VOLUME II

TECHNICAL REQUIREMENTS

for

GREAT HALL PROJECT

Between

City and County of Denver, through and on behalf of its Department of Aviation

and

Denver Great Hall LLC

Contract Control Number: 201735867

Final Draft Release Date: 07/15/17

Contents

PART I	PROJECT GENERAL REQUIREMENTS	1
I.1	Document Organization and Principles	1
1.2	Construction Limits and Construction Work Areas	1
1.2.1	General Requirements	1
1.2.2	Turnover Conditions of Construction Work Area	
1.2.3	Construction Work Area Handback Conditions	
1.2.4	TSA Work	
1.3	Terminal Improvements	
1.4	Functional Area Requirements	
1.4.1	Functional Areas	
1.4.2	Functional Area Requirements	
1.4.3	Functional Area and Other Area Specific Requirements	
1. 1 .5	Project Operational and Physical Environment	
I.5.1	Airport Security	
1.5.1 1.5.2	Security Levels	
1.5.2	Area Classification	
1.5.3 1.5.4	Project Support Facilities and Utilities	
1.5. 4 1.5.5	Special Events	
1.5.5 1.5.6	Interruption of Core Airport Operations	
1.5.6 1.5.7		
1.5.7 1.5.8	Accommodation of Irregular OperationsPaging, Audio, Video Systems, and Frequency Protection	
1.5.6 1.5.9	Prohibited Acts	
1.5.9 1.5.10	Other Aspects of DEN Operational and Physical Environment	
1.5.10 1.6	Project Schedule	
1.0 1.7	Project Schedule Project Phasing	
1. <i>1</i> 1.8	Project Management	
I.8.1		
_	General	
1.8.2	Monitoring and Reporting Requirements	
1.8.3	Submittal and Review Requirements	
1.8.4	Plan Reviews	
1.9	Additional Owner requirements related to Health, Safety and Environmental Manage 29	ement
1.9.1	Health and Safety Management	29
1.9.2	Hazardous Substances and OSHA Compliance	
1.9.3	Occupational Health and Safety	30
1.9.4	Environmental Management	30
1.9.5	Waste Management	30
1.9.6	Construction Impacts	30
I.10	Project Management Plan (PMP)	
1.10.1	General	30
1.10.2	Management and Staffing Plan	
1.10.3	Risk Management Plan	
1.10.4	Change Management Plan	
1.10.5	Transition and Phasing Plan	
1.10.6	Project Controls Plan	
1.10.7	Submittal Management Plan	
1.10.8	Quality Management Plan (QMP)	
1.10.9	Document and Data Management Plan (DDMP)	
1.10.10	Communications and Coordination Plan between the Owner and Developer	
1.10.11	Affected Third Party Plan	

1.10.12		
1.10.13	B Health and Safety Plan	42
1.10.14	3	
1.10.15	Emergency Management and Disaster Recovery Plan (EMDRP)	43
1.10.16		
1.10.17		
1.10.18		
1.10.19	5	
1.10.20	.	
PART II	PLANNING AND D&C WORK	47
II.1	General	
II.2	[RESERVED]	
II.3	Design Standards Manuals	
II.4	Design and Construction Specifications	47
11.4.1	Division I	47
11.4.2	Divisions 2 through 33 (Excluding Divisions 24, 25, 29 and 30)	49
11.4.3	Warranty Work	
PART II	I OPERATION AND MAINTENANCE SERVICES	69
III.1	General	69
III.1.1	Self-Monitoring and Self-Reporting Requirements	70
III.1.2	Access Control and Security	
III.1.3	Parking	
III.2	[RESERVED]	
III.3	O&M Services during Construction	
III.4	O&M Services Responsibilities Post Construction	71
III.4.1	Excluded O&M Services	71
III.4.2	Owner O&M Obligations	
III.4.3	Utility Services and Metering	
III.4.4	Service Task Orders	
III.4.5	Planned Maintenance and Shutdown	73
III.4.6	Emergency and Irregular Operations	74
III.4.7	Special Events	74
III.4.8	RESERVED	75
III.4.9	O&M Services Requirements	75
III.4.10) Inspections	78
III.4.11	1 5	
III.4.12		
III.5	Operations and Maintenance Services Plan	81
III.5.1	General	81
III.5.2	Operations and Maintenance Manuals	
III.5.3	Renewal Work Plan	
III.5.4	Handback Work Plan at the end of the Term	87

LIST OF APPENDICES

Appendix 1: Scope Documents:

- 1-A Terminal Improvements
- 1-B Scope Exhibits
- 1-C Basis of Estimate Scope Clarification

Appendix 2: Standards and Criteria DSM

- 2-A Schematic Design Quality Checklist
- 2-B Design Development Quality Checklist
- 2-C Issued for Review Quality Checklist

Appendix 3: BIM DSM

Appendix 4: Life Safety Systems DSM

Appendix 5: City and County of Denver General and Special Conditions (as modified for this Project)

Appendix 6: Design and Construction Specifications Divisions 1

Appendix 7: Design and Construction Specifications

- 7-A: Design and Construction Specifications Divisions 2-33
- 7-B: Airport Evacuation Checklist
- 7-C: DEN CM forms CM-01, 02, 06, 09, 10, 11, 14, 17, 20, 21, 21a, 26, 31, 35, 36, 37, 42, 43, 63, 65, 70, 75 and 78
- 7-D: Comment Log Template

Appendix 8: Executive Review Priorities Map

Appendix 9: DEN Environmental Guidelines

Appendix 10: Shutdown Policies and Procedures

Appendix 11: Great Hall Infrastructure Capacities Report

Appendix 12: DEN Architectural Program for Functional Area #19 - Central Monitoring Facility

Appendix 13: Manuals and Guidelines

TYPE 1

- DEN Architectural Design Standards Manual
- DEN Structural Design Standards Manual
- DEN Electrical Design Standards Manual
- DEN Mechanical Design Standards Manual
- Technologies Capabilities and Associated Standards

TYPE 2

- DEN Design Principles Guidelines
- DEN Signage and Wayfinding Guidelines

- TSA Recommended Security Guidelines for Airport Planning, Design and Construction
- IATA Airport Development Reference Manual (10th Edition), limited to the following Sections (and excluding all others) thereof:
 - 3.4.4 (Terminal Capacity and Level of Service)
 - 3.4.5 (Level of Service Concept and Planning Guidelines)
 - 3.4.8 (Passenger Process)
 - 3.4.9 (Segregation and Security Requirements in Airport Terminals)
 - 3.4.10 (Vertical and Horizontal Circulation)
 - 3.4.11 (Departures)
 - 3.4.13 (Arrivals)
 - 3.4.15 (Access to Air Travel for Persons with Reduced Mobility)
 - 3.4.16 (Toilet Provisions)

Appendix 14: O&M Tables

- Table III.1.a: Demarcation Points and Allocation of O&M Work Responsibilities for Utility Systems
- Table III.1.b: Building Systems Demarcation Points and Allocation of O&M Work Responsibilities for Building Systems
- Table III.2: Allocation of Responsibility for Cleaning and Custodial Services
- Table III.3: Customer Experience Elements
- Table III.4: STO Criticality Classification and Developer Response

PART I PROJECT GENERAL REQUIREMENTS

I.1 Document Organization and Principles

The Technical Requirements included in this Volume II consist of the following three parts:

- <u>Part I</u>: Project General Requirements;
- Part II: Planning and D&C Work; and
- Part III: O&M Services.

<u>Part I</u> of these Technical Requirements (General Requirements) describes the Terminal Improvements by Functional Areas and associated requirements, the physical and operational interfaces between the Project and the Airport, and provides overarching requirements applicable to the Work, including management and the collection of plans that constitute the Project Management Plan, quality, and information and communications, among others.

The requirements described in <u>Part I</u> apply to the Work described in <u>Part II</u> and the renewal work described in Part III.

<u>Part II</u> of these Technical Requirements (Project Planning and D&C Work) sets out the planning concepts that dictate the interrelationship among the various Project spaces, and describes the processes and requirements associated with the D&C Work. <u>Part II</u> includes Design Standards Manuals which describe the unified approach that the Owner is mandating for the Design Work. <u>Part II</u> also includes the City and County of Denver General and Special Conditions.

Design and Construction Specifications Division 1 and the City and County of Denver General and Special Conditions apply to the entire Project and provide the Owner's general requirements that are applicable to all D&C Work and O&M Services. Design and Construction Specifications Divisions 2 through 33 apply to the Construction Work as it pertains to Terminal Improvements within the Non-O&M Segments of the Project, unless otherwise noted.

<u>Part III</u> of these Technical Requirements (Operations and Maintenance Services) sets forth the scope of the O&M Services and applicable requirements, as well as the Excluded O&M Services and the Owner O&M Obligations.

These Technical Requirements shall apply to the Project, which includes all Functional Areas, all areas included in the Construction Limits, and all areas within the O&M Limits, including the Concessions Space. Furthermore, the development and implementation of the Concession Space as presented in the Concession Development and Management Plan shall follow and be in compliance with all Contract Documents and the Owner approved plans and those included in the Project Management Plan (PMP), unless otherwise indicated herein.

Moreover, for the avoidance of doubt, these Technical Requirement shall not apply to the Concessionaire finish work except as may otherwise be specifically noted herein.

I.2 Construction Limits and Construction Work Areas

I.2.1 General Requirements

Throughout the Project Construction Period, Developer shall perform all Construction Work within the Construction Limits, provided that staging and hauling may be undertaken in the Ancillary Site.

Prior to commencing any Construction Work within any Construction Work Area, Developer shall submit to the Owner, as part of the Transition and Phasing Plan, a plan delineating the proposed organization and limits of the Work within the Construction Work Area for review and comment as a Submittal Type 1 by the Owner in accordance with Section I.10 of these Technical Requirements.

Developer shall secure and enclose each Construction Work Area or portion thereof, throughout the duration of performance of any Construction Work within it, in accordance with the Design and Construction Specifications.

In respect to each Construction Work Area, Developer shall ensure that all adjacent spaces shall at all times be clean of debris, safe for Passenger and public access in respect of any Project related activities

I.2.2 Turnover Conditions of Construction Work Area

On the applicable Turnover Date, the Owner shall provide access to the relevant Construction Work Area to Developer in the following conditions:

- each Construction Work Area shall be clear of all loose materials, furniture, equipment, refuse and waste;
- all Art has been removed;
- with respect to tenant or concession within the relevant Construction Work Area as of the Turnover Date, all tenant concessionaires' furniture and equipment shall have been removed, including removal of any wiring for direct wired equipment back to the nearest electrical panel;
- all gas or air connections shall have been disconnected from the existing main service and valves shall have been shut off at the main connection; and
- built-in storage or work stations are to be completely cleared.

For each Construction Work Area, within five days after the date on which Developer provides written notice to the Owner in accordance with Section 3.2.4 of the Agreement, Owner will organize and invite the Developer to a tour of the Construction Work Area during which specific requirements to be completed by the Owner with respect to turnover conditions of such Construction Work Area shall be mutually agreed upon.

I.2.3 Construction Work Area Handback Conditions

All Construction Work Areas, to the extent outside of the Final Build-Out Limits, shall be handed back to the Owner in a clean state, clear of all equipment, loose materials, refuse, debris and waste, upon achievement of the corresponding Functional Area Readiness or Project Substantial Completion, whichever is earlier. Such areas shall be handed back in a condition compliant with the approved Construction Documents. Any repairs necessary to achieve the handback condition requirements included in this Section shall be completed by Developer at no cost to the Owner.

The conditions of the Construction Work Areas shall meet the applicable requirements for Functional Area Readiness, Project Substantial Completion and Project Final Acceptance.

I.2.4 TSA Work

No later than the Scheduled Developer TSA Screening Area Handover Date, Developer shall provide Owner access to the TSA Screening Area and any portion of the Construction Work Areas required for the Owner to complete the TSA Work. Such areas shall be clean of any debris, easily accessible by Owner, and enclosed and separated from other areas where Work is performed by the Developer. Owner will then hand back TSA Screening Areas to Developer upon completion of TSA Work no later than the Scheduled Owner TSA Screening Area Handback Deadline.

I.3 Terminal Improvements

The Terminal Improvements and scope of Work in respect thereof are as set forth in Appendix 1 (Scope Documents) of these Technical Requirements, which includes the Terminal Improvements description set forth

in Appendix 1-A, the Scope Exhibits set forth in Appendix 1-B (the "Scope Exhibits") and the basis of estimate scope clarification set forth in Appendix 1-C. Developer shall further develop the Scope Exhibits in order to meet the specific functional and aesthetic requirements of the Project in accordance with the Technical Requirements and the other Contract Documents.

I.4 Functional Area Requirements

The Functional Areas represent areas of occupancy and use within the Final Build-Out Limits which shall be delivered by Developer in a condition allowing such occupancy and use upon reaching Functional Area Readiness of such areas and which may receive Temporary Certificates of Occupancy, thus allowing occupancy and use of such areas prior to Project Substantial Completion. The Functional Areas are described in Sections I.4.3.1 through I.4.3.20 below; for the avoidance of doubt, Areas #21 and #22 described in Sections I.4.3.21 and I.4.3.22, respectively, below are not Functional Areas, but are areas within which certain design and construction work will be performed.

Section I.4 of these Technical Requirements set forth the general use and occupancy requirements associated with each Functional Area.

The scope of D&C Work to be completed by Developer within each Functional Area is provided in Section 1.3 of these Technical Requirements.

I.4.1 Functional Areas

The Functional Areas are listed below as items 1 through 20, each of which shall meet the applicable requirements set forth in Sections Parts I and II of these Technical Requirements:

- 1. Level 6 West Curbside;
- 2. Level 6 East Curbside;
- 3. Airline Space West Module 3;
- 4. Airline Space East Module 3;
- 5. Airline Space West Module 2;
- 6. Airline Space East Module 2;
- 7. Security Screening Area West Module 1;
- 8. Security Screening Area East Module 1;
- 9. Expanded North Balcony Vertical conveyance L6 to L5
- 10. Level 6 South Bridge Expansion;
- 11. AOB Corridor south;
- 12. Landside Plaza;
- 13. Airside Plaza Center Mod 2;
- 14. Airside Plaza Center Mod 1;
- 15. AGTS Access Vertical conveyance L5 to L4 Mod 1 & 2;
- 16. AGTS Access Escalators L5 to L4 center Mod 2;
- 17. AGTS Area Level 4;
- 18. Goods and Materials Delivery and Screening Facility;
- 19. Central Monitoring Facility
- 20. AOB SSCP Renovation (AOB Corridor north); and
- 21. Baggage Claim West Level 5;* and
- 22. Baggage Claim East Level 5.*

As further detailed in Section I.4 of these Technical Requirements, each area provides one or more of the functions listed below:

^{*} For the avoidance of doubt, items 21 and 22 are not functional areas, but are areas within which certain design and construction work will be performed.

- Airline Exclusive Use;
- Airline Shared Use;
- Public Circulation Space; and conveyance
- Security screening;
- Core Airport Operations use;
- Concessions activities;
- Baggage claim; and
- Emergency service access.

Within each Functional Area the Developer shall provide, as applicable, any Project features set forth in Section I.1.1 of Appendix 1-A (Terminal Improvements) of these Technical Requirements.

The Customer Experience Elements and art installations will be considered standalone elements and do not need to be completed as a condition precedent to the Functional Area Readiness.

I.4.2 Functional Area Requirements

The D&C Work encompasses all Functional Areas and adjacent spaces as necessary to complete the Work as defined in these Technical Requirements, and more particularly as provided in Appendix 1-A (Terminal Improvements) of these Technical Requirements.

The Work associated with each Functional Area shall be coordinated with the Owner in accordance with these Technical Requirements.

I.4.3 Functional Area and Other Area Specific Requirements

I.4.3.1 Functional Area #1 (Level 6 West Curbside)

I.4.3.1.1 General Functional Requirements

The purpose of this Functional area is to provide for passenger pick up and drop off.

I.4.3.1.2 List of Functions

- Public Circulation Space
- Emergency Service Access

I.4.3.2 Functional Area #2 (Level 6 East Curbside)

This Functional Area shall provide the same functions and meet the same requirements as Functional Area #1 (Level 6 West Curbside).

I.4.3.3 Functional Area #3 (Airline Space - West Module 3)

I.4.3.3.1 General Functional Requirements

The primary purpose of this Functional Area is to allow for public interaction with Airline and Airport services in association with Airlines allocated to this space, including functions listed below:

- ticketing and baggage drop capabilities on Level 6;
- Airline baggage handling offices on Level 5;
- ATO space; and
- Curbside bag drop and curbside check in.

I.4.3.3.2 List of Functions

The functions to be provided in this Functional Area are:

- Airline Exclusive Use;
- Airline Shared Use;
- Public Circulation Space, including public amenities and conveyance (including perimeter area on both of Levels 5 and 6);
- Concessions activities; and
- Core Airport Operations.

I.4.3.4 Functional Area #4 (Airline Space - East Module 3)

This Functional Area shall provide the same functions and meet the same requirements as Functional Area #3 (Airline Space – West Module 3).

I.4.3.5 Functional Area #5 (Airline Space - West Module 2)

This Functional Area shall provide the same functions and meet the same requirements as Functional Area #3 (Airline Space – West Module 3).

I.4.3.6 Functional Area #6 (Airline Space - East Module 2)

This Functional Area shall provide the same functions and meet the same requirements as Functional Area #3 (Airline Space – West Module 3).

I.4.3.7 Functional Area #7 (Security Screening Area West – Mod 1)

I.4.3.7.1 General Functional Requirements

The function of this space is to allow TSA to conduct airport passenger and bag screening and security activities; and for the associated DPD activities to be conducted.

I.4.3.7.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- Security Screening Area;
- Public Circulation Space, including public amenities and conveyance (including perimeter area on both Level 5 and 6);
- Core Airport Operations use; and
- City Use.

I.4.3.8 Functional Area #8 (Security Screening Area East – Mod 1)

This Functional Area, located in Mod 1E, shall provide the same functions and meet the same requirements as Functional Area # 7 (Security Screening Area West – Mod 1).

I.4.3.9 Functional Area # 9 (Expanded North Balcony – Vertical conveyance L6 to L5)

This area on Level 6 is located where screened passengers from both east and west Security Screening Areas converge, at the south connection to Functional Area #11 (AOB Corridor). This area will be expanded and will provide vertical conveyances between levels 5 and 6 as well as being the primary decision point for passage through the Functional Area 13 (Airside Plaza) or Functional Area 11(AOB Corridor).

This area serves primarily as Public Circulation Space.

I.4.3.10 Functional Area #10 (Level 6 South Bridge Expansion)

This area on Level 6 that connects the east to the west floorplates of level 6, will be structurally expanded and will include Concessions Space. This area also provides the vertical conveyances between levels 5 and 6.

I.4.3.11 Functional Area #11 (AOB Corridor, south)

I.4.3.11.1 General Functional Requirements

The function of this space is to allow pedestrian access of passengers from the Terminal to concourse A, provide access to the AOB and provide DEN, TSA and DEN leasable spaces, GHP offices and related support areas, adjacent but not including the AOB Corridor, north.

I.4.3.11.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- Concessions activities (office support);
- shell and core spaces to accommodate DEN leasable space (fit-out will be completed by the Owner);
- TSA support space; and
- Public Circulation Space.

I.4.3.12 Functional Area #12 (Landside Plaza)

I.4.3.12.1 General Functional Requirements

The function of this space is to provide a meet and greet area for passengers, provide synergy with the existing exterior plaza, and enable Concessionaire occupancy and use of the Concession Premises and Concessions Space located within the Landside Area.

I.4.3.12.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- Concessions Space;
- Public Circulation Space, including meet and greet area and public amenities; and conveyances;
- Core Airport Operations use: and
- Airline Shared and Airline Exclusive use.

I.4.3.13 Functional Area #13 (Airside Plaza – Center Mod 2)

I.4.3.13.1 General Functional Requirements

The function of this space is to provide Public Circulation Space for passengers and enable Concessionaire occupancy and use of the Concession Premises and Concessions Space located within the Airside Area – Center Mod 2.

I.4.3.13.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- Concessions Space;
- Public Circulation Space, including public amenities;
- Core Airport Operations use; and
- Airline Shared and Airline Exclusive use.

I.4.3.14 Functional Area #14 (Airside Plaza – Center Mod 1)

I.4.3.14.1 General Functional Requirements

The function of this space is to provide Public Circulation Space for passengers and enable Concessionaire occupancy and use of the Concession Premises and Concessions Space located within the Airside Area – Center Mod 1 and other landside areas including the International Meeting and Greeting Plaza.

I.4.3.14.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- Concessions Space;
- Public Circulation Space, including public amenities;
- Core Airport Operations use; and
- Airline Shared and Airline Exclusive use.

I.4.3.15 Functional Area #15 (AGTS Access - Vertical Conveyance L5 to L4 Mod 1 & 2)

I.4.3.15.1 General Functional Requirements

The function of this space is to provide access to and from the AGTS station on Level 4 which moves special needs Users , (elevators located in south Mod 1) and general Public (elevators located in South Mod 2) between the Terminal and concourses, and provides emergency exit from Level 4 for the all Users.

I.4.3.15.2 List of Functions

The function of this area is primarily Public Circulation Space.

I.4.3.16 Functional Area #16 (AGTS Access – Escalators L5 to L4 center Mod 2)

The function of this space is to provide access to and from the AGTS station on Level 4 which moves Users between the Terminal and concourses.

I.4.3.16.1 List of Functions

The function of this area is primarily Public Circulation Space between Level 4 and 5.

Conveyance quantities and locations, emergency egress and access, to and from the AGTS platform from the Level 5 Airside Plaza, are represented in the Scope Exhibits.

I.4.3.17 Functional Area #17 (AGTS Area – Level 4)

I.4.3.17.1 General Functional Requirements

The function of this space is to provide access to and from the AGTS station on Level 4 which moves Users between the Terminal and concourses.

I.4.3.17.2 List of Functions

The functions of this area is primarily Public Circulation Space between Levels 4 and 5.

Conveyance quantities and locations, emergency egress and access, to and from the AGTS platform from the Level 5 Airside Plaza, are represented in the Scope Exhibits.

I.4.3.18 Functional Area #18 (Goods and Materials Delivery and Screening)

I.4.3.18.1 General Functional Requirements

The purpose of this Functional Area is to allow for the receiving and screening of goods and materials being delivered to Functional Area #13 (Airside Plaza- Center Mod 2), Functional Area #14 (Airside Plaza – Center Mod 1) and, if necessary, Functional Area #12 (Landside Plaza) of the Terminal, as well as provide space and conveyances required for the delivery of goods and material going to and from the Airside Plaza.

I.4.3.18.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- Concessions Space;
- Public Circulation Space, including AGTS emergency egress as required by DBC;
- Core Airport Operations use; and
- conveyances for good and materials.

I.4.3.19 Functional Area #19 (Central Monitoring Facility)

I.4.3.19.1 General Functional Requirements

The function of this space is to provide TSA with central control capabilities of all the TSA operations, and Core Airport Operations monitoring.

I.4.3.19.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- monitoring of security screening; and
- Core Airport Operations use.

I.4.3.20 Functional Area #20 (AOB SSCP Renovation, located in the AOB Corridor, north)

I.4.3.20.1 General Functional Requirements

The function of this space is to allow pedestrian access of passengers from the Terminal to concourse A, provide access to the AOB and provide DEN, TSA and DEN leasable spaces, GHP offices and related support areas, adjacent but not including the AOB Corridor, south.

I.4.3.20.2 List of Functions

The functions to be provided in this Functional Area are listed below:

- AOB access and new lobby entrance; and
- Public Circulation Space.

I.4.3.21 Area #21 (Baggage Claim East – Level 5)

I.4.3.21.1 General Requirements

The function of this space is to allow passengers to claim their baggage upon arrival.

I.4.3.21.2 List of Functions

The functions to be provided in this area are listed below:

- Baggage Claim Area;
- Core Airport Operations use;
- Airline shared and Airline exclusive use; and

Public Circulation Space.

I.4.3.22 Area #22 (Baggage Claim West – Level 5)

I.4.3.22.1 General Requirements

The function of this space is to allow passengers to claim their baggage upon arrival.

I.4.3.22.2 List of Functions

The functions to be provided in this area are listed below:

- Baggage Claim Area;
- Core Airport Operations use;
- Airline shared and Airline exclusive use; and
- Public Circulation Space.

I.5 Project Operational and Physical Environment

I.5.1 Airport Security

Developer shall comply with security requirements included in the Design and Construction Specifications Division 1, in the Standards and Criteria DSM and in the Airport Rules and Regulations.

Developer shall, and shall cause all Developer-Related Entities performing any Work to comply with all safety, operational, or security measures required by Law, including any such measures required by the FAA or the TSA.

The security status of DEN is subject to change at any time during the Term, without prior notice, as determined by the FAA or the TSA. Consequently, the Work shall be subject to changes as may be required by changes in DEN's security status without prior notice.

As may be required by DEN's security status, Developer shall take prompt and effective steps to comply and assist the FAA, the TSA, and the Owner in complying with security modifications that occur as a result of a change of security status. At any time, Developer may obtain current information from DEN's Security Office regarding DEN's security status in relation to the Work.

Developer shall obtain security identification badges and security clearances from the Owner for each Developer Secured Personnel prior to commencement of the applicable Work, and shall ensure that the Developer Secured Personnel maintains such badges and clearances throughout the performance of their Work. Without limiting the foregoing, Developer shall be responsible for ensuring that Developer Secured Personnel obtains all training necessary to obtain and maintain such badges and clearances.

Developer shall endeavor to prevent any security identification badge from being lost, stolen, unaccounted for or not returned to the Owner at the time of security identification badge expiration, employee termination, termination of the Agreement, or upon written request by the Owner.

Upon any termination or cessation of employment or contractual relationship of any Developer Secured Personnel, Developer shall:

- (a) Promptly notify the Owner in writing, and in any event within 48 hours, of any termination or cessation of employment of, or contractual relationship with, such Developer Secured Personnel; and
- (b) Return his/her security identification badge to the Owner within 72 hours thereof.

Developer shall ensure that Developer Secured Personnel shall only use security identification badges and access rights granted by the Owner solely for the purpose of performing the relevant scope of

Work. Developer shall notify Developer Secured Personnel in writing of this requirement and that a violation of such shall be a basis for the termination of employment or contract, as applicable.

Developer shall comply with all DEN operating and security procedures and ensure compliance with this Section I.5.1.

I.5.2 Security Levels

The Security Level of Construction Work Area may be classified as Public Space, Secured Area, Sterile Area, or Controlled Area. The Security Level of a Construction Work Area or portions of a Construction Work Area may evolve as the Work progresses; such evolution shall be reflected in the Transition and Phasing Plan. The requirements associated with each Security Level are set forth in Section I.5.3 of these Technical Requirements.

For all Construction Work Areas, Developer shall submit a plan indicating the classification of Security Levels and associated security measures, for review and comment as a Submittal Type 1 by the Owner, as part of the Transition and Phasing Plan.

Access by Developer Secured Personnel to Secured Areas, Sterile Areas and Controlled Areas will require a badge in accordance with Section I.5.1 of these Technical Requirements. Restrictions on number of Developer personnel accessing certain areas of the Terminal may occur at the Owner's reasonable discretion, during high-volume travel periods, near areas of vulnerability, and near sensitive equipment.

I.5.3 Area Classification

I.5.3.1 Public Space

Public Space means any space publicly accessible where badging credentials are not required. This includes roadways, and areas in the Terminal prior to TSA screening.

I.5.3.2 Secured Area

Secured Area means a portion of an airport regulated by TSA under Part 1542 and which includes facilities and airfield areas beyond security badge readers that are inaccessible to screened passengers, and require employees to display a Green or Purple badge. Vehicle permits are required to gain entry into a Secured Area

I.5.3.3 Sterile Area

Sterile Area means a portion of an airport regulated by TSA under Part 1542 and which is located beyond a TSA screening checkpoint. A Sterile Area is accessible to screened passengers with a boarding pass, and employees with an Orange, Green, and/or Purple badge. Entry points when escorting un-badged individuals can occur at designated locations only. Additionally, no escorting is allowed from Public Areas to Sterile Areas. Tools and construction materials considered to be TSA-prohibited items, must be attended at all times or kept in locked spaces, and inaccessible to passengers.

I.5.3.4 Controlled Area

Controlled Area means any area on Airport property not designated as a Secured Area or Sterile Area, but which is deemed sensitive. A Controlled Area shall be inaccessible to passengers, and an individual without a badge may be accompanied under positive control of a badge-holder. Demarcation of controlled areas may include: signage, access control system, security keys, or the presence of security personnel.

I.5.4 Project Support Facilities and Utilities

Developer must complete the D&C Work within the scope contemplated in Appendix 1-A (Terminal Improvements) of these Technical Requirements. Developer shall utilize the Great Hall Infrastructure Capacities Report provided in Appendix 11 to these Technical Requirements for the determination of existing terminal capacity.

For gas, electricity and domestic water, revenue-grade meters for sub-metering purposes shall be installed by Developer to allow for recording of Utilities usage for each individual Concessions Premise. For these meters, Developer shall provide software, as required for data logging and consumption tracking, and if possible shall be compatible with DEN data tracking procedures, and shall be BACnet compatible if possible.

I.5.5 Special Events

Special Events organized by the Owner will take place adjacent to and within the Project Site, during the Project Construction Period and the Project Operating Period, as further described below.

All such Special Events shall be managed by the Owner and paid for by the Owner. Developer shall accommodate all activities completed by the Owner for the preparation, execution and close-out of the Special Events, and shall include into the Project Schedule necessary Float considering duration and dates provided by the Owner for each of such activities. The Owner shall take into account Developer's operations in organizing such events and shall coordinate with Developer so as to minimize disruption to Developer's operations in connection therewith. Additional tour or event requests beyond those outlined in these documents will be accommodated solely at the discretion of the Developer.

All Special Events will need to be closely coordinated between the Owner and Developer.

- Plaza Program Events: The Owner conducts Level 5 HTC Plaza program events at least once per month. In addition, Special Events such as concerts, art shows, car shows, and farmer's markets may be scheduled seasonally. Developer shall not impede public access to the plaza during these events and shall not impede access between the hotel, Transit Center and Terminal at any time without authorization. This includes access to the public restrooms on the south end of the Terminal, which are used during plaza program events. The Owner will be responsible for temporary directional signage in the Terminal for all plaza program events. The Owner will provide a schedule of planned events for the Plaza on a quarterly basis.
- Project-Related Events: At major project milestones, Special Events may be planned for employees, dignitaries, media, construction workers, and/or the public to celebrate the milestones. These types of events will be planned and organized by the Owner and will include a celebration event after each major construction phase completion and a final grand opening event. The Owner will provide necessary catering, seating, and stage setup. Additional special events involving the Developer for construction safety, recognition or Project Schedule milestones may also occur, as needed, and Developer shall coordinate these Special Events with the Owner upon its reasonable request for the same. The following list of events shall be included by Developer in the Project Schedule: ground breaking, one per phase opening, final grand opening, public art (or other) opening. Developer shall assume suspension of all Construction Work activities within the effected Construction Work Areas for one day per event.
- VIP and Public Tours: The Owner will hold limited VIP and public tours during the Project Construction Period, of no more than 32 total persons, which will be coordinated with Developer prior to site access. Tour attendees will be required by the Owner to sign waiver forms and wear appropriate personal protective equipment provided by the Owner in accordance with Developer safety plan (e.g., hardhats, safety glasses, gloves, boots) within

the Construction Limits. The Owner will provide one or more qualified tour guides with each group. Developer shall provide safe access routes for the tour groups, as requested. DEN will conduct no more than 10 VIP or Public Tours per phase. Tours of less than seven persons in total are not considered tours, these site visits will be coordinated with the Developer by the Owner prior to accessing the site.

I.5.6 Interruption of Core Airport Operations

DEN is an operating air and ground transportation facility. Developer understands that Construction Work will cause disruptions in the normal operations of the facility. However, normal or modified operations must continue at all times. Developer shall identify the sequencing and staging of Work under the constraints required for maintaining airport operations.

In general, Developer shall ensure that all Work performed by Developer or Developer-Related Entity is coordinated with the Owner to minimize any risk of interruption to the Core Airport Operations outside Construction Work Areas, except by Permitted Shutdown.

Developer shall plan and coordinate the Work to avoid any unforeseen impact on the Core Airport Operations. Any potential impact and associated mitigation plan proposed by Developer is subject to Owner review and comment as a Submittal Type 1 by the Owner at least five days prior to the commencement of the activity. Project Schedule updates shall reflect any potential impacts

Before doing any Work that disrupts or displaces normal Core Airport Operations, Developer shall request, and receive from the Owner, approval to do a Shutdown, in compliance with the Shutdown Policies and Procedures provided in Appendix 10 to this Volume II. Shutdown requests must be submitted to Owner Designee in accordance with Appendix 10 to this Volume II. Developer will be notified when it can proceed. For special occasions requiring short term approval and immediate Shutdown, the process will be accelerated in accordance with the Shutdown Policies and Procedures provided in Appendix 10 to this Volume II.

The Shutdown request shall include contact names and phone numbers, notification lead times, and Developer Key Personnel who are responsible for communications to the stakeholders.

The Owner can request alterations and additional mitigation measures for a proposed plan or Shutdown request, if it has a reasonable basis for doing so, which Developer is required to implement at no cost to the Owner. Owner approval cannot be unreasonably withheld, conditioned or delayed.

1.5.7 Accommodation of Irregular Operations

Airport Irregular Operations are exceptional events that require actions and capabilities beyond those considered usual by aviation service providers. Generally speaking, an impact of these events is the occurrence of passengers experiencing delays, often in unexpected locations for an undetermined amount of time. Examples include Emergencies, extreme bad weather and other events such as power outages or security breaches. The objective of Airport Irregular Operations is to return to normal operations as safely and expeditiously as possible.

The Owner will coordinate with the Developer during Airport Irregular Operations to ensure the safety and security of employees and workers.

During Airport Irregular Operations, including an Emergency, Developer will immediately act to ensure that Work is stopped if required and that the Construction Work Areas are free of Developer personnel, in accordance with the incident response, safety and security procedures, and protocols of the Emergency Management and Disaster Recovery Plan.

Developer shall provide the Owner a detailed damage report after the occurrence of Airport Irregular Operations. This report shall include an individual analysis of the site or sites affected by the events.

An evacuation may be ordered for a variety of reasons involving the safety and security of passengers, employees, and workers at the Airport. The Terminal, hotel, AGTS, concourses, and AOB corridor may be evacuated for any of the following:

- complete power outage;
- bomb threat;
- events that affect life safety or airport property as determined by the Incident Commander, who will coordinate with all necessary agencies regarding the event and may activate the Emergency Operations Center, as appropriate;
- Hazardous Materials involving a biological, chemical, or radiological accident;
- damage to buildings, structures, or malfunctioning equipment that may put occupants at risk;
- fire or other incidents that may put occupants at risk; and
- an Emergency.

If an evacuation is required, the Owner will activate the Emergency Operations Center (EOC), as appropriate. A representative from the Developer will respond to the EOC during an incident to provide support as needed. The Developer will follow Airport procedures during this incident. The Developer may assist with patron evacuation if necessary and coordinate with the Owner's Operations, DPD, and Denver Fire Department.

I.5.8 Paging, Audio, Video Systems, and Frequency Protection

If Developer installs, with the Owner's approval, any type of radio transceiver or other wireless communications equipment, Developer will provide frequency protection within the aviation air/ground VHF frequency band and the UHF frequency band in accordance with restrictions promulgated by the FAA for the vicinity of FAA Transmitter or Receiver facilities. Frequency protection will also be provided for all other frequency bands operating in the vicinity of Developer's equipment. If frequency interference occurs as a result of Developer's D&C Work, the Owner reserves the right to shut down Developer's installation until appropriate remedies to the frequency interference are made by Developer. Remedies may include relocation of Developer's equipment to another site. The cost to remedy the frequency interference will be solely at Developer's expense. Developer acknowledges and accepts that any paging or audio systems installed by Developer may be used by Owner to announce any notification (but excluding commercial offerings or promotions outside of the Terminal) or emergency at DEN. Owner shall not be liable to Developer for any use of the paging or audio systems installed by Developer.

I.5.9 Prohibited Acts

Developer shall not place loads in excess of intended design loads or place loads in such a way as to cause damage on the walls, ceilings, and floor or pavement areas of the Terminal. Developer will repair any area damaged by excessive loading at a minimum to be consistent with its prior condition.

Developer shall not permit the active display or operation in the Project Site of any display that flies, flashes, or emits a noise or odor, except as reasonably approved by the Owner in accordance with Airport Rules and Regulations.

Unless approved in writing in advance by the Owner, in its reasonable discretion, Developer shall not keep or display any Merchandise on or within, or otherwise obstruct, any part of the Airport outside of the Project Site. Developer shall keep all service corridors, hallways, stairways, doorways, or loading docks within or leading to and from the Project Site free and clear of all obstructions.

Developer shall not interfere or permit interference with the use, operation, or maintenance of the Airport, including the effectiveness or accessibility of the drainage, sewerage, water, communications, fire protection, utility, electrical or other systems installed or located from time to time at DEN. Developer shall not do or permit to be done anything that may interfere with free access and passage within or to and from the Project Site or the public areas adjacent thereto, or hinder police, firefighters, or other emergency personnel in the discharge of their duties. Furthermore, Developer shall not do or permit to be done anything that might interfere with the effectiveness or accessibility of elevators or escalators in or adjacent to the Project, including lines, pipes, wires, conduits, and equipment connected with or appurtenant thereto.

Developer shall not place any additional lock of any kind upon any window or interior or exterior door in the Project Site, or make any change in any existing door or window lock or the mechanism thereof, unless approved by the Owner and a key therefor is maintained on the portion of the Project were furnished to or otherwise procured by Developer. If any keys furnished to Developer by the Owner are lost, Developer shall pay the Owner, on demand, the cost for replacement thereof.

Developer shall not engage in any activity prohibited by the Airport Rules and Regulations as may be modified during the Term. Any failure of Developer to adhere to the Airport Rules and Regulations or fails to prevent any other of the prohibited acts set forth in this Section I.5.10, shall constitute a Noncompliance Instance.

If the prohibited act is not corrected as directed by the Owner, the Owner shall have the right to take corrective action, with any remedies of Owner or reimbursement by Developer being provided in accordance with the terms of the Agreement.

I.5.10 Other Aspects of DEN Operational and Physical Environment

The DEN operational and physical environment aspects that the Developer shall take into consideration in the planning and execution of the D&C Work are:

- Airline operations in Terminal;
- FAA operations;
- TSA operations;
- Airport Specialty System interfaces; and
- City and County of Denver operations.

Developer shall coordinate with the Owner prior to the execution of any Work that would impact one of the above-listed aspects of the Core Airport Operations.

For all of the above-listed aspects of the Airport operational and physical environment, Sections I.5.1 through I.5.10 of these Technical Requirements shall apply.

I.6 Project Schedule

The Baseline Project Schedule included in Appendix 3 to the Agreement shall be used by the Parties for establishing relevant Project milestone and contractual performance dates, as further described in this Section.

From the activities identified in the Baseline Project Schedule, the Developer shall add all relevant activities as required to develop and submit the Project_Schedule and updates thereof, which will be used for planning, monitoring and tracking the progress of the Work.

The Project Schedule shall be regularly updated in accordance with the requirements include in the Agreement and in these Technical Requirements. Each Project Schedule update shall show a comparison of the Work period actual dates and the future Work forecast dates against the Baseline Project Schedule activity dates.

[The Baseline Project Schedule, the Project Schedule and each update thereof shall also comply with the Design and Construction Specifications Division 013210 (Schedule).

Within 10 days after the Effective Date becomes known, the Baseline Project Schedule shall be updated to reflect calendar dates for all activities between the Effective Date and the Financial Close Date.

Within 10 days after the Financial Close Date becomes known, the Baseline Project Schedule shall be updated to reflect calendar dates for all activities after Financial Close.

The Baseline Project Schedule shall:

- identify the logic (including durations and start-finish relationships) for all activities identified in the Agreement that indicate a calculated submission/performance chronological duration, either preceding or succeeding to identified activities;
- include the Effective Date;
- include all Financial Close critical milestone dates;
- include the Schematic Design Package Submittal date;
- include the Design Development Package Submittal date;
- include all phased Construction Documents Submittal dates,
- include all Project Management Plan submission dates;
- include Project Schedule, Transition and Phasing Plan, Quality Management Plan, Health and Safety Plan, Environmental Management Plan, CDMP and O&M Services Plan submission dates;
- incorporate all Technical Design Review and Executive Design Review durations, as identified in these Technical Requirements;
- include all Project Construction Period critical milestone dates for each phase as identified in the Initial Transition and Phasing Plan;
- include the Baseline Functional Area Readiness Date for each Functional Area and construction phase, the Level 5.5 Completion Deadline the Temporary Certificate of Occupancy dates, the Scheduled Turnover Dates, the Baseline Project Substantial Completion Date, the Certificate of Occupancy date, and the Project Final Acceptance date;
- include the Baseline Developer TSA Screening Area Handover Date and Baseline Owner TSA Screening Area Handback Deadline; and
- include all milestone dates of activities that are on the Critical Path and which have significant risk elements that will be included in the Developer's Risk Management Plan (or other components of the Program Management Plan).

The Project Schedule, and all subsequent updates thereof, shall, at a minimum:

- be prepared using Primavera Version P6 or newer, as agreed upon with Owner;
- include all activities deemed necessary by the Developer in order to complete the D&C Work, by Functional Area and construction phase, in compliance with the Agreement and these Technical Requirements;

- include the Baseline Functional Area Readiness Date for each Functional Area and construction phase, the Level 5.5 Completion Deadline, the Temporary Certificate of Occupancy dates, the Scheduled Turnover Dates, the Baseline Project Substantial Completion Date, the Certificate of Occupancy date, and the Project Final Acceptance date;
- include dates for NTP1 and NTP2 respectively (or any other formal notices to be issued by the Owner) as milestone dates for commencement of Design Work and Construction Work;
- identify activities linked to completion of the CBRA Project, the Level 5.5 Project and Adjacent Projects; and identify all Float included with respect to those projects;
- identify activities linked to the TSA Screening Area Work, including Scheduled Developer TSA Screening Area Handover Date and Scheduled Developer TSA Screening Area Handback Date;
- identify all actual start and finish dates, and durations, for completed work, as well as forecasted start and finish dates for incomplete work, on all Project Schedule updates for that work period of time;
- tie all phases of Work together logically to present a total Critical Path Method (CPM) Project Schedule in one electronic file; identify the Critical Path for each Functional Area separately from the Critical Path for the project as a whole; and identify the Float between the Critical Paths of each Functional Area.
- identify all Design Reviews and Owner review periods of all Submittals identified in these Technical Requirements;
- identify time period allocated for Governmental Approvals, including the issuance of permits;
- include a duration of three business days for each special inspection during the Project Construction Period;
- Cost Loaded Project Schedule activities; the cost loaded activities shall be the same as the Design and Construction Schedule of Values (Appendix 3-I of the Agreement) and of adequate detail to perform evaluation of progress pursuant to Section 13.1 of the Agreement; and
- constrain only the activities that represent milestones and deadlines with a "start on or before" or "finish on or before" constraint, as agreed to by the Developer and Owner.

All Project Schedules shall be displayed per the following with:

- unique and consistent activity identification numbers, textual descriptions and codes in all Project Schedules. Each Project Schedule activity shall have a detailed, concise description of the Work represented by the activity title. The activity identification numbers relating to a specific activity title or description shall remain unchanged and connected to the original activity title or description throughout the duration of the Work. A Project Schedule activity's description may only be changed to clarify a schedule activity's scope. The scope or purpose of a schedule activity shall not be changed except through a Change Order, or a Compensation Event or a Delay Event or as otherwise permitted by the Owner;
- Project Schedule activities logic based upon showing the early start and late finish dates;
- the Critical Path highlighted in red on all schedules for each Functional Area and construction phase to distinguish critical Project Schedule activities from other Project Schedule activities and float shown for all Project Schedule activities;
- organized and consistent Work Breakdown Structure (WBS). Each Project Schedule activity shall be mapped to one, and only one, of the WBS elements. Developer shall further develop and detail the base WBS elements for all Work to ensure a clear understanding of the Project and the Agreement requirements;

- the Project title and data date displayed on all schedules, charts and diagrams;
- a legend provided on all schedules, charts and diagrams, which indicate the various symbols used and their meanings;
- all duration calculations based upon calendar days (seven days per week) and show all non-workdays;
- known Special Events provided by the Owner;
- all resource dependencies and allocations included in each Project Schedule activity duration to complete the prescribed Work element;
- identified assumptions for bad weather monthly impacts of one to three calendar days per month, depending on the season, excluding Force Majeure Events; and
- all Float identified; and no negative Float.

The Project Schedule shall be updated at as outlined in these Technical Requirements.

Minimum areas of Work to be scheduled shall include, but not be limited to, those outlined in the cost loaded Schedule of Values and WBS.

With the exception of activities that have been given a duration by the Owner in the Agreement or in these Technical Requirements, that are relating to tenant finishes, or that involve Environmental Approvals by a Governmental Entity, all other Project Schedule activities shall have a duration of no more than 30 calendar days. All activities shown in the Project Schedule, with the exception of the first and last activities, shall have a minimum of one predecessor and a minimum of one successor activity.

For the avoidance of doubt the duration limit contemplated in the immediately preceding paragraph does not apply to the Baseline Project Schedule and to the version of the Project Schedule included in the first Transition and Phasing Plan included in Appendix 3 to the Agreement.

I.7 Project Phasing

While the phasing of Construction Work is the responsibility of the Developer, it should be organized in a manner that allows for project milestones, for each Functional Area, to be met in accordance with Contract Documents requirements.

Developer shall provide a Transition and Phasing Plan, in accordance with the requirements included in Section I.10.5 of these Technical Requirements. The Transition and Phasing Plan shall indicate Project phases to complete the Work of all Functional Areas, in accordance with Contract Documents requirements. The Transition and Phasing Plan shall identify Construction Work Areas as such areas are defined in the Initial Transition and Phasing Plan included in Appendix 3 to the Agreement. The Transition and Phasing Plan shall also include anticipated start and finish dates of Construction Work for each Construction Work Area.

The Transition and Phasing Plan shall be compliant with Section I.5 of these Technical Requirements and with the Airport Rules and Regulations.

The D&C Work shall be executed in a phased manner that provides for the uninterrupted occupancy and operation of the Terminal outside of the Construction Work Areas, in compliance with Section I.5 of these Technical Requirements.

Construction phasing and staging, as shown in the Transition and Phasing Plan, shall be established by Developer and fully coordinated with the Owner, and shall meet all regulatory agency requirements for the Work. Adjustments may be required to the Transition and Phasing Plan as Design Work progresses to accommodate construction phasing needs of an operating Terminal, all modifications to the plan will need to be made by mutual agreement of the parties.

Developer shall follow the Shutdown Policies and Procedures, provided in Appendix 10. All Shutdowns necessary to perform D&C Work activities shall be coordinated in weekly meetings between the parties and shall comply with requirements of these Technical Requirements.

All Design Work will be advanced until completion of Design Development before the Construction Documents design phase can be initiated, unless noted otherwise in directives to perform Early Design Work. Submittals for Schematic Design and Design Development shall be issued to the Owner as one package that includes the entire Project with all Functional Areas.

I.8 Project Management

I.8.1 General

Developer is expected to manage the Project in order to comply with the requirements of the Agreement and these Technical Requirements, and to demonstrate Project Management in accordance with Good Industry Practice.

I.8.2 Monitoring and Reporting Requirements

Without otherwise limiting the rights of the Owner to inspect, verify, control, or audit the Work at any time, Developer shall report on the performance of the Work and compliance or noncompliance with Technical Requirements. Failure to monitor or report as required in accordance with these Technical Requirements or in the Agreement shall constitute a Noncompliance Instance.

Developer shall issue to Owner a D&C Monthly Report, an O&M Monthly Report, a Concessions Monthly Report, and an Asset Capitalization Report.

I.8.2.1 D&C Monthly Report

For each calendar month during the Project Construction Period, the D&C Monthly Report, issued to the Owner on the 15th each month, shall include at minimum the items listed in this Section I.8.2.1.

- **1.** Executive summary
 - a. Key issues requiring Owner's attention
 - b. Key Performance Metrics for D&C Work
- 2. Design and Construction
 - a. Schedule
 - i. Milestone summary;
 - ii. Overview of progress (actual vs. planned) of Design and Construction Work, by Functional Area;
 - iii. Summary of critical path by Functional Area and overall for the Project;;
 - iv. Schedule performance index trend over time, and to-date; by Functional Area and overall for the Project;
 - v. Float metric (% float remaining vs % schedule remaining); Float with regard to the Schedule of Values attached as Appendix 3-I to the Agreement;
 - vi. Completed Works during the month;
 - vii. Project Submittals 4 week look-ahead;
 - viii. Project Schedule 4 week look ahead, including upcoming Shutdowns, traffic management, and any other key interface; and
 - ix. Transition and Phasing Plan 4 week look ahead, including Security Levels and proposed security measures;
 - b. Design management

- i. Submittal management: status on Owner Design Reviews and Developer responses (due dates), and 4 week look ahead;
- Summary of Technical Design Reviews (weekly Design Reviews, Submittal Design Reviews) and Executive Design Reviews conducted during the month and upcoming Design Reviews, including log of Owner comments and resolution;
- iii. Nonconformance Report log for Design Work;
- iv. Request For Information log; and
- v. Change log (short description of any design changes made only in that month and status of outstanding changes).

c. Quality Management

- i. Nonconformance Report log for Design and Construction Work: status and dispositions for resolution;
- ii. Summary of QA/QC activities conducted during the month; and
- iii. QA/QC activities 4 week look-ahead.

d. Cost control

- Planned (baseline) and earned value of the Work (this month and cumulative to date) by Functional Area and building component/systems using the asset capitalization categories defined in Section I.8.2.4. of these Technical Requirements; and
- ii. Change Management & Contract Amendments. All Developer Change Proposals and Change Orders shall be broken down by Functional Area and within each Functional Area by building components and/or systems, using the asset capitalization categories defined in Section I.8.2.4. of these Technical Requirements:
 - Change log summary and tracking of financial impact on Design and Construction Cost of Developer Change Proposals, Change Requests and Change Orders;
 - 2. Compensation Events logs and status; and
 - 3. Total Change Orders value by Owner
- **3.** MWBE Goal Progression (plan vs. actual)
- 4. Key issues during the month
- **5.** Key opportunities during the month
- **6.** Collaborative Risk register section
- 7. HSE/ safety events during the month and to date
- **8.** Total workers on site
- **9.** Key interfaces and communications during the month
- **10.** Other key customer or operational impacts (include 4 week look-ahead)
- **11.** Public art funds utilized / in progress compared to anticipated budget
- **12.** Summary of Warranty Work performed and completed for the previous calendar month and outstanding Warranty Work, during applicable Warranty Period
- 13. Other relevant notices related to the D&C Work

The format and content of the executive summary of the design and construction monthly report will be substantially in a form mutually agreed upon by the parties prior to the Effective Date.

I.8.2.2 O&M Monthly Report

Requirements are provided in Section III.4.11.1 of these Technical Requirements.

I.8.2.3 Concessions Monthly Report

Requirements are provided in Appendix 5 to the Agreement.

I.8.2.4 Asset Capitalization Report

During the Project Construction Period, Developer shall provide the Owner with the total capitalized costs associated with the Project, with supporting documents aggregated and totaled by the associated asset capitalization categories as outlined in this Section I.8.2.4.

This report shall be distributed in a mutually agreed upon Excel-driven template/form and shall also include a PDF printout of each completed template.

The Asset Capitalization Report shall be issued to the Owner:

- on the 15th of each month, following the activity; and
- at each Project milestone (Functional Area Readiness, for each Functional Area, and Project Substantial Completion).

The Asset Capitalization Report shall include at minimum the items listed below:

- 1. Design and Construction
 - a. Executive Summary
 - b. Fixed Asset Accounting requirements: during the Project Construction Period, the value of the Work performed, by Functional Area, and consistent with the asset capitalization categories (see below).
 - i. Asset Capitalization Report shall allow to determine capitalization requirements once the asset is operational.
 - ii. The asset capitalization categories utilized for this reporting shall be consistent with the Schedule of Values template, as attached in the form contemplated by Appendix 7-A, to allow for tracking of Work performed against Design and Construction Cost, shall be organized by Functional Area and shall include at minimum, for each Functional Areas, cost allocation categories and associated sub-totals as listed below:
 - 1. Location (5th Floor, 6th Floor, Curbside, A Bridge, or AOB Receiving):
 - a. Building
 - b. HVAC
 - c. Curbs
 - d. Canopy
 - e. Ticket counter
 - f. TSA partition walls
 - g. Wayfinding signage
 - h. Electronic signage
 - i. Security systems
 - j. Conveyance systems
 - k. Furniture, fixtures and equipment
 - I. Customer experience element (to be itemized)
 - m. Art
 - iii. Above categories shall be provided to the Owner in a matrix which includes allocation methodology as well as infrastructure and other building units that may be individualized within the 'building' asset class.
 - iv. Value of the work performed shall include work performed above and beyond Design and Construction Cost.

I.8.3 Submittal and Review Requirements

This Section provides requirements related to:

Request of Information,

- Executive Design Review,
- Technical Design Review, and
- Submittal of Plans for review.

For the avoidance of doubt:

- no approvals or determinations of the Owner contemplated in this Section I.8.3 or elsewhere
 in these Technical Requirements are discretionary unless expressly provided for in these
 Technical Requirements; and
- build-out of the Concession Premises shall not be subject to any Owner review, comment or approval, and these Technical Requirements shall not apply to the build-out of the Concession Premises except as may otherwise be expressly provided herein.

I.8.3.1 Requests for Information

The Request for Information (RFI) procedure defines the methods, record keeping, lines of communications, and responsibilities to cover inquiries, supplemental instructions or clarification of technical matters originated by Developer for formal response from the Owner.

Developer's responsibilities include:

- create and send the RFIs via Aconex;
- each RFI will have a unique identification number;
- each RFI shall identify the name of the originator who may be contacted for more information. To ensure appropriate prioritization, all RFIs shall specify a response due date;
- all RFIs shall state the problem or the existing condition, list the affected design documents, and be accompanied by the appropriate sketches and renderings, as necessary. Each RFI shall contain only one subject for simplicity of tracking; and
- if a clarification meeting is required by the Owner, Developer will organize it and designate relevant people to attend the meeting.

Each RFI shall state any potential schedule or cost impacts associated with the RFI. Owner shall notify the Developer about any delay in the RFI closing date and any extension required shall be mutually agreed between Owner and Developer.

I.8.3.2 Executive Design Review

It is the intent of the Executive Design Review process to provide the Owner's leadership team with an opportunity to provide early input into alternatives for each EDR Area/Element (as defined below). The table included in this Section I.8.3.2, together with the list of Customer Experience Elements described in Table III.3 of these Technical Requirements constitute the list of elements subject to Executive Design Review (each, an "EDR Area/Element"). Refer to Appendix 1 (Executive Review Priorities Map) to these Technical Requirements for a location map of the following elements subject to Executive Design Review.

All of the Submittals identified below for Executive Design Review, are subject to the Owner's review and approval in its sole discretion pursuant to the process set forth in this Section I.8.3.2. Developer may not proceed further with the D&C Work that is the subject matter of any such Submittal, including submission of the Design Development Package (60% of all Functional Areas

submitted as one coordinated set) under Section I.8.3.3.1 of these Technical Requirements, without such Owner's approval, with the exception of item 12 – Wayfinding and Signage Package, which may be presented after the Design Development package, and shall be considered a Submittal Type 2. All EDR Areas/Element Submittals listed below are considered Submittals Type 1, other than item 12.

Executive Design Review Table

Key	EDR Area/Element Submittal	Developer Initial Submission Date(s)
1	Airline pods (all)	Per Project Schedule
2	TSA queue boundary wall	Per Project Schedule
3	TSA boutique walls	Per Project Schedule
4	L6 guardrails at slab edge	Per Project Schedule
5	L6 Sterile Area division walls at slab edge	Per Project Schedule
6	Exterior roof patio along L6 AOB Corridor	Per Project Schedule
7	Wall dividing L5 landside and airside	Per Project Schedule
8	L5 egress area from AGTS	Per Project Schedule
9	Flooring at L5 (3 specific areas)	Per Project Schedule
10	Tent mast wraps	Per Project Schedule
11	Curb appearance/Canopy and Median*	Per Project Schedule
12	Wayfinding and Signage package	Per Project Schedule
13	Security cameras and speakers	Per Project Schedule
14	Ceiling above Bag Claim Area east and west	Per Project Schedule
15	AGTS station platform floor	Per Project Schedule
16	AOB Corridor	Per Project Schedule
17	South entry vestibule from exterior plaza	Per Project Schedule
18	Iconic signage element at south end of Landside Plaza	Per Project Schedule
19	AOB lobby entry	Per Project Schedule
20	Customer Experience Elements	Per Project Schedule
21	Ticketing Equipment and Kiosks*	Per Project Schedule
22	FF&E* (as related to public spaces only)	Per Project Schedule

^{*} Subject to applicable Allowance contemplated in Section 13.4 of the Agreement, and will not result in a Change Directive under Step 6 below.

The Executive Design Review process is set out below:

Step 1 (Day 1): At any time commencing not less than 4 weeks prior to the submission deadline for the Design Development Package, Executive Design Review meetings shall be held between Owner and Developer. At the first such meeting (representing day 1 of the Executive Design Review process), Developer shall present to the Owner's leadership team: (a) the base design for each EDR Area/Element; and (b) not less than one (1) and not more than three (3) alternative finishes. Developer shall provide supporting materials as are reasonably necessary to fully present such designs and any applicable costs, including a visual presentation that may include layout details, longitudinal sections, transversal sections, renderings and sketches. During such initial meeting, the Owner will provide its feedback to Developer regarding the presented designs and costs, including which aspects of the designs are acceptable to the Owner and what, if any, changes are desired by the Owner.

Step 2 (Days 2-7): From day 2 through day 7 of the Executive Design Review process, Developer shall further develop the relevant designs based on the feedback received from the Owner at the initial meeting.

Step 3 (Day 8): On or prior to day 8, the Owner and Developer will have a follow-up meeting, at which Developer shall present to the Owner alternative design concepts and options for each EDR Area/Element based on the design presented in Step 1 above. Developer shall provide similar comparable presentation materials and details for each concept and option as in its initial presentation, and where applicable including (a) cost implications of any changes requested by the Owner as compared to the base design, and (b) changes to and/or waivers from requirements included in the Contract Documents necessary to implement the revised design. For each EDR Area/Element, the Owner's leadership team will either approve in writing a revised design, any associated additional costs as compared to the base design, and any changes to or waivers from the requirements of the Contract Documents required for such revised design, or reject the revised design. If a revised design is approved for an EDR Area/Element, then proceed to Step 6. If approval is not granted under this Step 3, the Owner will provide detailed criteria and instructions to Developer regarding the changes that the Owner requires in order to approve a design for the relevant EDR Area/Element, and Developer shall proceed to Step 4.

Step 4 (Days 9-14): Developer will have 6 days to incorporate the Owner's inputs under Step 3 above.

Step 5 (Day 15): On or prior to day 15, the Parties will hold a further design review meeting, at which Developer shall present to the Owner a further revised design for each EDR Area/Element not yet approved that addresses and complies with the criteria and instructions provided by the Owner at Step 3 above. Developer shall include in its presentation, where applicable 1) cost implications, as compared to the base design, and 2) changes to or waivers from requirements included in the Contract Documents necessary to implement the further revised design. The Owner will then approve in writing (by day 15) the further revised design, including any associated additional costs as compared to the base design and any changes to or waivers from the requirements of the Contract Documents required for such further revised design, or reject the design. If a revised design is approved with respect to an EDR Area/Element, proceed to Step 6.

Step 6: Upon approval by Owner of the of an EDR Area/Element pursuant to this Executive Design Review process, Developer shall promptly proceed with the applicable D&C Work on the basis of such final approved design. If the Owner's written approval of such design includes approval of any associated additional costs as compared to the base design or any changes to or waivers from the requirements of the Contract Documents, such written approval shall be deemed to be a signed Change Directive under Section 1.8 of Appendix 12 of the Agreement; provided that the procedural requirements contemplated by Section 11.2 of the Agreement and Section 1.8(c) of Appendix 12 of the Agreement shall not apply with respect to such Change Directive.

I.8.3.3 Technical Design Review Process

I.8.3.3.1 General

Similar to the Executive Design Review, the Technical Design Reviews promote coordination between Developer and Owner, ensuring the timely review and response to advance the successful development of Design Work. Participation by the Architects of Record and Engineers of Record is required. This process is there to ensure that Design Work is consistent with requirements set forth in the Contract Documents; and that the Owner and Developer can identify and adopt changes as mutually agreed in a timely manner to efficiently execute Design Work.

The elements subject to the Executive Design Review presented in Section I.8.3.2 of these Technical Requirements will also be subject to the Technical Design Review process presented in this Section, once incorporated into the Design Development Package Submittal and the Issued for Construction Submittals.

The Technical Design Review process does not replace any requirements associated with Governmental Approvals.

Technical Design Reviews shall be organized in accordance with the Submittal review time periods provided in the table below, and shall be reflected in the Project Schedule.

The Technical Design Review and Submittal process applies to the Submittals listed in the table below.

Technical Design Review Table

Phase	Submittal	Submission Date(s)	Owner review duration – Business Days	Reviewer and review standard
EW	Schematic Design Package - 30% (all Functional Areas submitted as one coordinated set) Design Analysis Report – SD - 30%	Early Design Work package	15	Owner Review and Comment as a Submittal Type 2
EW	Other Early Design Work (multiple package)	Per Project Schedule	10	Owner Review and Comment as a Submittal Type 2
DD	Design Development Package - 60% (all Functional Areas submitted as one coordinated set) Design Analysis Report – DD – 60%	Per Project Schedule	15	Owner Review and Comment as a Submittal Type 2
CD ¹	All Construction Documents – 90% Progress Submittals: number and name of packages based on Developer packaging schedule (multiple packages)	Per Project Schedule	15	Owner Review and Comment as a Submittal Type 2
CD ¹	All Construction Documents - Issued for Review - 100% (IFR) Submittal	Per Project Schedule	10	Owner Review and Approval as a Submittal Type 1
CD ¹	All Construction Documents -Issued for Construction (IFC) Submittal	Per Project Schedule	As negotiated with DBC	Building Officials as required by DBC
CD ²	Design Analysis Report CD ²	Per Project Schedule	10	Owner Review and Approval as a Submittal Type 1
CD ¹	All Submittals issued for Governmental Approvals (agency utilities, grant applications)	Per Project Schedule	10	Owner Review and Approval as a Submittal Type 1
CD ¹	All Construction Documents -Issued for Governmental Approval (IFC) ¹	Per Project Schedule	As negotiated with applicable Government Agency	Applicable Government Agency
CA	Record Document BIM (per BIM DSM)	Per Project Schedule	10	Owner Review and Comment as a Submittal Type 2

Table Footnotes:

1 The final quantity, break down and schedule for Construction Document (CD) packages is dependent on the Developer's construction packaging plan as agreed to with DBC. Developer shall keep a

construction package log indicating the dates for Technical Design Review, DBC review, and associated permit numbers, that is shared with the Owner as it is updated.

2 The Owner requires a final Design Analysis Report for the entire Project and does not necessarily require a Design Analysis Report for each CD package. It is the Developer's responsibility to determine narrative and calculation requirement for each package for permit with DBC and to get approval of those packages by DBC.

I.8.3.3.2 Early Design Work

The Early Design Work includes Design Development, IFR and IFC documents for the CMF; IFR and IFC phase 1 demolition plans; structural and vertical transportation procurement packages; and Cost-Loaded Project Schedule. The Early Design Work will be done at the same time as the Schematic Design Package Submittal (30% in order to achieve the proposed schedule in the Transition and Phasing Plan).

I.8.3.3.3 Design certification

The Design Quality Manager or Design and Construction Quality Manager shall certify that all technical documents produced as part of the Design Work, including drawings, specifications, calculations, and reports produced by Developer's organization have been checked in accordance with the requirements of the Contract Documents and Developer's D&C QMP. These design certifications and design quality checklists shall accompany all Submittals packages issued to the Owner for review. Owner's review time will only start once complete packages, per the design checklists have been received for review.

The Design Quality Manager or Design and Construction Quality Manager shall provide the certification as specified below:

- Design checks have been completed per the Quality Control and Quality Assurance requirements:
- Design quality checklists have been completed and submitted to the Owner with the corresponding Submittals, see Appendices 2-A through 2-C of these Technical Requirements for the design quality checklists
- Design Work conforms to requirements of the Contract Documents;
- Any Deviations or design exceptions have been approved, in writing, by the Owner;
 and
- Design QC activities are following Developer's D&C QMP.

I.8.3.3.4 Technical Design Review meetings and process

Technical Design Reviews include weekly Technical Design Review meetings and Submittal Technical Design Review meetings, as further detailed below. Design Documents that are to be reviewed during Technical Design Reviews and which require hard copies shall be submitted with sufficient copies to accommodate all participants in the Design Review.

It is understood that as the Work progresses, Technical Design Reviews and Construction Submittal reviews may be happening within the same time frame for different phases or packages of the Project.

The Technical Design Reviews conducted by the Owner shall be focused on the review of coordination and compliance with the Contract Documents. The table provided in Section I.8.3.3.1 provides the required Owner review time period by Submittal. The final list of Submittals for review will be based on the Developer's final packaging of Construction Documents for permit and construction.

Time periods for Technical Design Reviews (including weekly Technical Design Review meetings and Submittal Technical Design Review meetings) shall be reflected in the Project Schedule.

I.8.3.3.5 Weekly Technical Design Review Meetings

As a first stage of the Technical Design Review process, Developer will coordinate and invite the Owner to weekly Technical Design Review meetings. These reviews are intended to be short, over the shoulder, reviews of the working BIM model depicting design each week as it progressed towards the scheduled Submittal date.

The Developer shall indicate areas to be reviewed in advance of each meeting. The Owner reserves the right to direct or specify additional areas or topics where Owner needs more information if deemed necessary.

Two weeks prior to the Submittal date of any design or construction package, Developer shall provide a high-level preview of the complete Submittal package so that it can be reviewed during the weekly Technical Design Review meetings. Comments will be documented by the Developer in a comment log for the Submittal being reviewed or discussed, in accordance with the requirements set forth in Section I.8.3.3.6 of these Technical Requirements.

During the weekly Technical Design Review meetings, Owner will review and comment on compliance of Design Documents reviewed against Contract Documents.

If required by the Owner, Developer will conduct a virtual walk through of the progress since the last review with the Owner's designated reviewers. The working BIM model for the Project can be used to facilitate this.

Following each Technical Design Review meeting the Developer will update meeting minutes on Aconex.

Developer will proceed to address the comments in advance of the next weekly Technical Design Review meeting. If required and as agreed between Developer and Owner, Design Work documents can be uploaded on Aconex to provide Owner with interim updates on progress in advance of the next Technical Design Review meeting or to enable comments to be resolved in between weekly meetings.

Weekly Technical Design Review meetings replace the typical review schedule outlined in the Standards and Criteria DSM. Weekly Technical Design Review meetings will focus on system-wide updates.

Technical Design Reviews of a Submittal are intended to be an extended review by subject-matter experts and other Owner designated reviewers for compliance with the Contract Documents. The package that Developer shall provide for a Technical Design Review shall include all required documents necessary for a Submittal package as defined in the Standards and Criteria DSM.

Submittal review dates and review time periods shall be identified in the Project Schedule

The Owner shall review and provide comments on compliance of Submittal in the Comment Log, and provide mark ups as necessary to clarify Owner comments, within the review time periods identified for that Submittal.

Developer's responsibilities include:

- transmittal of Submittal package documentation and content to designated package reviewers (document control);
- upload of content to Aconex and transmittal of upload notification via Aconex, by 12 p.m. on date of Submittal deadline;

- participation in Submittal review meetings if requested by the Owner;
- participation by Architects of Record and Engineer of Record as necessary in comment resolution meetings; and
- response to comments and facilitation of a comment review meeting to demonstrate resolution of the Owner comments.

I.8.3.3.6 Comment Log

As part of the Technical Design Review process, Developer will provide and be responsible to collect, administrate, respond and implement, where applicable, any comments from the Owner. Owner will use the agreed template provided in Appendix 7-B to these Technical Requirements, identifying the person providing the comment, applicable section of the Submittal including: page, sheet and location of the comment and any other supporting documents required to provide response to the comment.

At the end of the review for each specific Submittal, Owner will provide the comment log to Developer. After the Owner has provided the comment log, Developer shall provide the Owner with a written reply that states the Developer's disposition, resolution, or action to be taken on each of the Owner's comments, instructions, or recommendations. Developer shall submit its reply to the Owner within seven calendar days after it receives the Owner's comments unless a different timeframe is specifically agreed by both parties.

Action codes that can be used by Developer for response to any comment from the Owner will be:

- A Agree, Developer will comply and implement comment as part of the Submittal
- C Disagree, Developer/Owner resolution meeting is required
- D Delete, Owner withdraws the comment
- E Exception, Developer/Owner resolution meeting is required
- F Will be corrected and implemented in a later Submittal
- N/A Not applicable

Owner will review Developer response to comments within seven (7) calendar days, and the comment will be closed if the action proposed by Developer satisfies the reviewer who provided the comment. A resolution meeting will be arranged within five to seven days of receipt of comments, if Owner considers that the response provided is not taking into account reviewer comments or if Developer responds with any C-Disagree or E-Exception, unless it is agreed between Owner and Developer to organize the resolution meeting at a later point in time.

I.8.3.3.7 Resolution Meeting

The purpose of the Resolution Meeting is to review and reach an agreement to any response classified as C-Disagree, E-Exception or any other response the Owner does not consider sufficient. All pending actions or comments shall be closed during the resolution meeting; any action or comment which has not been closed during the resolution meeting will be escalated to EVP and the Owner leadership team where a final decision will be made in no more than three days.

For each Submittal, the Developer shall have seven calendar days to respond to the Owner's review comments into the Submittal and resubmit it. Upon resubmission of a Submittal, Owner's review duration will be seven calendar days.

I.8.4 Plan Reviews

Developer shall submit to the Owner each Plan identified in Section I.10 of these Technical Requirements and listed in the table included in this Section in a timely manner and in accordance with the Agreement and Section I.10 of these Technical Requirements.

The date of the Plan submittal shall be reflected in the Project Schedule.

The Owner shall review and provide comment on compliance of Plans in the Comment Log, and provide mark ups as necessary to clarify Owner comments. After receiving the Plan, the Owner will have 15 calendar days to provide comments to the Developer.

Owner will use the template attached to these Technical Requirements as Appendix 7-D for the comment log, in accordance with the requirements set forth in Section I.8.3.3.6 of these Technical Requirements.

After the Owner has provided Developer with its comments, Developer shall provide the Owner with a written reply that states the Developer's disposition, resolution, or action to be taken on each of the Owner's comments, instructions, or recommendations. Developer shall submit its reply to the Owner within seven (7) calendar days after it receives the Owner's comments unless a different timeframe is specifically agreed by both parties. All comments and responses to the Plans shall follow the comment resolution meeting process described in Section I.8.3.3.7 and utilize the comment log in accordance with the requirements set forth in Section I.8.3.3.6 of these Technical Requirements.

Owner will review Developer response to comments within seven (7) calendar days, and the comment will be closed if the action proposed by Developer satisfies the reviewer who provided the comment. A resolution meeting will be arranged within seven days of receipt of comments, if Owner considers that the response provided is not taking into account their comments or if Developer responds with any C-Disagree or E-Exception, unless it is agreed between Owner and Developer to organize the resolution meeting at a meeting later.

Developer's responsibilities include:

- Upload content to Aconex and transmit upload notification via Aconex, by 12 p.m. on date of Submittal deadline;
- transmit Plan to designated reviewers (document control);
- participation in Plan review meetings if requested by the Owner; and
- response to comments and facilitation of a comment review meeting to demonstrate resolution of the Owner comments.

Plan Review Table

Submittal	(Review Duration – Business Days)	Reviewer and review standard
Project Management Plans (PMP) (no later than 30 days prior to Phase 1)	10	Owner Review and Comment as a Submittal Type 2
Energy Management and Conservation Plan (30 days after design completion)	10	Owner Review and Comment as a Submittal Type 2
Shutdown Plan (no later than 30 days prior to Phase 1)	10	Owner Review and Comment as a Submittal Type 1
Traffic Management Plan (no later than 30 days prior to Phase 1)	10	Owner Review and Comment as a Submittal Type 1
Pre-Commissioning Plan (Pre-Cx) (no later than 30 days prior to Phase 1)	10	Owner Review and Comment as a Submittal Type 1
Activation and Training Plan – update (no later than 30 days prior Phase 1)	10	Owner Review and Comment as a Submittal Type 1
Project Management Plan (PMP) (no later than 30 days prior each Phase)	10	Owner Review and Comment as a Submittal Type 2
Risk Management Plan – Risk matrix update (no later than 30 days prior each Phase)	10	Owner Review and Comment as a Submittal Type 2
Transition and Phasing Plan - update (levels of security) (no later than 30 days prior each Phase)	10	Owner Review and Comment as a Submittal Type 1
Quality Management Plan – update (no later than 30 days prior each Phase)	10	Owner Review and Comment as a Submittal Type 2
Health and Safety Plan – update (no later than 30 days prior each Phase)	10	Owner Review and Comment as a Submittal Type 2
Activation Plan and Training Plan (no later than 60 days prior to completion of each phase)	10	Owner Review and Comment as a Submittal Type 2
Communications and Coordination Plan between Owner and Developer – update if needed	10	Owner Review and Comment as a Submittal Type 2
Project Management Plan (PMP) (yearly update)	10	Owner Review and Comment as a Submittal Type 2

Moreover, the CDMP will follow specific procedures described in Appendix 5 to the Agreement and the O&M Services Plan will follow specific procedures describe in Part III of these Technical Requirements.

I.9 Additional Owner requirements related to Health, Safety and Environmental Management

I.9.1 Health and Safety Management

Developer shall perform the Work in a manner that ensures the safety of all Users, including the public, Developer personnel, DEN employees and all Patrons in accordance with all applicable Laws and Safety Standards.

Developer shall:

- ensure the safety of all its personnel and shall maintain the safety required and provide safety equipment and procedures for the protection of employees and the public throughout the construction work area(s) of the Facility;
- ensure that all equipment used shall be maintained in a safe and efficient manner in accordance with all Laws, safety organizations, regulations and guidelines pertaining to providing the required services; and

• follow all safety requirements outlined in the National Electric Safety Code (NESC), the Occupational Safety and Health Administration (OSHA), and any standards or practices for safe installation or maintenance of required equipment per the Agreement.

I.9.2 Hazardous Substances and OSHA Compliance

Developer shall not keep or store explosive or hazardous goods, merchandise or material at the Airport; and no dangerous trade, business or occupation will be carried on therein or thereon. Developer shall not by any act or omission in the performance of the Agreement increase the rate of or suspend any insurance policy or coverage of the Owner.

Developer shall ensure that all materials, equipment, and all other items used in the performance of this Agreement are in compliance with Occupational Safety and Health Administration (OSHA).

I.9.3 Occupational Health and Safety

Developer shall comply with requirements included in Design and Construction Specifications Division 1 and DEN Environmental Guidelines provided in Appendix 10 to this Volume II.

I.9.4 Environmental Management

Environmental management should be completed as per DEN Environmental Guidelines provided in Appendix 10 to this Volume II.

I.9.5 Waste Management

Developer shall manage and dispose of all waste associated with the Work in compliance with all applicable laws and regulations, including any City rule or ordinance:

- waste and borrow areas;
- permits;
- disposal of waste material;
- disposal of waste from Concessions;
- disposal of waste from Developer janitorial services and other O&M Services; and
- disposal of hazardous waste.

I.9.6 Construction Impacts

Developer shall be responsible for evaluating potential construction noise, dust and traffic impacts and for developing and implementing necessary impact mitigation measures.

I.10 Project Management Plan (PMP)

I.10.1 General

The Project Management Plan (PMP) provides a comprehensive baseline of means and methods by which Developer will achieve the design and construction related requirements of the Agreement and these Technical Requirements.

General PMP requirements are listed below:

- Developer shall develop, update and submit the PMP to the Owner, as needed in order to comply with the requirements set forth in the Contract Documents;
- Developer shall update the plans included in Appendix 3 to the Agreement, and subsequent versions thereof, as needed in order to comply with the requirements set forth in the Contract Documents;

- Developer shall implement and, as required in accordance with terms hereof, update the PMP every year and as Developer or the Owner determines is necessary to comply with requirements of the Agreement and Good Industry Practice;
- in addition to the annual update cycle, Developer shall update the PMP 30 days prior to each Project phase, as defined in the Transition and Phasing Plan in Section 1.10.5) of these Technical Requirements;
- where one part of the PMP requires updates, all applicable related parts of the PMP shall be updated as needed, unless the Owner agrees to accept updates to specified components without a full update of the PMP;
- updates to the PMP shall be submitted to the Owner as both clean and redline versions to facilitate Owner review of the revised PMP;
- the PMP shall identify Developer's organizational structure and management approach and processes to all aspects of the D&C Work;
- the PMP shall demonstrate in sufficient details the means and methods by which, for each plan listed in this Section I.10.1, the objectives and requirements listed in the applicable subsection of Section I.10 will be met;
- during the Project Operating Period, sections of each individual plan which apply to the Operations and Maintenance Work and the Concessions Program shall be consolidated into the O&M Services Plan and the CDMP, respectively; and
- Developer shall prepare, implement, manage, operate and update the plans (or components thereof) listed below:
 - 1) Introduction to the Project Management Plan;
 - 2) Management & Staffing Plan;
 - 3) Risk Management Plan;
 - 4) Change Management Plan;
 - 5) Transition and Phasing Plan (Initial Transition and Phasing Plan is included in Appendix 3 to the Agreement);
 - 6) Project Controls Plan;
 - 7) Submittal Management Plan;
 - 8) Quality Management Plan (QMP) (Initial Quality Management Plan for D&C is included in Appendix 3 to the Agreement);
 - 9) Document and Data Management Plan (DDMP);
 - 10) Communications and Coordination Plan between Owner and Developer;
 - 11) Affected Third Party Plan;
 - 12) Public Information and Communication Plan;
 - 13) Health and Safety Plan (Initial D&C Health and Safety Plan is included in Appendix 3 to the Agreement); and
 - 14) Environmental Management Plan (Initial Environmental Management Plan is included in Appendix 3 to the Agreement).

Each plan can be updated independently of the other plans.

Developer shall also prepare, implement, manage, operate and update the plans listed below. Unless otherwise stated herein, Developer shall submit a first version of these plans between the Effective Date and the start of Construction Work:

15) Emergency Management and Disaster Recovery Plan (EMDRP);

- 16) Energy Management and Conservation Plan (instead to be submitted within 30 days after design completion);
- 17) Shutdown Plan;
- 18) Traffic Management Plan;
- 19) Pre-Commissioning Plan (Pre-Cx); and
- 20) Activation and Training Plan.

I.10.2 Management and Staffing Plan

Developer shall develop and submit a Management and Staffing Plan, which shall identify (in narrative form and with organizational charts) key individuals and set out reporting lines, responsibilities, and authority. The plan shall include details on how the various organizations within Developer and Developer-Related Entities will be interlinked and managed and shall demonstrate how the design, construction, facilities operations and maintenance, Concessions development and management, and handback responsibilities will be integrated to achieve the project goals listed in the Scope Documents.

The plan shall include details of management structures and management systems to be used for design management, construction management, facilities operations and maintenance management, and Concessions development and management.

The plan shall include an organization chart (or charts) outlining the structure of Developer's project management organization for design, construction, operations and maintenance (including for quality assurance, quality control, and quality acceptance) and a description of the allocated roles, responsibilities, and interrelation of each member of the management team.

I.10.3 Risk Management Plan

Developer shall develop and submit a Risk Management Plan that describes the collaborative approach to identification, management, mitigation, and allocation of Project risks. A risk matrix shall be prepared by the Developer with the input of the Owner in advance of each construction phase, and shall identify at minimum the following:

- itemization of specific risk items that may present the possibility of delay or disturbance to the Project;
- categorization of risks, during the design and construction phases of the Project;
- probability of occurrence and potential consequences of the identified risks; and
- mitigation strategies (including assignment of responsibility for such strategies) and specific measures to eliminate, prevent, or reduce the impact of risks

Developer shall be responsible for managing all aspects of the risk register, including risk identification, risk assessment and development of risk mitigation strategies. Owner's role shall be limited to assisting the Developer upon Developer's request.

I.10.4 Change Management Plan

Developer shall develop and submit a Change Management Plan that shall set out requirements and processes for the following:

 submission of Change Requests and Developer Change Proposals: process, format, categorization, back-up documentation, including determination of feasibility, cost and schedule impacts of Change Requests and Developer Change Proposals;

- process for review, approval, rejection or other determination as defined in the Agreement.
- review, logging and tracking of Change Requests, which shall be organized by category (e.g., Design vs. Construction Costs, Functional Area, source of change, etc.);
- impact the change has on MWBE participation; and
- reporting of Change Orders in the documentation management system (including affected construction contract documents).

All Change Requests and Developer Change Proposals shall be formatted using the approved Work Breakdown Structure; costs shall be broken down by Functional Area and within each Functional Area by building components and/or building systems.

I.10.5 Transition and Phasing Plan

Developer shall coordinate with the Owner to achieve a smooth transition of activities between the major Phases of the Work, including the Financial Close, the commencement of Design Work, the commencement of Construction Work, major Phases of Construction Work, at the commencement of O&M Services for each Functional Area, at the commencement and end of the Project Operating Period, including the end of the handback phase.

A Transition and Phasing Plan summary included in the PMP will set out the guiding principles for transition between each construction phase.

In addition, Developer shall develop and submit a Transition and Phasing Plan for the D&C Work, which shall include:

- a logical sequencing for the Work;
- clear Project Phases and milestones;
- Developer's approach to planning and managing transition from one phase to the next;
- Construction Work Areas:
- Public Circulation Space adjacent to each Construction Work Area, for each phase of the Work;
- a Construction Staging Plan;
- Security Levels and associated security measures, for each Construction Work Area (or portion thereof) and Staging Area;
- how Developer shall work with the Owner to ensure a seamless transfer of responsibilities; and
- Handback dates per the Project Schedule.

The Initial Transition and Phasing Plan, including the initial construction staging, is provided in Appendix 3-B to the Agreement.

The Transition and Phasing Plan shall clearly reconcile with the Project Schedule and its associated WBS, without discrepancy. It shall be consistent with Appendix 1 (Scope Documents) to these Technical Requirements and with Appendix 3-B (Initial Transition and Phasing Plan) to the Agreement.

The Transition and Phasing Plan shall reflect, at any given time during the Project Construction Period, the Construction Work Areas.

The parts of the Transition and Phasing Plan dealing with Security Levels and associated security measures shall be submitted by Developer for review and comment by the Owner as a Submittal Type 1.

I.10.6 Project Controls Plan

I.10.6.1 General Requirements

A Project Controls section in the PMP shall describe the Developer's approach to controlling the Design and Construction phase of the project and will include as a minimum:

- Schedule control
- Cost control
- Asset capitalization
- Performance Measurement
- Reporting (in accordance with Section I.8.2 of these Technical Requirements)

The O&M Services Plan will detail how the O&M Services will be monitored and controlled. The Concessions Development and Management Plan details how the concessions will be monitored and controlled.

I.10.7 Submittal Management Plan

Developer shall develop, submit and implement a Submittal Management Plan, which shall set out how Developer shall fulfill its responsibility for design and construction administration requirements as provided in the Agreement, in Section I.8.3 of these Technical Requirements and in the General Standards and Criteria DSM, for each Phase of the D&C Work. For the avoidance of doubt, Section 4.4 of the Agreement and Section I.8 of these Technical Requirements shall govern the applicable processes in respect of Submittals and review thereof.

I.10.8 Quality Management Plan (QMP)

I.10.8.1 Organization of Quality Assurance and Quality Control

Developer's Quality Organization shall meet the following requirements:

- Developer's Key Personnel shall have the responsibility and authority to plan and determine the overall direction of Developer and its relationship to the quality efforts.
 Developer Key Personnel shall ensure the quality policy is documented and understood by all employees and management by formal and informal communication and shall further ensure the implementation of the quality policy by everyone in the organization;
- Developer's overall Quality Assurance and Quality Control management approach shall be supported and implemented from the top down. An organization chart shall be available and kept current in the QMP. All key roles and persons, and lines of communication and authority between Developer and the Owner and their representative(s). All Developer personnel are involved in managing, performing, or verifying work that affects quality. Quality shall not be the sole domain of the design checkers, QC inspectors, or QC personnel. All workers, including design and construction production personnel, shall be aware of the quality system requirements that govern their respective work;
- The Quality Management Plan (QMP) shall indicate the adequate authority structure to allow personnel who need the organizational freedom and authority to do the following:
 - initiate action to prevent the occurrence of any Nonconforming Work relating to the product, process, and quality system;
 - identify and record any problems relating to the product, process, and quality system;

- initiate, recommend, or provide solutions through designated channels;
- confirm, in a timely manner, the implementation of solutions. The verification shall also investigate if the solution to the identified problem created another quality problem; and
- control any further processing, delivery, or installation related to Nonconforming Work until the deficiency or unsatisfactory condition has been corrected.
 Controls shall be established, including stopping Work if necessary, once a significant quality problem is identified, until the cause of the problem can be identified and the required corrective action can be implemented.

For the avoidance of doubt, an individual person may fulfill one or more of the various roles contemplated in this Section I.10.8.

I.10.8.2 Role and Responsibilities of the Quality Manager

Developer shall designate a Quality Manager who shall be classified as one of the Key Personnel and who shall be responsible for overseeing the overall quality program and the preparation, implementation, and update of the QMP for Developer, including management, design, and construction. The Quality Manager shall have the overall responsibility for the development and management of Developer's QMP and is responsible for the overall Quality Assurance and Quality Control (QA/QC) program of Developer for the Work.

The Quality Manager shall be the primary point of contact with the Owner and available for consultation with the Owner throughout the duration of the Project for issues relating to Developer's QMP, including preparation, review, implementation, and updates. The Quality Manager shall attend the weekly progress meetings as a minimum and such other meetings as the Owner may request, including individual meetings between the Quality Manager and DEN.

The Quality Manager, irrespective of other responsibilities, shall have defined authority and responsibility for the following:

- ensuring that a quality system is established, implemented, and maintained;
- reporting on the performance of the quality system to Developer's management for review and as a basis for improvement of the quality system; and
- direct supervision of the Design Quality Manager and the Construction Quality Manager.

I.10.8.3 Project Quality Control and Quality Assurance Organization

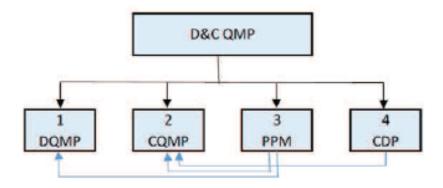
Developer shall identify resource requirements and provide sufficient resources, including the assignment of trained personnel, for management, performance of work and verification activities, including internal quality audits.

The organizational chart provided by Developer in the PMP should identify Key Personnel positions.

As further detailed in Section I.10.8 of these Technical Requirements, the D&C QMP will describe the Developer's policies, procedures, and staffing to manage the quality of the Work and will have a Quality Assurance and a Quality Control component.

The D&C QMP consists of separate sections for a Design Quality Management Plan (DQMP) and a Construction Quality Management Plan (CQMP), both related to a section of such D&C QMP for Process Procedures Manual (PPM) which defines the proposed methods and procedures of managing the quality of the D&C work. It defines responsibilities and the required documentation of the results of these processes.

Figure 1 Structure of Design and Construction Quality Management Plan (D&C QMP)



I.10.8.4 Owner Oversight role

The Owner shall have designated personnel in charge of leading the Owner's oversight of Quality Assurance activities completed by the Developer.

The Owner, in its oversight role, will conduct verification oversight inspections, audits, sampling, and testing.

The Owner's quality oversight will include any Independent Testing Agency (ITA) appointed by the Owner in accordance with the International Building Code (IBC) Chapter 17 Special Inspections and the DBC.

The Owner will periodically audit Developer QA/QC activities, including conducting independent verification sampling and testing. The audits, test results and subsequent feedback to Developer are intended to assess the adequacy of Developer's QA/QC, including the frequency of testing.

All of the Owner's feedback, including reasons for Nonconformance Reports, will be reported to Developer's Quality Manager, whom will proceed as described in the Contract Documents and the QMP.

Owner-generated observations will be identified either as conforming or nonconforming to related requirements of the Contract Documents. Developer shall be required to respond to all detected Owner instances of Nonconforming Work. A Nonconformance Report opened by the D&C Quality Manager upon Owner request in the Developer's Project NCR log will be closed by Developer upon the verification by the Owner of a resolution of the issue acceptable to the Owner in accordance with the requirements of the Contract Documents.

Verification sampling and testing will be performed by the Owner on samples that are taken independently of the QC samples.

The Owner will provide, periodically, independent assurance to evaluate Developer's qualified sampling and testing personnel and testing equipment. The independent assurance program will evaluate the sampling and testing procedures, and testing equipment used by Developer's construction quality control staff and the Owner's quality staff.

The Work for which special inspection or testing is required by IBC Chapter 17 shall remain accessible and exposed for special inspection or testing purposes until completion of the required Owner or ITA special inspections or tests. The Developer shall notify the Owner or designated ITA at minimum five days prior to the need for special inspections.

Continuous and periodic special inspections that are required by IBC Section 1705 and performed by the Owner or ITA includes: concrete, rebar, bolts installed in concrete, structural steel, cold-formed steel deck, open-web steel joists and joist girders, welding, masonry, prefabricated wood structural elements and assemblies, shoring, curtainwalls, soil compaction, cast-in-place deep foundations, sprayed fire-resistant materials, and fire-resistant penetrations and joints.

Where special inspections or tests are required, the Architect of Record and/or the Engineer of Record in responsible charge shall prepare a Statement of Special Inspections to be submitted by the permit applicant to the City and the Owner. Once the Developer obtains building permits, the Developer shall provide the Owner or designated ITA with the special inspection permit requirements. Prior to initiation of construction activities, the Developer shall hold a preconstruction meeting with the Owner, the designated ITA, and special inspectors to review the Statement of Special Inspections. The intent of this meeting is to ensure that construction and management teams are aware of the requirements associated with the Statement of Special Inspections, and how they shall be conducted as part of the Construction Work.

The Owner or designated ITA will keep records of special inspections (per IBC 1704). The Owner will furnish inspection reports to the Developer. Reports shall indicate that work inspected was or was not completed in conformance with approved Construction Documents. Discrepancies shall be brought to the immediate attention of the Developer for correction. If they are not corrected, the discrepancies shall be brought to the attention of the Architect of Record and/or the Engineer of Record in responsible charge prior to the completion of that Phase of the Work.

The Owner or designated ITA will submit a final report to the DBC and the Developer, stating whether all Work requiring special inspection was inspected, reported, and found to be in compliance with the approved Construction Documents, the Denver Building Code and the applicable referenced materials standards in the Denver Building Code. Final reports shall not be submitted to the City until all Nonconforming Work has been cleared or exceptions taken have been documented as being acceptable to the Architect of Record and/or Engineer of Record in responsible charge. Final reports shall catalog all inspection, testing, and related engineer-signed reports.

The Developer shall ensure the Engineer of Record makes structural observation visits to the site to observe general compliance with the approved structural plans, specifications, and any change thereof. Prior to the commencement of observations, the structural observer shall submit to the Owner and the City a written statement identifying the frequency and extent of structural observations. At the conclusion of the Work, the Engineer of Record shall submit a written statement to the Developer, the Owner, and the City stating that site visits have been made and identify any reported deficiencies that, to the best of the Engineer of Record's knowledge, have not been resolved. Engineer of Record structural observation letters and the Owner's final special inspection reports are required to be submitted to the City to obtain a Temporary Certificate of Occupancy and Final Certificate of Occupancy.

Where fabrication of structural load-bearing members and assemblies is being performed on the premises of a fabricator's shop, special inspection of the fabricated items may be required by IBC Section 1704.2. The Owner, designated ITA, or other representative will inspect the fabrication plant, if needed, which will require a minimum 30-day notice prior to the start of fabrication. The Developer shall provide to the Owner or designated ITA special inspector detailed fabrication and

Quality Control procedures that provide a basis for inspection control of the workmanship and the fabricator's ability to conform to approve Construction Documents and referenced standards. The special inspector will review the procedures for completeness and adequacy relative to the code requirements for the fabricator's scope of work. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to Owner or designated ITA stating that the Work was performed in accordance with the approved Construction Documents and referenced standards.

Special inspection of the steel fabrication process is not required where the fabricator does not perform any welding, thermal cutting, or heating operation of any kind as part of the fabrication process. In such cases, the fabricator shall submit a detailed procedure for material control that demonstrates the fabricator's ability to maintain suitable records and procedures such that, at any time during the fabrication process, the material specification, grade and mill test reports for the main stress-carrying elements are capable of being determined (IBC 1704.3). These procedures shall be provided by the Developer to the Owner or designated ITA.

I.10.8.5 Design Quality Management

I.10.8.5.1 Design Quality Assurance

Developer shall assign a Design Quality Manager, as one of the Key Personnel. The Design Quality Manager shall report to the D&C Quality Manager and shall be independent from the production of the Design Documents.

The QMP shall include procedures for verifying and documenting that the design output meets the design input requirements. Verification shall include independent checks, tests, and reviews. Verification shall be performed under the direction of the Design Quality Manager, who shall be responsible for providing QA direction in accordance with the QMP for all Design Work performed by Developer.

The Design Quality Manager shall be in the Project Office as necessary throughout Design Work and shall be present as necessary thereafter in order to manage Design Work QA related to design support during Construction Work, design change management, and the completion of Record Drawings.

The Design Quality Manager shall assess and evaluate Developer's Design Work QA and QC activities in order to certify to Developer and to the Owner that the Design QA and QC activities comply with the QMP and requirements of the Contract Documents. Developer shall ensure that the Design Quality Manager carries out all duties expressed and implied in Contract Documents.

The Design Quality Manager shall have QA responsibilities related to the following:

- Design of permanent and major temporary components;
- Changes in Design Work for permanent components; and
- Record Documents.

The Design Quality Manager shall also perform the following activities:

- identify and report any nonconformance with Contract Documents;
- track, monitor, and report on the status of outstanding design-related Nonconformance Reports; and
- provide input into the monthly report as part of the monitoring and reporting requirements defined in Section I.8.2 of these Technical Requirements.

I.10.8.5.2 Design Quality Control

The requirement that Developer engages and uses a Design Quality Manager shall not relieve Developer from carrying out all the Design Quality Control checks and reviews which shall comply with Design and Construction Specifications Division 1 and the Standards and Criteria DSM, in particular Chapter 33, and which shall be consistent with Good Industry Practice and what a professional and prudent designer would normally carry out on the type of Work that is actually being designed.

I.10.8.6 Construction Quality Management

I.10.8.6.1 Construction Quality Assurance

Developer shall assign a Construction Quality Manager (CQM), as one of the Key Personnel. The Construction Quality Manager shall report to the D&C Quality Manager and shall be independent from the production of the Construction Work.

The Developer shall submit a Construction Quality Management Plan (CQMP) for the Construction Work, as a component of the D&C QMP. Construction Quality Manager, through the CQMP, shall have the primary responsibility for the quality of the Work during the Project Construction Period, including all Work and products of Developer and Developer-Related Entities, fabricators, suppliers, and vendors, both on-site and off-site. The Owner, in its oversight role, will assume an oversight role, by conducting oversight inspections, audits, sampling, and testing.

Construction Work shall be performed in accordance with the requirements of the Contract Documents, Good Industry Practice, Construction Documents, and the approved PMP and components thereof.

The CQM shall be capable of ensuring that procurement, shipping, handling, fabrication, installation, cleaning, inspection, construction, testing, storage, examination, repair, maintenance, and required modifications of all materials, equipment, and elements of the Work shall comply with the requirements of the Contract Documents, and that all materials incorporated in the Work and all equipment and all elements of the Work shall perform satisfactorily for the purpose intended in the Contract Documents.

I.10.8.6.2 Construction Quality Control

The requirement that Developer engage and use a Construction Quality Manager shall not relieve Developer from carrying out all the Construction Quality Control checks and reviews which shall comply with Design and Construction Specifications Division 1 and the Standards and Criteria DSM, in particular Chapter 33, and which shall be consistent with Good Industry Practice and what a professional and prudent designer would normally carry out on the type of Work that is actually being designed.

I.10.8.7 Quality Management Plan (QMP) Requirements

Developer shall develop and submit a Quality Management Plan (QMP) as appropriate for the Project phase, which shall set out how Developer shall fulfill its responsibility for the quality of the Work and the Project, including all actions necessary to ensure full compliance with the Agreement and the Technical Provisions. The QMP shall set out all aspects of Developer's Quality System and cover all Work performed during the design and construction Phases of the Project by Developer and all Developer-Related Entities and Contractors of all tiers. There shall be only one QMP for the Project covering Developer and all Developer-Related Entities.

The QMP shall be compliant with requirements provided in this Section of these Technical Requirements, in the Design and Construction Specifications Division 1 and in the Standards and Criteria DSM as applicable, and shall be closely coordinated with the Owner quality management procedures for the Airport. The Owner will not approve any Quality Management Plan submitted by Developer that does not have a unified Quality System to be followed by all Developer-Related Entities for each phase of the Project.

Developer's Quality System and QMP shall include processes and key metrics which may be changed over time to improve performance of the Work.

The QMP shall describe the Quality Control and Quality Assurance procedures to be utilized to control, verify, check, and review the quality of all Work, in accordance with Contract Documents requirements. In addition, the QMP shall include Quality Assurance procedures to confirm that the Quality Control procedures are being properly followed. Developer shall describe how Quality Control procedures and Quality Assurance procedures are to be documented and by whom to verify that the required procedures are followed.

The QMP shall contain detailed descriptions of the inspection and test plans, including the timing and frequency of testing, which Developer shall use to meet quality control and quality assurance requirements of the Work.

The QMP shall set out how Developer shall make available all quality records to the Owner for review immediately upon request.

The D&C QMP shall include a design quality and a construction quality sections, which shall describe Developer's policies, procedures, and staffing to manage the quality of Design Work and Construction Work, respectively. A Quality Management for O&M is included as part of the Operations and Maintenance Plan.

Developer's QMP shall include the following:

- Quality Assurance and Quality Control plans, processes, and procedures for the Work during the D&C Work;
- document control procedures including control of quality records;
- quality management personnel, roles and responsibilities;
- resource management and training;
- design review, control, checking, and design certification;
- construction inspection, verification, checking, control, and testing;
- materials inspection, verification, checking, control, and testing;
- Developer's procedures to control quality of Work performed by Developer-Related Entities;
- inspection, verification, checking, control, and testing;
- process for assuring that facilities supplying materials or equipment to be integrated in the Work possess qualifications in accordance with Contract Documents and have an approved quality control program;
- an early detection system and associated key performance indicators to ensure that
 potential problems are detected before the quality of the Work or Performance
 Requirements fall below acceptable levels;

- a system for detecting, recording, addressing, correcting, and reporting on nonconformance, unplanned failures, and poor quality Work, and associated corrective actions;
- tools, systems, and data to allow the Owner to readily and easily verify the quality of the Work and that Performance Requirements are achieved;
- communication and interface protocols;
- reporting protocols; and
- Developer's audit program respecting the Work performed by Developer and Developer-Related Entities.

I.10.9 Document and Data Management Plan (DDMP)

Developer shall establish, implement, and update a Document and Data Management Plan (DDMP). The DDMP shall set out Developer's Electronic Document Management System (EDMS) for storing, maintaining, cataloging, searching, controlling, accessing, and promptly and conveniently retrieving all Project-related documents in an electronic format. Developer will upload the information as required in accordance with the Contract Documents to the Owner's EDMS System Aconex.

In the DDMP, Developer shall describe:

- methods by which all Project-related documents, data, and records shall be uniquely coded, stored, accessed in real-time as may be necessary and/or retrieved. The retrieval system shall allow for prompt, convenient retrieval of any Project-related document in a user friendly format; and
- the routing, filing, control, access, and retrieval methods for all documents.

I.10.10 Communications and Coordination Plan between the Owner and Developer

Developer shall develop and submit an Owner Developer Communications and Coordination Plan (the "Communications Plan"). Developer shall maintain and update the Communications Plan throughout the Term.

The Communications Plan shall describe, at a minimum:

- the procedures for communication of information respecting the Project or the Airport to the Owner;
- the procedures for scheduling, coordinating, and conducting meetings with the Owner and providing meeting minutes and other meeting records to the Owner;
- the tools, media, and other communication platforms to the used; and
- overall processes and plans for coordinating activities between Developer and the Owner.

The Communications Plan shall describe how Developer will respond to unexpected requests for information, communicate changes or revisions to necessary Developer personnel, and notify affected stakeholders before and after changes are made to the Project-related documents.

Developer shall coordinate all communications with third parties through the Airport's designated liaison, subject to Owner-approved communications protocols. Developer shall not communicate directly with third parties, including, the airlines, the FAA or the TSA without prior approval from the Owner.

I.10.11 Affected Third Party Plan

When Work directly impacts or interfaces with third party facilities or operations, in particular, without limitation, with the airlines, the FAA and the TSA, the Owner shall be responsible for coordinating such Work in a timely fashion with the affected third party. For the avoidance of doubt, direct communication and coordination with such third parties shall be managed by the Owner, but Developer will interact with DEN and potentially affected third parties as reasonably required in order to ensure appropriate coordination and consistency.

Developer shall develop, implement, manage, and, as required in accordance with the terms hereof, update an Affected third party Plan, which shall describe how Developer will coordinate with the Owner in order to mitigate the impact of the Work upon potentially impacted third parties.

I.10.12 Public Information and Communication Plan

Developer shall develop, implement, and as required in accordance with the terms hereof, update a Public Information and Communication Plan, which shall layout the communication protocols between Developer and the public. The Public Information and Communication Plan shall be compliant and closely coordinated with Owner public information and communication procedures for the Airport.

I.10.13 Health and Safety Plan

Developer shall develop and submit a Health and Safety Plan, which shall include staff training, safety procedures, and protocols to address the health and safety of the general public within the Construction Work Area, as applicable, Owner employees and consultants, Concessionaire employees, and Developer and Developer-Related Entities employees and any hazardous conditions associated with the Work. The Health and Safety Plan shall address Developer's approach to meeting all the health and safety requirements of these Technical Requirements, especially Section I.9 of these Technical Requirements.

Developer shall perform the Work in a manner that:

- ensures the safety of all Users, including the general public, DEN employees and DEN contractors' employees, and Developer's and Developer-Related Entities' employees in accordance with all applicable Laws, and safety standards; and
- minimizes the risk of damage, disturbance, or destruction of DEN property, Airport operations and third-party property and operations.

The Health and Safety Plan shall include staff training, safety procedures, protocols, and specialized equipment to address hazardous conditions associated with the Work.

- The Health and Safety Plan shall include the minimum requirements set forth below:
- provide safety equipment and procedures for the protection of employees, Patrons, third parties, and the general public in the execution of the Work;
- all equipment used shall be maintained in a safe and efficient manner in accordance with all Laws, safety standards, safety organizations, regulations and guidelines pertaining to providing the required services;
- follow all safety requirements outlined in the National Electric Safety Code (NESC), the Occupational Safety and Health Administration (OSHA), and any standards or practices for safe installation or maintenance of required equipment per the Agreement and these Technical Provisions; and
- notify the Owner immediately after any injury incurred by person(s) working on the Project or involving members of the general public or third parties.

I.10.14 Environmental Management Plan

Developer shall develop and submit an Environmental Management Plan, which shall include training, procedures, and protocols to address environmental management requirements set forth in the Contract Documents.

I.10.15 Emergency Management and Disaster Recovery Plan (EMDRP)

During the design and construction phase the Developer's EMP will be compliant and closely coordinated with the existing DEN Airport Emergency Plan (AEP) of 21st September 2015 and as notified by the Owner, any subsequent updates made to it.

In advance of each phase of construction commencing, Developer will agree with the Owner the emergency evacuation procedure, inclusive of requirements in respect of access to and signage on site to identify emergency exit points.

The protocol for emergency communications from the Owner to Developer will follow those outlined in the DEN Airport Emergency Plan (21st September 2015). The protocol for emergency communication between Developer and the Owner is outlined in the Communications and Coordination Plan in the Project Management Plan.

The Owner and the Developer shall collaborate to provide training to relevant Developer's staff in the relevant emergency and disaster recovery procedures utilized by the Owner.

I.10.16 Energy Management and Conservation Plan

The Owner is committed to improving its energy performance and reducing its overall energy use. Developer shall develop and implement an Energy Management and Conservation Plan that identifies short-term and long-term goals to reduce energy consumption for the Project.

The plan should also set out means and methods to satisfy sustainable design requirements included in the Design and Construction Specifications Division 1 Section 011813.

I.10.17 Shutdown Plan

Developer shall develop and implement a Shutdown Plan that describes the procedures that will be followed by Developer to notify and receive approval from the Owner and, as applicable, public utilities, for any Shutdown.

The Shutdown Plan shall set out means and methods to satisfy requirements outlined in Appendix 10 the utilities interface requirements provided in the Design and Construction Specifications Division 1 Section 011400.

I.10.18 Traffic Management Plan

Developer shall develop and implement a Traffic Management Plan which is comprised of a Traffic Control Plan and a Haul Road Plan and which shall identify all processes and procedures to manage vehicular and pedestrian traffic for D&C Work. For the avoidance of doubt, traffic management unrelated to the Project will be the responsibility of the Owner.

The Traffic Management Plan shall be in compliance with all requirements included in Section I.5 Project Operational and Physical Environment.

Specific considerations that shall be covered in the Traffic Management Plan (non-exhaustive list) include:

- safe access to Public Circulation Space;
- signs and protections, for vehicular and pedestrian traffic; and

• wayfinding, for vehicular and pedestrian traffic.

The Traffic Management Plan shall set out means and methods to satisfy the requirements for traffic control and haul road as provided in the Design and Construction Specifications Division 1 Section 015525.

I.10.19 Pre-Commissioning Plan

Developer shall develop and implement a Pre-Commissioning Plan which shall set out processes and procedures regarding preliminary and final functional performance testing/reporting and integrated system testing for all Project envelope (excluding Concessionaire finish work as described in the Scope Documents), mechanical, electrical, security, radio frequencies/signal, low voltage, life safety, instrumentation, communications and data systems. The goal of commissioning activities is to confirm that the identified systems/components are in a fully compliant operating order in accordance with contract documents, manufacturers' performance criteria and industry standards.

Requirements for the Pre-Commissioning Plan are listed below:

- Developer shall develop a step by step procedure with quantifiable activities directly related to assisting the Commissioning Agent with performing all the commissioning scope of services for each Functional Area or phase of Construction Work.
- Developer shall include all labor, material, equipment, tools, ladders, instruments, etc., necessary to accomplish the work and generate the formal reports/documentation.
- the Pre-Commissioning Plan will be updated in advance of commissioning activities of each phase of Construction Work k, and conform to the Transition and Phasing Plan and Project Schedule.
- utilizing the Communications and Coordination Plan between the Owner and Developer,
 Developer shall elaborate on the detailed communications needed specifically for commissioning, including specific points of contact and lead stakeholders.
- utilizing the Airport Rules and Regulations, FAA guidelines and TSA guidelines, Developer shall confirm with the Owner the list of specific systems being commissioned and the requirements for the security classification in that area.
- Developer shall utilize Section 019113— General Commissioning Requirements of the Design and Construction Specifications as a minimum criteria/guideline, to further develop the Pre-Commissioning Plan.
- Developer shall submit a complete overall Pre-Commissioning Plan at the end of the Project Design Development phase and a formal update prior to starting Construction Work for each phase during the Project Construction Period, with the specific equipment/systems
- the Owner will review and provide comments regarding the completeness, level of detail, general compliance and overall responsiveness of the Pre-Commissioning Plan once it is developed, for each phase during the Project Construction Period. The final Pre-Commissioning Plan should be delivered to the Owner no later than one month before the start of commissioning activities of each Functional Area or phase of Construction Work.
- Developer shall distribute all required information forms, scripts, etc., to Owner and Developer-Related Entities, consistent with the Commissioning Agent recommendations and Commissioning Plan, in a timely manner to avoid any impact to operations and Project Schedule.

- Developer shall utilize the Risk Management Plan to elaborate on risk factors for each commissioned areas.
- Developer shall utilize the Quality Management Plan to validate the inspections and acceptance of the completed Work.
- Developer shall utilize the Transition and Phasing Plan and Project Schedule to develop a fragnet subcategory related to commissioning activities that can used by all stakeholders to coordinate their observation, involvement and impact to the facility operation.

I.10.20 Activation and Training Plan

Developer shall develop and implement an Activation and Training Plan, which shall set out processes and related procedures to activate each Functional Area of the Project. The Activation and Training Plan shall conform to Good Industry Practice for the activation of airport facilities.

As part of the Activation and Training Plan, Developer shall, for each Functional Area or subset of a Functional Area being activated:

- utilize the Transition and Phasing Plan and Project Schedule to develop a fragnet subcategory related to activation that can used by all stakeholders to coordinate the transition;
- develop a Schedule fragnet of Work Breakdown Structure (WBS) task elements that depicts the specific work in the areas being activated;
- incorporate key milestones and activities from the Commissioning Plan;
- prepare for the right activation period of time to allow for a smooth adjustment from temporary facilities and old traffic/operating patterns to the new areas via concise wayfinding;
- develop and utilize a custom readiness checklist for each Functional Area to be activated;
- utilize the Risk Management Plan to elaborate on risk factors in the areas being activated;
- utilizing the Communications and Coordination Plan between the Owner and Developer, elaborate on the detailed communications needed specifically for activation, including specific points of contact and lead stakeholders;
- utilizing the Design and Construction Specifications for system readiness, provide a list of specific systems that are within the activated areas;
- utilizing the Airport Rules and Regulations, FAA guidelines and TSA guidelines, provide requirements for the security classification of activated areas;
- develop a full procedure for activation of an area that has changed to a higher security classification area, including a detailed timeline to avoid impacting security clearance areas;
- utilize the Commissioning checklists and documentation to validate all the systems functionality in the areas being activated;
- confirm that the new facility is fully inspected and commissioned in conformance to the Commissioning Plan;
- convey progress of the Work to the user group stakeholders and ensure that the Owner, Airlines and DEN operations staff have the training, skills, tools and documentation needed to effectively operate the Airport;
- prepare and exercise the new equipment during normal, irregular and emergency conditions;
- provide list of documentation required, including O&M manuals and as-built drawings;

- utilize the Quality Management Plan to validate the inspections and acceptance of the completed Work;
- conduct training programs of Developer's staff and DEN staff on systems and equipment, as may be necessary to ensure a smooth transition of activities;
- for systems included in the Non-O&M Segments, assist DEN staff as needed to initiate Owner's operations and maintenance activities; and
- provide procedures for securing and transmitting all warranties, keys, electronic O&M manuals, spare parts, and overstock materials at the end of each Phase.

The Activation and Training Plan shall conform to the requirements included in Sections 017515 and 017900 of the Design and Construction Specifications.

The Plan shall be submitted to the Owner not later than six months prior to the start of the transition activities.

PART II PLANNING AND D&C WORK

II.1 General

<u>Part II</u> of these Technical Requirements sets out the requirements that dictate the interrelationship among the various Project spaces, and describes the processes and requirements associated with D&C Work.

Part II includes:

- The Design Standards Manuals: DSM Standards and Criteria, DSM BIM and DSM Life Safety Systems;
- The City General and Special Conditions;
- The Design and Construction Specifications:
 - Design and Construction Specifications Division 1, which apply to all the D&C Work and the O&M Services; and
 - Design and Construction Specifications Divisions 2 through 33, which apply only to the D&C
 Work with respect to the Non-O&M Segments, except as noted otherwise herein.

II.2 [RESERVED]

II.3 Design Standards Manuals

In performing the Work, Developer shall comply with the Design Standards Manuals DSM Standards and Criteria, DSM BIM and DSM Life Safety Systems.

II.4 Design and Construction Specifications

II.4.1 Division I

General Alterations to Division 1

All references within the Design and Construction Specification Division 1 to Method of Measurement and Method of Payment are not applicable to the Project and shall accordingly be deemed deleted.

All references to Contractor shall mean Developer or Developer Related Entities where the context so requires.

The Design and Construction Specifications Division 1, which applies to all D&C Work and O&M Services, comprises the following sections:

- SECTION 011100 SUMMARY OF WORK
- SECTION 011400 WORK SEQUENCE AND CONSTRAINTS
- SECTION 011420 SECURITY REQUIREMENTS & SENSITIVE SECURITY INFORMATION (SSI)
- SECTION 011430 VEHICLE AND EQUIPMENT PERMITTING
- SECTION 011810 UTILITIES INTERFACE
- SECTION 012025 MEASUREMENT FOR PAYMENT
- SECTION 012300 ALTERNATES
- SECTION 012510 SUBSTITUTIONS
- SECTION 012910 SCHEDULE OF VALUES
- SECTION 013100 PROJECT MANAGEMENT AND COORDINATION
- SECTION 013119 PROJECT MEETINGS
- SECTION 013210 SCHEDULE

- SECTION 013223 CONSTRUCTION LAYOUT, AS-BUILT AND QUANTITY SURVEYS
- SECTION 013233 PHOTOGRAPHIC DOCUMENTATION
- SECTION 013300 SUBMITTAL PROCEDURES
- SECTION 013325 SHOP AND WORKING DRAWINGS, PRODUCT DATA AND SAMPLES
- SECTION 013510 CONSTRUCTION SAFETY
- SECTION 013516 ALTERATION PROJECT PROCEDURES
- SECTION 013520 CONSTRUCTION SAFETY AIRSIDE
- SECTION 014100 REGULATORY REQUIREMENTS
- SECTION 014220 ABBREVIATIONS AND SYMBOLS
- SECTION 014225 REFERENCE STANDARDS
- SECTION 014310 DIA QUALITY ASSURANCE
- SECTION 014320 DIA QUALITY ASSURANCE FOR FAA FUNDED PROJECTS
- SECTION 014510 CONTRACTOR QUALITY CONTROL
- SECTION 014520 CONTRACTOR QUALITY CONTROL PROGRAM FAA
- SECTION 014525 MATERIAL TESTING AGENCY
- SECTION 014545 SPECIAL INSPECTION AGENCY AND OWNER TESTING AGENCY(S)
- SECTION 015050 MOBILIZATION
- SECTION 015210 TEMPORARY FACILITIES
- SECTION 015215 FIELD OFFICES
- SECTION 015525 TRAFFIC CONTROL
- SECTION 015719 TEMPORARY ENVIRONMENTAL CONTROLS
- SECTION 015810 TEMPORARY SIGNS
- SECTION 016000 PRODUCT REQUIREMENTS
- SECTION 016610 STORAGE AND PROTECTION
- SECTION 017330 CUTTING AND PATCHING
- SECTION 017419 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
- SECTION 017420 CLEANING
- SECTION 017515 SYSTEM STARTUP, TESTING AND TRAINING
- SECTION 017720 CONTRACT CLOSEOUT
- SECTION 017825 OPERATION AND MAINTENANCE DATA
- SECTION 017835 WARRANTIES AND BONDS
- SECTION 017840 CONTRACT RECORD DOCUMENTS
- SECTION 017900 DEMONSTRATION AND TRAINING
- SECTION 018113.16 SUSTAINABLE DESIGN REQUIREMENTS LEED FOR COMMERCIAL INTERIORS
- SECTION 018113.19 SUSTAINABLE DESIGN REQUIREMENTS LEED FOR CORE AND SHELL DEVELOPMENT

- SECTION 019113 GENERAL COMMISSIONING REQUIREMENTS
- SECTION 019990 STANDARD FORMS

II.4.2 Divisions 2 through 33 (Excluding Divisions 24, 25, 29 and 30)

II.4.2.1 Purpose

Design and Construction Specifications Divisions 2 through 33 (excluding Divisions 24, 25, 29, and 30), included as Appendix 7-A to these Technical Requirements, provide the Owner's requirements for all Design and Construction Work, and are not required to be applied in the O&M Segments, except as noted in Section II.3.2 of these Technical Requirements.

Any Section of Design and Construction Specifications Divisions 2 through 33 which is stricken out from the list below is not applicable to the Work.

II.4.2.2 General Notes and Alterations to Division 2-33

All references within the Design and Construction Specification Divisions 2 through 33 to "Method of Measurement and Method of Payment" are not applicable to the Project and shall hereby be deemed deleted.

All references to "Contractor" shall mean "Developer" or "Developer Related Entities" where the context so requires.

II.4.2.3 Specific Alterations to Division 2-33

All bold language found in Divisions 2-33, which calls for choice, modification or addition, shall be done in the Developer's reasonable discretion; with the exception of Division 8 Section 087100 DOOR HARDWARE, Division 23 Section 230923 DIRECT DIGITAL CONTROL (DDC) SYSTEM FOR HVAC, Division 27 Section 275114 EMERGENCY COMMUNICATIONS SYSTEM, PUBLIC ADDRESS SYSTEM, AND VIDEO — TENANT INTERFACE, and Division 28 Section 283100 INTELLIGENT LIFE SAFETY FIRE MANAGEMENT SYSTEM which will not be open to substitutions.

All non-bold language found in Divisions 2-33, may be amended by the Developer during the design phase by using the Technical Design Review process as set forth in Section I.8.3.

Developer shall issue Construction Submittals to the Owner following the principles described below:

- For all Construction Submittals related to Division 8 Section 087100 DOOR HARDWARE, Division 23 Section 230923 DIRECT DIGITAL CONTROL (DDC) SYSTEM FOR HVAC, Division 27 Section 275114 EMERGENCY COMMUNICATIONS SYSTEM, PUBLIC ADDRESS SYSTEM, AND VIDEO – TENANT INTERFACE, and Division 28 Section 283100 INTELLIGENT LIFE SAFETY FIRE MANAGEMENT SYSTEM, Owner will review and comment; and
- For all other Construction Submittals, Owner will be provided with a copy of the Construction Submittal for information only, in accordance with Chapter 8 of the Standards and Criteria DSM.

The following Sections of the Design and Construction Specifications apply to all D&C Work and are not open to substitutions contemplated by in chapter 7.02 of the Standards and Criteria DSM:

Division 8 Section 087100 DOOR HARDWARE, Division 23 Section 230923 DIRECT DIGITAL CONTROL (DDC) SYSTEM FOR HVAC, Division 27 Section 275114 EMERGENCY COMMUNICATIONS SYSTEM, PUBLIC ADDRESS SYSTEM, AND VIDEO — TENANT INTERFACE, and Division 28 Section 283100 INTELLIGENT LIFE SAFETY FIRE MANAGEMENT SYSTEM

II.4.2.4 Exceptions in Divisions 2-33

The following is a list of certain exceptions to be applied in respect of the implementation of the Divisions 2-33 Specifications. For any other exceptions, Developer may submit a Request for Substitution (in accordance with Section 012510 of Division 1)or Developer Change Proposal (in accordance with the Agreement), as applicable, in respect of the same.

- <u>DEN Project Manager</u>: All references to DEN Project Manager shall mean Developer or Developer Related Entities where the context so requires.
- <u>Submittals of Shop and Working Drawings, Product Data and Samples</u>: All will be uploaded to the EDMS for the Owner's information except the ones corresponding to Sections 087100, 230923, 275114 and 283100 that would be submitted for Owner's review and comment.
- <u>LEED Submittals</u>: Product Data for the Credits shown in the Project checklist for Commercial Interiors will be described in the Project Technical Specifications and uploaded to the EDMS for the Owner's information.
- <u>Mock ups</u>: Mock up needs and requirements will be at Developer's discretion, unless required by the Owner as part of the Executive Design Review process contemplated by Section I.8.3.2 of these Technical Requirements..
- <u>Warranties</u>: A one-year warranty period from the applicable Functional Area Readiness Date or the Project Substantial Completion Date whichever is earlier is included.
- <u>Visual Matching/Selection</u>: All references within the Design and Construction Specifications 2 through 33 to Visual Matching Specification and Visual Selection Specification are not applicable to this Project and shall hereby be deemed deleted for purposes hereof.

II.4.2.5 Divisions 2-33

Division 02 - EXISTING CONDITIONS

SECTION 024116 - STRUCTURE DEMOLITION

SECTION 024119 - SELECTIVE DEMOLITION

Division 03 – CONCRETE

SECTION 033000 - CAST-IN-PLACE CONCRETE

SECTION 033053 - MISCELLANEOUS CAST-IN-PLACE CONCRETE (LIMITED APPLICATIONS)

SECTION 033300 - ARCHITECTURAL CONCRETE

SECTION 033320 - CONCRETE TOPPING (STANDARD AGGREGATES)

SECTION 034100 - PRECAST STRUCTURAL CONCRETE

SECTION 034500 - PRECAST ARCHITECTURAL CONCRETE

Division 04 – MASONRY

SECTION 042000 - UNIT MASONRY

SECTION 042300 - GLASS UNIT MASONRY

SECTION 044200 - EXTERIOR STONE CLADDING

SECTION 047200 - CAST STONE MASONRY

Division 05 - METALS

SECTION 050170 - MAINTENANCE OF DECORATIVE METAL

SECTION 050510 - WELDING

SECTION 051200 - STRUCTURAL STEEL FRAMING

SECTION 051213 - ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FRAMING

SECTION 052100 - STEEL JOIST FRAMING

SECTION 053100 - STEEL DECKING

SECTION 054000 - COLD-FORMED METAL FRAMING

SECTION 055000 - METAL FABRICATIONS

SECTION 055100 - METAL STAIRS

SECTION 055213 - PIPE AND TUBE RAILINGS

SECTION 055300 - METAL GRATINGS

SECTION 055813 - COLUMN COVERS

SECTION 057300 - DECORATIVE METAL RAILINGS

SECTION 057500 - DECORATIVE FORMED METAL

Division 06 – WOODS, PLASTICS, AND COMPOSITES

SECTION 061000 - ROUGH CARPENTRY

SECTION 061600 - SHEATHING

SECTION 062023 - INTERIOR FINISH CARPENTRY

SECTION 064113 - WOOD VENEER FACED ARCHITECTURAL CABINETS

SECTION 064116 - PLASTIC LAMINATE FACED ARCHITECTURAL CABINETS

SECTION 064213 - STILE AND RAIL WOOD PANELING

SECTION 064216 - FLUSH WOOD PANELING

SECTION 064219 - PLASTIC-LAMINATE-FACED WOOD PANELING

SECTION 064400 - ORNAMENTAL WOODWORK

SECTION 064600 - WOOD TRIM

SECTION 066400 - PLASTIC PANELING

Division 07 – THERMAL AND MOISTURE PROTECTION

SECTION 070150.19 - PREPARATION FOR RE-ROOFING

SECTION 071113 - BITUMINOUS DAMPPROOFING

SECTION 071326 - SELF-ADHERING SHEET WATERPROOFING

SECTION 071353 - FLASTOMERIC SHEET WATERPROOFING

SECTION 071354 - THERMOPLASTIC SHEET WATERPROOFING

SECTION 071413 - HOT FLUID-APPLIED RUBBERIZED ASPHALT WATERPROOFING

SECTION 071416 - COLD FLUID-APPLIED WATERPROOFING

SECTION 071613 - POLYMER MODIFIED CEMENT WATERPROOFING

SECTION 071616 - CRYSTALLINE WATERPROOFING

SECTION 071619 - METAL OXIDE WATERPROOFING

SECTION 071700 - BENTONITE WATERPROOFING

SECTION 071800 - TRAFFIC COATINGS

SECTION 071900 - WATER REPELLENTS

SECTION 072100 - THERMAL INSULATION

SECTION 072413 - POLYMER-BASED EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

SECTION 072419 – WATER-DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

SECTION 072500 - WEATHER BARRIERS

SECTION 072713 - MODIFIED BITUMINOUS SHEET AIR BARRIERS

SECTION 072726 - FLUID-APPLIED MEMBRANE AIR BARRIERS

SECTION 072729 - AIR BARRIER COATINGS

SECTION 073116 - METAL SHINGLES

SECTION 074113.13 - FORMED METAL ROOF PANELS

SECTION 074113.16 - STANDING-SEAM METAL ROOF PANELS

SECTION 074113.23 - INSULATED METAL ROOF PANELS

SECTION 074213.13 - FORMED METAL WALL PANELS

SECTION 074213.19 – INSULATED METAL WALL PANELS

SECTION 074213.23 – METAL COMPOSITE MATERIAL WALL PANELS

SECTION 075323 - ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING

SECTION 076200 - SHEET METAL FLASHING AND TRIM

SECTION 077100 - ROOF SPECIALTIES

SECTION 077129 – MANUFACTURED ROOF EXPANSION JOINTS

SECTION 077200 - ROOF ACCESSORIES

SECTION 077253 - SNOW GUARDS

SECTION 078100 - APPLIED FIREPROOFING

SECTION 078200 - BOARD FIREPROOFING

SECTION 078413 - PENETRATION FIRESTOPPING

SECTION 078446 - FIRE RESISTIVE JOINT SYSTEMS

SECTION 079200 - JOINT SEALANTS

SECTION 079500 - EXPANSION CONTROL

Division 08 – OPENINGS

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

SECTION 081119 - STAINLESS-STEEL DOORS AND FRAMES

SECTION 081416 - FLUSH WOOD DOORS

SECTION 083113 - ACCESS DOORS AND FRAMES

SECTION 083113.53 – SECURITY ACCESS DOORS AND FRAMES

SECTION 083213 - SLIDING ALUMINUM-FRAMED GLASS DOORS

SECTION 083323 - OVERHEAD COILING DOORS

SECTION 083326 - OVERHEAD COILING GRILLES

SECTION 083513 - FOLDING DOORS

SECTION 083613 - SECTIONAL DOORS

SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

SECTION 084229.23 – SLIDING AUTOMATIC ENTRANCES

SECTION 084229.33 – SWINGING AUTOMATIC ENTRANCES

SECTION 084413 - GLAZED ALUMINUM CURTAIN WALLS

SECTION 085113 - ALUMINUM WINDOWS

SECTION 085653 - SECURITY WINDOWS

SECTION 086300 - METAL-FRAMED SKYLIGHTS

SECTION 087100 – DOOR HARDWARE

SECTION 087113 – AUTOMATIC DOOR OPERATORS

SECTION 088000 - GLAZING

SECTION 088113 - DECORATIVE GLASS GLAZING

SECTION 088300 - MIRRORS

SECTION 088853 - SECURITY GLAZING

SECTION 089000 - LOUVERS AND VENTS

Division 09 - FINISHES

SECTION 092116.23 - GYPSUM BOARD SHAFT WALL ASSEMBLIES

SECTION 092216 - NON-STRUCTURAL METAL FRAMING

SECTION 092713 - GLASS-FIBER-REINFORCED PLASTER FABRICATIONS

SECTION 092900 - GYPSUM BOARD

SECTION 093000 - TILING

SECTION 093033 - STONE TILING

SECTION 095113 - ACOUSTICAL PANEL CEILINGS

SECTION 095133 – ACOUSTICAL METAL PAN CEILINGS

SECTION 095423 - LINEAR METAL CEILINGS

SECTION 095436 - SUSPENDED DECORATIVE GRIDS

SECTION 095753 - SECURITY CEILING ASSEMBLIES

SECTION 096400 - WOOD FLOORING

SECTION 096513 - RESILIENT BASE AND ACCESSORIES

SECTION 096516 - RESILIENT SHEET FLOORING

SECTION 096516.13 - LINOLEUM FLOORING

SECTION 096519 – RESILIENT TILE FLOORING

SECTION 096566 - RESILIENT ATHLETIC FLOORING

SECTION 096613 - PORTLAND CEMENT TERRAZZO FLOORING

SECTION 096623 - RESINOUS MATRIX TERRAZZO FLOORING

SECTION 096723 - RESINOUS FLOORING

SECTION 096813 - TILE CARPETING

SECTION 096816 - SHEET CARPETING

SECTION 096900 - ACCESS FLOORING

SECTION 097200 - WALL COVERINGS

SECTION 097513 - STONE PANELING

SECTION 097516 - STONE BASE

SECTION 097519 – STONE TRIM

SECTION 098433 - SOUND-ABSORBING WALL UNITS

SECTION 098436 - SOUND-ABSORBING CEILING UNITS

SECTION 099123 - INTERIOR PAINTING

SECTION 099419 - MULTICOLOR INTERIOR FINISHING

SECTION 099600 - HIGH-PERFORMANCE COATINGS

SECTION 099633 - HIGH-TEMPERATURE-RESISTANT COATINGS

SECTION 099646 - INTUMESCENT PAINTING

SECTION 099653 - ELASTOMERIC COATINGS

Division 10 – SPECIALTIES

SECTION 101100 - VISUAL DISPLAY SURFACES

SECTION 101200 - DISPLAY CASES

SECTION 101300 - DIRECTORIES

SECTION 101416 – PLAQUES

SECTION 101419 - DIMENSIONAL LETTER SIGNAGE

SECTION 101423 - PANEL SIGNAGE

SECTION 101426 - POST AND PANEL PYLON SIGNAGE

SECTION 102113 - TOILET COMPARTMENTS

SECTION 102226.13 - ACCORDION FOLDING PARTITIONS

SECTION 102238 - OPERABLE PANEL PARTITIONS

SECTION 102238.13 - OPERABLE GLASS PANEL PARTITIONS

SECTION 102600 - WALL AND DOOR PROTECTION

SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

SECTION 104413 – FIRE VALVE AND EXTINGUISHER CABINETS

SECTION 104416 - FIRE EXTINGUISHERS

SECTION 105113 - METAL LOCKERS

SECTION 105500 - POSTAL SPECIALTIES

SECTION 107500 - FLAGPOLES

Division 11 - EQUIPMENT

SECTION 111300 - LOADING DOCK EQUIPMENT

SECTION 112600 - UNIT KITCHENS

SECTION 114000 - FOODSERVICE EQUIPMENT

SECTION 118226 - FACILITY WASTE COMPACTORS

Division 12 – FURNISHINGS

SECTION 122113 - HORIZONTAL LOUVER BLINDS

SECTION 122116 - VERTICAL LOUVER BLINDS

SECTION 123200 - MANUFACTURED WOOD CASEWORK

SECTION 123619 - WOOD COUNTERTOPS

SECTION 123623.13 - PLASTIC-LAMINATE-CLAD COUNTERTOPS

SECTION 123640 - STONE COUNTERTOPS

SECTION 123661 – SIMULATED STONE COUNTERTOPS

SECTION 124813 – ENTRANCE FLOOR MATS AND FRAMES

SECTION 124816 - ENTRANCE FLOOR GRILLES

SECTION 126100 - FIXED AUDIENCE SEATING

SECTION 129200 - INTERIOR PLANTERS AND ARTIFICIAL PLANTS

SECTION 129300 - SITE FURNISHINGS

Division 13 – SPECIAL CONSTRUCTION

SECTION 133419 - METAL BUILDING SYSTEMS

SECTION 133423 - FABRICATED STRUCTURES

Division 14 – CONVEYING EQUIPMENT

SECTION 142100 - ELECTRIC TRACTION ELEVATORS

SECTION 142113 – ELECTRIC TRACTION FREIGHT ELEVATORS

SECTION 142400 - HYDRAULIC ELEVATORS

SECTION 142413 - HYDRAULIC FREIGHT ELEVATORS

SECTION 143100 - ESCALATORS

SECTION 143200 - MOVING WALKS

SECTION 147300 - OVER THE WING PASSENGER BOARDING BRIDGES

SECTION 147310 - APRON DRIVE PASSENGER BOARDING BRIDGES

SECTION 147320 - RADIAL DRIVE PASSENGER BOARDING BRIDGES

SECTION 149100 - FACILITY CHUTES

Division 21 - FIRE SUPPRESSION

SECTION 210400 - BASIC FIRE SUPPRESSION REQUIREMENTS

SECTION 210500 - COMMON WORK RESULTS FOR FIRE SUPPRESSION

SECTION 210513 – COMMON MOTOR REQUIREMENTS FOR FIRE SUPPRESSION EQUIPMENT

SECTION 210517 - SLEEVES AND SLEEVE SEALS FOR FIRE-SUPPRESSION PIPING

SECTION 210518 - ESCUTCHEONS FOR FIRE-SUPPRESSION PIPING

SECTION 210533 - HEAT TRACING FOR FIRE-SUPPRESSION PIPING

SECTION 210548 – VIBRATION AND SEISMIC CONTROLS FOR FIRE-SUPPRESSION PIPING AND EQUIPMENT

SECTION 210553 - IDENTIFICATION FOR FIRE-SUPPRESSION PIPING AND EQUIPMENT

SECTION 210700 - FIRE-SUPPRESSION SYSTEMS INSULATION

SECTION 211100 - FACILITY FIRE-SUPPRESSION WATER-SERVICE PIPING

SECTION 211200 - FIRE-SUPPRESSION STANDPIPES

SECTION 211313 - WET-PIPE SPRINKLER SYSTEMS

SECTION 211316 - DRY-PIPE SPRINKLER SYSTEMS

SECTION 211339 - FOAM-WATER SYSTEMS

SECTION 211340 - FOAM EXTINGUISHING SYSTEMS FOR AIRCRAFT HANGARS

SECTION 212113.13 - HIGH-PRESSURE CARBON-DIOXIDE FIRE-EXTINGUISHING SYSTEMS

SECTION 212113.16 - LOW PRESSURE CARBON DIOXIDE FIRE EXTINGUISHING SYSTEMS

SECTION 212200 – CLEAN-AGENT FIRE-EXTINGUISHING SYSTEMS

SECTION 213113 - ELECTRIC DRIVE, CENTRIFUGAL FIRE PUMPS

SECTION 213213 - ELECTRIC-DRIVE, VERTICAL-TURBINE FIRE PUMPS

SECTION 213400 - PRESSURE-MAINTENANCE PUMPS

SECTION 213900 - CONTROLLERS FOR FIRE PUMP DRIVERS

Division 22 - PLUMBING

SECTION 220400 - BASIC PLUMBING REQUIREMENTS

SECTION 220500 – COMMON WORK RESULTS FOR PLUMBING EQUIPMENT

SECTION 220505 - COATINGS AND CORROSION PROTECTION

SECTION 220513 – COMMON MOTOR REQUIREMENTS FOR PLUMBING EQUIPMENT

SECTION 220516 – EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING

SECTION 220517 - SLEEVES AND SLEEVE SEALS FOR PLUMBING PIPING

SECTION 220518 – ESCUTCHEONS FOR PLUMBING PIPING

SECTION 220519 - METERS AND GAUGES FOR PLUMBING PIPING

SECTION 220523 - GENERAL-DUTY VALVES FOR PLUMBING PIPING

SECTION 220529 – HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT

SECTION 220533 - HEAT TRACING FOR PLUMBING PIPING

SECTION 220548 – VIBRATION AND SEISMIC CONTROLS FOR PLUMBING PIPING AND EQUIPMENT

SECTION 220548.13 – VIBRATION CONTROLS FOR PLUMBING PIPING AND EQUIPMENT

SECTION 220553 – IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

SECTION 220716 - PLUMBING EQUIPMENT INSULATION

SECTION 220719 - PLUMBING PIPING INSULATION

SECTION 221016 - FACILITY HYDRAULIC PIPING AND FITTINGS

SECTION 221113 - FACILITY WATER DISTRIBUTION PIPING

SECTION 221116 - DOMESTIC WATER PIPING

SECTION 221119 - DOMESTIC WATER PIPING SPECIALTIES

SECTION 221123 - DOMESTIC WATER PUMPS

SECTION 221123.13 - DOMESTIC-WATER PACKAGED BOOSTER PUMPS

SECTION 221219 - FACILITY GROUND MOUNTED, POTABLE WATER STORAGE TANKS

SECTION 221223 - FACILITY INDOOR POTABLE-WATER STORAGE TANKS

SECTION 221226 - POTABLE WATER CABINETS

SECTION 221313 - FACILITY SANITARY SEWERS

SECTION 221314 - PROCESS MATERIAL SEWERAGE

SECTION 221316 - SANITARY WASTE AND VENT PIPING

SECTION 221319 – SANITARY WASTE PIPING SPECIALTIES

SECTION 221323 - SANITARY WASTE INTERCEPTORS

SECTION 221329 - SANITARY SEWERAGE PUMPS

SECTION 221343 - FACILITY PACKAGED SEWAGE PUMPING STATIONS

SECTION 221413 - FACILITY STORM DRAINAGE PIPING

SECTION 221423 - STORM DRAINAGE PIPING SPECIALTIES

SECTION 221429 – SUMP PUMPS

SECTION 221513 - GENERAL-SERVICE COMPRESSED-AIR PIPING

SECTION 221519 — GENERAL SERVICE PACKAGED AIR COMPRESSORS AND RECEIVERS

SECTION 223100 - DOMESTIC WATER SOFTENERS

SECTION 223200 - DOMESTIC WATER FILTRATION EQUIPMENT

SECTION 223300 - ELECTRIC, DOMESTIC-WATER HEATERS

SECTION 223400 – FUEL-FIRED, DOMESTIC-WATER HEATERS

SECTION 223500 – DOMESTIC-WATER HEAT EXCHANGERS

SECTION 224213.13 – COMMERCIAL WATER CLOSETS

SECTION 224213.16 - COMMERCIAL URINALS

SECTION 224216.13 – COMMERCIAL LAVATORIES

SECTION 224216.16 – COMMERCIAL SINKS

SECTION 224223 - COMMERCIAL SHOWERS, RECEPTORS, AND BASINS

SECTION 224233 - WASH FOUNTAINS

SECTION 224500 - EMERGENCY PLUMBING FIXTURES

SECTION 224713 - DRINKING FOUNTAINS

SECTION 224716 - PRESSURE WATER COOLERS

SECTION 224723 - REMOTE WATER COOLERS

Division 23 – HEATING, VENTILATING, AND AIR CONDITIONING

SECTION 230130.51 - HVAC AIR-DISTRIBUTION SYSTEM CLEANING

SECTION 230400 – BASIC HVAC REQUIREMENTS

SECTION 230500 - COMMON WORK RESULTS FOR HVAC EQUIPMENT

SECTION 230513 – COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT

SECTION 230516 - EXPANSION FITTINGS AND LOOPS FOR HVAC PIPING

SECTION 230517 - SLEEVES AND SLEEVE SEALS FOR HVAC PIPING

SECTION 230518 – ESCUTCHEONS FOR HVAC PIPING

SECTION 230519 - METERS AND GAGES FOR HVAC PIPING

SECTION 230523.11 – GLOBE VALVES FOR HVAC PIPING

SECTION 230523.12 - BALL VALVES FOR HVAC PIPING

SECTION 230523.13 - BUTTERFLY VALVES FOR HVAC PIPING

SECTION 230523.14 - CHECK VALVES FOR HVAC PIPING

SECTION 230523.15 - GATE VALVES FOR HVAC PIPING

SECTION 230523.16 - PLUG VALVES FOR HVAC PIPING

SECTION 230529 - HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT

SECTION 230533 - HEAT TRACING FOR HVAC PIPING

SECTION 230548.13 – VIBRATION CONTROLS FOR HVAC

SECTION 230553 - IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT

SECTION 230593 - TESTING, ADJUSTING, AND BALANCING FOR HVAC

SECTION 230596 - HVAC SMOKE CONTROL TESTING

SECTION 230713 - DUCT INSULATION

SECTION 230716 - HVAC EQUIPMENT INSULATION

SECTION 230719 - HVAC PIPING INSULATION

SECTION 230800 - COMMISSIONING OF HVAC

SECTION 230900 – INSTRUMENTATION AND CONTROL FOR HVAC

SECTION 230923 - DIRECT DIGITAL CONTROL (DDC) SYSTEM FOR HVAC

SECTION 230923.11 - CONTROL VALVES

SECTION 230923.12 - CONTROL DAMPERS

SECTION 230923.13 - ENERGY METERS

SECTION 230923.14 - FLOW INSTRUMENTS

SECTION 230923.16 - GAS INSTRUMENTS

SECTION 230923.17 - LEVEL INSTRUMENTS

SECTION 230923.18 - LEAK - DETECTION INSTRUMENTS

SECTION 230923.19 - MOISTURE INSTRUMENTS

SECTION 230923.21 - MOTION INSTRUMENTS

SECTION 230923.22 - POSITION INSTRUMENTS

SECTION 230923.23 - PRESSURE INSTRUMENTS

SECTION 230923.24 - SPEED INSTRUMENTS

SECTION 230923.27 - TEMPERATURE INSTRUMENTS

SECTION 230923.33 - VIBRATION INSTRUMENTS

SECTION 230923.43 - WEATHER STATIONS

SECTION 230993 - SEQUENCE OF OPERATIONS FOR HVAC CONTROLS

SECTION 230993.11 – SEQUENCE OF OPERATIONS FOR HVAC DDC

SECTION 230994 – INDUSTRIAL CONTROL SYSTEMS

SECTION 231113 - FACILITY FUEL OIL PIPING

SECTION 231123 - FACILITY NATURAL-GAS PIPING

SECTION 231126 - FACILITY LIQUEFIED-PETROLEUM GAS PIPING

SECTION 231213 - FACILITY FUEL-OIL PUMPS

SECTION 231313 - FACILITY UNDERGROUND FUEL OIL STORAGE TANKS

SECTION 231323 - FACILITY ABOVEGROUND FUEL-OIL STORAGE TANKS

SECTION 232113 - HYDRONIC PIPING

SECTION 232113.13 - UNDERGROUND HYDRONIC PIPING

SECTION 232113.33 - GROUND LOOP HEAT PUMP PIPING

SECTION 232116 - HYDRONIC PIPING SPECIALTIES

SECTION 232123 - HYDRONIC PUMPS

SECTION 232300 - REFRIGERANT PIPING

SECTION 232500 - HVAC WATER TREATMENT

SECTION 232513 – WATER TREATMENT FOR CLOSED-LOOP HYDRONIC SYSTEMS

SECTION 232516 - WATER TREATMENT FOR OPEN-LOOP HYDRONIC SYSTEMS

SECTION 232519 – WATER TREATMENT FOR STEAM SYSTEM FEEDWATER

SECTION 232523 - WATER TREATMENT FOR HUMIDIFICATION STEAM SYSTEM FEEDWATER

SECTION 232533 - HVAC MAKEUP-WATER FILTRATION EQUIPMENT

SECTION 233113 – METAL DUCTS

SECTION 233116 - NONMETAL DUCTS

SECTION 233119 - HVAC CASINGS

SECTION 233300 - AIR DUCT ACCESSORIES

SECTION 233413 - AXIAL HVAC FANS

SECTION 233416 - CENTRIFUGAL HVAC FANS

SECTION 233423 – HVAC POWER VENTILATORS

SECTION 233433 - AIR CURTAINS

SECTION 233600 - AIR TERMINAL UNITS

SECTION 233713 - DIFFUSERS, REGISTERS, AND GRILLES

SECTION 233723 – HVAC GRAVITY VENTILATORS

SECTION 233813 - COMMERCIAL-KITCHEN HOODS

SECTION 234100 - PARTICULATE AIR FILTRATION

SECTION 234133 – HIGH-EFFICIENCY PARTICULATE FILTRATION

SECTION 234200 - GAS-PHASE AIR FILTRATION

SECTION 234300 - ELECTRONIC AIR CLEANERS

SECTION 235113.11 – DRAFT CONTROL FANS

SECTION 235113.16 – VENT DAMPERS

SECTION 235116 - FABRICATED BREECHINGS AND ACCESSORIES

SECTION 235123 – GAS VENTS

SECTION 235133 - INSULATED SECTIONAL CHIMNEYS

SECTION 235213 - ELECTRIC BOILERS

SECTION 235216 - CONDENSING BOILERS

SECTION 235223 - CAST-IRON BOILERS

SECTION 235233 - WATER-TUBE BOILERS

SECTION 235239 - FIRE TUBE BOILERS

SECTION 235313 - BOILER FEEDWATER PUMPS

SECTION 235316 - DEAERATORS

SECTION 235413 - ELECTRIC-RESISTANCE FURNACES

SECTION 235416.13 - GAS-FIRED FURNACES

SECTION 235416.16 - OIL FIRED FURNACES

SECTION 235513.16 - GAS FIRED DUCT HEATERS

SECTION 235523.13 - LOW INTENSITY, GAS FIRED, RADIANT HEATERS

SECTION 235523.16 - HIGH-INTENSITY, GAS-FIRED, RADIANT HEATERS

SECTION 235700 - HEAT EXCHANGERS FOR HVAC

SECTION 236200 - PACKAGED COMPRESSOR AND CONDENSER UNITS

SECTION 236313 - AIR-COOLED REFRIGERANT CONDENSERS

SECTION 236333 – EVAPORATIVE REFRIGERANT CONDENSERS

SECTION 236413.13 - DIRECT-FIRED ABSORPTION WATER CHILLERS

SECTION 236413.16 - INDIRECT-FIRED ABSORPTION WATER CHILLERS

SECTION 236416 - CENTRIFUGAL WATER CHILLERS

SECTION 236419 - RECIPROCATING WATER CHILLERS

SECTION 236423 - SCROLL WATER CHILLERS

SECTION 236426 - ROTARY-SCREW WATER CHILLERS

SECTION 236500 - COOLING TOWERS

SECTION 236533.13 - LIQUID COOLERS

SECTION 236533.16 - DRY TYPE LIQUID COOLERS

SECTION 236600 - PRECONDITIONED AIR HYDRONIC AIR HANDLING UNITS - AVIATION

SECTION 236611 - PRECONDITIONED AIR DX AIR HANDLING UNITS - AVIATION

SECTION 236614 - PRECONDITIONED AIR DUCTWORK AND ACCESSORIES - AVIATION

SECTION 236616 - PRECONDITIONED AIR ELECTRIC CONTROL SYSTEMS - AVIATION

SECTION 236619 - PRECONDITIONED AIR SEQUENCE OF OPERATION - AVIATION

SECTION 237200 - AIR-TO-AIR ENERGY RECOVERY EQUIPMENT

SECTION 237313 – MODULAR INDOOR CENTRAL-STATION AIR-HANDLING UNITS

SECTION 237333.16 - INDOOR, INDIRECT, GAS-FIRED HEATING AND VENTILATING UNITS

SECTION 237339 - INDOOR, DIRECT-FIRED HEATING AND VENTILATING UNITS

SECTION 237413 – PACKAGED, OUTDOOR, CENTRAL-STATION AIR-HANDLING UNITS

SECTION 237423.13 – PACKAGED, DIRECT-FIRED, OUTDOOR, HEATING-ONLY MAKEUP-AIR UNITS

SECTION 237423.16 – PACKAGED, INDIRECT-FIRED, OUTDOOR, HEATING-ONLY MAKEUP-AIR UNITS

SECTION 237433 - DEDICATED OUTDOOR-AIR UNITS

SECTION 238113.11 - PACKAGED TERMINAL AIR-CONDITIONERS, THROUGH-WALL UNITS

SECTION 238113.12 - PACKAGED TERMINAL AIR-CONDITIONERS, FREESTANDING UNITS

SECTION 238113.13 – PACKAGED TERMINAL AIR-CONDITIONERS, OUTDOOR, WALL-MOUNTED UNITS

SECTION 238119 - SELF-CONTAINED AIR-CONDITIONERS

SECTION 238123 - COMPUTER ROOM AIR CONDITIONERS

SECTION 238126 - SPLIT-SYSTEM AIR-CONDITIONERS

SECTION 238146 - WATER-SOURCE UNITARY HEAT PUMPS

SECTION 238146.13 - WATER TO AIR HEAT PUMPS

SECTION 238213 - VALANCE HEATING AND COOLING UNITS

SECTION 238216 - AIR COILS

SECTION 238216.11 - HYDRONIC AIR COILS

SECTION 238216.12 - STEAM AIR COILS

SECTION 238216.13 - REFRIGERANT AIR COILS

SECTION 238216.14 – ELECTRIC-RESISTANCE AIR COILS

SECTION 238219 - FAN COIL UNITS

SECTION 238223 - UNIT VENTILATORS

SECTION 238229 - RADIATORS

SECTION 238233 - CONVECTORS

SECTION 238236 - FINNED TUBE RADIATION HEATERS

SECTION 238239 - UNIT HEATERS

SECTION 238239.13 - CABINET UNIT HEATERS

SECTION 238239.16 - PROPELLER UNIT HEATERS

SECTION 238239.19 - WALL AND CEILING UNIT HEATERS

SECTION 238245 - CHILLED BEAMS

SECTION 238313 - RADIANT-HEATING ELECTRIC CABLES

SECTION 238316 - RADIANT-HEATING HYDRONIC PIPING

SECTION 238323 - RADIANT-HEATING ELECTRIC PANELS

SECTION 238413 - HUMIDIFIERS

SECTION 238416 - MECHANICAL DEHUMIDIFICATION UNITS

Division 26 – ELECTRICAL

SECTION 260400 - BASIC ELECTRICAL REQUIREMENTS

SECTION 260510 - TESTING, ACCEPTANCES AND CERTIFICATION

SECTION 260513 - MEDIUM-VOLTAGE CABLES

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

SECTION 260523 - CONTROL-VOLTAGE ELECTRICAL POWER CABLES

SECTION 260526 – GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

SECTION 260529 – HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

SECTION 260533 – RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

SECTION 260536 – CABLE TRAYS FOR ELECTRICAL SYSTEMS

SECTION 260539 – UNDERFLOOR RACEWAYS FOR ELECTRICAL SYSTEMS

SECTION 260543 – UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS

SECTION 260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

SECTION 260548 – VIBRATION AND SEISMIC CONTROLS FOR ELECTRICAL SYSTEMS

SECTION 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

SECTION 260573 – OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY

SECTION 260583 – ELECTRICAL CONNECTIONS FOR EQUIPMENT

SECTION 260913 - ELECTRICAL POWER MONITORING AND CONTROL

SECTION 260923 – LIGHTING CONTROL DEVICES

SECTION 260926 - LIGHTING CONTROL PANELBOARDS

SECTION 260933 - CENTRAL DIMMING CONTROLS

SECTION 260936.19 – STANDALONE MULTIPRESET MODULAR DIMMING CONTROLS

SECTION 260943.16 - ADDRESSABLE-FIXTURE LIGHTING CONTROLS

SECTION 260943.23 - RELAY-BASED LIGHTING CONTROLS

SECTION 261116 - SECONDARY UNIT SUBSTATIONS

SECTION 261200 - MEDIUM-VOLTAGE TRANSFORMERS

SECTION 261300 - MEDIUM-VOLTAGE SWITCHGEAR

SECTION 262200 - LOW-VOLTAGE TRANSFORMERS

SECTION 262300 - LOW-VOLTAGE SWITCHGEAR

SECTION 262313 – PARALLELING LOW-VOLTAGE SWITCHGEAR

SECTION 262413 - SWITCHBOARDS

SECTION 262416 - PANELBOARDS

SECTION 262416.16 – ELECTRONICALLY OPERATED CIRCUIT-BREAKER PANELBOARDS

SECTION 262419 - MOTOR-CONTROL CENTERS

SECTION 262500 - ENCLOSED BUS ASSEMBLIES

SECTION 262600 - POWER DISTRIBUTION UNITS

SECTION 262713 - ELECTRICITY METERING

SECTION 262726 - WIRING DEVICES

SECTION 262813 - FUSES

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

SECTION 262913 – ENCLOSED CONTROLLERS

SECTION 262923 - VARIABLE-FREQUENCY MOTOR CONTROLLERS

SECTION 263100 - PHOTOVOLTAIC COLLECTORS

SECTION 263213 - ENGINE GENERATORS

SECTION 263323 - CENTRAL BATTERY EQUIPMENT

SECTION 263353 - STATIC UNINTERRUPTIBLE POWER SUPPLY

SECTION 263533 - POWER FACTOR CORRECTION EQUIPMENT

SECTION 263600 - TRANSFER SWITCHES

SECTION 264113 - LIGHTNING PROTECTION FOR STRUCTURES

SECTION 264200 - CATHODIC PROTECTION

SECTION 264313 – TRANSIENT-VOLTAGE SUPPRESSION FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS

SECTION 265100 - INTERIOR LIGHTING

SECTION 265600 - EXTERIOR LIGHTING

Division 27 - COMMUNICATIONS

SECTION 270526 - GROUNDING AND BONDING FOR COMMUNICATIONS SYSTEMS

SECTION 270528 - PATHWAYS FOR COMMUNICATIONS SYSTEMS

SECTION 270536 - CABLE TRAYS FOR COMMUNICATION SYSTEMS

SECTION 270544 – SLEEVES AND SLEEVE SEALS FOR COMMUNICATIONS PATHWAYS AND CABLING

SECTION 271100 - COMMUNICATIONS EQUIPMENT ROOM FITTINGS

SECTION 271300 - COMMUNICATIONS BACKBONE CABLING

SECTION 271500 - COMMUNICATIONS HORIZONTAL CABLING

SECTION 272100 - LOCAL AREA NETWORKS (LANS)

SECTION 272101 – PUBLIC WIRELESS LAN (WIFI)

SECTION 273200 - TELEPHONE SYSTEM

SECTION 274111 – VIDEO SURVEILLANCE AND ENVIRONMENTAL MONITORING SYSTEM (VSEMS)

SECTION 274133 - MASTER ANTENNA TELEVISION SYSTEM

SECTION 274219 – MULTI-USER FLIGHT INFORMATION SYSTEM (MUFIDS)

SECTION 274220 - COMMON USE PASSENGER PROCESSING SYSTEMS (CUPPS)

SECTION 275114 - EMERGENCY COMMUNICATIONS SYSTEM, PUBLIC ADDRESS SYSTEM, AND VIDEO - TENANT INTERFACE

SECTION 275119 - SOUND MASKING SYSTEMS

SECTION 275123 – EMERGENCY COMMUNICATIONS SYSTEM

SECTION 275313 - DEN STANDARDS FOR TIME SYNCHRONIZATION

Division 28 - ELECTRONIC SAFETY AND SECURITY

SECTION 280513 - CONDUCTORS AND CABLES FOR ELECTRONIC SAFETY AND SECURITY

SECTION 280528 - PATHWAYS FOR ELECTRONIC SAFETY AND SECURITY

SECTION 280544 – SLEEVES AND SLEEVE SEALS FOR ELECTRONIC SAFETY AND SECURITY PATHWAYS AND CABLING

SECTION 281300 - ACCESS CONTROL

SECTION 281600 - INTRUSION DETECTION

SECTION 281643 – PERIMETER SECURITY SYSTEMS

SECTION 282300 - VIDEO SURVEILLANCE

SECTION 283100 – INTELLIGENT LIFE SAFETY FIRE MANAGEMENT SYSTEM

SECTION 283500 - REFRIGERANT DETECTION AND ALARM

Division 31 – EARTHWORK

SECTION 311000 - SITE CLEARING

SECTION 312000 - EARTH MOVING

SECTION 312319 - DEWATERING

SECTION 312323.33 - FLOWABLE BACKFILL (CONTROLLED LOW-STRENGTH MATERIAL)

SECTION 312333 - TRENCHING AND BACKFILLING

SECTION 312400 - EXCAVATION AND EMBANKMENT-ROADS AND BRIDGES

SECTION 312514 - EROSION CONTROL

SECTION 312534 - SOIL RETENTION COVERING

SECTION 313210 – WATERING AND DUST PALLIATIVES

SECTION 315000 - EXCAVATION SUPPORT AND PROTECTION

SECTION 316213 - CONCRETE PILES

SECTION 316216 - STEEL PILES

SECTION 316219 - TIMBER PILES

SECTION 316223 - COMPOSITE PILES

SECTION 316316 - AUGER CAST GROUT PILES

SECTION 316329 - DRILLED CONCRETE PIERS AND SHAFTS

Division 32 – EXTERIOR IMPROVEMENTS

SECTION 321216 - ASPHALT PAVING

SECTION 321223 - IMPRINTED ASPHALT

SECTION 321313 - CONCRETE PAVING

SECTION 321316 - DECORATIVE CONCRETE PAVING

SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

SECTION 321400 - UNIT PAVING

SECTION 321443 - POROUS UNIT PAVING

SECTION 321713 - PARKING BUMPERS

SECTION 321723 - PAVEMENT MARKINGS

SECTION 321726 - TACTILE WARNING SURFACING

SECTION 321729 - MANUFACTURED TRAFFIC-CALMING DEVICES

SECTION 321816.13 - PLAYGROUND PROTECTIVE SURFACING

SECTION 323113 - CHAIN LINK FENCES AND GATES

SECTION 323113.53 - HIGH SECURITY CHAIN LINK FENCES AND GATES

SECTION 323116 - WELDED WIRE FENCES AND GATES

SECTION 323119 - DECORATIVE METAL FENCES AND GATES

SECTION 323119.13 – DECORATIVE METAL SECURITY FENCES AND GATES

SECTION 323223 - SEGMENTAL RETAINING WALLS

SECTION 328400 - PLANTING IRRIGATION

SECTION 329113 - SOIL PREPARATION

SECTION 329115 - SOIL PREPARATION (PERFORMANCE SPECIFICATION)

SECTION 329200 - TURF AND GRASSES

SECTION 329210 - MULCHING

SECTION 329300 - PLANTS

SECTION 329600 - TRANSPLANTING

SECTION 329700 - VEGETATED ROOF ASSEMBLIES

Division 33 – UTILITIES

SECTION 330500 – COMMON WORK RESULTS FOR UTILITIES

SECTION 332100 - WATER SUPPLY WELLS

SECTION 334100 - STORM UTILITY DRAINAGE PIPING

SECTION 334600 - SUBDRAINAGE

SECTION 334713 - POND AND RESERVOIR LINERS

SECTION 335100 - NATURAL GAS DISTRIBUTION

SECTION 335213 – FUEL OIL DISTRIBUTION

SECTION 336313 - UNDERGROUND STEAM AND CONDENSATE DISTRIBUTION PIPING

SECTION 337149.13 - OVERHEAD MEDIUM-VOLTAGE WIRING

SECTION 337753 - MEDIUM VOLTAGE UTILITY RECLOSERS

II.4.3 Warranty Work

Developer shall create a notification procedures that will be utilized by the Owner during all applicable Warranty Periods to inform Developer of any Defect, in accordance with Section 5.16.1.2 of the Agreement. Such notice and tracking system shall be submitted to the Owner for approval at least 12 weeks prior to the first Functional Area reaching Functional Area Readiness.

Developer shall identify to the Owner the prime contact during applicable Warranty Periods, for each Functional Area. Contact information of Developer's contact personnel shall be included in any communication which pertains to Warranty Work. Additional information shall include name of Contractors that will be involved in the Warranty Work.

During the applicable Warranty Period, and upon written notice of Defect from the Owner in accordance with Section 5.16.1.2 of the Agreement, Developer shall notify the Owner of any Shutdown that may be required to perform the Warranty Work, in accordance with the Shutdown Policies and Procedures included in Appendix 10 to these Technical Requirements. For Emergency Repairs, Developer shall follow the applicable procedure detailed in Appendix 10 to these Technical Requirements.

The schedule of Warranty Work shall be developed in cooperation with the Owner or third parties impacted by such proposed Shutdowns (such coordination with third parties to be conducted in accordance with Section I.10.10 and Section I.10.11 of these Technical Requirements) to minimize the impact on passenger flow, the Owner's operations, airline operations, and TSA operations.

For each Functional Area, Developer shall initiate, coordinate, facilitate and formally record, an 11 month Warranty Work site inspection with Owner. These inspections shall be scheduled during normal business hours and accommodate Owner designated personnel availability. Any Defect identified during these inspections shall be corrected in conformance with Section 5.16 of the Agreement.

Developer shall provide manufacturer's warranty information in order to enable the Owner to incorporate manufacturer warranties into the Owner's asset management and maintenance program.

PART III OPERATION AND MAINTENANCE SERVICES

Developer shall perform the O&M Services within the O&M Limits in accordance with the requirements of this <u>Part III</u> of these Technical Requirements, the O&M Services Plan, and the other applicable provisions of the Contract Documents. For avoidance of doubt, all the relevant requirements in these Technical Requirements respecting D&C Work shall equally apply to the Renewal Work.

The Owner will be responsible for all Core Airport Operations both within and outside of the O&M Limits.

III.1 General

With the exceptions of the Work listed in <u>Section III.4.1</u> and <u>Section III.4.2</u> of these Technical Requirements, Developer shall perform the O&M Services on the O&M Segments and, within the O&M Limits following the earlier of the applicable Functional Area Readiness Date and the Project Substantial Completion Date, take all necessary actions to, take all necessary actions to:

- ensure the safe, clean, functional, and reliable delivery of the O&M Services;
- ensure and verify the quality of the O&M Services in compliance with these Technical Requirements;
- ensure the safety of the Users, Developer and Developer-Related Entities within those areas which are the responsibility of Developer in accordance with these Technical Requirements;
- minimize the risk of damages to, disturbance of, or destruction of property of the Owner, the Airlines, the FAA, the TSA, and third party property;
- partner, cooperate and collaborate with the Owner as may be reasonably required to facilitate efficient passenger flow, processing and way finding;
- coordinate and collaborate with the Owner in the performance of O&M Services that relate to or touch upon the Building Systems and Utilities;
- Coordinate and collaborate with the Owner during Irregular Operations, including re-routing of
 passengers across the A bridge should the Concourse Train System become disabled; while, Core
 Airport Operations within the O&M Limits are the responsibility of the Owner, Developer shall provide
 reasonable assistance to facilitate performance of Core Airport Operations during Airport Irregular
 Operations.
- provide a consistent level of User experience within the Core O&M Limits in accordance with the Performance Standards defined in Appendix 9-A of the Agreement;
- provide for continuous access to and proper functioning of public amenities within the O&M Limits in accordance with these Technical Requirements;
- minimize inconvenience and risk of delay and disturbance to Core Airport Operations, the operations of the Owner, the Airlines, the FAA, and the TSA;
- meet the requirements in this <u>Part III</u> of these Technical Requirements and the Performance Standards and comply with the acceptance criteria that measure the condition, performance, and specified life of the respective Elements; and
- monitor, measure and report Developer performance in fulfilling its responsibilities and obligations set forth in this <u>Part III</u> of these Technical Requirements.

Developer shall be responsible for providing all resources and qualified personnel necessary to meet the requirements of this <u>Part III</u> of these Technical Requirements and to perform the Work identified in the O&M Services Plan.

Developer shall implement a preventive and proactive maintenance system to prevent the degradation of the Elements within the O&M Limits, maintain the Elements within the O&M Limits in a state of good repair, self-monitor and self-report performance, and meet the minimum Performance Standards in this <u>Part III</u> of these Technical Requirements.

Developer shall cooperate and coordinate with and facilitate the Owner and third parties with statutory duties or functions in relation to the Project performing such duties and functions from the start of Construction Work date until the end of the Term. Developer shall not encroach upon, or otherwise use, the Owner or third party assets or spaces outside of the O&M Limits for the performance of the O&M Services without prior approval from the Owner. If, in the performance of the O&M Services, Developer damages any Owner or third party assets, Developer shall restore such assets, at a minimum, to their condition prior to the damage caused by Developer.

All O&M Services shall be conducted in accordance with applicable Government Approvals.

Developer shall develop and implement a quality system for the O&M Services and be responsible for the quality of O&M Services in accordance with the requirements of <u>Section I.10.8</u> of these Technical Requirements. There shall only be one, single, unified quality system for the O&M Services performed by Developer and Developer-Related Entities.

Developer shall coordinate the planning and execution of Renewal Work and other Planned Maintenance, execution of Maintenance Work, and response to Emergency, Incidents with the Owner and affected third parties. The Owner will use reasonable efforts to coordinate with Developer in the planning and execution of the Owner's Renewal Work and other Planned Maintenance on the Elements within the O&M Limits that the Owner is responsible to maintain.

Developer shall allow and facilitate access by the Owner to the Concession Space upon reasonable advance notice by the Owner to Developer.

The Owner will use reasonable effort to provide reasonable advance notice prior to the execution of the Owner's Renewal Work and other Planned Maintenance on the Elements within the O&M Limits that the Owner is responsible to maintain. When_performing such work, the Owner will use its reasonable efforts to minimize disruption to Developer's Work.

In performing the O&M Services, Developer shall not interfere with or impede Core Airport Operations and the Owner's operations, maintenance, and renewal work within or outside the O&M Limits.

For avoidance of doubt, the requirements in this <u>Part III</u> of these Technical Requirements apply to the Concessions Program and the Concession Space.

III.1.1 Self-Monitoring and Self-Reporting Requirements

Developer shall be responsible for establishing and implementing a self-monitoring and self-reporting program (included as part of Developer's quality system respecting the requirements of Section I.8.3 of these Technical Requirements) as a tool to evaluate the condition of the Elements within the O&M Limits and the extent to which Developer's performance of the O&M Services meet the requirements in this Part III of these Technical Requirements. The detailed procedures, processes and staff responsibilities of this program shall be set forth in a single section in the O&M Services Plan.

III.1.2 Access Control and Security

In performing the O&M Services, Develop shall comply with <u>Section I.5</u> of these Technical Requirements.

III.1.3 Parking

Except as otherwise expressly provided in the Contract Documents, the Owner will not provide parking to Developer-or any Related Entity outside of its normal parking operations. The Owner may provide

parking accommodations to Developer or any Developer-Related Entity in common with other users of the Airport subject to the payment of reasonable charges as may be established from time to time by the Owner. In such event, Developer or Developer-Related Entity shall be required to park within the designated areas.

III.2 [RESERVED]

III.3 O&M Services during Construction

Throughout the performance of the Construction Work, the Owner will perform O&M work k that is required on all existing Owner-owned assets within Construction Work Areas until such time that Construction Work commences on such assets.

The Owner shall have unimpeded access to all Construction Work Areas to perform such maintenance work.

When performing such maintenance work, the Owner will provide advance notice to Developer before entering any Construction Work Area, except when not practicable in the event of an Incident or Emergency. Developer shall coordinate with the Owner to provide access to Construction Work Area as needed to perform such maintenance work. In particular, Developer shall attend weekly meetings with the Owner to understand the Owner's maintenance requirements and provide for timely access to identified Construction Work Areas.

All the Owner staff accessing Construction Work Areas will be required to understand and adhere to Developer's safety procedures and policies required under the Contract Documents. Developer shall be obligated to provide timely training on such safety procedures and policies to the Owner staff, so as not to delay the performance of the Owner's maintenance work.

Notwithstanding anything to the contrary in these Technical Requirements, the Owner shall have unrestricted and unconditional access to any Construction Work Area, whether within the O&M Limits or not, as may be necessary to respond to an Emergency or ensure Core Airport Operations.

During the Project Construction Period, Developer shall maintain Construction Work Areas, including Public Circulation Space within and adjacent to such areas, clean, orderly, and hazard free, in accordance with Section 017420 of the Design and Construction Specifications.

III.4 O&M Services Responsibilities Post Construction

III.4.1 Excluded O&M Services

Developer is not responsible for any of the following services (the "Excluded O&M Services") and will be the responsibility of the Owner:

- Core Airport Operations;
- operations and maintenance work for the Terminal Improvements outside of the O&M Limits;
- maintenance work on all Elements other than those installed, built, re-built, or repurposed by Developer as part of the Terminal Improvements;
- supply of Project Utilities Services to the applicable Utility Demarcation Point and operations and maintenance work of the corresponding Utilities outside the O&M Limits;
- the operations and maintenance work with respect to Utilities and Building Systems, to the
 extent such work is identified in Column (A) of <u>Table III.1</u> (Demarcation Points and Allocation
 of O&M Responsibilities for Systems) of Appendix 14 of these Technical Requirements as being
 the responsibility of the Owner; the cleaning and custodial services identified as being the

responsibility of the Owner in Column (A) of <u>Table III.2</u> (Allocation of Responsibility for Cleaning and Custodial Services) of Appendix 14 of these Technical Requirements;

- the operations and maintenance work with respect to the Customer Experience Elements, to the extent such work is identified in Column (A) of <u>Table III.3</u> of Appendix 14 of these Technical Requirements, flight information display system (FIDS) and train information display system;
- the maintenance of the Terminal superstructure;
- cleaning and maintenance of the tent roof (canopy) and its associated structural system in the Terminal; and
- in the event of a Utility failure, assisting Developer in the cessation of the Utility fault in order to prevent damage to surrounding areas and/or Owner property.

In providing such services, the Owner will follow the same procedures and standards applied for the rest of the Airport and in accordance with Table III.6 of Appendix 10-A (Owner Performance Obligations and Deductions) of the Agreement.

Notwithstanding anything to the contrary in this Part III of these Technical Requirements:

- if an Element installed, built, re-built, or repurposed by Developer is under warranty, Developer shall perform the Warranty Work on such Element whether such Element is within or outside the O&M Limits;
- if, in the performance of O&M Services, Developer disturbs, interrupts or otherwise damages any Owner asset, the obligation of the Owner to perform its operation and maintenance work or deliver services associated with such asset shall be suspended until Developer restores such asset, at a minimum, to its condition prior to the disturbance, interruption, or damage caused by Developer; and
- if, in the performance of its operations and maintenance work, the Owner disturbs or interrupts Developer's operations or otherwise damages an Element, the obligation of Developer to perform O&M Services related to such Element shall be suspended until the Owner restores such Element at a minimum, to its condition prior to the disturbance, interruption, or damage causes by the Owner.

III.4.2 Owner O&M Obligations

Developer shall identify in the O&M Services Plan any access points within and outside of the Terminal required to perform the O&M Services and, to the extent included in the Project Right of Entry under the Agreement and subject to Airport security requirements in Section I.5.1 of these Technical Requirements, the Owner will provide access at such points.

The Owner will be responsible for the operations and maintenance work for the Systems identified in Column (A) of Table III.1 of <u>Part III</u> of Appendix 14 of these Technical Requirements, whether within or outside the O&M Limits, which are directly supporting Developer's Work.

The Owner O&M Obligations shall be subject to the performance standards set forth in <u>Table III.6</u> of Appendix 10-A of the Agreement. Certain instances of Noncompliance by the Owner therewith shall be subject to the provisions contemplated in Section 8.4.4 of the Agreement.

III.4.3 Utility Services and Metering

The Owner will provide the Project Utility Services to the applicable Utility Demarcation Points in sufficient supply for Developer to perform the O&M Services in accordance with Section 4.8 of the Agreement.

All revenue meters installed by Developer for sub-metering purposes are included in the O&M Limits. As part of the O&M Monthly Report, Developer shall provide actual monthly usage data as measured by the revenue meters for individual Concession Premises and total Utilities usage, for gas, electricity and domestic water, respectively.

III.4.4 Service Task Orders

As part of the O&M Services Plan, Developer shall establish and manage a comprehensive program, including policies and protocols, for issuing, notifying, responding, tracking, closing, and recording Maintenance Work and other O&M Services whether associated with a Noncompliance or not using Service Task Orders ("STOs") (the "Service Task Order Program" or "STOP"). STOs shall be classified as either emergency maintenance, corrective maintenance, preventive maintenance, predictive maintenance, or service requests and clearly indicate the criticality level of the Maintenance Work in accordance with Table III.4 of these Technical Requirements. Developer shall issue STOs for all Maintenance Work, either planned or unplanned, performed within the O&M Limits in accordance with the appropriate classification and procedures defined in the STOP.

Developer shall issue an STO for each event of Noncompliance. Developer shall respond to such STOs by investigating, confirming, and curing the Noncompliance within the prescribed Cure Period in the Performance Standards. The STOP shall cover all O&M Services to the extent such work is in response to a Noncompliance.

The STOP shall utilize a centralized, computerized system for tracking STOs from initiation to resolution. Developer shall enter and track all STOs from initiation to resolution and all Noncompliance events in the STOP system. Developer shall provide the Owner with unrestricted, real time access to the STOP computerized system, including the ability for the Owner to notify Developer of a Noncompliance using the STOP. The Owner reserves the right to periodically audit actual performance and STO response times against Developer's records and field checks.

The STOP shall include a notification protocol that is aligned with the Owner policies and procedures and the requirements of the Agreement. The STOP computerized system shall include notification functionality that alerts appropriate Owner personnel of the issuance of and response to a STO.

Developer shall not use the Airport's maintenance call center as part of the STOP and shall not call on the Airport's maintenance call center in the performance of the O&M Services, unless Developer identifies a direct threat to life or property, in which case Developer shall be obligated to call promptly the Airport's maintenance call center to report such threat.

Developer response and response time identified in <u>Table III.4</u> of Appendix 14 of these Technical Requirements are part of Developer's O&M Services.

III.4.5 Planned Maintenance and Shutdown

No Shutdown other than a Permitted Shutdown shall be permitted. Any Shutdown for Planned Maintenance activities reducing passenger flow capacity in peak periods below design capacity in any Concessions and Public Circulation Space or otherwise impedes the Owner's operations, airline operations, or TSA operations shall not be permitted unless approved by the Owner (for the avoidance of doubt, to the extent that capacity can be reduced in non-peak periods without affecting passenger service, such reduction shall be permitted).

As part of the O&M Services Plan or the Renewal Work Plan (as relevant), Developer shall prepare a schedule of Planned Maintenance (including Routine Maintenance and Renewal Work) in accordance with the requirements set forth in this Section III.4.5 of these Technical Requirements identifying any proposed Shutdown.

If any O&M Services requires a Shutdown, Developer shall submit the schedule for such proposed Shutdown as part of the O&M Services Plan and as part of the Renewal Work Plan for Renewal Work. The schedule for such proposed Shutdowns shall be subject to the Owner's review and comment as a Submittal Type 1 in accordance with the requirements of this Section III.4.5 of these Technical Requirements. Developer shall also notify the Owner on the first day of the month of any Shutdowns scheduled for the current month and the following month.

The schedule of Planned Maintenance, and any changes thereof, shall be developed in cooperation with the Owner or third parties impacted by such proposed Shutdowns (such coordination with third parties to be conducted in accordance with <u>Section I.10.10</u> and <u>Section I.10.11</u> of these Technical Requirements) to minimize the impact on passenger flow, the Owner's operations, airline operations, and TSA operations.

The schedule of Planned Maintenance shall describe all of the Planned Maintenance for the given period and shall include at a minimum the expected dates, space to be maintained, times, durations and type of each Planned Maintenance activity, and impact on passenger flow, the Owner's operations, airline operations, or TSA operations, including any proposed Shutdowns. The schedule of Planned Maintenance shall include a contingency plan to expedite passenger flow or reopening of closed spaces to alleviate negative impacts on the Owner's operations, airline operations, or TSA operations or passenger flow. The Owner may direct Developer to cease Planned Maintenance activities at its reasonable discretion when the Owner's operations, airline operations, or TSA operations or passenger flow are negatively impacted.

When changes occur in Developer's schedule of Planned Maintenance (including changes in the Renewal Work Schedule) for which a Shutdown is required, Developer shall request and obtain the approval in accordance with the requirements of this Section III.4.5 of these Technical Requirements from the Owner at least fourteen days before undertaking the Work that requires such Shutdown. Such requirement does not apply to Permissible Unplanned Maintenance.

III.4.6 Emergency and Irregular Operations

When responding to an Emergency or Airport Irregular Operations, Developer shall comply with the Airport Rules and Regulations and notify the Owner immediately of any Shutdowns not associated with a previously approved Planned Maintenance, in accordance with the Shutdown Policies and Procedures. As part of the O&M Services Plan, Developer shall develop procedures for interfacing and coordinating with the Owner.

During an Emergency or Airport Irregular Operations, Developer will immediately act to ensure that Work is stopped if required and that the O&M Limits are free of Developer personnel, in accordance with the incident response, safety and security procedures, and protocols of the O&M Services Plan and the Emergency Management and Disaster Recovery Plan.

Developer shall provide the Owner a detailed damage report after the occurrence of an Emergency or Airport Irregular Operations. This report shall include an individual analysis of the site or sites affected by the events within the O&M Limits.

III.4.7 Special Events

Developer shall use reasonable efforts to coordinate with the Owner and adjust its Planned Maintenance Schedule and O&M Services to accommodate to Special Events. As part of the O&M Services Plan, Developer shall develop procedures for interfacing and coordinating with the Owner for Special Events.

III.4.8 RESERVED

III.4.9 O&M Services Requirements

The O&M Services performed by Developer shall meet or exceed the Owner standards and specifications, industry standards, and manufacturer's specifications and shall ensure that all Elements function as designed and meet the Performance Standards in Table III.5 of Appendix 9-A of the Agreement. Developer shall perform Renewal Work in accordance with the Renewal Work Plan to meet the Performance Standards. In the performance of O&M Services, Developer shall comply with the Airport Shutdown Policy.

III.4.9.1 Cleaning and Custodial Services

As part of the O&M Services, Developer shall perform cleaning and custodial services within the Core O&M Limits during the Term necessary to meet the following standards:

- at a glance, all surfaces (including floors, walls, stairs, ceilings, doors, doorframes, glass, mirrors, columns, countertops, partitions, sills, shelves, overhangs, skirting boards, and hard-to-reach areas) are clean free of stains, debris, stickers, graffiti, soils, remains of chewing, debris, signs of movement of furniture. marks, fluids, soap or soap scum, or other substances;
- floors are free of standing water or slippery areas;
- carpet, rugs and mats (including back of rugs and mats) are clean, free of dust, stains, dirt and general debris;
- at a glance, there are no areas with reflections from glass wiper blades;
- expansion joints are clean, with no residue and a uniform color;
- polished floors have a uniform polishing throughout the surface;
- sweeping, scouring, mopping and/or vacuuming conducted at least daily, with no dust or lint in sight;
- precautionary signs on newly polished, wet or painted floors;
- ducts, grills, floor vents, and other ventilation outlets are free of dust, stains, cobwebs, and remain open, unlocked and free of any obstruction;
- external and internal doors and their frames, jamb and rails are clean, free of dust, dirt, or other elements that could prevent their operation;
- metal and glass surfaces are clean and polished, without stripes and maintaining a uniform brightness;
- furniture, fixtures, equipment, curtains and binds, are clean, free of stains, finger marks, scratches, dust, cobweb, and discharges;
- public information screens are clean, free of dust and marks;
- cleaning equipment, utensils and materials used are clean (buckets, water, cloths, machines, etc.) and suitable for the service, and are stored properly and in orderly fashion and in locked rooms when not in use;
- cleaning materials are perfectly identified with the corresponding color codes and are used in the corresponding areas;
- no cleaning equipment and materials used for cleaning is left in sight or reach of User;

- cleaning supplies and materials are stocked in adequate and sufficient capacity;
- products, materials, equipment and machinery used do not have the potential to cause health and safety hazards to people, animals or the environment;
- bathrooms and adjacent areas are free of odors;
- sanitary elements (toilets, urinals, washbasins, faucets, etc.) and water fountains are clean, free of stains, odors, body fluids, soap chum, deposits and organic substances;
- mirrors are clear, without spots, traces or washable marks that affect the reflex;
- baby changing stations and shower areas are clean of stains, odors, mold and body fluids (including gaskets);
- toilet brushes are in the containers and no one is missing;
- toilet paper, tissue paper towels, hand soaps and tampons, as well as other consumables (air fresheners, etc.) are present in adequate an sufficient supply;
- hygienic-sanitary containers, soap dispensers, towels and hygienic paper dispensers, etc. are clean, free of stains, soap scum and other substances;
- comment survey forms and the corresponding mailbox is clean and available;
- adequate information is provides to Users about the closure or restrooms and alternative restrooms; and
- precautionary signs on newly polished, wet or painted floors.

With respect to waste management, Developer shall also perform O&M Services necessary to meet the following minimum standards:

- trash bins and recycling bins are installed in the specified numbers and location and available as agreed with the Owner;
- waste bins or containers does not exceed 90% of the waste storage capacity;
- the separation of waste is carried out correctly and in accordance with Law and the rules and regulations of the Owner and the City;
- all trash (including used frying oil) and recyclable materials are transported to the
 centralized collection points in the Owner-approved spill-proof containers; Developer shall
 ensure that storage, transportation, and disposal of all trash, waste, and other refuse does
 not damage or harm any structures or infrastructure at the Airport. Any trash spills
 (including oil spill) are cleaned up;
- comply with any waste diversion programs or policy of the Owner, including recycling, composting, or other programs for removal and disposal of all trash, waste and other refuse from the O&M Limits;
- the chemicals used or stored on Airport property are perfectly labelled and properly and securely stored;
- no improper discharges (into the sewage system, or within or outside the Terminal); and
- luminance of the different spaces within the Core O&M Limits complies with the Technical Requirements, and the requirements and parameters of the Commissioning Report.

III.4.9.2 Maintenance Requirements

Developer shall perform Maintenance Work on the O&M Segments within the O&M Limits during the Term

In the performance of the Maintenance Work, Developer shall use Developer's personnel or Contractors that are competent, sufficiently trained, and duly licensed to perform such Work in the State of Colorado. Elements shall be maintained at a standard equal to or exceeding applicable codes and standards in effect at time the Work is being performed, the current versions as of the Effective Date which are as set forth below:

- Latest adopted Denver Building Code;
- International Existing Buildings Code. 2012. IEBC;
- All applicable state and local building codes;
- All applicable national standards;
- The International Code Council ("ICC") family of codes including: International Building Code ("IBC"), International Fire Code ("IFC"), International Plumbing Code ("IPC"), International Mechanical Code ("IMC"), and the International Energy Conservation Code ("IECC");
- Electrical
 - NFPA 70B-2013 Recommended Practice for Electrical Equipment Maintenance, 2013 Edition;
 - OSHA 29 CFR 1910.331.335;
 - National Electrical Code;
 - Dora. Electrical Board: Laws, Rules and Policies;
 - https://www.colorado.gov/pacific/dora/Electrical_Laws#Rules;
- NFPA Life Safety Code (NFPA 101);
- NFPA National Electric Code (NFPA 70);
- ANSI/NEMA KS 3-2010 Guidelines for Inspection and Preventive Maintenance of Switches Used in Commercial and Industrial Applications;
- any other code-required maintenance, by frequency, as prescribed by the Authority With Jurisdiction (AWJ);
- HVAC codes:
 - International Mechanical Code (ICC IMC 2015);
 - Clean Air Act's Section 608 program (CAA 608);
 - ASHRAE Standard 180-2012;
 - 2015 ASHRAE Handbook;
 - ASHRAE Guideline 4-2008 (RA 2013);
 - ASHRAE Standard 62.1-2013;
 - ANSI/AHRI Standard 340/360-2007 with Addenda 1 and 2;
 - 10 CFR 431.242;

- 10 CFR 431.92 81 FR 2420 (January 15, 2016);
- 10 CFR 431.92;
- Fire codes:
 - NFPA 92B Smoke management systems in Malls, Atria and larges spaces (2005)
 - Colorado Revised Statutes
- International Plumbing Code (IPC 2015)
- Uniform Plumbing Code 2015 (IAPMO)
- State Plumbing Board
- maintenance requirements shall be determined based on manufacturer recommendation and the Owner requirements; and
- any preventive maintenance prescribed specifically within the Maintenance Manual provided by Developer's installed equipment manufacturers.

III.4.9.3 Renewal Work Requirements

Developer shall plan for and perform Renewal Work of the O&M Segments within the O&M Limits during the Term so as to ensure that all Elements within the O&M Limits function as designed and meet the Performance Standards.

Any Renewal Work shall be performed in accordance with the Contract Documents and manufacturer's specifications. All requirements in these Technical Requirements generally applicable to the D&C Work shall apply to the Renewal Work.

III.4.10 Inspections

Without limitation to the Owner's right to conduct inspections without prior notice, Developer shall be responsible for planning and conducting regular inspections of all Elements within the O&M Limits to verify that Elements function as designed and meet the Performance Standards. Inspections shall be conducted for all Elements at a minimum once per year, or more frequently as may be necessary depending on the nature and conditions of the Element or required by Law.

Developer inspections requirements shall include, at a minimum:

- Comparison of level of service against these Technical Requirements, Performance Standards, manufacturers specifications, O&M Services Plan, O&M Manuals, and best practice;
- Examination of efficiency; and
- Examination that O&M Services have been carried out in accordance with the Contract Documents and the O&M Services Plan and that the anticipated performance has been achieved.

Inspections and outcome of such inspections shall be documented in the Service Task Order Program and as part of the O&M Annual Report.

III.4.11 Reporting and Audit

III.4.11.1 O&M Monthly Report

Upon Developer's commencement of performance of the O&M Services, Developer shall deliver an O&M Monthly Report to the Owner for review and comment no later than the 15th day of each month covering the O&M Services performed the previous month. The format of the O&M Monthly Report shall be submitted to the Owner by Developer as part of the O&M Services Plan

Developer shall prepare the monthly reports in electronic format and each report shall contain the following information:

- summary of the Planned Maintenance for the upcoming month;
- summary of the O&M Services performed and completed for the previous calendar month and confirmation that all O&M Services was performed in compliance with the requirements under the Agreement, these Technical Requirements, and the O&M Services Plan;
- summary of the Planned Maintenance previously scheduled for the month but that was not completed for the month, including the reasons for the incompletion of the Planned Maintenance and a revised schedule for such Work;
- summary of the maintenance activities performed for the previous month beyond the Planned Maintenance for that month;
- detailed results of all Planned Maintenance and other Maintenance Work that was performed during the month;
- summary of inspection activities, assessments, testing activities and results, identified Noncompliance Events, and consequential Maintenance Work;
- Utilities usage per Section III.4.3 of these Technical Requirements;
- report all instances of Noncompliance Events and Unavailability Events starting or ending during the month, describing at a minimum: the corresponding name and ID number, applicable Cure Period, the start date and time, entity who identified the event first, whether the event was the result of an Incident or an Emergency, details regarding the cure of such events including the steps taken and the time it took to cure, the status of the event as of the end of the month, confirmation of cure if applicable, Noncompliance Points and deductions for Unavailability accrued if any associated with each event, and the changes (if any) made to the O&M Services Plan based upon the events;
- summary and support calculation of Noncompliance Points and Unavailability deductions accrued by Developer for the past month and cumulative number of Noncompliance Points and Unavailability deductions assessed during the last rolling 12-month period and 48-month rolling period;
- list with detailed locations and total number of all Shutdowns including details describing
 the location and duration and explaining as applicable for each Shutdown whether it is an
 Unavailability Event or a Permitted Shutdown, and detailed assessment of Unavailability
 deductions;
- report all Emergencies and impacts on the Elements within the O&M Limits and O&M Services, including a time based report of all actions and activities performed by Developer and description of impact of such events on Developer's O&M Services or statement of no impact (including damage assessment logs);
- description of the completed or programmed upcoming Renewal Work and measures to complete such Work;
- materials certification for any materials incorporated into the Work; and
- certification that the Work performed meets Developer's acceptance criteria.

III.4.11.2 O&M Annual Report

On an annual basis, Developer shall create a consolidated O&M Annual Report. The O&M Annual Report shall summarize Developer's O&M Services performed for the year, and confirmation that Developer performed its O&M Services in compliance with the Agreement, these Technical Requirements, and the Project Management Plan.

From Project Substantial Completion, Developer shall deliver the O&M Annual Report to the Owner no later than 30 days after each calendar year for review and comment, starting on January 1st after one year after the Project Substantial Completion Date. The O&M Annual Report shall be completed in accordance with the requirements set forth in this <u>Part III</u> of these Technical Requirements. Developer's O&M Annual Report shall contain the following information:

- summary of all O&M Monthly Reports from the preceding year;
- summary of Noncompliance Events and Unavailability Events and Noncompliance Points and Unavailability deductions accrued for the preceding year;
- summary of all adjustments to the O&M Monthly Reports from the preceding year (if any);
- summary of the information requested by the Owner (corrected if necessary), by month during the preceding year (if any); and
- Renewal Work Report.

III.4.11.3 Renewal Work Reports

As part of the O&M Annual Report, Developer shall deliver the Renewal Work Report to the Owner no later than the 30 days after each calendar year for the Owner review and comment. The Renewal Work Report shall, at minimum, include the following:

- summary of the preceding year's completed Renewal Work performed, including the location, the type of Work performed for each Element listed on the Renewal Work Schedule and any other component, including the dates of commencement and completion and the final cost (per type of Work);
- updates to Record Document BIM, as necessary to reflect completed Renewal Work;
- any updated inventory data as a result of the Renewal Work;
- a list of any Developer's Renewal Work, which was included in the previous year's Renewal Work Schedule, but was not conducted and an explanation of why Developer did not conduct this Renewal Work;
- materials certification for any materials incorporated into the Work; and
- certification that the Work performed meets Developer's acceptance criteria.

III.4.11.4 Audits

Developer shall develop a program of audit to verify the quality of the O&M Services.

The Owner may audit the Work upon prior notice and will use reasonable efforts to coordinate with Developer so as to minimize disruption of any of Developer's activities in respect of the Project and in any event in accordance with the Agreement.

III.4.12 Handback Renewal Work

As of the applicable handback date contemplated by Section 7.7 of the Agreement, the O&M Segments shall meet the requirements of Part III of these Technical Requirements, including the Performance Standards.

As of the applicable handback date contemplated by Section 7.7 of the Agreement, Developer shall provide materials certification forms for any materials incorporated into the Work on Elements handed back to the Owner and certification that the Work performed on such Elements meets Developer's acceptance criteria, the Owner's acceptance criteria, the requirements under the Agreement, these Technical Requirements, the O&M Services Plan, and the Project Management Plan.

Developer shall continuously update the Record Document BIM.

III.5 Operations and Maintenance Services Plan

III.5.1 General

Developer shall prepare and submit to the Owner within the timeframe contemplated below, for review and approval an Operations and Maintenance Services Plan (or "O&M Services Plan") that clearly identifies the approach, methods, systems, procedures, organization and staffing, contracting practices, schedule, project controls, inspections and reporting procedures and frequencies necessary for Developer to perform the O&M Services and ensure that the Project continuously satisfies the requirements of this Part III of these Technical Requirements and any other applicable Contract Documents. The Owner will transfer to Developer the O&M manuals and other information relating to existing assets that may be within the O&M Limits, to the extent such manuals (and/or other information) are available.

Developer shall implement the O&M Services Plan and shall manage and perform O&M Services in accordance with the O&M Services Plan. There shall be only one O&M Services Plan for Developer and all Developer-Related Entities performing O&M Services.

The O&M Services Plan shall include the following components organized as follows:

- a. the parts and components of the PMP presented in Part I of these Technical Requirements as applied to the O&M Services:
 - i. Management & Staffing Plan, in accordance with <u>Section I.10.2</u> of these Technical Requirements;
 - ii. Risk Management Plan in accordance with <u>Section I.10.3</u> of these Technical Requirements;
 - iii. Quality Management Plan (QMP) in accordance with <u>Section I.10.8</u> of these Technical Requirements;
 - iv. Document and Data Management Plan (DDMP) in accordance with <u>Section I.10.9</u> of these Technical Requirements;
 - v. Communications and Coordination Plan between Owner and Developer in accordance with Section I.10.10 of these Technical Requirements;
 - vi. Affected third party Plan in accordance with <u>Section I.10.11</u>. of these Technical Requirements;
 - vii. Public Information and Communication Plan in accordance with <u>Section I.10.12</u> of these Technical Requirements;

- viii. Health and Safety Plan in accordance with <u>Section I.10.13</u> of these Technical Requirements;
- ix. Environmental Management Plan in accordance with <u>Section I.10.14</u> of these Technical Requirements;
- x. Emergency Management and Disaster Recovery Plan (EMDRP) in accordance with Section I.10.15 of these Technical Requirements;
- xi. Shutdown Plan in accordance with <u>Section I.10.17</u> of these Technical Requirements; and
- xii. Training Plan in accordance with Section I.10.20 of these Technical Requirements.
- b. schedule of Planned Maintenance and preventive Routine Maintenance, which shall include the schedule for planned Shutdowns;
- c. Operations Manual;
- d. Maintenance Manual; and
- e. Renewal Work Plan, including Renewal Work Schedule.

Any changes to the above list will be made by mutual agreement.

Developer shall submit the O&M Services Plan to the Owner for review and comment as a Submittal Type 1 within 90 days after the issuance of NTP 2; provided, however, that information specific to individual O&M Segments or areas within the O&M Limits shall only reflect the information reasonably known at the time of such Submittals.

The Owner will review and provide comments on the O&M Services Plan within 30 days after receiving a complete and conforming draft O&M Services Plan in accordance with the requirements of this Part III of these Technical Requirements. Developer shall submit updated sections and components of the O&M Services Plan in respect of a given Functional Area, reflecting Record Document BIM and final O&M Limits and any new, relevant information reasonably known at the time as a condition precedent to Functional Area Readiness of each Functional Area.

Subsequently, Developer shall update the O&M Services Plan within 30 days prior to the beginning of each calendar year as necessary to comply with the requirements of the Contract Documents. Each update of the O&M Services Plan shall incorporate changes to Project Documents as they relate to O&M Services and these Technical Requirements and shall be subject to the Owner's review and comment as a Submittal Type 1.

The O&M Services Plan for all of Developer's O&M Services shall rely on and fully utilize the STOP.

The O&M Services Plan and subsequent updates shall describe Developer's approach to inspections, Routine Maintenance, Planned Maintenance, preventive and corrective Maintenance Work, Renewal Work, replacements, and other maintenance services performed by Developer, and include, at a minimum, the following:

- plan drawings and three-dimensional BIM model showing the O&M Limits for the Project;
- inventory and clear description of each individual area and each Element contained within the O&M Limits with its proper location and with a unique Element identification (ID);
- Developer's acceptance criteria for O&M Services;
- schedule of Planned Maintenance and preventive Routine Maintenance and associated Shutdowns along with an explanation of required frequencies of such Work and procedures

for executing such Work, for each Element category and for individual spaces within the Project Envelope;

- plans and procedures for maintenance and protection of pedestrian and vehicular traffic during O&M Services (for Planned Maintenance and unplanned O&M Services respectively);
- description of Developer's approach to minimize inconvenience and risk of delay and disturbance to Users, the general public, the Owner and the Owner contractors, the airlines, the FAA and the TSA;
- description of Developer's approach to minimize the risk of harm to the Users, the general public, and staff from the Owner and the Owner contractors, the airlines, the FAA and the TSA, and Developer and Developer-Related Entities;
- description of Developer's approach to minimize the risk of damage, disturbance, or destruction of property of the Owner, the airlines, the FAA, the TSA, and third party property;
- description of Developer's approach to coordinate with the Owner and third parties;
- description of Developer's quality system and approach to quality management, quality assurance, and quality control of the O&M Services (including Developer's quality assurance and quality control of its self-monitoring and self-reporting program), processes and procedures for achieving the requirements under this Part III and the obligations of Developer under the Agreement;
- description of the Service Task Order Program and supporting computerized system meeting
 the requirements of Section III.5 of these Technical Requirements and description of
 Developer's approach for fully utilizing the STOP including procedures appropriate measures
 for control of records and control of documents;
- Developer's approach and procedures for monitoring and inspecting the condition of the Elements within the O&M Limits and self-monitoring and self-reporting processes and procedures for identifying, classifying (in accordance with Section III.1.1 of these Technical Requirements), tracking, notifying the Owner of and reporting Noncompliance Events, response time and cure time, and procedures to permanently cure Noncompliance Events;
- procedures for tracking, calculating, and reporting Noncompliance Points accurately;
- procedures for routine monitoring, detection and evaluation of Noncompliance events;
- corrective and preventive actions to eliminate or minimize future occurrences of Noncompliance events;
- target performance metrics, measurement procedures and threshold values at which O&M Services is required, inspection procedures and frequencies and subsequent O&M Services to address deficiencies noted in such inspections, for each Element in accordance with this <u>Part</u> <u>III</u> and Good Industry Practice;
- O&M policies for the O&M Services respecting the Concession Space;
- Developer's self-monitoring processes and procedures for identifying and notifying the Owner of Shutdowns (including Permitted Shutdowns);
- procedures to assess damages, required O&M Services, and coordination with the Owner and third parties, Developer following Emergencies, Incidents, and extreme weather events;

- description of Developer's approach to obtaining all Governmental Approvals required for the O&M Services including any revision, modification, amendment, supplement, renewal or extension thereof and coordination with the Owner and third parties;
- Developer's plan and procedures for preventing and responding to Hazardous Material releases, including monitoring and evaluation and clean-up procedures of any Hazardous Materials;
- Developer's approach to controlling and caring for vegetation;
- list of Developer's maintenance personnel, staff organization chart and staffing plan including geographical and functional responsibilities, positions, personnel ID numbers, qualifications, training and certification processes, work locations, work hours, and contact details;
- details of Contractors employed to undertake O&M Services;
- a list with addresses and phone numbers for all the facilities that will be used by Developer, including any off-site storage or maintenance facilities;
- a list and inventory of vehicles, tools, spare parts and other major equipment furnished by Developer to support the O&M Services;
- the O&M Services activities planned for next 24 months, on a monthly basis; and
- guidelines and procedures for the efficient, coordinated, and consistent implementation of the Operations Manual, Maintenance Manual, HSEMP, Transition and Phasing Plan, Renewal Work Plan, and any other plan required for the performance of the O&M Services.

The Owner does not warrant or guarantee in any way the outcomes achieved by Developer in using any of these documents.

III.5.2 Operations and Maintenance Manuals

Developer shall develop and submit as part of the O&M Services Plan, detailed Operations Manual and Maintenance Manuals based on its program of O&M Services. These manuals shall include the complete set of information detailing the specific operations and maintenance procedures for the execution of O&M Services, consistent with the O&M Services Plan, as well as the any warranty documentation. For the avoidance of doubt, these manuals shall exclude the activities of Sub-Concessionaires performed as part of the Concessions Program.

The Operations Manual and Maintenance Manual shall be used by Developer's and Developer-Related Entity's staff in the performance of the O&M Services and shall be updated in accordance with the requirements set forth in this Part III of these Technical Requirements.

Developer shall update the Operations Manual and Maintenance annually as part of the annual update to the O&M Services Plan and as necessary to comply with the requirements of the Contract Documents.

The Operations Manual and Maintenance shall be based on the specific Maintenance Work program of Developer and include, at a minimum, the following:

- security protocols and procedures respecting the requirements in <u>Section I.5.1</u> of these Technical Requirements;
- identify the locations and frequencies of each Elements subject to Maintenance Work;
- list of routine operations necessary to meet the Performance Standards;

- list of Planned Maintenance and preventive Routine Maintenance procedures and required frequencies for each space and Element;
- diagnostic procedures for Elements, equipment and systems;
- procedures and forms used for inspections including scheduling, programming, reporting and inspections systems;
- procedures for coordinating with the Owner for all maintenance and operations work that is the responsibility of the Owner;
- procedures for responding, assessing and remediating events related to the release of Hazardous Materials;
- procedures for responding, assessing, and remediating Emergencies, Incidents and extreme weather events;
- procedures for systematic coordination with the Owner and relevant third parties;
- procedures for maintenance and protection of pedestrian and vehicular traffic;
- copies of all Record Document BIM that detail the components of the Maintenance Work and Renewal Work to be provided by Developer;
- manufacturers' instruction manuals and service manuals as appropriate, including systems, software and equipment manufacturer's maintenance manuals;
- copies of all forms, checklists, certificates, etc., to be used by Developer's personnel in the execution of O&M Services; and
- user manuals.

Standard service manuals for commercially available equipment and products shall be acceptable as part of the Maintenance Manual only if the equipment provided is standard off-the-shelf equipment without any custom features or functions. Custom equipment and systems shall have custom Maintenance Manuals that include detailed information that addresses the custom features of the equipment provided and shall include drawings.

III.5.3 Renewal Work Plan

Developer shall develop and submit, as part of the O&M Services Plan, a detailed Renewal Work Plan. Developer shall update the Renewal Work Plan annually within 30 days prior to the beginning of each calendar year (as part of the annual update to the O&M Services Plan), and shall include revisions as may be reasonably indicated by experience and then-existing conditions respecting the Project, changes in drawing plan, changes in technology, and other relevant factors as necessary to comply with the requirements of the Contract Documents. Each update of the Renewal Work Plan shall include any changes to the Agreement or these Technical Requirements as they relate to Maintenance Work or Renewal Work.

The Renewal Work Plan shall provide an overview of the overarching approach to Renewal Work during the entire O&M Phase, identify the planned Renewal Work cycles (including replacement cycles) for each Element, and describe Developer's approach, assumptions, means and methods for the Renewal Work (including useful life and residual life assumptions) during the entire O&M Phase.

The Renewal Work Plan shall identify and detail the program, approach, procedures, records, type and schedule of Renewal Work that Developer shall perform during the next five calendar years to ensure that each Element continuously meets or exceed the requirements of the Agreement and these Technical Requirements including this Part III, the Performance Standards and the O&M Services Plan.

The Renewal Work Plan for all Developer's Renewal Work shall comply with the requirements of Part I, Part II, and this Part III.

The Renewal Work Plan shall identify the Renewal Work per space and Element and shall include, at a minimum, the following:

- identify the useful life for all spaces and Elements and identify the planned Renewal Work cycles (including replacement) for each Element for the Term;
- description of the type of Renewal Work for both Developer and the Owner anticipated to be performed at the end of the Element's residual life;
- description of any Renewal Work anticipated to be performed or that has been performed before the end of the Element's useful life, including reasons why this Work is anticipated or has been performed at the proposed time;
- description of the nature of Renewal Work and Renewal Work Schedule to be conducted over the following five calendar years in accordance with Section III.5.1 of these Technical Requirements;
- plans and procedures for information and communication and coordination with the Owner of upcoming Renewal Work;
- plans and procedures for maintenance and protection of pedestrian and vehicular traffic during Renewal Work per;
- plans and procedures for the coordination with the Owner and affected third parties in the planning and execution of Renewal Work;
- quality system for all Renewal Work;
- results of most recently completed inspections (including any the Owner independent inspections or audits) and how such results are incorporated into the Renewal Work;
- details of alterations or replacements to any structural Elements;
- description (including photographs) of the nature and dates of Renewal Work performed over the past calendar year, highlighting any unplanned activities;
- Renewal Work Schedule in accordance with Section III.5.3.1 of these Technical Requirements;
 and
- when the five-year Renewal Work Plan extends into the Handback Phase, all Work required to meet the Handback Requirements.

III.5.3.1 Renewal Work Schedule

Developer shall submit to the Owner for review and comment as Submittal Type 1 a Renewal Work Schedule as part of the Renewal Work Plan. The Renewal Work Schedule shall be planned and developed in cooperation with the Owner and other Government Entities or third parties impacted by such proposed Shutdowns to minimize the impact and avoid the scheduling conflicts.

The Renewal Work schedule shall identify the Renewal Work for each space and Element and provide a detailed schedule of Renewal Work to be conducted over the following five Calendar Years with a daily resolution for the 24 months, and monthly resolution for the 36 months thereafter. The Renewal Work Schedule shall include explanation, anticipated start and end dates and duration of each planned Renewal Work, and anticipated start and end dates and duration of Shutdowns along with a description of proposed Shutdowns and mitigating measures to avoid any Unavailability Event or negative impact on traffic.

Annual updates to the Renewal Work Schedule shall show the revisions, if any, to the prior Renewal Work Schedule and include an explanation of the reasons for such revisions.

III.5.4 Handback Work Plan at the end of the Term

This Section III.5.4 sets out Developer's proposed processes for:

- planning for the transition of operation and maintenance responsibilities to the Owner and acceptance of the Project assets and operation and maintenance responsibilities upon satisfaction of the acceptance criteria;
- the Owner staff training on all O&M manuals, systems, and procedures; and
- Developer shall submit a Handback Work Plan to the Owner for review and comment as Submittal Type 1, 36 months prior to the end of the Term.

The Section shall include any areas that are under remedial Work. Developer shall retain all remediation responsibility (and liability) until such time that Developer submits to the Owner a full description of the remedial Work and the results of such Work, and receives from the Owner acceptable documentation indicating that Developer has complied with all directives and fulfilled and completed their remediation obligations as directed by the relevant authority.

The Section shall include a transition plan, which shall detail how Developer will work with the Owner to ensure a seamless transfer of O&M responsibilities and safe operations back to the Owner, including training of the Owner staff.

At least six months prior to the scheduled date of expiration of the Term, Developer shall provide a comprehensive O&M training session for the Owner's staff which shall cover in detail all operations and maintenance functions of the Project, and an on-the-job transition project plan and schedule. The training session shall include a review of certain Project records as well as O&M Services Plan, O&M Manuals, CDMP, and other plans and procedures. The complete curriculum for this training session shall be contained in the Handback Work Plan.

In the event of termination of the Agreement prior to the stated expiration of the Term, Developer shall use its commercially reasonable efforts to provide such training to facilitate the transition operations and maintenance responsibilities back to the Owner, in accordance with the transition plan contemplated by Section 21.6.1 of the Agreement.