



TENANT CONTRACTOR CONSTRUCTION WORK RULES & REGULATIONS

1861 INTERNATIONAL DRIVE

This manual serves as a guide to tenants, design consultants, and contractors involved in the design and construction of Leasehold Improvements at 1861 International Drive. The information provided within this manual is not intended to alter the Tenant's Lease Agreement, and in the case of a conflict between this manual and the Lease, the Lease shall govern.

I. PROJECT DIRECTORY

PROJECT CONTACTS:

Owner

Macerich
1162 Pittsford-Victor Road, Suite 100
Pittsford, NY 14534
Attn: Sam Rinaldo
(585) 402-1744
Sam.Rinaldo@macerich.com

Property Manager

Hines Interests Limited Partnership
7900 Tysons One Place
Suite 200
Tysons Corner, VA 22102
(703) 942-6650
Attn: Hines Property Management

Structural Engineer

IMEG Corp.
1881 Campus Common Drive
Suite 103
Reston, VA 20191
(703) 391-0024
Attn: Larisa Ramich

UTILITIES:

Electrical

Dominion Virginia Power
120 Tredegar Street
Richmond, VA 23219
(866) 366-4357 (866-DOM-HELP)

Natural Gas

Washington Gas
6801 Industrial Road
Springfield, VA 22151
(703) 750-1000

Sewer & Water

Fairfax Water
8570 Executive Park Ave.
Fairfax, VA 22031
(703) 698-5800

Trash Removal

Keter Environmental Services, Inc.
1 (866) 679-5079
(317) 403-1174
Yanira Ferriera

REQUIRED CONSULTANTS:

Structural Engineer (Structural Reviews)

IMEG Corp.
1881 Campus Common Drive, Suite 103
Reston, VA 20191
(703) 391-0028
Attn: Larisa Ramich

REQUIRED SUBCONTRACTORS:

Fire Alarm - Tie In / Programming

Adcock's Systems
22712 Commerce Center Court
Dulles, VA 20166
1 (888) 746-7539

Roofing

Gordon Contractors, Inc.
9010 Edgeworth Drive
Capitol Heights, MD 20743
(301) 350-6600
Attn: Steve Wilt

Air Balance

Metro Test and Balance
8640 Edgeworth Dr.
Capital Heights, MD 20743
(301) 808-3660

Building Controls

SmartBT
4800 Hampden Lane, Suite 200
Bethesda, MD 20814
(240)-482-3706
mikeD@smartbuildingtec.com

II. LANDLORD REQUIREMENTS

DESIGN DEVELOPMENT PHASE

Required to be submitted to and approved by Landlord at completion of design development:

- Space Plan
- Design Development Documents - Primary MEP & General Architectural (one full-size hard copy set & one half-size hard copy set)
- Occupancy Calculations (verify compliance with egress capacity of Base Building stairs)
- Project Budget

CONSTRUCTION DOCUMENTS PHASE

Required to be submitted to and approved by Landlord prior to construction commencement:

- Tenant Design & Construction Specifications
- All Construction Drawings (one full-size hard copy set & one half-size hard copy set), showing at least the following:

Energy Code	Architectural Plans & Details	Reflected Ceiling Plans
Finish Plan & Schedule	Door and Hardware Schedule	Furniture Plans
HVAC Plans & Details	HVAC Equipment Schedule	Lighting Plans
Power and Data Plans	Plumbing Plans & Riser Diagrams	Fire Protection Plans
Electrical Load Calculations	Electrical One Line Diagrams	
- Preliminary Construction Schedule
- Copy of the Building Permit
- Bid List of Tenant Contractor's pre-qualified Subcontractors
- Executed Acceptance of the floor by Tenant Contractor
- Written Acceptance of the Tenant Design and Construction Manual
- Executed Acceptance of the Tenant Contractor Work Rules
- Floor Punch List of Existing Conditions drafted by Tenant Contractor, prior to Turnover
- Insurance Certificates

DURING CONSTRUCTION

Required to be submitted to Landlord during Tenant fit-out:

- Construction Drawings (one full-size hard copy set & one half-size hard copy set)
- Project Team Directory/Contact List
- Detailed Construction Schedule
- Partial Lien Waivers for each Progress Payment
- Published Project Meeting Minutes
- Final Project Cost Projections
- Submittals on any Major Supplemental Equipment
- Any Changes to Documents Previously Approved by Landlord

AFTER CONSTRUCTION

Required to be submitted to and approved by Landlord at project completion:

- Final As-Built Drawings and Specifications (both electronic and a one full-size hard copy set)
- Copy of the Non-Residential Use Permit (Non-RUP) issued by Fairfax County
- Final Air Balance Report (one hard copy and a soft copy)
- Fire Alarm Test Report (one hard copy and a soft copy)
- Updated Electric Panel Schedules
- Updated Arc Flash Calculations for All Added/Modified Electrical Panels
- All Final Lien Waivers from Tenant Contractor, all Subcontractors, and all other Vendors
- Final Payment Application
- O&M Manuals for all Supplemental Equipment (one hard copy set in a labeled binder)
- Executed Asbestos & Polychlorinated Biphenyls (PCBs) Certifications by Tenant Contractor
- Written Response to Landlord Punchlist items from Tenant Contractor
- All Guarantees and Warranties

III. RULES & REGULATIONS

The following rules and regulations (“Rules of the Project”) governing work at 1861 International Drive (Tysons Corner Property, LLC) including adjacent supporting areas located within or outside the Premises (collectively, the “Project”), by a Contractor, have been established by the Property Manager and are intended as guidelines within which a Contractor must operate. For the purposes of the Rules of the Project, Tysons Corner Property, LLC is the “Owner”; Hines Interests Limited Partnership is the “Property Manager” and _____ is the “Contractor.”

1. Insurance Requirements: See COI Sample.

2. Work Hours:

Normal Business Hours: Monday through Friday 8:00 a.m. to 6:00 p.m.
Saturday 9:00 a.m. to 1:00 p.m.

Loading Dock: As scheduled with Property Manager

Contractor shall act with reasonable diligence in a manner (including the use of overtime labor) and at a time, or times, to prevent interference with the normal business operation of the Project, take measurable care to safeguard the Project, promptly repair any damage caused by Contractor, or subcontractors, and restore the Project to the condition existing before such activity. All work by Contractor which is to be performed at times other than normal business hours must be approved by Property Manager in advance prior to commencing such work. All work performed by Contractor outside of normal business hours which requires a building engineer will incur charges at the hourly overtime engineering rate. The charges will be billed back to the contractor.

3. Conduct:

Contractor shall be responsible for all its actions on the Project as well as those of its subcontractors, suppliers, agents and visitors. No loud, abusive or otherwise offensive language or actions will be allowed. Contractor shall promptly remove from the Project any employee deemed inappropriate or abusive by Property Manager. There is to be no smoking on the Project.

4. Project Logistics Plan:

(a) Contractor must submit a Project Logistics Plan to Property Manager for approval prior to the start of construction. These plans should delineate Contractor’s planning with respect to security, material loading, trash removal, anticipated protection, flammable material cabinets, fire extinguisher locations, shanty locations and duration, restroom facilities, signage and, to the extent possible, system shutdowns and predetermined overtime.

(b) Contractor, in the Project Logistics Plan, must accommodate and maintain a safe and legal means of egress to the Base Building exterior.

5. Quick Response Team:

Contractor shall designate a quick response team available to respond to “priority” items that may directly affect the Project occupants and submit the names and contact numbers of each response team member to Property Manager. The response team shall be supplied with communication devices by Contractor (2-way radio, cellular phone, etc.) at Contractor’s expense.

6. Contractor Conflicts:

In general, all Contractor's work must be scheduled so that it in no way conflicts with, interferes with, or impedes the operation of the Project. Any portion of Contractor's work that is in conflict with the operation of the Project must be rescheduled by Contractor.

7. Existing Conditions:

(a) Contractor must, in the presence of Property Manager, review the existing conditions prior to taking over an area from Property Manager and must accept the work area in "as-is" condition unless material deficiencies exist which prevent Contractor from starting construction. If such material deficiencies do exist, Property Manager shall make the necessary repairs in a mutually agreeable timeframe to enable Contractor to start construction, and then Contractor must accept the work area in "as-is" condition.

(b) Prior to the start of construction, Contractor shall create a videotape or photographic documentation of the construction area and access areas which may be affected by the proposed construction and provide a copy to Property Manager. This will document the condition of the space prior to construction start and clearly define Property Manager/Contractor responsibility for repairs and replacement. Failure to produce such documentation will indicate acceptance of the space by Contractor in "as-is" condition.

(c) Contractor will be required, with Property Manager's approval, to provide, maintain, and remove protection for finished surfaces, equipment and all elements of the Project susceptible to damage by construction activity under their control. Protection is to include and not be limited to homasote, masonite, tarps, insulation, plywood, etc. Protection of hallway carpets, wall coverings, and elevators from damage with masonite board, carpet, cardboard, or pads is required.

(d) Property Manager reserves the right at any time to require additional protection as deemed necessary to protect the Project. Contractor shall restore the premises affected by construction operations, including but not limited to the replacement of ceiling tile prior to the start of the next business day.

(e) All systems within the Project, unless specifically noted otherwise, are turned over to Contractor in an operable condition. Non-working system or components of systems following any construction work are the responsibility of Contractor to rectify.

(f) All work done by Contractor must be consistent with the Tenant Plans previously approved by Development Manager or Property Manager.

8. Project Start:

Before Contractor will be allowed to move materials, equipment, personnel or any other items onto the Project, or commence construction of its work, Contractor must procure written permission from Property Manager and provide a signed copy of the Tenant Contractor Work Rules and an acceptable Certificate of Insurance per Attachment A. Such permission will be given when suitable arrangements have been made between Contractor and Property Manager.

9. Trash Removal:

(a) Clean-up and rubbish removal via designated construction exit/entrance to a central trash collection point and to a container provided by Contractor in a location established by Property Manager, and removal from the Project, must be by Contractor at its sole expense. Contractor must at all times, on a regular basis, keep its area of work free from accumulations of waste material, debris or rubbish caused by, or incidental to Contractor's work. Food and beverage related waste material must, at all times, be removed on a daily basis. Hazardous, noxious or flammable materials shall not be left on the Project overnight without prior approval of Property Manager. Any debris, rubbish, materials or equipment left at any time in an undesignated area on the Project or in any location following completion of Contractor's work will be disposed of by Property Manager at Contractor's expense

(b) Per Fairfax County code cardboard generated during the project must be recycled at the Contractor's expense through an approved recycling vendor. **Note: Contractor may not utilize the building recycling containers or devices.** Contractor will develop a plan for cardboard recycling and will receive approval from Property Management.

(c) All work areas must be kept clean and safe. No trash storage is permitted in Tenant's leased premises or core areas. Any materials in any core area not under construction will be subject to removal and disposal at any time, at Contractor's expense without prior notice.

(d) Contractor is responsible for cleaning all areas of work under its control and/or accessed by its personnel, including but limited to:

Stairways/Mean of Egress
Telephone/Electrical Closet
Elevator & Vestibules

Building Perimeter/Plaza
Temporary Entrance/Office
Loading Dock

Central Plant
Toilet Rooms
Garage

10. Materials Delivery:

Contractor must schedule with Property Manager access to unloading areas at the Project. All materials unloaded at the Project must be moved to area of use immediately and shall not impact use of this facility in any way. Property Manager shall not be responsible in any way for Contractor's materials anywhere on the Project.

11. Building Access:

(a) Contractor, its subcontractors, suppliers, agents, and visitors may only use a designated Building entrance for access (Loading Dock) to their work on the Project. No access to the Project's lobby or public corridors on the Ground Floor will be permitted at any time. Contractor is responsible for protection, ramps, door removal, security, and a dust free environment at this building entrance.

(b) Contractor, its subcontractors, agents, and visitors must arrange access and coordinate all access to tenant occupied areas with Property Manager and Tenants' authorized personnel.

(c) Property Manager may institute and monitor a badge system with the purpose of controlling access to the Project and monitoring construction personnel within the premises for the duration of the work. Contractor should anticipate tight controls by Property Manager of all personnel entering or leaving the premises, including, but not limited to, the inspection of gang boxes. If a badge system is instituted, all construction personnel will be required to wear their badges at all times while on

the Project. Access will be denied to all personnel without a badge and those discovered without a badge will be escorted off the Project.

(d) Access into spaces under construction must be limited to one door. If an unfinished lease space has two doors, one must be locked. Passage can occur through the door most convenient to the service elevator and should have a temporary foot mat.

(e) There will be no contractors, suppliers, agents or visitors allowed parking in the Loading Dock. Contractors and Suppliers are allowed to load and unload tools and materials and are expected to immediately vacate the dock upon unloading.

12. Vertical Transportation:

Passenger and shuttle elevators are not available for access to the Project, for delivery of materials, or for employees of the Project. The service/freight elevator is available for use and the Project must share its usage along with other building operations.

13. Temporary Utilities/Protection:

(a) **Utilities:** Contractor will be afforded access, if necessary, to temporary utilities including electricity and water. Contractor must coordinate connection to such service with Property Manager. Contractor must return all areas used for temporary service (including, but not limited to toilet facilities; janitor's closets; electrical, telephone, or mechanical rooms) to an "as-existing" condition. Property Manager will invoice Contractor on a monthly basis for the use of utilities.

(b) **Toilets:** Contractor may use only those toilet facilities specifically designated and approved by Property Manager. Contractor shall submit an anticipated protection plan for said facilities as part of the Project Logistics Plan. At no time may any construction personnel use non-designated toilet facilities.

(c) **Stairways:** The stairway doors must not be held open by any means, and the lock sets or strikes cannot be tampered with in any way. Stairways and exit ways are to be kept clear for safe egress at all times. Contractor's safety officer will inspect all means of egress daily to ensure that these requirements are met.

(d) **Doors:** All core doors including electrical, telephone and mechanical area doors are not to be opened without an authorized key, wired or mechanically blocked at any time. All doors found to be propped open will be closed and locked.

(e) **Core Area Mechanical, Electrical, Telephone and Service Elevator Vestibule:** Upon completion of construction, Contractor shall restore all areas to their original condition as established prior to construction start. Contractor must schedule a pre-construction and post-construction walk-through with Property Manager.

(f) **Construction Entrance:** A fully enclosed dust-free enclosure is to be installed at the entrance to the construction area.

14. Security:

(a) Contractor is responsible for the security of its own material, equipment, tools, and work in place. In addition, Contractor is responsible for securing access to and from Tenant's premises.

(b) Contractor is responsible for the cost of additional security in Tenant's premises when such additional service is deemed necessary by Tenant or Contractor. Requests for additional guard service are to be directed to Property Management at least three business days in advance, and the cost of any such required service will be billed to Contractor.

(c) Contractor must provide Property Manager or designated representative at all times with keys or other devices that are required to access any area secured by Contractor on the Project.

15. Project Damage:

Contractor shall be responsible for all damage to the Project, existing tenant space or to other contractor's work caused by Contractor.

16. Safety:

(a) Contractor is responsible to ensure that the workplace is maintained in a safe and orderly manner for all persons working therein. Contractor shall not engage in any labor practice that may impact another contractor's work. Contractor shall comply with all governing federal (including OSHA), state (including VOSH), and local safety and health laws and regulations that pertain to such work in Fairfax County on the Project. If required, temporary fire protection equipment in accordance with governing regulations, or as reasonably required by Property Manager, shall be provided by Contractor at its sole expense.

(b) Contractor must supply Property Management with the following materials two business days in advance prior the work:

- i. A copy of their Hazard Communication Standard Program as required by OSHA.
- ii. A list of products and their hazardous substances which Contractor and/or subcontractors plan to use. The list should include dates and shifts. The list is to be updated as work progresses.
- iii. In the event that materials, products, and/or processes being prepared for this project contain, or may emit, any volatile organic compounds ("VOC"), formaldehyde formations or hazardous out-gassing, as determined by the manufacturer must be identified as such and an OSHA-compliant "Materials Safety Data Sheet" shall be submitted for the prepared product or material for review by Property Manager. Material Safety Data sheets must be provided for all products to be used on site.
- iv. Temporary ventilation plan for removal of VOC/fumes from space until permanent HVAC system is in full operation or as directed by Property Manager.
- v. Written notification for all burning/welding operations (Hot Work) and Impairments shall be provided to Property Manager in writing via Impairment Form at least two business days prior to such work. A hot work permit is required by Fairfax County and must be obtained by the subcontractor(s) performing Hot Work. The building's Hot Work requirements will be provided to the GC during the kick-

off meeting prior to the commencement of work beginning. Tenant contractor will not be allowed to disable more than one Fire Life Safety System from service at a time. All oxyacetylene/propane must be removed when work is completed. The Building encourages utilizing cold work methods when applicable as well as designating a hot work area (Loading Dock) where the Building's Hot Work program would not be required. Property Manager will require the presence of an on-site engineer employed by Property Manager during all Hot Work and Impairment operations.

Tenant Contractor must also always adhere to Fairfax County's Fire Prevention Code (FPC) as well as obtain any necessary permits.

(c) Contractor shall designate a qualified safety officer to oversee the work and provide life safety training to all personnel. Contractor shall submit the name of this person to Property Manager.

(d) No flammable liquids, gases, or other highly combustible material will be allowed to be stored on the Project. Contractor shall at no time use, generate, release, store, treat, dispose of, or otherwise deposit, in, on, under or about the Property, any material or substance which may be hazardous or toxic as determined from time to time by any governmental body or by Property Manager ("Hazardous Materials"); or permit or allow any third party to do so, without Property Manager's express, prior, and written consent. Contractor's compliance with the terms of this Paragraph 16 and with all environmental laws and regulations shall be at Contractor's sole cost and expense. Contractor shall pay or reimburse Property Manager for any costs or expense incurred by Property Manager, including reasonable attorneys', engineers', consultants', and other experts' fees and disbursements incurred or payable to determine, review, approve, consent to or monitor the requirements for compliance with all environmental laws and regulations, including, without limitation, above and below ground testing. Any and all chemical containers, vessels or other equipment supplied by Contractor for use by building personnel and/or for use on the Project, shall remain the property of the Contractor. Upon notice from Property Manager, Contractor shall cause such items to be removed from the Project and properly disposed of, in accordance with the applicable laws, codes or regulations, at Contractor's sole expense and responsibility. If Contractor fails to comply with the provisions of this Paragraph, Property Manager shall have the right, but not the obligation, without in any way limiting its other rights and remedies, to take such actions as Property Manager deems necessary or advisable to clean up, remove, resolve, or minimize the impact of, or otherwise deal with, any Hazardous Materials on or affecting the Project, following the receipt of any notice or information asserting the existence of any Hazardous Materials. All reasonable costs and expenses paid or incurred by Property Manager in the exercise of any such rights shall be payable by Contractor to Property Manager upon demand.

(e) Any time that a burning or welding device is used, all surrounding areas must be protected from the heat and/or flame of the device. All personnel who are welding or using any type of cutting torch must hold and post a copy of their valid County-Issued Hot Work Permit to perform such activities. A copy of that Permit must also be presented to Property Management prior to the commencement of the work. Additionally, all personnel employed to perform fire watch responsibilities must provide a copy of their certification to perform such services to the Property Manager before any work begins.

(f) Contractor shall give immediate verbal notice to the Property Manager (and written notice within twenty-four (24) hours) after Contractor learns of any accident or emergency occurrence, fire or other casualty, or any damages to the Project, the building equipment, or Tenant Improvements, including but not limited to damage caused by others.

(g) Contractor shall also provide clear warning notices and effective barriers around work in public areas and tenant spaces.

17. Field Offices:

Contractor shall not store any material on the Project or erect any sheds, offices or similar structures without the prior approval of Property Manager. Any stored material, shed, office, or other material which interferes with orderly progress of other contractors' work must promptly be relocated or removed from the Project as directed by Property Manager. Property Manager may designate a Contractor field office adjacent to the Project. If designated, Contractor will be responsible for building space out, and will need to provide power, telephone, lighting, floor protection, etc. to it. Drywall and paint must be installed in areas of the Contractor's office space that are visible to the public or other tenants

18. Pedestrian and Vehicular Traffic:

Contractor shall in no way interfere with or endanger public pedestrian and vehicular traffic adjacent to the Project nor interrupt the flow of traffic in and out of the Project. Contractor shall provide its own traffic control personnel, at its sole expense and in coordination with Property Manager, to coordinate deliveries to the Project. **The designated Construction Entrance to the Building shall be the Loading Dock.**

19. Vending Machines:

No vending machines or concessions will be permitted on the Project.

20. Signage:

Contractor shall not be permitted to post any identifying signage except for information and directional signage as approved, in advance, by Property Manager.

21. Supervision:

While working at the Project, Contractor must maintain supervisory personnel on the Project at all times. Such personnel must be fully empowered to coordinate, respond to and authorize Contractor's work as necessary to enable work to proceed.

22. Fire Alarm:

(a) Contractor must arrange for all connections to the Base Building fire alarm system to be performed by the required electrical/fire alarm subcontractor (identified in Section 1 of the Tenant Design and Construction Manual), and the work is to be coordinated with the Property Manager. All costs associated with such work shall be the responsibility of Contractor.

(b) For any work requiring suppression of the alarm systems, Contractor must notify Property Manager two business days prior to requirement (via Impairment Form). At no time will the Fire Alarm System and Sprinkler system be allowed to be impaired at the same time.

(c) Property Manager must be notified two business days prior to the use of any burning or welding device or demolition work so that the fire alarm system can be taken "off-line." Notification must also be given immediately upon work completion.

(d) Smoke detectors and other fire alarm system devices must be protected when performing work which may cause these devices to become unduly dusty. Any protection such as paper, tape and plastic, etc., must be removed daily.

(f) Interruptions of the operation of the Fire Alarm System in excess of 4 hours will require the creation of a Fire Watch including all recording and operations information as required by NFPA 101 at the sole expense of the Contractor.

23. Air Balance:

Contractor must arrange for air balance with an air balance subcontractor approved by Property Manager. Air balance reports shall be prepared and submitted in a format approved by Tenant's MEP Engineer. All costs associated with such work shall be the responsibility of the Contractor.

24. Progress Meetings:

Contractor agrees to conduct weekly job progress meetings with Property Manager. Any Contractor or subcontractor, if requested, must attend and be represented by an individual empowered to speak and act on Contractor's behalf.

25. Disruptive Work:

(a) Contractor agrees to perform work involved in slab penetrations, steel erection, interruptions of Project services, including but not limited to: fire protection, electrical, HVAC and plumbing services or other disruptive work between the hours of 7:00 p.m. and 7:00 a.m. Mondays through Fridays and after 2:00 p.m. Saturdays or such other times designated by Property Manager so as not to disturb occupants of the Project. All work performed by Contractor during non-normal working hours must be scheduled at least two business days in advance with Property Manager. Any work requiring an interruption in utility, HVAC or life safety system services to other tenants of the Project shall be scheduled at least two business days in advance with Property Manager and shall be performed under the supervision of Property Manager's operating engineer. Contractor shall bear the cost of Property Manager's operating engineer, at an overtime rate, with a 4-hour minimum.

(b) The following construction operations which take place on any floors of the Project must be performed outside Normal Business Hours identified in Paragraph 2. These operations include, but are not limited to:

- i. Drilling, cutting or chiseling of the concrete floor slab.
- ii. Drilling or cutting of any structural member or installation of new structural member.
- iii. Any work which generates vibration that may be disruptive to normal office operations. (Shooting drywall track, drilling pipe or duct work hangers, installing tackless strips, etc.).
- iv. Welding or operating a compressor.
- v. Draining or tapping into sprinkler piping or plumbing risers or loops.
- vi. Spraying or lacquering.
- vii. Work in occupied tenant spaces.
- viii. Work in tenant ceilings.

(c) No cutting, drilling, or patching of existing work shall be permitted without prior written consent of Property Manager. Request for permission to do cutting, drilling, or patching shall include explicit

details and descriptions of work and must not under any circumstances diminish the structural integrity or functional capabilities of the Project components or systems. Tenant must provide Ground Penetrating Radar (GPR) and X-Ray reports to be reviewed by the Base Building Structural Engineer of Record, at Tenant's expense, and written approval must be conveyed prior to any penetrations being made. Field visitations may be required, depending on types and locations of penetrations. Additionally, depending on scale of GPR and X-Ray work, occupancy of Project may be restricted as work is being performed. Tenant shall coordinate "after hours" work with Property Manager. Chipping or channeling is not permitted.

(d) Contractor shall provide reasonable notice, but not less than one week, to Property Manager for Project system (including elevator) shutdowns necessary to perform the work, including a description of work intended, a comprehensive schedule of shutdowns, anticipated duration of shutdown, systems involved, contingency plans, and required Property Manager support staff. If such work interferes with the Project occupants' ability to conduct business, Contractor shall perform such work, or affect such interruption, during non-business hours consistent with good construction practices. All Contractors shall work to coordinate shutdowns so as to reduce the frequency of occurrence and duration of service interruption.

(e) The following Base Building systems must not be shut down, operated, interrupted, modified or reconfigured without the express prior written consent of Property Manager. An engineer employed by Property Manager must be present during all shutdowns at a reimbursable overtime rate (four-hour minimum). Special care must be taken when these systems serve other tenant areas.

Elevator	Domestic Water	Electrical Power
Air Distribution	Standpipe	Security
Chilled Water	Sprinkler	Life Safety/Fire Alarm
Condenser Water	Heating Hot Water	BMCS
Cooling Tower	Plumbing	Telephone/Data

(f) All new HVAC piping and existing HVAC piping that is drained must be cleaned, flushed and treated in accordance with Property Manager's design specifications. Prior to connecting into the system, Contractor must coordinate this work with Property Manager and the approved water treatment vendor. All new piping must be hydrostatically tested in accordance with requirements by the local jurisdiction (at a minimum) before being brought on line.

(g) Contractor must provide updated panel schedules in typed form to Property Manager.

(h) NFPA 70E and OSHA 29 CFR 1910 Arc Flash and electrical safety requirements must be adhered to at all times. The building's Arc Flash program is required to be updated in accordance with NFPA and OSHA. Copies of all updated Arc Flash calculations related to the modified/added panels shall be turned over to property management upon completion of the project.

(i) Panel covers must be reinstalled at the end of the workday.

(j) If work on the standpipe and sprinkler system is required, Property Manager must be notified at least two business days in advance and necessary Project staff will be dispatched to operate the shut-off valves at the Contractor's expense if requested prior to 7:00 a.m. on Weekdays, on Saturdays and/or Sundays. When work is completed, Property Manager must again be notified to reactivate the system. At no time will a floor be left without sprinkler coverage unless a fire watch, previously authorized by Property Manager, is instituted with Property Manager's participation. If a Life Safety System has been

impaired the sub-contractor must not leave the site until it has been brought back in service and verified by the building's engineer.

(k) Contractor is responsible for providing fire extinguishers in accordance with OSHA requirements, with current inspection tags during the construction period within the work area, and at a ratio of one fire extinguisher per 7,500 square-feet or part thereof under construction.

26. Burning:

Open fire or rubbish burning is strictly prohibited.

27. Fire and Life Safety Systems:

(a) Contractor shall be responsible for false alarms of the Project's Fire and Life Safety System generated by Contractor. Each event of a false alarm will cause Contractor to be charged \$250.00, plus any additional fees charged by the Fairfax County Fire Department in response to these alarms.

(b) Fire and Life Safety System equipment must remain in operation at all times during construction. Approvals to take the system (or any part) out of service, must be obtained from Property Manager in writing via the Building's Impairment Form. Posting of fire watch will be required per Fairfax County code during all Impairments when the system is fully or partially out of service.

(c) Any efforts to disable the smoke detectors in the work area must be coordinated with the Property Manager and must be reversed so as to put all Fire and Life Safety Systems back into service during non-normal working hours. Contractor will be charged \$250.00 for each incident where the Fire and Life Safety Systems on the Project are left in a disabled condition, and will be responsible for costs, if any, related to the repair of the systems damaged by Contractor.

(d) Any tie-ins to the Fire and Life Safety System must be performed by building's required Fire Alarm subcontractor, at Tenant's expense, and coordinated through the Property Manager. Property Manager must be notified at least two business days prior to working on any of the devices. If any panels or devices are to be accessed, an approved fire alarm technician must be on site. The approved technician is to monitor all work related to the Fire/Life Safety System as it progresses. At no time is the Fire and Life Safety System to be tied into without the presence of an approved fire alarm technician. Any devices that are accidentally or otherwise made to be inoperable must be repaired or replaced immediately.

(e) Fire Marshal Inspections need to be coordinated with the Property Manager two business days in advance and be scheduled before 8:00 a.m. or after 6:00 p.m.

28. Permits:

Contractor must obtain all building permits, including a final Non-Residential Use Permit (Non-RUP), as required by Fairfax County for Contractor's work. A copy of the building permit must be supplied to the Property Manager before any work commences, and the original Non-Residential Use Permit (Non-RUP) must be supplied to the Property Manager at the time of issuance.

29. Indoor Air Quality Specifications:

Property Manager has established acceptable indoor air quality ("IAQ") procedures. Attachment B

outlines, in general, the conditions under which Tenant construction must take place in order to comply with established Property Manager IAQ requirements. Contractor must meet with Property Manager prior to the commencement of construction to review all specific requests, as outlined in Attachment B, attached hereto.

30. Good Construction Procedures:

(a) All abandoned or removed equipment above the ceiling and behind the walls (water lines, electrical lines, duct work, telecommunication wiring etc.) must be removed and taken back to the point of origination such as Breaker Panels, Risers, etc. this also includes items discovered in the field.

(b) Building standard signs are to be ordered through the Property Manager. Requests for and deviation from this standard must be submitted, in writing, to Property Manager for approval.

(c) All cabling must be plenum rated due to the return air ceiling plenum in the building.

(d) All penetrations must be waterproofed and have firestop installed in accordance with the National Fire Protection Association (NFPA).

(e) Any and all equipment and cabling installed in ceilings cannot be supported by the suspended ceiling or any existing guy wires. They must be secured to the underside of the slab and comply with all National Fire Safety Codes.

(f) All waste lines that create condensation due to ice machines, refrigerators, etc., must be insulated to prevent leaks. Repairs performed due to uninsulated lines will be charged to the Tenant.

IV. SYSTEM DESIGN - RULES & REGULATIONS

Plumbing

If Tenant Contractor connects to the plumbing infrastructure, futures for subsequent work shall be created by the Contractor, where applicable.

Piping and Fixtures

The domestic water piping shall be type L copper with solder joint fittings; the sanitary and vent piping shall be service weight cast iron with no-hub coupling; and the plumbing fixtures shall be the water efficient type and shall meet the latest version of LEED requirements.

Water Heaters

Each tenant shall provide their own electric water heater, sized for demand and storage requirements, to serve new fixtures installed as part of Tenant Improvements (e.g., additional restrooms fixtures, shower facilities, pantries, etc.). Water Heaters need to include a moisture sensing device within the overflow pan that will upon activation shut the water supply off to the Water Heater via Solenoid Valve.

Electrical

The electrical system is designed to accommodate 8 watts/ft² of Tenant connected load on each floor. Tenant shall provide additional heating panels as required for Tenant build-out.

Tenant Contractor shall label the front face of each panel, including Landlord-provided panels, with an engraved tag listing the panel's ID and the Tenant's name.

All initial energizing and service set-up for Tenant power must be coordinated by Tenant Contractor with Landlord.

Critical Tenant loads requiring separate emergency power systems must be coordinated with the Landlord and will require separate tenant supplied back-up systems. **The Building's Generator is not available to support tenant systems.**

There is an electrical ground bar in each Electrical Room, which is accessible to Tenant.

Fire Protection

Sprinkler mains are provided throughout the core and shell office floors per NFPA 13 requirements. Tenant must remove, relocate and route branch lines and/or mains to new locations as required by the Tenant's design requirements, and the entire sprinkler installation shall be installed in accordance with the rules and regulations of the applicable NFPA 13 and NFPA 101 and comply with the regulations of the Fire Marshal and the local and state authorities having jurisdiction. All core and shell sprinkler types will have to be replaced by Tenant with building standard fully concealed sprinkler heads with a white cover, and upon completion, the Tenant shall furnish an inspection certificate. Any draindowns necessary for Tenant sprinkler work requires at least two business days to Landlord/Manager with the submittal of an Impairment Form.

Tenants requiring special fire extinguishing systems (dry, chemical, or delayed) must provide a signal to the Fire Command Center on the Street Level that reports a trouble, alarm or activation of the Tenant's system.

Fire Alarm & Smoke Detection

If the quantity of devices required, due to the layout of the Tenant space or the occupancy type, exceeds the current capacity, Tenant will be required to install additional circuit boards, power supplies, and amplifiers at the system's data gathering panels.

Building Management System

Tenant Contractor will need to extend the base building BMS capabilities to each VAV and Control within the Tenant Space during fit-out work using the Property's required Building Controls subcontractor and update the floor graphics for modified or added equipment.

Roofing

To ensure that warranties are maintained, Tenant shall use the required Roofing subcontractor to perform any roof penetrations and/or to install roof curbs. All roof work must be reviewed and approved by Property Management prior.

Waterproofing

Tenant shall provide waterproofing in all "wet areas" such as kitchens, restrooms, mop sinks, drinking fountains, etc. in the Tenant Space. The waterproof membrane must extend 6" vertically on all demising walls. This membrane shall be water tested by the Tenant Contractor and inspected and signed off on by Building Operations personnel. If the membrane fails the water test, it must be replaced. Notwithstanding the foregoing, no vertical membrane curb shall be required at entrance points to any cafeteria, pantry, coffee station, or other typical office water location.

Telephone & Data

Any work in the Main Telephone Room must be installed on cable trays and with j-hooks and installed in locations approved by Property Management.

Conduits extend out from the Main Telephone Room to two separate phone risers. All cabling within these closets will also be installed on cable trays and with j-hooks and coordinated with Property Management. All Tenant equipment and final punchdowns must occur within the Tenant's Premises.

There is a telephone ground bar in each telephone closet (two per floor), which is accessible to Tenant.

Satellites & Antennas

Satellite dishes and any exterior antennas require a separate agreement with the Landlord (if not already included as part of the Lease), and any associated equipment must be installed at Tenant's expense. The equipment information, routing, installation location, and details must be approved by Landlord prior to commencement of this work.

LEED & Green Initiatives

Landlord strongly encourages the Tenant to follow the **LEED for Commercial Interiors** program for design and construction criteria during the build-out. Guidelines can be found on the U.S. Green Building Council's LEED website at www.usgbc.org/LEED.

V. COORDINATION DRAWINGS

Landlord strongly recommends that the Tenant Plans (including both architectural and engineering specifications) include the following language requiring the Contractor to prepare and submit "Coordination Drawings" to ensure adequate coordination of above-ceiling work before and during construction:

"Prepare composite working drawings ("Coordination Drawings") at a suitable scale not less than 1/4"=1'-0, clearly showing how the work of all other trades will be coordinated. Any work installed in conflict with the work of other trades shall be corrected at no cost to the Tenant or Landlord.

The Contractor and all Subcontractors shall prepare a complete set of Coordination Drawings indicating the actual equipment to be furnished and installed under this Contract, and the location and/or exact routing for all items including but not limited to: light fixtures, conduit, piping, ductwork, and related above ceiling items. Coordination Drawings shall also include locations of all slab penetrations. The Contractor shall make allowances to include 1" slab deflection in all areas as part of the coordination of above ceiling work. The Coordination Drawings shall be submitted to Tenant's Architect and Tenant in a timely manner after award of the Contract. The sheet metal drawings shall be prepared and shall serve as the base drawings. The Coordination Drawings shall be approved by the Contractor. If the Contractor allows one trade to install work before coordinating with work of other trades, the Contractor shall make necessary changes to correct the condition without extra charge.

This requirement for Coordination Drawings shall not be construed as authorization for the Contractor or Subcontractor to make any unauthorized changes to the Tenant Plans. The Contractor may, however, subject to acceptance of Tenant's Architect and without extra charge, make reasonable modifications in the layout as needed to prevent conflict with work of other trades, or for the proper execution of the work.

All architectural parameters on the Coordination Drawings shall be maintained such as ceiling height, chase walls, and equipment room sizes, unless prior written authorization to modify such space allocations is received from Tenant's Architect. Prior to final acceptance of the Work, the Contractor shall provide the Coordination Drawings originals to the Landlord.

Landlord will require a 6" minimum clear space between ceiling and bottom of plenum hung MEP equipment. All piping and duct work must be installed as tight to the underside of the deck as possible."

AGREED TO AND ACCEPTED

By: _____
Contractor: _____
Date: _____

By: _____
Tenant: _____
Date: _____

By: _____
Project Manager: _____
Date: _____

By: _____
Sub-contractor: _____
Date: _____

By: _____
Sub-contractor: _____
Date: _____

By: _____
Sub-contractor: _____
Date: _____

By: _____
Sub-contractor: _____
Date: _____

By: _____
Sub-contractor: _____
Date: _____

ATTACHMENT A
Owner Certificate of Insurance Requirements

INSURANCE
Vendors/Contractors

Before proceeding with any of Contractor's work, Contractor shall furnish to Owner and Property Manager, a certificate in form approved by Owner (not to be unreasonably withheld) executed in duplicate by Contractor's insurance agent evidencing the insurance required with insurance companies approved by Owner (not to be unreasonably withheld). Certificates not in approved form or which are incomplete will be returned to Contractor for revision and resubmission. Certificates must clearly indicate the work for which the certificate is submitted. Contractor shall keep said insurance in full force until acceptance of its work by the Tenant. Such insurance shall be modifiable or cancelable only on written notice to Owner and Property Manager from the insurance company, mailed to Owner and Property Manager, ten (10) days in advance of modification or cancellation. In the event of cancellation notice, Contractor shall obtain similar insurance coverage from other approved insurance companies prior to the effective cancellation of the original insurance coverage. In the absence of such insurance, Contractor shall cease all work and vacate the Project, until such time as new Certificates of Insurance, as described above, are received by Owner and Property Manager.

Coverage	Minimum Limits of Liability
1. Commercial General Liability Insurance	\$8,000,000 per occurrence \$1,000,000 personal & adv injury \$8,000,000 general aggregate \$5,000,000 products – comp/op agg
2. Excess/Umbrella Liability	\$5,000,000
3. Comprehensive Automobile Liability Occurrence insurance to include non-Owned, hired or rented vehicles as well as owned vehicles.	\$1,000,000 combined single limit
4. Statutory Minimum Worker's Compensation.	
5. Employers' Liability	\$1,000,000 each accident \$1,000,000 disease – each employee \$1,000,000 disease – policy limit
6. Design Consultants Professional Liability	\$1,000,000 each claim

It is agreed that in no event shall this insurance company have any right of recovery against MACW Property Management Company, LLC, Hines Interests Limited Partnership, Owner's or Property Manager's agents or Owner's Architects or Engineers.

Evidence of the above coverage should be provided to Owner and Property Manager by means of a Certificate of Insurance with Owner and Property Manager as certificate holders. The Certificate of Insurance shall also include the following provisions:

The entities listed below are additional insured on all policies (other than Worker's Compensation), and that such policies (other than Worker's Compensation) will be primary insurance over any other available insurance to the additional insured for the negligence of Contractor. The following wording shall be included for the additional insured:

- *Tysons Corner Holdings LLC,*
- *Tysons Corner LLC,*
- *Tysons Corner Property LLC,*
- *MACW Tysons, LLC,*
- *MACWH, LP,*
- *Walleye Retail Investments LLC,*
- *Macerich Walleye LLC,*
- *Walleye LLC,*
- *IMI Walleye LLC,*
- *DB Holdings LLC,*
- *MACDB Corp.,*
- *Tysons Corner Property LLC,*
- *The Macerich Partnership L.P.,*
- *The Macerich Company,*
- *MACW Property Management Company, LLC,*
- *Hines Interests Limited Partnership,*

and all owned, managed, controlled, non-controlled and subsidiary companies, corporations, entities, joint ventures, lenders, ground lessors, LLC's, partnerships and all their constituent partners and members.

Contractor shall also carry such additional insurance as may be required by the law in the Fairfax County. Contractor shall keep the insurance required by this paragraph in full force and effect until acceptance of its work by Owner. If Contractor shall subcontract any of its work, Contractor shall be responsible for seeing that such subcontractor shall have the insurance coverage and shall furnish Owner and Property Manager evidence thereof before the subcontractor commences work on the Project.

All policies of insurance must have a current rating of A-, VIII or better.

ATTACHMENT B

INDOOR AIR QUALITY

ASHRAE 62-89 Ventilation Standard for Acceptable Indoor Air Quality has been used as a guideline for this document in establishing minimum IAQ standards in addition to those required by local codes.

A. General

1. Adequate ventilation during the construction process is the key to maintaining acceptable indoor air quality. It is during Tenant construction that the largest quantity of air borne chemicals is likely to be released.
2. Owner recommends that materials and finishes be selected and specified which produce a minimum amount of chemical emissions.
3. Owner recommends that the construction schedule include adequate time after installation of materials and finishes for the removal of toxic emissions (“off-gassing”) which are present in many construction materials, finishes and furnishings.
4. All HVAC equipment and delivery systems (i.e., ductwork, diffusers, etc.) must be clean and designed so as to not encourage accumulation or distribution of microbial growth or other air borne contaminants.

B. Requirements

1. The HVAC system should be designed to include sufficient air volume distribution to the occupants, adequate outside air delivered to the occupants, ease of air system balance, and adequate start-up commissioning with follow-up documentation and verification. HVAC ducts, plenums and equipment shall be designed, constructed and installed to minimize or prohibit the growth or dissemination of micro organisms.

Such design shall include:

- External thermal duct insulation
 - Dual wall construction of equipment handling air
 - Stainless steel components inside air handling equipment
 - Air filtration to minimize the introduction of dirt and to clean re-circulated air.
2. Produce a minimum of two (2) air changes of outside air per hour in the construction area and enclose the construction area when construction begins, i.e., grinding concrete floors, sanding sheet rock, or application of wet products like painting, sealing, etc. Supply fans must be operated only during hours of actual construction, not 24 hours a day. Supply fan operation must be programmed to use outside air in lieu of return air. Caution must be exercised in cold weather.
 3. Provide a minimum of two (2) air changes of outside air, twenty-four (24) hours per day commencing with installation of floor covering products, continuing until the last day before

occupancy. Caution must be exercised in cold weather.

4. Contractor should, whenever feasible, allow wet applications to dry completely before installing dry materials and furnishings.
5. Prior to commencing work, Contractor must provide Property Manager with Material Safety Data Sheets (MSDS) for all applicable materials and products. Specific installation criteria will be approved based upon this information.
6. Contractor shall be required to minimize the air concentrations of volatile organic compounds (VOCs) by controlling their source and selecting building materials based in part on their favorable air quality characteristics.
7. Contractor shall minimize, whenever possible, the on-site use of wet materials producing VOCs such as lacquer, adhesives, paints, etc. Factory application of these finishes should be specified whenever possible.
8. CFM readings must be taken before work is started and after work is completed any time changes are made to an air supply system that serves another tenant.

ATTACHMENT C

LEED O+M

Facility Maintenance and Renovation Policy for 1861 International Drive

Effective date: May 6, 2022

i. Scope

This policy applies to any ongoing facility maintenance activities and any facility renovations that occur in 1861 International Drive. This policy includes guidelines for purchasing materials related to these activities, disposing of waste generated from these activities, and managing indoor air quality during these activities.

The following materials are covered under this policy:

- Base building elements permanently or semi-permanently attached to the building (mechanical, electrical and plumbing components and specialty items such as elevators are excluded). Exclude fixtures and equipment, which are not considered base building elements
- Furniture and furnishings as well as the components and parts needed to maintain them

For the purposes of this policy, routine maintenance includes (not exclusively) painting, carpet replacement, and ceiling tile replacement. Renovations include fit-outs affecting more than one room, or large rooms such as the lobby or board room, and involve multiple elements, such as moving walls and electrical work, or replacing multiple different architectural finishes.

ii. Goals

<u>Component</u>	<u>Goal</u>	<u>Performance Measurement Unit</u>
Materials purchased for facility maintenance and renovations	50% of materials purchased will meet the sustainability criteria described below	cost
Furniture purchases	50% of furniture purchases will meet the sustainability criteria described below	cost
Waste disposal from facility maintenance	40% of waste will be diverted from landfills	Weight or volume
Waste disposal from facility renovations	40% of waste will be diverted from landfills	Weight or volume
IAQ best management practices	IAQ Best Management Practices will be implemented for 100% of renovation projects and 100% of maintenance activities	-

iii. Roles and Responsibilities

The primary responsible party for this policy is Hines Interests Limited Partnership, the Management of 1861 International Drive. The responsible party is responsible for ensuring that this policy is executed and that any contracted vendors involved in facility maintenance and renovation activities are informed of and adhere to the procedures outlined in this policy. Property Management is responsible for reviewing this policy for any significant changes on the interval specified in the quality assurance section. If at any time updates are required to this policy, the responsible party will ensure that the appropriate individuals are informed of the updates.

Each major renovation project will have a renovation manager. The renovation manager is appointed by the Property Manager and is responsible for coordinating the various aspects of the renovation, including the purchasing and waste schedule, as well as adherence to the indoor air quality requirements.

iv. Standard Operating Procedures and Implementation Strategies

Purchasing

Materials purchased for use in facility maintenance and renovations, as well as furniture purchases, will meet at least one of the following criteria under Reporting, Optimization, and other attributes:

Reporting:

- **Health Product Declaration.** The end use product has a published, complete Health Product Declaration with full disclosure of known hazards in compliance with the Health Product Declaration open Standard.
- **Cradle to Cradle Certified.** Product is Cradle to Cradle Certified™ under standard version 3 or newer.
- **Declare.** The Declare label must indicate that all ingredients have been evaluated and disclosed down to 1000 ppm.
- **ANSI/BIFMA e3 Furniture Sustainability Standard:** Documentation from the assessor or scorecard from BIFMA must demonstrate the product earned at least 3 points under 7.5.1.3 Advanced Level in e3-2014 or 3 points under 7.4.1.3 Advanced Level in e3-2012.
- **Product Lens certification**
- **Facts - NSF/ANSI 336.** Sustainability Assessment for Commercial Furnishings Fabric at any certification level
- **Global Green TAG PHD labels issued after January 1, 2020**
- **Environmental product declaration (EPD):** Product has an environmental product declaration that conforms to ISO 14025, 14040, 14044, and EN 15804 or ISO 21930 and have at least a cradle to gate scope. The EPD can be either industry-wide (generic) EPD in which the manufacturer is explicitly recognized as the participant by the program operator, or a product specific Type III EPD .

Optimization:

- **GreenScreen v1.2 Benchmark.** Product with fully inventoried chemical ingredients to 100 ppm with no Benchmark 1 hazards.
- **Cradle to Cradle Certified:** Product is Cradle to Cradle certified under standard version 3 or newer.
- **EPD Optimization path:** Product with Environmental Product Declarations (EPDs) that is third-party certified and demonstrates impact reduction below industry average in at least three of the following categories:
 - global warming potential (greenhouse gases), in CO₂e;
 - depletion of the stratospheric ozone layer, in kg CFC-11;
 - acidification of land and water sources, in moles H⁺ or kg SO₂;
 - eutrophication, in kg nitrogen or kg phosphate;
 - formation of tropospheric ozone, in kg NO_x, kg O₃ eq, or kg ethene; and
 - depletion of nonrenewable energy resources, in MJ.
- **Extended producer responsibility.** The product manufacturer (producer) participates in an extended producer responsibility program or is directly responsible for extended producer responsibility.

- **Wood products.** The product is certified by the Forest Stewardship Council or USGBC-approved equivalent
- **Materials reuse.** Reuse includes salvaged, refurbished, or reused products.
- **Recycled content.** Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content, based on cost.
- **Bio-based products.** The Bio-based product meets the Sustainable Agriculture Network's Sustainable Agriculture Standard and the Bio-based raw materials are tested using ASTM Test Method D6866 and legally harvested, as defined by the exporting and receiving country. Excludes hide products, such as leather and other animal skin material

Furniture specific requirements:

- **Furniture Emissions Evaluation :** Product has been tested in accordance with ANSI/BIFMA Standard Method M7.1–2011 (R2016) and complies with ANSI/BIFMA e3-2011 Furniture Sustainability Standard 7.6.2. For classroom furniture, use the standard school classroom model in CDPH Standard Method v1.2. Salvaged and reused furniture more than one year old at the time of use is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
- **Any of the optimization related attributes above are applicable to furniture.**

Other (facility maintenance and renovation materials only):

- **Low Formaldehyde Composite wood.** Built-in cabinetry and architectural millwork containing composite woods must be constructed from materials documented to have low formaldehyde emissions that meet the California Air Resources Board requirements for ultra-low-emitting formaldehyde (ULEF) resins or no-added formaldehyde based resins. Salvaged and reused architectural millwork more than one year old at the time of occupancy is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
- **Low emissions of volatile organic compounds for products other than furniture:** Thermal and acoustic insulation, flooring materials and finishes, ceiling materials and finishes and wall materials and finishes must either be inherently nonemitting or be tested and determined compliant in accordance with California Department of Public Health Standard Method v1.2–2017, using the applicable exposure scenario and complies with testing criteria and VOC limits for the CDPH standard method. Statement of product compliance must include appropriate exposure scenarios, range of TVOCs and follow CDPH guidelines. For products for school classrooms, the testing should be performed using the classroom scenario, for all other products use the default private office scenario. Both first-party and third-party statements of product compliance must follow the guidelines in CDPH SM v1.2–2017, Section 8. Organizations that certify manufacturers' claims must be accredited under ISO Guide 65. Laboratories that conduct the tests must be accredited under ISO/IEC 17025 for the test methods they use.
- **VOC content requirements for wet-applied products.** In addition to meeting the general requirements for volatile organic compounds (above), on-site wet-applied products must not contain excessive levels of VOCs, for the health of the installers and other trades workers who are exposed to these products. To demonstrate compliance, a product or layer must meet the following requirements, as applicable. Disclosure of VOC content must be made by the manufacturer. Any testing must follow the test method specified in the applicable regulation.

- All paints and coatings wet-applied on site must meet the applicable VOC limits of the California Air Resources Board (CARB) 2007, Suggested Control Measure (SCM) for Architectural Coatings, or the South Coast Air Quality Management District (SCAQMD) Rule 1113, effective June 3, 2011.
- All adhesives and sealants wet-applied on site must meet the applicable chemical content requirements of SCAQMD Rule 1168, July 1, 2005, Adhesive and Sealant Applications, as analyzed by the methods specified in Rule 1168. The provisions of SCAQMD Rule 1168 do not apply to adhesives and sealants subject to state of federal consumer product VOC regulations.
- If the applicable regulation requires subtraction of exempt compounds, any content of intentionally added exempt compounds larger than 1% weight by mass (total exempt compounds) must be disclosed.
- If a product cannot reasonably be tested as specified above, testing of VOC content must comply with ASTM D2369-10; ISO 11890, part 1; ASTM D6886-03; or ISO 11890-2.
- [For projects in North America] Methylene chloride and perchloroethylene may not be intentionally added in paints, coatings, adhesives, or sealants.
- **Zero Waste Manufacturing.** Products are made from manufacturers that have achieved certification of their waste minimization during operations. Acceptable certifications include third-party verified TRUE (zero waste certification) and UL Standard 2799.

Waste Management

For each facility renovation project, the Property Manager will coordinate with the renovation manager and contracted vendors to discuss the scope of the renovation. The scope of the renovation must be determined and the materials to be used and discarded during the renovation must be identified. Packaging will be a consideration in the materials that will be discarded. The weight or approximate volume of each type of waste will be broken out. Projects can use either weight or volume, but must be consistent throughout. Separate categories may include cardboard, wood products and cabinetry, drywall, tile, etc.

From this material flow, the five largest waste categories will be determined. The renovation manager will coordinate proper waste disposal and landfill diversion for these waste categories. This will involve contacting the appropriate vendors, scheduling haul dates, and ensuring properly sized storage areas for the construction waste. If necessary, a separate secured storage area will be secured for hazardous waste, such as paint.

Once the waste disposal has been coordinated, the renovation manager will write waste disposal instructions for each waste category and will distribute to the appropriate vendors.

For facility maintenance waste, the facility manager will identify locations for safely storing the waste. Bins will be provided to properly sort the waste for recycling and landfill, as appropriate.

All waste from facility renovations and maintenance will be handled, stored, and sorted separately from ongoing waste.

[Consider including additional information regarding the building-specific waste management program here.]

Indoor Air Quality Procedures for Maintenance and Renovations

The recommended control measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction, 2nd edition (2007), ANSI/SMACNA 008–2008, Chapter 3 will be implemented for facility renovations and maintenance activities that occur in the project. Hines Property Management is ultimately responsible for ensuring that these control measures are implemented, as applicable:

HVAC PROTECTION:

As much as possible, the HVAC systems serving the affected area will not be used during construction. All duct equipment openings will be sealed with plastic. In the event that the HVAC systems must be operated, the return side of the systems will be protected and closed off if possible. Temporary filters will be installed at each return air grille and return or transfer duct inlet opening such that there is no bypass around the filtration media. The filters must have a minimum efficiency reporting value (MERV) of 8 or better, as determined by ASHRAE 52.2–2007, with errata (or equivalent filtration media class of F5 or higher, as defined by CEN Standard EN 779–2002, Particulate Air Filters for General Ventilation, Determination of the Filtration Performance). All filtration media will be replaced immediately prior to occupancy.

SOURCE CONTROL

Materials meeting the sustainability criteria prescribed above will be used as much as possible, particularly for paints, carpet, composite wood, adhesives, and sealants that have the potential for significant emissions. All containers for paints, adhesives and sealants will be stored in a separate, secure location at times when construction is not active. During construction, lids will be kept on all containers as much as possible.

PATHWAY INTERRUPTION

Construction areas will be isolated to prevent contaminating non-construction areas. This will be done by sealing off the work areas with plastic and de-pressurizing the construction area. As much as possible, with weather permitting, the construction area will be ventilated using 100% outside air to exhaust contaminated air directly to the outside. Dust guards and collectors will be used on saws, sanders, and other tools.

HOUSEKEEPING

All porous or absorptive building materials, such as dry wall and ceiling tiles, will be protected from exposure to moisture and will be stored in a separate, clean area prior to installation. The entrances to the construction area will have temporary walk-off mats to collect particulates. The construction area will be sealed off using plastic. During construction, daily housekeeping will include use of vacuum cleaners with high-efficiency particulate filters, and sweeping compounds or wetting agents for dust control when sweeping. Prior to building material installation, the installation area will be cleaned to remove dust and debris. Prior to occupancy, the construction area will be vacuumed using high efficiency particulate filters.

SCHEDULING

As much as possible, the use of paints, sealants, and adhesives will be used after normal working hours to prevent building occupant exposure to off-gassing. All absorptive-finish materials will be installed after wet-applied materials have cured. The construction schedule will include time for a building flush out prior to occupancy. See below for flush out details.

PRIOR TO OCCUPANCY

The Hines Property Manager will coordinate with the renovation manager and contracted vendors to develop a plan for either conducting a flush-out or conducting air quality testing, as applicable, after construction ends and all interior finishes are installed, but before occupancy.

- **Flush-out:** If it is determined that a flush-out will be conducted, the flush out will begin after all construction work, including punch-list items, has been completed and furniture and fixtures have been installed. Finalize all cleaning, complete the final testing and balancing of HVAC systems, and make sure the HVAC control is functional. 14,000 cubic feet per square foot of floor area will be delivered to the space, with an internal temperature of at least 60 degrees Fahrenheit and a relative humidity of no more than 60% where cooling mechanisms are operated. The area will not be occupied until after at least 3,500 cubic feet of outdoor air per square foot has been provided to the space. After occupancy, the outside air will be ventilated at a minimum rate of 0.30 cfm per square foot.
- **Indoor air quality testing:** If it is determined that indoor air quality testing will be conducted, air quality will be tested when the HVAC system is operating under normal conditions with minimum outdoor airflow rates, so that the air tested will be as similar as possible to what the occupants will be breathing. The protocols for IAQ testing in the referenced publication, the U.S. EPA's Compendium of Methods for the Determination of Air Pollutants in Indoor Air will be used. Testing locations will be selected with the least ventilation but the greatest concentration of VOCs and other contaminants. Exact locations will be recorded. If a test sample exceeds the maximum concentration level, the space will be flushed out using the procedure above and indoor air quality will subsequently be retested in the same location.

[Consider including additional information regarding the indoor air quality management practices for the building here.]

v. Performance Measurement and Schedule for Reassessment

After each renovation or quarterly (whichever comes first), the responsible party and renovation manager will evaluate whether the procedures described in this policy have been met. Purchasing and waste logs will be evaluated against sustainability criteria and project goals. If changes are necessary to the policy, the responsible party and renovation manager will determine how best to change the policy procedures to meet the specified goals for the next renovation and/or for ongoing maintenance activities. Indoor Air Quality practices will also be reviewed to ensure that any adjustments to the policy are made.

vi. Quality Assurance/Quality Control Processes

During renovations, the renovation manager, with help from the Hines Property Manager as necessary, will oversee the work on the construction site to ensure that the procedures are being followed as required. Manufacturer documentation and purchasing data will be retained to ensure that sustainable purchasing goals are being met, and waste reports will be retained to ensure that recycling goals are being met. Weekly construction meetings will include an agenda item to ensure that the Indoor Air Quality practices outlined in this policy are being implemented.

All maintenance personnel responsible for building repairs will review this policy annually to ensure that they implement the Indoor Air Quality practices outlined in this policy. Maintenance purchases will be tracked on a quarterly basis to ensure that sustainable purchasing goals are being met. Maintenance waste will be tracked on a monthly basis to ensure that recycling goals are being met.