

## MEMORANDUM

Agenda Item No. 14(A)(9)

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**TO:** Honorable Chairman Jose "Pepe" Diaz  
and Members, Board of County Commissioners

**DATE:** September 1, 2021

**FROM:** Geri Bonzon-Keenan  
County Attorney

**SUBJECT:** Resolution on approving Development Lease Agreement between Miami-Dade County and 13th Floor OPF Developers, LLC, for the construction of aircraft hangars and taxiway extension at Miami-Opa Locka Executive Airport with required minimum investments of \$22,000,000.00 for the development of aircraft hangars and \$4,781,000.00 for construction of the taxiway extension, as well as obligations for land and opportunity rent; authorizing the County Mayor to execute the Agreement, subject to approval of the Federal Aviation Administration; authorizing the County Mayor to exercise the provisions therein, including termination; and directing the County Mayor to provide the Agreement to the County Property Appraiser in accordance with Resolution No. R-791-14

Resolution No. R-842-21

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The accompanying resolution was prepared by the Aviation Department and placed on the agenda at the request of Prime Sponsor Vice-Chairman Oliver G. Gilbert, III.



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Geri Bonzon-Keenan  
County Attorney

GBK/smm

# Memorandum



**Date:** September 1, 2021

**To:** Honorable Chairman Jose “Pepe” Diaz  
and Members, Board of County Commissioners

**From:** Daniella Levine Cava  
Mayor 

**Subject:** Development Lease Agreement with 13<sup>th</sup> Floor OPF Developers, LLC for the  
Construction of Aviation-Use Facilities at Miami-Opa Locka Executive Airport

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## **Recommendation**

It is recommended that the Board of County Commissioners (Board) approve the attached resolution approving a development lease agreement between Miami-Dade County and 13<sup>th</sup> Floor OPF Developers, LLC (Developer) entitled: “Development Lease Agreement between Miami-Dade County, Florida and 13<sup>th</sup> Floor OPF Developers, LLC, its Successors, and Permitted Assigns at Miami-Opa Locka Executive Airport” (DLA).

The DLA authorizes the lease of a parcel of land approximately 10 acres in size for aviation-use at the Miami-Opa Locka Executive Airport (OPF) for a period of thirty years with one five-year renewal option to the Developer, a wholly owned corporation. The DLA requires a minimum investment of \$22 million from the Developer to design and construct aircraft hangars for different uses on the southwest portion of OPF including but not limited to: aircraft storage, maintenance repair, aircraft engine testing, aircraft engine repair facilities, aircraft paint shop, parking, customer lounge areas and office. All improvements become the property of the County at the conclusion of the DLA.

In addition to the abovementioned improvements, the Developer will construct a portion of a taxiway extension as well as any other required airfield and pavement improvements from its facility to provide shared access to future tenants to the three runways at OPF. Estimated costs for the taxiway extension is approximately \$4.8 million. The taxiway extension, as a common use area, will be the property of the County at all times.

Through this DLA, it is anticipated that approximately 250 temporary jobs will be created during the design and construction period in addition to 270 permanent jobs with an average salary of \$62,000 to manage, maintain and operate the aircraft hangars and other related facilities. Project costs are estimated at minimum to total \$22 million including hard project costs and soft project costs.

## **Scope**

OPF is located in District 1, which is represented by Vice-Chairman Oliver G. Gilbert III, however, the impact of this DLA is countywide as OPF is a regional asset.

## **Delegation of Authority**

The County Mayor or County Mayor’s designee has the authority to execute the DLA. Furthermore, under the terms of the DLA, the Miami-Dade Aviation Department (MDAD or Aviation Department) has the option to (i) terminate the DLA for failure to comply with any material covenants of the DLA,

including the covenants to pay rentals, fees and charges when due, and the covenants to provide required evidence of insurance coverage, (ii) approve any assignment or subletting of the premises, and (iii) reduce acreage or the leasehold term for the Developer’s failure to timely or completely construct the required improvements.

### **Fiscal Impact/Funding Source**

As per the terms and conditions of this DLA, there is a positive fiscal impact to the County as it will generate revenues for the Aviation Department over the total term of the DLA, which includes the initial 30-year term plus the one five-year option-to-renew.

Based on aviation use land rent rates effective October 1, 2020, which is \$0.29 per square foot, the Developer will pay full market land rent for +/-10 acres in the amount of \$126,324 for the first year of the lease. Such land rent will be adjusted annually based on the appraised value approved by the Board. It is estimated that land rent will generate approximately \$6.2 million in revenues to the County (including the annual increases) over the 35-year DLA term.

Starting on the sixth year of the DLA, the Developer will pay the County opportunity rent for the use of the constructed improvements in the amount of \$200,000 per year beginning on the first day of Year 6 of the DLA through Year 10; \$300,000 per year beginning on the first day of Year 11 through Year 25; and \$400,000 per year beginning on the first day of the Year 26 to the last day of the term, totaling \$9.5 million over the 35-year DLA term. It is expected that the County will receive over the life of this DLA close to \$15.7 million.

### **Track Record/Monitor**

MDAD’s Division Director for Real Estate Management, Michele Raymond, will monitor the implementation of this DLA.

### **Background**

Chapter 125.35(1)(b)1 of the Florida Statutes stipulates that it is in the best interest of the County for the Board to negotiate the lease of an airport facility for a term determined by the Board, as such, through the attached DLA, the Developer is seeking Board approval to lease +/-10 acres of land for a term of 30 years with one (1) 5-year option on the unused southwest portion of OPF for aviation-use. As per the terms and conditions delineated in this DLA, the Developer will design the aviation-use improvements in compliance with the Master Plan in effect for OPF and will obtain approval from the Federal Aviation Administration (FAA) for the proposed designs, which include one 200,000 square foot facility comprised of: (i) a 120,000 square foot aircraft hangar; (ii) a 20,000 square foot sheet metal shop; (iii) a 20,000 square foot composite shop; (iv) a 20,000 square foot interior refurbishment shop on the mezzanine level; and (v) a 20,000 square feet of office space together with mezzanine level office space to serve administrative, operational and customer offices.

The Developer must achieve “Beneficial Occupancy” of the newly constructed facilities no later than 1276 calendar days (3.5 years) from the DLA commencement date provided that delays are not caused by Force Majeure events. Beneficial Occupancy shall be deemed to have been achieved by the Developer on the date which is the earlier of: (i) the date upon which the Temporary Certificate of

Occupancy, or Certificate of Completion, as the case may be, has been issued for the improvements by the County, or (ii) the date upon which the improvements can be used for their intended purposes, in compliance with all permits and applicable laws.

The DLA reflects the negotiated terms and conditions between the Developer and the County, and includes among other things, all small business enterprise provisions applicable to architects and engineers in Section 2-10-4.01 of the Code of Miami-Dade County (Code); small business enterprise provisions applicable to construction activities under Section 10-33.02 of the Code; Art in Public Places under Section 2-11.15 of the Code; the "Little Davis-Bacon Ordinance" under Section 2-11.16 of the Code, Responsible Wages Ordinance under Section 2-11.16 of the Code; Residents First Training and Employment Program under Section 2-11.7; Employ Miami-Dade under Administrative Order (AO) 3-6; Responsible Wages and Benefits for County Construction Contracts - Implementing Order No. 3-24; and any other program of the County applicable to the Developer's activities, including the Department's Tenant Airport Construction Program in effect, as such procedures, programs, ordinances, or code provisions may be amended from time to time.

Since the aviation-use development proposed by the Developer will help meet the demand for high quality general aviation jet hangar aircraft storage, maintenance repair facilities and office facilities at OPF, it is in the best interest of the County to proceed with the proposed DLA, which is subject to final FAA approval.



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Jimmy Morales  
Chief Operations Officer



## MEMORANDUM

(Revised)

**TO:** Honorable Chairman Jose "Pepe" Diaz  
and Members, Board of County Commissioners

**DATE:** September 1, 2021

**FROM:**   
Gen Bonzon-Keenan  
County Attorney

**SUBJECT:** Agenda Item No. 14(A)(9)

Please note any items checked.

- ☐ "3-Day Rule" for committees applicable if raised
- ☐ 6 weeks required between first reading and public hearing
- ☐ 4 weeks notification to municipal officials required prior to public hearing
- ☐ Decreases revenues or increases expenditures without balancing budget
- ☐ Budget required
- ☐ Statement of fiscal impact required
- ☐ Statement of social equity required
- ☐ Ordinance creating a new board requires detailed County Mayor's report for public hearing
- ☒ No committee review
- ☐ Applicable legislation requires more than a majority vote (i.e., 2/3's present \_\_\_\_, 2/3 membership \_\_\_\_, 3/5's \_\_\_\_, unanimous \_\_\_\_, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) \_\_\_\_, CDMP 2/3 vote requirement per 2-116.1(3)(h) or (4)(c) \_\_\_\_, or CDMP 9 vote requirement per 2-116.1(4)(c)(2) \_\_\_\_ to approve
- ☐ Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required

Approved \_\_\_\_\_ Mayor  
Veto \_\_\_\_\_  
Override \_\_\_\_\_

Agenda Item No. 14(A)(9)  
9-1-21

RESOLUTION NO.      R-842-21

RESOLUTION APPROVING DEVELOPMENT LEASE AGREEMENT BETWEEN MIAMI-DADE COUNTY AND 13TH FLOOR OPF DEVELOPERS, LLC, FOR THE CONSTRUCTION OF AIRCRAFT HANGARS AND TAXIWAY EXTENSION AT MIAMI-OPA LOCKA EXECUTIVE AIRPORT WITH REQUIRED MINIMUM INVESTMENTS OF \$22,000,000.00 FOR THE DEVELOPMENT OF AIRCRAFT HANGARS AND \$4,781,000.00 FOR CONSTRUCTION OF THE TAXIWAY EXTENSION, AS WELL AS OBLIGATIONS FOR LAND AND OPPORTUNITY RENT; AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE THE AGREEMENT, SUBJECT TO APPROVAL OF THE FEDERAL AVIATION ADMINISTRATION; AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXERCISE THE PROVISIONS THEREIN, INCLUDING TERMINATION; AND DIRECTING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO PROVIDE THE AGREEMENT TO THE COUNTY PROPERTY APPRAISER IN ACCORDANCE WITH RESOLUTION NO. R-791-14

**WHEREAS**, this Board desires to accomplish the purposes outlined in the accompanying memorandum and document, copies of which are incorporated herein by reference,

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA**, that this Board:

**Section 1.** Approves the terms of the attached Development Lease Agreement between Miami-Dade County and 13th Floor OPF Developers, LLC, for the construction of aircraft hangars and taxiway extension at Miami-Opa Locka Executive Airport with required minimum investments of \$22,000,000.00 for the development of aircraft hangars and \$4,781,000.00 for construction of the taxiway, as well as obligations for land and opportunity rent, subject to the provisions of section 3.

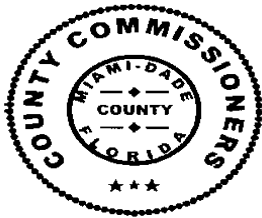
**Section 2.** Authorizes the County Mayor or County Mayor’s designee to execute the Development Lease Agreement on behalf of the County and exercise the provisions therein, including termination, subject to approval of the Federal Aviation Administration.

**Section 3.** Directs the County Mayor or County Mayor’s designee to provide a copy of the Development Lease Agreement to the County Property Appraiser in accordance with Resolution No. R-791-14.

The foregoing resolution was offered by Commissioner **Oliver G. Gilbert, III** , who moved its adoption. The motion was seconded by Commissioner **Kionne L. McGhee** and upon being put to a vote, the vote was as follows:

|                      |                                       |                                   |
|----------------------|---------------------------------------|-----------------------------------|
|                      | Jose “Pepe” Diaz, Chairman            | <b>aye</b>                        |
|                      | Oliver G. Gilbert, III, Vice-Chairman | <b>aye</b>                        |
| Sen. René García     | <b>aye</b>                            | Keon Hardemon <b>aye</b>          |
| Sally A. Heyman      | <b>aye</b>                            | Danielle Cohen Higgins <b>aye</b> |
| Eileen Higgins       | <b>aye</b>                            | Joe A. Martinez <b>aye</b>        |
| Kionne L. McGhee     | <b>aye</b>                            | Jean Monestime <b>aye</b>         |
| Raquel A. Regalado   | <b>aye</b>                            | Rebeca Sosa <b>absent</b>         |
| Sen. Javier D. Souto | <b>absent</b>                         |                                   |

The Chairperson thereupon declared this resolution duly passed and adopted this 1<sup>st</sup> day of September, 2021. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.



MIAMI-DADE COUNTY, FLORIDA  
BY ITS BOARD OF  
COUNTY COMMISSIONERS

HARVEY RUVIN, CLERK

By: **Melissa Adames**  
Deputy Clerk

Approved by County Attorney as  
to form and legal sufficiency.

APP

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Agreement No.: \_\_\_\_\_

Cust. No.: \_\_\_\_\_

**DEVELOPMENT LEASE AGREEMENT BETWEEN MIAMI-DADE  
COUNTY, FLORIDA AND 13TH FLOOR OPF DEVELOPERS, LLC., ITS  
SUCCESSORS, AND PERMITTED ASSIGNS AT MIAMI-OPA LOCKA  
EXECUTIVE AIRPORT**

THIS DEVELOPMENT LEASE AGREEMENT ("Agreement" or "Lease") is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 2021 (the "Lease Commencement Date"), by and between MIAMI-DADE COUNTY, a political subdivision of the State of Florida ("Lessor" or "County"), and 13TH FLOOR OPF DEVELOPERS, LLC., a corporation organized under the laws of Delaware, its successors and permitted assigns ("Lessee" or "Tenant," together with Lessor (or County), a "Party," and, collectively, the "Parties").

**WITNESSETH**

**WHEREAS**, the County is the owner of Miami-Opa Locka Executive Airport (known as the "Airport" or "OPF") and operates it through the County's Aviation Department (the "Department" or sometimes "MDAD"), and Lessee desires to develop a specific portion of such Airport for aviation and aeronautical purposes; and

**WHEREAS**, Lessee will construct at its expense aircraft hangars for uses including but not limited to aircraft storage, maintenance repair, aircraft engine testing, aircraft engine repair facility, aircraft paint shop, parking, customer lounge areas and offices and any and all uses permitted in accordance with the Minimum Standards for Conducting Aeronautical Activities at the Miami-Dade County General Aviation Airports (the "Facility" or the "Development Activities"), consisting of a total of 10 acres, more or less, as reflected on Exhibit A, which Lessee shall occupy for a thirty (30)-year period with one (1) five (5)-year option to renew under the terms of this Agreement; and

**WHEREAS**, in addition to the improvements noted above, Lessee will construct at its own expense, a designated portion of a taxiway (the "Development Activities") as well as any other required airfield and pavement improvement in support of the activities noted above; and

**WHEREAS**, Lessee acknowledges that there may be existing environmental conditions on site, and assumes full responsibility for remediating the site to a condition that allows construction of the site; and

**WHEREAS**, Lessee acknowledges that all Development Activity must occur in strict compliance with requirements of the Federal Aviation Administration ("FAA") and in compliance with all regulatory requirements of the State of Florida and the County, and that this Agreement is expressly subject to such regulatory reviews and acceptances in accordance with the provisions of this Agreement;

**NOW THEREFORE**, for and in consideration of the foregoing premises, and of the mutual covenants and agreements contained herein, the Parties agree as follows:

**ARTICLE 1**  
**Term and Premises**

**1.01     Term:**

(A)     The Lessor hereby leases to the Lessee, and the Lessee leases from the Lessor, that certain parcel, more particularly described in Exhibit A (the "Premises"), consisting of approximately 10 acres, more or less, for the purposes and uses set forth in Article 2 (Use of Premises) and Article 4 (Improvements to Premises), with the right of Lessee to construct or cause to be constructed and thereafter occupy and make use of the Improvements as described in Article 4 (Improvements to Premises and Other), all for an initial lease term of thirty (30) years from the Lease Commencement Date (the "Initial Lease Term"), plus, at Tenant's option, one (1) extension term of five (5) years from the expiration of the Initial Lease Term (the "Extension Term, and together with the Initial Lease Term, the "Term" or the "Lease Term").

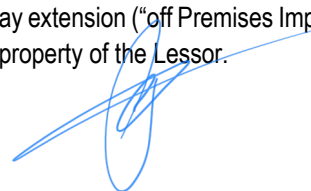
The approximate boundaries and location of the Premises are outlined on the sketch attached as Exhibit A, and incorporated herein by reference. The "Legal Description of the Property" as well as the precise number of square feet shall be determined by a survey prepared by the Lessee (the "Survey").

(B)     The Lease Term shall commence on the Lease Commencement Date. The "Lease Commencement Date" shall be the date on which the Lease has been fully executed and approved by the Board of County Commissioners of Miami-Dade County, Florida ("BCC"). In the event that: (i) Lessee has not obtained all permits for the construction and operation of the Improvements within, or if any appeals on any such permits are pending as of, three hundred and sixty-five (365) calendar days following the Lease Commencement Date, due to no fault of Tenant, Tenant shall have the right to terminate this Lease, by delivering written notice to Lessor, setting forth the effective date of such termination, in which case, this Lease shall be terminated, and shall be null, void, and of no further force or effect, in which case, the Parties shall be relieved of their respective obligations hereunder; or (ii) Tenant discovers unforeseen conditions affecting the Premises, which would impose an unreasonable burden upon Tenant, Tenant shall have the right to terminate the Lease, by delivering written notice to Lessor, setting forth the effective date of such termination, in which case, this Lease shall be terminated, and shall be null, void and of no further force or effect, in which case, the Parties shall be relieved of their respective obligations hereunder; provided however, the right to terminate the Lease in sub-article (ii) hereof is subject to the provisions within Article 8, and to the extent any conflict between the two exist, Article 8 shall prevail. In addition, the right to terminate the Lease in sub-article (ii) hereof shall expire ninety (90) calendar days following the date on which all permits for the construction and operation of the Improvements have been issued, and (b).

The "Rent Commencement Date" shall be the date which is the earlier of (i) six hundred and thirty (630) calendar days following the date on which all permits for the construction and operation of the Improvements have been obtained, or (ii) the date upon which Beneficial Occupancy of the Improvements has been achieved. Notwithstanding the foregoing or any other provision herein, the Rent Commencement Date for payment of the Land Rent (as defined herein) shall commence not later than one thousand ninety five (1095) days from the Lease Commencement Date.

"Beneficial Occupancy" of the Improvements shall be deemed to have been achieved by Lessee on the date which is the earlier of: (i) the date upon which the Temporary Certificate of Occupancy, or Certificate of Completion, as the case may be, has been issued for the Improvements by the County, or (ii) the date upon which the Improvements can be used for their intended purposes, in compliance with all permits and Applicable Laws.

**1.02     Investment:** The Lessee shall expend as a minimum development investment, TWENTY-TWO MILLION DOLLARS (\$22,000,000.00) (the "Investment") including all hard and soft costs associated with the design and construction of the Improvements located on the Premises (Phased Development Schedule included in Exhibit "B"), as defined in Section 4.01(A). Lessee shall also expend an additional minimum amount of \$4,781,000.00 for a portion of a common use taxiway extension ("off Premises Improvement Investment") which will allow access to Lessee's leasehold and shall at all times remain the property of the Lessor.



1.03 Premises, Improvements to be Constructed: The preliminary layout of the Improvements (as defined in Article 4.01 (Improvements to the Premises and Other), on the Premises, is shown in Exhibit B. Lessee will construct at its expense, aircraft hangars for uses including but not limited to aircraft storage, maintenance repair, aircraft engine testing, aircraft engine repair facility, aircraft paint shop, parking, customer lounge areas and offices. The Premises shall exclude areas containing airside access roads, and utility easements, each as set forth and depicted on Exhibit A hereto. Lessee acknowledges that there may be drainage issues on site that Lessee will remediate at their own expense. Further, Lessee acknowledges that the storm water retention for the five (5) year storm is to be retained within the leasehold as per Miami Dade County standards.

The Lessor shall, at all times during the Term, maintain, at no cost to Lessee, all such south public access roads, and utility easements to the same standards as the Lessor is required to maintain Off-Premises Improvements pursuant to Article 4.01(D).

In addition to the Improvements noted above, Lessee will construct at its own expense, a designated portion of a taxiway (the "Development Activities"), as well as any other required airfield and pavement improvement in support of the activities noted above, subject to approval by MDAD ("off-Premises Improvements"). The parties expressly agree that the design and layout of the taxiway extension to the west to access Lessee's leasehold as shown on exhibit "A" is not final, and is subject to the review and consent of the Federal Aviation Administration (FAA) and the Authorities Having Jurisdiction (as defined in Section 4.02 (A)).

The Parties acknowledge that all buildings shall be given specific building numbers by MDAD for identification purposes upon Beneficial Occupancy and that, if Lessee makes use of such facilities after the conclusion of the Term, the terms of Article 3.04 (Holdover) of this Lease shall apply.

Prior to, and during, construction of the Improvements, the Lessee shall have the right to make non-material modifications to the layout of such Improvements, so long as such modifications are generally consistent with the layout of the Improvements on Exhibit B, without the consent of MDAD. In the event that FAA approval is required with respect to any such non-material modification, MDAD shall reasonably cooperate with Lessee in obtaining such approval.

Subsequent to Beneficial Occupancy, Lessee shall have the right to make non-material modifications to such Improvements, so long as such modifications are generally consistent with the layout of such Improvements, without the consent of MDAD. In the event that FAA approval is required with respect to any such non-material modification, MDAD shall reasonably cooperate with Lessee in obtaining such approval.

1.04 Suitability of Premises: The Lessee acknowledges that (a) the Lessor has made no representations as to the Premises or the suitability of the Premises for the purposes of the Lessee, (b) except as set forth in this Agreement, the Lessor has no obligation to perform or cause to be performed any maintenance, repairs, renovations, cleanups, painting, or the like of the Premises which are leased in an as is condition, except to the extent of Lessor's responsibilities for environmental conditions under Article 8, (c) Lessee has made, or shall make pursuant to the terms hereof, whatever site inspections it deems necessary so as to be apprised of the conditions of the Premises, both above ground and below ground, and has made, or shall make, its own determination that the Premises are suitable for its intended use (d) Lessee has reviewed all documents provided by Lessor to Lessee which are applicable to the Premises and the adjacent areas of OPF. Except as set forth herein, Lessee has otherwise satisfied or shall satisfy itself that the conditions of the Premises and utilities in their current state are satisfactory to the Lessee. The Lessee's obligation under this Agreement, such as in Article 7.01(B) (Permits and Licenses), to obtain all land use, construction, and operating permits and approvals required of the Lessee at the Lessee's sole cost

and expense, shall not require the Lessor to take any action or perform any tasks within the Premises to enable the Lessee to obtain such permits and approvals, including, but not limited to, certificates of occupancy, which shall remain the Lessee's exclusive obligation to take or perform in order to obtain such permits and approvals; provided that the Lessor shall reasonably cooperate with Lessee regarding obtaining such permits and approvals. Lessee further acknowledges that, by executing this Lease, the Lessee at its own cost, risk, and expense must make the necessary investments and all Improvements to the Premises, including all infrastructure improvements and utilities services necessary for Lessee's construction and use of the Premises, to make the Premises suitable for the Lessee's use and to satisfy the County's building, life, safety, fire and occupancy requirements, and that the Lessor shall have no obligation to Lessee to compensate or reimburse Lessee for such cost, risk, expense, investment, and improvements.

1.05 Title to Improvements; Standards of Construction: Unless Lessee's financing documents require otherwise, Lessee shall have the option, to be exercised not later than sixty (60) days of the Lease Commencement Date, of (i) placing in the name of the County all Improvements installed or constructed by Lessee, free and clear of all liens and encumbrances, except for any financial interests or liens but only if such interests or liens are expressly approved by the County prior to the transfer of title, or (ii) retaining title to such Improvements in Lessee's name for the duration of the Term. For any Improvement, the title to which is to be placed in County's name, Lessee shall comply with the more stringent design and construction standards set forth by the Department from time to time to assure that the Improvement will remain in satisfactory condition during the Term and will have a reasonable useful life following the termination of this Agreement. For any improvement the title to which is to remain in Lessee's name, Lessee shall be entitled to use modified standards for its design and construction, as approved by the Department, but must nonetheless comply with all applicable building, fire, and life/safety codes, comply with the Department's requirements under Article 4.14 (Standards of Construction) as to the useful life of the Improvements.

1.06 Development Schedule and Failure to Develop. Lessor has granted Lessee this Agreement for the Term hereof on the basis of Lessee's assurance that Lessee will expend not less than the Investment (as set forth in Article 1.02 (Investment) hereof) for the design and construction of improvements on the Premises in accordance with the Lessee's Development Schedule (as defined herein).

Lessee shall achieve Beneficial Occupancy within 1095 calendar days following the Lease Commencement Date, provided that: (i) permits required for construction and operation of the improvements have been issued on or before the date that is three hundred and sixty-five (365) calendar days from the Lease Commencement Date and (ii) an event of Force Majeure as defined in Article 22.17 does not cause a delay in construction or in receipt of permits for more than ninety (90) days. Notwithstanding anything contained in this Lease to the contrary, except to the extent that delays are caused by Force Majeure events, Beneficial Occupancy must be achieved within 1276 calendar days.

Notwithstanding the foregoing or any provision within this Agreement, in the event that Beneficial Occupancy has not been achieved within 1825 days from Lease Commencement Date, Lessor shall be entitled to terminate this Lease, as provided in Article 4.05.

1.07 Review by FAA: This Agreement is subject to the review by the Federal Aviation Administration (FAA), and shall not be effective until completion of such FAA review and the Parties' acceptance of any changes hereto required or necessary as a result of the FAA review. If the FAA indicates that any portion of this Agreement is not consistent with the requirements of federal law or grant assurances, or else raises an objection to any portion of this Agreement, the Department shall have the right in its reasonable discretion to either declare this Agreement to be null and void or else to change the terms of this Agreement so as to overcome the reasons for the FAA's statements or objections and submit to the Lessee this Agreement as so changed. In the latter event, Lessee shall respond to such proposed changes promptly and in any case not later than sixty (60) days from the date of submission by the Department. If the Lessee accepts such changes, the Parties will execute a new Agreement as changed, subject again to FAA review. At any time following the FAA's initial review

of this Agreement in which the FAA made statements or else raised concerns about the terms of the Agreement, the Department may in its reasonable discretion determine that it is in the best interests of the County to lease the Premises to another party on terms that would be acceptable to the FAA, and upon such determination, whatever rights Lessee may have hereunder shall cease upon Lessee's receipt of such statement of determination. No compensation of any sort shall be payable to Lessee in the event that (a) the Department declares this Agreement to be null and void, (b) the Department makes in its reasonable discretion a determination to lease the Premises to another party, or (c) the parties are unable to agree to the terms of a revised Agreement that will overcome the concerns raised by the FAA.

1.08 Nothing herein shall be construed to limit or waive Lessor's rights to condemn the Premises or this Agreement, or to effect same through eminent domain, or as otherwise may be provided for at law.

## **ARTICLE 2**

### **Use of Premises**

2.01 General Privileges, Uses and Rights The Lessor hereby grants to the Lessee the following general privileges, uses and rights, all of which shall be subject to the terms, conditions and covenants hereinafter set forth or otherwise applicable to Lessee's use of any portion of the Airport, and all of which shall be non-exclusive on the Airport.

(A) The general use, in common with others, of all public Airport facilities and improvements, which are now or may hereafter be connected with or appurtenant to said Airport, to be used by the Lessee in connection with its operations hereunder. For the purpose of this Agreement, "public Airport facilities" shall include all public non-airfield areas, including, but not limited to, automobile parking areas, roadways, sidewalks, other public facilities appurtenant to said Airport, not specifically leased hereunder. Nothing contained herein shall in any way limit the right of the County in its sole discretion to abandon, discontinue or demolish any of the public Airport facilities described herein, subject to the terms hereof; provided however, notwithstanding the foregoing, during the Term, the County shall not have the right to abandon, discontinue or demolish the Taxi Lane, without providing corresponding replacement public Airport facilities that are satisfactory for the Lessee's uses and operations under this Lease.

(B) The right of ingress to and egress from the Premises over and across public roadways serving the Airport for the Lessee, its agents and employees, patrons and invitees, suppliers of service and furnishers of material. Said right shall be subject to Applicable Laws, promulgated as of the Lease Commencement Date, or as may hereafter apply with respect to life-safety matters and security requirements mandated by any Authority Having Jurisdiction. In no event shall Lessor be entitled to impose any fees or charges on Lessee related, in any manner, to the exercise of Lessee's rights granted under this Lease, except fees and charges established pursuant to Articles 2.04, 2.05, 3.10 and 3.11, fees imposed on Lessee by constituent Departments of the County providing services to Lessee (including but not limited to Solid Waste and/or Water and Sewer), and fees imposed by any Authority Having Jurisdiction in a regulatory capacity.

(C) Use of Facility: Lessee shall use the Facility, and shall require all customers using Facility, to comply with MDAD's requirements as to proper Facility use, as MDAD modifies, alters, or adds to such requirements from time to time.

The Facility is for the purpose of maintenance of aircraft and aviation related equipment, including support shops and overhaul facilities, aircraft parking, executive, administrative and operational offices, and related activities.

Nothing herein contained shall be construed to grant to the Lessee the right to use any other space or area improved or unimproved which is leased to a third Party, or which the County has not specifically leased to the Lessee.

2.02 Use of Premises: The Lessee shall use the Premises to construct aircraft hangars for uses including but not limited to aircraft maintenance and repair, aircraft engine testing, aircraft engine repair facility, aircraft paint shop, aircraft parking associated with the abovementioned activities, customer and employee vehicle parking, customer lounge areas and

offices and any and all uses permitted in accordance with the Minimum Standards for Conducting Aeronautical Activities at the Miami-Dade County General Aviation Airports as well as uses incidental thereto and otherwise permitted under Applicable Laws (the "Permitted Uses"). Fueling and defueling of aircraft shall only be permitted for aircraft and rotorcraft (collectively, "Aircraft") as part of the Lessee's maintenance activity. All Permitted Uses shall be in accordance with MDAD's Minimum Standards, as may be established and amended from time to time. Such services and uses may be provided on the Premises, provided that the services and uses are provided in compliance with MDAD's Minimum Standards.

2.03 Non-Flyable Aircraft: In no instance shall any non-flyable Aircraft be parked or stored on the Premises for a period in excess of sixty (60) consecutive days, without the prior written approval of the Department. After such sixty (60)-day period, the Lessee shall remove any non-flyable Aircraft from the Premises within twenty (20) days, when notified in writing by the Department to do so, unless such Aircraft is then and there undergoing maintenance as authorized herein. Failure of the Lessee to remove non-flyable Aircraft within such twenty (20)-day period, Aircraft shall result in the Department declaring said aircraft derelict and subject to removal pursuant to Chapter 25-10.24 of the Miami-Dade County Code, as well as the Department's termination of this Agreement.

2.04 Collection of Certain Fees and Charges: The Lessor reserves the right to establish fees for the landing, and parking, of all or special classes of Aircraft at the Airport. The Lessee, as a further consideration for this Agreement, shall be required, when directed, in writing, by the Lessor, to collect and promptly remit to the Lessor aviation fees and other aviation charges, approved by the County and payable to the Lessor. The method of collection and remittance of such fees and charges shall be as determined and directed by the Lessor, in writing. Lessee shall be in breach of this Agreement, if Lessee fails to make timely remittance of such aviation fees and other aviation charges to the Lessor, in accordance herewith, in which case, Lessor shall deliver to Lessee written notice of such breach, specifying the nature of such breach. If such breach continues for a period of sixty (60) days following the date of Lessee's receipt of such notice, or Lessee fails to diligently commence to cure such breach within such sixty (60)-day period, if such breach is of a nature that it cannot reasonably be cured within such sixty (60)-day period, Lessee shall be in default under this Agreement, and Lessor may terminate this Agreement by delivering written notice of termination to Lessee, specifying the effective date of termination, which effective date of termination shall be a date no earlier than thirty (30) business days following receipt by Lessee of Lessor's notice of termination. The Lessee shall be permitted to retain five percent (5%) of such fees and charges collected on behalf of the Lessor, which amount shall be considered as full and final payment to the Lessee for the cost of collecting and remitting the fees and charges, and shall not be considered as part of gross revenues earned by Lessee.

2.05 Concession Services: The Lessor reserves the right to establish fees and require permits for the operation of concessions, restaurants, car rentals, taxicab and other ground transportation services and other commercial activities at the Airport. In the event that the Lessor exercises such right with respect to Lessee, any such fees shall be charged to Lessee at fair market value, consistent with fees being charged by Lessor for similar concessions or activities to other tenants at OPF.

2.06 Lessee's Rights Not Exclusive: Notwithstanding anything herein contained that may be, or that may appear to be, to the contrary, it is expressly understood and agreed that the rights granted under this Agreement are non-exclusive and Lessor reserves the right to grant similar privileges and similar leases to other lessees on other parts of the Airport (other than the Premises) and to take any and all actions (including the leasing of property for any lawful purpose) that Lessor is permitted to take pursuant to Applicable Laws.

**ARTICLE 3**  
**Rent and Payments**

3.01 Rental Charges:

A) Rent.

- (1) As to the land which constitutes the Premises, Lessee shall pay to Lessor, on a monthly basis, land rent (land) ("Land Rent"), pavement rent, as applicable during the five-year option to renew or any years thereafter, ("Pavement Rent"), and opportunity rent ("Opportunity Rent"). Opportunity Rent together with Land Rent and Pavement Rent, shall be the "Rent". Land Rent and Pavement Rent shall be determined by the County as fair market value (FMV) rental rates established through appraisal and approved by the BCC. The Rent, commencing as described below, shall be payable monthly in U.S. funds, plus applicable state sales tax, as required by law, on the first day of each and every month as shown below, and without billing, at the offices of the Department as set forth in Article 3.05 (Address for Payments).
- (2) Land Rent. Land Rent shall be the established rate by the BCC, as of the Rent Commencement Date, as defined herein. By way of example, the rate for Land Rent for fiscal year 2021 is \$0.29 per square foot. If the Land Rent were to be payable within the year 2021 and assuming the final Survey equaled exactly ten (10) acres, more or less, the Land Rent would be calculated as follows: 10 acres (435600 s.f.) x \$0.29 per square foot = \$126,324 per year. For the avoidance of doubt, Land Rent shall only be allocable to the Premises, and not to any real property located outside of the Premises. The Land Rent shall be adjusted annually by the appraisal process, as described in Article 3.03. The Land Rent shall be payable, in monthly installments, beginning on the Rent Commencement Date.
- (3) Lessor and Lessee agree that there is no Existing Pavement on the Premises and therefore Existing Pavement Rent is inapplicable to this Agreement, except during the five-year option period or any time thereafter as noted in section 3.01(A)(1) above.
- (4) Opportunity Rent. Beginning on the first (1<sup>st</sup>) day of the 6<sup>th</sup> Year of the Lease, and extending to the last day of the 10<sup>th</sup> year of the Lease, Lessee shall pay \$200,000 per year in Opportunity Rent, to the Landlord; (ii) beginning on the first (1<sup>st</sup>) day of the 11<sup>th</sup> Year of the Lease, and extending to last day of the 25<sup>th</sup> year of the Lease, Lessee shall pay \$300,000 per year in Opportunity Rent, to the Landlord; and (iii) beginning on the first (1<sup>st</sup>) day of the 26<sup>th</sup> year of the Lease, and extending to the last day of the Lease Term, Lessee shall pay \$400,000 per year in Opportunity Rent, to the Landlord.

Following the Rent Commencement Date, Rent shall be payable in equal monthly installments in U.S. funds, plus applicable state sales tax, as required by Applicable Law, on the first (1<sup>st</sup>) day of each and every month as shown below and without billing, at the offices of the Department as set forth in Article 3.05 (Address for Payments).

(B) Sales Taxes and Other County Charges. Lessee shall pay to the Lessor, in addition to the foregoing Rent, all applicable state sales taxes as well as all federal, state or local taxes arising out of Lessee's use of the Premises, and all other charges, permitted to be imposed by the County under this Agreement, imposed by the County on the Lessee's use of the Premises provided that such charges are applicable to all similarly-situated tenants at OPF.

(C) Title to Improvements. Unless the Parties have otherwise agreed, title to all Improvements made on or under the Premises by Lessee shall revert to the Lessor upon the expiration or termination of this Agreement.

3.02 Security Deposit: Prior to occupancy or use of any Improvement on the Premises, the Lessee shall pay to the Lessor an amount equal to two (2) times the required total monthly installments of Land Rent, Pavement Rent and

Opportunity Rent pursuant to Article 3.01 above, plus applicable state sales tax on such security deposit amount, as security for the payment of the Lessee's obligations hereunder (the "Security Deposit"). The Security Deposit shall be in addition to any Rent payments required hereunder, and the Lessor shall be entitled to apply such security deposit to any debt of the Lessee to the Lessor that may then exist, as permitted by law, including but not limited to, the Rent, and fees and charges permitted to be imposed by the County hereunder. In lieu of the security deposit being made in cash, the Lessor, in its sole discretion, may authorize the Lessee to provide an irrevocable Letter of Credit, in a form approved by the Lessor, in like amount. The amount of the security deposit is subject to adjustment by the Lessor at any time there is a change in the Rent pursuant to the terms of this Agreement; provided further, Lessor shall have the right to demand an increase in the security deposit requirement of up to an additional four (4) months of Rent (on the basis of monthly installments) to provide the Lessor with adequate assurance of the Lessee's payment of its obligations, which assurance is required because of the Lessee's defaults in the timely payment of Rent, and fees and charges permitted to be imposed by the County under this Lease, due hereunder, or because the Lessor has reason to believe, based on published reports, that the Lessee's future ability to pay such Rent, and such fees and charges, on a timely basis, is in jeopardy.

3.03 Rental Rate Review:

(A) Annually as of October 1 of each year during the term of this Agreement, or such other date as may be established by the Board of County Commissioners, the ground rental rates (land and pavement), applicable to the Premises as stated in Article 3 (Rentals and Payments) above shall be subject to review and adjustment in accordance with the adjustment of rental rates for the entire Airport based on fair market value (FMV) rental rates established through appraisal and approved by the BCC.

(B) When such rental rate adjustments are established by the Board of County Commissioners, and new or revised rental rates applicable in whole or in part to the Premises are established, this Agreement shall be deemed to have been administratively amended to incorporate the revised rental rates effective as of such effective date. Such revised rental rates shall be reflected herein by means of a letter between the Department and the Lessee to be attached hereto. Payments for any retroactive rental adjustments shall be due upon billing to the Lessee by the Department and payable by the Lessee within thirty calendar days of same. Notwithstanding anything to the contrary provided herein, the adjustment of rental rates for the Premises shall be based on a non-discriminatory application of the rental rates for the entire Airport as adjusted by the Board of County Commissioners and the Parties agree that retroactive rental adjustments can only apply to the County's current fiscal year, not to prior years.

3.04 Holdover: In the event that the Lessee remains in possession of the Premises beyond the expiration of the Term, or the earlier termination of this Agreement pursuant to the terms hereof, the Parties shall be bound by all of the terms and conditions of this Agreement to the same extent as if this Agreement were in full force and effect during the period beyond expiration of the Term, or the earlier termination of this Agreement. However, during any such possession of the Premises, as a holdover tenant, after the Lessor has demanded the return of the Premises, double the rent otherwise due, shall be payable by Lessee to Lessor, in monthly installments, after such expiration or termination but during any holdover period. Such holdover status, shall not prevent the Lessor at any time from exercising its rights under Florida law for Lessee's eviction from Premises.

3.05 Address for Payments: The Lessee shall pay, by mail or other delivery services, all Rent, and fees and charges required by this Agreement to the following:

Miami-Dade Aviation Department  
Finance Division  
P. O. Box 526624  
Miami, Florida 33152-6624

Payments may also be made by hand-delivery to the Finance Division offices at 4200 NW 36 Street, 3<sup>rd</sup> Floor, during normal working hours.

3.06 Late Payment Charge: In the event the Lessee fails to make any payments, as required to be paid under the provisions of this Agreement, within ten (10) days after same shall become due, interest at the rates established from time to time by the BCC (currently set at 1.5% per month), shall accrue against the delinquent payment(s) from the original due date until the Lessor actually receives payment. The right of the Lessor to require payment of such interest, and the obligation of the Lessee to pay same, shall be in addition to, and not in lieu of, the rights of the Lessor under this Lease to enforce other provisions herein and pursue the Lessor's remedies, including termination of this Agreement in accordance with this Lease, and to pursue other remedies provided by Applicable Law.

3.07 Dishonored Check or Draft: In the event that the Lessee delivers a dishonored check or draft to the Lessor in payment of any obligation arising under this Agreement, the Lessee shall incur and pay a service fee assessed in accordance with the Department's practice for dishonored checks plus penalties as may be imposed by Applicable Law, such as Sections 832.08 and 125.0105, Florida Statutes, as such statutes may be amended or renumbered. Further, in such event, the Lessor may require that future payments required pursuant to this Agreement be made by cashier's check or other means acceptable to the Lessor.

3.08 Utilities: The Lessee shall pay for all utilities it uses or are imposed on Lessee as a matter of Applicable Law. The Lessor shall have no obligation to provide utilities to the Premises or, as provided below in Article 6 of this Agreement, to maintain or repair any utilities that may exist on the Premises as of the Lease Commencement Date.

3.09 Other Fees and Charges: The Lessee acknowledges that the BCC has established, or may establish or direct the establishment of, from time to time: (i) various fees and charges for the use of various facilities, equipment and services provided by the County and not leased to, specifically provided to the Lessee hereunder, or related, in any manner, to the exercise of Lessee's rights under this Lease (except fees and charges established pursuant to Articles 2.04, 2.05, 3.10 and 3.11), and (ii) procedures relating to the payment of same. The Lessee shall pay, upon billing, for its use of such facilities, equipment and services, for the use of such facilities, equipment and services, which are billed monthly. For other fees and charges, unrelated to the exercise of Lessee's rights under this Lease, which are based on usage, the Lessee shall, in writing, report its uses of applicable facilities, equipment and services, and simultaneously pay the applicable fees and charges, unrelated to the exercise of Lessee's rights under this Lease, at such frequency, and in such manner, as may be prescribed by the Department. Notwithstanding the absence of any identification in this Agreement of particular charges to be paid by Lessee for its use of the Airport, Lessee agrees to pay whatever charges are imposed by the County on all tenants and users of the Airport for the use of various facilities, equipment and services, unrelated to the exercise of Lessee's rights under this Lease. Notwithstanding the foregoing, for the avoidance of doubt, in no event shall Lessor be entitled to impose any fees or charges on Lessee related, in any manner, to the exercise of Lessee's rights granted under this Lease, except fees and charges established pursuant to Articles 2.04, 2.05, 3.10, 3.11 and fees imposed on Lessee by constituent Departments of the County providing services to Lessee (including but not limited to Solid Waste and/or Water and Sewer), and fees imposed by any Authority Having Jurisdiction in a regulatory capacity.

3.10 Assignment Fee: The Lessee shall be obligated to pay to the Lessor a fee of two percent (2%) of gross consideration received by Lessee in the event that the Lessee transfers, subleases or assigns this Lease within the first five (5) years of the Lease Term following the Lease Commencement Date (the "Transfer Fee"); provided however, such Transfer Fee shall not be assessed on transfers, subleases, or assignments to Affiliates of Lessee, or on Lessee's financing parties in the event such party has assumed this Agreement. For the purposes of this Lease, the term "Affiliate" means a business entity in which Lessee maintains a majority ownership or exercises control. For purposes of this Lease, the ownership or power to control shall be 51 per cent or more of ownership. Upon the sixth (6<sup>th</sup>) anniversary of the Lease Commencement Date, Opportunity Rent shall become payable, and the Transfer Fee shall no longer be payable in the event of a transfer, sublease or assignment of this Lease by the Lessee.

3.11 Flowage Fees: Lessee shall be obligated to pay flowage fees, ( presently the amount of \$0.08 per U.S. gallon), for all aviation fuel, lubricants and oils flowage as may be amended from time to time.

#### **ARTICLE 4**

##### **Improvements to Premises and Other Improvements**

#### **4.01 Improvements to Premises and Other:**

(A) As authorized pursuant to Chapter 125.012(24), Florida Statutes, subject to the provisions of this Agreement, the Lessee, for its convenience, shall, design, construct and pay for such improvements (including taxiway(s), aircraft and vehicle pavement, buildings, structures, fixtures, additions, enlargements, extensions, modifications, repairs, replacements and other improvements) to, or for the benefit of, the Premises, as shall be necessary to make the Premises suitable for Lessee's use and occupancy for the purposes and uses described in Article 2 ("Use of Premises") hereof and generally as shown on Exhibit B herein, including without limitation, (i) the Facility, to be located on the Premises on the Airport property. Such improvements shall be collectively referenced herein as the "Improvements."

(B) In addition to Lessee's right and obligation to complete construction of the Improvements according to the timetable described in Article 1.06 (Development Schedule and Failure to Develop), Lessee hereby agrees to satisfy the minimum investment requirement, set forth in Article 1.02 (Investment) by virtue of the costs incurred by Lessee in the design and construction of the Improvements. Expenditures that satisfy such minimum investment requirement shall be as further described in Article 4.09 below.

(C) The Lessee shall bear, and be solely responsible for, all costs in relation to the design, construction and use of the Improvements, including, but not limited to, the following:

- (1) land use approvals, development fees, concurrency fees, and permit fees for the design, construction, and subsequent use of the Improvements and infrastructure;
- (2) design and construction of the Improvements, including but not limited to utilities (which may include construction of water, sewer, or storm sewer facilities outside of the Premises if needed to connect the Premises to the County's utility infrastructure), roads, parking lots, landscaping, taxiways, and ramps on the Premises.;
- (3) financing, construction bonding and insurance, building permits, impact and concurrency fees, utility installations and/or hook-ups or other infrastructure for the Improvements, as may be required to make the Premises suitable for the use of the Improvements;
- (4) construction audits (as may be required elsewhere herein);
- (5) consultants, accountants, financing charges, legal fees, furnishings, equipment, and other personal property of the Lessee; and
- (6) all other direct or indirect costs associated with the approvals, design, construction, and financing of the Improvements, and their subsequent use.

Except as otherwise set forth herein, Lessee acknowledges that the Lessor shall have no maintenance responsibility for any of the Improvements to be constructed on the Premises by Lessee.

#### 4.02 Design of Improvements:

(A) Prior to the design and commencement of any construction of the Improvements, Lessor and Lessee shall hold a pre-design meeting to be coordinated through the Lessor's Facilities Project Manager with the participation from all parties deemed by Lessor to be necessary for such meeting, for discussions regarding utilities, grading drainage, airside, security, existing as-built drawings, compliance with the master plan for OPF in effect as of the Lease Commencement Date (the "Master Plan"), and any other related item(s). Lessee and Lessor shall reasonably cooperate to obtain FAA approval of the design for the Improvements, and the Parties acknowledge that such FAA approval shall be communicated to Lessee in writing prior to the commencement of construction of the Improvements. The Lessee and its architect/engineer (i) have the responsibility to insure that the design of the Improvements shall be in material compliance with all applicable laws, codes, regulations, and other requirements ("Applicable Laws") of County, State and/or Federal authorities having jurisdiction ("Authorities Having Jurisdiction") over the Improvements by law, including but not limited to the Storm Water Master Plan and all master permits issued by the South Florida Water Management District governing OPF or the Premises, and (ii) shall use commercially reasonable efforts to comply with the contractual requirements of the County as they relate to projects constructed under TAC-N Tenant Airport Construction Contracts, which requirements are set forth in Exhibit C, attached hereto and made a part hereof. Lessee shall be responsible for obtaining and confirming as-built drawings and information pertaining to the design of the Improvements; provided, however, promptly following the Lease Commencement Date, the Miami-Dade County Aviation Department shall deliver to Lessee all existing as-built drawings and information, within the Miami-Dade County Aviation Department's possession, pertaining to the Premises and existing utilities and off-Premises utility connections.

(B) Lessee acknowledges that, before the County's Building Department may issue any permit for the Improvements, the Department must issue a "Letter of Concurrence" that constitutes the County's authority for the Lessee to apply for, and obtain, the building permit. The Department shall not be required to issue the Letter of Concurrence until such time as Lessee has complied with all obligations in this Agreement as to the design of the Improvements, including compliance with the Department's TAC-N procedures in effect on the Lease Commencement Date, submission of approved Contract Documents, as that term is defined in sub-article (C)(i) below, and compliance with the regulatory provisions of the County's other departments having jurisdiction over the construction, such as, but not limited to, the Fire Department and the Department of Environmental Resources Management.

(C) As described in sub-article (1) below, the Lessee shall submit, to the Facilities Division of the Department, the Contract Documents for each Improvement, for the Department's review, modifications, and approval. In no event shall the Department's review, modification or approval hereunder be unreasonably withheld, conditioned or delayed. The Department's failure to submit modifications within fourteen (14) business days from the date the complete Contract Documents are submitted by the Lessee to the Department shall be deemed as a consent by MDAD for Lessee to apply for permits from the appropriate County Departments; provided, however, that, if the Department has requested changes on such Contract Documents, Lessee shall not proceed with the Improvements, until Lessee has incorporated such changes in the Contract Documents and resubmitted them to the Department for confirmation that the changes in the Contract Documents have been made.

- (1) The Lessee shall submit to the Department, for design review, ten (10) sets of the following documents: (i) 100% complete construction drawings and specifications ("Plans and Specifications"); (ii) a project schedule based upon calendar days without dates for the design, bid and construction, hereinafter referred to as "Lessee's Project Schedule"; and (iii) cost estimates for the Improvements, prepared by an architect/engineer registered in the State of Florida (collectively, the "Contract Documents") The Department may, from time to time, reasonably request: (i) submission of Plans and Specifications at other stages of completion, and/or (ii) submission of other documents as part of the Contract Documents for a particular Improvement (collectively, "Supplemental Requests"), and Lessee shall comply with such

reasonable Supplemental Requests. Lessee acknowledges that failure to comply with Lessee's obligations to initially submit complete Contract Documents (excluding any Supplemental Requests) may delay the Department's review of the Contract Documents, which may cause the Lessee to miss other design or construction deadlines contained herein or desired by Lessee. Any delay caused by the Department's review, and/or Supplemental Requests, in each case, beyond the fourteen (14)-calendar day review period set forth in sub-article (C)(3) below, shall extend the deadlines contained herein, day for day. Delays resulting from the failure of the Lessee to initially submit all Contract Documents expressly set forth herein shall not extend the deadlines contained herein.

- (2) Upon submission of the Contract Documents to the Department, in addition to design review, the Department shall review the Plans and Specifications for compliance with the following:
  - (i) Conformance with the Master Plan, the County's Comprehensive Master Development Plan (CDMP), and Airport Layout Plan (ALP), and FAA approval.
  - (ii) Compliance with environmental requirements, utilities master plan, and storm water master plan and permitting requirements.
- (3) The Department shall comment, in writing, on the Contract Documents within fourteen (14) calendar days following the date of receipt of same from the Lessee. All comments by the Department shall be incorporated into the Contract Documents, unless Lessee requests reconsideration of any of the Department's comments. Such request shall include documentation supporting Lessee's position. The Department shall review the request for reconsideration and shall either approve or disapprove the request or alter its initial comments in light of the reconsideration. The determination of the Department, at such time, shall be final and binding upon the Lessee, and accordingly shall be incorporated in the revised Plans and Specifications for resubmittal. Subject to Lessee's right to make non-material modifications to the layout of the Improvements, after the Department reviews the Plans and Specifications as submitted by the Lessee, the Lessee may not make a material change in the Plans and Specifications, without the Department's further review, which shall not be unreasonably conditioned, withheld or delayed. The Department's review of the Contract Documents does not constitute certification or warranty by the Department: (a) as to the quality of the Contract Documents prepared by the Lessee's architect/engineer(s); (b) that the Contract Documents are free of design errors or omissions; or (c) that the Contract Documents are in compliance with Applicable Laws governing the construction of the Improvements.

4.03 Submission of Certain Documents and Fees Prior to Commencement of Construction: At least ten (10) days prior to commencing construction, Lessee shall comply with the following requirements:

(A) Lessee shall submit the following to the Department's Facilities Project Manager, who will be assigned to this Agreement:

- (1) A copy of the building permit(s);
- (2) All construction bonds required under Article 4.07 (Construction Bonds and Insurance Required), and insurance certificates, required under Article 4.07; and
- (3) An insurance certificate for the Pollution and Remediation Legal Liability Insurance required under Article 12.

(B) Unless the Lessor directs otherwise, Lessee shall submit the following to the Department's Finance Manager:

- (1) A check made payable to the Department in the amount of one hundred and fifty thousand dollars (\$150,000) together with a copy of the construction contract for the Improvements. Such fee shall be non-refundable, unless this Lease is terminated, prior to commencement of construction. Such fee shall be in lieu of all plans processing fees, building permit fees and inspection fees for the Improvements; notwithstanding, if the actual, final construction hard costs are higher or lower than \$15,000,000.00, the difference shall be multiplied by 1% and shall either: (i) be paid by Lessee to the Department if the resulting number is a positive amount, or (ii) refunded to the Lessee by the Department if the resulting number is negative; and
- (2) Copy of the Lessee Audit, if applicable, pursuant to Article 8.05.

(C) Lessee shall submit the following to the Department's Assistant Director for Business Retention and Development:

- (1) Copy of Lessee's financing documents pursuant to Article 11.03

(D) Lessee shall not be authorized to begin construction until the above-listed items have been submitted to the Department. If Lessee begins construction prior to submission of the Contract Documents, to the reasonable satisfaction to the Department, and payment of fees in the required form and amounts, as required pursuant to this Article 4.03, the Department shall be authorized to halt Lessee's construction activities without any liability to the County until such time as Lessee satisfies these requirements. In such event, no extensions of time shall be granted by the Department to Lessee. During construction, during reasonable business hours, upon at least forty-eight (48) hours prior written notice, the Department's Project Manager or a designee will be permitted by Lessee to access the Premises in order to observe the progress of the construction.

4.04 Construction of Improvements: Promptly following Lessor's approval of the Contract Documents, in accordance with Article 4.02 (Design of Improvements), but not more than one hundred and eighty (180) days thereafter, the Lessee shall finalize and enter into a contract(s) for the construction of the Improvements, in accordance with the terms and conditions of the approved Contract Documents. The Lessee shall use commercially reasonable efforts to achieve Beneficial Occupancy of the Improvements pursuant to Article 1.06 (Development Schedule and Failure to Develop). In no event shall any approval hereunder be unreasonably withheld, conditioned or delayed. -

4.05 Failure to Complete on a Timely Basis: The Lessee shall achieve Beneficial Occupancy of the Improvements in accordance with Article 1.06 (Development Schedule and Failure to Develop) . In the event the Lessee fails to achieve Beneficial Occupancy of the Improvements in accordance with Article 1.06, the County shall give written notice to Lessee of such failure. If Lessee fails to cure such failure with one hundred and twenty (120) days following the date of receipt of such notice, or Lessee fails to commence to cure such failure within such one hundred and twenty (120)-day period, if such failure is of a nature that cannot reasonably be cured within such one hundred and twenty (120)-day period, Lessee shall be in default under this Agreement, and the County may terminate this agreement by delivering written notice of termination to Lessee, specifying the effective date of termination, which effective date of termination shall be a date no earlier than thirty (30) business days following receipt by Lessee of the County's notice of termination, or else County may take whatever appropriate legal steps may be available hereunder to protect the County's interests.

4.06 Certain Construction Contract Terms: All contracts entered into by the Lessee for the construction of the Improvements shall require that Beneficial Occupancy of the Improvements shall be achieved within a specified time period following the execution of said contract(s) and shall contain, unless otherwise authorized by the Department, reasonable

provisions for the payment of actual or liquidated damages in the event Lessee's contractor fails to achieve Beneficial Occupancy in accordance with this Agreement. The Lessee agrees that it will use commercially reasonable efforts under such construction contract(s) to (i) enforce the timely completion of the work covered thereby and (ii) provide that the County is a third party beneficiary thereof.

4.07 Construction Bonds and Insurance Required; Insurance Company Rating:

(A) All contracts for the construction of any Improvements shall require that Lessee shall maintain, or cause to be maintained, the following construction bonding and insurance during the construction of the Improvements:

- (1) Separate performance and payment bonds, reasonably satisfactory to the County, in the full amount of the Improvements, to assure completion of the contractor's obligations under such contract, and the payment of the costs thereof, free and clear of all claims, liens and encumbrances of subcontractors, laborers, mechanics, suppliers and material men. The required bonds shall be written by or through, and shall be countersigned by, a licensed Florida agent of the surety insurer in accordance with Florida Statutes.
- (2) A contract completion bond from the Lessee to the County as security for the completion of and payment for the construction of the Improvements free and clear of all claims of any nature whatsoever in the full amount of the cost of the contracts for construction of the Improvements. In lieu of a contract completion bond, the County may accept substitute documents that provide the Department with assurance that the Improvements will be completed. If Lessee obtains a performance and payment bond that names the Lessee and County as joint obliges, County will accept such bond in satisfaction of the requirement for a contract completion bond, provided such bond is in a form reasonably acceptable to the County.
- (3) Completed Value Builders Risk and/or Installation Floater, issued in the name of the Lessee's contractor, the Lessee, and the County, as their interests may appear, in amount(s) not less than 100% of the insurable value of the structural Improvements, covering perils on an "All Risks" basis including windstorm. Policy(s) must clearly indicate that underground structures (if applicable) and materials being installed are covered.
- (4) Commercial General Liability Insurance as specified in Article 12 (Insurance) herein.
- (5) Workers Compensation Insurance as required by Florida Statutes.
- (6) Automobile Liability Insurance as specified in Article 12 (Insurance) herein.

(B) All insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida and rated no less than "A-" as to financial strength and no less than Class "VII" as to financial size, in accordance with the A.M. Best Company Insurance Guide, or its equivalent as approved by the County Risk Management Division.

(C) The Lessee shall furnish insurance certificates evidencing the insurance required under this Article 4.07 to the County for approval, as may be required by the MDAD Risk Management, which approval shall not be unreasonably withheld, conditioned or delayed. These certificates shall clearly indicate that the Lessee or its contractors have obtained insurance of the types, amounts and classifications required by these provisions. No cancellation of the insurance shall be effective without a thirty (30) day (or ten (10) day in the case of non-payment of premium) prior written notice to MDAD Risk Management.

4.08 Construction Completion Documents: Within thirty (30) days following the completion of construction of

any Improvement for which a Certificate or Temporary Certificate of Occupancy is issued or such reasonable period of time as may be necessary, the Lessee shall furnish the following documents to the Department:

- (A) Documents showing that the Improvements have met the requirements of the final inspection and that all permits have been closed out;
- (B) Documents that Lessee has obtained lien waivers from the general contractor and all parties designated by the Department, along with any final affidavit of the general contractor required by Chapter 713, Florida Statutes;
- (C) Copy of Certificate of Occupancy for the Improvements;
- (D) Certification from the Lessee's architect that the Improvements have been completed in substantial conformance with the approved Plans and Specifications as well as all permits and applicable governmental requirements;
- (E) At least one (1) copy of an as-built survey of the Premises;
- (F) Two (2) complete sets of as-built construction drawings and two (2) AutoCAD files of the as-built construction drawings in a compact disk format or other format designated by the Department, including all pertinent shop and working drawings and such other as-built drawings as the Department may reasonably require; and
- (G) Copies of all releases of contractor claims and liens.

#### 4.09 Final and Approved Improvements Costs:

(A) For purposes of verifying Lessee's expenditure of not less than \$22,000,000.00 in design and construction costs for the Improvements on the Premises, plus an additional minimum amount of \$4,781,000.00 for a portion of a common use taxiway extension to allow access to Lessee's leasehold, ("off Premises Improvement Investment"), within ninety (90) days following the date on which Beneficial Occupancy has been achieved, the Lessee shall submit to the Finance Division of the Department, a certified audit of the monies actually expended in the design and construction of the Improvements, including all infrastructure and utility facilities, in accordance with the Contract Documents described above in Article 4.02 (A), prepared by an independent certified public accounting firm ("Auditor") approved in advance by the Department, which approval shall not be unreasonably withheld, conditioned or delayed. In accordance with Article 4.01(B) and Article 4.09(B), eligible costs for such Improvements shall include, but not be limited to, those costs for project management and scheduling, all permitting and design fees and costs paid by the Lessee, and construction costs (including contractors' overhead (general conditions and general requirements costs) and profit, in accordance with the Contract Documents and any changes thereto requested by the Lessee and approved by the Department, including the costs of required bonds and insurance, as further elaborated in Article 4.09(A), and all other costs identified in Article 4.01(C) and Article 4.09(B) ("Approved Improvements Costs"). The Department's failure to disapprove the audit submitted by Lessee as required in this Article 4.09, within ninety (90) days from the date of submission, shall constitute an unconditional approval. In the event of any disputes between the Department and the Lessee as to whether certain costs are to be included in Approved Improvements Costs, said dispute(s) shall be submitted to the consulting engineers identified in the County's Trust Agreement, as defined in Article 19.01 (Incorporation of Trust Agreement by Reference) hereof (the "Consulting Engineers").

(B) Approved Improvements Costs, subject to verification under the certified audit described in Article 4.09(A), shall include actual expenditures for architectural and engineering design, construction, site development, required bonds, construction and liability insurance, construction financing fees and interest, building permits, impact and concurrency fees, the certified audit, consultant fees, accountant fees, permanent financing fees or charges, reasonable attorneys' fees and costs, furniture, fixtures and equipment. In the event of any questions as to whether certain costs are to be included in the Approved Improvements Costs, the County through its Consulting Engineers shall make a determination, subject to Lessee's right to appeal or contest such decision.

4.10 Temporary Structures: Trailers or temporary structures used for construction purposes, but not for business purposes, shall be allowed on the Premises during the period of construction of the Improvements, subject to all required permitting. All trailers or temporary structures must comply with the Florida Building Code and must be removed promptly following Beneficial Occupancy of the Improvements. Copies of the building permits shall be submitted to the Department's Facilities Project Manager within thirty (30) calendar days following the issuance of same to Lessee.

4.11 Review of Construction: During the construction of the Improvements, the Department or its designee shall have the right, but not the obligation, to periodically review the construction and to enter the Premises at reasonable times during normal business hours, upon at least forty-eight (48) hours prior written notice (but not to exceed one (1) such inspection in any six (6) month period), to inspect the construction for the purpose of ensuring conformity with the building permits for the Improvements, including any amendments thereto with respect to modifications to the Improvements made in accordance with Article 1.03. The failure of the Department to make such review or inspection shall not impose any liability on the Department or the County, nor constitute Lessor's acceptance of the Improvement as being in accordance with the building permits therefor and Lessee's obligations hereunder.

4.12 Tenant Airport Construction Contracts:

From time to time, the Lessee and the County shall be entitled to enter into separate Tenant Airport Construction, reimbursable ("TAC-R") or non-reimbursable contracts (TAC-N) for the purpose of enabling Lessee to construct facilities or improvements on the Premises or on the Airport deemed necessary or appropriate for Lessee's construction and use of its improvements on the Premises. As more set forth below in Article 9.01 (Alterations), such contracts shall comply with the Department's TAC-R or TAC-N contract requirements as such requirements may be amended by the Department from time to time.

4.13 Assignment of Contract Documents to Lessor and Assumption of Construction of Improvements by County:

In the event that Lessee fails to perform its material obligations under Article 4 (Construction and Improvements to Premises) of this Agreement, and Article 13.03 (Other Defaults), the Lessor may provide Lessee written notice of such default specifying those matters constituting such default. Material obligations shall include, but not be limited to, compliance with the contract documents and compliance with any regulatory requirement. If such default continues for a period of thirty (30) days following Lessee's receipt of the notice or Lessee fails to diligently commence to cure such default within such thirty (30) day period if such default is of a nature that it cannot be cured within thirty (30) days, the Lessor may either terminate this Agreement or else terminate Lessee's rights with respect to the construction of the improvements or portions thereof and thereafter assume the obligations of Lessee under this Article 4 of the Agreement under an assignment by Lessee to Lessor of relevant contracts and permits, and complete the construction of the improvements or portions thereof with the benefit of all bonds and other forms of security provided by Lessee hereunder. Lessor's use of any such bonds or security shall not diminish Lessee's liability to Lessor hereunder for failure to complete the improvements in accordance with Lessee's obligations hereunder.

4.14 Standards of Construction. The Lessee may construct all Improvements to the standards established by the Lessor, as of the Lease Commencement Date, or shall be entitled to use modified standards for its design and construction of improvements that are to remain in Lessee's name. Such standards are set forth in Exhibit D.

4.15 Compliance with Responsible Wages and Benefits for County Construction Contracts (Implementing Order #3-24):

Lessee is aware of the policy of Miami-Dade County that in all leases of County-owned land which provide for privately funded construction improvements thereon whose construction costs are greater than or equal to \$5 million dollars, or construction improvements where any portion of which are financed by any federal, state or local governmental entity or by bonds issued by such entities, including the Industrial Development Authority (IDA), the Lessee shall include the requirements of the Responsible Wages Ordinance codified as Section 2-11.16 of the Miami-Dade County Code, as well as Implementing Order #3-24 in all applicable construction contracts. Lessee agrees to comply with all applicable provisions of such ordinance and implementing order.

#### 4.16 Other Programs: .

To the extent required by the current terms of the County's Community Business Enterprise (CBE) Program applicable to architects and engineers under Section 2-10.4.01 of Miami-Dade County's Code, the Community Small Business Enterprise (CSBE) Program for construction activities under Section 10-33.02, the Living Wage Ordinance under Section 2-8.9, the Art in Public Places (AIPP) Program under Section 2-11.15, the ordinance referred to as the "Little Davis-Bacon Ordinance" under Section 2-11.16, and any other program of the County made applicable to the Lessee's activities hereunder, as such programs, ordinances, or code provisions may be amended from time to time, Lessee agrees to comply with such applicable provisions as well as any Implementing Orders and other directives issued by the County relating to such Programs.

#### 4.17 Art in Public Places

Art in Public Places ("APP") provisions of the Miami-Dade County Code and Administrative Order, as managed by the Miami-Dade County Department of Cultural Affairs ("Department of Cultural Affairs") pursuant to Procedure 358 in the Miami-Dade County Procedures Manual ("Procedures Manual"). The Lessee/Developer shall transmit 1.5% of the Project costs for all development on County land (as outlined in the Procedures Manual) to the Miami-Dade Aviation Department to be deposited in the Aviation Art in Public Places Trust Account for the implementation of the APP program. The Lessee/Developer is required to work collaboratively with the Department of Cultural Affairs on the implementation of the APP program pursuant to the requirements of said program. The referenced documents can be accessed at:

[https://library.municode.com/fl/miami\\_-\\_dade\\_county/codes/code\\_of\\_ordinances](https://library.municode.com/fl/miami_-_dade_county/codes/code_of_ordinances)  
<http://www.miamidade.gov/ao/home.asp?Process=alphalist>  
<http://intra.miamidade.gov/managementandbudget/library/procedures/358.pdf>

### **ARTICLE 5**

#### **Maintenance and Repair by Lessee**

5.01 Cleaning: The Lessee shall, at its sole cost and expense, perform, or cause to be performed, services which will at all times keep the Premises clean, neat, orderly, sanitary and presentable, following the date of Beneficial Occupancy of the Improvements. Prior to the date of Beneficial Occupancy of the Improvements, the Premises, from time to time, will be an active construction site, on which trash, debris, scrap, materials and equipment can be reasonably expected to accumulate; provided however, during such period, Lessee shall not permit any unreasonable accumulation of such trash, debris, scrap, materials or equipment to exist at any time, and shall endeavor to maintain the construction site in a clean, neat, orderly and sanitary condition, with due consideration given to the nature of on-going construction activities. Notwithstanding, Lessee shall use best efforts to ensure that debris from such construction does not pose a hazard to aviation or otherwise pose a risk to aircraft operations, and shall take all actions necessary to prevent or resolve such hazards or risks.

5.02 Removal of Trash: The Lessee shall, at its sole cost and expense, remove or cause to be removed from the Premises, all trash and refuse which might unreasonably accumulate and arise from its use of the Premises and the business operations of the Lessee under this Agreement. Such trash and refuse shall be stored temporarily and disposed of in a manner reasonably approved by the Lessor. Notwithstanding, Lessee shall use best efforts to ensure that trash and refuse does not pose a hazard to aviation or otherwise pose a risk to aircraft operations, and shall take all actions necessary to prevent or resolve such hazards or risks.

#### 5.03 Maintenance and Repairs:

(A) Lessee shall be exclusively responsible for maintenance and repair of the Improvements (including unpaved and landscaped areas and whether or not Temporary Certificates of Occupancy or Certificates of Completion have been issued for any Improvement thereon), except for those off-Premises items for which the Lessor is responsible under Article 6 (Maintenance by Lessor). The standard of maintenance and repairs by Lessee shall be in quality and class equal to, or

better than, the standard of maintenance and repair of the public Airport facilities undertaken by the County or its contractors. The Lessee shall repair all damage upon the Premises, caused by the Lessee and its employees, agents, independent contractors, patrons, servants, trespassers, or invitees.

(B) Except as provided in Article 6.01 or as otherwise provided herein, in no event shall Lessor be responsible or liable for any maintenance or repair of any Improvement, fixture, equipment, structure, facility, alteration, or addition thereto on the Premises.

(C) Any maintenance or repair obligation of Lessee pursuant to this Article 5 shall be subject to interruption caused by an event of Force Majeure. Upon the occurrence of any event of Force Majeure, the Lessor shall have no claim for breach or damages for the Lessee's failure to furnish, or to furnish in a timely manner, any such maintenance or repair.

5.04 Excavation of Land: Except in connection with the construction of the approved Improvements, no excavation of any of the land shall be made, no soil or earth shall be removed from the Premises, and no well of any nature shall be dug, constructed or drilled on the Premises, except as may be required for environmental monitoring purposes, without the prior written approval by the Lessor. Lessor's approval of the Contract Documents pursuant to Article 4 (Improvements) shall constitute permission for the excavation required for construction.

5.05 Water and Sewerage System: The Lessee shall operate and maintain, at its sole cost and expense, all the components of the existing water, sanitary sewerage and newly constructed storm drainage facilities within the boundaries of the Premises. The Lessee shall not make any alterations or modifications to these facilities without the advance written approval of the Lessor, which consent shall not be unreasonably conditioned, withheld, or delayed. The Miami-Dade County Water and Sewer Department, or its successor, shall operate and maintain, at its sole cost and expense, all the components of the existing water, sanitary sewerage and storm drainage facilities within the Airport, outside of the boundaries of the Premises, which are necessary to serve the Premises.

5.06 Industrial Waste Facilities: The Lessee shall be fully responsible for all industrial wastes resulting from Lessee's operations on the Premises, and, shall comply in all material respects with Applicable Laws in separating, neutralizing and treating industrial wastes and foreign materials and the proper disposal thereof, in accordance with Applicable Laws.

5.07 Grassed Areas and Shrubbery: The Lessee shall mow the grassed areas and trim the shrubbery on the Premises regularly so as to maintain the Premises in a neat, orderly and attractive condition, subject to Article 5.01. Any land areas not grassed or paved shall be stabilized by the Lessee and the Premises shall be so utilized, that use of the same will not cause excessive dust, debris or waste to be blown about or raised so as to be ingested by Aircraft or otherwise unreasonably interfere with or disturb the use or enjoyment of others of the Airport. All landscaping maintenance required hereunder shall be performed in accordance with landscape maintenance standards applicable to all similar tenants of the Airport, as published, from time to time, by the Lessor and provided in writing to Lessee.

5.08 Inspections: Upon and during the continuation of any material breach by Lessee, Lessor and/or its designated representatives shall have the right, during normal working hours, upon at least forty-eight (48) hours prior written notice to Lessee, to inspect the Premises to identify those items of maintenance, repair, replacement, modification and refurbishment required of Lessee to correct the condition giving rise to such breach. Lessee shall perform all corrective work required of it, identified in such inspection(s) within thirty (30) days following the date of receipt of written notice from the Department, subject to Lessee's right to dispute same in a court of competent jurisdiction; provided, however, if such corrective work cannot be reasonably accomplished within such (30)-day period, then the Lessee shall commence the corrective work within such thirty (30)-days period, and diligently prosecute the same to completion. Trash and debris accumulation in violation of this Agreement shall be corrected within forty-eight (48) hours following receipt of written notice by the Lessee from the Lessor. Failure of the Lessor to inspect, as aforementioned, shall not impose any liability on the Lessor.

5.09 Failure to Maintain: If it is determined by the Lessor that the Lessee has failed to properly clean, remove trash and debris, maintain, repair, replace and refurbish the Premises as required by this Article 5 (Maintenance and Repair by Lessee), the Department shall provide to the Lessee a list of deficiencies, reflecting the amount of time to be reasonably allowed for the Lessee to correct same. If the Lessee fails to correct such deficiencies within the time allowed, the Lessor shall provide prior written notice to Lessee of its intention to cure such deficiencies. If Lessee has failed to cure any such deficiency within thirty (30) days following the date of receipt of such notice (provided, however that if such cure cannot be reasonably accomplished within such thirty (30)-day period, then the Lessee shall commence the cure within such thirty (30)-day period and diligently prosecute the same completion), the Lessor may enter upon the Premises to cure such deficiency, which, in the judgment of the Lessor, may be necessary, and Lessee shall pay to Lessor the cost of such work, plus five percent (5%) for administrative costs, on the first (1<sup>st</sup>) day of the month following the date of the completion of such cure and submission to Lessee of the receipts for same.

5.10 Recertification: As may be required by the County, recertification repairs shall be performed by the Lessee when the existing premises reach 40 years old and every 10 years thereafter.

## **ARTICLE 6**

### **Maintenance by Lessor**

6.01 Lessor's Obligation for Other Maintenance: Except as set forth herein, Lessor shall have no obligation for maintenance or repair of any facility, building, improvement, or ground areas within the Premises.

6.02 Maintenance of Airport Facilities: Throughout the Term, the County shall maintain the Airport, including without limitation, the Off-Premises Improvements contemplated in Article 4.01, so that Lessee may make use of the Airport, including the Off-Premises Improvements, for the purposes stated in Article 2, subject to Article 6.04.

6.03 County Maintenance Subject to Certain Conditions: Such maintenance by the County may be subject to interruption caused by an event of Force Majeure. Upon the occurrence of any event of Force Majeure, the Lessee shall have no claim for damages for the County's failure to furnish or to furnish in a timely manner any such maintenance; provided, however, that the Department shall provide a Rent abatement for that portion of the Premises rendered effectively unusable for the period of time during which the County is unable to perform the maintenance or repair required by Article 6.01 (Maintenance by County).

## **ARTICLE 7**

### **Regulations, Licenses and Permits**

#### **7.01 Rules and Regulations - General:**

(A) Rules and Regulations. The Lessee shall comply in all material respects with: (i) all Applicable Laws, and (ii) any and all plans and programs developed in compliance therewith, to the extent applicable or required, as all of the foregoing may be promulgated and amended from time to time, which may be applicable to its operations or activities under this Agreement, specifically including, without limiting the generality hereof, Federal air and safety laws and regulations and Federal, State and County environmental laws

(B) Permits and Licenses. The Lessee, at its sole cost and expense, shall be liable and responsible for obtaining, paying for, maintaining on a current basis, and fully complying with, any and all permits, licenses and other governmental authorizations, however designated, as may be required, at any time throughout the Term, by any Federal, State, or County governmental entity or any judicial body having jurisdiction over the Lessee or the Lessee's operations and activities, for any activity of the Lessee conducted on the Premises and for any and all operations conducted by the Lessee

on the Premises or in connection with construction of the Improvements, including ensuring that all legal requirements, permits and licenses necessary for, or resulting directly from, the Lessee's operations and activities on the Premises, have been satisfied, and Lessee is in full compliance with same, to the extent required. Such permits and licenses shall include, but not be limited to, a Certificate of Use and any required Industrial Waste Operating Permits from the Miami-Dade County Department of Environmental Resources Management ("DERM"). Prior to occupancy of the Premises and commencement of operations under this Agreement, the Lessee shall provide to the Department evidence that it has obtained the Certificate of Use, and, as applicable, the appropriate Industrial Waste Operating Permit(s). Upon written request of the Department, the Lessee shall provide to the Department copies of any applicable permits and licenses, and applications therefore, which the Department may request.

The Department shall give its full cooperation to Lessee necessary to obtain and/or hasten the obtaining of any required permit or license.

(C) Penalties, Assessments and Fines. The Lessee agrees to pay on behalf of the Lessor any penalty, assessment or fine issued against the Lessor, or to defend, in the name of the Lessor, any claim, assessment or civil action, which may be presented or initiated by any agency or officer of the Federal, State or County governments, based in whole or substantial part upon a claim or allegation, that the Lessee, its agents, employees or invitees have violated any Applicable Law described in, and subject to the provisions of, this Article 7.01 (Rules and Regulations) above, or is not in compliance, to the extent required, with any plan or program developed in compliance therewith, with such violation or non-compliance occurring on, or in connection with, the Premises. The Lessee agrees to pay, on behalf of the Lessor, any penalty, assessment or fine issued against the Lessor, to the extent that Lessee has been determined to have committed such violation or non-compliance by a court of competent jurisdiction, pursuant to a final non-appealable order of such court. The Lessee further agrees that the substance of this Article 7.01 shall be included in every sublease, contract and other agreement, which the Lessee may enter, related to its operations and activities under this Agreement, and that any such sublease, contract and other agreement shall specifically provide that "Miami-Dade County, Florida is a third-party beneficiary of this provision." This provision shall not constitute a waiver of any other conditions of this Agreement prohibiting or limiting assignments, subletting or subcontracting.

## **ARTICLE 8**

### **Environmental Compliance**

8.01 Definitions: For purposes of this Agreement, the following additional definitions apply:

(A) "Baseline Environmental Conditions" means the presence or release of Hazardous Materials, at, on, under, or from the Premises prior to Lessee's Occupancy Date, the presence or release of which was not caused by Lessee or Lessee's agents, employees, contractors, invitees or trespassers. Solely for purposes of this Agreement, it shall be presumed that the Baseline Environmental Conditions consist of the conditions identified in any existing (as of the date of this Agreement) Miami-Dade County maintained records, including contamination assessment reports and any other technical reports, data bases, remedial action plans, the Baseline Audit or the presence, discharge, disposal or release of any other Hazardous Materials originating prior to the Occupancy Date that comes to be located on the Premises and not caused by Lessee or Lessee's agents, employees, contractors, invitees or trespassers.

(B) "Environmental Claim" means any investigative, enforcement, cleanup, removal, containment, remedial or other private, governmental or regulatory action at any time threatened, instituted or completed pursuant to any applicable Environmental Requirement, against Lessee with respect to its operations at the Airport or against or with respect to its operations at the Airport or against or with respect to the Premises or any condition, use or activity on the Premises (including any such action against County), and any claim at any time threatened or made in writing by any person against Lessee with respect to its operations at the Airport or against or with respect to the Premises or any condition, use or activity on the Premises (including any such claim against County), relating to damage, contribution, cost recovery, compensation, loss or injury resulting from or in any way arising in connection with any Hazardous Material or any applicable Environmental Requirement.

(C) "Environmental Law" means any applicable federal, state or local law, statute, ordinance, code, rule, or regulation, or license, authorization, decision, order, injunction, or decree, any of which may be issued by a judicial or regulatory body of competent jurisdiction, or rule of common law including, without limitation, actions in nuisance or trespass, and any judicial or agency interpretation of any of the foregoing, which pertains to health, safety, any Hazardous Material, or the environment (including but not limited to ground or air or water or noise pollution or contamination, and underground or aboveground tanks) and shall include without limitation, the Solid Waste Disposal Act, 42 U.S.C. § 6801 *et seq.*; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601 *et seq.* ("CERCLA"), as amended by the Superfund Amendments and Reauthorization Act of 1986 ("SARA"); the Hazardous Materials Transportation Act 49 U.S.C. § 1801 *et seq.*; the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.*; the Clean Air Act 42 U.S.C. § 7401 *et seq.*; the Toxic Materials Control Act 15 U.S.C. § 2601 *et seq.*; the Safe Drinking Water Act, 42 U.S.C. § 300f *et seq.*; Chapters 403, 376 and 373, Florida Statutes; Chapters 24 and 25 of Miami-Dade County Code, and any other applicable local, state or federal environmental statutes, codes, or ordinances, and all rules, regulations, orders and decrees now or hereafter promulgated under any of the foregoing, as any of the foregoing now exist or may be changed or amended or come into effect in the future.

(D) "Environmental Requirement" means any Environmental Law, or any agreement or restriction entered into or applicable by law (including but not limited to any condition or requirement imposed by any insurance or surety company), as the same now exists or may be changed or amended or come into effect in the future, which pertains to health, safety, any Hazardous Material, or the environment, including but not limited to ground or air or water or noise pollution or contamination, and underground or aboveground tanks.

(E) "Hazardous Material" means any substance, whether solid, liquid or gaseous, which is listed, defined or regulated as a hazardous substance, a hazardous waste or pesticide, or otherwise classified as hazardous or toxic, in or pursuant to any applicable Environmental Requirement; or which is or contains asbestos, radon, any polychlorinated biphenyl, urea formaldehyde foam insulation, explosive or radioactive material, or motor fuel or other petroleum hydrocarbons; or which causes or poses a threat to cause contamination or a nuisance on the Premises, any adjacent Premises or a hazard to the environment or to the health or safety of persons on the Premises or Other Airport Property.

(F) "Initial Construction Period" means for any lease which contemplates construction or renovation for Premises not previously occupied in whole or in part by Lessee under this Agreement and/or any previous Agreement, a period of time not to exceed nine (9) months commencing with the date on which Lessee breaks ground on the Premises for construction of foundations or commences such renovation.

(G) "Occupancy Date" means the date Lessee first entered, occupied or took possession of the Premises under any written or verbal agreement.

(H) "On" or "in" when used with respect to the Premises or any premises adjacent to the Premises, means "on, in, under, above or about."

(I) "Other Airport Property" means property on the Airport occupied or used by Lessee, or upon which Lessee performs operations, but which is not subject to a lease, sublease or other legal agreement governing the terms of Lessee's occupation, use or operations at such property.

(J) "Recognized Environmental Condition" shall have the meaning set forth in ASTM E 1527-05, Section 1.1.1, as such provision may be amended or superseded from time to time.

(K) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment.

(L) "Remediation" means any investigation, clean-up, removal action, remedial action, restoration, repair, response action, corrective action, monitoring, sampling and analysis, installation, reclamation, closure, or post-closure in connection with the suspected, threatened or actual release of Hazardous Materials, and the delivery of a corresponding no further action confirmation upon which the Lessor and the Lessee can rely.

(M) "Trespassers" means a third party who have entered the Premises and whose actions while on the Premises have resulted in Release of Hazardous Materials directly onto the Premises after the Lease Commencement Date. Notwithstanding the foregoing, for purposes of this Agreement, Trespassers shall not include those third parties whose actions took place off of the Premises and which resulted in the presence of Hazardous Materials on the Premises due to the migration of Hazardous Materials from that off-Premises location.

8.02 Lessee's Acceptance of the Risks and Condition of Premises As-Is: Lessee agrees that the Premises shall be leased and delivered to Lessee in its current "as-is/with all faults" condition (but it is not intended by this provision that County be relieved from its duties expressly set forth in this Agreement or any other applicable agreement). Lessee hereby, warrants, covenants, agrees, and acknowledges that:

(A) Hazardous Materials may be present on the Premises and Other Airport Property. The County is currently engaged in a significant environmental remediation program at its airports.

(B) Under Article 8.05 below, Lessee is provided the opportunity to conduct an independent investigation of the Premises and the physical condition thereof, including the potential presence of any Hazardous Materials on or about the Premises. Lessee's report on the investigation shall be prepared and provided to the County. Whether Lessee conducts such an investigation or not, and subject to Lessor's obligations under this Article 8, Lessee is willing to proceed with this Agreement notwithstanding the environmental conditions of the Premises, subject to Lessee's right to terminate this Agreement as otherwise provided herein.

(C) Because of the possible presence of environmental contaminants on the Premises or other Airport property, County has made no express, implied, or other representations of any kind with respect to the suitability or usability of the Premises or other Airport Property, or any improvements appurtenant thereto, including, without limitation, the suitability or usability of any building materials, building systems, soils or groundwater conditions (due to the presence of Hazardous Materials in, on, under, or about the Premises or other Airport property), for Lessee's proposed or intended use, and Lessee shall rely solely on Lessee's own inspection and examination of such matters.

(D) Except as to County's obligations set forth in this Article or elsewhere in this Agreement, Lessee expressly assumes the risk that Hazardous Materials that are or may be present on the Premises at the commencement of this Agreement may affect the suitability or usability of the Premises for Lessee's proposed or intended use. Lessee agrees that, except to the extent of County's Remediation obligations provided in this Article 8, or any other discharge, disposal or release of Hazardous Materials or violation of Environmental Requirements, caused by County, its agents, employees or contractors and except with respect to Baseline Environmental Conditions, County shall have no responsibility or liability with respect to any Hazardous Materials on the Premises. Notwithstanding the foregoing, in no event shall County be liable to Lessee for damages relating to physical or personal injury, business interruptions relocation costs or any other cost (other than a cost for which County is liable under this Article 8) resulting from the presence of Hazardous Materials on the Premises at any time during this Agreement.

8.03 Lessee's Acceptance of the Risks and Conditions of Premises and Responsibilities for Hazardous Materials:

Lessee agrees that Premises is being leased in its current "as-is/with all faults" condition in its entirety" and Lessor has no financial obligation or responsibility to offset any environmental remediation required to allow construction on site. Further, Lessee acknowledges that there may be drainage issues on site that Lessee will remediate at their own expense. Lessee hereby warrants, covenants, agrees and acknowledges that:

- (A) Hazardous Materials may be present on the Premises and Other Airport Property.
- (B) Under Article 8.05 below, Lessee is provided the opportunity to conduct an independent investigation of the Premises and the physical condition thereof, including the potential presence of any Hazardous Materials on or about the Premises. Whether Lessee has conducted such an investigation or not, Lessee is willing to proceed with this Agreement notwithstanding the environmental conditions of the premises or the properties surrounding the premises, subject to Lessee's right to terminate this Agreement as otherwise provided herein.
- (C) Because of the possible presence of environmental contaminants on the Premises or other Airport property, County has made no express, implied, or other representations of any kind with respect to the suitability or usability of the Premises or other Airport Property, or any improvements appurtenant thereto, including, without limitation, the suitability or usability of any building materials, building systems, soils or groundwater conditions (due to the presence of Hazardous Materials in, on, under, or about the Premises or other Airport property), for Lessee's proposed or intended use, and Lessee has relied solely on Lessee's own inspection and examination of such matters. For this reason, Lessee acknowledges that it shall not rely on the Lessor's baseline audit for inspection.
- (D) Lessee expressly assumes the risk that Hazardous Materials that are or may be present on the Premises at the commencement of this Agreement may affect the suitability or usability of the Premises for Lessee's proposed or intended use. Lessee agrees, County shall have no responsibility or liability with respect to any Hazardous Materials on the Premises. Notwithstanding the foregoing, in no event shall County be liable to Lessee for damages relating to physical or personal injury, business interruptions relocation costs or any other cost resulting from the presence of Hazardous Materials on the Premises at any time during this Agreement.

8.04 Baseline Audit: Within ninety (90) days following the Lease Commencement Date , the County shall provide Lessee with a copy of an environmental audit of the Premises, conducted to identify any Recognized Environmental Conditions associated with the Premises, which audit may include analyses of soil and groundwater samples (the "Baseline Audit"). The Lessee shall be responsible for any Recognized Environmental Conditions within the meaning of ASTM E 1527-05, or most recent version, disclosed by the Baseline Audit. Lessee may terminate this Agreement within one hundred and eighty (180) days of receipt of the Baseline Audit if Lessee, in its sole discretion, determines that the Recognized Environmental Conditions disclosed in such Baseline Audit are unacceptable.

8.05 Lessee Audit: Lessee, at its sole cost and expense, shall have the right to conduct, within ninety (90) days from the receipt of the Baseline Audit, an environmental inspection of the Premises (the "Lessee Audit"), through an independent environmental consultant approved in writing by County, such approval not to be unreasonably withheld or delayed. If Lessee elects to conduct a Lessee Audit, it shall furnish County a copy of the Lessee Audit within thirty (30) days of Lessee's receipt of the Lessee Audit. The purpose of the Lessee Audit is to determine whether there are present on the Premises any Recognized Environmental Conditions not identified in the Baseline Audit, any previous audits, or any contamination assessment reports or remedial action plans, to the extent any such documents exist. Within thirty (30) days of receipt of such Lessee Audit, the County shall notify Lessee if it disputes the Recognized Environmental Conditions or the delineation of any subsurface conditions described in the Lessee Audit. If the Lessee Audit reveals any Recognized Environmental Conditions or delineates any subsurface contamination not disclosed in any contamination assessment

reports, remedial action plans, or the Baseline Audit, and which are not otherwise considered Baseline Environmental Conditions under the Term, then, the County, at its option, shall: (i) allow Lessee the option to terminate the Agreement, without penalty, within sixty (60) days of receipt of such notice or dispute from the County; or (ii) allow Lessee the ability to remediate all environmental conditions identified in the Baseline Audit and Lessee Audit. If Lessee elects not to terminate, Lessee's failure to terminate shall constitute a waiver of (1) Lessee's rights to terminate its obligations under this Agreement as to any findings in such Lessee Audit, except as to its right to cancel the lease under Article 1.01(B) and, (2) as provided in Article 8.03, any claim it may have against the County with respect either to Recognized Environmental Conditions and subsurface contamination disclosed in such Lessee Audit.

8.06 Environmental Maintenance of Premises: Lessee shall, at its sole cost and expense, prepare for construction, keep, maintain and use the Premises, and operate within the Premises at all times, in compliance with all applicable Environmental Laws, and shall maintain the Premises in good and sanitary order, condition, and repair.

8.07 Lessee's Use of Hazardous Materials: Lessee shall not use, store, generate, treat, transport, or dispose of any Hazardous Material on the Premises or Other Airport Property without first providing the County thirty (30) days written notice prior to bringing such Hazardous Material upon the Premises. To the extent certain Hazardous Materials are needed to be used by Lessee on a non-routine basis, such as for emergency repairs, Lessee may provide such notice within twenty-four (24) hours of bringing such Hazardous Material upon the Premises. Notwithstanding the foregoing, County may object to the use of any previously-approved Hazardous Material should County reasonably determine that the continued use of the Hazardous Material by Lessee presents a material increased risk of site contamination, damage or injury to persons, Premises, resources on or near the Premises of Other Airport Property, or noncompliance due to a change in regulation of such Hazardous Material under applicable Environmental Law. Upon County's objection, Lessee shall immediately remove the Hazardous Material from the Premises. This Article 8.07 shall not apply to Hazardous Materials which are not used, generated, treated or disposed of by Lessee but which are otherwise transported by Lessee solely in the course of Lessee's business, such as cargo operations, and for which Lessee has no knowledge as to the identity of such hazardous materials prior to such transport. County's objection or failure to object to the use, storage, generation, treatment, transportation, or disposal of Hazardous Material under this paragraph, or the exclusion of certain Hazardous Materials under this paragraph, shall not limit or affect Lessee's obligations under this Agreement, including Lessee's duty to remedy or remove releases or threatened releases; to comply with applicable Environmental Law and/or Environmental Requirements relating to the use, storage, generation, treatment, transportation, and/or disposal of any such Hazardous Materials; or to indemnify County against any harm or damage caused thereby. Lessee shall promptly and completely answer periodic questionnaires from the County concerning Lessee's practices regarding the generation, use, storage, and disposal of Hazardous Materials under this Agreement.

8.08 Entry by County:

(A) Notwithstanding any other right of entry granted to County under this Agreement, and subject to the requirements set forth in Article 8.08(B), MDAD shall have the right, at its own expense, during reasonable business hours, and upon reasonable prior written notice at least forty-eight (48) hours prior to such entry, to enter the Premises or to have consultants enter the Premises throughout the Term of this Agreement for the purposes of: (1) determining whether the Premises are in conformity with applicable Environmental Law; (2) conducting an environmental review or investigation of the Premises; (3) determining whether Lessee has complied with the applicable environmental requirements of this Agreement; (4) determining the corrective measures, if any, required of Lessee to ensure the safe use, storage, and disposal of Hazardous Materials; or (5) removing Hazardous Materials (except to the extent used, stored, generated, treated, transported, or disposed of by Lessee in compliance with applicable Environmental Requirements and the terms of this Agreement). Lessee agrees to provide access and reasonable assistance for such inspections. MDAD shall use its reasonable efforts to reasonably minimize interruptions of business operations on the Premises.

(B) Such inspections may include, but are not limited to, entering the Premises or adjacent property with drill rigs of other machinery for the purpose of obtaining laboratory samples of environmental conditions or soil or groundwater conditions. Lessee shall have the right to collect split samples of any samples collected by MDAD, MDAD shall not be limited

in the number of such inspections during the Term of this Agreement MDAD will conduct such inspections during Lessee's normal business hours, but MDAD may conduct such inspections in other than normal business hours if the circumstances so require. For inspections conducted by MDAD, MDAD agrees to provide Lessee with reasonable notice (not less than forty-eight (48) hours) prior to inspecting the Premises; provided however, that such notice period shall not apply under circumstances in which MDAD reasonably determines that there exists an immediate threat to the health, safety, or welfare of any persons. Based on the results of such inspections, should MDAD reasonably determine that Hazardous Materials have been released, discharged, stored, or used on the Premises in violation of the terms of this Agreement, Lessee shall, in a timely manner, at its expense, remove such Hazardous Materials in a manner not inconsistent with applicable Environmental Law and otherwise comply with the reasonable recommendations of MDAD and any regulatory authorities related to the results of such inspections. The right granted to MDAD herein to inspect the Premises shall not create a duty on MDAD's part to inspect the Premises, nor liability of MDAD for Lessee's use, storage, or disposal of Hazardous Materials, it being understood that Lessee shall be solely responsible for all liability in connection therewith. MDAD shall provide the results of such inspections to the Lessee in a timely manner if requested to do so in writing. Nothing herein shall be construed to limit, restrain, impair or interfere with County's regulatory authority to conduct inspections and/or the manner in which it conducts such inspections. Lessee shall not be liable or otherwise responsible for any property damage to the Premises or injury to any person caused by County, its agents or consultants during County's inspection under this Article 8.08.

8.09 Permits and Licenses: The Lessee warrants that it will secure at the times required by issuing authorities all applicable permits or approvals that are required by any governmental authority having lawful jurisdiction to enable Lessee to perform its obligations under this Agreement. Upon written request, Lessee shall provide to County copies of all permits, licenses, certificates of occupancy, approvals, consent orders, or other authorizations issued to Lessee under applicable Environmental Requirements, as they pertain to the Lessee's operations on or use of the Premises or Other Airport Property.

8.10 Notice of Discharge to County:

(A) In the event of: (i) the happening of any material event involving the spill, release, leak, seepage, discharge or clean-up of any Hazardous Material on the Premises or Other Airport Property in connection with Lessee's operation thereon; or (ii) any written Environmental Claim affecting Lessee from any person or entity resulting from Lessee's use of the Premises or Other Airport Property, then Lessee shall immediately notify County orally within twenty-four (24) hours and in writing within five (5) business days of said notice. If County is reasonably satisfied that Lessee is not promptly commencing the response to either of such events. County shall have the right but not the obligation to enter onto the Premises or to take such other actions as it shall deem reasonably necessary or advisable to clean up, remove, resolve or minimize the impact of or otherwise deal with any such Hazardous Material or Environmental Claim following receipt of any notice from any person or any entity having jurisdiction asserting the existence of any Hazardous Material or an Environmental Claim pertaining to the Premises, which if true, could result in an order, suit or other action against the County. If Lessee is unable to resolve such action in a manner which results in no liability on the part of County, all reasonable costs and expenses incurred by County shall be deemed additional rent due County under this Agreement and shall be payable by Lessee upon demand, except to the extent they relate to a Baseline Environmental Condition.

(B) With regard to any reporting obligation arising out of Lessee's operations or during the Agreement, Lessee shall timely notify the State of Florida Department of Environmental Protection, Miami-Dade County Department of Regulatory and Economic Resources, and the United States Environmental Protection Agency, as appropriate, with regard to any and all applicable reporting obligations while simultaneously providing written notice to County.

(C) Within sixty (60) days of execution of this Agreement, Lessee shall submit to County an emergency action plan/contingency plan setting forth in detail Lessee's procedures for responding to spills, releases, or discharges of Hazardous Materials. The emergency action plan/contingency plan shall identify Lessee's emergency response coordinator and Lessee's emergency response contractor.

8.11 Reports to County: For any year in which any Hazardous Materials have been used, generated, treated, stored, transported or otherwise been present on or in the Premises, (or on or in other Airport property for purposes related to Lessee's operations on the Premises), Lessee shall provide County with a written report listing: the Hazardous Materials which were present on the Premises or other Airport property; all releases of Hazardous Material that occurred or were discovered on the Premises or other Airport property and which were required to be reported to regulatory authorities under applicable Environmental Laws; all enforcement actions related to such Hazardous Materials, including all, consent agreements or other non-privileged documents relating to such enforcement actions during that time period. In addition, Lessee shall provide County with copies of any reports filed in accordance with the Emergency Planning and Community Right to Know Act (EPCRA) and shall make available for review upon request by County copies of all manifests for hazardous wastes generated from operations on the Premises. Lessee shall provide the report required under this section to the County by April 1 of each year for the preceding calendar year.

8.12 Periodic Environmental Audits: Lessee shall establish and maintain, at its sole expense, a system to assure and monitor its continued compliance on the Premises with all applicable Environmental Laws, which system shall include, no less than once each year a detailed review of such compliance (the "Environmental Audit") by such consultant or consultants as County may approve, which approval shall not be unreasonably withheld, delayed or conditioned. Alternatively, if the Department approves, which approval shall not be unreasonably withheld, delayed, or conditioned, such Environmental Audit may be conducted by Lessee's personnel but in either case Lessee shall provide County with a copy or summary of its report of its annual Environmental Audit, which shall be consistent with ASTM's "Practice for Environmental Regulatory Compliance Audits" or other recognized format approved by County. If the Environmental Audit indicates any unresolved violation of any applicable Environmental Law and/or Environmental Requirements, Lessee shall, at the request of County, provide a detailed review of the status of any such violation within thirty (30) days of the County's request.

8.13 Remediation of Hazardous Material Releases: If Lessee or Lessee's agents, employees, contractors, invitees or trespassers cause any Hazardous Materials to be released, discharged, or otherwise located on or about the Premises or Other Airport Property during the Term ("Hazardous Material Release"), Lessee shall promptly take all actions, at its sole expense and without abatement of Rent, as are reasonable and necessary to return the affected portion of the Premises or Other Airport Property and any other affected soil or groundwater to their condition existing prior to the Hazardous Material Release in a manner not inconsistent with applicable Environmental Law. County shall have the right to approve all such remedial work, including, without limitation: (i) the selection of any contractor or consultant Lessee proposes to retain to investigate the nature or extent of such Hazardous Material Release or to perform any such remedial work; (ii) any reports or disclosure statements to be submitted to any governmental authorities prior to the submission of such materials; and (iii) any proposed remediation plan or any material revision thereto prior to submission to any governmental authorities. The County's approvals shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, County's prior consent shall not be necessary if a Hazardous Material Release poses an immediate threat to the health, safety, or welfare of any persons and, despite Lessee's best efforts, it is not practicable to obtain County's consent before taking remedial action to abate such immediate threat, provided that: (a) Lessee shall notify County as soon as possible and shall thereafter obtain County's consent as otherwise provided in this paragraph; and (b) Lessee shall take only such action as may be necessary or appropriate to abate such immediate threat and shall otherwise comply with the provisions of this paragraph. In addition to any rights reserved by County in this Agreement, County shall have the right, but not the obligation, to participate with Lessee, Lessee's consultants and Lessee's contractors in any meetings with representatives of the governmental authorities and Lessee shall provide County reasonable notice of any such meetings. All remedial work shall be performed in compliance with all applicable Environmental Laws. The County's consent to any remedial activities undertaken by Lessee shall not be withheld so long as County reasonably determines that such activities will not cause any material adverse long-term or short-term effect on the Premises, or other adjoining property owned by County. Lessee's obligations in this section do not apply to Baseline Environmental Conditions or any other obligations of Lessor pursuant to this Article 8.

8.14 Indemnity: Lessee shall indemnify, defend (with counsel reasonably satisfactory to County), and hold County, its directors, officers, employees, agents, assigns, and any successors to County's interest in the Premises, harmless from

and against any and all loss, cost, damage, expense (including reasonable attorneys' fees), claim, cause of action, judgment, penalty, fine, or liability, directly or indirectly, relating to or arising from the use, storage, release, discharge, handling, or presence of Hazardous Materials on, under, or about the Premises or Other Airport Property and caused by Lessee, Lessee's agents, employees, contractors, invitees or to the extent Lessee has not taken reasonable steps to exclude, Trespassers. This indemnification shall include without limitation: (a) personal injury claims; (b) the payment of liens; (c) diminution in the value of the Premises or Other Airport Property; (d) damages for the loss or restriction on use of the Premises or Other Airport Property; (e) sums paid in settlement of claims; (f) reasonable attorneys' fees, consulting fees, and expert fees, (g) the cost of any investigation of site conditions, and (h) the cost of any repair, cleanup, remedial, removal, or restoration work or detoxification if required by any governmental authorities or deemed necessary in County's reasonable judgment, but shall not extend to such claims, payment, diminution, damages, sums, fees or costs to the extent caused (i) solely by an act of God or (ii) by the negligent or willful misconduct of the County, its officers, employees, contractors or agents. For any legal proceedings or actions initiated in connection with the Hazardous Materials Release, County shall have the right at its expense but not the obligation to join and participate in such proceedings or actions in which the County is a named party, and control that portion of the proceedings in which it is a named party. County may also negotiate, defend, approve, and appeal any action in which County is named as a party taken or issued by any applicable governmental authorities with regard to a Hazardous Materials Release; provided, however, claims for which Lessee may be liable pursuant to this Article 8.14 shall not be settled without Lessee's consent. Any costs or expenses incurred by County for which Lessee is responsible under this paragraph or for which Lessee has indemnified County: (i) shall be paid to County on demand, during the Term as additional Rent; and (ii) from and after the expiration or earlier termination of the Agreement shall be reimbursed by Lessee on demand. Lessee's obligations pursuant to the foregoing indemnity shall survive the expiration or termination of this Agreement and shall bind Lessee's successors and assignees and inure to the benefit of County's successors and assignees. Notwithstanding any other provision of this Agreement, this section 8.15 does not apply to Baseline Environmental Conditions or a discharge, disposal or release caused by the County, its officers, employees, contractors or agents.

(A) This indemnity specifically includes the direct obligation of Lessee to perform, at its sole cost and expense, any remedial or other activities required or ordered by court or agency having competent jurisdiction over the subject matter, or otherwise necessary to avoid or minimize injury or liability to any person, or to prevent the spread of Hazardous Materials.

(B) Lessee agrees in order to minimize its obligations in this regard to use reasonable efforts to assist the Department in responding to Hazardous Materials spills in or Airport property reasonably close to the Premises used by Lessee by making Lessee's remediation equipment and personnel available for such emergency remediation activity. However, Lessee may provide such assistance only at the direct request of the Department and only if Lessee's remediation equipment is intended to be utilized for the Hazardous Material spill at issue and only if Lessee's personnel have been trained to respond to the Hazardous Material spill at issue. If Lessee is directed to perform any remedial work under this Article 8.14(B) for which it is later determined that Lessee is not responsible, the Department shall reimburse Lessee for all costs associated with or arising out of Lessee's performance of such remedial work. Lessee shall cooperate with the Department in any subsequent effort by the Department to recover from the responsible parties all costs involved with the remediation effort that utilized Lessee's equipment and personnel. Lessee shall perform all such work in its own name in accordance with applicable laws. Lessee acknowledges that the County's regulatory power in this regard is independent of the County's contractual undertakings herein, and nothing herein shall affect the County's right in its regulatory capacity to impose its environmental rules, regulations, and authorities upon the Lessee in accordance with the law.

(C) In the event Lessee fails to perform its obligations in Article 8.14(A) above, and without waiving its rights hereunder, County may, at its option, perform such remedial work as described in Article 8.13(A) above, and thereafter seek reimbursement for the costs thereof. In accordance with this Article 8, Lessee shall permit County or its designated representative access to the Premises areas to perform such remedial activities.

(D) Whenever County has incurred costs described in this Article 8 as a result of the failure of Lessee to perform its obligations hereunder, Lessee shall, within thirty (30) days of receipt of notice thereof, reimburse County for all

such expenses together with interest at the rate of 1.5% percent per month on the outstanding balance commencing on the thirty-first day following Lessee's receipt of such notice until the date of payment.

(E) To the extent of Lessee's responsibility under this Article and without limiting its obligations under any other paragraph of this Agreement, and except to the extent of County's responsibility for environmental conditions set forth in this Article 8, Lessee shall be solely and completely responsible for responding to and complying with any administrative notice, order, request or demand, or any third party claim or demand relating to potential or actual Hazardous Materials contamination on the Premise. Lessee's responsibility under this paragraph includes but is not limited to responding to such orders on behalf of County and defending against any assertion of County's financial responsibility or individual duty to perform under such orders. Lessee shall assume, pursuant to the indemnity provision set forth in this Article 8, any liabilities or responsibilities which are assessed against County in any action described under this paragraph.

8.15 Dispute Resolution: County and Lessee agree that any dispute between them relating to this Article 8 will first be submitted, by written notice, to a designated representative of both County and Lessee who will meet at County's place of business or other mutually agreeable location, or by teleconference, and confer in an effort to resolve such dispute. Any agreed decision of the representatives will be final and binding on the Parties. In the event the representatives are unable to resolve any dispute within ten (10) days after submission to them, either Party may refer the dispute to mediation, or institute any other available legal or equitable proceeding in order to resolve the dispute.

8.16 Waiver and Release: Lessee, on behalf of itself and its heirs, successors and assigns, hereby waives, releases, acquits and forever discharges County, its principals, officers, directors, employees, agents, representatives and any other person acting on behalf of the County, and the successors and assigns of any of the preceding, of and from any and all claims, actions, causes of action, demands, rights, damages, costs, expenses or compensation whatsoever, direct or indirect, known or unknown, foreseen or unforeseen, which Lessee or any it's heirs, successors, or assigns now has or which may arise in the future on account of or in any way related to or in connection with any present or future physical characteristic or condition of the Premises, including, without limitation, any Hazardous Material, in at, on, under or related to the Premises, or any violation or potential violation of any Environmental Law applicable thereto; provided, however, this Article 8.16 shall not constitute a waiver or release of any obligation of County under this Article 8. Lessee acknowledges that County would not enter into this Agreement without Lessee's agreement to the waiver and release provided herein.

8.17 No Waiver of Rights, Causes of Actions or Defenses. Notwithstanding any language in this Agreement, including without limitation Articles 8.02, 8.03, 8.04, 8.05, 8.13, 8.14 and 8.15, Lessee does not agree to waive or release any rights, causes of action or defenses it may have against Miami-Dade County or any other party related to allegations made by the County in (i) Case No. 01-8758 CA 25 which has been filed by the County in the Florida Circuit Court of the Eleventh Judicial Circuit, and (ii) a letter dated April 9, 2001, to Lessee and others (who are referred to as "responsible parties" or "RPs"). Nothing herein shall be construed to limit or expand upon any releases previously granted to or exchanged between the Parties as a result of judgments or settlements obtained in proceedings between the Parties, including, without limitation, settlements in bankruptcy or settlements entered under Case No. 01-8758 CA 25 which has been filed by the County in the Florida Circuit Court of the Eleventh Judicial Circuit.

8.18 Surrender of Premises: Lessee shall surrender the Premises used by Lessee to County upon the expiration or earlier termination of this Agreement free of debris, waste, and Hazardous Materials used, stored, or disposed of by Lessee or its agents, employees, contractors, invitees or Trespassers, or otherwise discharged on the Premises or Other Airport Property for which Lessee is responsible during the Term.. The Premises shall be surrendered in a condition that complies with all applicable Environmental Requirements, and such other reasonable environmental requirements as may be imposed by County. Lessee shall not be responsible under this section 8.18 to the extent of County's obligations under this Article 8.

8.19 Breach: Any breach by Lessee of any material provision of this Article 8 shall, after notice and a reasonable opportunity for Lessee to cure, constitute a default of the Agreement and shall entitle County to exercise any and all remedies provided in the Agreement, or as otherwise permitted by law.

8.20 Survivability of Terms: the terms and conditions of this Article 8, including the indemnity, waiver, and release, shall survive the termination of this Agreement.

8.21 Right to Regulate: As provided for in Article 20 of this Agreement, nothing within this Article 8 shall be construed to waive or limit, restrain, impair or interfere with the County's regulatory authority.

8.22 No Payment Obligation: For the avoidance of doubt and notwithstanding any provision contained within this Agreement, Lessor shall have no obligation to pay for any environmental conditions which currently exist or which may arise in the future. All such obligations are the solely the responsibility of the Lessee, unless Lessee exercises its right to terminate in accordance with this Article 8.

## **ARTICLE 9**

### **Alteration of Premises and Erection of Signs**

#### **9.01 Alterations:**

The Lessee shall not alter the Premises in any manner whatsoever without the prior written approval of the Department. In the event the Lessee is given approval to make any alterations to the Premises, the Lessee shall fully comply with the terms and conditions of the approval document, the applicable Tenant Airport Construction (TAC) requirements (Exhibit C), as may be amended from time to time, of the Department's TAC Program in effect, and Article 7 (Regulations, Licenses and Permits). Such programs may include, but shall not be limited to: (i) the County's Community Business Enterprise (CBE) Program applicable to architects and engineers under Section 2-10.4.01 of Miami-Dade County's Code; (ii) the Community Small Business Enterprise (CSBE) Program for construction activities under Section 10-33.02; (iii) the Living Wage Ordinance under Section 2-8.9; the Art in Public Places (AIPP) Program under Section 2-11.15; (iv) the Responsible Wages Ordinance under Section 2-11.16 and its corresponding Implementing Order; (v) Residents First Training and Employment Program under Section 2-11.7; (vi) Employ Miami-Dade under Administrative Order (AO) 3-6; and any other program of the County applicable to the Lessee's alteration activities hereunder, as such programs, ordinances, or code provisions may be amended from time to time.

The Lessee shall comply with such applicable provisions as well as any Administrative and/or Implementing Orders and other directives issued by the County relating to such Programs. The Lessee's failure to do so shall constitute a default pursuant to Article 13.03 (Other Defaults) hereof.

9.02 Removal of Alterations: Any alterations pursuant to Article 9.01 (Alterations) above constructed or installed by the Lessee, at its sole expense, including signage and telecommunications equipment, that can be removed from the Premises and Improvements without materially damaging the Premises and Improvements shall be considered the personal property of the Lessee and may be removed and or replaced by the Lessee at any time during the Term. All other Improvements shall become a part of the Premises, and shall become the property of the County upon expiration of the Term, or as earlier designated by Lessee as provided in Article 1.01, or the earlier termination of this Agreement; provided, however, in the case of any Improvements which were constructed, installed, added or altered with proceeds of tax-exempt financing, such Improvements shall immediately vest in the County or the entity providing such financing, if the financing documents so provide, and shall be deemed to be the property of the County or such entity upon their construction, installation or other implementation, subject, however, to all of Lessee's rights under this Agreement. Lessee hereby reserves the right to remove any item of a non-leased nature, including, but not limited to, personal property, at any time during the Term and upon termination of the Agreement.

9.03 Signage: The Lessee shall not erect, maintain or display any identifying signs or any advertising matter, of any type or kind which is visible to the public, without prior written approval of the Department. In the event the Department changes the graphics system for the identification of lessees at the Airport, the Lessee agrees, if required by the Department, to change, at its sole cost, any of its identification signs necessary to comply with such graphics system, provided that such graphics system does not impair the exercise of Lessee's rights to engage in the Permitted Uses..

## **ARTICLE 10**

### **Indemnification**

The Lessee shall indemnify and hold harmless the Lessor and its officers, employees, agents and instrumentalities from any and all liability, losses or damages, including reasonable attorneys' fees and costs of defense at the trial and appellate levels, which the Lessor or its officers, employees, agents or instrumentalities may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature arising out of, relating to or resulting from the performance of, and under, this Agreement by the Lessee or its employees, agents, servants, partners, principals, subcontractors, or invitees, to the extent of Lessee's negligence, or the negligence of its officers, employees, agents and instrumentalities and shall specifically exclude liability, losses or damages, as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature arising out of, relating to or resulting from the negligence of Lessor. Lessee shall pay all claims and losses in connection therewith and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the Lessor, where applicable, including appellate proceedings, and shall pay costs, judgments and attorney's fees and costs at the trial and appellate levels, which may issue thereon. Lessee expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by Lessee shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Lessor or its officers, employees, agents and instrumentalities as herein provided. The Lessor shall give to the Lessee reasonable notice of any such claims or actions.

The provisions of this Article 10 shall survive the expiration or early termination of this Agreement for a period of five (5) years following the Lease Commencement Date.

## **ARTICLE 11**

### **Assignment and Subletting and Conditions of Financing**

11.01 Assignment and Transfer: Except as provided in Article 11.03, the Lessee shall not, in any manner, assign, transfer, mortgage, pledge, hypothecate, encumber or otherwise convey an interest in this Agreement, or authorize others to exercise the rights granted to the Lessee herein, without the written approval of the Department. The Lessee may make a collateral assignment to Lessee's lender (a "Lender") or sell the stock of the business without prior approval of the County, and a Lender, who is the holder of a Leasehold Mortgage (as defined below), may foreclose or accept a deed-in-lieu of foreclosure under the Leasehold Mortgage, without prior approval of the County. Lessee may also sell substantially all of its assets without prior approval of the County, provided that: (a) substantially all of the assets are sold; (b) the purchaser is a single entity that will continue substantially all of the operations permitted or required of Lessee hereunder; and (c) the purchaser meets the County's requirements set forth in Article 11.03(D) (5) herein. In the event that a Lender, following a foreclosure or deed-in-lieu of foreclosure of the Leasehold Mortgage (as defined below), seeks provisions in the assignment which (x) extend beyond the requirements of this Article 11 and (y) affect the interests or require certain actions by the County, such provisions must be approved by the County; however, approval of such provisions shall not be unreasonably withheld or delayed by MDAD for so long as the Use of Premises as provided for in Article 2 (Use of Premises) remains substantially the same and this Lease is assigned or transferred to an entity deemed by MDAD to be reputable and creditworthy meeting the County requirements stated under Article 11.03 (D) (5) (Transfer To A "Transferee" or "Successor Lessee").

11.02 Subletting: The Lessee shall submit any subleases to the Department for approval, which shall not be unreasonably withheld. Any objection by the Department must be forwarded to the Lessee within thirty (30) days following the date of receipt of the sublease by the Department's Assistant Director for Business Management. Agreements between

the Lessee and the owners or operators of Aircraft who have tie down or hangar agreements that include office or shop space within the Facility where the tie down or hangar operation is located shall not be considered subleases for the purposes of this Article. Subleases shall be subject to the provisions of any applicable County Commission Resolution, as amended from time to time, which may describe conditions applicable to subleases or limit the Rent to be charged to the sublessee by the Lessee. The County shall have the right to audit the Lessee's compliance with such subleasing policy.

Further, any such subleases shall be subject to the same conditions, obligations and terms as set forth herein, including, as a minimum, but not limited to, requirements for compliance with duly adopted Airport rules and regulations and Applicable Laws regarding payment of concession fees and indemnification of the County. Notwithstanding anything herein contained to the contrary, in the event that a sublease is approved by the County, the Lessee shall remain fully liable to the County for fulfilling all obligations, conditions and terms of this Agreement, throughout its entire Term.

#### 11.03 Conditions of Financing for Approved Improvements Costs.

(A) Financing of Improvements. Lessee may secure financing from an Institutional Lender to provide funds required for the construction of the Improvements. No mortgage or other encumbrance the Lessee executes in connection with that financing (a "Leasehold Mortgage") will extend to or be a lien or encumbrance upon Lessor's interest in of the real property comprising the Premises or in any right appurtenant to that interest. Moreover, the Lessor has no obligation to subordinate the Lessor's interest in the Premises to the lien or security interest of any mortgage or other encumbrance that Lessee may execute on the authority of this Article 11.03 (A). As used herein, "Institutional Lender" means: (i) the United States of America, any state or commonwealth thereof or any agency or instrumentality of any of them, any municipal agency, public benefit corporation or public authority, advancing or insuring mortgage loans or making payments which, in any manner, assists in the financing, development, operation and maintenance of projects; (ii) any (A) savings bank, savings and loan association, commercial bank, trust company (whether acting individually or in a fiduciary capacity) or insurance company organized and existing under the laws of the United States of America or any state or commonwealth thereof, (B) foreign insurance company or commercial bank qualified to do business as an insurer or commercial bank as applicable under the laws of the United States (if such qualification is necessary in connection with the acquisition of leasehold mortgage debt), (C) pension fund, foundation or university or college or other endowment fund or (D) real estate investment fund, infrastructure investment fund, investment bank, pension advisory firm, mutual fund, investment company or money management firm; (iii) any "qualified institutional buyer" under Rule 144(A) under the Securities Act or any other similar Applicable Law hereinafter enacted that defines a similar category of investors by substantially similar terms; (iv) a governmental authority acting (directly or through a trust or other single purpose vehicle controlled by it) as a conduit for the purpose of issuing private activity bonds authorized by Applicable Law for the benefit of the Lessee; (v) any entity formed for the purpose of securitizing mortgages or making loans in connection with the securitization of mortgages; or (vi) any other financial institution or entity designated by the Lessee and approved by the County; provided, however, each such entity or combination of such entities if the Institutional Lender shall be a combination of such entities shall have individual or combined assets, as the case may be, of not less than \$250,000,000.

(B) Rights of Leasehold Mortgagee. The mortgagee or secured party in whose favour Lessee has executed a leasehold mortgage (the "Leasehold Mortgagee") shall not, by virtue of its Leasehold Mortgage, acquire any greater rights or interest in the Premises than the Lessee has at any applicable time under this Agreement, other than such rights or interest as may be granted or acquired in accordance with the provisions of this Article 11.03.

(C) Recording of Leasehold Mortgage. Following the Lessee's execution of a Leasehold Mortgage, if applicable, Lessee shall furnish the Lessor (i) a duplicate original of the Leasehold Mortgage or a photocopy of the Leasehold Mortgage that the Clerk of the Circuit Court for Miami-Dade County, Florida has certified as being a true copy of the Leasehold Mortgage recorded among its real property records, and (ii) a written notice setting forth the name and address of the Leasehold Mortgagee.

(D) Conditions Of Leasehold Mortgage. Following the delivery of the documents in 11.03 (C) (Recording of Leasehold Mortgage) and continuing until the Leasehold Mortgagee releases the Leasehold Mortgage of record, the following provisions will apply:

- (1) LESSOR TO GIVE NOTICE OF DEFAULT. At the time that the Lessor gives Lessee written notice of the occurrence of any breach in respect of the performance of Lessee's obligations under this Agreement, the Lessor shall simultaneously give the Leasehold Mortgagee a copy of that notice in a manner established for the delivery of notices in Article-24.03 (Notices) at the address for the Leasehold Mortgagee provided to the Lessor. No notice of breach to Lessee will be effective until the Lessor delivers the notice required by this Article 11.03(D) (1).
- (2) MORTGAGEE'S RIGHT TO CURE DEFAULT. The Leasehold Mortgagee may cure a breach on Lessee's part, but has no obligation to do so. The Lessor will accept the Leasehold Mortgagee's performance of any of Lessee's obligations to the same extent as though the Lessee has performed. The Lessor may exercise a remedy available to it by reason of a default on Lessee's part only if Lessee and the Leasehold Mortgagee fail to cure a breach of this Lease within (a) sixty (60) days following the time period specifically set forth in Article 13 (Termination by County or Lessee) of the Lease for a cure of a particular breach by Lessee, or (b) if no such time period is set forth, then, within thirty (30) days after the date of the delivery of the notice required by virtue of Article 11.03(D)(1) above, or if a cure is not reasonably possible within such thirty (30) day period, then within a period of time reasonably required to cure the breach through the exercise of prompt, diligent and continuous effort.
- (3) TERMINATION DELAYED DURING EXERCISE OF LEASEHOLD MORTGAGEE'S REMEDIES. Even though a breach of this Lease has occurred and neither the Lessee nor the Leasehold Mortgagee has provided for a cure within the times permitted by Article 11.03(D)(2) above, the Lessor will not terminate the Lease for a reasonable period of time, not to exceed two (2) years, from the effective date of termination provided in the Lessor's notice of termination to Lessee, if the Leasehold Mortgagee is then making: (a) prompt, diligent and continuous efforts to gain possession of the Premises and to succeed to Lessee's interest in the Premises by means of a foreclosure or the exercise of any other remedy available to the Leasehold Mortgagee by virtue of Lessee's default in respect of any of its obligations under the terms of the Leasehold Mortgage, together with (b) the payment to the Lessor of all Rent and fees and charges unrelated to the exercise of Lessee's rights under this Lease, due hereunder with respect to which Lessee becomes delinquent and (c) good faith efforts to rectify other breaches under the Lease, contemporaneously with the efforts to gain possession of the Premises. Nothing herein contained shall require any Leasehold Mortgagee or its designee, as a condition to its exercise of rights hereunder, to cure any breach hereunder which is otherwise not reasonably susceptible of being cured by such Leasehold Mortgagee or its designee, except that all breaches related to life and safety shall be corrected by Leasehold Mortgagee or its designee during this period. Notwithstanding, a Successor Lessee shall be responsible for curing all breaches reasonably capable of being cured as a condition of, or subsequent to, assumption of this Lease.
- (4) LEASEHOLD MORTGAGEE'S OPTION FOR ISSUANCE OF NEW LEASE. Prior to the expiration of the two (2)- year period provided above in Article 11.03(D)(3), the Leasehold Mortgagee must request the Lessor to execute and deliver a new lease for the Premises in favour of a successor Lessee meeting the criteria of Article 11.03(D)(5) (a "Successor Lessee"). That new lease will have a term that coincides with what would have been the remainder of the Term, had termination of this Agreement not occurred, and will otherwise be on the same terms

and conditions as those set forth in this Agreement. The new lease will also have the same priority as this Agreement with respect to any lien or other encumbrance affecting the Premises, including any fee mortgage. In order for the Lessor to be obligated to execute and deliver the new lease, the Leasehold Mortgagee must request the execution and delivery of the new lease by the delivery of written notice to the Lessor within two (2) years after the termination of this Agreement occurs, and acknowledge and return the new lease to the County for execution on the Lessor's part within twenty (20) days after the date on which the Lessor tenders the new lease to it for signature. Simultaneously with the delivery of the new lease, the Successor Lessee must also execute and deliver to the Lessor a written plan to rectify, within a reasonable period of time, any breach that exists at that time in respect of any of Lessee's obligations under the terms of this Agreement, including, without limitation, any breach that may exist in respect of Lessee's obligations arising under the terms of Article 8 (Environmental Compliance). Such plan must set forth, in reasonable detail, the manner in which the Successor Lessee plans to rectify each breach; provided, however, Lessor shall waive any breaches hereunder which cannot reasonably be expected to be cured by such Leasehold Mortgagee or Successor Lessee.

- (5) **TRANSFER TO A "TRANSFeree" OR "SUCCESSOR LESSEE".** A transfer of Lessee's interest in the Premises to the Leasehold Mortgagee, or a corporate nominee affiliated with the Leasehold Mortgagee, or a purchaser at a foreclosure sale that occurs by virtue of the Leasehold Mortgagee's acceptance of a deed in lieu of foreclosure or the exercise of any remedy available to it under the terms of the Leasehold Mortgage (collectively, a "Transferee") will not constitute an assignment requiring the Lessor's consent under the terms of Article 11.01 (Assignment and Transfer) above. The provisions of Article 2 (Use of Premises) will govern any use of the Premises that occurs prior to, and after, a transfer to the Transferee. The Transferee may make a subsequent transfer of Lessee's interest in the Premises only with the Lessor's prior written consent as provided in Article 11.01. The Lessor will, however, consent to the subsequent transfer to a Successor Lessee, if the proposed successor or successors to the Lessee's interest would have been acceptable to the Lessor for the Premises in the reasonable exercise of the Lessor's judgment considering the successors experience, financial strength, history of meeting contractual obligations and intent to implement a business plan consistent with the Lessor's plan for operating the Airport. The Parties agree that the Transferee will be subject to the termination provisions of Article 13 (Termination by Lessor or Lessee). After succeeding to Lessee's interest in the Premises, a Transferee that is not a Successor Lessee must use reasonable best efforts to find a Successor Lessee satisfying the criteria set forth above in this Article 11.03(D)(5), but in any event no later than two (2) years following the effective date of termination provided in Lessor's notice. If no Successor Lessee or Lessees are found in such period to occupy at least 50% of the Premises and Improvements, then all of the Lessee's, Leasehold Mortgagee's and Transferee's interests in the Premises, the Improvements, and this Lease shall terminate in their entirety, without any right of recovery or compensation from the Lessor.
- (6) **NO OBLIGATIONS OF TRANSFeree; LESSOR'S RIGHT TO TERMINATE IF OBLIGATIONS NOT SATISFIED.** If a Transferee succeeds to Lessee's interest in the Premises by virtue of the Leasehold Mortgagee's acceptance of a deed in lieu of foreclosure or the exercise of any remedy available to the Leasehold Mortgagee under the terms of the Leasehold Mortgage, the Transferee and its successors and assigns will only have personal liability for the performance of those obligations incumbent upon Lessee under the terms of this Agreement that arise or accrue during the period between the time at which the Transferee succeeds to Lessee's interest in the Premises and the time at which it divests itself of that interest. The foregoing limitation

will not preclude the Lessor from terminating this Agreement if the Transferee fails to rectify, without cost to Lessor, any breach existing in respect of Lessee's obligations at the time the Transferee succeeds to Lessee's interest in the Premises, including, without limitation, any obligation arising under the terms of Article 8 (Environmental Compliance), provided that Lessor has delivered, to the Transferee, the same notice, and opportunity to cure such breach, as Lessor is required to give to Lessee pursuant to the terms of this Lease for the particular breach; provided, however, that Lessor shall waive any breaches by Lessee hereunder which cannot reasonably be expected to be cured by such Leasehold Mortgagee or Successor Lessee.

- (7) NO AMENDMENT OF LEASE WITHOUT LEASEHOLD MORTGAGEE'S CONSENT. Without the Leasehold Mortgagee's prior written consent, Lessee may not amend this Agreement, exercise any right available to it under the terms of this Agreement or at law to cancel this Agreement, or to voluntarily surrender possession of the Premises to Lessor, except as provided herein; provided, however, notwithstanding the foregoing, notice to Leasehold Mortgagee pursuant to Article 11.03(D)(1), but not its consent, shall be required for adjustments pursuant to the express terms of this Agreement in accordance with Articles 1.07 (Review by FAA), 3.03 (Rental Rate Review), 19.02 (Adjustment of Terms and Conditions), and 22.07 (Severability). Without the Leasehold Mortgagee's prior written consent, the Lessor may not cancel this Agreement and accept a surrender of possession of the Premises, except at the end of the then-current Term (subject to Lessee's right to extend the Term as set forth in Article 1.01 of this Agreement) or in connection with the Lessor's exercise of its remedies following an occurrence of a breach in the performance of any of Lessee's obligations, subject to Leasehold Mortgagee's notice and cure rights pursuant to Articles 11.03(D)(1)-(4). The Leasehold Mortgagee will not be bound by any amendment, cancellation or surrender that occurs in contravention of the foregoing provisions of this Article 11.03(D) (7).
- (8) RIGHTS OF LEASEHOLD MORTGAGEE IN INSURED LOSSES. The Leasehold Mortgagee will have the right to participate in the adjustment of any insured losses that becomes necessary by reason of damage or destruction occurring to the Improvements, as may be applicable, and the right to supervise and control the receipt and disbursement of insurance proceeds to the extent provided in agreements among Lessee, Leasehold Mortgagees and any lessees holding an interest with respect to the Premises. The Leasehold Mortgagee is entitled to receive, and apply to the reduction of the indebtedness, the payment of which is secured by the lien of the Leasehold Mortgagee, any portion of insurance proceeds arising from damage or destruction to Lessee's interest in the Premises not applied to the restoration of that portion of the Premises that remains following such damage or destruction. If, however, the Premises cannot be adequately restored, repaired or reconstructed so as to constitute a complete architectural unit of substantially the same usefulness, design, construction and commercial feasibility as immediately before the damage or destruction, then Lessee may terminate this Agreement by delivering written notice to the Lessor by a date that is on or before one hundred twenty (120) days after the date of such damage or destruction. Lessee's notice must specify the date on which the termination will become effective, which date will not be earlier than the date of such damage or destruction. If a termination occurs in accordance with the foregoing, Lessee shall pay and shall satisfy all Rent, and fees and charges, due and accrued hereunder, unrelated to the exercise of Lessee's rights under this Lease, up to such date of such termination, and shall perform all of the obligations of Lessee hereunder to such date, and thereupon, this Agreement and the Term shall cease and terminate. The provisions of this Article 11.03(D)(8) are subject to the rights of any Leasehold Mortgagee under the documents relating to any Leasehold Mortgage. Lessor acknowledges and agrees that any insurance proceeds not applied to a restoration pursuant to this sub-article shall be subject to the lien or liens of any Leasehold

Mortgage and the rights and requirements of the Leasehold Mortgagee. If this Agreement is terminated pursuant to the provisions of this Article 11.03(D)(8), Lessor acknowledges and agrees that the Leasehold Mortgagee can apply the insurance proceeds to the reduction of indebtedness and all other amounts owing to Leasehold Mortgagee pursuant to the Leasehold Mortgage.

- (9) RIGHTS OF LEASEHOLD MORTGAGEE IN CONDEMNATION. If a taking of any part of the Premises occurs, including a taking brought by Lessor or any constituent element of Lessor, the Leasehold Mortgagee will have the right to participate in any condemnation proceedings or settlement discussions pertaining to the Lessee's interests hereunder and the right to supervise and control the receipt and disbursement of all condemnation awards arising from such interests to the extent provided in agreements among Lessee, Leasehold Mortgagee and any other party holding an interest with respect to the Premises. The Leasehold Mortgagee is entitled to receive and apply to the reduction of the indebtedness, the payment of which is secured by the lien of the Leasehold Mortgagee, any portion of a condemnation award arising from a taking of Lessee's interests not applied to the restoration of that portion of the Premises that remains following the taking to a complete architectural unit. After payment to the Lessor by the condemning authority of whatever compensation and damages are determined to be owing to the Lessor for Lessor's property interests in the Premises, and after the indebtedness the payment of which is secured by the lien of the Leasehold Mortgagee is discharged in full by an application of a condemnation award in accordance with the terms of the preceding sentence and after payment to the Lessee by the condemning authority of whatever compensation and damages are determined to be owing Lessee for Lessee's property interests in the Premises, the Lessor is entitled to receive any remaining portion of the condemnation award. If a partial taking of the Premises occurs, this Agreement will continue in effect with respect to that portion of the Premises not taken and, effective as of the earlier of the dates on which the condemning authority takes title to or possession of the part taken, the Rent payable under the terms of this Agreement will be reduced in proportion to the reduction in the area of the Premises. If, however, the remaining portion of the Premises not taken cannot be adequately restored, repaired or reconstructed so as to constitute a complete architectural unit of substantially the same usefulness, design, construction and commercial feasibility as immediately before the taking, then Lessee may terminate this Agreement by delivering written notice to the Lessor by a date that is on or before one hundred twenty (120) days after the date of the taking. Lessee's notice must specify the date the termination will become effective, which date will not be earlier than the date of such taking. If a termination occurs in accordance with the foregoing, Lessee shall pay and shall satisfy all Rents and fees and charges, unrelated to the exercise of Lessee's rights under this Lease, due and accrued hereunder up to such date of such termination and shall perform all of the obligations of Lessee hereunder to such date, and thereupon this Agreement and the Term shall cease and terminate. If a taking for a temporary period occurs, this Agreement will continue in full force and effect and the entire award payable in respect of that taking will be payable to Lessee, except for any portion sought by, and attributable solely to Lessor's interest in the Premises, subject to provisions of any agreements among Lessee, the Leasehold Mortgagee and any lessee holding an interest with respect to the Premises.
- (10) LESSOR WAIVER OF RIGHT TO CERTAIN RENT. During the entire Term hereof, Lessor will have no right, and expressly waives any right, arising under Applicable Law, in and to the rent that will become due to Lessee under the terms of any approved sublease of any part of the Improvements. Lessee may assign such rents to the Leasehold Mortgagee without any consent or approval of the County. Nothing in this Article 11.03 shall (a) alter Lessee's obligations to commence paying Lessor fair market Rent on the Improvements as provided in Article 3

(Rentals and Payments) or (b) provide Lessee with any ownership claim to the Improvements or the rent therefrom after the conclusion of the Term.

- (11) **NON MERGER OF FEE AND LEASEHOLD INTEREST.** Under no circumstances will the fee estate of the Lessor and the leasehold estate created by this Agreement or any sublease created hereunder merge, even though owned by the same party, without the Leasehold Mortgagee's written consent.

(E) Estoppel Certificate. Upon written request from time to time by Lessee, a Leasehold Mortgagee, a prospective Leasehold Mortgagee, or a prospective assignee of Lessee's interest in the Premises, the Lessor shall execute and deliver to the requesting party, within thirty (30) days following the date of receipt of such request, an estoppel certificate in the form reasonably requested by the requesting party. In each such certificate, the Lessor shall certify, to the best of its knowledge, information and belief: (i) the monthly payment on account of Rent that Lessee is then obligated to pay under the terms of this Agreement and the date through which Lessee has paid that Rent; (ii) that this Agreement is in full force and effect; (iii) the specific nature of any breach that the Lessor knows to exist in respect of either Party's performance of its respective obligations under the terms of this Agreement; (iv) whether there is any then-outstanding mortgage, encumbrance or pledge of Lessor's interest in the Premises; and (v) such other matters as may be reasonably requested by Lessee, except that the County, at its sole discretion, shall determine the form of the certification. The Lessor and Lessee intend that any statement delivered pursuant to this Article 11.03(E) may be relied upon by Lessee, and any Leasehold Mortgagee, prospective Leasehold Mortgagee, or prospective assignee of Lessee's interest in the Premises.

(F). Leasehold Mortgagee's Right To New Lease. The provision of this Article 11.03 will survive (i) termination of this Lease prior to the expiration of the Term due to a default by Lessee (subject to Leasehold Mortgagee's notice and cure rights set forth in Article 11.03(D)) and (ii) rejection or disaffirmance pursuant to any bankruptcy Law or proceeding or other similar law or proceedings affecting creditors' rights generally with respect to a bankruptcy proceeding relating to the Lessee or otherwise, and will continue in full force and effect thereafter to the same extent as if this Article 11.03 were a separate and independent contract made by the Lessor, Lessee, and the Leasehold Mortgagee. The Lessor's agreement, set forth in this Article 11.03, to enter into a new lease with the Leasehold Mortgagee constitutes a separate agreement with the Lessor and the Leasehold Mortgagee. The Lessor agrees that the Leasehold Mortgagee shall be a third-party beneficiary under this Agreement, and that such third-party beneficiary status shall be unaffected by the rejection or disaffirmance of this Agreement in any bankruptcy proceeding by any Party.

**11.04 Assignment:** Notwithstanding the above, this Lease Agreement shall be assignable by the Lessee to Affiliates of 13TH FLOOR OPF DEVELOPERS, LLC. or Lessee, or to Lessee's financing parties, including Leasehold Mortgagees, without MDAD's consent. "Affiliates" shall mean (a) any Person that directly or indirectly through one or more intermediaries controls or is controlled by or is under common control with the specified Person, (b) any Person who, from time to time, is an officer or director of a specified Person, or (c) any Person who, directly or indirectly, is the beneficial owner of 10% or more of any class of equity securities of the specified Person or of which the specified Person is directly or indirectly the owner of 10% or more of any class of equity securities. A "Person" shall mean an individual or entity.

The Lease shall be assignable by Lessee to any other assignee, with MDAD's consent, which shall not be unreasonably withheld, delayed or conditioned. "Affiliate" means, in relation to any Person, any other Person: (i) which directly or indirectly Controls through one or more intermediaries, or is Controlled by, or is under common Control with, such Person; or (ii) which directly or indirectly through one or more intermediaries beneficially owns or holds fifty percent (50%) or more of any class of voting stock or other equity interests of such Person; or (iii) which has fifty percent (50%) or more of any class of voting stock or other equity interests that is directly or indirectly through one or more intermediaries beneficially owned or held by such Person, or (iv) who either directly or indirectly through one or more intermediaries holds a general partnership interest in such Person or such Person holds a general partnership interest in the other Person. "Person" means any natural person, corporation, company, voluntary association, partnership, incorporated organization, trust, limited liability company, or any other entity or organization, including any governmental authority. A Person shall include any officer, director, member, manager, employee or agent of such Person. "Controls" or "Controlled" means, for the purposes of the

definition of Affiliate, possession, directly or indirectly through one or more intermediaries of the power to direct or cause the direction of the management or policies of a Person, whether through the ownership of voting securities or otherwise.

11.05 Intentionally Omitted.

11.06 Lessor Mortgage: Lessor represents and warrants that as of the Lease Commencement Date, it has not mortgaged or encumbered its fee interest in the Premises. Lessor may not mortgage or encumber its fee interest in the Premises unless such mortgage or encumbrance is subject in all respects to the terms and provisions of this Agreement and Lessor has obtained a non-disturbance agreement in favor of Lessee, which must be in form and content reasonably satisfactory to Lessee.

**ARTICLE 12**  
**Insurance**

12.01 Insurance Required: In addition to such insurance as may be required by law, the Lessee shall maintain, without lapse, for so long as it occupies the Premises, the following insurance:

- (A) Commercial General Liability Insurance on a comprehensive basis, including Contractual Liability, to cover the Lessee's Premises and operations, in an amount not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage. The County must be shown as an additional insured with respect to this coverage.
- (B) Automobile Liability Insurance covering all owned, non-owned and hired vehicles used by the Lessee in connection with its operations under this Agreement in an amount not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage.
- (C) Pollution and Remediation Legal Liability Insurance, to the extent required under Article 8.16, in an amount not less than \$2,000,000 covering third party claims, remediation expenses, and legal defense expenses arising from on-site and off-site loss, or expense or claim related to the release or threatened release of Hazardous Materials at the Lessee's Premises. This policy shall be issued on a claims-made basis.
- (D) Builders Risk and Property Insurance The Lessee and/or its sub lessee(s), at its (and/or their) sole cost and expense, throughout the Term, shall keep the Improvements insured on an "All Risk" basis in an amount not less than 100% of the full replacement value of the Improvements against loss or damage (in excess of a reasonable per occurrence deductible amount, which shall be the responsibility of the Lessee) by fire, lightning, tornado, hurricane, windstorm, hail, flood, earthquake, explosion, riot, riot attending strike, civil commotion, vandalism and malicious mischief, sprinklers and sprinkler leakage, Aircraft, vehicles and smoke, or any other casualty in an amount not less than 100% of the full replacement value of the Improvements to the extent such coverage is commercially available at commercially reasonable rates. The full replacement value of the Improvements shall be established as of the date each Improvement is constructed and a certificate of completion (or certificate of occupancy) for same is issued by the appropriate governing authority with jurisdiction over same and shall be re-established at intervals of not more than three (3) years thereafter, by the firm and professional property evaluators used by the County for establishing replacement values for County property. Any deficiency in the amount of the proceeds from such property insurance resulting from a failure by the Lessee to re-establish the full replacement value of the Improvements shall be the sole responsibility of the Lessee.
- (E) Business Interruption Insurance The Lessee at its sole cost and expense throughout the Term shall maintain business interruption insurance at a minimum, in an amount sufficient to continue making

payment of Land Rent, and payments of taxes and insurance, during the rebuilding period as a result of damage to the Improvements.

All insurance policies required pursuant to the terms of this Agreement shall be issued in companies approved to do business under the laws of the State of Florida. Such companies must be rated no less than "A-" as to financial strength, and no less than "VII" as to financial size in accordance with the latest edition of "Best's Key Rating Guide", published by A.M. Best Company, Inc., or its equivalent, subject to approval of the MDAD's Risk Management Office.

12.02 Insurance Certificates Required: Prior to the commencement of operations hereunder and annually thereafter if requested by Lessor, the Lessee shall furnish or cause to be furnished certificates of insurance to the Department which certificates shall clearly indicate that:

- (A) The Lessee has obtained insurance in the types, amounts and classifications as required for strict compliance with this Article;
- (B) The policy cancellation notification provisions specify at least thirty (30) days advance written notice of cancellation to the County; and
- (C) The County is named as an additional insured with respect to the Lessee's commercial general liability policies.
- (D) The County is named as a loss payee with respect to the required builder's risk and property insurance provided by the Lessee.

On said insurance certificates, unless specifically shown to be excluded thereon, commercial general liability coverage shall include contractual liability, and notification of cancellation shall include notification of material changes in the policies.

The County reserves the right to require the Lessee to obtain and maintain such amended insurance coverage, in the case in which, in the County's reasonable judgment, such amended insurance coverage would be necessary to protect the County from risks which are not known, or reasonably anticipated, as of the date of the Lease Commencement Date, provided that such amended insurance coverage would be the least burdensome obligation of the Lessee in order to provide such protection to the County, upon issuance of notice in writing to the Lessee, which notice shall automatically amend this Agreement effective thirty (30) days after the date of receipt of such notice, subject to Lessee's right to dispute such requirement.

12.03 Compliance: Compliance with the requirements of this Article 12 (Insurance) shall not relieve the Lessee of its liability under any other portion of this Agreement or any other agreement between the County and the Lessee.

12.04 Right to Examine: The Department reserves the right, upon reasonable notice, to examine the original or true copies of policies of insurance (including but not limited to binders, amendments, exclusions, riders and applications) to determine the true extent of coverage. The Lessee agrees to permit such inspection at the offices of the Department.

12.05 Personal Property: Any personal property of the Lessee or of others placed in the Premises and Airport shall be at the sole risk of the Lessee or the owners thereof, and the County shall not be liable for any loss or damage, except to the extent such loss or damage was caused by the County, its officers, employees, agents and instrumentalities, as limited by Section 768.28, Florida Statutes.

12.06 Property Loss Policies Endorsements: All property insurance policies shall contain an endorsement that the proceeds of any loss shall be made payable to (i) in the event any leasehold mortgage debt is outstanding, the Leasehold Mortgagee and applied in accordance with the leasehold mortgage debt or (ii) in all other events, in accordance with the

terms of this Agreement. All such insurance proceeds shall be held as agreed upon by Lessee and Lessor and such proceeds shall be used and applied in the restoration, reconstruction or replacement of the loss or damaged property for which such insurance moneys are payable hereunder in accordance with the applicable provisions of this Agreement.

### **ARTICLE 13**

#### **Termination**

13.01 Payment Defaults: Failure of the Lessee to make all payments of rentals, fees and charges required to be paid herein when due shall constitute a default, and the Lessor may, at its option, terminate this Agreement after thirty (30) days' notice in writing to the Lessee, unless the default is cured within the notice period.

13.02 Insurance Defaults: The Lessor shall have the right, upon thirty (30) days written notice to the Lessee, to terminate this Agreement if the Lessee fails to provide evidence of insurance coverage in strict compliance with Article 12 (Insurance) hereof prior to commencement of operations, or fails to provide a renewal of said evidence upon its expiration; provided, however, that such termination shall not be effective if the Lessee provides the required evidence of insurance coverage within the notice or grace period.

13.03 Other Defaults: The Lessor shall have the right, upon thirty (30) days written notice to the Lessee, to terminate this Agreement upon the occurrence of any one or more of the following, unless the same shall have been corrected within such period, or, if correction cannot reasonably be completed within such 30-day period, the Lessee has commenced corrective steps within such 30-day period and diligently pursues same to completion:

- (A) Failure of the Lessee to comply with any material covenants of this Agreement, other than the covenants to pay rentals, fees and charges when due, and the covenants to provide required evidence of insurance coverage.
- (B) The conduct of any business, the performance of any service, or the merchandising of any product or service not specifically authorized herein by the Lessee.

13.04 Immediate Termination: The happening of the following events shall constitute a default by the Lessee and this Agreement shall permit Lessor to terminate this lease immediately, effective as of the date of Lessee's receipt of notice thereof: abandonment of the Premises or discontinuance of operations; failure of the Lessee for thirty (30) days or more to occupy the Premises for one or more of the purposes permitted under this Agreement; or if a lien is filed against the leasehold interest of the Lessee and not removed within a reasonable time.

13.05 Actions at Termination:

(A) The Lessee shall vacate, quit, surrender up and deliver the Premises to the Lessor on or before the termination date of this Agreement, whether by lapse of time or otherwise. The Lessee shall surrender the Premises in the condition required under Article 5 (Maintenance and Repairs) herein with all repairs for which the Lessee is responsible shall be completed prior to surrender and shall execute appropriate documents confirming that title to such Improvements in Lessee's name has been transferred to Lessor. In no event shall Lessor be required to pay any compensation or reimbursement to Lessee for such transfer of title. On or before the termination date of this Agreement, the Lessee shall remove all of its personal property from the Premises; provided, however, that if immediate termination occurs under Article 13.04, Lessee shall be allowed up to fifteen (15) calendar days from the receipt of notice of termination to remove such personal property.

(B) If the Lessor advises the Lessee that it has reason to believe that any hazardous substance or environmental contaminant has been released within the Premises or into the ground under the Premises, then the Lessee at its expense shall retain an approved environmental consultant to perform whatever environmental assessment may be

required to determine the extent of such release. The Lessee shall comply with the recommendations and conclusions of such consultant regarding environmental clean-up efforts that may be required, and shall comply with any other clean-up requirements imposed on the Lessee by Federal, State or County laws, regulations or codes.

(C) In the event of termination for default, the Lessor shall be entitled to recover immediately, without waiting until the due date of any future Rent, or until the date fixed for expiration of the Agreement, the following amounts as damages the reasonable costs of re-entry and re-leasing including without limitation the cost of any clean up, alteration, repair, maintenance, refurbishment, removal of personal property and fixtures of the Lessee, or any other reasonable expense occasioned by failure of the Lessee to quit the Premises upon termination and to leave them in the required condition, reasonable attorney's fees, court costs, and expenses of litigation through all levels of legal proceedings.

13.06 Lien Upon Personal Property: In the event of termination for default, the Lessor shall have a lien upon all personal property of the Lessee located at Premises to secure the payment of any unpaid Rent, and, fees and charges accruing under the terms of this Agreement.

13.07 Right to Show Premises: At any time within six (6) months prior to the end of the Term, or any time after the Lessee has been given notice of termination for default, pursuant to Article 13 (Termination) or Article 1.06 (III) (Reduction of Term) hereof, the Lessor shall have the right to enter on the Premises for the purposes of showing the Premises to prospective tenants or users during regular business hours.

13.08 Other Terminations: This Agreement shall be subject to termination by the Lessor or the Lessee in the event of any one or more of the following:

(A) The permanent abandonment of the Airport.

(B) The lawful assumption by the United States Government or any authorized agency thereof, of the operation, control or use of the Airport, or any substantial part of parts thereof, in such a manner as to substantially restrict the Lessee from operating there from for a period in excess of ninety (90) consecutive days, provided that nothing contained herein shall be deemed to constitute a waiver by the Lessee of any right it may have against the United States for just compensation in the event of any such assumption.

(C) The issuance by any court of competent jurisdiction of any injunction in any way substantially preventing or restraining the use of the Airport, and the remaining in force of such injunction for a period in excess of ninety (90) days. In the event of termination for such reason, Lessee's exclusive remedy shall be termination or reinstatement of this lease by the County, at its sole discretion, for a period of time equal to the number of days that the injunction was in effect in excess of said ninety (90) days.

13.09 Habitual Default: Notwithstanding the foregoing, in the event that the Lessee has frequently, regularly or repetitively defaulted in the performance of or breach any of the terms, covenants and conditions required herein, to be kept and performed by the Lessee, on five (5) occasions within a twenty-four (24)-months' period regardless of whether the Lessee has cured each individual condition of breach or default as provided for in Sub-Article 13.01 (Payment Default), Sub-Article 13.02 (Insurance Defaults), and Sub-Article 13.03 (Other Defaults) above, the Lessee shall be determined by MDAD to be an "habitual violator". At the time that such determination is made the Department shall issue to the Lessee a written notice, advising of such determination and citing the circumstances thereof. Such notice shall also advise the Lessee that there shall be no further notice or grace periods to correct any subsequent breach(s) or default(s) and that any subsequent breach or default, of whatever nature, taken with all previous breaches and defaults, shall be considered cumulative and collectively shall constitute a condition of non-curable default and grounds for immediate termination of this Agreement. In the event of any such subsequent breach or default, the County may terminate this Agreement upon the giving of written notice of termination to the Lessee, such termination to be effective upon the seventh (7th) day following the date of receipt thereof and all payments due hereunder shall be payable to said date, and the Lessee shall have no further rights hereunder.

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Immediately upon receipt of said termination, the Lessee shall discontinue its operations at the Airport and proceed to remove all its personal property in accordance with Sub-Article 13.05 (Actions at Termination) hereof.

13.10 Termination by Abandonment: This Agreement shall be automatically terminated upon the abandonment by the Lessee of Premises or voluntary discontinuance of operations at the Airport for any period of time exceeding sixty (60) consecutive calendar days, unless such abandonment or discontinuance has been caused by casualty or governmental order that prevent the lessee's use of the Premises for the purposes authorized in Article 2.02 (Use of Premises) hereof.

13.11 Lessor's Default: In addition to any other rights or remedies specifically granted to Lessee elsewhere in this Lease, if Lessor should be in material default in the performance of any of its obligations or Lessor violates any of its representations under this Lease, and such default continues for a period of more than fifteen (15) days after receipt of written notice from Lessee specifying such default, or if such default is of a nature to require more than fifteen (15) days to remedy and continues beyond the time reasonably necessary to cure (provided Lessor must have undertaken procedures to cure the default within such thirty-day period and diligently pursues such efforts to cure to completion), Lessee may, in addition to any other remedy at law or in equity, at its option, upon notice, terminate this Lease, or may incur any reasonable expense necessary to perform the obligation of Lessor specified in such notice and deduct such expense from the Rents or other obligations next becoming due. Notwithstanding the foregoing, if Lessor's default shall result in a real and imminent danger to the health and safety of the person or property of Lessee or any agent, employee, invitee of Lessee, Lessee shall only be obligated to provide Lessor with reasonable notice under the circumstances before exercising its rights as set forth in the previous sentence.

## **ARTICLE 14**

### **Special Conditions**

14.01 Quality of Services: The Lessee shall furnish the services required and authorized, pursuant to Article 2 (Use of Premises) hereof, on a good, prompt and efficient basis and on a fair, equal and not unjustly discriminatory basis to all users thereof.

14.02 Nondiscriminatory Prices: For sales of products or services on the Premises or the subletting of any facilities as permitted by MDAD, Lessee shall charge fair, reasonable, customary and not unjustly discriminatory prices for each unit of sale or service or sublease; provided, however, that the Lessee may make reasonable, customary and nondiscriminatory discounts, rebates or similar types of price reductions to volume purchasers of the Lessee's services.

14.03 County's Obligations: The Lessee, in recognition of the County's obligation, pursuant to Section 22 of Part V of the Federal Aviation Administration's standard grant assurances, to enforce the provisions of Articles 14.01 (Quality of Services) and 14.02 (Nondiscriminatory Prices) above, agrees that the Lessor may, from time to time, promulgate standards, methods and procedures for and monitor and test the provision of services hereunder and may require the Lessee to provide copies of schedules of service charges and the bases for discounts, rebates and similar types of price reductions. Should the Lessor determine that the Lessee is not in compliance with the provisions of Articles 14.01 (Quality of Services) or 14.02 (Nondiscriminatory Prices) above, the first such occurrence shall be considered a curable default, pursuant to Article 13.03 (Other Defaults) hereof, and subsequent occurrence(s) shall be considered a material breach of this Agreement, entitling the Lessor to the remedies provided in this Agreement or by law.

14.04 Air Shows and Special Events: Upon at least sixty (60) days written notice from the Department, the County may require the Lessee to surrender portions of the Premises for certain periods of time during the term of this Agreement for the purpose of allowing the use of designated portions of the Premises by others in connection with air shows and other special events. Said use will not exceed ten days or more than three events per year. For any day or part of a day that the Premises are so used, rental payments under Article 3.01 (Rentals) will be abated. The Department shall actively keep the Lessee advised of all of the planning for such events, air shows, or County sponsored special events, if portions of the Premises are to be so used.

**ARTICLE 15**  
**Equal Employment Opportunity, Nondiscrimination and Affirmative Action**

The Lessee agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the Lessee for the period during which Federal assistance is extended to the airport through the Airport Improvement Program. In cases where Federal assistance provides, or is in the form of personal property; real property or interest therein; structures or improvements thereon, this provision obligates the party or any transferee for the longer of the following periods:

- (a) The period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits; or
- (b) The period during which the airport sponsor or any transferee retains ownership or possession of the property.

15.01 Employment Discrimination: The Lessee shall not discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment because of age, sex, race, color, religion, national origin, ancestry, sexual orientation or disability. The Lessee shall comply with applicable provisions of the Americans with Disabilities Act, including, but not limited to, provisions pertaining to employment.

15.02 Nondiscriminatory Access to Premises and Services: The Lessee, for itself, its personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that: (1) no person on the grounds of race, color, sex, national origin, disability, sexual orientation or ancestry shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of the Premises; (2) that in the construction of any improvements on, over, or under such land and the furnishings of services thereon, no person on the grounds of race, color, sex, national origin, disability, sexual orientation or ancestry shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in the use of the improvements; and (3) that the Lessee shall use the Premises in compliance with all other requirements imposed by or pursuant to then enforceable regulations of the Department of Transportation, as amended from time to time.

15.03 Breach of Nondiscrimination Covenants: In the event it has been determined that the Lessee has breached any enforceable nondiscrimination covenants contained in Sub-Articles 15.01 "Employment Discrimination" and Sub-Article 15.02 "Nondiscriminatory Access to Premises and Services", pursuant to the complaint procedures contained in the applicable Federal Regulations, and the Lessee fails to comply with the sanctions and/or remedies which have been prescribed, the County shall have the right to terminate this Agreement pursuant to Sub-Article 13.03 "Other Defaults" hereof.

15.04 Affirmative Action and Disadvantaged Business Enterprise Programs: The Lessee agrees that in the event the provisions of 49 CFR Part 23, Disadvantaged Business Enterprises (DBE) and 14 CFR Part 152, Affirmative Action Employment Programs, are applicable to the Lessee under this Agreement, it shall comply with all requirements of the Department, the Federal Aviation Administration and the U. S. Department of Transportation. These requirements may include, but not be limited to, the compliance with DBE and/or Employment Affirmative Action participation goals, keeping of certain records of good faith compliance efforts, and the submission of various reports, including, if directed by the Department, the contracting of specified percentages of goods and services contracts to Disadvantaged Business Enterprises. Failure to comply with these requirements shall constitute a default hereunder and be grounds for termination of this Agreement. In the event it has been determined, in accordance with applicable regulations, that the Lessee has defaulted in the requirement to comply with this section, and the Lessee thereafter fails to comply with the sanctions and/or

remedies then prescribed, the County shall have the right, upon written notice to the Lessee, to terminate this Agreement pursuant to Sub-Article 13.03 "Other Defaults" hereof.

15.05 Title VI Clauses for Compliance with Nondiscrimination Requirements: During the performance of this Lease, the Lessee, for itself, its assignees, and successors in interest (hereinafter referred to as the "Lessee") agrees as follows:

(A) Compliance with Regulations: The Lessee (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are set forth in Sub-Article 15.07. "Title VI List of Pertinent Nondiscrimination Acts and Authorities".

(B) Non-discrimination: The Lessee, with regard to the work performed by it during the Lease, will not discriminate on the grounds of race, color, or national origin in the selection and retention of sub-lessees or subcontractors, including procurements of materials and leases of equipment. The Lessee will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities set forth below, including employment practices when the Lease covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.

(C) Solicitations for sub-leases or subcontracts, including procurements of materials and equipment: In all solicitations, either by competitive bidding, or negotiation made by the Lessee for work to be performed under a sub-lease or subcontract, including procurements of materials, or leases of equipment, each potential sub lessee or subcontractor or supplier will be notified by the Lessee of the Lessee's obligations under this Lease and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.

(D) Information and Reports: The Lessee will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a Lessee is in the exclusive possession of another who fails or refuses to furnish the information, the Lessee will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

(E) Sanctions for Noncompliance: In the event of a Lessee's noncompliance with the Nondiscrimination provisions of this Lease, the sponsor will impose such Lease sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

1. Withholding payments to the Lessee under the Lease until the Lessee complies; and/or
2. Cancelling, terminating, or suspending a Lease, in whole or in part.

(F) Incorporation of Provisions: The Lessee will include the provisions of paragraphs one through six in every sublease and subcontract, including procurements of materials and leases of equipment, Required Contact Provisions Issued on January 29, 2016 Page 19 AIP Grants and Obligated Sponsors Airports (ARP) unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Lessee will take action with respect to any sublease or subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Lessee becomes involved in, or is threatened with litigation by a sub-lessee, subcontractor, or supplier because of such direction, the Lessee may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Lessee may request the United States to enter into the litigation to protect the interests of the United States.

15.06 Title VI Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program:

(A) The Lessee, for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree, as a covenant running with the land, that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the Lessee will use the premises in compliance with all other requirements imposed by or pursuant to the Title VI List of Pertinent Nondiscrimination Acts and Authorities.

(B) With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, the County will have the right to terminate the Lease and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the Lease had never been made or issued.

15.07 Title VI List of Pertinent Nondiscrimination Acts and Authorities: During the performance of this Lease, the Lessee agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and Lessees, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123 (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

## ARTICLE 16

### **Security and Special Provisions**

16.01 Security: The Lessee acknowledges and accepts full responsibility for the security and protection of the Premises, any Improvements thereon, its equipment and property on the Airport. The Lessee fully understands and acknowledges that any security measures deemed necessary by the Lessee for the protection of said Premises, equipment and property shall be the sole responsibility of the Lessee and shall involve no cost to the Lessor. The Lessee further understands and acknowledges that it may be required to alter security measures as may be dictated from time to time by Federal, State, local or departmental mandate and that the cost of execution of such mandate may be at the sole expense of the Lessee.

16.02 Right of Flight: There is hereby reserved to the County, its successors and assigns, for the use and benefit of the County and the public, a right of flight for the passage of Aircraft in the air space above the surface of the Premises herein leased, together with the right to cause in said air space such noise as may be inherent in the operation of Aircraft, now known or hereafter used for navigation of or flight in the air, using said air space or landing at, taking off from or operating on the Airport.

16.03 Height Restrictions: The Lessee expressly agrees for itself, its successors and assigns, to restrict the height of structures, objects of natural growth and other obstructions on the leased Premises to such a height so as to comply with Federal Aviation Regulations, Part 77 and with the Code of Miami-Dade County, whichever is more restrictive.

16.04 Alcohol and Drug Testing: The Lessee acknowledges that the County, as a public agency sponsor under the provisions of the Airport and Airway Improvement Act of 1982, as amended, has the obligation to establish a drug free workplace and to establish policies and programs to ensure airport safety and security. The Lessee acknowledges that the Department, on behalf of the County, has the right to require users of the Airport (including all Lessees, Permittees, and licensees) to establish reasonable programs to further the achievement of the obligations described herein. Accordingly, the Lessee shall establish programs for pre-employment alcohol and drug screening for all candidates for employment at the Airport and for the same or similar screening based on a reasonable suspicion that an employee, while on duty at the Airport, may be under the influence of alcohol or drugs. The Lessee shall make reasonable good faith efforts to negotiate amendments to any existing contract(s), which may serve as a bar to the Lessee's implementation of its obligations hereunder.

16.05 Drug-Free Workplace Default: The Lessee acknowledges it has provided to the Lessor a Drug-Free Workplace Affidavit certifying that it is providing a drug-free workplace for its employees, as required by County Ordinance

No. 92-15, adopted on March 17, 1992, as such may be amended from time to time ("Ordinance"). Based on the provisions of said Ordinance, the Lessor shall have the right, upon thirty (30) days written notice to the Lessee, to terminate this Agreement in the event the Lessee fails to provide, as of each anniversary of the Lease Commencement date of this Agreement, the annual re-certification affidavit as required by the Ordinance; provided, however, that such termination shall not be effective if the Lessee submits the required Affidavit within the notice period.

Further, this Agreement shall be terminated upon not less than fifteen calendar days written notice to the Lessee and without liability to the Lessor, if the Lessor determines any of the following:

- (1) That the Lessee has made a false certification in its execution of the Affidavit submitted or in its annual re-certification as required by the Ordinance;
- (2) That the Lessee has violated its original or renewal certification by failing to carry out any of the specific requirements of the Ordinance, other than the annual re-certification; or
- (3) That such a number of employees of the Lessee have been convicted of violations occurring in its workplace(s) as to indicate that the Lessee has failed to make a good faith effort to provide a drug-free workplace as required by the Ordinance.

## **ARTICLE 17**

### **Employees**

17.01 Control of Employees: The Lessee shall properly control the actions of its employees at all times that said employees are working on the Airport, ensuring that they present a neat appearance and discharge their duties in a courteous and efficient manner and that they maintain a high standard of service to the public.

17.02 Employee Covenants Violations: In the event the Lessee is in default of the covenants in Article 17.01 (Control of Employees) for failure to properly control its employees, the Lessee understands that the Lessor shall have the right to require the Lessee to take immediate action to correct the discrepancy.

## **ARTICLE 18**

### **Civil Actions**

18.01 Governing Law; Venue: This Agreement shall be governed and construed in accordance with the laws of the State of Florida. The venue of any action on this Agreement shall be laid in Miami-Dade County, Florida, and any action to determine the rights or obligations of the Parties hereto shall be brought in the appropriate courts of the State of Florida.

18.02 Notice of Commencement of Civil Action: In the event that the Lessor or the Lessee commences a civil action where such action is based in whole or in part on an alleged breach of this Agreement, the Lessor and the Lessee agree that service of process shall be made pursuant to the rules of civil procedure in the court in which the action has been filed.

18.03 Registered Office/Agent; Jurisdiction: Notwithstanding the provisions of Article 18.02 (Notice of Commencement of Civil Action), and in addition thereto, the Lessee, if a corporation, shall designate a registered office and a registered agent, as required by Section 48.091, Florida Statutes, such designations to be filed with the Florida Department of State in accordance with Section 607.0501, Florida Statutes. If the Lessee is a natural person, he and his personal representative hereby submit themselves to the jurisdiction of the Courts of this State for any cause of action based in whole or in part on an alleged breach of this Agreement.

## **ARTICLE 19**

### **Trust Agreement**

19.01 Incorporation of Trust Agreement by Reference: Notwithstanding any of the terms, provisions and conditions of this Agreement, it is understood and agreed by the Parties hereto that the provisions of the Amended and Restated Trust Agreement dated as of the 15th day of December, 2002, by and between the County and the JPMorgan Chase Bank as Trustee and Wachovia National Bank as Co-Trustee, (the "Trust Agreement") which Trust Agreement is incorporated herein by reference thereto, shall prevail and govern in the event of any conflict or inconsistency with or ambiguity relating to the terms and conditions of this Agreement, including the Rent, fees or charges required herein, and their modification or adjustment. A copy of the Trust Agreement is available for inspection in the offices of the Department during normal working hours.

19.02 Adjustment of Terms and Conditions: If, at any time during the Term, a court or Federal Agency of competent jurisdiction shall determine that any of the terms and conditions of this Agreement, including the Rent, and fees and charges required to be paid hereunder to the County by the Lessee or by other Lessees under other Agreements of the County for the Lease or use of facilities used for similar purposes, are unjustly discriminatory, the County shall have the right to modify such terms and conditions and to increase or otherwise adjust the Rent, and such, fees and charges required to be paid under this Agreement in such a manner as the County shall determine is necessary and reasonable so that the Rent, and such fees and charges payable by the Lessee and others shall not thereafter be unjustly discriminatory to any user of like facilities and shall not result in any violation of the Trust Agreement or in any deficiency in revenues necessary to comply with the covenants of the Trust Agreement. In the event the County has modified the terms and conditions of this Agreement, including any adjustment of the Rent, and such fees and charges required to be paid to the County pursuant to this provision, this Agreement shall be amended to incorporate such modification of the terms and conditions including the adjustment or Rent, and such fees and charges upon the issuance of written notice from the Department to the Lessee.

19.03 Lessee Right to Terminate: In the event the terms and conditions of this Agreement, including the Rent, and fees and charges payable hereunder, have been substantially modified pursuant to Article 19.02 (Adjustment of Terms and Conditions) above, the Lessee at any time within one year following the effective date of such modification, may terminate this Agreement by giving ninety (90) days written notice to the County, without liability by either Party to the other.

## **ARTICLE 20**

### **Rights Reserved to the Lessor**

20.01 Rights Reserved: Rights not specifically granted the Lessee by this Agreement are reserved to the Lessor.

20.02 Rights of Lessor at Airport: The County shall have the absolute right, without limitation, to make any repairs, alterations and additions to any structures and facilities at the Airport. The County shall, in the exercise of such right, be free from any and all liability to the Lessee for business damages occasioned during the making of such repairs, alterations and additions, except those occasioned by the sole active negligence of the County, its employees, or agents.

20.03 Rights to be Exercised by Department: Wherever in this Agreement rights are reserved to the Lessor or County, such rights may be exercised by the Department.

20.04 Right to Regulate: Nothing in this Agreement shall be construed to waive or limit the governmental authority of the County, as a political subdivision of the State of Florida, to regulate the Lessee or its operations. Notwithstanding any provision of this Agreement, nothing herein shall bind or obligate the County, the Zoning Appeals Board, the Building and Zoning Department (as it may be renamed from time to time), the Planning Department, or any department, board or agency of the County, to agree to any specific request of Lessee that relates in any way to the regulatory or quasi-judicial power of the County; and the County shall be released and held harmless by Lessee from any liability, responsibility, claims, consequential damages or other damages, or losses resulting from the denial or withholding of such requests; provided, however, that this provision shall not preclude any appeal from County action wherein the sole remedy sought is

reversal of the County's action or injunctive relief; nor shall it preclude any action based on the County's bad faith, capricious behavior or arbitrary action.

**ARTICLE 21**  
**Agreement Subject to Rights of U.S. Government**

21.01 Easements or Encumbrances: This Agreement is made by the Lessor and accepted by the Lessee subject to all of the existing easements and encumbrances and to subsequent easements or encumbrances and to all of the terms, conditions, reservations, exceptions, limitations and restrictions set forth in any applicable Quit-Claim Deed, and subject to all of the rights of the Government therein enumerated.

21.02 Government Use of Airport:

In the event the Government, acting under the provisions of any applicable Quit-Claim Deed, shall take over the use of the leased Premises or the Airport, and such use shall so restrict the Lessee in its operations as to make continued use of the Premises by the Lessee impractical, then:

(A) This Agreement and rights and obligations hereunder shall, at the option of the Lessee, exercised in writing, either:

(1) automatically terminate, except as herein under provided; or (2) be suspended during the time the Premises or the Airport are being so used by the Government and the term of this Agreement shall be automatically extended for the same period.

(2) Any monies paid by the Government for the upkeep of, repairs to and the maintenance and replacement of facilities at the Airport shall be used by the County for such purposes.

(3) Any monies paid by the Government to the County as Rent for the use of the Premises shall be retained by the County; provided, however, that if the Lessee shall elect to suspend this Agreement for the period of the Government's use of the Premises, pursuant to subparagraph (A) (1) above, and rentals are paid by the Government for the use of any personal property or unamortized capital Improvements installed thereon by Lessee, the Rent received by the County for use of the Lessee's said property or Improvements shall be for the benefit of the Lessee and paid thereto.

(B) In the event the Government shall take over the use of the Airport, and such use by the Government shall not materially restrict or hamper the Lessee in its operations, the Lessee shall remain in possession of said Premises and shall continue to pay the Rent, fees, and charges specified herein to be paid.

21.04 Federal Subordination: This Agreement shall be subordinate to the provisions of any existing or future agreements between the County and the United States of America relative to the operation and maintenance of the Airport, the execution of which has been or may be required as a condition precedent to the expenditure of Federal funds for the development of the Airport. All provisions of this Agreement shall be subordinate to the right of the United States of America to lease or otherwise assume control over the Airport, or any part thereof, during time of war or national emergency for military or naval use and any provisions of this Agreement inconsistent with the provisions of such lease to, or assumption of control by, the United States of America shall be suspended.

**ARTICLE 22**  
**Other Provisions**

22.01 No Representation as to Condition of the Premises: The Lessor makes no representation, warranty, guarantee, or averment of any nature whatsoever concerning the physical condition of the Premises, and it is agreed that Lessor will not be responsible for any loss, damage or costs which may be incurred by the Lessee by reason of any such physical condition.

22.02 Headings: Any headings preceding the text of any articles, paragraphs or sections of this Agreement shall be solely for convenience of reference and shall not constitute a part of this Agreement, nor shall they affect its meaning, construction or effect.

22.03 Notices: All notices required or permitted to be given under the terms and provisions of this Agreement by either Party to the other shall be in writing and shall be hand delivered or sent by registered or certified mail, return receipt requested or by overnight or other delivery services whereby a receipt is available to the Parties as follows:

As to the Lessee:

13TH FLOOR OPF DEVELOPERS, LLC  
Miami Opa Locka Executive Airport

---

Miami, FL 33186

With a copy to:

Llorente & Heckler, P.A.  
801 Arthur Godfrey Road  
Suite 401  
Miami Beach, Florida 33140  
Attn: Alexander P. Heckler, Esq.

As to the County or Department:

CEO-DIRECTOR  
Miami-Dade Aviation Department  
P.O. Box 025504  
Miami, Florida 33102-5504

or to such other address as may hereafter be provided by in writing. Notices by registered or certified mail shall be deemed received on the delivery date indicated by the U.S. Postal Service on the return receipt. Hand delivered notices shall be deemed received by the Lessee when presented to the local management representative of the Lessee.

22.04 Interference: The Lessee further expressly agrees to prevent any use of the Premises, which would interfere with or adversely affect the operation or maintenance of the Airport or otherwise constitute an Airport hazard.

22.05 Authorized Uses Only: The Lessee shall not use or permit the use of the Premises or the Airport for any illegal or unauthorized purpose or for any purpose which would increase the premium rates paid by the County on, or invalidate, any insurance policies of the County or any policies of insurance written on behalf of the Sub-Lessor or Lessee under this Agreement.

22.06 Binding Effect: The terms, conditions and covenants of this Agreement shall inure to the benefit of and be binding upon the Parties hereto and their successors and assigns. This provision shall not constitute a waiver of any conditions prohibiting assignment or subletting.

22.07 Severability: If any provision of this Agreement or the application thereof to either Party to this Agreement is held invalid by a court of competent jurisdiction, such invalidity shall not affect other provisions of this Agreement which can be given effect without the invalid provision, and to this end, the provisions of this Agreement are severable.

22.08 Inspections: The authorized employees and representatives of the County and of any applicable Federal or State agency having jurisdiction hereof shall have the right of access to the Premises at all reasonable times for the purposes of inspection to determine compliance with the provisions of this Agreement. This right of inspection shall impose no duty on the County to inspect and shall impart no liability upon the County should it not make any such inspections.

22.09 Payment of Taxes: The Lessee shall pay all taxes and other costs lawfully assessed against its leasehold interests in the Premises, its improvements and its operations under this Agreement; provided, however, the Lessee shall not be deemed to be in default of its obligations hereunder for failure to pay such taxes pending the outcome of any legal proceedings instituted to determine the validity of such taxes. Failure to pay the taxes upon the adverse ultimate conclusion of such legal proceedings against the Lessee shall constitute a default.

22.10 Quiet Enjoyment of Others: The Lessee shall control the actions of its employees, agents, invitees and those doing business with it, so as to not unreasonably annoy, disturb or be offensive to others and to provide the service hereunder so as to not unreasonably create a nuisance or thing which may disturb the quiet enjoyment of any other users of the Airport.

22.11 No Waiver: There shall be no waiver of the right of either Party to demand strict performance of any of the provisions, terms and covenants of this Agreement nor shall there be any waiver of any breach, default or non-performance hereof by either Party, unless such waiver is explicitly made in writing by the other Party. Any previous waiver or course of dealing shall not affect the right of either Party to demand strict performance of the provisions, terms and covenants of this Agreement with respect to any subsequent event or occurrence of any subsequent breach, default or non-performance hereof by the other Party.

22.12 Radon Disclosure: In accordance with Chapter 404.056, Florida Statutes, the following disclosure is hereby made:

Radon Gas: Radon is a naturally occurring radioactive gas that, when it has accumulated in a building in sufficient quantities, may present health risks to persons who are exposed to it over time. Levels of radon that exceed Federal and State guidelines have been found in buildings in Florida. Additional information regarding radon and radon testing may be obtained from your county public health unit.

22.13 Destruction of Premises: In the event the Premises shall be destroyed or so damaged or injured by fire, windstorm, flood or other casualty (and in each such event the Lessee was not at fault in whole or in part) during the life of this Agreement that the Premises or any portion thereof are rendered untenable, the County shall have the right, but not the obligation, to render said Premises or damaged portion thereof tenantable by repairs completed within a reasonable period of time.

(A) Total Destruction: In the event the County elects not to render the Premises tenantable, if destroyed or damaged in their entirety, the Lessee shall be so notified in writing by the Department, and this Agreement shall be deemed terminated as of the date of the casualty, with the Lessee being liable only for payment

of Rent on a prorated basis as to whatever portion(s) of the Premises which were tenantable and used by the Lessee following the casualty. In such event, the Department shall endeavor to find adequate replacement premises for the Lessee in existing facilities on the Airport.

- (B) If the damaged portion of the Premises is not rendered tenantable by the County within a reasonable period of time, and the Lessee shall determine that: 1) the loss of the damaged portion of the Premises shall have a materially adverse impact on the ability of the Lessee to utilize the Premises for the purposes described in Article 2; or 2) would require the Lessee to obtain other space off the Premises in order to substantially conduct the operations of the Lessee originally conducted within the Premises, then, in either such event, upon written notice to the County, the Lessee may cancel this Agreement as of a date which shall be not later than three months from the giving of such notice, if the repairs are not completed within 90 days following such written notice of intent to cancel, or if the repairs cannot be reasonably completed within such ninety (90)-day period the County has not commenced repairs within such time. In the event of cancellation, the Rent for the untenable portion of the Premises shall be paid only to the date of such fire, windstorm, flood, or other casualty. If the Agreement is not canceled following any such casualty, the Rent shall be abated as to the portion of the Premises rendered untenable.

If the casualty was caused in whole or in part by the Lessee, its officers, employees, agents, contractors or trespassers, then the Lessee shall not have the right to terminate this Agreement and shall be responsible under other provisions of this Agreement for payment to the County of all damage to the Premises, plus the loss of Rent attributable to the damaged or destroyed premises.

22.14 Quiet Enjoyment: Subject to the terms of this Agreement, specifically including but not limited to the environmental remediation steps to be taken under Article 9.02 (Environmental Compliance) Lessor's right and obligation to make certain repairs, alterations, and additions under Articles 5 (Maintenance by Lessor and 20.02 (Rights of Lessor at Airport), which, for purposes of this clause includes any and all demolition, in whole or in part, of buildings and runways, and roadway systems on or off the Airport, and the reservation of easement rights to the airspace under Article 16.02 (Right of Flight), all of which provisions and others in the Agreement the Lessee acknowledges may cause disruption and disturbance to the Lessee, and upon the observance by the Lessee of all the terms, provisions, covenants and conditions imposed upon the Lessee hereunder, the Lessee shall peaceably and quietly hold and enjoy the Premises for the Term; provided, however, that the Lessor shall not be liable for any violation of this clause or for any disturbance or disruption in or to the Lessee's business, for acts or omissions of tenants, users of the Airport, third parties, or when any department or agency of the Lessor is acting in its governmental capacity, or by Acts of God.

22.15 Definition of Day: For the purposes of this Agreement, except where otherwise expressly set forth in this Agreement and the Exhibits, "days" shall mean all days except Saturday, Sunday, and official County holidays.

22.16 Interpretation of Agreement: This Agreement is the result of negotiation between the Parties hereto and has been typed/printed by one Party for the convenience of both Parties, and the Parties covenant that this Agreement shall not be construed in favor of or against any of the Parties hereto. All exhibits referenced in this Agreement are hereby incorporated into, and made a part of, this Agreement.

22.17 Force Majeure: The terms and conditions of this Agreement (with the exception of the obligation of the Lessee to pay the amounts required by the terms of this Agreement) shall be subject to Force Majeure. Neither the County nor the Lessee shall be considered in default in the performance of its obligations hereunder, if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, strike, lock-out, epidemic, fire, wind, flood, hurricane, tornado, lightning, wind damage or because of any law, order, proclamation, regulation or ordinance of any government or of any subdivision thereof or because of any Act of God or any other cause whether of similar or dissimilar nature beyond the reasonable control of the party affected, provided that notice of such Force Majeure is given by the affected party to the other within ten (10) days of the beginning of said Force Majeure. Should one or both of the parties be prevented from fulfilling its contractual obligations by a state of Force Majeure lasting continuously for a period of six (6) months, the parties

shall consult with each other regarding the future implementation of this Agreement. Notwithstanding the foregoing, the prevention or delay of performance caused by the coronavirus disease 2019 (COVID-19) shall in no way be deemed by Lessee as a condition subject to Force Majeure.

22.18 Intentionally omitted.

22.19 Entirety of Agreement: The Parties hereto agree that this Agreement sets forth the entire agreement between the Parties, and there are no promises or understandings other than those stated herein. None of the provisions, terms and conditions contained in this Agreement may be added to, modified, superseded or otherwise altered, except as may be specifically authorized herein or by written instrument executed by the Parties hereto.

22.20 Memorandum of Lease: On the Lease Commencement Date, the Parties hereto shall promptly execute, acknowledge, and deliver duplicate originals of a memorandum of lease (the "Memorandum of Lease") which shall include, without limitation, (i) the name and address of the Parties to this Agreement; (ii) a reference to this Agreement, with its date of execution; (iii) a description of the leased premises; and (iv) the Term. On the Lease Commencement Date, the Parties hereto shall file or cause to be filed such Memorandum of Lease for recordation with the Land Records of the Office of the Miami-Dade County Clerk.

*[Signature page follows]*

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their appropriate officials as of the Lease Commencement Date.

BOARD OF COUNTY COMMISSIONERS  
OF MIAMI-DADE COUNTY, FLORIDA

By: \_\_\_\_\_  
County Mayor

Witnesses:

ATTEST: Harvey Ruvin, Clerk

By: \_\_\_\_\_  
Name: \_\_\_\_\_

By: \_\_\_\_\_  
Deputy Clerk

By: \_\_\_\_\_  
Name: \_\_\_\_\_

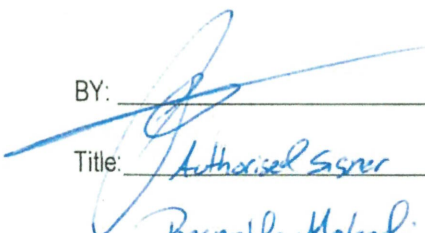
(SEAL)

13TH FLOOR OPF DEVELOPERS, LLC

Witnesses:

By:   
Name: David Resnick

By:   
Name: Vivien Rivero

BY:   
Title: Authorized Signer  
Reginaldo Melendi  
Print Name



|                                    |                                                                                                           |                  |                                   |
|------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------|-----------------------------------|
| 13TH FLOOR OPF<br>DEVELOPMENT, LLC | <div><b>EXHIBIT A</b></div> <div>62</div> |                  | MIAMI OPA LOCKA EXECUTIVE AIRPORT |
|                                    |                                                                                                           | SCALE 1" = 5000' | AUGUST 02, 2021                   |

**Exhibit B**  
Development Plans & Phasing Schedule

13<sup>th</sup> Floor OPF Developers, LLC plans to construct a +/- 200,000 sq ft facility. Potential uses of the facility include:

- Fixed-base Operator Facility
- Hangar Space for Aircraft Storage and Repair
- Standard and/or Heavy Aircraft Maintenance Facility
- Aircraft Engine/Testing Facility
- Sheet Metal Shop
- Composite Shop
- Interior Refurbishment Shop
- Office space to serve all administrative, operational and customer offices.
- Ramp Space
- Surface Lot for Vehicle Parking
- Taxiway Extension to Connect to Taxiway to be Developed by Adjacent Tenant

**Project Schedule**

| <b>Opa Locka</b>                  | <b>Duration<br/>(mon)</b> | <b>Start</b> | <b>End</b> |
|-----------------------------------|---------------------------|--------------|------------|
| Ground Lease Approval / Execution | 1                         | Sep-21       | Oct-21     |
| Schematic Design                  | 4                         | Oct-21       | Feb-22     |
| Design Development                | 4                         | Feb-22       | Jun-22     |
| Construction Drawings             | 5                         | May-22       | Oct-22     |
| Permit Approvals                  | 6                         | Oct-22       | Apr-23     |
| Procurement                       | 3                         | Oct-22       | Jan-23     |
| Construction of Civil / Sitework  | 18                        | Apr-23       | Oct-24     |
| Building Construction             | 18                        | Jun-23       | Dec-24     |
| Extension of Taxiway              | 6                         | Jun-24       | Dec-24     |

**Exhibit C**

**TAC-N Airport Procedures**



## **TENANT AIRPORT CONSTRUCTION NON-REIMBURSABLE (TAC-N) PROJECT PROCEDURES**

### **PURPOSE**

To provide details for the initiation and management of a Tenant Airport Construction Program non-reimbursable project.

### **DEFINITIONS**

|               |                                                                                           |
|---------------|-------------------------------------------------------------------------------------------|
| ALSB          | Aviation Life Safety Bureau                                                               |
| APP           | Art in Public Places                                                                      |
| FAA           | Federal Aviation Administration                                                           |
| A/E           | Tenant's State Registered Architect or Engineer responsible for the design of the project |
| BCC           | Board of County Commissioners                                                             |
| CA            | Contract Administration                                                                   |
| COA           | Certificate of Assurance                                                                  |
| GSA           | General Services Administration                                                           |
| MA            | Minority Affairs                                                                          |
| MARC          | Miscellaneous Asbestos Recovery Contract                                                  |
| MCC/TAC       | Miscellaneous Construction Contract/Tenant Airport Construction                           |
| MDAD          | Miami Dade Aviation Department                                                            |
| NTP           | Notice to Proceed                                                                         |
| PM            | Project Manager                                                                           |
| Property Mgr. | Real Estate or Concessions Manager                                                        |
| TAC-N         | Tenant Airport Construction Non-Reimbursable Projects                                     |
| Tenant        | Business Partner, Lessee                                                                  |
| SBD           | Small Business Development                                                                |

### **GENERAL INFORMATION**

#### **Summary of Department Process for Design and Construction of TAC-N Projects**

When an airport tenant wishes to improve or expand a leasehold area, the tenant must contact the MDAD Property Manager to discuss the proposed improvement or expansion. The Property Manager or designee determines whether the proposed design and construction will be a reimbursable or a non-reimbursable project.

If the determination is that the proposed design and construction are non-reimbursable, the tenant must submit a request to the Property Manager for a TAC-N Project.

The Property Manager informs Minority Affairs (MA) of the proposed TAC-N project and sends the Lease Agreement and all related documents to MA for review.

The Property Manager holds a Project Improvement Consultation Meeting with the Tenant and MA to explain TAC-N Procedures and State and County requirements such as: SBD Applicable Programs and Systems, Tenant Airport Construction Non-Reimbursable (TAC-N) Projects procedures (Facility Division Procedure A\_FD0-111-P), Flow Chart, MDAD Design Procedures, Art in Public Places (APP) and other requirements as applicable. The Property Manager shall determine if the project requires Board of County Commissioners (BCC) approval.

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The Tenant shall submit a TAC-Non-Reimbursable Project Information form (Facilities Division Form B\_FD1-080) to the Property Manager requesting MDAD approval of the project, which shall include the following attachments:

- Conceptual sketches or detailed narrative description of scope of work
- Completed TAC-Non-Reimbursable Project Information form (Facilities Division Form B\_FD1-080) providing the following information:
  - ✓ Project Name
  - ✓ Scope of Work (project description)
  - ✓ Project Cost (tenant's estimate) broken down between design and construction
  - ✓ Tenant's Name and Contact Person's name and telephone numbers
  - ✓ Verification that the Tenant has been instructed on insurance responsibilities and MDAD TAC-N procedures and requirements
  - ✓ Verification that the Tenant has been instructed on SBD Applicable Programs and Systems.

The Property Manager or designee shall prepare a TAC-N Project Quick Check Form (Facilities Division Form C\_FD1-090) and forward it to the following MDAD Divisions; Facilities Development Planning, Facilities Development Design, Facilities Management Maintenance Engineering, Safety and Security, Terminal Operations (for projects in the MIA Terminal Complex), and others as appropriate, for review and approval.

Following approval of the Quick Check (Q/C), the Property Manager requests assignment of a Project Number from Planning Division in accordance with Facilities Division Procedure (Facilities Division Procedure D\_FD1-020-P). Planning Division will assign a Project Number for TAC-N projects.

If the TAC-N Project Quick Check Form is approved and the project does not require approval by the Miami-Dade Board of County Commissioners (BCC), the Property Manager issues a Concept Approval Letter (Facilities Division Form E\_FD1-100) to the tenant, advising the tenant to proceed with the project and addressing compliance with MDAD Design Guidelines, TAC-N design and construction procedures and SBD Programs and Systems. The Property Manager forwards copies of the letter to the Deputy Director and the following Assistant Aviation Directors: Facilities Development, Facilities Management & Engineering, Business Retention & Development and others as appropriate. The Property Manager shall send a TAC-N Project Manager Assignment Request (Facilities Division Form F\_FD1-110) with results of Q/C reviews and copying all attachments to the Maintenance Engineering Chief.

If the project requires approval by the Miami-Dade Board of County Commissioners (BCC), the Property Manager prepares the necessary documentation for presentation to the BCC requesting an amendment to the existing lease and to authorize the project.

Upon approval by the BCC, the Property Manager will send a letter, attaching copies of the executed lease amendment, the County Manager's memorandum, and the BCC resolution to the tenant advising the tenant to proceed with the project in accordance with the terms of the lease as approved by the BCC. The letter will constitute a formal Concept Approval to the Tenant and shall substitute the Concept Approval Letter. The Property Manager shall send a TAC-N Project Manager Assignment Request (Facilities Division Form F\_FD1-110) with results of Q/C reviews and all attachments, including but not necessarily limited to, the executed lease amendment, the County Manager's memorandum and the BBC resolution to the Tenant and to the Maintenance Engineering Chief.

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## PROCEDURES for DESIGN and CONSTRUCTION

The Maintenance Engineering Chief shall issue a TAC-N Hand-Off Package (Facilities Division Form G\_FD1-120) providing details and requirements of the project and will designate a TAC-N Project Manager.

1. The TAC-N Project Manager shall provide a Letter of Introduction (Facilities Division Form H\_FD1-130) to the tenant via e-mail with copies of the Tenant Airport Construction Non-Reimbursable (TAC-N) Projects procedures (Facilities Division Procedure A\_FD0-111-P), SBD Applicable Programs & Systems (Document labeled "I" with Attachments 1 through 5), MDAD Design Procedures and APP requirements describing the design and construction process.
2. The TAC-N Project Manager shall hold a meeting with the Tenant, SBD, MA and Fine Arts & Cultural Affairs, if applicable. SBD will participate in all future MDAD meetings with the Tenant.
3. The Tenant must submit all project related packages to the TAC-N Project Manager prior to advertisement or award of A/E services or contract for construction. [Small Business, Wages and Workforce Requirements (SBWWR - Attachment 1)].
4. The TAC-N Project Manager shall submit SBD Departmental Input Form (SBWWR – Attachment 2 with attachments to MA for review of recommended SBE – A/E measures. MA to submit project package to SBD for approval.
5. SBD shall deliver measure recommendation, approved applicable Responsible Wages and Construction type through a Project Worksheet to MA and TAC-N PM (SBWWR - Attachment 3). SBD Worksheets that are returned with no measure and no wage requirement can skip steps 6 – 8 below.
6. Tenant must enroll in the County BMWS system and submit completed Certificate of Assurance (COA) (SBWWR - Attachment 4) to TAC-N Project Manager. TAC-N PM will submit COA to MA for SBD review.
7. Upon receipt of a COA by SBD, the Tenant will receive notification via email (with copy to TAC\_N Project Manager) from BMWS to submit their Utilization Plan via BMWS.
8. SBD will submit a compliance review memo (SBWWR - Attachment 5). Tenant cannot execute a contract with A/E and/or Contractor until Tenant has received the SBD Compliance Review Memo.

### START OF DESIGN PHASE

- A. It is the responsibility of the Tenant through its Architect/Engineer (A/E) to:
  - Obtain copies of relevant as-built drawings from MDAD Technical Support Division (305) 869-1379.
  - Verify field conditions, including but not limited to electrical, mechanical, HVAC, plumbing, water, sewer, structural, and connecting points for all utilities, HVAC, fire protection, and smoke evacuation systems.
  - Ensure that if the project is located at the MIA Terminal Complex, the design is in compliance with the MDAD Design Guidelines Manual (available from MDAD Technical Support with letter of authorization from TAC-N Project Manager). Projects in the cargo areas and at the General Aviation Airports need only meet civil work Design Guidelines or as noted per the terms of the lease. Reference MDAD Design Guidelines and Tenant Airport Construction

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Non-Reimbursable (TAC-N) Projects Procedures (Facilities Division Procedure A\_FD0-111-P).

- If applicable, Tenant A/E to initiate a Request for Waiver or Permanent Modification of a Design Guideline (Facilities Division Form K\_FD3-027). Refer to procedure (Waivers and Modifications to the Design Guidelines Manual, Facilities Division procedure J\_FD3-027-P) and form
- The A/E of Record shall comply with requirements of MDAD Design Procedures.
- The responsibility for the design and compliance with all applicable codes, standards, and ordinances rests solely with the tenant's Architect/Engineer of Record.
- Comply with MDAD security requirements, which if at MIA includes installation of Matrix system where and as applicable.
- A/E of Record shall coordinate requirements for compliance with R.E.R Miami-Dade Department of Environmental Resources Management (DERM and Florida Department of Environmental Protection (DEP) requirements as applicable.
- A/E of Record shall coordinate with Aviation Fire Life Safety Bureau during the design process as applicable.
- Obtain a MDAD Miscellaneous Asbestos Recovery Contract Status Report for the project from MDAD Environmental Engineering Division (305-876-8326).
- Each sheet of the construction plans shall be identified with a title box that includes the following information:

|                               |                                            |         |       |
|-------------------------------|--------------------------------------------|---------|-------|
| PROPERTY OWNER:               | MIAMI-DADE AVIATION DEPARTMENT             |         |       |
| ADDRESS:                      | P.O. BOX 025504, MIAMI, FLORIDA 33102-5504 |         |       |
| TAC-N PROJECT MANAGER:        | _____                                      |         |       |
| TAC-N PROJECT MANAGER PHONE:  | _____                                      | e-mail: | _____ |
| PROJECT OWNER/ LESSEE:        | _____                                      |         |       |
| ADDRESS:                      | _____                                      |         |       |
| TENANT PROJECT MANAGER:       | _____                                      |         |       |
| TENANT PROJECT MANAGER PHONE: | _____                                      | e-mail: | _____ |

- B. Upon completion of 75% Construction Documents (CD), the Tenant or its A/E shall submit the required number of sets of CDs to the TAC-N Project Manager for review.
- C. TAC-N Project Manager transmits the sets of CDs to pre-determined reviewers for In-House Review, to the MDAD Division reviewers, including any applicable Agencies and MDAD Consultant - Bond Engineering Firm (HNTB). The TAC-N PM shall forward by e-mail the CD attached to a Maintenance Engineering In-House Design Review Request for TAC Projects (Facilities Division Form L\_FD3-061).
- D. Concurrently, the TAC-N Project Manager shall forward by email, a Design Review Transmittal (Facilities Division Form M\_FD3-009) to the MDAD Division reviewers, any applicable Agencies, including MDAD Consultant - Bond Engineering Firm (HNTB), notifying them of the review process.

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- E. The Tenant's A/E shall confirm receipt of all Review Comments with the TAC-N Project Manager and must submit back-check sets of 100% construction documents with all reviewer-required changes incorporated.
- F. TAC-N Project Manager submits SBD Departmental Input Form (SBWWR – Attachment 2) with attachments to MA for review of recommended SBE-CON measures. MA submits project package to SBD for approval.
- G. Follow steps 6-8 page 3 (for purposes of Construction) that must be completed prior to Tenant advertisement or award of a contract for construction.
- H. The TAC-N Project Manager shall determine how many sets of 100% complete construction documents shall be submitted for review and the tenant or it's A/E shall submit the required number of sets of documents to the TAC-N Project Manager.
- I. The TAC-N Project Manager shall forward 100% complete construction document sets to pre-determined reviewers. One of these sets must have the A/E of Record's signature and seal on every design sheet and on the project manual, if provided. The documents shall be attached to a Maintenance Engineering In-House Design Review Request (Facilities Division Form L\_FD3-061).
- J. Concurrently, the TAC-N Project Manager shall forward by email, a Design Review Transmittal (Facilities Division Form M\_FD3-009) to the MDAD Division reviewers, any applicable Agencies, including MDAD Consultant - Bond Engineering Firm (HNTB), notifying them of the review process.
- K. The Reviewers will e-mail any issues/comments directly to the tenant's A/E of Record and to the TAC-N Project manager within (14) calendar days of receipt of the plans. The tenant or tenant's A/E shall confirm receipt of all Review Comments with the TAC-N Project Manager.
- L. The TAC-N Project Manager shall ensure that comments and issues introduced by reviewers are discussed and resolved.
- M. The TAC-N Project Manager shall review the submitted documents. The Tenant's A/E will be responsible to obtain plan reviewers signatures on TAC-N Design Review - 100% C.D Backcheck form (Facilities Division Form N\_FD3-062) indicating that their comments have been complied with and incorporated into the revised 100% final documents. The 100% construction drawings submitted for back-check must be accompanied with notarized letter to the TAC-N Project Manager on the A/E's company's letterhead requesting a TAC-N Concurrence Letter to be provided to the tenant (Facilities Division Form O\_FD5-017). The A/E's letter must contain the following two paragraphs verbatim:

This letter will serve as our request for the issuance of your TAC-N Letter of Concurrence for the above referenced project that will allow the tenant to apply for a Building Permit.

As the tenant's Architect/Engineer of Record, we have satisfied all comments and issues originating from the TAC-N Design Review process by means of revisions to the 100% Construction Documents. These revisions will produce a project in compliance with all MDAD and FAA requirements. Further, we realize that the final responsibility for the design and compliance with all applicable codes, standards, and ordinances rests solely with the tenant's Architect/Engineer of Record.

- N. The TAC-N Project Manager shall advise the tenant of the Miami-Dade General Services Administration (GSA) Risk Management Division insurance requirements. Prior to the issuance of the MDAD Letter of Concurrence to the tenant, execution of contract documents by the tenant

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and its contractor, the tenant shall provide copies of all of the contractor's certificates of insurance to the TAC-N Project Manager who shall request MDAD Risk Management to review them. Upon satisfactory review and compliance, the TAC-N Concurrence Letter (Facilities Division Form O\_FD5-017) will be issued, unless there are more requirements in accordance with Building Permit Application Checklist (Facilities Division Form P\_FD3-18C).

- O. The tenant shall complete a Building Permit Application. The completed permit application shall be signed by an authorized MDAD Owner's Representative (Facility Development or Facility Management Assistant Director). The Tenant shall submit it to the Miami-Dade Department of Regulatory and Economic Resources (R.E.R.) Satellite Office on the First Floor of Miami International Airport Building 3030. The Letter of Concurrence, a copy of the Miscellaneous Asbestos Recovery Contract (MARC) report, if required, and two (2) signed and sealed permit sets of the project 100% construction documents must be attached to the application. The Satellite Office may be reached at (305) 869-1081.
- P. For those TAC-N projects that require an amended Lease Agreement and as per the terms of the lease, the following documents must be submitted prior to the issuance of the Letter of Concurrence and prior to construction.
- Performance and Payment Bonds in compliance with the terms of the Lease
  - Copy of the Building Permit
  - The Environmental Insurance Policy as applicable
  - A check in the amount that represents 1% of the budgeted construction hard costs for reimbursement of MDAD Building Department fees
  - Contract completion bond as applicable
  - Insurance required
- Q. Tenant must submit all project related packages including a cost estimate broken down by trade to TAC-N Project Manager after 100% backcheck approval and dry run approval prior to advertisement or award of contract for construction. [Small Business, Wages and Workforce Requirements (SBWWR - Attachment 1)].
- R. TAC-N Project Manager to submit SBD Departmental Input Form (SBWWR - Attachment 2) with attachments to MA for review of recommended SBE - A/E measures. MA to submit project package to SBD for approval.
- S. SBD delivers measure recommendation, approved applicable Responsible Wages and Construction type, through a Project Worksheet to MA and TAC-N PM (SBWWR - Attachment 3). When a Project Worksheet with no Measures or Wage Requirements is received, then Steps 6 – 8 above are not applicable.
- T. The Tenant Prime Contractor and subcontractors must enroll in the County BMWS system and submit completed Certificate of Assurance (COA) (SBWWR - Attachment 4) to TAC-N Project Manager. PM will submit COA to MA for SBD review.
- U. Upon receipt of a COA by SBD, the Tenant will receive notification via email (with copy to TAC-N Project Manager) from BMWS to submit their Utilization Plan via BMWS.
- V. SBD will submit a compliance review memo (SBWWR - Attachment 5). Tenant cannot execute a contract with Contractor until Tenant has received the SBD Compliance Review Memo.

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- W. The tenant shall select a contractor to perform the work.
- X. The TAC-N Project Manager shall issue a Notice to Proceed.
- Prior to commencement of construction, the tenant shall submit copies of the Construction Schedule, schedule of values and the Building Permit to the TAC-N Project Manager. The tenant must also provide any revisions to these documents to the TAC-N Project Manager as they are issued.

#### **START OF CONSTRUCTION PHASE**

- Y. The TAC-N Project Manager shall determine, based on the complexity and magnitude of the project, if a pre-construction meeting should be held and if regularly scheduled construction meetings are required. If required, the frequency of construction meetings will be based on the complexity and duration of the project. The tenant's A/E and contractor, the TAC-N Project Manager, or designee, and others, as may be required, will attend the construction meetings.
- Z. Once the NTP is issued, TAC-N Project Manager and SBD Attends Pre-Construction Meeting. Tenant's Contractor shall submit copies of the construction schedule and building permit to the TAC-N project Manager. TAC-N Project Manager shall monitor construction progress and keep track and record of all RER Construction Permits until permits are closed.
- AA. It is the responsibility of the Tenant through its Contractor to:
- Coordinate schedules and locations for material deliveries to MIA with MDAD Landside Operations Division (305) 876-7086 or (305) 876-7279 and/or GA Airport Manager.
  - Coordinate airside access at MIA with MDAD Airside Operations Division (305) 876-7482 and/or GA Airport Manager.
  - Coordinate MIA identification badging and security orientation requirements with MDAD Safety and Security Operations Division (305) 876-4028 and/or GA Airport Manager.
  - Coordinate utility information and issues, including shutdown procedures, with MDAD Maintenance Engineering (305) 869-3874.
  - Coordinate requirements and specific procedures for obtaining Miami-Dade (RER) Department of Environmental Resources Management (DERM) and Florida Department of Environmental Protection (DEP) permits and for dewatering, excavating, trenching, stockpiling, maintenance and disposal of contaminated material activities with the MDAD Civil Environmental Engineering Division (305) 869-1299.
- BB. The TAC-N Project Manager, or designee, shall periodically visit the jobsite. The permit set of drawings must always be available on the construction site.
- CC. The Tenant Prime Contractor and subcontractors must update the County BMWS system on a monthly basis to track compliance with SBE contract measures and subcontractor payments by submitting monthly certified payrolls into the SBD LCP Tracker system. TAC-N Project Manager shall do periodic audits of certified payrolls (via LCPtracker) to verify compliance with SBD program requirements.
- DD. Change orders to a TAC-N Project that either increases the scope of work and cost or reduces the scope of work and cost requires the re-submittal of Input Document addressing the change that may increase or decrease their goal/wage requirement previously issued.

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- EE. Depending on a project's complexity, at project completion a walk-through may be scheduled and coordinated by the TAC-N Project Manager.
- FF. Commissioning of equipment that is to be maintained by MDAD shall be commissioned by MDAD Facilities Management and Engineering Division in accordance with MDAD Commissioning procedures.
- GG. The tenant must submit to the TAC-N Project Manager copies of the following documents at project completion:
- Signed off Building Permit Inspection within twenty-four hours of issue
  - Certificate of Occupancy (CO) or Certificate of Completion (CC) within twenty-four hours of issue; and proof that all construction permits have been closed out by the tenant's Contractors.
  - Warranties, service manuals, maintenance instructions, etc. and training for all equipment that will be maintained by MDAD
  - Provide copies of final releases or acceptable Consent(s) of Surety for all contractors, subcontractors and suppliers involved with the project.
  - SBD's Workforce Performance Report within 30 days of completion of work.
- HH. One copy of As-Built drawings (record drawings) on bond paper, signed and sealed by the tenant's A/E of Record and two digital copies as CAD and/or Revit files within thirty (30) days from issue of the Certificate of Occupancy or Certificate of Completion. When the Certificate of Occupancy has been issued and all As-Built Records have been transferred to MDAD Technical Support Division, the TAC-N Project Manager and tenant shall close the project. The TAC-N Project Manager shall issue a TAC-N Project Closeout Memorandum (Facilities Division Form Q\_FD5-246) at close of the project.

### **ASSOCIATED FORMS**

- |                                              |                                                                         |
|----------------------------------------------|-------------------------------------------------------------------------|
| 1. Facilities Division Form B_FD1-080        | TAC-Non-Reimbursable Project Information                                |
| 2. Facilities Division Form C_FD1-090        | TAC-N Project Quick Check Form                                          |
| 3. Facilities Division Procedure D_FD1-020-P | Project Number                                                          |
| 4. Facilities Division Form E_FD1-100        | Concept Approval Letter                                                 |
| 5. Facilities Division Form F_FD1-110        | TAC-N Project Manager Assignment Request                                |
| 6. Facilities Division Form G_FD1-120        | TAC-N Hand-Off Package                                                  |
| 7. Facilities Division Form H_FD1-130        | Letter of Introduction                                                  |
| 8. SBD I                                     | SBD Programs and Systems                                                |
| 9. Facilities Division Form J_FD3-027-P      | Waivers and Modifications to the Design Guideline Manual                |
| 10. Facilities Division Form K_FD3-027       | Request for Waiver or Permanent Modification of a Design Guideline      |
| 11. Facilities Division Form L_FD3 061       | Maintenance Engineering In-House Design Review Request for TAC Projects |
| 12. Facilities Division Form M_FD3 009       | Design Review Transmittal                                               |

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- |                                        |                                           |
|----------------------------------------|-------------------------------------------|
| 13. Facilities Division Form N_FD3-062 | TAC-N Design Review - 100% C.D. Backcheck |
| 14. Facilities Division Form O_FD5-017 | TAC-N Concurrence Letter                  |
| 15. Facilities Division Form P_FD3-18C | Building Permit Application Checklist     |
| 16. Facilities Division Form Q_FD5-246 | TAC-N Project Closeout Memorandum         |

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**TAC-Non-Reimbursable Project Information**

To Property Manager: \_\_\_\_\_ Property: \_\_\_\_\_

Date: \_\_\_\_\_ Tel: \_\_\_\_\_ Email: \_\_\_\_\_

Per the TAC-N Project Procedures, please review the following project information and prepare and submit the project "Quick Check" form to all necessary MDAD Divisions to obtain conceptual approval for its design and construction.

1. Project Name: \_\_\_\_\_

2. Description (scope of work): \_\_\_\_\_

|                                      |               |          |
|--------------------------------------|---------------|----------|
| 3. Project Cost (tenant's estimate): | Design:       | \$ _____ |
|                                      | Construction: | \$ _____ |
|                                      | Total:        | \$ _____ |

4. Tenant Name: \_\_\_\_\_

Tenant's Project Point of Contact Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

5. Tenant must furnish Certificates of Insurance as required by Miami-Dade by Miami-Dade Risk management: (YES) (NO)

6. Tenant has received and reviewed TAC-N Process and Procedures Letter: (YES) (NO)

7. Tenant understands that MDAD acceptance of its project for construction, must start no later than three months from the MDAD TAC-N Approval Letter and that the tenant must not occupy the spaces until a Certificate of Occupancy or a Certificate of Completion has been submitted to TAC-N: (YES) (NO)

8. Tenant's letter requesting approval of project attached: (YES) (NO)

9. Tenant acknowledges that they have read and acknowledge SBD requirements. (YES) (NO)

\_\_\_\_\_  
Tenant Representative Signature

\_\_\_\_\_  
Date

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**TAC-N Project Quick Check Form**

Date: \_\_\_\_\_

To: Jose A. Ramos, P.E., Facilities Dev. Planning  
 Felix Pereira, RA, Facilities Dev. Design  
 Enrique Perez, P.E., Facilities Dev. Construction  
 Gustavo Leal, Environmental Engineering  
 Ernesto Beltre, P.E., Civil Engineering  
 Fred Hebert, Facilities Maint. Utilities  
 Lydia M. Salas, P.E., Facilities Maint. Engineering  
 Andre Ragin, Minority Affairs  
 Rupen Philloura, Terminal Operations

Sarah Abate, Concessions  
 Michele Raymond, Real Estate Management & Dev.  
 Susan Feeney, Safety & Security  
 MDFR-ALSB@miamidade.gov, Aviation Life Safety Bureau  
 Barbara Carlo, Landside Operations  
 Maria Perez, Telecommunications/ISD  
 Lonny Craven, Airside Operations  
 Gendry Sherer, Fine Arts & Cultural Affairs  
 Richard Garcia, Facilities Maint. Signage  
 Maria Diaz-Todaro, Facilities Maint. Interior Design

From: \_\_\_\_\_

Subject: \_\_\_\_\_

Please note below your recommendation as to the disposition of this Quick Check by no later than close of business \_\_\_\_\_ in order to address this request.

| Project Approval                   | Yes | No | Print Name | Signature | Date |
|------------------------------------|-----|----|------------|-----------|------|
| Fac. Dev. Planning                 |     |    |            |           |      |
| Fac. Dev. Design                   |     |    |            |           |      |
| Fac. Dev. Construction             |     |    |            |           |      |
| Fac. Dev. Env. Eng.                |     |    |            |           |      |
| Fac. Dev. Civil Eng.               |     |    |            |           |      |
| Facilities Maint./Utilities        |     |    |            |           |      |
| Facilities Maint. Eng.             |     |    |            |           |      |
| Facilities Maint. Interior Design  |     |    |            |           |      |
| Facilities Maint. Signage          |     |    |            |           |      |
| Minority Affairs                   |     |    |            |           |      |
| Terminal Ops.                      |     |    |            |           |      |
| Real Estate Management/Concessions |     |    |            |           |      |
| Safety & Security                  |     |    |            |           |      |
| Aviation Life Safety Bureau        |     |    |            |           |      |
| ISD/Telecom.                       |     |    |            |           |      |
| Airside                            |     |    |            |           |      |
| Landside                           |     |    |            |           |      |
| Others                             |     |    |            |           |      |

Expedite Process: \_\_\_\_ Yes \_\_\_\_ No

Comments:

|  |
|--|
|  |
|  |
|  |

Attachments: \_\_\_\_\_

CC: Norma Mata, Facilities Dev. Planning  
Mark Hatfield, Safety & SecurityRobert Warren, Business Retention & Development  
Nancy Pantoja Kirtland, P.E., Civil Environmental Eng.**MIAMI INTERNATIONAL AIRPORT**

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Ralph Cutie, Facilities Management. & Eng.  
Pedro Hernandez, P.E., Facilities Dev. Mgt.  
Maurice Jenkins, ISD/Telecom.  
Jesus Valderrama, Fac. Maint. Utilities

Dan Agostino, Operations  
Ana Finol, P.E., Fac. Maint. Planning, Eng. & Construction  
Grisel Agha-Long, Fac. Maint. Eng.  
Juan Paan, Fac. Maint. Construction & Contracts

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## **PROJECT NUMBER**

### **PURPOSE**

To provide direction on naming and numbering MDAD Facilities Development projects.

### **SCOPE**

Every project and miscellaneous study proposed in a Request for Capital Funding memo must be assigned an MDAD project name and number.

### **INSTRUCTION**

#### **1. USE of PROJECT NAMES and NUMBERS**

- 1.1. When a project or study is proposed in a Request for Capital Funding memo (Facilities Division Form FD1-005) the MDAD Planning Division assigns it a project name and number per the direction provided below.
- 1.2. If a Project Manager wishes to change a project name or number --- to separate a project into sub-units or bid packages, to combine existing projects into a single, larger project, or in any way alter or create a name or number, the Project Manager shall prepare a request memorandum to the Manager, Planning Division explaining the request. Only the Planning Division can create or alter project names and numbers.
- 1.3. The project name and number shall be written on all documents relating to the project, e.g., contracts, letters, advertisements, memos, plans, specifications, transmittals, emails, etc.
- 1.4. The project name and number shall always be written exactly as assigned by the Planning Division. No dashes, spaces, or quotation marks shall be added or other alterations made.

#### **2. ASSIGNMENT of a PROJECT NAME**

- 2.1. A project name consists of a three-character designation of the affected airport, the name of the affected facility area within the airport, and a very brief description of the project. The project name shall not exceed 80 characters in order to meet Project Graphical Tracking System (PGTS) requirements.
- 2.2. A project name is assigned per the following conventions.

The first three characters denote the affected airport:

- |              |                                                    |
|--------------|----------------------------------------------------|
| ▪ <b>HST</b> | Miami Homestead General Aviation Airport (X51)     |
| ▪ <b>MIA</b> | Miami International Airport (MIA)                  |
| ▪ <b>OPF</b> | Miami-Opa Locka Executive Airport (OPF)            |
| ▪ <b>TMB</b> | Miami Executive Airport (TMB)                      |
| ▪ <b>TNT</b> | Dade Collier Training and Transition Airport (TNT) |

The next characters denote the facility within the airport. For example:

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- **Cc A** Concourse A
- **Cargo** Cargo Area

The final characters provide a descriptive name for the project. For example:

- **[Building Name] Pkg I** First package of a new building.
- **Civil/Utilities Part 1** First package of underground or civil work.

Examples of Project Names:

- HST Terminal Roadway and Parking
- MIA Bldg 2121 Fire Alarm System
- MIA Cc F Code Compliance Improvements
- MIA Fuel Farm Emergency Security Phones
- MIA Northside Utilities and Drainage Pkg IV-C (Airside)

### 3. ASSIGNMENT of a PROJECT NUMBER

- 3.1. The five-character project number indicates the year the project was initiated, the sequential order of the project within that year, and whether the project is a sub-project within a larger project.
- 3.2. A project number is assigned per the following conventions.

Character 1 consists of a capital letter (A through Z) to denote the calendar year in which a project is initiated.

| <u>LETTER</u> | <u>YEAR</u> |      |               |
|---------------|-------------|------|---------------|
| • A           | 1994        | • R  | 2011          |
| • B           | 1995        | • S  | 2012          |
| • C           | 1996        | • T  | 2013          |
| • D           | 1997        | • U  | 2014          |
| • E           | 1998        | • V  | 2015          |
| • F           | 1999        | • W  | 2016          |
| • G           | 2000        | • X  | 2017          |
| • H           | 2001        | • Y  | 2018          |
| • I           | 2002        | • AA | 2019          |
| • J           | 2003        | • BB | 2020          |
| • K           | 2004        | • CC | 2021          |
| • L           | 2005        | • DD | 2022          |
| • M           | 2006        | • EE | 2023          |
| • N           | 2007        | • FF | 2024          |
| • O           | 2008        | • GG | 2025          |
| • P           | 2009        | • HH | 2026          |
| • Q           | 2010        | • Z  | Prior to 1994 |

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Characters 2, 3 and 4 consist of sequential numbers (001 through 999) that denote the sequence of projects or programs in the specified year.

Character 5 consists of a capital letter (A through Z) that denotes a project unit within a program or larger project. The first project in a program will be denoted by an "A." Subsequent sub-projects or packages are denoted with other letters in alphabetical order.

Examples of Project Numbers:

- The first project number assigned in 2001 **H001A**
- The second project number assigned in 2001 **H002A**
- Subprojects within the second project **H002B through H002Z**

#### 4. SPECIAL NUMBERING SYSTEMS

- 4.1. The North Terminal Development Program has reserved the series of numbers from B700A through B799Z.
- 4.2. Miscellaneous Construction Contract (MCC) projects are assigned a secondary number based on the contract under which they are being worked.



**Miami-Dade Aviation Department**

P.O. Box 025504  
Miami, Florida 33102  
T 305-876-7000 F 305-876-0948  
www.miami-airport.com

**Commercial Airport:**  
Miami International Airport

miamidade.gov

**General Aviation Airports:**  
Dade-Collier Training & Transition Airport  
Miami Homestead General Aviation Airport  
Miami Executive Airport  
Miami-Opa Locka Executive Airport

\_\_\_\_\_, 2021



Mr. Z  
President  
ABC Corporation  
123 Anytown Street  
Any State, xxxxx

Dear \_\_\_\_\_:

This is to inform you that your Tenant Airport Construction (TAC) project request to \_\_\_\_\_ has been conceptually approved by Miami-Dade Aviation Department (MDAD) and issued the above-captioned project number.

MDAD will be assigning a TAC-N Project Manager shortly who will guide you through the Small Business Development (SBD) and Arts in Public Places (APP) review, the project's staff selection including but not limited to architect/engineer, consultants, contractor (prime & subs), design, permitting/construction and project closeout processes.

Please call me at \_\_\_\_\_ or email me via \_\_\_\_\_ if you have any questions.

Sincerely,

\_\_\_\_\_  
Senior Aviation Property Manager  
Real Estate Management & Development

Cc: Name/Title  
Deputy Director  
Assistant Director Facilities Development  
Assistant Director Facilities Management & Engineering  
Assistant Director Business Retention & Development

Concept Approval Letter  
E\_FD1-100 01/21



**TAC-N PROJECT MANAGER ASSIGNMENT REQUEST**

Date:

To:

From:

Subject: Hand-Off Memo

TAC-N Project No.

---

*(indicate Q/C results)*

Facilities Maintenance Engineering

Facilities Development Planning

Real Estate Management & Development

Facilities Maintenance Interior Design

Concessions

Aviation Fire/Life Safety

Airside Operations

Info Systems/Telecommunications

Others

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1. Project Title:
2. Project Location:
3. Project Description:
4. Property Manager:
5. Tenant Contact:

6. Project Cost:

7. Lease Number:

Attachments:      Approved Quick Check Form(s)  
                         Email Approvals  
                         Exhibit(s)

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**TAC-N HAND-OFF PACKAGE**

TAC-N [ ]

TAC-N EXPEDITED [ ]

PROJECT NAME: \_\_\_\_\_

EST. PROJECT COST: \$ \_\_\_\_\_ PROJECT NO.: \_\_\_\_\_

TAC-N PROJECT MANAGER: \_\_\_\_\_

PROPERTY MANAGER (REAL ESTATE/CONCESSIONS): \_\_\_\_\_

ACTIVE LEASE NUMBER: \_\_\_\_\_

|                                                    |              |          |         |
|----------------------------------------------------|--------------|----------|---------|
| Concept Approval Letter issued by Property Manager | Attached [ ] | Need [ ] | N/A [ ] |
| Copy of Exhibits: location, concept drawings       | Attached [ ] | Need [ ] | N/A [ ] |
| TAC-N Project Information Form                     | Attached [ ] | Need [ ] | N/A [ ] |
| Copy of executed Lease                             | Attached [ ] | Need [ ] | N/A [ ] |
| TAC-N Project Manager Assignment Request           | Attached [ ] | Need [ ] | N/A [ ] |
| Copy of Resolution BCC approval                    | Attached [ ] | Need [ ] | N/A [ ] |
| Copy of Quick Check approvals                      | Attached [ ] | Need [ ] | N/A [ ] |
| FAA approval (master plan, etc. Development)       | Attached [ ] | Need [ ] | N/A [ ] |
| Other documents: _____                             | Attached [ ] | Need [ ] | N/A [ ] |

**Upon receipt of this hand-off package, the TAC-N PM shall:**

Issue Letter of Introduction; Provide and review with the Tenant, a copy of the TAC-N design and construction procedures; Provide Tenant with a copy of the **TAC-N Project Quick Check Form FD1-090** with comments for compliance; Coordinate meeting with Tenant, SBD, and MDAD (Minority Affairs, Property Manager, and Fine Arts & Cultural Affairs, if applicable); Advise tenant that there will be additional comments from the in-house review; Advise Tenant how to obtain MDAD Design Guidelines.

Comments:

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---

Lydia M. Salas, P.E., Chief, Maintenance Engineering

cc: TAC-N Project Manager  
Real Estate/Concessions Property Manager  
Norma Mata  
Pedro Hernandez, P.E.  
Enrique Perez, P.E.  
Felix Pereira, RA  
Victor Guilbaud (HNTB)  
Timothy Newsome (HNTB)  
Gendry Sherer

Ana Finol, P.E.  
Sylvia Novela  
Andre Ragin  
Christina Gorrita  
Indira Almeida-Pardillo  
Greg Chin  
Juan E. Paan  
Ralph Cutie  
Grisel Agha-Long

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DATE: XXX

TO: Tenant

RE: TAC-N Project No.  
Project Title:

Dear Tenant,

Please be advised that the Miami Dade Aviation Department has assigned me, [Name of PM], as the MDAD Facilities Division Project Manager (PM) for the above-referenced project. I look forward to working with you and your team. My contact information is: Work Phone: XXXXXX, Mobile Phone: XXXX, and email address: XXXX@XXXXX

Please provide me with your Personnel and Emergency Contact List.

You will be responsible for complying with all County and Aviation Department rules and regulations, including the Miami-Dade County Small Business Enterprises (SBE); Architecture & Engineering, Construction and Good & Services programs, before you commence the procurement process for design and construction services as outlined in the attached SBD Project Requirements.

Sincerely:

[Name], Project Manager  
Miami-Dade Aviation Department  
Office Phone: [Number]  
Cell Phone: [Number]  
Email: [Address]

w/enclosures

cc: Assistant Director Facilities Development  
Assistant Director Facilities Management & Engineering  
Assistant Director Operations  
Assistant Director Real Estate or Concessions Project Manager  
Airport Manager  
Project File

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Letter of Introduction  
H\_FD1-130 01/21

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## SMALL BUSINESS, WAGE AND WORKFORCE REQUIREMENTS

### IMPROVEMENTS ON COUNTY OWNED LAND

#### APPLICABLE PROGRAMS

- Design: Small Business Enterprise – Architectural and Engineering (SBE-A&E)  
Small Business Enterprise – Goods and Services (SBE-G&S)
- Construction: Small Business Enterprise – Construction (SBE-Con)  
Small Business Enterprise – Goods and Services (SBE-G&S)  
Responsible Wages and Benefits (Wages)  
Community Workforce Program (CWP)  
Residents First Training and Employment Program (Residents 1<sup>st</sup>)  
Employ Miami-Dade Program (Employ M-D)

**Small Business Enterprise (SBE) Programs** reserve portions of or entire contracts for participation by certified small businesses through the application of small business measures. Applies to all construction contracts funded in whole or in part with County funds and all leases and contracts for privately funded construction on County-owned land. This section shall not apply to privately funded construction on any County-owned facilities or property where the total value of the construction is \$200,000.00 or less.

**Responsible Wages and Benefits** requirements apply to all leases and contracts which provide for privately funded construction, alteration or repair of buildings or improvements located on County-owned land. Construction projects on County owned land valued \$5 million or less and financed 100% through private sources are exempt, as are, entities that meet all 3 of the following: 501(c)(3) and not-for-profit and community based. All contractors regardless of tier must pay employees the wage rate in the schedule that corresponds with the type of work being performed without regard to skill. The County's wage schedule is update annually. The wage schedule that applies is the one in effect for the year in which the work is being performed.

The **Community Workforce Program (CWP)** is designed to increase employment opportunities in the area of construction, for residents of underserved residential areas throughout Miami-Dade County identified as Designated Target Areas (DTA). The local workforce goal is a requirement that a percentage of the workforce performing construction trades work and labor under the contract be a resident of a DTA the project is located in. CWP applies to construction contracts funded in whole or in part by County funds or with private funds on County owned land valued greater than \$250,000.

The **Residents First Training and Employment Program** applies to County construction contracts and projects or leases for privately funded construction on County owned land valued in excess of \$1 million and requires all persons employed by the contractor to perform construction to have completed the OSHA 10-Hour construction safety training course established by the Occupational Safety & Health Administration of the United States Department of Labor; and contractors make best reasonable efforts to promote employment opportunities for local residents and achieve a project goal of having 51% of all Construction Labor hours performed by Miami-Dade County residents.

## SMALL BUSINESS, WAGE AND WORKFORCE REQUIREMENTS

The **Employ Miami-Dade Program** applies to contracts valued in excess of \$1 million or privately funded projects or leases valued in excess of \$1 million for construction, demolition, alteration or repair of buildings or improvements on County owned land shall make a good faith effort to fill at least 20% of the labor workforce required per Contractor's Construction Workforce Plan from the Employ Miami-Dade Register through Career Source South Florida.

### **APPLICABLE SYSTEMS REQUIRED TO BE USED BY TENANTS**

Small Business Development's (SBD's) successful implementation of Miami-Dade County's Business Management Workforce System (BMWS) was completed with LCPtracker, a web-based payroll management system, which went live on May 1, 2019. This web-based system is utilized to apply for small business certifications, manage and report on County contracts, and to track compliance with SBE Program measures, Workforce Program requirements, and subcontractor payments.

The use of BMWS is mandatory for firms contracting with Miami-Dade County for the submission and verification of subcontractor payment information; LCPtracker is required for the submission of certified payrolls for contracts with wage requirements. Therefore, attending a hands-on training session is strongly encouraged. For more information regarding BMWS, contact SBD at 305-375-3111.

Links to legislation, implementing documents, wage schedules and forms can be found at:  
<http://www.miamidade.gov/smallbusiness/>

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## **PRE-AWARD PROCESS**

Each project for the procurement of Construction and Architectural & Engineering services must be submitted to Miami-Dade County Small Business Development (SBD) to establish contract(s) measures and provide subcontracting opportunities for certified SBE-A&E, SBE-Construction and SBE-G&S firms and the establishment of measures accordingly prior to advertisement and/or establishing contract(s). SBE-G&S measures apply to Construction and A&E contracts valued over \$750,000. ***NOTE: Tenant can submit A/E services for measure review initially followed by construction services. However, it is the Tenant's responsibility that once construction scope/estimates/trade breakdowns are ready, the Tenant submits to MDAD Project Manager for review per below. No work will be allowed to be performed until process for all areas of a Tac Project are completed.***

### **A. Responsibility of the Tenant – Project Submittal Process**

After receipt of the MDAD Concept letter from MDAD Property Manager, Tenant must submit ALL project related packages for Architectural & Engineering and Construction services that are part of the TAC project to MDAD Project Manager prior to advertisement/contract establishment to include:

- Detailed scope of services
- Complete breakdown of the project cost estimate identifying the sub-trade areas by division
- Listing of all special requirements (special licensure, manufacturer's certification, experience, payment/performance bond requirement, etc.)

*Sample submittal package included. (Attachment 1)*

### **B. Responsibility of MDAD Project Manager – Project Submittal Process**

Submit COMPLETED and signed SBD Departmental Input Document Form (Attachment 2) along with ALL applicable attachments (as listed in Section A above) to MDAD Contracts Administration (CA). CA will review form and attachments and submit the project's package to SBD.

### **C. Responsibility of SBD – Project Review and Analysis Process**

SBD will review all project submittal documents to ensure the packages are complete, identifying all trade areas to properly bid the project. SBD will review all special requirements or conditions to ensure that there are no artificial barriers to prevent opportunities for Small Business participation.

- Each sub-trade will be reviewed for possible participation by small businesses.
- To determine whether certified firms are ready, willing and able to perform, firms will be surveyed and required to respond in writing.
- Firms will be sent project information on an availability form letter for their review and response accordingly.

- Only Firms certified in the various commodities included in project package will be surveyed.
- SBD will deliver measure recommendation through a Project Worksheet (Attachment 3) to MDAD CA and MDAD Project Manager within 2 days for A/E projects and 5 days for construction projects. For construction the applicable CWP goal and applicable wage schedule will also be included.

**D. TAC Project Advertisement/Contract Establishment – Small Business Participation Compliance**

- The Tenant must include all program requirements and Certificate of Assurance forms in each bid package/advertisement/contract documents.
- SBD will participate in all MDAD meetings with Tenant after project concept is approved by MDAD to ensure tenants are aware of the SBE measures, wage and local hiring requirements.

**E. Pre-Award/Pre-Establishment of Contracts Compliance Review**

- After bid openings and/or prior to contract establishment, Tenant must submit the completed Certificate of Assurance (COA) to MDAD Project Manager. A COA is a form submitted with bid documents whereby the Tenant and their prospective Contractor(s) acknowledges: (i) SBE measures apply to the project; and (ii) Tenant will submit its list of certified SBEs to satisfy the measure via Miami-Dade County's web-based reporting system, Business Management Workforce System (BMWS) within a specified timeframe.
- MDAD Project Manager will submit COA to Contracts Administration for SBD review.
- Upon receipt of the COA by SBD, the Tenant will receive notification via email from BMWS to submit their Utilization Plan via BMWS.
- SBD will submit a Compliance Review Memo (Attachment 4) to disclose the Tenants' compliance status as it relates to the SBE goals.
- **Tenant will not move forward with contract award(s) nor execute a contract until it is determined that Tenant's Contractor is in compliance with established small business goals and Tenant has received the SBD Compliance Review Memo (Attachment 4).**
- MDAD Project Manager will process Tenant's Permit Application upon receipt of the SBD Compliance Memo (Attachment 4).

## **POST AWARD COMPLIANCE**

### **RESPONSIBILITIES OF TENANT**

#### **A. Small Business Enterprise Program**

- Invite SBD to attend all Pre-Construction/Pre-Work meetings to advise awarded Prime Contractor of small business, wage and/or workforce requirements.
- Enter into subcontracts with SBE(s) for the price and scope reported on the Utilization Plan.
- Ensure SBEs maintain certification through the duration of the job, perform a commercially useful function and do not subcontract work further. SBEs must have a contractual responsibility for the execution of a distinct element of the work of a contract and carry out that responsibility by actually performing, managing and supervising the work involved. Acting as a broker is not considered a commercially useful function.
- Report payments to SBE(s) through BMWS and require SBEs reply to confirm payments reported.
- Ensure small businesses meeting goals are promptly paid within 2 days of receiving payment from the Developer/County.
- Submit requests to deviate from approved small business goals to the Director of SBD, through BMWS for approval prior to deviation.
- Forward complaints regarding small business utilization and/or payment to SBD for investigation.

#### **B. Responsible Wages and Benefits**

- Ensure wage schedule is posted on the job site,
- Require prime and subcontractors at every tier level submit certified payrolls monthly via LCPtracker, a web-based Certified Payroll Management System.
- Verify payrolls have been submitted by all contractors prior to accepting their requisition.
- In the case of suspected underpayment to employees, withhold funds due to prime contractor/subcontractors to protect any wages due to employees upon receipt of a written stop payment request from SBD.
- Forward complaints of underpayment to SBD for investigation

#### **C. Community Workforce Program**

- Prior to issuance of Notice to Proceed ensure contractor submits list of subs and Construction Workforce Plan (Form RFTE 1) and it is deemed acceptable by SBD.
- New hires must be recruited from the project Designed Target Area.
- SBD must be notified of changes in workforce.

#### **D. Residents First Training and Employment Program**

- Ensure completed Responsible Contractor Affidavit (Form RFTE 1) is submitted with bid
- Prior to issuance of Notice to Proceed ensure contractor submits list of subs, Responsible Subcontractor Affidavits (Form RFTE 1) and Construction Workforce Plan

- (Form RFTE 1) and it is deemed acceptable by SBD.
- All employees found on-site must have OSHA-10 Safety Training.
- SBD must be notified of changes in workforce.
- Collect Workforce Performance Report (Form RFTE 4) within 30 days of completion of work and it is deemed acceptable by SBD prior to final payment.

#### **E. Employ Miami-Dade Program**

- Prior to issuance of Notice to Proceed ensure contractor submits list of subs and Construction Workforce Plan (Form RFTE 1) and it is deemed acceptable by SBD.
- New hires must be recruited through CareerSource Florida.
- SBD must be notified of changes in workforce.
- Collect Workforce Performance Report (Form RFTE 4) within 30 days of completion of work and it is deemed acceptable by SBD prior to final payment.

#### **RESPONSIBILITIES OF SBD - POST AWARD**

- Review Residents 1<sup>st</sup> affidavits prior to contract award
- Attend pre-construction meetings to explain program requirements
- Review CWP, Residents 1<sup>st</sup> and Employ Miami-Dade Construction Workforce Plans (Form RFTE 2) prior to issuance of Notice to Proceed
- Obtain and review the subcontract agreements for the certified small business meeting goals
- Conduct on-site interviews of employees to ensure compliance with SBE, wage, and workforce requirements
- Review Compliance Audits and Certified Payrolls submitted through the County's web-based system
- Process SBE deviation requests
- Investigate complaints and administer compliant process
- 50% and 75% SBE goal compliance review
- Final compliance review for small business and workforce requirements

## SMALL BUSINESS, WAGE AND WORKFORCE REQUIREMENTS

### **IMPORTANT LINKS**

Applicable legislation, wage schedules and forms: [http://www.miamidade.gov/smallbusiness/Business Management Workforce System \(BMWS\) and LCPtracker:](http://www.miamidade.gov/smallbusiness/Business%20Management%20Workforce%20System%20(BMWS)%20and%20LCPtracker)  
<https://mdcsbd.gob2g.com/>

For training or questions about BMWS or LCPtracker, please contact [BMWS@miamidade.gov](mailto:BMWS@miamidade.gov) or call (305) 375-3111.

### **ATTACHMENTS**

- 1: Sample Pre-Award Project Submittal Package
- 2: Sample SBD Departmental Input Form
- 3: Sample SBD Project Worksheet
- 4: Sample SBD Compliance Review Memo
- 5: Applicable SBD Legislation



# ATTACHMENT 1



Date: October 10, 2019  
To: Gyselle Pino, Director of Contracts and Procurement  
PortMiami  
From: Diana Beauchamp Lopez, P.E. *Diana Lopez*  
Vice President Port Development  
MSC Cruises Miami Cruise Terminal LLC

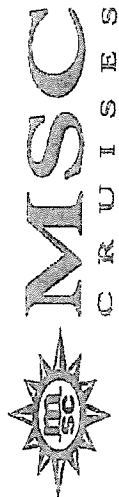
Subject: SBE Goal Recommendations for MSC Cruises Miami Cruise Terminals Project

In accordance with the Terminal Development Management and Lease Agreement between Miami-Dade County and MSC Miami Cruise Terminal LLC to Design, Build, Operate, Finance and Maintain a Cruise Terminal and Office Complex at PortMiami, this Memorandum serves to provide a recommendation for Small Business Enterprise (SBE) measures/goals for Architectural & Engineering (A/E), Construction (CON), Goods & Services (G&S), and Community Workforce Program (CWP).

The approximate duration of the project is approximately 730 calendar days, including Complete Design and Construction, with an expected direct cost of \$283,440,000, broken down as follows:

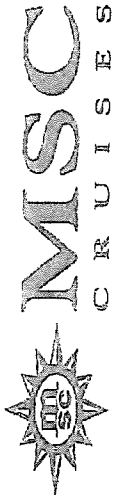
|                         |                                           |
|-------------------------|-------------------------------------------|
| \$254,241,547.00        | Estimated Construction Cost               |
| \$20,000,000.00         | Estimated Architecture & Engineering Cost |
| \$4,113,623.00          | Art in Public Places (1.5%)               |
| \$5,084,830.00          | Permit Allowance (2%)                     |
| <b>\$283,440,000.00</b> | <b>Total Estimated Cost</b>               |

The project is expected to include the following: demolition of site and utilities as needed to make space for the construction of two new cruise terminals with an office element, construction of a parking garage structure element, construction of two new berths (Berths 8 and 9) and expansion of the apron via a new bulkhead and seawall, installation of utilities for the apron to service vessels, dredging of the waterway for the berthing of two (2) cruise ships, construction of provisioning and intermodal areas, site improvements and development, construction of a connecting roadway system within the Ground Lease area connecting to the PortMiami public roadway, and connection and improvement of all utilities as needed for the operation of the Project.



For the firms providing A/E design services for this Project, the following Technical Certification Categories will be required:

| <i>Technical<br/>Certification<br/>No.</i> | <i>Type</i>  | <i>Description</i>                                                                         | <i>Percentage</i> | <i>Amount</i> |
|--------------------------------------------|--------------|--------------------------------------------------------------------------------------------|-------------------|---------------|
| 5.02                                       | Lead A/E     | Port and Waterway Systems - Architectural Design                                           | 34%               | \$6,800,000   |
| 5.03                                       | Lead A/E     | Port and Waterway Systems - Cruise Terminal Design                                         | 15%               | \$3,000,000   |
| 18                                         | Lead A/E     | Architectural Construction Management                                                      | 8.00%             | \$1,600,000   |
| 22                                         | Lead A/E     | ADA Title II Consultant                                                                    | 1.00%             | \$200,000     |
| 5.04                                       | Other        | Port and Waterway Systems - Cruise Terminal Equipment Design                               | 1.00%             | \$200,000     |
| 5.08                                       | Other        | Port and Waterway Systems - Marine Engineering                                             | 6.50%             | \$1,300,000   |
| 5.09                                       | Other        | Port and Waterway Systems - Environmental Design                                           | 1.50%             | \$300,000     |
| 5.10                                       | Other        | Port and Waterway Design - Transportation Systems                                          | 1.50%             | \$300,000     |
| 8                                          | Other/SBE-AE | Telecommunication Systems                                                                  | 2.00%             | \$400,000     |
| 9.02                                       | Other        | Soils, Foundations, and Material Testing - Geotechnical and Materials Engineering Services | 0.50%             | \$100,000     |
| 9.03                                       | Other        | Soils, Foundations, and Material Testing - Concrete and Asphalt Testing Services           | 0.50%             | \$100,000     |
| 9.04                                       | Other        | Soils, Foundations, and Material Testing - Non-Destructive Testing and Inspection          | 0.50%             | \$100,000     |
| 11                                         | Other        | General Structural Engineering                                                             | 5.00%             | \$1,000,000   |
| 12                                         | Other        | General Mechanical Engineering                                                             | 3.00%             | \$600,000     |
| 13                                         | Other        | General Electrical Engineering                                                             | 3.00%             | \$600,000     |
| 14                                         | Other/SBE-AE | Architecture                                                                               | 1.00%             | \$200,000     |
| 15.01                                      | Other/SBE-AE | Surveying and Mapping - Land Surveying                                                     | 0.50%             | \$100,000     |
| 15.03                                      | Other/SBE-AE | Surveying and Mapping - Underground Utility Location                                       | 0.50%             | \$100,000     |
| 16                                         | Other/SBE-AE | General Civil Engineering                                                                  | 2.00%             | \$400,000     |



|     |                  |                                        |             |                     |
|-----|------------------|----------------------------------------|-------------|---------------------|
| 17  | Other/SBE-<br>AE | Engineering Construction<br>Management | 4.00%       | \$800,000           |
| 20  | Other/SBE-<br>AE | Landscape Architecture                 | 4.00%       | \$800,000           |
| N/A | Other            | Miscellaneous/Specialty Engineering    | 5.00%       | \$1,000,000         |
|     |                  | <b>Total Estimated A/E Services</b>    | <b>100%</b> | <b>\$20,000,000</b> |

It is recommended that the SBE goals be set at 14% for Architectural and Engineering Services, 10.01% for Construction, and 2.20% for Goods and Services. Additionally, a recommendation for a Community Workforce Plan goal of 10% is recommended.

MSC Cruises - Terminals AA & AAA

Project Analysis for Goal Recommendation (SBE-CON)

|                                                  | Estimated Cost           | SBE-Con Analysis        | % of Item to Base Bid |
|--------------------------------------------------|--------------------------|-------------------------|-----------------------|
| -DIVISION 1 - GENERAL REQUIREMENTS               | \$ 12,712,077.35         |                         |                       |
| -DIVISION 2 - EXISTING CONDITIONS                | \$ 635,603.87            | \$ 635,603.87           | 0.25%                 |
| -DIVISION 3 - CONCRETE                           | \$ 55,933,140.34         |                         |                       |
| -DIVISION 4 - MASONRY                            | \$ 5,084,830.94          | \$ 5,084,830.94         | 2.00%                 |
| -DIVISION 5 - METALS                             | \$ 5,084,830.94          |                         |                       |
| -DIVISION 6 - WOOD, PLASTICS, AND COMPOSITES     | \$ 1,525,449.28          |                         |                       |
| -DIVISION 7 - THERMAL AND MOISTURE PROTECTION    | \$ 6,356,038.68          |                         |                       |
| -DIVISION 8 - OPENINGS                           | \$ 11,440,869.62         |                         |                       |
| -DIVISION 9 - FINISHES                           | \$ 15,890,096.69         |                         |                       |
| Painters and Allied Trades                       |                          | \$ 2,383,514.50         | 0.94%                 |
| -DIVISION 10 - SPECIALTIES                       | \$ 2,542,415.47          |                         |                       |
| -DIVISION 11 - EQUIPMENT                         | \$ 3,813,623.21          |                         |                       |
| -DIVISION 12 - FURNISHINGS                       | \$ 4,322,106.30          |                         |                       |
| -DIVISION 13 - SPECIAL CONSTRUCTION              | \$ 83,580,386.75         |                         |                       |
| -DIVISION 14 - CONVEYING EQUIPMENT               | \$ 5,720,434.81          |                         |                       |
| -DIVISION 21 - FIRE SUPPRESSION                  | \$ 5,084,830.94          | \$ 5,084,830.94         | 2.00%                 |
| -DIVISION 22 - PLUMBING                          | \$ 6,356,038.68          |                         |                       |
| -DIVISION 23 - HVAC                              | \$ 8,135,729.50          |                         |                       |
| Sheet Metal Workers                              |                          | \$ 2,847,505.33         | 1.12%                 |
| -DIVISION 25 - INTEGRATED AUTOMATION             | \$ 1,525,449.28          |                         |                       |
| -DIVISION 26, 27 & 28 - ELECTRICAL, COMM, SAFETY | \$ 22,881,739.23         |                         |                       |
| Low Voltage                                      |                          | \$ 6,864,521.77         | 2.70%                 |
| -DIVISION 31 - EARTHWORK                         | \$ 4,576,347.85          |                         |                       |
| -DIVISION 32 - EXTERIOR IMPROVEMENTS             | \$ 2,542,415.47          | \$ 2,542,415.47         | 1.00%                 |
| -DIVISION 33 - UTILITIES                         | \$ 4,703,468.62          |                         |                       |
| LEED Allowance                                   | \$ 3,813,623.21          |                         |                       |
| <b>TOTALS</b>                                    | <b>\$ 254,241,547.00</b> | <b>\$ 25,443,222.82</b> | <b>10.01%</b>         |

MSC Cruises - Terminals AA & AAA

Project Analysis for Goal Recommendation (SBE-G&S)

| Sub-trade                                   | Estimate Cost          | % of Item to Base Bid |
|---------------------------------------------|------------------------|-----------------------|
| Field Surveying                             | \$ 635,603.87          | 0.25%                 |
| Temporary Utilities / Portable Toilets      | \$ 889,845.41          | 0.35%                 |
| LEED Consultant (General Contractor's Rep.) | \$ 2,542,415.47        | 1.00%                 |
| Trash / Storage Containers (20 ton.)        | \$ 1,525,449.28        | 0.60%                 |
| <b>Estimated Construction Cost (SBE)</b>    | <b>\$ 5,593,314.03</b> | <b>2.20%</b>          |
| Estimate Construction Cost (Total)          | \$ 254,241,547.00      | 100.00%               |

MSC Cruises - Terminals AA & AAA

Project Analysis for Goal Recommendation (SBE-CWP)

| Trade/Skills Required                            | Estimated Cost          | % of Item to Base Bid | Est. # of Workforce Required Per Trade | Est. # of days to Complete Job |
|--------------------------------------------------|-------------------------|-----------------------|----------------------------------------|--------------------------------|
| -DIVISION 2 - EXISTING CONDITIONS                | \$635,603.87            | 0.25%                 | 6                                      | 730                            |
| -DIVISION 3 - CONCRETE                           | \$55,933,140.34         | 22.00%                | 130                                    | 730                            |
| -DIVISION 4 - MASONRY                            | \$5,084,830.94          | 2.00%                 | 15                                     | 680                            |
| -DIVISION 5 - METALS                             | \$5,084,830.94          | 2.00%                 | 18                                     | 730                            |
| -DIVISION 6 - WOOD, PLASTICS, AND COMPOSITES     | \$1,525,449.28          | 0.60%                 | 9                                      | 130                            |
| -DIVISION 7 - THERMAL AND MOISTURE PROTECTION    | \$6,356,038.68          | 2.50%                 | 18                                     | 730                            |
| -DIVISION 8 - OPENINGS                           | \$11,440,869.62         | 4.50%                 | 27                                     | 730                            |
| -DIVISION 9 - FINISHES                           | \$15,890,096.69         | 6.25%                 | 49                                     | 730                            |
| -DIVISION 10 - SPECIALTIES                       | \$2,542,415.47          | 1.00%                 | 5                                      | 170                            |
| -DIVISION 11 - EQUIPMENT                         | \$3,813,623.21          | 1.50%                 | 17                                     | 280                            |
| -DIVISION 12 - FURNISHINGS                       | \$4,322,106.30          | 1.70%                 | 12                                     | 360                            |
| -DIVISION 13 - SPECIAL CONSTRUCTION              | \$63,560,386.75         | 25.00%                | 85                                     | 950                            |
| -DIVISION 14 - CONVEYING EQUIPMENT               | \$5,720,434.81          | 2.25%                 | 12                                     | 380                            |
| -DIVISION 21 - FIRE SUPPRESSION                  | \$5,084,830.94          | 2.00%                 | 16                                     | 610                            |
| -DIVISION 22 - PLUMBING                          | \$6,356,038.68          | 2.50%                 | 20                                     | 680                            |
| -DIVISION 23 - HVAC                              | \$8,135,729.50          | 3.20%                 | 35                                     | 680                            |
| -DIVISION 25 - INTEGRATED AUTOMATION             | \$1,525,449.28          | 0.60%                 | 4                                      | 160                            |
| -DIVISION 26, 27 & 28 - ELECTRICAL, COMM, SAFETY | \$22,881,739.23         | 9.00%                 | 60                                     | 730                            |
| -DIVISION 31 - EARTHWORK                         | \$4,576,347.85          | 1.80%                 | 16                                     | 375                            |
| -DIVISION 32 - EXTERIOR IMPROVEMENTS             | \$2,542,415.47          | 1.00%                 | 8                                      | 265                            |
| -DIVISION 33 - UTILITIES                         | \$4,703,468.62          | 1.85%                 | 10                                     | 450                            |
| General Requirements                             | \$12,712,077.35         | 5.00%                 |                                        |                                |
| LEED Allowance                                   | \$3,813,623.21          | 1.50%                 |                                        |                                |
| <b>Estimated Construction Cost</b>               | <b>\$254,241,547.00</b> | <b>100.00%</b>        | <b>572</b>                             |                                |



# ATTACHMENT 2

## DEPARTMENTAL INPUT CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

☐ New    ☐ OTR    ☐ Sole Source    ☐ Bid Waiver    ☐ Emergency    Previous Contract/Project No.  
Contract  
☐ Re-Bid    ☐ Other    LIVING WAGE APPLIES: ☐ YES    ☐ NO

Requisition No./Project No.:

TERM OF  
CONTRACT

Requisition /Project Title:

Description:

Issuing Department:

Contact  
Person:

Phone:

Estimate Cost:

GENERAL    FEDERAL    OTHER

Funding Source:

## ANALYSIS

Commodity Codes:

Contract/Project History of previous purchases three (3) years  
Check here ☐ if this is a new contract purchase with no previous history.

EXISTING

2<sup>ND</sup> YEAR

3<sup>RD</sup> YEAR

**Contractor:**

**Small Business Enterprise:**

**Contract Value:**

**Comments:**

Continued on another page (s):    ☐ Yes    ☐ No

## RECOMMENDATIONS

SBE

Set-aside

Sub-contractor goal

Bid preference

Selection factor

Basis of  
recommendation:

Date sent to SBD:

# ATTACHMENT 3



## Small Business Development Division

### Project Worksheet

Project/Contract Title: Cruise Terminals AA/ AAA (MSC Cruise Terminal) Received Date: 10/28/2019  
 Project/Contract No: 2017-001.01 (BUILD) Funding Source: Private  
 Department: Seaport  
 Estimated Cost of Project/Bid: \$254,241,547.00  
 Description of Project/Bid: MSC Cruises Cruise Terminal Design/Build

| Contract Measures |             |              |
|-------------------|-------------|--------------|
| Measure           | Program     | Goal Percent |
| Goal              | SBE - Con   | 10.01%       |
| Goal              | SBE - Goods | 2.20%        |
| Workforce Goal    | CWP         | 10.00%       |

**Reasons for Recommendation**

**SMALL BUSINESS ENTERPRISE - CONSTRUCTION (SBE-Con)**  
 An analysis of the factors contained in Section VI. C. of Implementing Order 3-22 indicates that a 10.01% Small Business Enterprise - Construction (SBE - Con) subcontractor goal is appropriate for the trades of: Masonry Contractors; Electrical Contractors and Other Wiring Installation Contractors; Painting and Wall Covering Contractors; Plumbing, Contractors; Other Building Finishing Contractors and All Other Specialty Trade Contractors.

**SMALL BUSINESS ENTERPRISE - GOODS (SBE-Good)**  
 An analysis of the factors contained in section VIII. B. of Implementing Order 3-41 & Ordinance 14-41 indicates that a 2.20% is appropriate for the goods portion of this contract in; Builder's Supplies; Electrical Cable and Wire, Not Electronic; Electrical Equipment and Supplies, Except Cable and Wire; Electronic Equipment, Components, Parts, and Accessories and Plumbing Equipment, Fixtures, and Supplies.

SBE-Con and SBE-G or 5 subcontractor Goals can be met by 1st, 2nd and 3rd Tier Subcontractor.

CWP Estimated Workforce: CWP Workforce Recommendation

NAICS 238140 Masonry Contractors, NAICS 238210 Low voltage electrical work, NAICS 238220 Fire sprinkler system installation, NAICS 238220 Heating, ventilation and air-conditioning (HVAC) contractors, NAICS 238220 Plumbing contractors, NAICS 238390 Other Building Finishing Contractors, NAICS 238990 All Other Specialty Trade Contractors, NAICS 238320 Painting and Wall Covering Contractors, NIGP 15000 BUILDER'S SUPPLIES, NIGP 28000 ELECTRICAL CABLE AND WIRE, NOT ELECTRONIC, NIGP 28500 ELECTRICAL EQUIPMENT AND SUPPLIES, EXCEPT CABLE AND WIRE, NIGP 28700 ELECTRONIC EQUIPMENT, COMPONENTS, PARTS, AND ACCESSORIES (SEE CLASS 730 FOR TESTING OR ANALYZING TYPE), NIGP 67000 PLUMBING EQUIPMENT, FIXTURES, AND SUPPLIES, NAICS 238210 Electrical Contractors and Other Wiring Installation Contractors

| Small Business Contract Measure                                  |           |
|------------------------------------------------------------------|-----------|
| Sub-trade                                                        | Category  |
| All Other Specialty Trade Contractors                            | SBE - Con |
| Electrical Contractors And Other Wiring Installation Contractors | SBE - Con |
| Masonry Contractors                                              | SBE - Con |
| Plumbing Contractors                                             | SBE - Con |

|                                                              |             |
|--------------------------------------------------------------|-------------|
| Fire Sprinkler System Installation                           | SBE - Con   |
| Low Voltage Electrical Work                                  | SBE - Con   |
| Other Building Finishing Contractors                         | SBE - Con   |
| Heating, Ventilation And Air-Conditioning (HVAC) Contractors | SBE - Con   |
| Painting And Wall Covering Contractors                       | SBE - Con   |
| Plumbing Equipment, Fixtures, And Supplies                   | SBE - Goods |
| Electrical Cable And Wire, Not Electronic                    | SBE - Goods |
| Plumbing Equipment, Fixtures, And Supplies                   | SBE - Goods |
| Electronic Equipment, Components, Parts, and Accessories     | SBE - Goods |

Living Wages: YES ☐ NO ☒

Highway: YES ☐ NO ☒

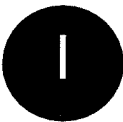
Heavy Construction: YES ☐ NO ☒

Responsible Wages: YES ☒ NO ☐

Building: YES ☒ NO ☐

  
 \_\_\_\_\_  
 S&D Director

10-31-19  
 \_\_\_\_\_  
 Date



# ATTACHMENT 4

## Memorandum



DATE: September 21, 2020

TO: Sylvia Novela, Strategic Procurement Director  
Miami-Dade Aviation Department

FROM: Gary Hartfield, Division Director  
Internal Services Department  
Small Business Development

SUBJECT: Compliance Review  
Passenger Screening Program

Small Business Development (SBD), a Division of the Internal Services Department, has completed its review of the subject project for compliance with the Small Business Enterprise Program for Construction Services (SBE-Con). The contract measures established for this project is a SBE-Con 12.18% sub-contractor goal.

The Miami-Dade Aviation Department submitted project documents from Leidos, Inc., for the Passenger Screening Program. The firm submitted the Utilization Plan (UP) via the Business Management Workforce System (BMWS). Please find the results of SBD's compliance review below.

**FIRM:**

1. Leidos, Inc.

**STATUS:**

Compliant

**SUMMARY:**

Leidos, Inc., (1) a non-certified SBE-Con firm committed to utilize the following certified firm; Dunn Development, LLC to perform site preparation, commercial building construction work at 12.18%.

Please note that SBD staff reviewed and addresses compliance with the SBE-Con program only. The Miami Dade Aviation Department is responsible for any other issues that may exist. Should you have any questions or need any additional information, please do not hesitate to call Robert Parson, SBD Contract Compliance Officer 2 at (305) 375-3182.

c: L. Johnson, SBD  
C. Corrales, SBD  
C. Gorrita MDAD

# ATTACHMENT 5

## Sec. 2-10.4.01. -Small Business Enterprise Architecture and Engineering Program.

(1) *Title*. This Section shall be referred to as the Miami-Dade County Small Business Enterprise Architecture & Engineering ("CBE" or "CBE-A/E") Program.

(2) *Definitions*. For purposes of this section:

A. *Agreement* means an agreement proposed by the County or Public Health Trust staff, or approved by the County Commission or Public Health Trust for architectural, landscape architectural, engineering, and surveying and mapping professional services.

B. *Available or availability* means to have, prior to proposal submission, the ability to provide professional services under an agreement or subconsultant agreement by having:

- (1) Reasonably estimated, uncommitted capacity and expertise;
- (2) All licenses, permits, registrations, insurances and certifications;
- (3) The ability to obtain bonding that is reasonably required to perform the agreement or subconsultant agreement consistent with normal industry practice; and
- (4) The ability to otherwise meet all the proposal specifications.

C. *A/E Advisory Board* is the board established for the purpose of supporting and promoting the Small Business Enterprise Architecture & Engineering Program.

D. *Bonding Assistance* may include providing assistance in preparing and completing bond packages as well as providing funding to be used for bonding purposes.

E. *Business day* means a regular weekday (Monday through Friday) normally starting at 8:00 a.m. and finishing at 5:00 p.m., excluding Saturdays and Sundays and excluding all legal holidays recognized by the Federal, State or Miami-Dade County governments.

F. *CBE-A/E Objective* means the objective of assuring that not less than 10 percent of the County's total annual expenditures for professional architectural, landscape architectural, engineering, and surveying and mapping services, are expended with CBE-A/Es certified under this section, for projects specific and multiple project contracts. The foregoing CBE-A/E objective may be increased by subsequent resolution of the Board of County Commissioners, adopted after recommendation for an increase by the County Mayor or designee.

G. *CBE-A/E Program* is the Small Business Enterprise Program for the Architectural, Engineering, Landscape Architectural, Surveying and Mapping Professionals.

H. *Calendar day* means a twenty-four (24) hour period covering all days of the week (Monday through Sunday including all holidays), starting at 12:00 a.m. and finishing at 11:59 p.m.

I. *Certificate of Assurance* means the departmental form submitted with proposal documents whereby the Proposer acknowledges: (i) Small Business Enterprise ("SBE") measures apply to the project; and (ii) Proposer will submit its list of certified SBEs to satisfy the measures via Miami-Dade County's web-based system, within the specified time frame.

J. *Commercially useful function* means contractual responsibility for the execution of a distinct element of the work of an agreement by a firm and the carrying out of the contractual responsibilities by actually performing, managing, and supervising the work involved. Acting as a broker is not considered a commercially useful function. The determination of whether an activity is a commercially useful function shall include:

- 1 The evaluation of the amount of work subconsulted;
- 2 Normal industry practices;



**SMALL BUSINESS DEVELOPMENT  
CERTIFICATE OF ASSURANCE(COA)  
SMALL BUSINESS PARTICIPATION ON COUNTY PROJECTS**

This completed form must be submitted with bid documents by all bidders/proposers on a Miami-Dade County project with Small Business Enterprise ("SBE") program measure(s).

Project No.: \_\_\_\_\_ Project Title: \_\_\_\_\_  
Bidder/Proposer: \_\_\_\_\_ FEIN: \_\_\_\_\_  
Address: \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_  
Phone Number: \_\_\_\_\_ Email address: \_\_\_\_\_

The bidder/proposer is committed to meeting the established measure(s) assigned to this project: \_\_\_\_\_% SBE-A/E, \_\_\_\_\_% SBE-Cons, N Trade Set-aside SBE-Cons, \_\_\_\_\_% SBE-G, and/or \_\_\_\_\_% SBE-S.  
(For Goals, write in the percentage. For Set-aside, put Y or N.)

\_\_\_\_\_  
Print Prime Bidder's Name & Title

\_\_\_\_\_  
Prime Bidder's Signature

\_\_\_\_\_  
Date

To satisfy the requirements for **Step 1 - Bid Submittal and Compliance with Small Business Enterprise Program(s)**, the following are required:

1. Acknowledgement of the SBE-Architecture & Engineering, SBE-Construction, SBE-Good and/or SBE-Service (non-construction, architecture or engineering) measure(s) established for this project via this Certificate of Assurance.
2. Agree to engage in the solicitation of approved Miami-Dade County Small Business Enterprise firm(s) to achieve the established measure(s) as indicated in the Project Documents (specifications).
3. Agree to select and submit the names of the certified SBEs to satisfy the measures via Miami-Dade County's Business Management Workforce System ("BMWS") within the specified timeframe, upon email notification from the Small Business Development ("SBD") Division or BMWS.

To satisfy the requirements for **Step 2 - Bid Evaluation and Recommendation for Award**, please attest that:

I understand that my company will be deemed non-compliant and not eligible for award if I fail to (1) submit this form with my bid/proposal documents and/or (2) submit my company's Utilization Plan which shall list all certified Miami-Dade County Small Business Enterprise firms whom will be subcontracted with to satisfy the project's established SBE measure(s) via BMWS, within the specified timeframe, upon email notification from SBD or BMWS. Each SBE subcontractor, subconsultant, and/or sub-vendor will also be required to confirm its contractual relationship via BMWS, within the specified timeframe, for final approval by SBD.

STATE OF FLORIDA

COUNTY OF MIAMI-DADE

BEFORE ME, an officer duly authorized to administer oaths and take acknowledgement, personally appeared \_\_\_\_\_, who being first sworn deposes and affirms that the provided information statements are true and correct to the best of his/her knowledge information and belief.

Signature of Owner

SWORN TO and subscribed before me this day \_\_\_\_\_ of \_\_\_\_\_, 20 \_\_\_\_\_

---

Signature of Notary Public-State of Florida

My Commission Expires:

## **WAIVERS AND MODIFICATIONS TO THE DESIGN GUIDELINES MANUAL**

### **PURPOSE**

To provide direction on how to request a waiver or permanent modification to the MDAD Design Guidelines Manual.

### **DEFINITIONS**

**Design Guideline:** Requirement specified in the MDAD Design Guidelines Manual.

**Design Guideline Modification:** MDAD authorization to permanently change a specified design requirement or to add or delete a requirement.

**Design Guideline Waiver:** MDAD authorization to waive a specified design requirement in the design of a specific project.

### **DESIGN GUIDELINE MODIFICATIONS (PERMANENT)**

1. Any MDAD staff member, business partner, or consultant who identifies a compelling need to change a Design Guideline may initiate a request for a Design Guideline modification by preparing and signing a Request for Waiver or Permanent Modification of a Design Guideline (Facilities Division Form K\_FD3-027). The initiator shall provide an explanation and justification for the proposed modification and check the "Permanent Modification" box on the form. When a very detailed modification is being requested, the form shall be supplemented with a copy of the affected section(s) revised to show the desired change (deleted text lined through and new text in bold italics).
2. The initiator shall meet with the MDAD Facilities Division Design Guidelines Coordinator to determine which MDAD divisions and external organizations need to review and recommend approval of the modification request and shall ensure these entities are listed in the Recommendation for Approval section of the form. In all cases MDAD Facilities Management & Engineering shall be the first reviewing organization.
3. The initiator shall hand deliver the completed form and any attachments to the MDAD Facilities Management & Engineering Division's designated staff person for review and recommendation to the Assistant Aviation Director, Facilities Management & Engineering. If in agreement, the Assistant Aviation Director, Facilities Management shall recommend the modification by signing and dating the request and returning it to the initiator.

If the Assistant Aviation Director, Facilities Management & Engineering determines that the request is not appropriate, he/she shall return the unsigned request to the initiator with an explanation in the remarks field of the form.

4. After recommendation of the Assistant Aviation Director, Facilities Management & Engineering, the initiator shall hand deliver the forms and any attachments to each of the authorized representatives of designated divisions and organizations determined in Step 2 for review. If in agreement, each representative shall recommend the modification by signing and dating the request and returning it to the initiator.

If any reviewer determines that the request is not appropriate, he/she shall return the unsigned request to the initiator with an explanation in the remarks field of the form. The initiator shall then communicate the failure of the request process to the project manager and other participants who had previously recommended approval.

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5. When all necessary organizations have reviewed the modification request and have indicated their recommendation that the modification be approved by signing the form, the initiator shall hand deliver the form and any attachments to the Design Guidelines Coordinator, who shall initial the request and forward it to the Assistant Aviation Director, Facilities Development.
6. The Assistant Aviation Director, Facilities Development, shall review the request and its justification and, if in agreement, approve the request by signing and dating it and returning it to the Design Guidelines Coordinator.

If the Assistant Aviation Director, Facilities Development determines that the request is not appropriate, he/she shall return the unsigned request to the initiator with an explanation in the remarks field of the form. The initiator shall then communicate the failure of the request process to the project manager and the other participants who had recommended approval. Approval or disapproval by the Assistant Aviation Director, Facilities Development shall be final.

7. The Design Guidelines Coordinator shall forward copies of an approved request to the initiator, all MDAD divisions and other organizations that have participated in the review process, MDAD Facilities Development Design Chief, MDAD Facilities Maintenance Engineering Chief and the Consulting Engineer. The Design Guidelines Coordinator shall retain the original.
8. The Design Review Chief shall incorporate the approved permanent modification into the Design Guidelines. The Chief shall use the revised section(s) provided electronically by the initiator. If the change is documented only in the summary information contained in the Request for Waiver or Permanent Modification of a Design Guideline, the Design Review Chief shall create the necessary text to incorporate the approved modification into the Design Guidelines.
9. The Design Review Chief shall distribute the permanent modification by
  - Sending revised sections, Cover pages and Tables of Contents via email to MDAD Information Systems for installation on the MDAD Website and Intranet;
  - Notifying users for whom we have email addresses that the revisions have been placed on the Website and Intranet;
  - Sending notices and hardcopy or diskettes to in house holders of same and to those few users who have been given authorization to have those formats; and
  - Any other methods that may from time to time be approved by the Design Guidelines Coordinator.

#### **DESIGN GUIDELINE WAIVERS (PROJECT-SPECIFIC)**

10. If a tenant, business partner, or A/E identifies a compelling need to deviate from a Design Guideline requirement in the design of a project component, he/she shall prepare and sign a Request for Waiver or Permanent Modification of a Design Guideline (Facilities Division Form FD3-027) providing an explanation and justification for the proposed waiver. The "Waiver" box shall be checked.

Requests for waivers of requirements shall be judged against a clear:

- Satisfaction of project requirements.
- Necessity to preserve continuity of design intent.
- Compatibility with existing, future, adjacent, or corollary contexts.
- Current and continuing availability and feasibility of the means to fulfill the Design Guidelines Manual requirement for which the waiver is requested.
- Life cycle cost benefit to MDAD by value analysis in accordance with Miami Dade County Ordinance 94-73, Section 2-10.4.

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- Minimization of sole sources which limit competition.
- Durability and ease of maintenance.
- Overall strength of the justification presented.
- Absence of any compelling need not to grant a waiver.

Initial ignorance and later discovery of the applicability of a Design Guideline requirement to a project, neglect to incorporate it initially, or failure of the project book or awarded professional services agreement to mention the requirement do not constitute justification of a waiver.

11. The initiator shall submit the completed form and any supporting documentation to the project's manager.
12. The project manager shall review the request and consider the strength of the justifications presented by the initiator and whether there are compelling reasons NOT to grant a waiver. If the project manager decides to recommend the waiver, he/she shall sign and date the waiver request and hand deliver it to the MDAD Facilities Division Design Guidelines Coordinator.

If the project manager decides not to recommend the waiver, he/she shall return the unsigned request to the initiator with an explanation for the determination.

13. The project manager shall meet with the Design Guidelines Coordinator to determine which MDAD divisions and external organizations will need to review and recommend the waiver request. In all cases MDAD Facilities Management shall be the first reviewing organization.
14. The project manager shall hand deliver the completed form and any attachments to the MDAD Facilities Management & Engineering Division's designated staff person for review and recommendation to the Assistant Aviation Director, Facilities Management & Engineering. If in agreement, the Assistant Aviation Director, Facilities Management & Engineering shall recommend the modification by signing and dating the request and returning it to the project manager.

If the Assistant Aviation Director, Facilities Management & Engineering determines that the request is not appropriate, he/she shall return the unsigned request to the Design Guidelines Coordinator with an explanation in the remarks field of the form. The Design Guidelines Coordinator shall then communicate the failure of the request process to the initiator and the project manager and initiator.

15. After recommendation of the Assistant Aviation Director, Facilities Management & Engineering, the project manager shall hand carry the forms and any attachments to each of the authorized representatives of designated divisions and organizations determined in Step 15 for review. If in agreement, each representative shall recommend the waiver by signing and dating the waiver request and returning it to the project manager.

If any reviewer determines that the waiver is not appropriate, he/she shall return the unsigned waiver request to the project manager with an explanation in the remarks field of the form. The project manager shall then communicate the failure of the request process to the initiator and the other participants who had previously recommended approval.

16. When all necessary organizations have reviewed the waiver request and have indicated their recommendation that the waiver be granted by signing the form, the Design Guidelines Coordinator shall initial the request and forward it to the Assistant Aviation Director, Facilities Development.
17. The Assistant Aviation Director, Facilities Development shall review the request and its justification and, if in agreement, approve the request by signing and dating it and returning it to the Design Guidelines Coordinator.

If the Assistant Aviation Director, Facilities Development determines that the request is not appropriate, he/she shall return the unsigned request to the Design Guidelines Coordinator with an explanation in

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the remarks field of the form. The Design Guidelines Coordinator shall then communicate the failure of the request process to the project manager, the initiator and other participants. Approval or disapproval by the Assistant Aviation Director, Facilities Development, shall be final.

18. The Design Guidelines Coordinator shall forward copies of the approved waiver to the initiator, the project manager, all MDAD divisions and other organizations that have participated in the review process, MDAD Facilities Development Design Chief, Facilities Maintenance Engineering Chief, and the Consulting Engineer. The Design Guidelines Coordinator shall retain the original.
19. An approved waiver shall apply only to the single specified requirement on the specified project for which it was requested. It shall not be considered to provide a waiver to any other requirement or project or to effect a permanent change to the Design Guidelines Manual.

### **ASSOCIATED FORM**

Facilities Division Form K\_FD3-027 Request for Waiver or Permanent Modification of a Design Guideline

**REQUEST FOR WAIVER or PERMANENT MODIFICATION OF A DESIGN GUIDELINE**Approval of a **waiver** applies only to a single project.TO Abel A. Oporto, P.E., DESIGN GUIDELINES COORDINATOR DATE: \_\_\_\_\_

REQUESTED BY \_\_\_\_\_ SIGNATURE \_\_\_\_\_

AFFILIATION \_\_\_\_\_ TITLE \_\_\_\_\_

☐ It is requested that MDAD approve a waiver of its Design Guidelines for the indicated item on the specified project:

PROJECT NAME \_\_\_\_\_ PROJECT No. \_\_\_\_\_

☐ It is requested that MDAD approve a permanent modification of its Design Guidelines for the indicated item.

MDAD DESIGN GUIDELINES MANUAL SECTION NO: \_\_\_\_\_

SECTION NAME: \_\_\_\_\_

|                                                                 |  |
|-----------------------------------------------------------------|--|
| CURRENT REQUIREMENT:<br>(use additional sheets as necessary)    |  |
| PROPOSED MODIFICATION:<br>(use additional sheets as necessary)  |  |
| JUSTIFICATION:<br>(use additional sheets as necessary)          |  |
| CAUSE: (waivers, only):<br>(use additional sheets as necessary) |  |
| COST IMPACT:<br>(use additional sheets as necessary)            |  |

**RECOMMENDED**

|                                           |                      |           |       |
|-------------------------------------------|----------------------|-----------|-------|
| Project Manager (Waivers only)            | _____                | _____     | _____ |
|                                           | Print Name           | Signature | Date  |
| Other MDAD Division                       | _____                | _____     | _____ |
| Design Guidelines Coordinator             | Abel A. Oporto, P.E. | _____     | _____ |
|                                           | Print Name and Title | Signature | Date  |
| Chief Facilities Initiation & Engineering | Lydia M. Salas, P.E. | _____     | _____ |
|                                           | Print Name           | Signature | Date  |
| Director, Facilities Management           | Ana M. Finol, P.E.   | _____     | _____ |
|                                           | Print Name           | Signature | Date  |

**APPROVED**

|           |                                                                                      |                    |                                                                                 |
|-----------|--------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------|
| Signature | _____                                                                                | Signature and Date | _____                                                                           |
|           | Ralph Cutié<br>Assistant Aviation Director,<br>Facilities Management and Engineering |                    | Pedro Hernandez, P.E.<br>Assistant Aviation Director,<br>Facilities Development |

\* Insert additional division or organization name(s) as appropriate for the specific aspect to be permanently modified, including the Aviation Life Safety Bureau of the Miami-Dade County Fire Department for Life Safety issues. (Additional rows may be added to the table.)

REMARKS \_\_\_\_\_

Distribution after Processing: Initiator, Design Guidelines Coordinator (original), Facilities Management, other affected MDAD Divisions, MDAD Facilities Development Design Chief, HNTB, Document Control

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## Maintenance Engineering In-House Design Review Request For TAC Projects



**To:** Lydia M. Salas, P.E. / Chief **Date:** \_\_\_\_\_  
**Through:** Grisel Agha-Long / Admin. Officer 2 **Project No.:** \_\_\_\_\_  
**From:** \_\_\_\_\_ **Project Name:** \_\_\_\_\_  
**E-mail:** \_\_\_\_\_ **Airport/Bldg. No.:** \_\_\_\_\_  
**Tenant's**  
**A/E Firm:** \_\_\_\_\_ **MDAD Prop. Mgr.:** \_\_\_\_\_

### PLEASE INDICATE:

|                                                 |                                       |                                       |                     |
|-------------------------------------------------|---------------------------------------|---------------------------------------|---------------------|
| <b>Project Type:</b>                            | <b>TAC-N</b> <input type="checkbox"/> | <b>TAC-R</b> <input type="checkbox"/> |                     |
| <b>Construction Document Development Phase:</b> | <b>75%</b> <input type="checkbox"/>   | <b>100%</b> <input type="checkbox"/>  | <b>OTHER:</b> _____ |
| <b>Documents Transmitted for Review:</b>        | <b>PLANS</b> <input type="checkbox"/> | <b>SPECS</b> <input type="checkbox"/> | <b>OTHER:</b> _____ |
| <b>Submitted to HNTB for Review:</b>            | <b>YES</b> <input type="checkbox"/>   | <b>NO</b> <input type="checkbox"/>    | <b>DATE:</b> _____  |

### Maintenance Engineering Section Reviewers: (Sign / Date)

|                 |                              |               |
|-----------------|------------------------------|---------------|
| A. Oporto       | (Structural Engineering)     | _____ / _____ |
| G. Lara         | (Electrical Engineering)     | _____ / _____ |
| J. L. Rodriguez | (Mechanical Engineering)     | _____ / _____ |
| V. Mendez       | (Civil Engineering / F.O.G.) | _____ / _____ |
|                 | (Architectural)              | _____ / _____ |

**Comments Due Date:** \_\_\_\_\_

The Department has established a two-week Design Review period for discipline reviews. Our Section will respond via e-mail with review comments to the TAC PM. If there are no review comments, our Section will advise the TAC PM.

TAC PM is required to e-mail all review comments to the Tenant's Architect/Engineer and copy MDAD Property Manager.

The Design Review is deemed complete after revised plans incorporating review comments have been submitted to the MDAD TAC PM and the Design Review – 100% Back Check form is signed by the reviewer.

**Comments:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**DESIGN REVIEW TRANSMITTAL****M**

PROJECT NAME: \_\_\_\_\_

AIRPORT/FACILITY: \_\_\_\_\_ PROJECT No.: \_\_\_\_\_

REVIEW PHASE: \_\_\_\_\_ PLANS DATE: \_\_\_\_\_

A/E FIRM: \_\_\_\_\_ PROJECT MANAGER: \_\_\_\_\_

A/E REP: \_\_\_\_\_ TRANSMITTAL DATE: \_\_\_\_\_

PROJECT TYPE: ☐ CIP ☐ NTD ☐ MMC ☐ TAC-R ☐ TAC-N

The listed documents are being sent for review. Review to be completed by \_\_\_\_\_. Comments may be made in hard copy or electronically on the "Document Review Comment Form" (Form FD3-011) or the "MDAD Quality Assessment Review Comments" form. Comments should be forwarded to the Project Manager at \_\_\_\_\_.

| ITEM | DATED | DOCUMENTS TRANSMITTED<br>(DRAWINGS SHALL BE BOUND IN SEPARATE PACKAGES BY DISCIPLINE) |
|------|-------|---------------------------------------------------------------------------------------|
|      |       |                                                                                       |
|      |       |                                                                                       |
|      |       |                                                                                       |

**DISTRIBUTION: [ADD OR DELETE ORGANIZATIONS PER PROJECT REQUIREMENTS]:**

| ORGANIZATIONS                                | REVIEWERS                                                                            | COPIES SENT * | PLANS **  | SPECS | OTHER          |
|----------------------------------------------|--------------------------------------------------------------------------------------|---------------|-----------|-------|----------------|
| U.S. Bureau of Customs and Border Protection | L. Dye                                                                               | Doc Control   |           |       |                |
| US Public Health Service                     | TBD                                                                                  | Doc Control   |           |       |                |
| HNTB                                         | V. Guilbaud                                                                          | 3             | Half size | Yes   | Cost Est       |
| Miami-Dade RER***                            | F. Tain, P.E. (Permit Submittal)                                                     | 2             | Full size | ***   |                |
| Miami-Dade RER***                            | F. Tain, P.E.                                                                        | Doc Control   |           |       |                |
| Miami-Dade DERM                              | G. Sitomer                                                                           | Doc Control   |           |       |                |
| MDAD Airside Operations                      | L. Craven                                                                            | Doc Control   |           |       |                |
| MDAD Civil & Environmental Eng               | G. Leal / E. Beltre, P.E.                                                            | 1             | Half size | Yes   |                |
| MDAD Information Systems/Telecom             | M. Jenkins, J. Lira, M. Perez                                                        | Doc Control   |           |       |                |
| MDAD Interiors Section                       | M. Diaz-Todaro (Interiors Work only)                                                 | 1             | Half size | Yes   |                |
| MDAD Landside Facilities                     | B. Carlo (Landside and Ground Transportation only)                                   | 1             | Half size |       |                |
| MDAD Life Safety Bureau                      | R. Rodriguez (sent to: MDFR-ALSB@miamidade.gov)                                      | 1             | Full size | Yes   |                |
| MDAD Maintenance                             | A. Finol, P.E., J. Bunting, J. Valderrama, J. Sariego, J. Paan                       | 2             | Half size | Yes   |                |
| MDAD Marketing & Trade Dev                   | C. Mangos (Cargo)                                                                    | Doc Control   |           |       |                |
| MDAD Minority Affairs                        | A. Ragin                                                                             | 1             |           | Yes   | Cost Est       |
| MDAD Planning                                | J. Ramos, RA                                                                         | 1             | Half size |       |                |
| MDAD Properties/Comm Ops                     | M. Raymond, (Properties) R. Diaz (Commercial Operations), S. Abate (Concessions)     | 1             | Half size |       |                |
| MDAD Risk Management Ins.                    | M. Cockfield (to forward to ISD RM for Global Risk Consultants review, if necessary) | 1             |           | Yes   |                |
| MDAD Safety and Security Ops                 | S. Feeney                                                                            | Doc Control   |           |       |                |
| MDAD Technical Support                       | D. Cinti (100%)                                                                      | 1             | Half size |       |                |
| MDAD Terminal Operations                     | R. Philloura (Terminal Areas)                                                        | 1             | Half size | Yes   |                |
| Project Manager                              |                                                                                      | 1             | Half size | Yes   | All Other Docs |
| Document Control                             |                                                                                      | 1             | Half size | Yes   | All Other Docs |

\* DOCUMENT CONTROL indicates that no documents are being sent to the listed reviewer.

\*\* See MDAD Design Guidelines Manual Volume A, Section 010007.5.N and Design/Construction Document Reviews FD3-015-P.

\*\*\* Building Department requires specifications only if Life Safety permitting data are not provided on plans.

cc (transmittal only): Asst. Dir. Facilities Development, Asst. Dir. Facilities Management & Engineering, Asst. Dir. Operations, Asst. Dir. Public Safety & Security, Maintenance & Eng., Chief, Facilities Development Design Chief, Facilities Development Construction Chief, Architect/Engineer, Document Control

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### TAC-N Design Review – 100% C.D. Backcheck

**Project Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**Airport Facility:** \_\_\_\_\_ **Project No.:** \_\_\_\_\_  
**Project Manager:** \_\_\_\_\_ **Plans Date:** \_\_\_\_\_

If you had comments and those comments have been addressed and incorporated into the 100% revised final drawings, please sign your name and date. Your signature is required in order for TAC-N PM to issue the Letter of Concurrence to the tenant. The Letter of Concurrence enables the tenant to obtain a building permit.

| REVIEWERS                                                                                           | SIGNATURES | DATE  |
|-----------------------------------------------------------------------------------------------------|------------|-------|
| Juan Paan<br><b>Construction &amp; Contracts</b><br><b>(305) 876-7035</b>                           | _____      | _____ |
| Victor Guilbaud<br><b>HNTB</b><br><b>(305) 551-8100</b>                                             | _____      | _____ |
| Ernie Beltre, P.E./Gustavo Leal<br><b>Civil &amp; Environ. Engineering</b><br><b>(305) 869-1299</b> | _____      | _____ |
| Maurice Jenkins<br><b>ISD/Telecommunications</b><br><b>(305) 876-7868</b>                           | _____      | _____ |
| Dan Agostino/Albert Reyes<br><b>Operations</b><br><b>(305) 876-7081 / 305-876-7279</b>              | _____      | _____ |
| Barbara Carlo<br><b>Landside Operations</b><br><b>(305) 876-7086</b>                                | _____      | _____ |
| Lonny Craven<br><b>Airside Operations</b><br><b>(305) 876-7482</b>                                  | _____      | _____ |
| Lydia Salas, P.E.<br><b>Maintenance &amp; Engineering</b><br><b>(305) 876-8318</b>                  | _____      | _____ |
| Jose Ramos, RA<br><b>Facilities Dev. &amp; Planning</b><br><b>(305) 876-8080</b>                    | _____      | _____ |
| Mark Hatfield/Susan Feeney<br><b>Security &amp; Safety</b><br><b>(305) 876-7188</b>                 | _____      | _____ |

#### MIAMI INTERNATIONAL AIRPORT

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\_\_\_\_\_

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\_\_\_\_\_

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**Division:** \_\_\_\_\_  
**Phone:** \_\_\_\_\_

\_\_\_\_\_

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## TAC-N Concurrence Letter

[Date]

[Business Partner Contact]

[Business Partner]

[Address]

**Re: [Project Name]**  
**MDAD Project No. [-----]**

Dear [Business Partner Contact]:

The Miami-Dade Aviation Department (MDAD) has reviewed the request for your construction project referenced above. This letter serves as MDAD's concurrence to proceed with the Miami-Dade Department of Regulatory and Economic Resources (R.E.R.) plans processing review of your project's drawings and specifications as applicable for the issuance of a Building Permit.

The plans review process by the Miami-Dade R.E.R. is a required process for the issuance of the Building Permit. It is a separate and independent process from the MDAD review.

All work shall be done in accordance with the MDAD Design Guidelines, as applicable (available through the Internet at [www.miami-airport.com](http://www.miami-airport.com)), applicable FAA requirements (including safety regulations, height restrictions, Maintenance of Traffic (MOT), phasing and coordination, etc.), and all applicable codes. Your contractor shall obtain all necessary permits and call for all mandatory inspections.

It is the tenant's responsibility to submit a copy of the Building Permit, Certificate of Occupancy/Completion, inspections, and a set of record drawings (as-built drawings) to the attention of [Project Manager's Name], MDAD TAC-N Project Manager, Aviation Department upon completion of the project.

The tenant must bring a copy of this letter to the Miami-Dade R.E.R., Miami International Airport, Building 3030, 1<sup>st</sup> Floor, when applying for a Building Permit. This letter is valid for a period of sixty (60) calendar days from the date of issue. If application for a Building Permit has not been made within this time, this letter will be void and a new letter will have to be issued. It is the intent that construction will commence within sixty (60) calendar days from the date of issue of the Building Permit.

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[Business Partner Contact]  
[Business Partner]  
[Date]  
Page 2

---

[Project Manager's name] and/or a consultant representing MDAD will be observing the construction of this project. He/She will contact you for the following information:

- Name and phone number of the persons involved in the project
- Project Schedule
- Contractor name and copies of the insurance
- Copy of Building Permit
- Copy of Certificate of Occupancy/Completion
- Copy of signed-off Building Permit
- Copy of Record Contract Documents (As-Builts)
- Comply with all SBD goals and wage requirements, as applicable

Please provide your consultant and contractor with a copy of the attachment which gives additional information regarding Building Permit application and project insurance requirements.

Sincerely,

---

TAC-N Project Manager  
Facilities Development

( ) Insurance ( ) Required ( ) Not Required  
( ) Payment and Performance Bond ( ) Required ( ) Not Required

Reviewed by Risk Management, Milford Cockfield

See affixed approval stamp in attached.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Attachment:

cc:  
Pedro Hernandez, P.E.  
N. Pantoja Kirkland, P.E.  
Ralph Cutié  
J. Ramos, RA  
[MDAD Property Manager]  
V. Gilbaud, HNTB  
Project File

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**BUILDING PERMIT APPLICATION CHECKLIST**

PROJECT NAME \_\_\_\_\_

PROJECT  
No. \_\_\_\_\_

The Project Manager shall place checks on this form to indicate that listed activities have been performed or is not applicable (NA) and shall then sign off on this checklist and attach it to the Permit Request Memorandum when it is sent for authorizing signature.

Done NA

(Click box to check or uncheck)

- |     |                                                                                                                                                                                                                                                                                                                                       |                          |                          |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| 1.  | Miami-Dade County Building Department Permit Application has been completed, identifying the type of Permit sought. The project name and number, name of project manager, cost of construction, square footage, description of the work to be performed, and other pertinent information has been provided in the permit application. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.  | Review to be performed simultaneously by Miami-Dade R.E.R., Zoning, DERM, and Fire Department and 8 complete sets of plans are attached. Follow R.E.R guidelines for uploading documents in the plans tracking, New Application and Rework Application.                                                                               | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.  | Standard review and 2 complete sets of plans are attached.                                                                                                                                                                                                                                                                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.  | Applicable Building Department forms and supplemental documentation (e.g., threshold inspection forms, geotechnical reports, etc.) as required and pertinent for the permit sought are attached to the application.                                                                                                                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5.  | Each drawing sheet is identified with a title box including all information required by MDAD Design Guideline 010007, Section 5.                                                                                                                                                                                                      | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.  | Fire protection plans and hydraulic calculations have been prepared by the Engineer of Record.                                                                                                                                                                                                                                        | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.  | Miami-Dade County Product Control Approval has been provided on all elements requiring it.                                                                                                                                                                                                                                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 8.  | Miami-Dade R.E.R Department of Environmental Resource Management (DERM) approval has been obtained on sewer, storm system, and landscape elements. (Note: Landscape approval is not typically available until DERM has met with the (sub)contractor.) DERM letters showing approval numbers attached.                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 9.  | Miami-Dade Department of Health Engineering Section approval has been obtained on water main extensions. Letter granting permit and showing permit number attached.                                                                                                                                                                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | All existing conditions have been investigated and items requiring upgrading to meet current code requirements have been addressed.                                                                                                                                                                                                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. | Any addition that exceeds the replacement value of the original building by more than twenty-five percent (25%) has been identified.                                                                                                                                                                                                  | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. | All Life-Safety information is on or attached to the plans, including Authority Having Jurisdiction interpretations, inspection schedules, and any approved performance-based alternative life safety measures per the Life Safety Master Plan for MIA Terminal Complex.                                                              | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. | Current version of the Florida Building Code has been used in preparation of drawings and specifications.                                                                                                                                                                                                                             | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. | Building Permit Application Checklist (Facilities Division Form FD3-018C) prepared.                                                                                                                                                                                                                                                   | <input type="checkbox"/> | <input type="checkbox"/> |

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- |                                                                                                                                                                                                      | Done                     | NA                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| 15. Expedited review requested. Facilities Division Form FD3-019 prepared by the Project Manager and signed by an MDAD Chief.                                                                        | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Certificate of Compliance with Miami-Dade County Administrative Order No. 10-10.                                                                                                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Letter of Concurrence is signed by the TAC-N PM.                                                                                                                                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. Letter of Concurrence, permit application, and plans delivered to the RER Permit Clerk in the Building Department Satellite Office at Miami International Airport in Building 3030, First Floor. | <input type="checkbox"/> | <input type="checkbox"/> |

The activities checked above have all been completed.

|                                 |              |       |
|---------------------------------|--------------|-------|
| _____                           | _____        | _____ |
| Tenant Representative Signature | Printed Name | Date  |

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---

**TAC-N PROJECT CLOSEOUT MEMORANDUM**

---

**Date:** \_\_\_\_\_

**To:** Sarah Abate  
Division Director, Airport Concessions and Business Development  
-or-  
Michele Raymond  
Division Director, Real Estate Management Development  
-or-  
Robert Warren  
Assistant Director, Business Retention & Development

**From:** \_\_\_\_\_  
Project Manager

**Subject:** TAC (N or R) Project Closeout

\_\_\_\_\_  
Project Name and Project Number

---

The tenant for subject project was advised 30 days ago of the required documents to be submitted in order for MDAD to close out this project, required documents are:

- Signed off Building Permit Inspection within twenty-four hours of issue
- Certificate of Occupancy (CO) or Certificate of Completion (CC) within twenty-four hours of issue
- Warranties, service manuals, maintenance instructions, etc. and training for all equipment that will be maintained by MDAD
- Provide copies of final releases or acceptable Consent(s) of Surety for all contractors, subcontractors and suppliers involved with the project.
- One copy of As-Built drawings (record drawings) on bond paper, signed and sealed by the tenant's A/E of Record and two digital copies as CAD and/or Revit files within thirty (30) days from issue of the Certificate of Occupancy or Certificate of Completion.

To date, the required documents have not been received.

Please contact the tenant and request these documents be submitted within the next 30 days. If the Lease allows any penalties for not submitting the documents, you should advise the Tenant.

We need this issue resolved within the next 30 days, so that we may proceed to close out this project.

cc: Felix Pereira, RA  
Enrique Perez, P.E.  
Lydia Salas, P.E.  
Grisel Agha-Long

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**Exhibit D**

**Standards of Construction**



## Miami-Dade Aviation Department Building Information Modeling Standards Manual

Developed by:



HNTB Corporation  
The HNTB Companies  
Infrastructure Solutions



[www.pdbmconsulting.com](http://www.pdbmconsulting.com)  
[info@pdbmconsulting.com](mailto:info@pdbmconsulting.com)

November 2020  
v1

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## **1.0 GENERAL REQUIREMENTS**

The Miami-Dade Aviation Department BIM Standards (MDAD BIM Standards) describes the processes and procedures required for the preparation and submission of BIM models throughout the entire project life cycle. Waiver of any of these provisions is subject to the Division's discretion, to be provided in writing prior to the start of the relevant project phase.

### **1.1 INTRODUCTION**

BIM is the current industry standard that is changing the way planning, design, construction, and facility operations are conducted. BIM uses database-driven computer-based simulations to study and validate project design and construction before projects are built. This process will leverage the information so it can be easily integrated into an Enterprise Asset Management System to reduce the overall life-cycle cost.

BIM is far more than a 3D model; BIM is an entire business approach that integrates multiple streams of project-related information. The Traditional Project Delivery (TPD) approach has been "document-centric and linear," and CAD systems serve the TPD system well. However, TPD/CAD only addresses the capital construction side of a facility, whereas BIM moves users away from TPD, and toward an Integrated Project Delivery (IPD) "data-centric and collaborative" approach, which supports the facility life cycle operation. This results in a more effective, holistic approach for the design, estimating, scheduling, and construction phases.

Below is an illustration of the CAD and BIM approaches.

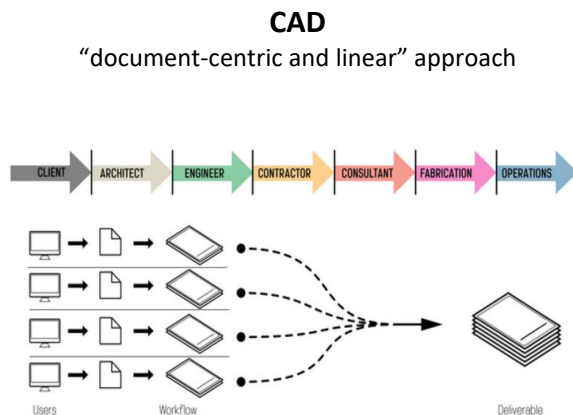


Image 1.1

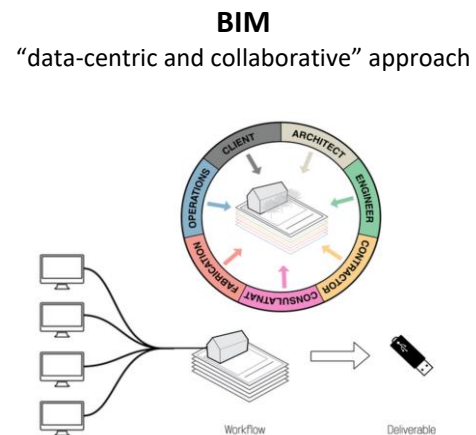


Image 1.2

BIM breaks down traditional barriers to interdisciplinary collaboration, and facilitates off-site prefabrication, improves design options, and reduces risk, rework, schedule slippage, and cost.

BIM also allows for the automation of processes such as space planning, building analysis, coordination, quantity takeoffs, integration of construction phasing through project scheduling software, collection of commissioning information, and as-built conditions, among many others.

## 1.2 APPLICABILITY

The Miami-Dade Aviation Department is introducing the use of BIM technology so all project stakeholders, both internal and external, can produce, use, release, and receive information in a consistent format. This introduction of BIM will maintain an efficient exchange of data among disciplines, ensure the compatibility of each discipline’s model(s) within the different project phases, capture commissioning information in a consistent way, and will streamline future uses such as an Enterprise Asset Management Program.

The Miami-Dade Aviation Department does not intend to apply BIM on all projects; this effort will be rolled out on a project-by-project basis and based on a standardized ranking system.

### **NOTE**

MDAD Technical Support Unit is currently developing a criteria for the selection of BIM projects

### 1.3 LIFE CYCLE WORKFLOW AND BIM USES

The MDAD BIM Standards considers all phases of the project life cycle by taking into account the data needs of each phase. The current version of the Manual, however, focuses on the Design and Documentation and the Construction and Management phases.

Image 1.3 shows the different phases of BIM within the project life cycle, each of which has different BIM uses. Some BIM uses overlap from phase to phase.

Using BIM in a collaborative environment along with having BIM Standards that define clear workflows, processes, procedures, and best practices will allow all stakeholders (architects, engineers, contract managers, builders, and owners) to have an efficient tool to plan, design, build and manage their projects.

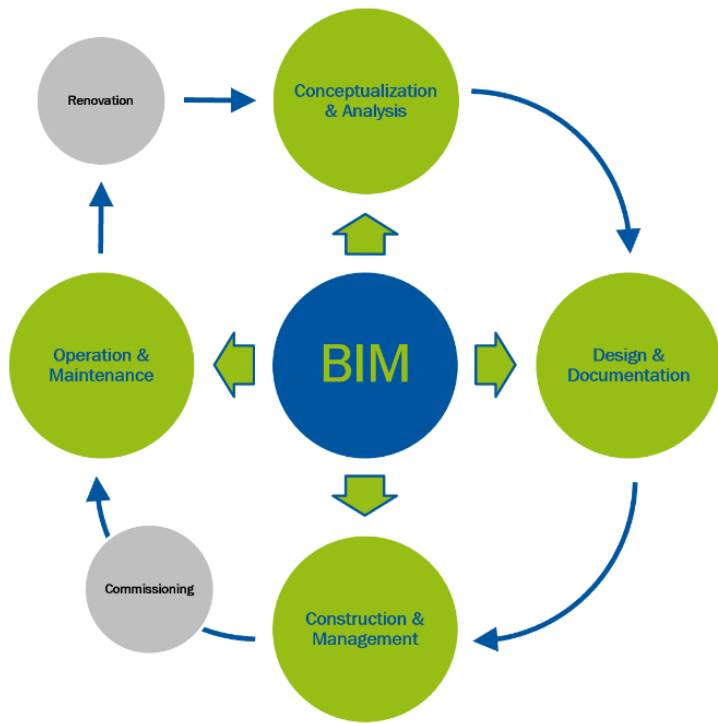


Image 1.3

Image 1.4 illustrates the different BIM uses within the project life cycle and how some of them overlap from phase to phase.

| USE                               | CONCEPTUALIZATION & ANALYSIS |  |  | DESIGN & DOCUMENTATION |  |  | CONSTRUCTION & MANAGEMENT |  |  | OPERATION & MAINTENANCE |  |  |
|-----------------------------------|------------------------------|--|--|------------------------|--|--|---------------------------|--|--|-------------------------|--|--|
| Existing Condition                |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Site Analysis                     |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Programming                       |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Planning                          |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Energy Analysis                   |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Preliminary Cost Assessment       |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Design Authoring                  |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Design Review                     |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Sustainability Evaluation         |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Engineering Analysis              |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Code Validation                   |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| 3D Coordination                   |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Quantity Take-Offs                |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Cost Estimation                   |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Construction Planning             |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Construction Scheduling           |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Constructability Analysis         |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Progress Control                  |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Cost Tracking                     |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Digital Fabrication               |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| As-Built Model                    |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Record Model                      |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Preventive Maintenance Scheduling |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Asset Management                  |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Space Management                  |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Building Systems Analysis         |                              |  |  |                        |  |  |                           |  |  |                         |  |  |
| Disaster Planning and Response    |                              |  |  |                        |  |  |                           |  |  |                         |  |  |

Image 1.4

As the image above illustrates, the following BIM uses may be applicable, per phase:

- Conceptualization & Analysis
  - Existing Condition
  - Site Analysis
  - Programming
  - Planning
  - Energy Analysis
  - Preliminary Cost Assessment
- Design & Documentation
  - Design Authoring
  - Design Review
  - Sustainability Evaluation

- Engineering Analysis
  - Structural
  - Lighting
  - Mechanical
  - Energy
  - Other
- Code Validation
- 3D Coordination
- Quantity Take-Offs
- Cost Estimation
- Construction & Management
  - 3D Coordination
  - Quantity Take-Offs
  - Cost Estimation
  - Construction Planning
  - Construction Scheduling
  - Constructability Analysis
  - Progress Control
  - Cost Tracking
  - Digital Fabrication
  - As-Built Model
- Operation & Maintenance
  - As-Built Model
  - Record Model
  - Preventive Maintenance Scheduling
  - Asset Management
  - Space Management
  - Building Systems Analysis
  - Disaster Planning and Response

## 1.4 ACCESSING MDAD - BIM STANDARDS

The Miami-Dade Aviation Department BIM Standards consist of this Manual and a series of Support Files that have been organized in the following sections:

- Manual
- Support Files

Image 1.5 illustrates how the Miami-Dade Aviation Department BIM Standards Manual and Support Files have been organized.

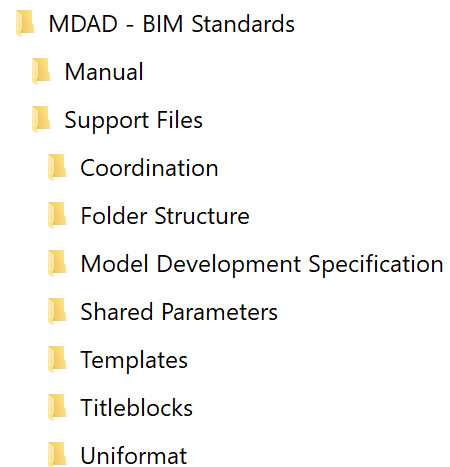


Image 1.5

### 1.4.1 MANUAL

The first component of the MDAD - BIM Standards is this Manual, which has been organized using a “modular” approach and includes the following sections:

- General Requirements
- Design & Documentation
- Construction & Management

The General Requirements Section shall be applicable to all BIM Projects, regardless of the phase, while the other two sections are specific to the phase being executed and are to be used in conjunction with the General Requirements Section.

---

For instance, if BIM is a requirement for the Design phase, the General Requirements section, and the Design & Documentation section will apply.

The Manual includes processes, procedures, workflows, and best practices that allow the Miami-Dade Aviation Department to develop BIM projects consistently.

The MDAD BIM Standards Manual can be found under the following folder:

**\\MDAD - BIM Standards\Manual\**

#### **1.4.2 SUPPORT FILES**

The second component of the MDAD - BIM Standards is a series of Support Files aligned with the Manual that includes a standardized folder structure, templates, configuration, and support files that allow the Miami-Dade Aviation Department to develop BIM projects consistently.

The MDAD BIM Standards Support Files can be found under the following folder:

**\\MDAD - BIM Standards\Support Files\**

---

## 1.5 PLATFORM

The Miami-Dade Aviation Department BIM practice is comprised of several Autodesk products and will generally use terminology and references that are unique to the Autodesk-based software applications.

MDAD's BIM practice include the following Autodesk products:

- Revit
- Civil 3D
- Navisworks

### **NOTE**

Based on the backward compatibility issues of the Revit-based applications, please make sure to check which version of the software is currently being used by the Miami-Dade Aviation Department.

The use of BIM software other than Revit for authoring purposes (Model development) is subject to the approval of the Miami-Dade Aviation Department. Where non-Autodesk BIM software is used for the development of models, models shall be converted to Revit where technology allows. In the absence of translation capabilities, models shall be submitted as Industry Foundation Classes (IFC) files in addition to the native format used.

## 1.6 PROJECT ORGANIZATION

The MDAD BIM Standards provide a structure for the organization of BIM projects. The primary goal of this structure is to improve coordination among all functional groups within all Departments/Divisions and external agents such as consultants and contractors. Additionally, a structured repository allows developing BIM projects in a way that will facilitate the further use of electronic information during and beyond the project life cycle.

### 1.6.1 AIRPORT CODES

All MDAD's BIM projects have been organized by Facility using the following Airport Codes as described in the Table 1.1.

| AIRPORT CODE                                 |      |
|----------------------------------------------|------|
| NAME                                         | CODE |
| Miami International Airport                  | MIA  |
| Miami-Opa Locka Executive Airport            | OPF  |
| Miami Executive Airport                      | TMB  |
| Miami Homestead General Aviation Airport     | X51  |
| Dade-Collier Training and Transition Airport | TNT  |

Table 1.1

### 1.6.2 ZONING AREA

In the meantime, the Zoning Area category applies only for Miami International Airport, but as the other airports expand, they can use the structure described in Table 1.2 to organize their projects.

| ZONING AREA                        |      |
|------------------------------------|------|
| NAME                               | CODE |
| Terminal Area & Support Facilities | TA   |
| West Side Cargo Facilities         | WS   |
| North Side Facilities              | NS   |
| Employee Parking                   | EP   |
| Intermodal Facilities              | IF   |

Table 1.2

### 1.6.3 BUILDING NUMBER

Each Airport is organized by Building Numbers. Refer to the Technical Support Group for the latest version of the Property Location Plan which includes a list of the Building Number (old and new), tenant, and type of occupancy along with Bridges and Fuel Farm information.

#### 1.6.4 PROJECT IDENTIFICATION NUMBER

The Project Identification Number (PIN) is a unique identifier assigned to all MDAD projects. Every facility has been divided into project folders using a six-digit alphanumeric PIN Number.

The Project Identification Number consists of a combination of letters and numbers (ex. EZ916A), and projects that are related or are a part/phase of a larger project or program are assigned the same main number with sequential last letter (ex. EZ916A, EZ916B, EZ916C, etc.)

The Project Identification Number is created upon request by the Project Manager and is issued upon approval by the Aviation Planning Division.

Image 1.6 illustrates this concept using project number EZ916A at Miami-Opa Locka Executive Airport.

OPF  
EZ916A

Image 1.6

#### 1.6.5 DISCIPLINE NAMES

All Miami-Dade Aviation Department BIM projects are divided among fourteen (14) Disciplines as follows.

- Architectural
- Civil
- Electrical
- Equipment
- Fire Protection
- Interiors
- Landscape
- Life Safety
- Mechanical
- Plumbing
- Signage
- Structural
- Survey
- Telecommunications

Image 1.7 illustrates this concept at Miami-Opa Locka Executive Airport, for a project with a PIN number of EZ916A.

Each project folder includes an \_SM sub-folder that stores the Site Model file, which holds the project coordinate system and controls the location, rotation, and elevation of all Revit-based Models.

- OPF
- EZ916A
  - \_SM
  - Architectural
  - Civil
  - Electrical
  - Equipment
  - Fire Protection
  - Interiors
  - Landscape
  - Life Safety
  - Mechanical
  - Plumbing
  - Signage
  - Structural
  - Survey
  - Telecommunications

Image 1.7

## 1.7 CONFIDENTIAL INFORMATION

Confidential Projects contain Sensitive Security Information (SSI) or highly sensitive information that, if lost or made public, could seriously damage or compromise the Miami-Dade Aviation Department and/or public safety and security.

For that reason, if portions and/or aspects of a project are considered Confidential or SSI, they will need to be handled differently than standard contract drawings.

Please coordinate with the Miami-Dade Aviation Department on how to manage Confidential Information.

---

## **1.8 MODEL GENERALITIES**

This section establishes the technical criteria required to develop a project using BIM technology for the Miami-Dade Aviation Department.

### **1.8.1 REQUIREMENTS**

All active Models (BIMs) shall be developed in accordance with the current version of the MDAD BIM Standards. Unless otherwise approved by the Miami-Dade Aviation Department, BIMs shall be compatible with the version of Revit and Navisworks (including all third-party applications) currently in use by MDAD, regardless of when the project began.

### **1.8.2 OWNERSHIP**

The Miami-Dade Aviation Department owns all the information contained within the BIM Models, including all inventions, ideas, designs, and methods within. This also includes Revit families (system-based and component-based) and any other content submitted as part of the Model.

Consultants and contractors using the Models are granted temporary use of it for the duration of the project. After project completion, they are required to return all copies of the BIM Models to MDAD.

### **1.8.3 QUALITY**

The Miami-Dade Aviation Department requires all Models to be developed using object-based elements only (such as Columns, Beams, Walls, Doors, Windows, Ducts, Pipes, Conduits, etc.), along with their associated parametric information. This will streamline the BIM processes from design through construction and operation/maintenance.

### **1.8.4 SINGLE SOURCE OF TRUTH**

The Miami-Dade Aviation Department requires all BIM models to be the Single Source of Truth (SSoT) for all project related information. All 2D drawings, 3D views, quantities, analysis, reports, etc., shall be stored within and generated from the BIM Model.

---

---

A parallel CAD effort to generate any project related information (including drawings) is not accepted by the Miami-Dade Aviation Department. The sole exception is civil work, which may be developed in AutoCAD Civil 3D.

#### **1.8.5 BI-DIRECTIONAL ASSOCIATIVITY**

The Miami-Dade Aviation Department supports the use of third-party applications outside the Autodesk family of products, under the condition that the integrity of the model (such as geometry, location, and attributes) is entirely preserved when the information is brought back into the native format and remains accessible by the default software solution already in possession of MDAD.

#### **1.8.6 LEVEL OF DEVELOPMENT**

The Level of Development (LoD) describes both the level of completeness and accuracy to which a Model is developed. In reality, the LoD is rarely the same for all the elements contained in a Model. In addition, the Level of Detail for a single element will likely change depending on the project phase. For those reasons, the general descriptions that follow are of informative nature only.

Model authors shall verify the actual LoD requirements for the elements they are each responsible for. The BIM Forum LoD Specification Guide 2019 has been used as a reference when defining the Miami-Dade Aviation Department's minimum LoD requirements.

### 1.8.6.1 LoD-100

LoD-100 models are compared to the traditional planning stage, includes elements such as masses, and are used for preliminary studies only. Analysis based on the element's location and orientation can be performed, and quantities based on overall area and volume can be obtained.

Image 1.8 shows the building elements as masses and their associated area and volume.

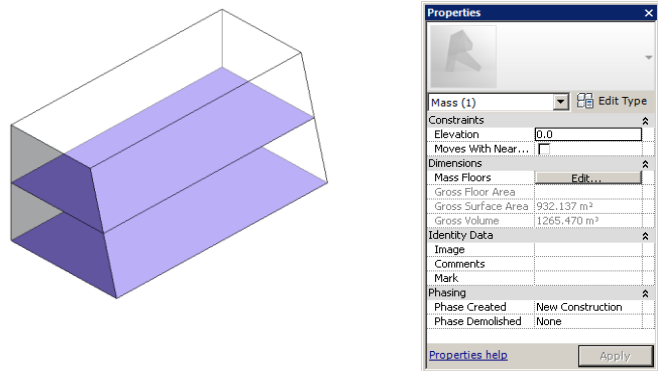


Image 1.8

### 1.8.6.2 LoD-200

LoD-200 models are compared to the traditional Conceptual and/or Schematic Design approach and include elements in which masses have been replaced with generic components. Analysis based on overall systems can be performed. Approximate quantities based on more specific areas and volumes can be obtained.

Image 1.9 shows the different building elements as generic components. The major characteristics of components are their thickness and width, allowing quick takeoffs.

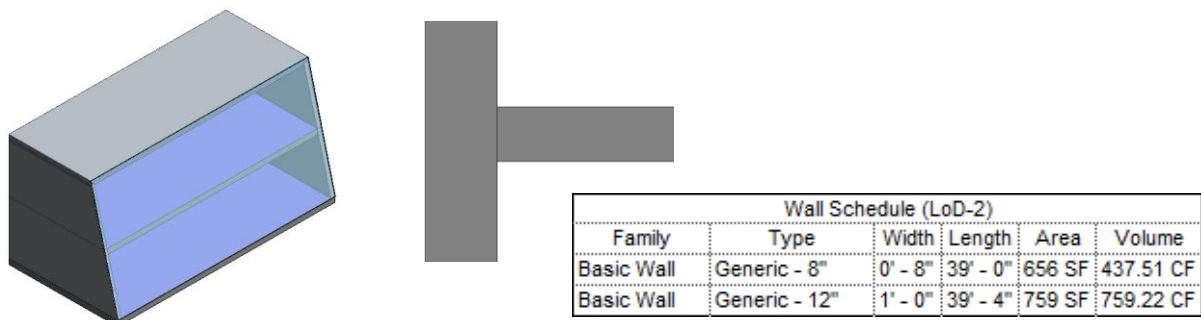


Image 1.9

### 1.8.6.3 LoD-300

LoD-300 models are compared to the traditional contract drawings approach and include elements in which generic components have been replaced with fully defined assemblies. This LoD includes elements that are accurate in terms of size, shape, location, quantity, and orientation. Analysis based on specific systems can be performed, and quantities based on materials can be obtained.

Image 1.10 below show the different building elements as fully defined assemblies, where the different components have well-defined characteristics; therefore, a more specific takeoff can be performed.

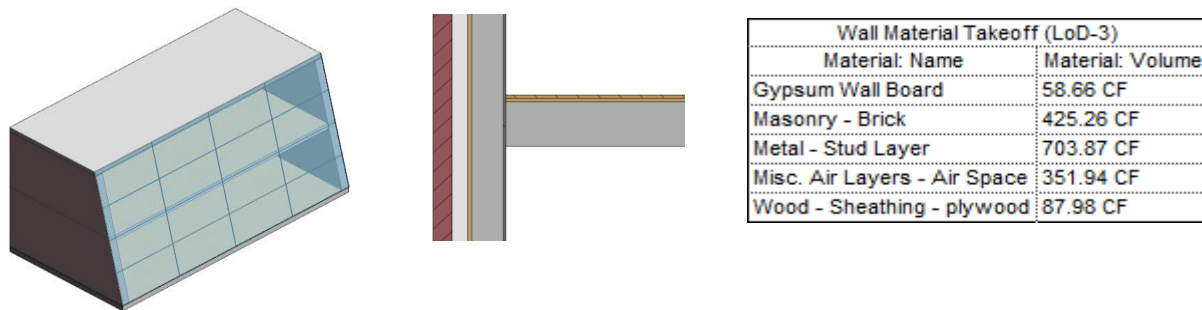


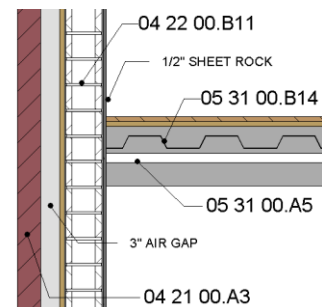
Image 1.10

### 1.8.6.4 LoD-400

LoD-400 models are compared to the traditional shop drawing approach and represent the project as constructed. They include elements that are accurate in terms of size, shape, location, quantity, and orientation with complete fabrication, assembly, and detailed information. At this level, the model may also have non-geometric (2D) information such as text, dimensions, notes, 2D details, etc.

Image 1.11 shows a detail where 2D information has been placed on top of the 3D model on a section view.

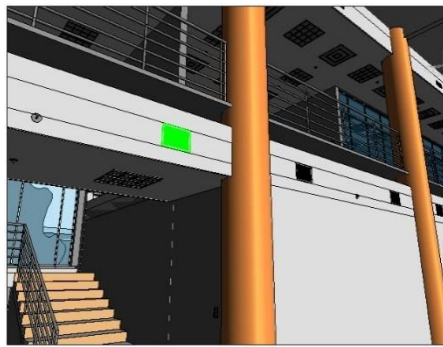
Image 1.11



### 1.8.6.5 LoD-500

LoD-500 models are compared to traditional as-built drawings. At this level, the model may also have custom and physical attributes, included as parameters, to the geometric shape used for operation and maintenance.

Image 1.12 shows a model element that has been associated with a database and contains inspection information.



| element_ID | revit_ID | last_inspected | next_inspection_due_date | priority | condition |
|------------|----------|----------------|--------------------------|----------|-----------|
| 132457383  | 659832   | 6/2/2008       | 9/11/2011                | medium   | good      |
| 132426790  | 679334   | 6/2/2008       | 9/11/2011                | medium   | good      |
| 132447782  | 650023   | 6/2/2008       | 9/11/2011                | medium   | good      |
| 131276003  | 672363   | 4/20/2006      | 1/24/2011                | high     | fair      |
| 132786522  | 650933   | 6/2/2008       | 9/11/2011                | medium   | good      |
| 131028862  | 667681   | 6/2/2008       | 9/11/2011                | medium   | good      |
| 132290073  | 679911   | 6/2/2008       | 9/11/2011                | medium   | excellent |
| 131189520  | 640087   | 6/2/2008       | 9/11/2011                | medium   | good      |

Image 1.12

## 1.8.7 MODEL DEVELOPMENT SPECIFICATION

The MDS is a critical project document that is required to be defined in the early stages of all MDAD Projects. This document helps communicate the LoD requirements across phases or project milestones and ensures the needs and expectations of MDAD regarding BIM deliverables are met in time and fashion.

Annex B contains a table with critical definitions for each Category and sub-Category, based on the CS Unifomat 2016 Code and Project milestones. Following a matrix format, the MDS specifies the minimum LoD required per project Milestone for each element Category, as well as the responsible party for authoring the element. It may also include the attributes that each Authoring Agent is responsible for capturing.

This specification is unique to each project and an essential part of the BIM Execution Plan (BEP). As such, it shall be developed by the Lead Consultant or Contractor as applicable and submitted to MDAD for approval.

MDAD provides a template for this purpose as part of the support files, and can be found in the following folder:

**\\MDAD - BIM Standards\Support Files\Model Development Specification\**

For roles and responsibilities regarding the MDS, refer to the corresponding sections on the Design and Documentation or Construction and Management sections of this Manual.

### **1.8.8 MEASUREMENT OF PROGRESS**

Progress will be measured based on the Model Development Specification (MDS) defined for each project as part of the BIM Execution Plan.

### **1.8.9 GRANULARITY**

Modeling every component in a structure is not a common practice supported by the MDAD - BIM Standards. Therefore, the BIM Models may not represent the complete design intent and may not indicate all elements required for construction. As a rule of thumb, objects smaller than 1" in size do not need to be modeled.

### **1.8.10 TOLERANCES AND CLEARANCES**

All BIM models shall be created on a scale of 1:1 and shall contain the appropriate dimensions for construction.

The maximum tolerance shall be  $\pm 1/8"$  unless otherwise specified within the BIM Execution Plan developed for each project.

### **1.8.11 DISCREPANCIES**

When conflicts exist between the contents of a BIM Model and the Contract Documents, the information contained within the Contract Documents will prevail and will be considered as definitive.

#### **1.8.12 EXCLUSIONS**

Elements excluded from the BIM model will be specified within the BIM Project Execution Plan on a project-by-project basis.

## 1.9 PROJECT FOLDER STRUCTURE

Each Project Folder Structure will have two possible configurations, depending on if the Project is actively on the Design & Documentation or in the Construction & Management Phase.

The former shall be explained first as the Construction configuration is very similar with minor differences, which are outlined in [Section 1.9.3 – Construction & Management Phase](#).

### 1.9.1 SITE MODEL

Each Project Folder Structure contains an SM sub-folder that stores the Site Model file, which holds the project coordinate system and controls the location, rotation, and elevation of all Revit-based Models.

### 1.9.2 DESIGN & DOCUMENTATION PHASE

Image 1.13 shows the standardized folder structure in a tree configuration using the Architectural discipline as an example

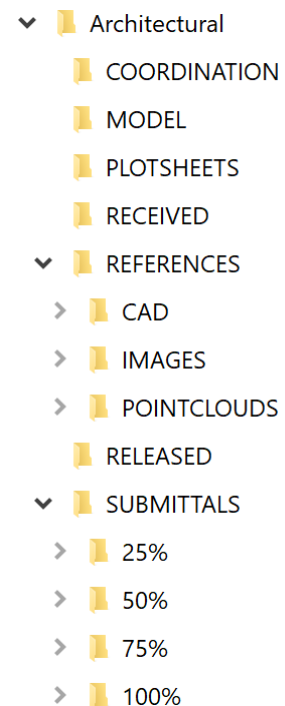


Image 1.13

#### 1.9.2.1 DISCIPLINE FOLDER

For a Design & Documentation Project, the Folder Structure contains discipline-specific directories used to share files among all project stakeholders.

##### Rules of the DISCIPLINE folder:

- Additional sub-folders shall not be created in the Discipline folder.
- The Discipline folder has read-write permissions assigned to the owning Discipline only.

Every Discipline Folder is subdivided into the following:

##### 1.9.2.1.1 COORDINATION FOLDER

This folder stores Navisworks files (NWF, NWC, NWD) and is used to stored coordination and/or clash detection reports in formats such as HTML and/or PDF.

##### Rules of the COORDINATION folder:

- Additional sub-folders may be created in the COORDINATION folder. Refer to [Section 1.10.1 – Folder Naming Convention](#).
- The COORDINATION folder provides read-write access to the owning discipline.
- No other discipline has access to the COORDINATION folder.
- The COORDINATION folder will be archived with the project.

##### 1.9.2.1.2 MODEL FOLDER

This folder stores the Central Revit Model file.

##### Rules of the MODEL folder:

- Additional sub-folders shall not be created in the MODEL folder.
- The MODEL folder allows read-write access to the owning discipline.
- The MODEL folder allows read-only access to all other disciplines.
- The MODEL folder will be archived with the project.

##### 1.9.2.1.3 PLOTSHEETS FOLDER

This folder stores PDF files assembled as sheets for printing created from Revit and shall always contain the latest and most recent version of the PDF files, which shall be created and saved in this folder every time a submittal milestone is reached.

PDF files shall contain consecutive sheets grouped by Drawing Type and by Series.

Rules of the PLOTSHEETS folder:

- Additional sub-folders shall not be created in the PLOTSHEETS folder.
- The PLOTSHEETS folder allows read-write access to the owning discipline.
- The PLOTSHEETS folder allows read-only access to all other disciplines.
- The PLOTSHEETS folder will be archived with the project.

1.9.2.1.4 RECEIVED FOLDER

This folder contains a dated archive of design information received from outside sources. This folder is a record intended to identify exactly when and what information was provided by a consultant.

Rules of the RECEIVED folder:

- Additional sub-folders may be created in the RECEIVED folder. (Refer to [Section 1.10.1 – Folder Naming Convention](#)).
- The RECEIVED folder provides read-write access to the owning discipline.
- No other discipline has access to the RECEIVED folder.
- The RECEIVED folder will not be archived with the project.

1.9.2.1.5 REFERENCES FOLDER

This folder stores information from multiple sources that will be referenced to the model; this includes, but is not limited to, drawings, details, images, tables, point clouds, etc.

Rules of the REFERENCES folder:

- Additional sub-folders may be created in the REFERENCES folder. (Refer to [Section 1.10.1 – Folder Naming Convention](#)).
- The REFERENCES folder provides read-write access to the owning discipline.
- No other discipline has access to the REFERENCES folder.
- The REFERENCES folder will be archived with the project

#### 1.9.2.1.5.1CAD Folder

This folder stores CAD information in DWG format that will be referenced (not linked) to the model and will become part of the Contract Document.

- Additional sub-folders may be created in the CAD folder (Refer to [Section 1.10.1 – Folder Naming Convention](#)).
- The CAD folder provides read-write access to the owning discipline.
- No other discipline has access to the CAD folder.
- The CAD folder will not be archived with the project.

#### 1.9.2.1.5.2IMAGES Folder

This folder stores raster information in multiple formats that will be referenced to the model and will become part of the Contract Document.

Rules of the IMAGES folder:

- Additional sub-folders may be created in the IMAGES folder (Refer to [Section 1.10.1 – Folder Naming Convention](#)).
- The IMAGES folder provides read-write access to the owning discipline.
- No other discipline has access to the IMAGES folder.
- The IMAGES folder will not be archived with the project.

#### 1.9.2.1.5.3POINTCLOUDS Folder

This folder stores Point Cloud information in multiple formats that will be referenced to the model to reflect their current conditions.

Rules of the POINTCLOUDS folder:

- Additional sub-folders may be created in the POINTCLOUDS folder (Refer to [Section 1.10.1 – Folder Naming Convention](#)).
- The POINTCLOUDS folder provides read-write access to the owning discipline.
- No other discipline has access to the POINTCLOUDS folder.
- The POINTCLOUDS folder will not be archived with the project.

#### 1.9.2.1.6 RELEASED FOLDER

This folder contains a dated archive of design information provided to outside sources. This folder is a record intended to identify exactly when and what information was provided to a consultant.

Rules of the RELEASED folder:

- Additional sub-folders may be created in the RELEASED folder. (Refer to [Section 1.10.1 – Folder Naming Convention](#)).
- The RELEASED folder provides read-write access to the owning discipline.
- No other discipline has access to the RELEASED folder.
- The RELEASED folder will be archived with the project.

#### 1.9.2.1.7 SUBMITTALS FOLDER

This folder is to be used for storing project information as it appears at each milestone of the project. While other folders contain working information that changes throughout the life of the project, the SUBMITTALS folder preserves the state of those files at the moment of each milestone defined for the Project (e.g. 30% Design Development, 60%, etc.)

Rules of the SUBMITTALS folder:

- Additional sub-folders may be created at the root level of the SUBMITTALS folder. One folder is required for each milestone, as shown by sample Image 1.14.
- The SUBMITTALS folder allows read-write access to the owning discipline.
- The SUBMITTALS folder allows read-only access to all other disciplines.
- All sub-folders under the SUBMITTALS folder will be archived with the project.

Image 1.14 shows the standardized sub-folders under SUBMITTALS, where Each discipline Design Project Manager is responsible for archiving their discipline-specific MODEL, PLOTSHEETS, and REFERENCES folders into one of the pre-defined milestones.

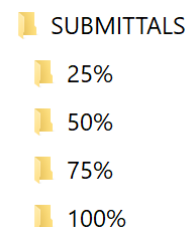


Image 1.14

### 1.9.3 CONSTRUCTION & MANAGEMENT PHASE

Unlike the approach used in the Design & Documentation phase, where all project information was organized within different Discipline folders, when developing projects in the Construction & Management phase, all project information is organized by the type of information regardless of their Discipline.

Image 1.15 shows the standard directory configuration for Construction & Management projects. Folder definitions and rules previously stated are applicable to this structure as well.

- OPF
- EZ916A
  - \_SM
  - COORDINATION
  - MODEL
  - PLOTSHEETS
  - RECEIVED
  - REFERENCES
  - RELEASED
  - SUBMITTALS

Image 1.15

## 1.10 NAMING CONVENTIONS

### 1.10.1 FOLDER NAMING CONVENTION

If sub-folders are needed and permitted by the folder's rules, they can be created under the predefined project folder structure and shall follow the Folder Naming Convention.

The folders shall be named using the following format:

 YYYYMMDD\_Description

**Example:**

The following folder was created on May 06, 2020, and stores pictures from a site visit.

\20200506\_Pictures

Table 1.3 describes the nomenclature used to define the Folder Naming Convention.

| FOLDER NAMING CONVENTION |                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM                     | DESCRIPTION                                                                                                                                                     |
| YYYY                     | Four-digit Year                                                                                                                                                 |
| MM                       | Two-digit Month                                                                                                                                                 |
| DD                       | Two-digit Day                                                                                                                                                   |
| Description (optional)   | Brief User Description (up to 24 characters)<br>The following characters shall not be used as part of the description<br>@ \$ % ^ & < > / \ " ' : ; ? *   , ' . |

Table 1.3

### 1.10.2 DISCIPLINE CODES

All Miami-Dade Aviation Department Disciplines have been assigned a Discipline Code as described in the Table 1.4.

| DISCIPLINE         |      |
|--------------------|------|
| NAME               | CODE |
| Architectural      | AR   |
| Civil              | CV   |
| Electrical         | EL   |
| Equipment          | EQ   |
| Fire Protection    | FP   |
| Interiors          | IN   |
| Landscape          | LA   |
| Life Safety        | LS   |
| Mechanical         | ME   |
| Plumbing           | PL   |
| Signage            | SN   |
| Structural         | ST   |
| Survey             | SU   |
| Telecommunications | TC   |

Table 1.4

### 1.10.3 FILE NAMING CONVENTION

All electronic files shall be named following the File Naming Convention, including Revit files (RVT), Plotsheet files (PDF), Revit Family files (RFA), Navisworks files (NWF, NWC, NWD), AutoCAD files (DWG), Image files (JPG), Animation files (AVI), Microsoft Office files (DOC, XLS, HTML, TXT) among others.

#### 1.10.3.1 MODEL FILES

The Model file shall be named beginning with the Discipline Code, followed by the MDAD Unique Project ID Number (PIN Number), a dash, and the Model Type”. If, by any chance, the filename needs to change during the life of the project, all disciplines will need to rename their files accordingly.

The filename shall take the form of

DPIN–MT.rvt

Table 1.5 describes the nomenclature used to name Model Files.

| MODEL FILES |                                                                               |
|-------------|-------------------------------------------------------------------------------|
| ITEM        | DESCRIPTION                                                                   |
| D           | Discipline Code<br>Refer to <a href="#">Section 1.10.2 - Discipline Codes</a> |
| PIN         | Project Identification Number                                                 |
| MT          | Model Type Code<br>Refer to Table 1.6 below                                   |

Table 1.5

On larger projects, a discipline’s work may be divided into several models. Very often, this happens for large projects where file size would otherwise be an issue. For example, the Architectural Discipline may split a large building design into a Core model and a separate Shell model. Another situation in which a single Discipline may need to create multiple separate Models is when the design work is divided among multiple consultants. For example, Mechanical designs might be handled by two different specialty consultants, one handling Supply and Return Systems, while the other is handling Exhaust System, in which case each will need to create their own model with a unique file name.

Pay special attention to the Model Types table below for guidance on how to differentiate one file name from another in these situations. If a Discipline only has one Model file, the “3D” Type Code shall be used.

Table 1.6 describes the Model Type Codes used to name Model Files.

| MODEL TYPE CODES       |                                                          |
|------------------------|----------------------------------------------------------|
| ITEM                   | DESCRIPTION                                              |
| <b>GENERAL</b>         |                                                          |
| 3D                     | 3D Model (to be used if there are not additional Models) |
| EC                     | Existing Conditions Model                                |
| SC                     | Site Context Model                                       |
| <b>ARCHITECTURAL</b>   |                                                          |
| CR                     | Core                                                     |
| SH                     | Shell                                                    |
| IN                     | Interiors                                                |
| <b>ELECTRICAL</b>      |                                                          |
| CP                     | Corrosion Protection                                     |
| EL                     | Electronics                                              |
| LI                     | Lighting                                                 |
| PO                     | Power                                                    |
| <b>FIRE PROTECTION</b> |                                                          |
| DR                     | Dry                                                      |
| GS                     | Gas                                                      |
| WT                     | Wet                                                      |
| <b>LANDSCAPE</b>       |                                                          |
| IR                     | Irrigation                                               |
| PL                     | Planting                                                 |
| <b>MECHANICAL</b>      |                                                          |
| BH                     | Baggage Handling                                         |
| TR                     | Horizontal and Vertical Transportation                   |
| ME                     | HVAC                                                     |
| <b>PLUMBING</b>        |                                                          |

|                   |                |
|-------------------|----------------|
| DR                | Drainage       |
| PL                | Plumbing       |
| ST                | Storm          |
| <b>STRUCTURAL</b> |                |
| CO                | Concrete       |
| ST                | Steel          |
| SB                | Substructure   |
| SP                | Superstructure |
| WO                | Wood           |

Table 1.6

#### **NOTE**

Other 2-character Model Type Codes may be approved by the Miami-Dade Aviation Department as meets the project's needs.

As an example, the Architectural Group is saving their Revit Model to a network drive with a PIN Number of EZ916A, the file shall be named as follows:

AREZ916A-3Drvt

Another example; the Electrical Group is saving their Revit Model to a network drive with a PIN Number of EZ916A, where they will have two separate models, one for Power and another one for Lighting, the files shall be named as follows:

ELEZ916A-PO.rvt  
ELEZ916A-LI.rvt

#### **1.10.3.2 PDF FILES**

Plotsheet files shall be generated out of the Revit model in PDF format. PDF Files shall be created in full-size (24"x 36"). All text in PDFs shall be text-searchable, including all notes, labels, model areas, and titleblocks.

Two sets of PDF Files shall be submitted:

- Individual sheet PDFs
- Combined set PDFs, to match the volume breakdown for a hardcopy, if relevant

#### 1.10.3.2.1 INDIVIDUAL SHEET PDFs

For individual sheet PDFs, the filename shall take the form of:

PIN-DT###.pdf

Table 1.7 describes the nomenclature used to name PDF Files.

| INDIVIDUAL SHEET PDF FILES |                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------|
| ITEM                       | DESCRIPTION                                                                                   |
| PIN                        | Project Identification Number                                                                 |
| DT                         | Drawing Type Code<br>Refer to <a href="#">Section 1.10.4 – Drawing Type Naming Convention</a> |
| ###                        | Sheet Number                                                                                  |

Table 1.7

Table 1.8 describes several examples of naming for individual PDF sheet files. The example project has an MDAD PIN Number EZ916A.

| INDIVIDUAL SHEET PDF FILE EXAMPLES |                   |
|------------------------------------|-------------------|
| SHEET NUMBER                       | FILENAME          |
| A2                                 | EZ916A -A002.pdf  |
| A20                                | EZ916A -A020.pdf  |
| A200                               | EZ916A -A200.pdf  |
| A2.1                               | EZ916A -A2.1.pdf  |
| A2.12                              | EZ916A -A2.12.pdf |

Table 1.8

#### 1.10.3.2.2 MULTI-SHEET PDFs

For multi-sheet PDFs, the filename shall take the form of:

PIN-DT##f\_##l.pdf

Table 1.9 describes the nomenclature used to name PDF Files.

| INDIVIDUAL SHEET PDF FILES |                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------|
| ITEM                       | DESCRIPTION                                                                                   |
| PIN                        | Project Identification Number                                                                 |
| DT                         | Drawing Type Code<br>Refer to <a href="#">Section 1.10.4 – Drawing Type Naming Convention</a> |
| ##f_##l                    | First Sheet to the last Sheet of the set                                                      |

Table 1.9

Table 1.10 describes several examples of naming for multi-sheet PDF files. The example project has an MDAD PIN Number EZ916A.

| INDIVIDUAL SHEET PDF FILE EXAMPLES |                         |
|------------------------------------|-------------------------|
| SHEET NUMBER                       | FILENAME                |
| A1 to A11                          | EZ916A -A001_A011.pdf   |
| A20 to A72                         | EZ916A -A020_A072.pdf   |
| A200 to A 223                      | EZ916A -A200_A223.pdf   |
| A2.1 to A2.9                       | EZ916A -A2.1_A2.9.pdf   |
| A2.12 to A 2.17                    | EZ916A -A2.12_A2.17.pdf |

Table 1.10

#### 1.10.3.2.3 COMBINED PDF FILES

Combined PDF files shall represent a complete drawing set. Files may be broken down by volume if applicable. Volumes are to match those that would be printed in hardcopy.

For combined sheet PDFs, the filename shall take the form of

PIN-DTvol.pdf

Table 1.11 describes the nomenclature used to name Combined PDF Files.

| PDF FILES |                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------|
| ITEM      | DESCRIPTION                                                                                   |
| PIN       | Project Identification Number                                                                 |
| DT        | Drawing Type Code<br>Refer to <a href="#">Section 1.10.4 – Drawing Type Naming Convention</a> |
| vol       | Volume number (if applicable) in the format of: x of y                                        |

Table 1.11

As an example, a set of combined drawings is created for a project with MDAD PIN Number of EZ916A, and named as follows:

EZ916A.pdf

If the set had two volumes, they would be named as follows:

EZ916A-1of2.pdf

EZ916A-2of2.pdf

Combined PDFs shall have bookmarks for each sheet, with a bookmark title to match the sheet number.

Provide hyperlinks between call-outs and sheets referenced.

### 1.10.3.3 POINT CLOUD FILES

Point Cloud files linked to the Revit Model shall be provided in ReCap and named after PIN Number, a dash, and a User Description.

The filename shall take the form of

PIN-Description.rcp

Table 1.12 describes the nomenclature used to name Point Cloud Files.

| POINT CLOUD FILES |                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM              | DESCRIPTION                                                                                                                                                                                  |
| PIN               | Project Identification Number                                                                                                                                                                |
| Description       | <p>Brief User Description<br/>(up to 24 characters)</p> <p>The following characters shall not be used as part of the description</p> <p>@ \$ % ^ &amp; &lt; &gt; / \ " ' : ; ? *   , ' ,</p> |

Table 1.12

As an example, Point Cloud for a project with PIN Number of 2011007 shall be named as follows:

EZ916A-Main Entrance.rcp

#### **NOTE**

A ReCap RCP file is a Project file that references additional point cloud information in raw format (RCS files). All station information, such as 3D photogrammetry and support files could be named at the user's discretion.

#### 1.10.3.4 IMAGE FILES

Image files linked to or created from the Revit Model shall be named beginning with the Discipline Code, followed by the PIN Number, a dash, an optional Sequence Number, a dash, and an optional User Description. If Image files are referenced into the Revit Model, and by any chance, the filename needs to change during the life of the project, all disciplines will need to rename their files accordingly.

The filename shall take the form of  
DPIN –SN–Description.jpg

Table 1.13 describes the nomenclature used to name Image Files.

| IMAGE FILES               |                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM                      | DESCRIPTION                                                                                                                                                     |
| D                         | Discipline Code<br>Refer to <a href="#">Section 1.10.2 – Discipline Codes</a>                                                                                   |
| PIN                       | Project Identification Number                                                                                                                                   |
| SN<br>(Optional)          | Sequence Number<br>(Two-digit consecutive numbers starting with 01)                                                                                             |
| Description<br>(Optional) | Brief User Description (up to 24 characters)<br>The following characters shall not be used as part of the description<br>@ \$ % ^ & < > / \ " ' : ; ? *   , ' , |

Table 1.13

As an example, the Architectural Group is linking two image files into their Revit BIM Model for a project with PIN Number of EZ916A; the files shall be named as follows:

EZ916A-01-Signage A1.jpg  
EZ916A-02-Signage A2.jpg

#### 1.10.3.5 NAVISWORKS FILES

Navisworks files created from the Revit Model shall be named beginning with the Discipline Code, followed by the PIN Number, a dash, and a Model Type. If by any chance, the filename needs to change during the life of the project, all disciplines will need to rename their files accordingly.

The filename shall take the form of

DPIN–MT.format

Table 1.14 describes the nomenclature used to name Navisworks Files.

| NAVISWORKS FILES |                                                                                      |
|------------------|--------------------------------------------------------------------------------------|
| ITEM             | DESCRIPTION                                                                          |
| D                | Discipline Code<br>Refer to <a href="#">Section 1.10.2 – Discipline Codes</a>        |
| PIN              | Project Identification Number                                                        |
| MT               | Model Type Code<br>Refer to tables in <a href="#">Section 1.10.3.1 – Model Files</a> |
| format           | File Format<br>Refer to Table 1.15 below                                             |

Table 1.14

As an example, the Structural Group is creating a Navisworks Cache File (explained below) file for the Concrete portion of a project with PIN Number of EZ916A; the files shall be named as follows:

STEZ916A-CO.nwc

Table 1.15 describes the different Navisworks File Type Format.

| NAVISWORKS FILE TYPE FORMAT |                                                                                                                                                                                                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM                        | DESCRIPTION                                                                                                                                                                                                                                        |
| NWC                         | <p>Navisworks Cache Files</p> <p>This type of file contains all of the original model geometry and data</p>                                                                                                                                        |
| NWF                         | <p>Navisworks File Set</p> <p>This type of file acts as a container that appends the individual files (NWC) together and allows the creation of redlines, review markups, and comments</p> <p>No model geometry is saved with this file format</p> |
| NWD                         | <p>Navisworks Document</p> <p>This type of file contains all model geometry data together with redlines, review markups, and comments</p> <p>This type of file is a “snapshot” of the project and is used for sharing purposes</p>                 |

Table 1.15

#### 1.10.3.6 CAD FILES

CAD files linked to the Revit Model shall be named beginning with the Discipline Code, a PIN Number, a dash, an optional two-digit Drawing Type and/or Sequence Number, a dash, and an optional User Description. If by any chance, the filename needs to change during the life of the project, all disciplines will need to rename their files accordingly.

The filename shall take the form of

DPIN –DT/SN–Description.dwg

Table 1.16 describes the nomenclature used to name CAD Files.

| CAD FILES                 |                                                                                                                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM                      | DESCRIPTION                                                                                                                                                                             |
| D                         | Discipline Code<br>Refer to <a href="#">Section 1.10.2 – Discipline Codes</a> Discipline Names                                                                                          |
| PIN                       | Project Identification Number                                                                                                                                                           |
| DT/SN<br>(Optional)       | Drawing Type Code or Sequence Number<br>Refer to <a href="#">Section 1.10.4 – Drawing Type Naming Convention</a><br>Sequence Number<br>(Two-digit consecutive numbers starting with 01) |
| Description<br>(Optional) | Brief User Description<br>(up to 24 characters)<br>The following characters shall not be used as part of the description<br>@ \$ % ^ & < > / \ " ' : ; ? *   , ' ,                      |

Table 1.16

As an example, the Mechanical Group is linking three AutoCAD files into their Revit Model for a project with PIN Number of EZ916A; the files shall be named as follows:

MEEZ916A-01-First Floor.dwg  
MEEZ916A-02-Second Floor.dwg  
MEEZ916A-03-Roof.dwg

As another example, the Fire Protection Group is linking three AutoCAD files into their Revit Model for a project with PIN Number of EZ916A; the files shall be named as follows:

FPEZ916A-FP-First Floor.dwg  
FPEZ916A-FP-Second Floor.dwg  
FPEZ916A-FP-Roof.dwg

#### 1.10.4 DRAWING TYPE NAMING CONVENTION

Drawing Types are categories used to organize the Contract Documents and refer to the nomenclature, Discipline and/or Sub-Discipline Designators that appear before the Sheet Number in the lower right-hand corner of each sheet.

##### 1.10.4.1 DISCIPLINE DESIGNATORS

Discipline Designators are used to organize sheets based on a specific Trade. The Discipline Designator matches the Discipline Codes defined in [Section 1.10.2 - Discipline Codes](#).

##### 1.10.4.2 SUB-DISCIPLINE DESIGNATORS

Sub-Discipline Designators may be used to provide a more descriptive classification of the Disciplines and are meant to increase the number of available drawings per trade.

#### **NOTE**

Sub-Discipline Designators are not necessary for all plot sheets.

Table 1.17 describes the optional Sub-Discipline Designators.

| SUB-DISCIPLINE DESIGNATORS |                                      |
|----------------------------|--------------------------------------|
| SUB-DISCIPLINE             | DESCRIPTION                          |
| <b>ARCHITECTURAL</b>       |                                      |
| AD                         | Demolition                           |
| AE                         | Electrical                           |
| AF                         | Architectural Finishes               |
| AG                         | Signage                              |
| AI                         | Interiors                            |
| AK                         | Equipment                            |
| AM                         | Mechanical                           |
| AS                         | Structural                           |
| AX                         | Sections (longitudinal and traverse) |
| AZ                         | Project Details                      |

| ELECTRICAL      |    |                                                                                        |
|-----------------|----|----------------------------------------------------------------------------------------|
|                 | EA | Airfield Lighting and Nav aids - Visual Air Navigation Systems                         |
|                 | EB | Baggage Handling Systems                                                               |
|                 | EC | Communications – Data, Audio/Visual                                                    |
|                 | ED | Demolition - Protection, Termination, and Removal                                      |
|                 | EF | Fire Alarm System                                                                      |
|                 | EG | Grounding                                                                              |
|                 | EI | Roadway Illumination                                                                   |
|                 | EK | Track System                                                                           |
|                 | EL | Interior Lighting                                                                      |
|                 | EN | Instrumentation - Controls, Relays, Instrumentation, and Measurement Devices           |
|                 | EP | Interior Power                                                                         |
|                 | ER | Runway Illumination                                                                    |
|                 | ES | Security                                                                               |
|                 | ET | Interior Telecommunications - Telephone, Network, Voice and Data Cables                |
|                 | EY | Interior Auxiliary - Alarms, Nurse Call, Security, CCTV, PA, Music, Clock, and Program |
|                 | EZ | Project Details                                                                        |
| FIRE PROTECTION |    |                                                                                        |
|                 | FA | Alarm Systems                                                                          |
|                 | FD | Demolition - Protection, Termination, and Removal                                      |
|                 | FR | Risers                                                                                 |
|                 | FX | Sections                                                                               |
|                 | FZ | Project Details                                                                        |
| LANDSCAPE       |    |                                                                                        |
|                 | LD | Demolition - Protection and Removal of Existing Landscaping                            |
|                 | LI | Irrigation                                                                             |
|                 | LP | Planting                                                                               |
|                 | LZ | Project Details                                                                        |

| MECHANICAL |                                                               |
|------------|---------------------------------------------------------------|
| MB         | Baggage Handling Systems                                      |
| MD         | Demolition - Protection, Termination, and Removal             |
| ME         | Elevators/Escalators                                          |
| MF         | Fire Protection                                               |
| MH         | HVAC - Ductwork, Air Devices, and Equipment                   |
| MI         | Instrumentation and Controls                                  |
| MR         | Risers                                                        |
| MS         | Site - Utility Tunnels and Piping Between Facilities          |
| MX         | Sections                                                      |
| MZ         | Project Details                                               |
| PLUMBING   |                                                               |
| PD         | Demolition - Protection, Termination, and Removal             |
| PG         | Plumbing and Drainage - Chilled and Heated Water, Steam       |
| PP         | Piping, Valves, and Insulation                                |
| PQ         | Equipment - Pumps and Tanks                                   |
| PR         | Risers                                                        |
| PS         | Site - Extensions and Connections to Civil Utilities          |
| PX         | Sections                                                      |
| PZ         | Project Details                                               |
| STRUCTURAL |                                                               |
| SA         | Alignment                                                     |
| SB         | Substructure - Foundations, Piers, Slabs, and Retaining Walls |
| SD         | Demolition - Protection and Removal                           |
| SF         | Foundation/Framing - Floors and Roofs                         |
| SK         | Track Supports                                                |
| SS         | Seismic                                                       |
| ST         | Structural Site                                               |

|    |                 |
|----|-----------------|
| SX | Sections        |
| SZ | Project Details |

Table 1.17

**NOTE**

Other 2-character Model Type Codes may be approved by the Miami-Dade Aviation Department as meets the project's needs.

**1.10.5 SHEET NUMBER NAMING CONVENTION**

Sheet Number refers to the numbers that appear right after the Drawing Type (Discipline and/or Sub-Discipline Designators) in the lower right-hand corner of each sheet and are used to organize the Contract Drawings in order.

Sheet numbering shall use a consistent and coordinated system across all disciplines. This shall include consistent series numbers and individual sheet numbers.

The following are examples of a consistent Sheet Number Naming Convention:

AR2.1, ST3.2, FP2.5  
AR2.01, ST3.15, FP2.05  
AR02.01, ST03.15, FP02.05  
AR002, ST027, FP007

The sequential order must be maintained at all times. The number of digits in the sheet number must be consistent across the set. The following have an inconsistent Sheet Number Naming Convention and will not be accepted:

AR2.1, ST03.15, FP 2.05  
AR2.1, ST027, FP 007

#### **1.10.6 PHASING NAMING CONVENTION**

Phases within the Project shall be consistent and coordinated throughout project documentation, including drawings and models, across all disciplines.

The following are examples of a consistent Phasing Naming Convention:

Phase I – North Wing  
Phase I – South Wing  
Phase II – North Wing  
Phase II – South Wing

#### **1.10.7 LEVELS NAMING CONVENTION**

Levels within the Project can be named with two different approaches:

- Project-specific Level Name: each level is identified by a name, such as Level 1, Level 2 Mezzanine, etc.
- Datum Elevation: all Levels are identified by using the vertical position relative to the Datum set for that project. Refer to [Section 1.13 – Coordinate Systems](#), for reference to Datums and their use.

At the beginning of each project, the Design Project Manager and/or Construction Resident Engineer shall determine whether the Datum Elevation or the Level Name approach will be used for all Disciplines of the project. These two approaches will not be able to co-exist within the same project.

Levels shall be named beginning with the Discipline Code, a space, a dash, another space, the word Level followed by the Datum Elevation or Level Name. If, by any chance, the Level name needs to change during the life of the project, all disciplines will need to rename it accordingly.

The Level shall take the form of

<Discipline> - Level <Datum Elevation or Level Name >

Table 1.18 describes the nomenclature used to name Levels.

| LEVELS                        |                                                                               |
|-------------------------------|-------------------------------------------------------------------------------|
| ITEM                          | DESCRIPTION                                                                   |
| D                             | Discipline Code<br>Refer to <a href="#">Section 1.10.2 – Discipline Codes</a> |
| Level                         | This shall stay as is                                                         |
| Datum Elevation or Level Name | Datum Elevation or Level Name                                                 |

Table 1.18

#### **NOTE**

Naming the Levels after the Discipline Code will allow easy identification when working on a multi-discipline project.

As an example, the Datum Elevation approach is being used on a project by the Architectural Group, where three levels need to be created. The Levels shall be named as follows:

- AR - Level 42'
- AR - Level 54' 6"
- AR - Level 67'

Another example, the Level Name approach is being used on a project by the Mechanical Group where five levels need to be created. The Levels shall be named as follows:

- ME - Level 1
- ME - Level 2
- ME - Level 3
- ME - Level 4
- ME - Level 5

### 1.10.8 VIEWS NAMING CONVENTION

Views shall be named beginning with the View Type Code, a dash, an optional Level/Sequence Number and/or an optional User Description.

The View shall take the form of

<View >-<Level/Sequence> and/or <Description>

Table 1.19 describes the nomenclature used to name Views.

| VIEWS                         |                                                                                                                                                                |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM                          | DESCRIPTION                                                                                                                                                    |
| <b>GENERAL</b>                |                                                                                                                                                                |
| View                          | View Type Code<br>Refer to the chart below                                                                                                                     |
| Level/Sequence<br>(Optional*) | Level Number or Sequence Number<br>(* Two-digit integer)                                                                                                       |
| Description<br>(Optional)     | Brief User Description<br>(up to 24 characters)<br>The following characters shall not be used as part of the description<br>@ \$ % ^ & < > / \ " ' ; , * , ' , |
| <b>ALL DISCIPLINES</b>        |                                                                                                                                                                |
| 3D                            | 3D Views                                                                                                                                                       |
| AP                            | Area Plans                                                                                                                                                     |
| BS                            | Building Sections                                                                                                                                              |
| CP                            | Ceiling Plans                                                                                                                                                  |
| CS                            | Construction Staging or Sequence                                                                                                                               |
| DL                            | Drawing List                                                                                                                                                   |
| DR                            | Drafting Views                                                                                                                                                 |
| DS                            | Detail Sections                                                                                                                                                |
| DV                            | Detail Views                                                                                                                                                   |
| EE                            | Exterior Elevations                                                                                                                                            |

|               |                           |
|---------------|---------------------------|
| EP            | Enlarged Plan             |
| ES            | Engineering Estimates     |
| FE            | Framing Elevation         |
| FP            | Floor Plans               |
| IE            | Interior Elevations       |
| KL            | Keynote Legend            |
| LG            | Legends                   |
| LP            | Location Plan             |
| MT            | Material Takeoff          |
| NB            | Note Block                |
| NO            | General Notes             |
| ON            | One Line Diagram Plan     |
| QP            | Equipment Plan            |
| RD            | Riser Diagram             |
| RO            | Roof Plan                 |
| RP            | Reports                   |
| SC            | Sections                  |
| SL            | Sheet List                |
| SP            | Site Plan                 |
| SQ            | Schedule/Quantities       |
| VL            | View List                 |
| WT            | Walkthroughs              |
| ARCHITECTURAL |                           |
| FU            | Furniture Plan            |
| SP            | Signage Plan              |
| ELECTRICAL    |                           |
| AC            | Access Control Plan       |
| AX            | Auxiliary Power Plan      |
| CM            | Communication Plan        |
| CO            | Corrosion Protection Plan |
| FA            | Fire Alarm Plan           |
| GP            | Grounding Plan            |
| LI            | Lighting Plan             |

|                        |                            |
|------------------------|----------------------------|
| LT                     | Lightning Protection Plan  |
| NS                     | Network System Plan        |
| PA                     | Public Address System Plan |
| PP                     | Power Plan                 |
| RS                     | Radio System Plan          |
| SS                     | Security System Plan       |
| TC                     | Telecommunication Plan     |
| WD                     | Wiring Diagram Plan        |
| <b>FIRE PROTECTION</b> |                            |
| CC                     | Control Schematic Plan     |
| CD                     | Communication System Plan  |
| CN                     | Control Plan               |
| FP                     | Fire Protection Plan       |
| FS                     | Fire Suppression Plan      |
| SK                     | Sprinkler Plan             |
| <b>LANDSCAPE</b>       |                            |
| LI                     | Irrigation                 |
| LP                     | Planting                   |
| <b>MECHANICAL</b>      |                            |
| HP                     | HVAC Ductwork Plan         |
| MD                     | Machine Design Plan        |
| MH                     | Material Handling Plan     |
| PI                     | Piping Plan                |
| SI                     | Specialty Piping Plan      |
| <b>PLUMBING</b>        |                            |
| PI                     | Piping Plan                |
| PL                     | Plumbing Plan              |
| SI                     | Specialty Piping Plan      |
| <b>STRUCTURAL</b>      |                            |
| CF                     | Concrete Framing Plan      |
| DP                     | Decking Plan               |
| FD                     | Foundation Plan            |
| FR                     | Framing Plan               |

|     |                           |
|-----|---------------------------|
| GC  | Graphical Column Schedule |
| J L | Joist Girder Load Diagram |
| PP  | Precast Panel Plan        |
| RE  | Reinforcement Plan        |
| SF  | Stair Framing Plan        |
| ST  | Steel Framing Plan        |
| TB  | Truss Bracing Plan        |
| WG  | Wind Girt Plan            |
| XB  | X Bracing Plan            |

Table 1.19

#### **NOTE**

Other View names may be used as meets the project's needs and must be specified within the BIM Execution Plan.

As an example, Architectural Floor Plans views are being named without the optional Level/Sequence Number:

FP-First Floor  
FP-Second Floor  
FP-Third Floor

Another example, Mechanical Ceiling Plans views are being named without the optional User Description:

CP-03  
CP-04  
CP-05

As an additional example, Structural Plans views are being named with both the optional Level/Sequence Number and the optional User Description:

FP-07 Level 260  
FP-08 Level 275  
FP-09 Level 290

### 1.10.9 FAMILY NAMING CONVENTION

The Miami-Dade Aviation Department bases its internal database of Parametric Content (Families and Types) on the CSI Unifomat 2016 classification.

For consistency, Family files shall be named beginning with the Unifomat Category Letter Code followed by the Class Number (4-digit Level 1 + Level 2), a space, a dash, another space, and an optional User Description.

The filename shall take the form of

<Unifomat Category Letter Code><Class Number> - <Description>.rfa

The Miami-Dade Aviation Department may approve a different proposed naming convention for the Project content, provided the following conditions are met:

- a) The naming form or pattern and the logic behind it are explicitly stated on the Project's BIM Execution Plan.
- b) Parameters values for Assembly Code, Assembly Classification (automatically defined by the Code), and Assembly description are correct for every instance of every component. This ensures Unifomat-based identification.

Table 1.20 describes the nomenclature used to name Families.

| FAMILIES                            |                                                                                                                                                                    |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ITEM                                | DESCRIPTION                                                                                                                                                        |
| <b>GENERAL</b>                      |                                                                                                                                                                    |
| Unifomat Category                   | Letter Code<br>Refer to the chart below                                                                                                                            |
| Class Number<br>(Level 1 + Level 2) | 4-digit Class<br>Refer to the chart below                                                                                                                          |
| Description<br>(Optional)           | Brief User Description<br>(up to 24 characters)<br>The following characters shall not be used as part of the description<br>@ \$ % ^ & < > / \ " ' : ; ? *   , ' , |

| LETTER CODES         |                                                                           |
|----------------------|---------------------------------------------------------------------------|
| A                    | Substructure                                                              |
| B                    | Shell                                                                     |
| C                    | Interiors                                                                 |
| D                    | Services                                                                  |
| E                    | Equipment and Furnishings                                                 |
| F                    | Special Construction and Demolition                                       |
| G                    | Building Sitework                                                         |
| Z                    | General                                                                   |
| LEVEL 1              |                                                                           |
| Level 1 Class Number | 2-digit number<br>Refer to the <b>CSI - Uniformat Classification 2016</b> |
| LEVEL 2              |                                                                           |
| Level 2 Class Number | 2-digit number<br>Refer to the <b>CSI - Uniformat Classification 2016</b> |

Table 1.20

#### **NOTE**

When naming Family keep file names as short as possible so they can display in the Type Selector and create a Type Catalog for Family files that contain five or more types.

As an example, the Architectural Group is creating three exterior windows, the files shall be named as follows:

- B2020-Andersen\_400 Series\_DoubleHung.rfa
- B2020-Marvin\_Signature\_Awning.rfa
- B2020-Pella\_Impervia\_Casement.rfa

---

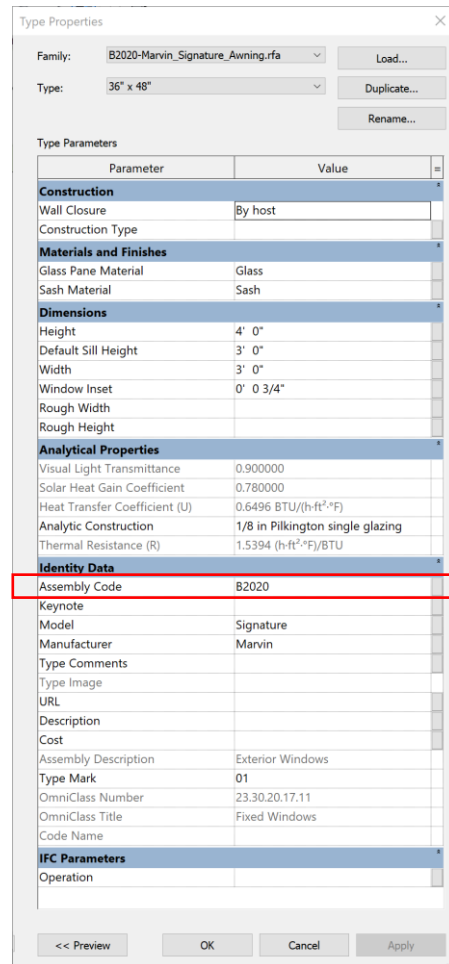
Another example, the Plumbing Group is creating two domestic water distribution systems, the files shall be named as follows:

- D2010-JM Eagle\_SCH40\_HotWater.rfa
- D2010- JM Eagle\_SCH40\_ColdWater.rfa

As an additional example, the Mechanical Group is creating three HVAC pieces of equipment, the files shall be named as follows:

- D3030-York\_YVAA.rfa
- D3030-Carrier\_Aero39L.rfa
- D3030-Trane\_XV20i.rfa

Image 1.16 illustrates the FAMILY TYPE PROPERTIES Dialog Box within a Window Family with the Assembly Code parameter set to B2020, which corresponds to the Exterior Window classification.



The 'Type Properties' dialog box shows the following parameters and values:

| Parameter                     | Value                            |
|-------------------------------|----------------------------------|
| <b>Construction</b>           |                                  |
| Wall Closure                  | By host                          |
| Construction Type             |                                  |
| <b>Materials and Finishes</b> |                                  |
| Glass Pane Material           | Glass                            |
| Sash Material                 | Sash                             |
| <b>Dimensions</b>             |                                  |
| Height                        | 4' 0"                            |
| Default Sill Height           | 3' 0"                            |
| Width                         | 3' 0"                            |
| Window Inset                  | 0' 0 3/4"                        |
| Rough Width                   |                                  |
| Rough Height                  |                                  |
| <b>Analytical Properties</b>  |                                  |
| Visual Light Transmittance    | 0.900000                         |
| Solar Heat Gain Coefficient   | 0.780000                         |
| Heat Transfer Coefficient (U) | 0.6496 BTU/(h·ft²·°F)            |
| Analytic Construction         | 1/8 in Pilkington single glazing |
| Thermal Resistance (R)        | 1.5394 (h·ft²·°F)/BTU            |
| <b>Identity Data</b>          |                                  |
| Assembly Code                 | B2020                            |
| Keynote                       |                                  |
| Model                         | Signature                        |
| Manufacturer                  | Marvin                           |
| Type Comments                 |                                  |
| Type Image                    |                                  |
| URL                           |                                  |
| Description                   |                                  |
| Cost                          |                                  |
| Assembly Description          | Exterior Windows                 |
| Type Mark                     | 01                               |
| OmniClass Number              | 23.30.20.17.11                   |
| OmniClass Title               | Fixed Windows                    |
| Code Name                     |                                  |
| <b>IFC Parameters</b>         |                                  |
| Operation                     |                                  |

Image 1.16

### 1.11 SHARED PARAMETERS

Shared Parameters allow for the creation of custom attributes to be built into parametric content (Families) that can be used for the vast majority of data storage and scheduling needs.

Refer to the **MDAD - Shared Parameter File.txt** file provided as part of the Support Files found under the following folder:

**\\MDAD BIM Standards\Support Files\Shared Parameters\**

#### **NOTE**

The Autodesk Revit products can reference only one shared parameter file at a time, so make sure this is the default file when working on Miami-Dade Aviation Department projects. If parameters from external sources need to be imported, this can be changed without impacting parameters already imported.

### 1.12 UNIFORMAT CLASSIFICATION

The Miami-Dade Aviation Department organizes all of its content based on the Uniformat System. This classification organizes the different building elements into specific groups. This approach allows streamlining processes such as estimating, commissioning and asset management.

The Uniformat System used by the MDAD BIM Standards is based on the CSI Uniformat 2016, which uses a hierarchy to organize the major categories of construction information separated by their special function. These special functions include the following eight categories:

- A - Substructure
- B - Shell
- C - Interior
- D - Services
- E - Equipment and Furnishings
- F - Special Construction and Demolition
- G - Building Sitework
- Z - General

The Miami-Dade Aviation Department Unifomat Classification minimum requirements include organizing the data with a four-digit Class (Level 1 + Level 2).

Refer to the **CSI - Unifomat Classification 2016.pdf** file provided as part of the Support Files found under the following folder:

**\\MDAD BIM Standards\Support Files\Unifomat\**

### **1.13 COORDINATE SYSTEMS**

All Miami-Dade Aviation Department projects shall be geo-referenced to a horizontal and vertical Coordinate System, which must be configured by the project team at the beginning of a project based on the Airport Control Grid Models which will be provided by MDAD Technical Support Unit.

The Coordinate System use on all MDAD projects is the Florida East State Plane Zone Coordinates.

A BIM Site Model file, including the project coordinate system, will be established and provided by the Technical Support Group.

### **1.14 LOCATION CODE**

In order to fully exploit the potential of the Models beyond the Design and Construction phases, MDAD requires Rooms & Spaces to be coded as per the Department standard.

Rooms & Spaces names shall be defined at the beginning of the project and shall be named after the Terminal/Concourse Code, follow by a one-digit Level Number and a three-digit Room Number

The Architectural discipline, along with the Design Project Manager, is responsible for defining these values and ensure they are correct. All other disciplines shall follow this naming convention.

#### **NOTE:**

As the MDS specifies for the Room category, is the responsibility of the Architectural Model author to enter these values and ensure they are correct. All other disciplines shall follow this naming convention.

## 1.15 ASSETS

MDAD has preliminarily identified 34 Assets to be captured during the Commissioning phase to eventually be used in Operations & Maintenance. This list of Assets will be expanded as the use of BIM grows within the organization.

The following list includes the Assets currently being used by MDAD.

- Condensers
- Chillers
- Cooling Towers
- Energy Recovery
- Pumps
- Air Handling Units
- Coils
- Compressors
- Fans and Blowers
- Terminal Units
- Heaters
- Tanks
- Water Heaters
- Water Filters
- Lift Stations
- Fuel Valves
- Drains
- Sprinklers
- Gauges
- Valves
- Batteries
- Motors
- Panels
- Panelboards
- Power Generators

- Power Supply
- Transformers
- Elevators
- Escalators
- Lifts
- Boarding Bridges
- Baggage Handling Systems
- Conveyor Belts
- Moving Walkways

## 1.16 ATTRIBUTES

MDAD has preliminary defined 46 Attributes to be captured during the project lifecycle to eventually be integrated with an Enterprise Asset Management System. This list of attributes will be expanded as the use of BIM grows within the organization.

Table 1.21 includes the Attributes along with the project phase in which they need to be captured.

| ATTRIBUTES                     |             |              |     |
|--------------------------------|-------------|--------------|-----|
| NAME                           | RESPONSIBLE |              |     |
|                                | DESIGN      | CONSTRUCTION | O&M |
| Project - Name                 | •           |              |     |
| Project - Number               | •           |              |     |
| Project - Description          | •           |              |     |
| Building - Name                | •           |              |     |
| Building - Code                | •           |              |     |
| Level - Name                   | •           |              |     |
| Level - Number                 | •           |              |     |
| Room - Name                    | •           |              |     |
| Room - Number                  | •           |              |     |
| Asset - Name                   | •           |              |     |
| Asset - Code                   | •           |              |     |
| Asset - Horizontal Coordinates | •           |              |     |
| Asset - Vertical Coordinates   | •           |              |     |
| Asset - Description            | •           |              |     |
| Asset - Manufacturer           |             | •            |     |

|                                      |  |   |   |
|--------------------------------------|--|---|---|
| Asset - Model                        |  | • |   |
| Asset - Serial Number                |  | • |   |
| Asset - System/Service Name          |  | • |   |
| Asset - System/Service Description   |  | • |   |
| Asset - System/Service Location      |  | • |   |
| Asset - Construction Documents       |  | • |   |
| Asset - O&M Manuals                  |  | • |   |
| Asset - Technical Specifications     |  | • |   |
| Asset - Warranty Start Date          |  | • |   |
| Asset - Warranty End Date            |  | • |   |
| Asset - Extended Warranty Start Date |  |   | • |
| Asset - Extended Warranty End Date   |  |   | • |
| Vendor - Name                        |  | • |   |
| Vendor - Phone                       |  | • |   |
| Vendor - Contact Name                |  | • |   |
| Installation - Date                  |  |   | • |
| Installation - Installed By          |  |   | • |
| Preventive Maintenance - Daily       |  |   | • |
| Preventive Maintenance - Weekly      |  |   | • |
| Preventive Maintenance - Bi-Weekly   |  |   | • |
| Preventive Maintenance - Monthly     |  |   | • |
| Preventive Maintenance - Bi-Monthly  |  |   | • |
| Preventive Maintenance - Quarterly   |  |   | • |
| Preventive Maintenance - Semi-Annual |  |   | • |
| Preventive Maintenance - Annual      |  |   | • |
| Inspection - Last Inspected Date     |  |   | • |
| Inspection - Next Inspected Date     |  |   | • |
| Inspection - Condition               |  |   | • |
| Inspection - Description             |  |   | • |
| Capital Plan - Expected Life         |  |   | • |
| Capital Plan - Replacement Cost      |  |   | • |

Table 1.21

#### **NOTE**

These Attributes have been included in the **MDAD - Shared Parameter File.txt** file provided as part of the Support Files found under the following folder:

**\\MDAD BIM Standards\Support Files\Shared Parameters\**

## 1.17 TEMPLATES

All Revit projects developed for the Miami-Dade Aviation Department must be created using one of the five templates provided with the MDAD - BIM Standards, which are:

- MDAD - Architectural Template.rte
- MDAD - Electrical Template.rte
- MDAD - Mechanical Template.rte
- MDAD - PlumbingTemplate.rte
- MDAD - Structural Template.rte

Refer to [Section 1.18.3.1 - Trade](#) for the relationship between the Templates and the Disciplines within the Project Browser.

### 1.17.1 OBJECT OWNERSHIP

Revit works with an element/object hierarchy where Categories occupy the top level. The MDAD BIM Standards use this hierarchy to structure relevant information as well, for example for Quantity Take-offs.

In order to have consistency between Projects and avoid duplicates and errors (elements/objects in different Models representing the same element/object), MDAD Templates adopts the general element ownership shown in Image 1.17 below.

A Model Development Specification (MDS) table shall be prepared specifically for each Project, and shall specify in detail the owner (responsible) for each element Category and Sub-Category. Refer to [Section 1.8.7 – Model Development Specification](#) Model Development Specification.

| CATEGORY                | A<br>R<br>C<br>H<br>I<br>T<br>E<br>C<br>T<br>U<br>R<br>A<br>L | S<br>T<br>R<br>U<br>C<br>T<br>U<br>R<br>A<br>L | M<br>E<br>C<br>H<br>A<br>N<br>I<br>C<br>A<br>L | P<br>L<br>U<br>M<br>B<br>I<br>N<br>G | E<br>L<br>E<br>C<br>T<br>R<br>I<br>C<br>A<br>L | C<br>I<br>V<br>I<br>L |
|-------------------------|---------------------------------------------------------------|------------------------------------------------|------------------------------------------------|--------------------------------------|------------------------------------------------|-----------------------|
| Air Terminal            |                                                               |                                                |                                                |                                      |                                                |                       |
| Cable Tray Fittings     |                                                               |                                                |                                                |                                      |                                                |                       |
| Cable Trays             |                                                               |                                                |                                                |                                      |                                                |                       |
| Casework                |                                                               |                                                |                                                |                                      |                                                |                       |
| Ceilings                |                                                               |                                                |                                                |                                      |                                                |                       |
| Columns                 |                                                               |                                                |                                                |                                      |                                                |                       |
| Communication Devices   |                                                               |                                                |                                                |                                      |                                                |                       |
| Conduit Fittings        |                                                               |                                                |                                                |                                      |                                                |                       |
| Conduits                |                                                               |                                                |                                                |                                      |                                                |                       |
| Curtain Panels          |                                                               |                                                |                                                |                                      |                                                |                       |
| Curtain Systems         |                                                               |                                                |                                                |                                      |                                                |                       |
| Curtain Wall Mullions   |                                                               |                                                |                                                |                                      |                                                |                       |
| Data Devices            |                                                               |                                                |                                                |                                      |                                                |                       |
| Doors                   |                                                               |                                                |                                                |                                      |                                                |                       |
| Duct Accessories        |                                                               |                                                |                                                |                                      |                                                |                       |
| Duct Fittings           |                                                               |                                                |                                                |                                      |                                                |                       |
| Duct Insulation         |                                                               |                                                |                                                |                                      |                                                |                       |
| Duct Linings            |                                                               |                                                |                                                |                                      |                                                |                       |
| Ducts                   |                                                               |                                                |                                                |                                      |                                                |                       |
| Electrical Equipment    |                                                               |                                                |                                                |                                      |                                                |                       |
| Electrical Fixtures     |                                                               |                                                |                                                |                                      |                                                |                       |
| Entourage               |                                                               |                                                |                                                |                                      |                                                |                       |
| Fire Alarm Devices      |                                                               |                                                |                                                |                                      |                                                |                       |
| Flex Ducts              |                                                               |                                                |                                                |                                      |                                                |                       |
| Flex Pipes              |                                                               |                                                |                                                |                                      |                                                |                       |
| Floors                  |                                                               |                                                |                                                |                                      |                                                |                       |
| Furniture               |                                                               |                                                |                                                |                                      |                                                |                       |
| Furniture Systems       |                                                               |                                                |                                                |                                      |                                                |                       |
| Generic Models          |                                                               |                                                |                                                |                                      |                                                |                       |
| Lighting Devices        |                                                               |                                                |                                                |                                      |                                                |                       |
| Lighting Fixtures       |                                                               |                                                |                                                |                                      |                                                |                       |
| CATEGORY                | A<br>R<br>C<br>H<br>I<br>T<br>E<br>C<br>T<br>U<br>R<br>A<br>L | S<br>T<br>R<br>U<br>C<br>T<br>U<br>R<br>A<br>L | M<br>E<br>C<br>H<br>A<br>N<br>I<br>C<br>A<br>L | P<br>L<br>U<br>M<br>B<br>I<br>N<br>G | E<br>L<br>E<br>C<br>T<br>R<br>I<br>C<br>A<br>L | C<br>I<br>V<br>I<br>L |
| Mechanical Equipment    |                                                               |                                                |                                                |                                      |                                                |                       |
| Nurse Call Devices      |                                                               |                                                |                                                |                                      |                                                |                       |
| Parking                 |                                                               |                                                |                                                |                                      |                                                |                       |
| Pipe Accessories        |                                                               |                                                |                                                |                                      |                                                |                       |
| Pipe Fittings           |                                                               |                                                |                                                |                                      |                                                |                       |
| Pipe Insulation         |                                                               |                                                |                                                |                                      |                                                |                       |
| Pipes                   |                                                               |                                                |                                                |                                      |                                                |                       |
| Planting                |                                                               |                                                |                                                |                                      |                                                |                       |
| Plumbing Fixtures       |                                                               |                                                |                                                |                                      |                                                |                       |
| Railings                |                                                               |                                                |                                                |                                      |                                                |                       |
| Ramps                   |                                                               |                                                |                                                |                                      |                                                |                       |
| Roads                   |                                                               |                                                |                                                |                                      |                                                |                       |
| Roofs                   |                                                               |                                                |                                                |                                      |                                                |                       |
| Security Devices        |                                                               |                                                |                                                |                                      |                                                |                       |
| Site                    |                                                               |                                                |                                                |                                      |                                                |                       |
| Speciality Equipment    |                                                               |                                                |                                                |                                      |                                                |                       |
| Sprinklers              |                                                               |                                                |                                                |                                      |                                                |                       |
| Stairs                  |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Beam Systems |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Columns      |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Connections  |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Foundations  |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Framing      |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Rebar        |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Stiffeners   |                                                               |                                                |                                                |                                      |                                                |                       |
| Structural Trusses      |                                                               |                                                |                                                |                                      |                                                |                       |
| Telephone Devices       |                                                               |                                                |                                                |                                      |                                                |                       |
| Topography              |                                                               |                                                |                                                |                                      |                                                |                       |
| Walls                   |                                                               |                                                |                                                |                                      |                                                |                       |
| Windows                 |                                                               |                                                |                                                |                                      |                                                |                       |
| Wires                   |                                                               |                                                |                                                |                                      |                                                |                       |

Image 1.17

### 1.17.2 UNITS

Units have been defined within the Templates as shown in the Table 1.22.

| UNITS       |                                |
|-------------|--------------------------------|
| DESCRIPTION | FORMAT                         |
| Distance    | Feet and Inches (ft. – in)     |
| Area        | Square Feet (ft <sup>2</sup> ) |
| Volume      | Cubic Feet (ft <sup>3</sup> )  |
| Angles      | Degrees (°)                    |

Table 1.22

### 1.17.3 TEXT AND DIMENSION STYLES

Seven (7) Text Styles have been defined within the MDAD Revit Project Templates, as follows:

- MDAD - TEXT 1/4"
- MDAD - TEXT 1/4" BOLD
- MDAD - TEXT 1/5"
- MDAD - TEXT 1/5" BOLD
- MDAD - TEXT 1/8"
- MDAD - TEXT 3/128"
- MDAD - TEXT 3/32"

Four (4) Dimension Styles have been defined within the MDAD Revit Project Templates, as follows:

- MDAD - DIM ARC 3/32"
- MDAD - DIM ANG 3/32"
- MDAD - DIM DIAM 3/32"
- MDAD - DIM LINEAR 3/32"

If needed, Authoring Firms may create other Text and or Dimension Styles, starting from the ones described above. The following guidelines shall be taken into consideration for this:

- The naming convention will follow the same criteria, as shown above, uppercasing included
- The font shall always be Arial
- Minimum Font size will be such that all text remains visible even when plotted at half size
- Font width factors smaller than 1.0 are only acceptable when space is constrained
- All text shall have 30 degrees filled arrow leaders

#### 1.17.4 LINE WEIGHTS

Eight (8) Line Weights have been provided for Annotation Objects and for Model Objects, which have been defined at the  $1/8" = 1'$  Scale.

Design Consultants and Contractors can modify them to ensure the final hard copies look consistent and correct.

##### 1.17.4.1 MODEL AND ANNOTATION LINE WEIGHTS

Table 1.23 describes the Line Weights used for Annotation Objects and for Model Objects.

| ANNOTATION AND MODEL OBJECTS LINE WEIGHTS |             |
|-------------------------------------------|-------------|
| PEN #                                     | WIDTH       |
| 1                                         | 0.0050"     |
| 2                                         | 0.0075"     |
| 3                                         | 0.0100"     |
| 4                                         | 0.0150"     |
| 5                                         | 0.0200"     |
| 6                                         | 0.0300"     |
| 7                                         | 0.0500"     |
| 8                                         | 0.0700"     |
| 9                                         | not defined |
| 10                                        | not defined |

|    |             |
|----|-------------|
| 11 | not defined |
| 12 | not defined |
| 13 | not defined |
| 14 | not defined |
| 15 | not defined |
| 16 | not defined |

Table 1.23

#### 1.17.4.2 PERSPECTIVE LINE WEIGHTS

All Perspective Line Weights have been set to 0.0050"

#### 1.17.5 LINE STYLES

Eight (8) Line Styles out of the sixteen Line Weights have been defined within the MDAD - BIM Standards.

Table 1.24 describes the Line Styles.

| LINE STYLES   |                  |              |
|---------------|------------------|--------------|
| NAME          | PEN # (WIDTH)    | LINE PATTERN |
| MDAD - Pen#1  | 1 (0.0050")      | Solid        |
| MDAD - Pen#2  | 2 (0.0075")      | Solid        |
| MDAD - Pen#3  | 3 (0.0100")      | Solid        |
| MDAD - Pen#4  | 4 (0.0150")      | Solid        |
| MDAD - Pen#5  | 5 (0.0200")      | Solid        |
| MDAD - Pen#6  | 6 (0.0300")      | Solid        |
| MDAD - Pen#7  | 7 (0.0500")      | Solid        |
| MDAD - Pen#8  | 8 (0.0700")      | Solid        |
| MDAD - Pen#9  | 9 (not defined)  | Solid        |
| MDAD - Pen#10 | 10 (not defined) | Solid        |
| MDAD - Pen#11 | 11 (not defined) | Solid        |
| MDAD - Pen#12 | 12 (not defined) | Solid        |

|               |                  |       |
|---------------|------------------|-------|
| MDAD - Pen#13 | 13 (not defined) | Solid |
| MDAD - Pen#14 | 14 (not defined) | Solid |
| MDAD - Pen#15 | 15 not defined)  | Solid |
| MDAD - Pen#16 | 16 (not defined) | Solid |

Table 1.24

### 1.17.6 LINE STYLES SCREENING

Five (5) screened Line Styles have been defined within the MDAD - BIM Standards.

Table 1.25 describes Line Styles Screening.

| LINE STYLES SCREENING |               |             |           |
|-----------------------|---------------|-------------|-----------|
| NAME                  | PEN # (WIDTH) | RGB VALUE   | RGB COLOR |
| MDAD - Black 100%     | 1 (0.0050")   | 000-000-000 |           |
| MDAD - Black 80%      | 2 (0.0075")   | 050-050-050 |           |
| MDAD - Black 60%      | 3 (0.0100")   | 100-100-100 |           |
| MDAD - Black 40%      | 4 (0.0150")   | 150-150-150 |           |
| MDAD - Black 20%      | 5 (0.0200")   | 200-200-200 |           |

Table 1.25

### **NOTE**

The lighter the Screening of the Line Style, the thicker it has been set; this is needed to ensure that screened Line Styles appear correctly when plotted.

Line Style Screening lower than 40% does not reproduce correctly when copies are made from plotted hardcopies.

### 1.17.7 FILL REGIONS

Five (5) Fill Regions (opaque and transparent) have been defined within the MDAD - BIM Standards.

Table 1.26 describes the Fill Regions.

| FILL REGIONS            |             |           |
|-------------------------|-------------|-----------|
| NAME                    | RGB VALUE   | RGB COLOR |
| MDAD - Solid Black 100% | 000-000-000 |           |
| MDAD - Solid Black 80%  | 050-050-050 |           |
| MDAD - Solid Black 60%  | 100-100-100 |           |
| MDAD - Solid Black 40%  | 150-150-150 |           |
| MDAD - Solid Black 20%  | 200-200-200 |           |

Table 1.26

### 1.17.8 HALFTONE

Halftone has been set to 50%.

### 1.17.9 SCHEDULES

Basic starting Schedules have been pre-defined with the different Discipline Templates to support the Estimating process. Model Authors shall duplicate, rename, and update schedules as needed in order to ensure elements for which they are responsible can be quantified in these tables.

#### **NOTE**

Schedules can be duplicated within the Revit Model so the Filter and Sorting/Grouping Categories can be used.

---

## **1.18 MODEL MANAGEMENT REQUIREMENTS**

This section covers the minimum requirements from a Model Management perspective, to ensure that overall performance is as expected, as well as consistency is obtained. It is highly recommended that Model authors refer to Annex B for recommended best practices before starting their work.

### **1.18.1 CREATING NEW MODELS**

New Models shall always be created from one of the templates provided by the MDAD Technical Support Unit for that end. Refer to [Section 1.17 – Templates](#).

If an external organization has standards of its own, they may be transferred to the Model after created from an MDAD template, as long as it doesn't override any settings or contradict this Manual (e.g.: by incorporating Text styles that are not as dictated in this document).

### **1.18.2 SHARED COORDINATES**

At the initial phase of each project, the Technical Support Group will provide a Site Model (SM) to be linked in all Models to be developed for the Project. Refer to [Section 1.9.1 – Site Model](#) and [Section 1.13 – Coordinate Systems](#).

The BIM Models shall always acquire the Shared coordinates from the Site Model and maintain these coordinates throughout the Project. When exporting geometry (e.g. for Clash Detection in Navisworks), this shall always be done by shared coordinates unless specifically requested otherwise by MDAD.

### **1.18.3 PROJECT BROWSER**

A customized Revit Project Browser (MDAD- Project Browser) has been included within the different Discipline Templates provided as part of the support files, where Views and Sheets are grouped based on their Trade and View Classification.

Image 1.18 illustrates the PROPERTIES Dialog Box with the custom Trade and View Classification Parameters under the Graphics Group.

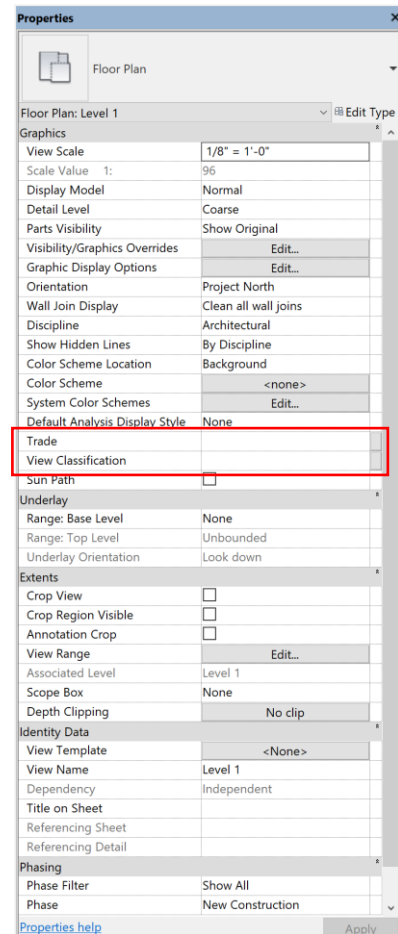


Image 1.18

# **NOTE**

All Views within the Project Browser will need to be manually associated with both of these Parameters.

### 1.18.3.1 TRADE

The Trade Parameter is the first level of the Project Browser and allows organizing the different Views by discipline.

Image 1.19 illustrates the Project Browser where the ELECTRICAL and TELECOMMUNICATIONS trades have been included within the same model.

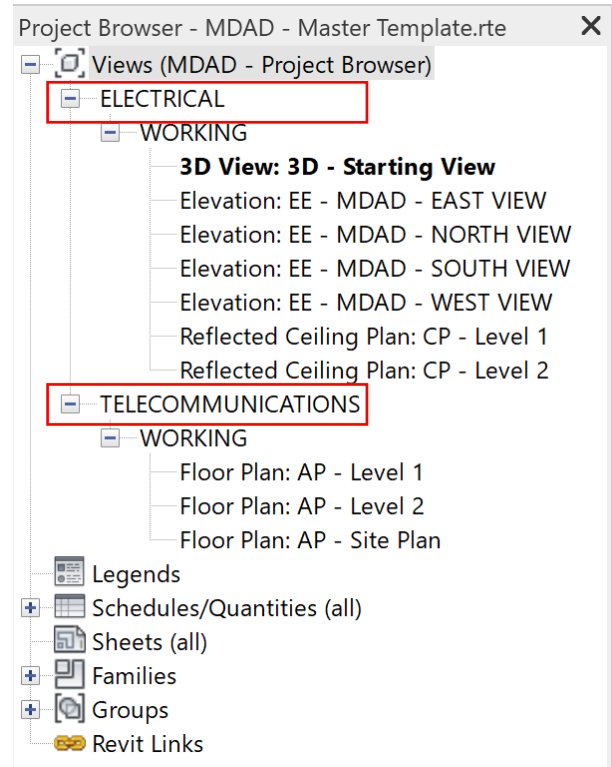


Image 1.19

Table 1.27 describes the relationship between the Templates and the Disciplines within the Project Browser.

| TRADE         |                                        |
|---------------|----------------------------------------|
| TEMPLATE      | DISCIPLINE                             |
| Architectural | Architectural                          |
|               | Interiors                              |
|               | Landscape                              |
|               | Signage                                |
| Electrical    | Electrical                             |
|               | Life Safety                            |
|               | Telecommunications                     |
| Mechanical    | Mechanical                             |
|               | Equipment                              |
|               | Horizontal and Vertical Transportation |
| Plumbing      | Fire Protection                        |
|               | Plumbing                               |
| Structural    | Structural                             |

Table 1.27

**NOTE**

Civil and Survey Model shall be created using Civil 3D

### 1.18.3.2 VIEW CLASSIFICATION

The View Classification Parameter is the second level of the Project Browser and allows organizing the different Views by categories.

Table 1.28 describes the different View Classification categories.

| VIEW CLASSIFICATION |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CATEGORY NAME       | DESCRIPTION                                                                                                                                                                      |
| Coordination        | Views intended to maintain the coordination across the different disciplines<br>These Views are not intended to be included as part of the Contract Document                     |
| Design Option       | Views intended to include specific settings for design options views                                                                                                             |
| Design              | Views intended to be included as part of the Contract Document                                                                                                                   |
| Export              | Views intended to be exported to Third Party Applications<br>These Views are not intended to be included as part of the Contract Document                                        |
| Presentation        | Views intended for presentation purposes only                                                                                                                                    |
| Configuration       | Views intended to maintain the name relationship between Levels and the first set of Floor Plans<br>These Views are not intended to be included as part of the Contract Document |
| Working             | Views intended for working purposes only<br>These Views are not intended to be included as part of the Contract Document                                                         |

Table 1.28

Image 1.20 illustrates the Project Browser, where four View Classification groups have been associated with the STRUCTURAL Trade Parameter.

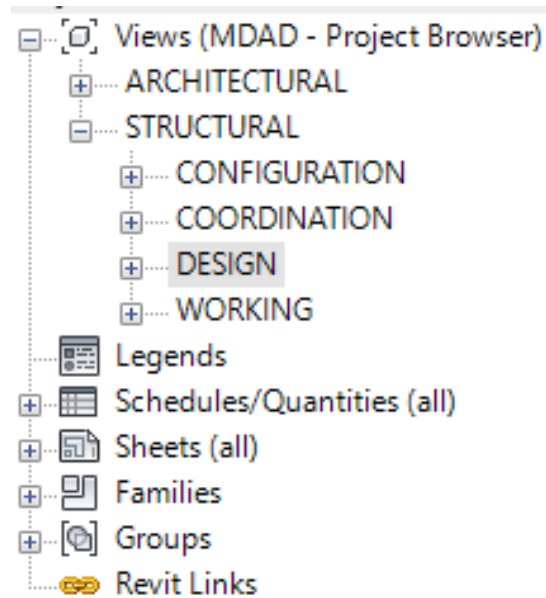


Image 1.20

### 1.18.3.3 CREATING VIEW

All new Views created using the Templates provided with the MDAD BIM Standards will be, by default, associated with an un-assigned category under the customized Project Browser. Unassigned categories are represented by three question marks “???”.

Image 1.21 illustrates the Project Browser where Floor Plans and Ceiling Plans Views of Levels 1 through four have been associated with an un-assigned category.

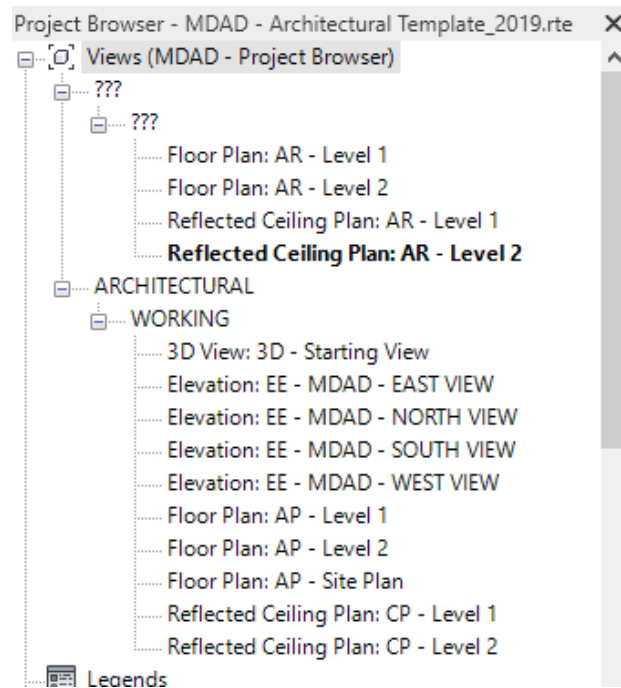


Image 1.21

## 1.18.4 CONTENT QUALITY

### 1.18.4.1 3D CONTENT

MDAD recognizes that, in order to fulfill the requirements made in this Manual, custom content will likely have to be used and/or developed. Poor content development practices may negatively affect Model performance, so a certain quality is expected. Families shall comply with the following, at a minimum:

- Family naming shall follow the requirements specified in this Manual.
- Types shall be created as needed and named accordingly. Type properties shall be carefully defined to comply with the requirements specified in this Manual and the MDS.
- Families that need to flex (change geometrical or data values) shall be fully checked to verify family integrity and functionality.

- Dimensions need to be constrained by a type property or locked. This is to prevent accidental modifications of the geometrical properties of instances. The only exception is when a “free” dimension serves as part of the family functionality (e.g., a strip light that needs to be adjustable in length).
- Family geometry shall be developed fully in the native platform (no imported geometry is allowed unless approved by MDAD)
- File size shall be no greater than 5 MB.
- Families inserted in the model must be purged of all inserted CAD references.

#### 1.18.4.2 2D CONTENT

In order to fully benefit from Parametric modeling, Tags shall be used wherever possible when displaying alphanumerical information (Equipment name, Room names, Duct/Pipe system, and size, etc.).

Text annotations will only be allowed as an exception where they refer to information that cannot be made into a parameter value, or the situation does not justify creating and tracking a shared parameter. These exceptions shall be made at the sole discretion of the MDAD Technical Support Group

#### 1.18.5 SHEET CONFIGURATION

Title block (contract border) families are included as part of the MDAD Revit templates. BIM authors shall be responsible for developing all project documentation such as plans, RCPs, sections, and elevations, isometric 3D views, etc., by following one of these standardized borders. If the project requires a specific border, it shall be developed by the party requesting the change and submitted for MDAD’s approval.

#### 1.18.6 MAXIMUM ALLOWED FILE SIZE

Revit Models shall not be larger than 250 MB. A discipline’s work may be divided into several models, as it often happens on larger projects. For example, the Architectural Discipline may split a large building design into a Core model and a separate Shell model.

Generally, it is recommended to start any project with the final Model configuration, as opposed to divide/merge Models later on. This can be troublesome for many reasons.

When starting a new Project, consider dividing them very early in the Process (ideally, at project setup) if the files are expected to grow larger than the mentioned limit.

#### **1.18.7 LINKED MODELS**

Each Discipline Model file shall have the rest of the Models for that Project linked, pinned, and if Worksharing has been enabled, there should be assigned in the proper Workset.

#### **1.18.8 ROOM BOUNDING PROPERTIES**

Linked Models shall have room bounding enabled within its properties, by default. Additionally, the Room Bounding property setting of all bounding families must be verified before rooms are added to models. Room Bounding Property is crucial to the process of being able to schedule equipment with the proper room information displayed.

#### **1.18.9 SUBMITTING MODELS TO MDAD**

The model shall be submitted with the required information for a full and comprehensive review. This includes but is not limited to the following:

- All linked Models that are part of the Project must be submitted in a folder structure that complies with this Manual and keeps the reloading efforts from MDAD to a minimum.
- Views and sheets as needed to enable a full review. Revit Models where views or sheets have been removed will not be accepted.
- Models shall be fully functional. No blocked Worksets or content is allowed.
- Models shall be checked for warnings prior to submission. If there are unsolvable warnings, these shall be promptly reported to MDAD.

Additionally, Models shall be purged and cleaned. This includes “working views” (that is, views not used on sheets) with the exception of one 3D view of the whole project.

## **1.19 PROJECT REQUISITES**

### **1.19.1 BIM KICK-OFF MEETING**

A BIM Kick-Off Meeting shall be scheduled at the project Kick-Off to discuss the expectations for compliance with this Manual, along with how BIM will be implemented in the project.

If the BIM Authoring is to be performed and/or monitored by an outside Consultant or Contractor external to MDAD, said Firm should be responsible for including among the attendees a representative that is qualified to discuss the requirements made herein.

### **1.19.2 BIM EXECUTION PLAN**

At the start of every BIM project, regardless of the phase, a BIM Execution Plan shall be prepared and submitted to the Miami-Dade Aviation Department for acceptance. The BIM Execution Plan shall be submitted no more than two weeks after the BIM Kick-Off Meeting.

#### **NOTE**

Refer to **ANNEX A – BIM Execution Plan** for a template to document each project's BIM roadmap.

### **1.19.3 QA/QC COMPLIANCE REPORTS**

The Miami-Dade Aviation Department monitors all BIM projects for standard compliance. These reports will be generated on discipline-specific models developed by in-house staff and outside consultants and apply to all projects. Copies of the reports will be submitted to the Department's Project Manager (Design phase) or Resident Engineer (Construction phase).

The MDAD BIM Standards Compliance Report includes a series of mandatory fields for which compliance with the MDAD BIM Standards is required for all projects to pass. The BIM Standard Compliance Report also includes notes and comments about the review.

Compliance Reports are mandatory on all BIM projects developed by or for the Miami-Dade Aviation Department and will be generated on the 25%, 50%, 75%, and 100% milestones of each phase or as corresponds with the project's design and/or construction schedule established by the Project Manager and/or Resident Engineer.

The BIM Standard Compliance Report checks for compliance in the submitted Revit and Navisworks files.

The following images show an example of the BIM Standard Compliance Report. An additional page with Notes and Comments will be included with each report as well.



## BIM Standards Compliance Report

AIRPORT  
BUILDING  
PIN NUMBER  
PROJECT TITLE  
REVIEWED BY  
DATE REVIEWED  
INITIAL REVIEW DATE  
DUE DATE  
MODELS REVIEWED

DISCIPLINE  
DISCIPLINE LEADER  
PROJECT MANAGER  
CONSULTANT NAME  
DATE SUBMITTED  
PHASE  
STAGE  
SUBMITTAL %

### OVERALL SUMMARY PERFORMANCE

☐ PASSED ☐ FAILED

|                       | Compliance (Yes/No)      |
|-----------------------|--------------------------|
| BIM EXECUTION PLAN    | <input type="checkbox"/> |
| GENERAL               |                          |
| Folder Structure      | <input type="checkbox"/> |
| File Location         | <input type="checkbox"/> |
| Coordinate System     | <input type="checkbox"/> |
| AutoCAD Links         | <input type="checkbox"/> |
| Revit Links           | <input type="checkbox"/> |
| Model Size            | <input type="checkbox"/> |
| Links Pinned          | <input type="checkbox"/> |
| PROJECT SETTINGS      |                          |
| Units                 | <input type="checkbox"/> |
| NAMING CONVENTIONS    |                          |
| Model                 | <input type="checkbox"/> |
| Views                 | <input type="checkbox"/> |
| Families              | <input type="checkbox"/> |
| Levels and Elevations | <input type="checkbox"/> |

Image 1.22



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PROJECT BROWSER STRUCTURE

Discipline / Sub-Group

☐

View Classification

☐

PDF SUBMITTALS

Full Size

☐

Multi Sheet

☐

Black and White

☐

Sheet Order

☐

CONTENT QUALITY

Clash Free

☐

Quantity Takeoffs

☐

Object Hosting

☐

Object Alignment

☐

Object Category

☐

Parameter Assignment

☐

Check Systems (Ducts and Pipes)

☐

Check Services (Cable Trays and Conduits)

☐

STYLES

Object

☐

Line Weights

☐

Symbols

☐

Tags

☐

Texts

☐

Dimensions

☐

Lines

☐

Regions

☐

PLAN SET PREPARATION

Discipline / Sub-Group

☐

Contract Border

☐

PIN Number

☐

Airport Name

☐

Title Sheet

☐

Drawing Information

☐

Page 2

Image 1.23



NOTES / COMMENTS

Page 3

Image 1.24

## 1.20 ACRONYMS

The following Acronyms are being used throughout the MDAD BIM Standards Manual.

| ACRONYMS | DESCRIPTION                       |
|----------|-----------------------------------|
| Aoi      | Areas of Interest                 |
| AMS      | Asset Management System           |
| AOI      | Area of Interest                  |
| BEP      | BIM Execution Plan                |
| BIM      | Building Information Model        |
| CAD      | Computer-Aided Design             |
| C3D      | Civil 3D                          |
| FIM      | Facility Information Model        |
| ICE      | Integrated Concurrent Engineering |
| IPD      | Integrated Project Delivery       |
| LoD      | Level of Development              |
| MDAD     | Miami-Dade Aviation Department    |
| MDS      | Model Development Specification   |
| PE       | Professional Engineer             |
| PM       | Project Manager                   |
| PxP      | Project Execution Plan            |
| QTO      | Quantity Take-Off                 |
| RA       | Registered Architect              |
| RCS      | ReCap Scan File Format            |
| RE       | Resident Engineer                 |
| RFI      | Request for Information           |
| SM       | Site Model                        |
| SSI      | Sensitive Security Information    |
| SSoT     | Single Source of Truth            |
| TL       | Task Leader                       |
| TST      | Total Station                     |
| TPD      | Traditional Project Delivery      |
| WCS      | World Coordinate System           |

Table 1.29

## 1.21 GLOSSARY OF TERMS

The following Glossary of Terms is being used throughout the MDAD BIM Standards Manual.

| TERM                    | DESCRIPTION                                                                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3D Model                | A three-dimensional representation of a building and structure that does not necessarily include object-based elements                                                                                                                 |
| 4D Model                | Virtual Model produced by linking activities in the construction schedule to elements and objects within the Model                                                                                                                     |
| 5D Model                | Virtual Model produced by linking activities and cost in the construction schedule to elements and objects within the Model                                                                                                            |
| 6D Model                | Virtual Model produced by including attributes, data, and workflows for Operation & Maintenance to elements and objects within the Model                                                                                               |
| As-Built Model          | A BIM model generated after construction that represents the exact conditions based on field verified shop drawings                                                                                                                    |
| Asset Management System | Database management software used by Operation & Maintenance staff to track repairs and replacements of facility components                                                                                                            |
| Attribute               | Quality, aspect, version, or other characteristic that can be applied to an asset and is recorded as a parameter value                                                                                                                 |
| BIM Model               | A digital / three-dimensional representation of the physical and functional characteristics of a building and structure which includes object-based elements                                                                           |
| BIM Manager             | The System Administrator for all BIM projects                                                                                                                                                                                          |
| BEP                     | BIM Execution Plan. Similar to the BxP                                                                                                                                                                                                 |
| Central File            | The Master Project File that is saved to a network drive and acts as the distribution point for publishing work to the rest of the team. The Central File stores the current ownership information for all the elements of the project |
| Clash                   | Spatial overlap of two or more objects in the Federated Model                                                                                                                                                                          |
| Contract Drawing        | A drawing sheet that is part of the Contract Documents                                                                                                                                                                                 |
| Contract Documents      | The legal set of issued drawings originally signed and sealed by a Professional Engineer (PE) and/or Registered architect (RA), combined with the project's specifications and other formally-issued binding documentation             |

| TERM                        | DESCRIPTION                                                                                                                                                                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction Model          | Includes the different BIM models created in the Construction phase that will include construction means and methods showing the intent of the final construction effort, generally developed to an LoD 350/400                                                           |
| Coordination                | The process of resolving clashes in the Federated Model                                                                                                                                                                                                                   |
| Design Intent Model         | Includes the different BIM models created in the design phase showing the intent of the final design effort, generally developed to an LoD 300/350                                                                                                                        |
| Element Borrowing           | The ability to edit an element located in a Workset without needing to take ownership of the entire Workset. If no one owns the Workset, permission to borrow the element is automatically granted. If a Workset is owned, individual permission must be granted to edit. |
| Facility Information Model  | The Facility Information Model (FIM) stores the most current Revit-based and Civil 3D-based models of that particular facility                                                                                                                                            |
| Federated Model             | A BIM model which integrates all discipline-specific project models                                                                                                                                                                                                       |
| Intelligent Objects         | An Object or Set of Objects that represents not only the geometry of a component but also information that can be extracted in multiple ways depending on the user needs                                                                                                  |
| Integrated Project Delivery | Integrated Project Delivery (IPD) is a project delivery approach that integrates people, systems, and practices to optimize efficiency through all phases of design, fabrication, and construction                                                                        |
| Local File                  | The copy of the Central File located directly on the user's workstation. The main purpose of the Local File is faster data access. The Workset processes establish a link between the Central File and the Local File for data sharing                                    |
| Level of Development        | The degree to which geometric detail and data are incorporated into a BIM Model                                                                                                                                                                                           |
| Parameter                   | A property in Revit consisting of a name or label and a value that can serve as a placeholder to store data. Also known as an Attributes                                                                                                                                  |
| Project Information Model   | The Project Information Model (PIM) stores the finalized Revit-based and Civil 3D-based models as a record of a completed project                                                                                                                                         |

| TERM                         | DESCRIPTION                                                                                                                                                                                                                                         |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Point Cloud                  | A large collection of points placed on a 3D Coordinate System which creates a 3D representation of an object or space                                                                                                                               |
| Record Model                 | Consolidated Model ready to be used for O&M and which includes commissioning information                                                                                                                                                            |
| Revit Families               | Groups of elements with a common set of parameters, identical use, and similar graphical representation                                                                                                                                             |
| Shared Parameters            | Shared Parameters can be connected to projects and families. They give the ability to add specific custom attributes that do not exist in the Revit-based applications                                                                              |
| Site Model                   | The Site Model (SM) is the centralized Revit-based file where all models share coordinates and at the same time will control true north, project north, and elevations                                                                              |
| Site Logistics Model         | The Site Logistics Model (SLM) is the model developed outside the footprint of the building and includes temporary or permanent work either, underground or above ground                                                                            |
| Traditional Project Delivery | Traditional Project Delivery (TPD), a sequence of stages and products such as Conceptual Design, Design Development, and Final Design, creating well-defined workflow boundaries that do not align with a collaborative process                     |
| Worksets                     | Worksets create the ability to divide the project into functional areas. This allows the propagation and coordination of changes between designers and enables multiple members of a team to simultaneously work on different portions of a project |

Table 1.30

## **1.22 UPDATES AND REVISIONS**

The dynamic nature of BIM technology dictates that the MDAD BIM Standards Manual will change over time. Changes to this document will be made by following strict procedures and guidelines.

Changes may be made based on documented errors and omissions, as well as to enhance or update the BIM Standards based on changes in the BIM environment and industry standards practices.

## **1.23 CONTACT INFORMATION**

Questions regarding the Miami-Dade Aviation Department BIM Standards shall be directed to the MDAD Technical Support Group at:

[MDADtechsupport@miami-airport.com](mailto:MDADtechsupport@miami-airport.com)

Miami-Dade Aviation Dept  
P.O.Box 025504  
Miami, FL 33102

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## **2.0 DESIGN & DOCUMENTATION**

This section of the MDAD BIM Standards defines the minimum requirements to develop a BIM Model for Design and Documentation purposes with an emphasis on trade coordination and quantity extraction along with all 2D information needed for the project.

### **2.1 APPLICABILITY**

The Design & Documentation section of the MDAD BIM Standards applies for all projects in the Design phase, where BIM has been specified by Contract. This includes, but is not limited to, redevelopment programs, new construction, renovations, retrofits, expansions, improvements, and other undertakings that MDAD requires.

### **2.2 HOW TO USE THIS SECTION**

The Design & Documentation section needs to be used in conjunction with the General Requirements section; both will allow all stakeholders to develop a BIM Model with the minimum requirements necessary to comply with the MDAD needs.

### **2.3 BIM USES**

Uses and applications for BIM in MDAD Construction Projects have been divided into Mandatory and Recommended approaches. Following definitions are based on those provided by Pennsylvania State University ([https://www.bim.psu.edu/bim\\_uses/](https://www.bim.psu.edu/bim_uses/))

#### **2.3.1 MANDATORY**

##### **2.3.1.1 DESIGN AUTHORIZING**

Design Authoring tools allow for the creation of Building Information Models (BIMs) based on the project's design criteria and as per requirements defined in this standard. It also includes a series of attributes within its database.

#### 2.3.1.2 DESIGN REVIEW

Design Review tools allow all stakeholders to view the data contained within BIMs, in 3D and 2D, and provide feedback to validate multiple design aspects, such as the program, the spaces, the payout, its proportions, conflicts, etc.

#### 2.3.1.3 3D COORDINATION

A process in which 3D coordination tools are used to identify geometric conflicts by comparing Models of building systems. The goal in Design is to deliver a reasonably coordinated Model to be taken as a reference in future developments, particularly at the beginning of the construction phase.

#### 2.3.1.4 QUANTITY TAKE-OFFS

A process in which BIM can be used to assist in the generation of accurate quantity take-offs throughout the lifecycle of a project. This process allows the project team to quantify the effects of their changes during all phases of the project.

### 2.3.2 RECOMMENDED ADDITIONAL USES

#### 2.3.2.1 CODE VALIDATION

Code Validation tools allow checking the BIM model geometry and attributes against specific code compliance.

#### 2.3.2.2 SUSTAINABILITY EVALUATION

Sustainability Evaluation tools allow for the study, evaluation, and tracking of the performance of a project by using a standardized scoring system, such as LEED.

#### 2.3.2.3 ENGINEERING ANALYSIS

Engineering Analysis tools allow for the development, simulation, optimization, and refinement of the BIM models, such as Structural, Lighting, Mechanical, Energy, etc., to reduce the project's life-cycle cost.

#### 2.3.2.4 COST ESTIMATION

Cost Estimation tools assist in the generation of accurate pricing of the project by associating unit cost to the items, elements and/or objects identified as part of the Quantity Take-Offs.

## 2.4 REQUIREMENTS

The MDAD BIM projects shall be in complete compliance with the latest release of the MDAD BIM Standards currently in use.

### 2.4.1 LEVEL OF DEVELOPMENT

In general terms, the Level of Development (LoD) required for the Design & Documentation phase will range from LoD 200 to LoD 300, depending on the element Category. Typical examples of Levels are:

- LoD 200: Foundation piles and pile caps, structural trusses, and joists.
- LoD 300: Walls, MEP systems.

The former examples are FOR REFERENCE ONLY, and may not reflect the requirements of each project. The actual LoD requirements for a particular project shall be ruled by the Model Development Specification (MDS), as approved by MDAD and documented in the BEP. For information on the MDS, refer to **Section 1.8.7 - Model Development Specification**

### 2.4.2 ROLES AND RESPONSIBILITIES

This section describes the Roles and Responsibilities of the different team members involved in the MDAD's BIM projects. These Roles and Responsibilities might vary depending on the Project specifics and shall be reflected on the BEP for each project.

#### 2.4.2.1 TECHNICAL SUPPORT GROUP

This group is responsible for maintaining the MDAD BIM Standards Manual and associated Support Files, along with providing all necessary BIM support needed for the Aviation Department.

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In addition to its other Roles and Responsibilities, the Technical Support Group will:

- Review and approve each project BIM Execution Plan.
- Provide templates defined in this Manual and a Site Model for consultants to inherit proper coordinates in their own Models.
- Upon the request of MDAD's Project Manager, it may act as the main point of contact for the Lead Consultant on BIM related issues.
- Respond to RFI submissions from Consultants on BIM related queries. This may include: providing templates, answer the question regarding standards, etc.
- Audit Models for compliance.
- Provide seminars or training regarding specific tools, processes, or requirements.

#### 2.4.2.2 DESIGN PROJECT MANAGERS / COORDINATORS

Each project has a Design Project Manager / Coordinator who is responsible for the following BIM related issues:

- Schedule the BIM Kick-Off Meeting.
- Develop (or assign a qualified person/group to develop) a BIM execution Plan, and monitor Design Staff adherence to it throughout the Project.
- Schedule regular Inter-Disciplinary Coordination meetings.
- Coordinate any BIM related issues with the rest of the Design Team.
- In coordination with MDAD's Project Manager, notify the Technical Support Group when the Project reaches a milestone and needs to be archived.

#### **NOTE**

Outside Consultants may choose to assign a BIM Coordinator to act on their behalf and represent them in all BIM related issues with MDAD. For larger Projects, MDAD reserves the right to make this a mandatory requirement.

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#### 2.4.2.3 DESIGN STAFF (EXTERNAL)

Outside Consultants Design Staff are responsible for the following BIM related issues:

- Coordinate design work with other disciplines.
- Author discipline-specific BIM Content, as required by Contract as well as this Manual and the approved BEP and MDS for the Project. Naturally, this includes both geometric and non-geometric information.
- Ensure BIM supports the process of Design Review.
- Run discipline-specific Clash Detection Reports.
- Extract Quantities for Estimating purposes.
- Archive Disciplines Specific Folders under SUBMITTALS

## 2.5 DELIVERABLES

The Miami-Dade Aviation Department requires two types of BIM deliverables on every submission milestone: Drawing and Electronic Deliverables

### 2.5.1 DRAWING DELIVERABLES

All official milestones, other than the final submissions, shall include full size (24" x 36") PDF files of each sheet.

A Revit Titleblock template family has been developed as part of the support files and can be found in the following folder:

**\\MDAD - BIM Standards\Support Files>Titleblocks\**

This family is called **MDAD - Contract Border\_Full.rfa**, and shall be updated by the group responsible for delivering each set.

Required updates include but may not be limited to updating logo, Project North arrow orientation, Project name, and number, among others.

Changes in sizes or overall sheet composition are not allowed.

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The final submission shall also include hardcopies of each sheet in full size (24" x 36"), printed in black and white, and identified with the Miami-Dade Aviation Department Contract Border provided with the MDAD - BIM Standards. Drawings shall be signed and stamped at milestones as required for permit and contract submittals. **See Section 2.5.3 - Deliverables Schedule.**

**NOTE**

If the project team requires a different size not shown, a request must be submitted to the MDAD's Technical Support Group for acceptance.

**2.5.2 ELECTRONIC DELIVERABLES**

Electronic files shall be submitted, at minimum, at each official milestone. Additional submissions may be required depending on the Project or at the discretion of the MDAD's Project Manager.

Files shall be submitted digitally via an MDAD approved FTP or cloud service or by physical media (CDs/DVDs/Flash Drives); files shall be delivered virus free and shall include the following file formats:

- RVT: Revit Model files
- NWF: Navisworks File set ("live" container of NWC files)
- NWC: Navisworks Cache files
- NWD: Navisworks Document files ("published" container or Federated file)
- PDF: Portable Document Format (Raster Files)
- XLS: Navisworks Clash Report files
- DWG: AutoCAD Sheet exports from Revit and/or Civil 3D files when required

### 2.5.3 DELIVERABLES SCHEDULE

Each deliverable shall be submitted on the following instances, at a minimum:

| DELIVERABLES     | PROJECT MILESTONES |     |     |      |                 |
|------------------|--------------------|-----|-----|------|-----------------|
|                  | 25%                | 50% | 75% | 100% | BUILDING PERMIT |
| DRAWINGS (PRINT) |                    |     |     | X    | X               |
| DRAWINGS (PDF)   | X                  | X   | X   | X    | X               |
| DRAWINGS (DWG)   | X                  | X   | X   | X    | X               |
| RVT              | X                  | X   | X   | X    | X               |
| NWF              |                    |     | X   | X    |                 |
| NWC              |                    |     | X   | X    |                 |
| NWD              | X                  | X   | X   | X    | X               |
| XLS              |                    | X   | X   | X    |                 |

#### **NOTE**

Additional instances of submission may be required by Contract or defined in the BIM Execution Plan for each particular project.

### 2.6 CLASH DETECTION

Detecting and resolving design interferences is one of the selected BIM uses for the Design and Documentation Phase. As such, and due to the very collaborative nature of it, Clash Detection Resolution is a shared responsibility between all disciplines and Project Manager/s to achieve a coordinated Model.

As seen in **Section 2.5.3 - Deliverables Schedule**, MDAD requires Navisworks files as part of the submission deliverables to monitor that this process is being carried out. It is highly recommended that this effort is progressively carried out as Design development progresses, as opposed to waiting for a finalized design to focus on coordination.

### **2.6.1 SINGLE-DISCIPLINE INTERFERENCE CHECK**

Each discipline is responsible for verifying self-coordination as the design is developed. In other words, each Author shall verify that there are no conflicts between elements in the same Model for the content for which they are responsible (e.g., Plumbing Model should not have pipes interfering with other pipes).

In addition to visual inspection of the plans, sections, and 3D views, it is highly encouraged to perform automated interference checks by using Revit's built-in tool (Interference Check), Navisworks Clash Detective tool, or a combination of both.

### **2.6.2 CROSS-DISCIPLINE INTERFERENCE CHECK**

The Design Project Manager is responsible for setting up Inter-Disciplinary Coordination Meetings as often as the project requires.

The Cross-Discipline Interference Check will be performed using Autodesk Navisworks. Each discipline's Coordinator is responsible for creating a Navisworks file out of their Revit Models unless specified otherwise in the BEP.

### **2.6.3 NAVISWORKS FEDERATED MODEL**

The Design Project Manager (or appointed person or group as defined in the BEP) shall be responsible for compiling all the discipline-specific Navisworks Cache files (NWC) into a single Federated Navisworks file (NWF) for coordination purposes.

Pre-defined settings have been developed to promote consistency when generating the Clash Reports and to speed up the initial set up. Refer to the **MDAD - Federated Model Template.nwf** file provided as part of the Support Files found under the following folder:

**\\MDAD - BIM Standards\Support Files\Coordination\**

## 2.6.4 NAVISWORKS CLASH REPORTS

Navisworks Clash Reports are required on every Submission Milestone and shall include the following mandatory fields:

- Clash Point
- Date Found
- Assigned To
- Date Approved
- Item ID
- Status
- Comments
- Image
- Grid Location

### 2.6.4.1 COLOR SCHEMES

The following Color Scheme is used to promote consistency and easy identification across all users when generating Clash Reports. At a minimum, the following Disciplines shall adhere to this Color Scheme.

Table 2.1 describes the nomenclature of the Color Scheme.

| COLOR SCHEMES   |             |
|-----------------|-------------|
| DISCIPLINE      | COLOR       |
| Architectural   | Cyan        |
| Civil           | Dark Gray   |
| Electrical      | Yellow      |
| Equipment       | Orange      |
| Fire Protection | Red         |
| Interiors       | Light Gray  |
| Landscape       | Pink        |
| Life Safety     | Light Blue  |
| Mechanical      | Green       |
| Plumbing        | Magenta     |
| Signage         | Light Green |

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|                    |        |
|--------------------|--------|
| Structural         | Blue   |
| Survey             | Purple |
| Telecommunications | White  |

Table 2.1

**NOTE**

Depending on the project needs, a further breakdown can be set either by level or by system. Contact the BIM Support Group if you need to create new Color Schemes.

2.6.4.2 CLASH REPORT SAMPLE

The image below shows an example of a Navisworks Clash Report required on all BIM projects done at the MDAD.

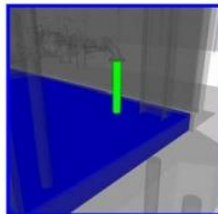
## Clash Report

### Report Batch



#### Test 1 Clash

|           |        |
|-----------|--------|
| Tolerance | 0.00ft |
| Total     | 22     |
| New       | 22     |
| Active    | 0      |
| Reviewed  | 0      |
| Approved  | 0      |
| Resolved  | 0      |
| Type      | Hard   |
| Status    | OK     |



|              |                     |
|--------------|---------------------|
| Name         | Clash1              |
| Distance     | ft                  |
| Status       | New                 |
| Date Created | 2009/12/10 12:44:37 |

#### Item 1

|                  |                     |
|------------------|---------------------|
| Layer            | Ground Floor        |
| Item Name        | 10" Foundation Slab |
| Element ID Value | 589675              |

#### Item 2

|                  |                  |
|------------------|------------------|
| Layer            | <No level>       |
| Item Name        | Galvanized Steel |
| Element ID Value | 335371           |

---

## **2.7 COORDINATION MEETINGS**

Regular meetings to discuss areas of concern will take place as requested by the Design Project Manager and/or Coordinator. To facilitate the discussion, copies of all Revit and/or Navisworks files shall be accessible via their shared file system and displayed on a screen viewable by all attendees.

### **2.7.1 PROGRESS MEETINGS**

Meetings will take place at the Design Project Manager's and/or Coordinator's discretion and/or as otherwise defined by the BIM Execution Plan to review the general development of the BIM model files. Discussions may revolve around progress in developing geometry and/or adding data to the files.

### **2.7.2 SUBMISSION REVIEW MEETINGS**

At least two weeks before every Submission Milestone, a Submission Review Meetings shall take place to review the general development of the BIM model files. This meeting is mandatory, and all Disciplines must attend.

## **2.8 QUANTITY TAKE-OFFS**

It is of paramount importance to MDAD to be able to extract reliable quantities from a Model if the project has been selected for mandatory BIM use.

In order for quantities to be of value, Model Authors are responsible for ensuring their developed content is representative of the actual design.

The following are mandatory practices:

- Abide by the MDS Matrix. LoD is not only a measure of detail but also of completeness.
- Use family types as needed to correctly represent the design (do not mirror content if, in reality, they are quantified separately).
- In correspondence to the above, different family types shall have different Type Marks.
- Avoid groups as much as possible.

- Follow Unifomat coding requirements (Assembly Code and Assembly Description parameters).

### **2.8.1 SCHEDULES ORGANIZATION**

A series of pre-defined empty Schedules for Quantity Take-Off purposes have been provided with the MDAD BIM Standards Templates. These Schedules will populate automatically as you add content to the Models and will help streamline the processes of Cost Estimating with the Estimating Group.

These schedules are in no way intended to meet all quantification requirements for the Project; Model Authors may duplicate and filter out content as needed, but original schedules must be maintained.

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## **3.0 CONSTRUCTION & MANAGEMENT**

This section of the MDAD BIM Standards defines the minimum requirements to develop a Model for Construction and Management purposes. The emphasis is made on Construction Planning, interdisciplinary coordination, and capturing commissioning information as well as as-built conditions, so an accurate Model is available for handover to O&M at the end of construction.

### **3.1 APPLICABILITY**

The Construction & Management section of the Port of Seattle DF BIM Standards applies for all projects in the construction phase, where BIM has been required. This section has been developed for a traditional Design-Bid-Build project delivery method.

### **3.2 HOW TO USE THIS SECTION**

The Construction & Management section needs to be used in conjunction with the General Requirements section; both will allow all stakeholders to develop Models with the minimum requirements necessary to comply with the MDAD needs.

### **3.3 BIM USES**

Uses and applications for BIM in MDAD Construction Projects have been divided into Mandatory and Recommended. Following definitions are based on those provided by Pennsylvania State University ([https://www.bim.psu.edu/bim\\_uses/](https://www.bim.psu.edu/bim_uses/))

### **3.3.1 MANDATORY**

Unless elsewhere specified by Contract, Contractors are to comply with the following required uses, at minimum.

#### **3.3.1.1 3D COORDINATION**

A process in which 3D coordination tools are used to identify geometric conflicts by comparing Models of building systems. The goal is to eliminate field conflicts and coordination issues prior to installation/construction.

#### **3.3.1.2 PHASE PLANNING**

A process in which a 4D model (3D models with the added dimension of time) is utilized to effectively plan the phased occupancy in a renovation, retrofit, addition, or to show the construction sequence and space requirements on a building site.

#### **3.3.1.3 DIGITAL FABRICATION (LIMITED TO SHOP-DRAWINGS)**

At a minimum, Shop Drawings developed and submitted by the Contractor (or any of its Subcontractors) shall be developed from a coordinated Model and accurately reflect the signed-off layout, which is the output of the 3D Coordination process defined in this Document.

#### **3.3.1.4 QUANTITY TAKE-OFFS**

A process in which BIM can be used to assist in the generation of accurate quantity take-offs throughout the lifecycle of a project. This process allows the project team to quantify the effects of their changes during all phases of the project.

#### **3.3.1.5 RECORD MODEL**

Record Modeling is the process used to depict an accurate representation of the physical conditions, environment, and assets of a facility. It is the culmination of all the BIM Modeling throughout the project, including linking Operation, Maintenance, and Asset data to the As-Built model. MDAD requires the final Model deliverable to be accurate and according to the specifications made on this document, both in terms of geometry and data.

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### **3.3.2 RECOMMENDED ADDITIONAL USES**

In addition to Mandatory uses, MDAD strongly recommends the Contractor to consider the following potential BIM uses in the Project. If selected, these shall be carried out at no additional cost for MDAD.

#### **3.3.2.1 COST ESTIMATION**

A more mature use of Quantity Take-Off where also cost is included, which can help analyze and then curb excessive budget overruns due to project modifications.

#### **3.3.2.2 CONSTRUCTION SCHEDULING**

A process in which the Construction Activities are linked to the geometry in the Construction Model to provide a detailed simulation of the construction schedule. This is typically more detailed than Phase Planning, as it provides information at the day or week level, instead of larger time units, such as months or years.

#### **3.3.2.3 3D CONTROL AND PLANNING**

A process that utilizes a model to layout facility assemblies or to automate control of equipment's movement and location. The information model is used to create detailed control points to aid in assembly layout.

### 3.4 REQUIREMENTS

BIM Construction projects shall be in complete compliance with the latest release of the MDAD BIM Standards currently in use.

#### 3.4.1 LEVEL OF DEVELOPMENT

In general terms, the Level of Development (LoD) required for the Construction & Management phase will range from LoD 300 to LoD 400, depending on the element Category. Typical examples of Levels are:

- LoD 300: Walls, doors, and windows
- LoD 350: Building services components like Piping and Ductwork
- LoD 400: Electrical and Mechanical Equipment

The former examples are FOR REFERENCE ONLY and may not reflect the requirements of each project. The actual LoD requirements for a particular element shall be ruled by the Model Development Specification (MDS), as approved by MDAD and documented in the BEP. For information on the MDS, refer **Section 1.8.7 - Model Development Specification**

#### 3.4.2 MODEL DEVELOPMENT SPECIFICATION

Refer to **Annex B - Model Development Specification** for the MDS tables. An excel file named MDAD - MDS Matrix.xlsx file **has been** provided as part of the support files and can be found in the following folder:

**\\MDAD - BIM Standards\Support Files\Model Development Specification\**

### **3.5 ROLES AND RESPONSIBILITIES**

This section describes the Roles and Responsibilities of the different team members involved in MDAD BIM projects. These Roles and Responsibilities might vary depending on the Project specifics and shall be reflected on the BEP for each project.

#### **3.5.1 TECHNICAL SUPPORT GROUP**

This group is responsible for maintaining the MDAD BIM Standards Manual and associated Support Files, along with providing all necessary BIM support needed for the Aviation Department.

In addition to its other Roles and Responsibilities, the Technical Support Group will:

- Review and approve each project BIM Execution Plan
- Provide templates defined in this Manual and a Site Model for consultants to inherit proper coordinates in their own Models
- Upon the request of the PM or Resident Engineer, it may act as the main point of contact with the Contractor for BIM related issues
- Respond to RFI submissions from Consultants on BIM related queries. This may include: providing templates, answer the question regarding standards, etc.
- Audit Models for compliance
- Prepare final Record Model for incorporation to an Asset Management System

### 3.5.2 RESIDENT ENGINEER AND/OR CONSTRUCTION MANAGER

The Resident Engineer and/or Construction Manager supervises the planning, coordination, and implementation of construction projects along with the time, delivery, cost, quality, and safety of the project and is responsible for the following BIM related issues:

- Schedule the BIM Kick-Off Meeting
- Facilitate meetings among all stakeholders
- Schedule regular Inter-Disciplinary Coordination meetings and ensure the 3D Coordination is carried over as planned
- Coordinate any BIM related issues with all stakeholders
- Ensure Models are being developed as stated in the approved MDS and BEP, in terms of Completeness, Level of Detail, Attributes (Commissioning Data), As-Built conditions (field-verified shop drawings), and other aspects as required by the project

### 3.5.3 CONTRACTOR AND SUB-CONTRACTORS

The General Contractor and Sub-Contractors are responsible for the following BIM related issues:

- Develop a BIM Execution Plan (Contractor). Refer to **Section 3.6.1- BIM Execution Plan**
- Adhere to the BIM Execution Plan (Subcontractors)
- Author/Develop the Trade Models in compliance with this Manual, the BEP, and the MDS.
- Host/Lead/Participate multi-trade 3D Coordination meetings, which includes but may not be limited to presenting the issues to review, recording the meeting conclusion and distributing clash reports to interested parties, and pursue resolution of conflicts. The 3D Coordination Strategy, including but not limited to the overall process and aimed Coordination sign-off dates shall be stated in the BEP
- Collaboratively work with field personnel to define the methods and processes that will be used to keep models updated with field-verified information (As-Built updates). This process shall be stated in the BEP
- Develop a 4D Model for phase and site planning. Once a Model achieves this status (for a particular Zone or Area of interest), it becomes the single source of truth for spatial coordination. This is relevant because, if any conflict arises during construction or installation, the sign-off Model will be the first step to open a discussion and determine the reasons and the parties responsible for resolution.

For this reason, the Sign-Off Model shall be the basis for all Shop Drawing creation, and the Sub-Contractor producing them shall use MDAD approved software (Autodesk Revit or another approved platform such as AutoCAD MEP, Fabrication CADmep, etc.)

The following two requirements must be met for a Model to be eligible for Sign-Off :

1. Geometry has to be according to the LoD stated in the MDS

The reason is that the intended location of Model elements may be affected by changes in geometry, connection points of equipment, etc.

2. Acceptable interference resolution

A 100% clash-free model, though desired, may not always be possible or practical to pursue. The model may have open items at the time of sign off, under the condition that they all have identified action items with a responsible party assigned that acknowledges them in the sign-off documentation provided to the Resident Engineer. MDAD may still reject the claim for sign-off status if the open items reported are considered of relevance, and action items are not satisfactory.

Examples of clashes approvable by the Contractor or Sub-Contractors:

- Slight insulation clashes (requires trade specialist/Sub-Contractor to approve)
- MEP interference with basic walls, where penetrations are not necessarily modeled
- Intentional MEP interference with the floating ceiling; such as sprinkler, lighting fixtures, etc.

Example of clashes that may require additional acceptance by MDAD:

- Any interference that is left to be resolved in the field
- Interference with access zones or clearances, where they may cause difficulty in the operation and maintenance of equipment
- Other as ruled by the Resident Engineer

#### 3.5.3.1.1 COORDINATION SIGN-OFF SHEET

Regardless of the methodology and process followed for spatial coordination, it is mandatory that all participants (Contractor and Sub-Contractors) formally sign-off on a coordinated Model before any installation. The sign-off sheet shall include the following:

- Statement of conformity regarding coordination status
- Acknowledgement of any outstanding open items (if any), their recommended actions and their potential implications. These items must be listed, each with their responsible party and expected action.
- Expressed commitment to perform any construction and installation works as close to the signed off Model as possible and to immediately report any field deviations that may impact future works, especially to other trades
- 4D Model – Phase and Site Planning
- Capture Commissioning Data as construction progresses
- Update each trade Model with a field-verified shop drawing information to produce an As-Built Model (Record Model)

#### 3.5.4 BIM LEAD COORDINATOR

The General Contractor shall assign a person and/or consultant whose main role is the coordination of all BIM related project efforts. The BIM Lead Coordinator shall, at a minimum, lead the 3D Coordination efforts between trades. The Contractor may also choose to assign to this person the task of acting as the main point of contact with MDAD for BIM related issues.

The full extent of the role and its responsibilities for each BIM Use shall be stated in the BEP.

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## 3.6 DELIVERABLES

MDAD requires different types of BIM deliverables in a Construction Project, according to the Uses selected and described in **Section 3.3 - BIM Uses**.

This Section covers the minimum requirements for each deliverable.

### 3.6.1 BIM EXECUTION PLAN

In addition to the requirements made in the General Requirements Section, the BEP developed by the Contractor shall comply with the following.

#### 3.6.1.1 CONTENTS

For the Construction Phase, a BIM execution Plan needs to focus on the interaction between different Contractors, clearly showing the collaboration processes that will ensure the consolidation of the BIM Goals selected for the Project.

The Contractor may choose to use the MDAD template as a starting point or, prior approval of MDAD, use a template of its own authoring.

In any case, the BEP shall contain, at a minimum:

- General Project information, such as name, contract number, project address, etc.
- Project Directory Structure
- Project Coordinates: Origin point and Datum elevation
- BIM Primary Uses in the Project (need to match the Mandatory uses described in Section 3.3.1, as well as any other requirements made in the Contract)
- BIM Recommended Additional Uses in the Project
- A thorough description of roles and responsibilities, per BIM use. This can be done as a narrative, responsibility Matrix or chart, or as part of a flow chart
- A Model Development Specification (MDS) prepared specifically for the Project, from the MDAD MDS Template
- Project breakdown into Areas of Interest. Refer to Section 3.6.3.3
- Strategy and Process to achieve 3D Coordination

- Strategy and Process to incorporate Asset data
- Strategy and Process that will be used to incorporate field information back into the model, to capture final installed conditions (e.g.: by using field-verified Shop Drawings)
- Project BIM Schedule, including but not limited to Model Development completion per zone, Coordination Sign-off, shop drawing deliverables, incorporation of Asset Data, etc.

#### **NOTE**

It is highly probable that some of the information required in this list may not be available at the time of the first submission of the BEP to MDAD; for instance, some subcontractors may not have been selected yet. For this type of situation, it will be acceptable to keep “place holders. This is not applicable to processes, strategies, and general roles and responsibilities, which shall be included from the first version.

#### **3.6.1.2 SUBMISSION TO MDAD**

The BEP shall be submitted by the Contractor to MDAD not later than 30 days after the Project’s BIM kickoff meeting. This is to be considered a formal submission for Approval, and as such, it shall use the formal means of communication as defined by MDAD.

MDAD will review and provide comments if needed, within 14 calendar days.

#### **3.6.1.3 UPDATES**

The BEP is considered a “live document”. Even after approval by MDAD, it may be necessary to update the information so that it accurately represents the Project schedule, key Project members, processes, etc. It is the Contractor's responsibility to keep the BEP up to date.

Additionally, MDAD reserves the right to request an updated BEP from the Contractor at any time.

### **3.6.2 PROGRESS REPORT FROM CONTRACTOR**

To ensure better communication between MDAD and other parties and to expedite the Technical Support Unit's review of BIM submissions, the Contractor shall prepare a Progress Report to accompany all deliverables (in progress or final), describing the progress made on each.

This report shall also include any deviations from the Manual and/or BEP, explicating the causes for MDAD to review.

### **3.6.3 CONSTRUCTION MODEL**

#### **3.6.3.1 INTRODUCTION**

The Construction Model is a tool that will allow all stakeholders to better understand the Project, so more educated decisions can be made in regards to it.

The Construction Model is highly dynamic by the simple fact that it affects, and is in turn affected by, the construction process itself. For the Construction Model to meet its purpose, the information contained in it must always be as current and as reliable as possible.

Throughout this section, the term Construction Model may refer to the following:

- A single composite or Federated Model; e.g. the Navisworks NWF/NWD files
- Several Trade Models referred to the same Project, e.g. the aggregate of the Revit and Civil 3D native files

#### **3.6.3.2 TRADE MODEL DEVELOPMENT**

Each trade shall develop its own model/s in accordance with the requirements made in this Manual and as refined in the Project's BEP. The Model Development Specification (MDS) is a critical Document to guarantee a clear understanding of the modeling scope of all parties involved.

To avoid duplicates and/or omissions, the Model Development Specification for the Project shall clearly state the MEA (Model Element Author) for each of the categories contained in the Model.

The MDS also contains critical information regarding the Level of Development that must be achieved for each project milestone, as it is expected that both geometry and data will change and are progressively more defined as information becomes available.

### 3.6.3.3 CONSTRUCTION MODEL BREAKDOWN

Depending on the size of the project, it may be convenient to divide the scope into smaller zones that MDAD refers to as Areas of Interest (AoI). The AoI shall be defined by the Contractor and stated in the BIM Execution Plan. The definition is typically influenced by the construction sequence, but other factors may become relevant as well. As a general rule, defined Areas of Interest must include all trades occupying that space.

Examples of Areas of Interest are entire Construction Zones, complete or partial Floors, Mechanical Rooms, Generator/Electrical Rooms, Risers, Restrooms, Single rooms of particular importance, etc.

As previously mentioned, the Contractor shall propose in the BEP the areas that the Construction Model will be broken into. Areas of Interest are subject to acceptance by MDAD's appointed Resident Engineer.

A few aspects to consider for this purpose are the following:

- Each Area of Interest will be considered by MDAD as a BIM partial deliverable. Reporting from the Contractor shall be based on that
- Naturally, the sum of the Areas of Interest needs to contain the full project scope of the work
- Areas of Interest may go through each Model Milestones independently
- There is no limitation on how big or small Areas of Interest need to be in terms of square footage
- There is no minimum or maximum amount of Areas of Interest that a project needs to have
- It is often helpful to think "backward in time". For example, to identify zones that will need shop drawings first so that in-depth BIM coordination can begin sooner in those areas

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#### **NOTE**

MDAD may request at its sole discretion that all Areas of Interest are submitted for the initial Basis of Design Milestone at the same time. This may be the case for relatively small and simple projects.

#### **3.6.3.4 CONSTRUCTION MODEL MILESTONES**

Milestones are referred to in the MDS and are to be considered when planning the development of the Models. This section contains the definitions required for the Contractor and Subcontractors to plan Model content.

MDAD recognizes three milestones for the Construction Model, as defined below:

- **Basis of Design:**  
Models have been prepared as per Contract Documentation, plus any variation requested from or approved by MDAD (for example, Change Orders or Post-Award Design changes). Regarding 3D coordination, the location of elements is considered to approximate, not final.
- **Coordination Sign-off Model:**  
All Trade Model elements have reached the LoD required for Sign-off in the MDS, and elements are in their final position. Model is accepted as the “single source of truth” for coordination purposes. As part of the sign-off process, all parties agree to install layouts, as shown on the model.
- **As-Built Model:**  
Elements identified in the MDS have been updated as per field-verified locations. Additionally, information relevant to the Enterprise Asset Management System has been incorporated into the Trade Models.

### 3.6.3.5 SUBMISSION AND REPORTING TO MDAD

The first submission For Review and Comment of the Construction Model shall be made 45 days after the BIM kick-off. This submission corresponds with the Basis of Design milestone, which means the Trade Models need to accurately represent the Design Intent.

The Contractor shall continue to submit the Construction Model on a monthly basis to MDAD until the Project is closed. **Refer to Section 3.6.7 - BIM Deliverable summary and Schedule.**

All Monthly submissions shall include as part of the Report from the Contractor described in **Section 3.6.2**, a narrative of the progress made in the elapsed period.

### 3.6.4 3D COORDINATION

3D Coordination between Trades is one of the main uses selected by MDAD for the construction phase. Any clashes not attended to in the Coordination Model will naturally translate into issues in the field, with consequent negative time and cost impact.

#### 3.6.4.1 MULTI-TRADE 3D COORDINATION STRATEGY

It is the Contractor's responsibility to define a strategy for spatial coordination, which shall be defined in the BEP.

The strategy shall clearly define, at a minimum:

- BIM Lead Coordinator, and a description of the role responsibilities within this framework.
- Frequency of meetings and publishing of Trade Model
- Meeting Methodology and platform (e.g., remote attendance or in-person)
- Areas of Interest/Coordination Zones that the modeling scope has been divided into for coordination purposes
- Coordination schedule. Target sign-off dates for each Area/Zone
- Brief description of how clashes will be generated, assigned, tracked, etc.
- Description of the Folder structure that will be used in the NWF/NWD files to organize clashes

As a general principle, MDAD will allow Contractors to define their own strategy and follow tried-and-true internal processes. However, MDAD reserves the right to require changes in strategy and processes in situations where its interests as an owner are at risk due to a poor outcome or performance in spatial Coordination.

#### 3.6.4.2 COMPLETENESS OF TRADE MODELS

Each trade is responsible for completing its own Model/s to the LoD defined in the MDS prior to the Coordination of an Area. Any delays to include geometry shall make the Model Element Author directly responsible for the delays in Coordination.

#### 3.6.4.3 UPDATES IN TRADE MODELS

As a direct consequence of the Coordination process, Trades will be required to update their Models and publish updated versions at the time, on the format, and using the platform defined in the BEP.

Trade Model updates may occur naturally only until Coordination sign-off. After this point, any required changes in the Model need to be reported first to the BIM Lead Coordinator, who will decide on the process to follow, based on the nature and impact of the change requested.

#### 3.6.4.4 SUBMISSION AND REPORTING TO MDAD

A Federated Model shall be included as part of the monthly BIM submission to MDAD. A comprehensive submission of this Model includes:

- Single Trade Native Revit Files
- Single Trade Navisworks files (NWC)
- Navisworks File Set (NWF) file that links NWC files together
- Published Navisworks (NWD) file

NWF and NWD files shall maintain the Clash Detection Tests used by the BIM Coordinator to run interference checks, as well as the saved Viewpoints used for assigning clashes.

Additionally, the submission shall be complemented by a Coordination Status report, which is part of the Monthly Progress Report by the Contractor. See Section 3.6.2.

This part of the report shall contain, at a minimum:

- Coordination Status for the different Areas/Zones
- Clash count Matrix
- List of Open RFIs significantly affecting coordination
- Updates to Coordination schedules, if needed

#### 3.6.4.4.1 COORDINATION SIGN-OFF AND SHOP DRAWING PREPARATION

Once a Model achieves this status (for a particular Zone or Area of interest), it becomes the single source of truth for spatial coordination. This is relevant because, if any conflict arises during construction or installation, the sign-off Model will be the first step to open a discussion and determine the reasons and the parties responsible for resolution.

For this reason, the Sign-Off Model shall be the basis for all Shop Drawing creation, and the Sub-Contractor producing them shall use MDAD approved software (Autodesk Revit or another approved platform such as AutoCAD MEP, Fabrication CADmep, etc.)

The following two requirements must be met for a Model to be eligible for Sign-Off :

1. Geometry has to be according to the LoD stated in the MDS  
The reason is that the intended location of Model elements may be affected by changes in geometry, connection points of equipment, etc.
2. Acceptable interference resolution  
A 100% clash-free model, though desired, may not always be possible or practical to pursue. The model may have open items at the time of sign off, under the condition that they all have identified action items with a responsible party assigned that acknowledges them in the sign-off documentation provided to the Resident Engineer. MDAD may still reject the claim for sign-off status if the open items reported are considered of relevance, and action items are not satisfactory.

- Examples of clashes approvable by the Contractor or Sub-Contractors:
  - Slight insulation clashes (requires trade specialist/Sub-Contractor to approve)
  - MEP interference with basic walls, where penetrations are not necessarily modeled
  - Intentional MEP interference with the floating ceiling; such as sprinkler, lighting fixtures, etc.
- Example of clashes that may require additional acceptance by MDAD:
  - Any interference that is left to be resolved in the field
  - Interference with access zones or clearances, where they may cause difficulty in the operation and maintenance of equipment
  - Other as ruled by the Resident Engineer

#### 3.6.4.4.2 COORDINATION SIGN-OFF SHEET

Regardless of the methodology and process followed for spatial coordination, it is mandatory that all participants (Contractor and Sub-Contractors) formally sign-off on a coordinated Model before any installation. The sign-off sheet shall include the following:

- Statement of conformity regarding coordination status
- Acknowledgement of any outstanding open items (if any), their recommended actions and their potential implications. These items must be listed, each with their responsible party and expected action.
- Expressed commitment to perform any construction and installation works as close to the signed off Model as possible and to immediately report any field deviations that may impact future works, especially to other trades

### **3.6.5 4D MODEL – PHASE AND SITE PLANNING**

Service continuity and minimum impact on the transport of passengers and cargo is one of the prime concerns of MDAD during Construction Planning and Execution. As such, the dimension of Time takes on a particular relevance within BIM deliverables. By requesting a 4D Model at the beginning of Construction, MDAD plans to utilize it as a tool to support early decision-making and risk-mitigation, particularly in regards to the impact of Airport operations.

It is the Contractor's responsibility to submit this Model and simulation as per the requirements made in this section.

#### **3.6.5.1 OVERALL DESCRIPTION**

The 4D Model shall be obtained by adding the Construction timeline or schedule to a Site Plan and any surroundings affected by Construction work.

The simulation has three main components, which are all explained in this section: The Project Environment Model, a Project Site Logistics Model (SLM), and the Simulated Timeline. The components are explained first, and Section 3.6.5.5 covers the Simulation itself.

#### **3.6.5.2 PROJECT ENVIRONMENT MODEL**

##### **3.6.5.2.1 DESCRIPTION**

This component is meant to act as a background and provide a spatial reference to the simulation. It will typically be based on Base Map files provided by MDAD's Technical Support Unit.

Depending on the available information at the time, this model may contain 2D information only, 3D components, or a combination of both. For the same reason, it may be submitted in DWG, RVT, or NWD format.

##### **3.6.5.2.2 REQUIREMENTS**

This Model will be submitted by MDAD for reference only, with the purpose of including it in the 4D simulation software in use by the Contractor.

The contractor shall not significantly alter or add any the geometry on this file without approval in writing by MDAD; this includes modifying the Model coordinates.

### 3.6.5.3 PROJECT SITE LOGISTICS MODEL

#### 3.6.5.3.1 DESCRIPTION

This component of the simulation is where the Contractor (or party assigned by the Contractor) shall perform any 3D modeling work. It is a stand-alone Revit Model, created for this purpose only.

#### 3.6.5.3.2 REQUIREMENTS

This Model (SLM) shall only contain temporary components such as Job Trailers, fencing, material lay-down areas, etc. Unlike other models, the Site Logistics Model will not typically undergo an LoD transformation throughout the process, as generic geometry is typically sufficient for its purposes.

Further, as opposed to Trade Models, the Site Logistics Model will not contain any final work and will not be used by MDAD beyond the duration of Construction. As a direct consequence, content requirements are fewer and less strict.

However, the following practices are to be observed, at a minimum:

- The Contractor is still expected to follow the MDAD Standards Manual as a reference when developing the Site Logistics Model
- Any Revit template provided as support to this Manual may be used. The Contractor may modify it at will.
- As a general rule, LoD requirements for elements in the Site Logistics Model will not be higher than a Level of Development 200 (LoD-200)
- No permanent work is to be included in the Site Logistics Model
- The Site Logistics Model must remain a Revit native file, and its geometry shall also be native to this software (there may be some approved exceptions that will be treated on a case-by-case scenario)
- Elements Family Name and Type, when defined by the Contractor, must be suggestive of what they are representing

- Categories used to represent any element shall be the closest to as possible (for instance, a fence could be represented with a “Generic Element”, but using Revit’s “Wall” tool is recommended)
- The use of the “Model in Place” tool to create geometry is accepted in the Site Logistics Model (unlike Trade Models). An should be kept to a minimum.

| SITE LOGISTIC MODEL                                       |                                                                                                                                                      |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| ELEMENT                                                   | MODEL GUIDELINE                                                                                                                                      |
| Project site overall perimeter                            | Modeled as a single element, of negligible thickness and with an elevation equal to or higher than the top-most point of any temporary or final work |
| Obstruction to traffic (vehicle, pedestrian, cargo, etc.) | Represented as simple prisms (overall dimensions)                                                                                                    |
| Job Trailers                                              | Represented as simple prisms (overall dimensions)                                                                                                    |
| Material lay down areas (non-hazardous)                   | Represented as simple prisms (overall dimensions)                                                                                                    |
| Site access points                                        | Modeled as a single element, of negligible thickness. May overlap with fencing and property line geometry.                                           |
| Parking (temporary)                                       | Modeled as single or multiple elements of arbitrary thickness. “Slab” tool is acceptable.                                                            |
| Fences                                                    | Modeled as single or multiple elements of arbitrary thickness. “Wall” tool is acceptable.                                                            |
| Cranes, Hoists, and Fixed Equipment                       | Geometry must suggest the type of equipment when possible. Crane envelopes, equipment clearance, and other “no-fly” zones must be represented        |
| Excavation                                                | Basic prismatic shapes showing overall dimensions.                                                                                                   |
| Temporary Structures                                      | Basic prismatic shapes are showing overall dimensions.                                                                                               |

Table 4.10.1.7

#### **NOTE**

If there is an available Design Model for the scope of the project, developed by MDAD or a third party, it shall also be included in the model and simulation.

Only include contents as necessary to represent/capture the logistics and overall Construction progress. As an example, if the Project consists of a multi-story Building Model, it may be sufficient for simulation purposes only to include the foundations, shell, slabs, and roof.

#### **3.6.5.4 SIMULATED TIMELINE**

##### **3.6.5.4.1 DESCRIPTION**

The final component of the Simulation is a Timeline that will incorporate certain activities Start and End dates, which will be associated with the geometry of the Site Logistics Model, thus allowing for a 4D Model.

The Timeline is typically a preliminary and simplified version of the Construction Schedule.

##### **3.6.5.4.2 REQUIREMENTS**

MDAD considers that the Timeline needs to be prepared according to each Contractor's and Scheduler's best practices. However, the following are some minimum requirements to consider, which will help in communicating the information desired by MDAD:

- Development: Site Timeline may be developed by simplifying the Construction Schedule or created from scratch for this purpose alone. This is decided by Contractors at their own judgment. However, the lack or delay of an approved Construction schedule shall not be used as a reason to delay a Site Timeline and, by extension, the 4D simulation
- Activity Type: Unless specified by Contract or requested by the Resident Engineer, it is only required to include activities which are strictly necessary to simulate major construction elements in relation to site logistics and overall Project progress
- Activity Name: required to be human-readable and representative of the nature of the Activity; e.g. "Excavation – North Foundation" is an acceptable name, but "EX-N-FND" is not. Activity Name is required to display in the simulation.
- Activity Code: no requirements in this regard. It shall be as elsewhere required by MDAD. It is not necessary to display the Activity Code in the simulation.

- Activity Duration: As a general rule, Activity Duration shall not exceed 30 Calendar days. This needs to be confirmed at the Project Kick-off, as it will greatly depend on each Project's overall duration.
- Activity Grouping: The contractor may consider it more appropriate to group certain Construction schedule activities for an easier high-level representation. For instance: formwork, slab pouring, and concrete curing may all be grouped under one single activity.

#### 3.6.5.5 4D SIMULATION REQUIREMENTS

The different components previously defined in this section are integrated into a single Model file, where simulation is run and exported as a video to MDAD.

Minimum requirements are as follows:

- Platform: The contractor may select the Software, plug-ins, integrations, or any other means necessary to develop the video file. Since Navisworks is requested to develop other deliverables, consider using its TimeLiner feature, as it should make for easy integration. If this is the case, MDAD may request that the NWD file be shared as part of the submission, as well
- Video output format: commonly used file extensions such as AVI and MP4 are typically accepted; kindly confirm with MDAD's Technical Support Group before submission
- Animation: camera angles and animation path shall be chosen in a way that ensures a proper visualization and interpretation of the activities being simulated. As an example, a top and fixed view may be sufficient to understand some linear projects like landing strips paving, but 3D rotational views may be necessary to display others such as multi-building or multi-story projects
- The information displayed: The activity name and dates shall be displayed in the simulation, at a minimum.

### 3.6.5.6 SUBMISSION AND REPORTING

#### 3.6.5.6.1 FIRST SUBMISSION

The Contractor is responsible for submitting the Site Logistics Model for comment at a date defined at the BIM Kick-Off meeting, typically within the 45 days after the meeting. Given the low complexity of the Model and the benefits it can provide in the early stages of construction, an early submission may be required by MDAD.

#### 3.6.5.6.2 UPDATES

In principle, no recurring updates to the simulation will be requested unless significant changes in the Schedule or Site logistics make it necessary. In other words, depending on Construction performance, it may be a one-time submission.

If there is a significant impact on Airport operations, the Contractor shall resubmit an updated simulation as soon as possible (not exceeding 30 calendar days since the deviation was detected).

The following are two essential reasons to trigger a resubmission:

1. Changes in Site layout that affect Airport logistics; e.g.: a change in Site access or relocation of temporary circulation paths for pedestrians, cargo, traffic, etc.
2. Changes in Schedule that affect Airport logistics, with a deviation larger than 14 days of what originally reported in the first simulation; e.g.: change in the duration a sidewalk will be closed for public circulation

#### **NOTE**

If changes in construction activities not affecting Logistics do not trigger a new submission.

### **3.6.6 RECORD MODEL: AS-BUILT CONDITIONS**

#### **3.6.6.1 INTRODUCTION**

The Miami-Dade Aviation Department considers part of the Record Model all permanent, underground, or above ground, elements/objects, components, systems, and/or services that reflect the final version of the Construction Model where field verified shop drawings had been incorporated.

The Record Model is considered of the utmost importance for MDAD as an owner and operator of its facilities. It is meant to provide reliable and accurate information on the finished construction work so it can potentially be migrated to its Enterprise Asset Management System for future Operation & Maintenance.

#### **3.6.6.2 BASIC DEFINITIONS AND CLASSIFICATIONS**

##### **3.6.6.2.1 REAL WORLD CONDITIONS**

This manual considers two types of actual or “real-world” conditions:

- **Existing conditions:**  
They are considered as the aggregate of any material objects and/or elements that the Contractor must work with and around to execute the Work. Existing conditions may or may not remain at the end of the project (e.g. due to Demolition or decommissioning activities). Requirements for modeling of existing conditions are defined in the Project Model Development Spec
- **As-Built Conditions:**  
The final condition of all completed Work. Unless specified differently in the Contract, this refers to final Work only (no temporary)

#### 3.6.6.2.2 DATA TYPES

MDAD recognizes two basic types of information:

- Geometrical information  
Related to size, shape, quantity, location, and orientation of elements
- Asset Data:  
Specific data on elements of interest, typically but not limited to equipment information such as Manufacturer, Model, Make, Serial Number, etc.

#### **NOTE**

MDAD will provide a list of Assets and Attributes to be capture during the initial stages of the Project. Refer to **Section 1.15 - Assets** and **Section 1.16 - Attributes** for a full list of assets that are candidates to be captured.

#### 3.6.6.2.3 TERRESTRIAL LASER SCAN

Terrestrial Laser Scan (TLS), sometimes referred to as *LiDAR* (Light Detection and Ranging), is a surveying method that measures the distance to a target by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor. Differences in laser return times and wavelengths are then used to make a digital 3D representation of the targets, commonly referred to in the industry as Point Clouds. This is a quick and efficient method to capture both final and existing conditions and allows for easy comparison with modeled objects. As such, Contractors are highly encouraged by MDAD to use this technology for geometric data acquisition.

#### 3.6.6.3 REQUIREMENTS

As part of the contractual requirements, the Contractor must typically provide a record of final installed/constructed conditions to MDAD. Additionally, depending on project scope, there may be a requirement to capture and record Existing Conditions as well as part of the Work. The Contractor may also choose to capture and record any temporary work.

#### 3.6.6.3.1 PLANNING REQUIREMENTS

The contractor shall submit as part of the BEP, a schedule showing dates on which both geometrical and Asset Data will be captured. The Contractor may choose to create groups of assets and/or spatial zones for capturing data more efficiently.

The Contractor shall also include a description of the methodology, equipment, and overall processes that will be followed.

#### 3.6.6.3.2 ACCURACY REQUIREMENTS (GEOMETRIC PRECISION)

MDAD requires that the discrepancy between the real-world element and its “digital twin” are kept within certain tolerances, as follows:

| ELEMENT INSTALLATION TYPE | EXAMPLES                                                                                                             | TOLERANCE                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------|
| Exposed elements          | Walls, windows, columns, exposed equipment, and services. Interface elements as manhole covers, flushed panels, etc. | +/- 1/8” in any direction. |
| Concealed elements        | Underground utilities,                                                                                               | +/- 1/2” in any direction. |

The Contractor must use the available As-Constructed shared parameter in Revit (YES/NO parameter type) to identify any element that has been adjusted as per field verified information or Survey.

#### 3.6.6.3.3 ASSET DATA VALIDATION (ASSURANCE)

MDAD provides a shared parameter document as part of the support files to this manual. Special parameters have been created and grouped under “Asset Management”.

The Contractor shall use these fields for data entry in the BIMs, regardless of other forms of delivery of this information (e.g., Shop drawings, Manufacturer cut-sheets, O&M Manuals, etc.) required elsewhere in the Contract.

Special care and attention shall be placed so that the structure of the information is consistent with MDAD requirements. As an example, if a date is requested in the MM/DD/YYYY format, 01/01/2021 is an accepted value; whilst 01.01.2021, Jan/01/2021, or 01/01/21 are all incorrect.

#### 3.6.6.3.4 REPORTING TO MDAD

The Contractor shall include as part of the monthly report, detailed progress of the geometrical and non-geometrical data incorporated into each Trade Model. MDAD will spot-check the accuracy of the data as part of its review.

#### 3.6.6.4 RECORD MODEL SUBMISSION AND ACCEPTANCE

The Record Model is only formally submitted for review and approval once all the following conditions have been met:

- Resident Engineer has confirmed that construction has achieved Substantial Completion
- All required Asset information has been incorporated into the Trade Models by the Contractor (or Sub-Contractors)
- As-Constructed conditions have been replicated in a way that satisfies tolerance requirements
- LoD's, as stated in the MDS has been achieved
- All outstanding issues regarding BIM (as recorded on BIM Submission logs, meeting minutes, or other documents) have been closed

Previous submissions of the Construction Model containing partial information or complying only partially with the above list do not count as a submission of the Record Model.

The Contractor shall submit for acceptance all native files (e.g. Revit, Civil 3D if applicable) as well as a Navisworks file.

#### **NOTE**

NWD file shall be a data-rich model. Prevision must be taken by the Contractor to ensure that individual files composing the NWD are exported from the native platforms in a way that all possible parameters and their values are carried over to Navisworks.

### 3.6.6.5 ACCEPTANCE PROCESS

The Miami-Dade Aviation Department's Technical Support Unit and the Asset Management team will thoroughly review the Models for compliance with the Department's Standards. MDAD may reject the deliverables if not satisfactory, in which case the Contractor shall meet with the Department's BIM representative to review non-compliances; Models shall then revise and resubmitted for review and approval on an agreed schedule (typically between two and four weeks depending on the amount and severity of the issues). The cycle will continue, and Project closure may not occur until all Models are accepted.

Periodic Model and data validation throughout Construction, as required by this BIM Standard, should minimize the possibility of such a scenario.

### 3.6.7 BIM DELIVERABLE SUMMARY AND SCHEDULE

The table below shows a summary of deliverables and their frequency. This is for reference only and is superseded by Project specific requirements as stated in the Contract, BEP and/or the MDS.

| DELIVERABLE                         | FIRST SUBMISSION TO MDAD  | OTHER SUBMISSIONS TO MDAD                                                                         | COMMENTS                                                                                                         |
|-------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| BEP                                 | 15 days after BIM Kickoff | As needed and/or requested by MDAD                                                                | PDF format                                                                                                       |
| Progress Report from the Contractor | 30 days after BIM Kickoff | Monthly, with every required submission until the formal approval from MDAD of all deliverables.  | Shall be submitted in PDF                                                                                        |
| Construction Model                  | 45 days after BIM Kickoff | Monthly since first submission, until Project closure                                             | This includes interlinked RVT files, NWC, NWF and NWD files.                                                     |
| 4D Simulation                       | 30 days after BIM Kickoff | No resubmission needed unless necessary due to significant schedule variance or required by MDAD. | Submitted as a digital video file. Please confirm acceptable formats with MDAD Support Group Prior to submission |

|                         |                                                                        |                                                                                                                                                       |                                                                                                                                                                        |
|-------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clash Report            | Once coordination starts, as defined in the BEP                        | Monthly since first submission, until all areas are signed off                                                                                        | Included as part of the monthly report. Short narrative and a clash count matrix. Needs to be submitted along with the Construction Model in NWD format.               |
| Complete Sign-off sheet | Within 5 working days after an Area has been signed off.               | No resubmission required.                                                                                                                             | One sheet required per coordination Area. Needs to be signed, and observations made where applicable.                                                                  |
| As-Built conditions     | 60 days after field work starts                                        | Monthly since first submission, until conditions are reflected in the Model to the satisfaction of MDAD, and final Record Model is formally approved. | Progress included as part of the monthly report. Needs to be submitted with RVT files for verification of the As-Built parameter (see reference section in the Manual) |
| Asset Data              | As defined in the BEP. No later than 90 days before project Close out. | Monthly since first submission, until data is included in the Model to the satisfaction of MDAD, and final Record Model is approved.                  | Refer to the General Requirements Section                                                                                                                              |

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## Annex

- A. BIM Project Execution Plan
- B. Model Development Specification

## ANNEX A - BIM EXECUTION PLAN

## ANNEX B - MODEL DEVELOPMENT SPECIFICATION