through MPO.

**GC-31. CUTTING AND PATCHING**

- A. Cut, drill, alter, remove, and replace all existing construction as required for performance of work. Patch and finish all changed and damaged work to match existing construction as approved by BNL.

GC-32. WORK BY TRADES

- A. Work of a trade is not necessarily limited to the Drawing or Specification page describing work to be done by that trade.

GC-33. SALVAGE

- A. Salvage is that material and equipment, as defined in the Specifications, to be removed by the Contractor from the Project facility, but is to remain the property of BNL.
- B. Remove all specified salvageable material and equipment and pass it through the vehicle radiation monitor. Place, where directed by, and turn over to, MPO, on the BNL Site.
- C. Remove all salvageable material and equipment, as specified, and place on BNL Site where directed.
- D. Remove all non-salvageable material and equipment and legally dispose of same off the BNL Site.
- E. All removed salvageable material and equipment, as defined in the Specifications, shall remain property of BNL.
- F. All removed salvageable and non-salvageable materials and equipment shall pass through the vehicle radiation monitor prior to disposal on the BNL Site or exiting the BNL Site.

GC-34. WORK AS BUILT

- A. MPO will provide a complete set of prints of the Contract Drawings. Mark up accurately, showing all changes, in a neat, legible manner. Final payment will not be approved prior to receipt of approved marked up prints.

GC-35. CONSTRUCTION WASTE MANAGEMENT

- A. Waste and demolition materials shall be segregated into disposal categories:
  - 1. Radioactive waste is any refuse, solid or liquid, that must be managed for its radioactive content.
  - 2. Hazardous waste is any refuse, solid or liquid, that is a by-product of processes/ activities that can pose a hazard to health or environment that must be managed for its hazardous nature (usually listed by EPA).
  - 3. Mixed waste is any refuse that contains both Low-Level Radioactive Waste (LLRW) as well as hazardous waste.
  - 4. Non-hazardous waste is any refuse, other than construction debris, that is considered industrial or special in nature (oil, anti-freeze, etc.). The BNL Standards-Based Management System (SBMS) contains the full descriptions.

5. Universal waste is any battery containing hazardous constituents such as mercury/lithium/lead/nickel cadmium, certain pesticides, as well as mercury-containing thermostats and fluorescent lamps and tubes.
  6. Construction rubbish and debris is any refuse as a result of the normal construction or earth clearing activity such as packing and shipping materials, discarded lumber and wood materials, metals, insulation, gypboard, piping, electrical scrap, tree branches, roots, and sweepings.
- B. Radioactive waste and mixed waste disposal will be coordinated by the MPO Waste Management Representative, Gary Olsen, (631) 344-8580.
  - C. Hazardous waste and mixed waste shall be disposed of by the Contractor at the BNL Waste Management Facility, or at an approved off-site facility coordinated by the MPO Waste Management Representative.
  - D. Universal waste shall be disposed of by the Contractor at the BNL Waste Management Facility, or at an approved off-site facility coordinated by the MPO Waste Management Representative.
  - E. Non-hazardous waste shall be disposed of by the Contractor at the BNL Waste Management Facility, or at an off-site disposal facility approved by BNL.
  - F. Construction rubbish and debris shall be disposed per GC-36.

GC-36. SITE CLEANING AND DISPOSAL OF CONSTRUCTION DEBRIS

- A. Keep Site clear of debris and rubbish at all times. Burning of debris and rubbish will not be permitted.
- B. Place all construction debris and rubbish in appropriate containers and legally dispose of same periodically off the BNL Site.
- C. At job completion, promptly remove tools and equipment, and clean premises thoroughly, as approved by BNL.
- D. All removed construction debris, excess clearing, excavation and/or grading material, rubbish, and equipment, removed from the Site, shall pass through the Vehicle Radiation Monitor on East Princeton Avenue, prior to being disposed off the BNL Site.

END OF SECTION 000700