

Facilities Management Design Guidelines A/E Workbook

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER
FACILITIES MANAGEMENT DEPARTMENT
DESIGN GUIDELINES – A/E WORKBOOK
JUNE 13, 2024

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06/13/2024

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A/E WORKBOOK

*Greyed out items indicated UTSW Design Guidelines sections that are not included.

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INTRODUCTION

INTRODUCTION

I. Purpose

- A. The purpose of the A/E workbook is to facilitate a greater understanding and usage of the UTSW Design Guidelines.
- B. The content included in this document are excerpts from the UTSW Design Guidelines with commentary. Inclusion within this document is to more clearly identify required deliverables, codes, regulations, and guides for A/E usage.
 - 1. The Table of Contents includes greyed out text indicating UTSW Design Guidelines sections that are not included within this document.

DESIGN PHILOSOPHY SECTION A DESIGN PHILOSOPHY

EXHIBIT A.1 UTSW Room Numbering Standards

Project A/E shall use the following room numbering standards in all capital projects. Floor plans with room number and room names shall be submitted for review to the UTSW Planning / Masterbooks team and the FM Signage Manager during Schematic Design and Design Development (DD) for review and approval. After the DD review, all room numbers in design documents shall adhere to the approved standard numbering system. Any plan changes following DD, shall be reviewed by the UTSW Planning Team for compliance.

Room numbering system shall always make sense to the end user while creating a natural flow for users and guests. Room Numbering should facilitate visitor, employee, and faculty wayfinding. Room numbers shall be assigned using a holistic approach that considers how differing floor levels can still relate within a building. One way to do this is to have numbers 'stack' from floor to floor, where possible.

UTSW PM will provide A/E with existing facility CAD plan, identifying room numbers <u>prior to the room numbering process</u> undertaken for the project.

Project A/E shall assist departments with cubicle numbering as shown in Figure A.1-5.

Overall Room Numbering Review Process:

- I. A/E begins with current Facility CAD Plan sent from UTSW PM to review the entire plan area. Consideration shall be given to the context around the project area as changes must be done in relationship with existing spaces.
- II. Review the existing numbers of all the spaces affected by the renovation.
- III. Use the standards in this exhibit to apply new numbers.
- IV. In large capital projects, end-user operational processes, and workflows would need to be considered for numbered spaces to remain or change.
- V. During Schematic Design, the A/E shall submit a PDF of the demolition and proposed plans to the UTSW Planning / Masterbooks team for review and comment on room number convention.
- VI. During Schematic Design, A/E is to consult with UTSW PM if whole floor room numbering is required.
- VII. Sufficient notice is to be given to other end-users not involved in the scope of the project by the UTSW PM that room re-numbering will occur.
- VIII. Prior to the final DD meeting, the A/E shall submit a PDF of the demolition and proposed plans for UTSW Planning / Masterbooks team for coordination and compliance with UTSW Room Numbering Standards
 - A. Any plan changes during design milestone reviews by the A/E shall be digitally scanned and emailed to the UTSW Planning / Masterbooks team for record-keeping.
- IX. Room numbers shall go through a final review at the Design Development stage by the UTSW Planning / Masterbooks team via the UTSW PM.
 - A. Any room number and name corrections shall be digitally scanned and emailed to the A/E via the UTSW PM
 - B. A/E shall include corrections in Construction Documents
- X. UTSW PM may solicit consultation from the UTSW Planning / Masterbooks team and the Signage Manager to guide the Architect or Designers on room numbering and room nomenclature for complex wayfinding questions.

Room Numbering Guidance:

- I. Space numbers begin at Main Elevator/Entrance and flow clockwise, where possible, around the building, including stairwells
 - A. Note Elevators are not given room numbers. They are simply designated as "Elevator 1," "Elevator 2," etc.
 - B. Elevators can be assigned room numbers for finish schedules but are not part of the overall room numbering sequence.
- II. Spaces opening onto main and suite corridors alternate back and forth across the corridor, utilizing even numbers, like a hotel corridor.
- III. Main Elevator Lobby is number 100 (see Figure A.1-1)
 - a. Room number process near the main elevator lobby can be as followed 100A, 100B, 100C, etc.
 - b. If there are additional spaces on 100A, such as a Vestibule, Guest Services, or Wheelchair Storage, room numbering can begin as 100AA, 100AB, 100AC, etc.

IV. Corridors:

- a. Existing and Small Renovations: The longest, most visible corridor is 1 from the main elevator lobby. Otherwise, the corridors begin at the Main Entrance and either flow clockwise OR are numbered with main corridors having 1, 2, on horizontal axis then secondary vertical axis corridors 3, 4, etc. (see **Figure A.1-1 and Figure A.1-10**)
 - i. Corridor numbers shall only go up to 9. For example, Corridors 1.1, 1.2, 1.3, etc., up to 1.9.
 - ii. If additional corridor numbers are needed, a letter could follow behind corridor numbers such as 1.1a, 1.1b, and 1.1c. These additional corridors should be located near their main 1.1 corridor.
- b. New Buildings and Major Renovations: The longest, most visible corridor is CO1 from the main elevator lobby. Otherwise, the corridors begin at the Main Entrance and either flow clockwise OR are numbered with main corridors having CO2, CO3, on horizontal axis then secondary vertical axis corridors CO4, CO5, etc. (see **Figure A.1-1a and Figure A.1-10a**)
 - i. Corridor numbers shall only go up to 90. For example, Corridors C01, C02, C03, etc., up to C90.
 - ii. If additional corridor numbers are needed, a letter could follow behind corridor numbers such as CO1a, CO1b, and CO1c. These additional corridors should be located near their main CO1 corridor. If alcoves are located along the corridors, they will be identified as CO1A, CO1B, CO1C, etc.
- V. Rooms are numbered on the even numbers to allow for growth. For large areas that could be subdivided into smaller rooms later, skip several numbers in the sequence to prevent having to renumber the spaces not affected by renovations.
- VI. Rooms are numbered based on the hallway that they open into, even if they are generally accessed from an interior room. Opening onto a corridor overrides general use.
- VII. Rooms within a suite are typically numbered/lettered with direction depending on the point of main entry.
- VIII. Subspaces receive the same number as the room they open from with a sub-letter designation (ex. 400 has 400A, 400B, etc.) (**Figure A.1-2**)

SECTION A DESIGN PHILOSOPHY

- a. Subspaces within subspaces continue to add letters up to 3 letters (ex. 400A has 400A and that has 400AA and 400AAA)
- b. Subspaces do NOT carry an "I" or an "O" designation to avoid confusion between "1" or a "O"
- IX. Existing core and shell spaces will maintain their original room numbers, such as mechanical rooms, stairs, etc. whenever possible.

Figure A.1-1 – Existing and Small Renovation: Example showing main elevator lobby and corridor numbering.

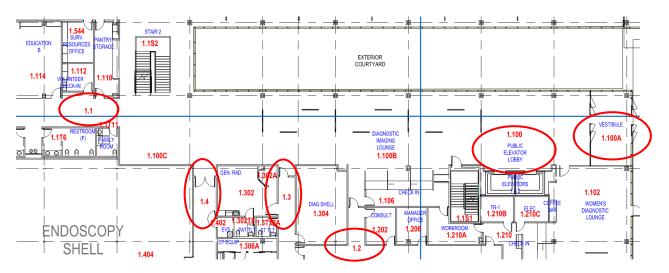


Figure A.1-1a – New Building and Major Renovation: Example showing main elevator lobby and corridor numbering.

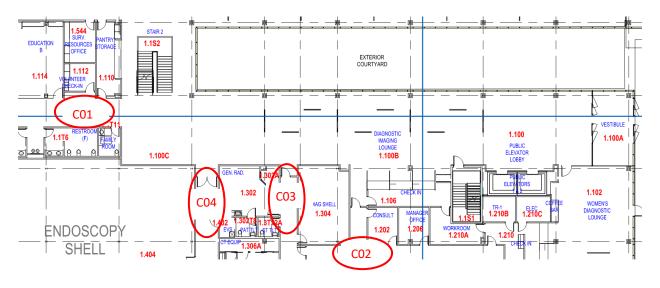
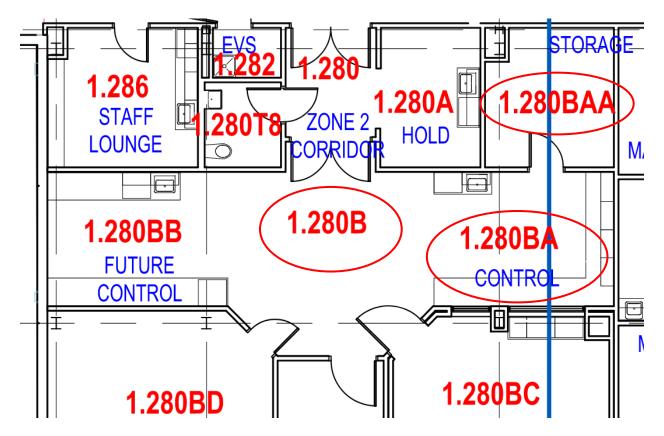


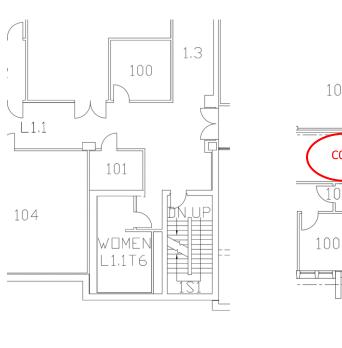
Figure A.1-2 – Example showing subspaces with sub-letter designation.

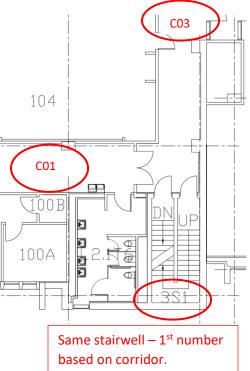


Stairs follow the formula below:

- I. Stairs are numbered in a new building project and will not be modified during renovations.
- II. L1.1S1
 - A. L = Building Designate
 - B. 1 = Floor or Level
 - C. .1 = Corridor Number the stair opens from on the current floor (this number can change between levels)
 - D. S = Designation for a Stairwell
 - E. 1 = Stair Number This MUST remain constant between floors (S1 is ALWAYS S1 even if it begins with 1, 2, 3, etc. per floor. This is an OSBC-Fire Safety requirement)
 - 1. Example **Figure A.1-3** same building, same stair number, different leading numbers based on corridors.

Figure A.1-3 - Example showing the stairs formula





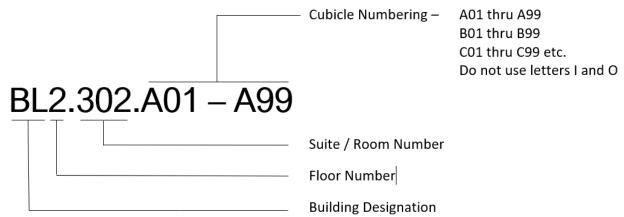
Restrooms follow the formula below:

- I. For restrooms, refer to Building Core Elements: Restrooms earlier in Section A
- II. RB1.7T12
 - A. RB = Building Designate for Redbird as an example
 - B. 1 = Floor or Level
 - C. .7 = Corridor Number the room is accessed from or Number Series of the room the toilet is a sub-room to
 - D. T = Designation for a toilet room / restroom
 - E. 12 = Use number of the toilet room as indicated in the UTSW Comprehensive Interior Signage Manual. In this example, a unisex staff, ADA restroom. It is unusual, but you can have more than one T12 in the same corridor/room. In this instance, the T number will have a letter suffix added (i.e., RB1.7T12A, RB1.7T12B, etc.)
 - 1. Example **Figure A.1-4** Toilet RB1.7T12A opens from corridor 1.7 and followed by restrooms following an alphanumeric sequence.
- III. If a restroom is added to an existing building, provide the next letter suffix in the "T" series depending on what corridor number it opens into.

Figure A.1-4 - Example showing the restroom formula and Figure A.1-8.



Figure A.1-5 – Example of cubicle numbering formula (for reference):



- I. Refer to the UTSW Comprehensive Interior Signage Manual for cubicle sign type.
- II. Cubicle numbering is for individual Departments' use and reference only and may not be reflected in the Facilities CAD Plans.

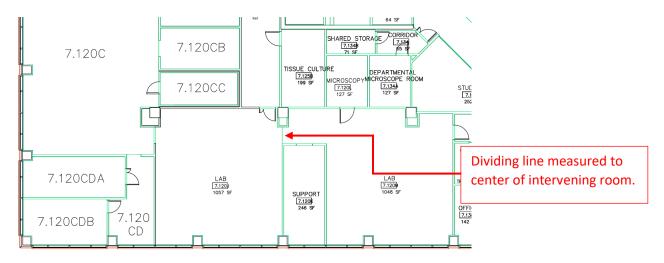
Exceptions to Standard Room Numbering

Labs and Open Offices pose specific challenges to numbering. Examples like the ones shown below in **Figure A.1-6** document the process for applying space divisions where elements like walls are not present.

Labs:

- I. Divisions within the larger spaces associated with benches and between hard walls carry a single room number.
- II. The shared space that functions as a corridor is divided between adjacent room numbers, typically to the center of the area between as shown below.

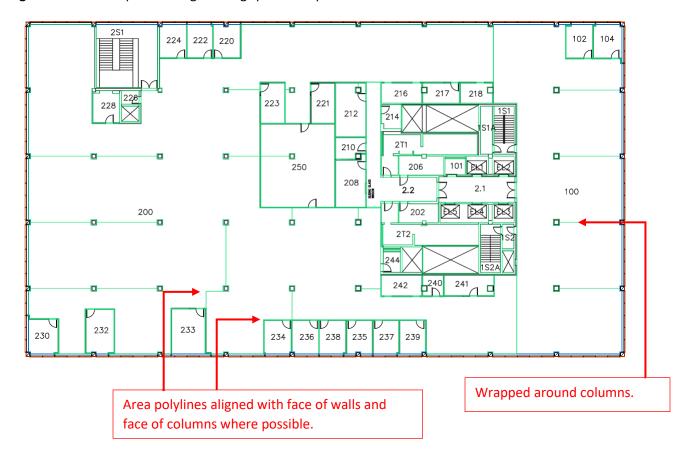
Figure A.1-6 - Example showing the division of open spaces



Open Office

UTSW may provide additional subspace designations to break larger lab or office spaces into smaller sizes.

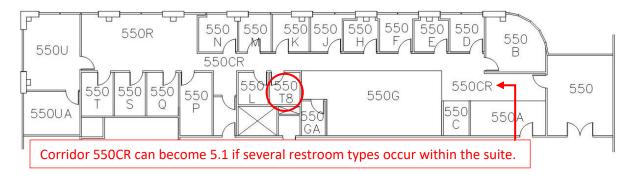
Figure A.1-7 - Example showing dividing spaces in open offices.



Leased Suites:

- Begin with a room number usually provided by Associate Director, UTSW PM, and/or
 Director of Real Estate Services who is familiar with the new and/or leased clinic either on
 campus or remote location.
 - a. For example, Suite 550 will usually be the Health Care Public Waiting Room or a main room entrance to a clinic. Refer to **Figure A.1-8.**
- II. A letter will follow behind each suite's room (550A, 550B, 550C etc.). A reminder to never use letters O and I.
 - a. Corridors will usually be labeled CR, in this case 550CR
 - b. Restroom's room numbering in Suites will follow the UTSW Comprehensive Interior Signage Manual. Refer to Restroom formula in previous A.1 section. An example in **Figure A.1-8** is a unisex ADA patient restroom would be 550T8.
- III. There are a few existing clinics and suites around UTSW campus which follow the same process for the suite exception. If there are renovation plans for existing clinic or hospital suites, here are some important items to remember:
 - a. Review the existing numbers of all the spaces affected prior to designing and/or modifying the function of a room.
 - b. Review the new assigned numbers with the UTSW PM and Drafting Technician (Planning).

Figure A.1-8 - Example showing suite numbering and toilet numbering in leased buildings



Due to software limitations of UTSW Facility Management Software, toilet room numbers may occasionally be changed by UTSW during the numbering process. The following pages illustrate a variety of examples of room numbering within the context of the entire floor.

Figure A.1-9 – Example showing F2 overall floor numbering.

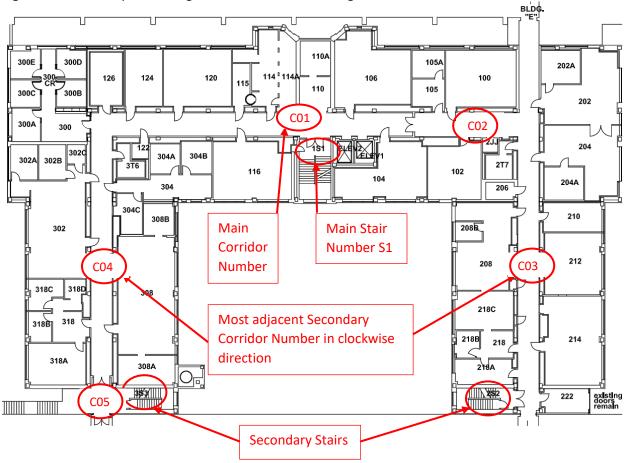
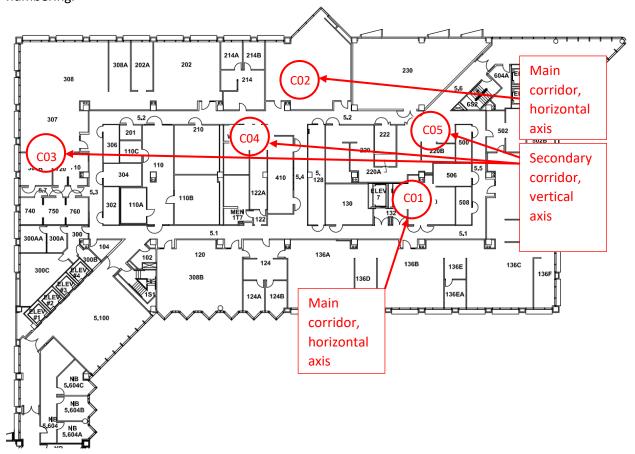


Figure A.1-10 – New Building and Major Renovations: Example of ND-5 showing corridor numbering.



DESIGN CRITERIA SECTION A1 MASTER SPECIFICATIONS

SECTION A1 – MASTER SPECIFICATIONS

I. Specification Guide

- A. IR Scope will be determined per project and the A/E shall confirm specification sections for inclusion with UTSW PM and IR for each project.
- B. See Exhibit A1.1 IR Specification Guide for Renovation Projects and Exhibit A1.2 IR Specification Guide for CIP Projects to assist on IR scope per project.

EXHIBIT A1.1 IR Specification Guide for Renovation Projects

Confirm With UTSW IR Per Project During Design Phase Meetings.

Sections Under the Scope of the GC are Standard Text.

Sections Under the Scope of IR/IR Vendor are Grey.

Division 26 – Electrical

26 33 53

27 13 13.13

27 13 22

27 13 23

27 13 23.13

	26 36 00	Transfer Switches
	26 36 23	Medium Voltage Automatic Transfer Switches
	26 41 13	Lightning Protection System
	26 43 13	Surge Protection Devices
	26 51 00	Lighting Fixtures
[Division 27 – Commu	nications
	27 05 00	Common Work Results for Communications
	27 05 26	Grounding and Bonding for Communications Systems
	27 05 28.15	Floorboxes and Poke-Thrus
	27 05 28.29	Hangers and Supports for Communications Systems
	27 05 28.33	Conduits and Boxes for Communication Systems
	27 05 28.36	Cable Trays for Communications Systems
	27 05 53	Identification for Communications Systems
	27 07 00	Communications Testing
	27 11 00	Communications Room Fit-Out
	27 11 13	Communications Entrance Protection
	27 11 16	Communications Cabinets, Racks, Frames, And Enclosures
	27 11 19	Communications Termination Blocks and Patch Panels
	27 11 23	Communications Cable Management
	27 11 26	Communications Rack Mounted Power and Power Strips
	27 13 13	Communications Copper Backbone Cabling

Communications Copper Cable Splicing and Terminations

Communications Optical Fiber Backbone Cabling, Exterior

Communications Optical Fiber Splicing and Terminations

Communications Optical Fiber Backbone Cabling

Uninterruptible Power Systems

SECTION A1 – MASTER SPECIFICATIONS

EXHIBIT A1.1 (Continued)

27 13 33	Communications Coaxial Backbone Cabling
27 15 13	Communications Copper Horizontal Cabling
27 15 33	Communications Coaxial Horizontal Cabling (Confirm Per Project)
27 15 43	Communications Faceplates and Connectors
27 16 19	Communications Patch Cords and Station Cords
27 51 14	Television Distribution Equipment
27 51 19	Sound Masking System (If required per scope)
27 52 23	Nurse Call System
27 53 13	Clock Systems (If required per scope)
27 53 13.13	Wireless Clock System (If required per scope)
27 53 18	WLAN
27 53 19	Internal Cellular and Antenna Systems
27 84 13	Communications Penetration Firestopping

IR Specification Guide for CIP Projects EXHIBIT A1.2

Confirm With UTSW IR Per Project During Design Phase Meetings.

Sections Under the Scope of the GC are Standard Text

Sections Under the Scope of IR/IR Vendor are Grey

Division 26 – Electrical

26 33 53	Uninterruptible Power Systems
26 36 00	Transfer Switches
26 36 23	Medium Voltage Automatic Transfer Switches
26 41 13	Lightning Protection System
26 43 13	Surge Protection Devices
26 51 00	Lighting Fixtures

Division 27 – Communications				
27 05 00	Common Work Results for Communications			
27 05 26	Grounding and Bonding For Communications Systems			
27 05 28.15	Floorboxes and Poke-Thrus			
27 05 28.29	Hangers and Supports for Communications Systems			
27 05 28.33	Conduits and Boxes for Communication Systems			
27 05 28.36	Cable Trays for Communications Systems			
27 05 53	Identification for Communications Systems			
27 07 00	Communications Testing			
27 11 00	Communications Room Fit-Out			
27 11 13	Communications Entrance Protection			
27 11 16	Communications Cabinets, Racks, Frames, And Enclosures			
27 11 19	Communications Termination Blocks and Patch Panels			
27 11 23	Communications Cable Management			
27 11 26	Communications Rack Mounted Power and Power Strips			
27 13 13	Communications Copper Backbone Cabling			
27 13 13.13	Communications Copper Cable Splicing and Terminations			
27 13 22	Communications Optical Fiber Backbone Cabling			
27 13 23	Communications Optical Fiber Backbone Cabling, Exterior			
27 13 23.13	Communications Optical Fiber Splicing and Terminations			
27 13 33	Communications Coaxial Backbone Cabling			

SECTION A1 – MASTER SPECIFICATIONS

EXHIBIT A1.2 (Continued)

27 15 13	Communications Copper Horizontal Cabling
27 15 33	Communications Coaxial Horizontal Cabling
27 15 43	Communications Faceplates and Connectors
27 16 19	Communications Patch Cords and Station Cords
27 51 14	Television Distribution Equipment
27 51 19	Sound Masking System (If required per scope)
27 52 23	Nurse Call System
27 53 13	Clock Systems (If required per scope)
27 53 13.13	Wireless Clock System (If required per scope)
27 53 18	WLAN
27 53 19	Internal Cellular and Antenna Systems
27 84 13	Communications Penetration Firestopping

End of Section A1

DESIGN CRITERIA SECTION B CODES AND STANDARDS

EXHIBIT B.1 NFPA Amendments - Texas Secretary of State

Texas Register for March 31, 2023, Adopted Rules Regarding

Title 28. Insurance Adopted Section
Part 1. Texas Department of Insurance
Chapter 34. State Fire Marshal

Title 28 Adopted Sections - March 2023

EXHIBIT B.2 Building Code Analysis

[TEMPLATE] — For CIP Projects, refer to DG Section B I. Final approved analysis shall be included within the Issue for Construction Drawings.

Code/Standards: Analysis Date: Project Phase:		
Applicable Codes (actual edition dependent upon 1. NFPA 101 Life Safety – 2021, effect 2. NFPA 1 Fire Code – 2021, effective 3. International Building Code – 2021 4. Texas Accessibility Standard – 2012 5. Etc.	ive September 1, 2023 September 1, 2023 Edition	
Note: The code requirements selected as the ba	asis for design are bolded.	
Code Issue	NFPA 101	<u>IBC</u>
Occupancy Classification 1. Offices and college classrooms With less than 50 occupants	Business 6.1.2.2	Group B 304.
Construction Classification 1. Main Building	Not addressed	Type IIA 403.3.1
Stair Pressurization	Not Required	1005.3.2.5
Distance between exits	250 ft. if sprinkled	250 ft. if sprinkled
Etc.		

UTSW Project Name: UTSW Project No.:

EXHIBIT B.3 Code Compliance Confirmation Review

[TEMPLATE] A/E to submit at DD and 75% CD at a minimum.

[Date]

[UTSW Project Manager]

UT Southwestern Medical Center Facilities Management – (A/E specify Department) 5323 Harry Hines Dallas, Texas 75390

Reference: Review Comments on [100% DD or 75% CD]

[UTSW Project name]

UTSW Project No. XXX-XXX Dear

[Project Manager]:

[For CIP: Code Consulting Firm (CCF)][For Renovation: A/E Firm] has completed its Code Compliance Confirmation review and has prepared review comments on the documents for the [DD or 75% Construction Documents] package for the referenced project.

In performing this current service, [CCF] [A/E] reviewed the following documents, furnished by A/E.

- DD or 75% Construction Documents Drawings dated [month dd, yyyy].
- DD or 75% Construction Documents Project Manual, Architectural Volume I Divisions 1- 14, dated [month dd, yyyy].
- DD or 75% Construction Documents Project Manual, M.E.P. Volume II Divisions 21 33, dated [month dd, yyyy].

The principal codes (actual edition dependent upon date of design contract) used in this review are as follows:

- International Building Code, 2021 Edition (IBC)
- NFPA 101, Life Safety Code, 2021 Edition (LSC) (effective September 1, 2023)
- NFPA 1, Fire Code, 2021 Edition (effective September 1, 2023)

Other applicable codes, standards, and regulations are listed in the Project Data shown on the Building Code Analysis Drawing 1.1 and in the Project Information Manual. Additionally, FEMA 100-year flood plain verification and TDI First Tier Coastal County wind load criteria were reviewed where applicable.

Description of Project

The [Project] consists of ...

Note: The follow major headings in this Code Compliance Confirmation Review Template are for reference only to demonstrate process.

EXHIBIT B.3 (continued)

Building Code Issues

Comments:

[Drawing 5.1, Drawing 10.21, Drawing 11.41 indicates there are accessible dwelling units. There is no table that indicates the discrete Apartment ID and Building ID for each accessible dwelling unit so that a user of the plans can see in one place the summary of accessible units.]

Requirements for Hazardous Materials and Laboratories

Insert comments as necessary.

Means of Exit Access

Insert comments as necessary.

Emergency and Standby Power

Insert comments as necessary.

Fire Water Supply

Insert comments as necessary.

FEMA 100-year Flood Plain

Insert comments as necessary.

TDI Windstorm Inspection Program

Insert comments as necessary.

Other Major Code Headings as Necessary

Insert comments as necessary.

Summary

Compliance with the comments stated in this letter does not relieve the A/E from complying with the Owners Design Guidelines, Owner's insurance/underwriting requirements, applicable NFPA Standards and State requirements.

Sincerely,

A/E Project Manager Texas License No. xxxxx

cc: Vice President, Facilities Management

Director, CIP

Director, Fire and Occupational Safety

PROJECT DELIVERY REQUIREMENTS SECTION C DELIVERABLE REQUIREMENTS FOR DESIGN DOCUMENTS

EXHIBIT C.1 Pending Issues / Project Tracking

(EXAMPLE FORMAT) A/E Shall prepare, maintain, and submit throughout Design Phases to IFC to record and track outstanding issues, concerns, and decisions.

Date Issued:
Project Name:
UTSW Project Number:
Original Project Scope Summary/Narrative:
Scope Changes and Dates:

Action Number	Date Action	Requested By	Requested Action	Responsible Party	Due Date For	Action Item / Comment	Status (Open /
	Initiated				Resolution		Closed)

EXHIBIT C.2 UTSW CAD Standards

I. Requirements

- A. The following items must be accurate for acceptance of the files submitted into UTSW FPD&C for record documents:
 - 1. All lines indicating objects (walls, doors, windows, etc.) must be continuous lines and not made up of partial lines or duplicated lines.
 - 2. Walls must match architectural conditions as found in the field. Specifically, walls must meet the exterior walls at mullions, not simply end into a window.
 - 3. If any special conditions found in the field must be noted along with the drawing file at the time of submittal for review by UTSW FPD&C.
 - 4. Layers as shown below are to be maintained and limited to only those layers listed. Any variance from this list requires prior written approval from UTSW FPD&C.
 - 5. Plans shall contain room names and room numbers within each room.
- B. Symbols used in CAD programs by the A/E shall match the symbols on UTSW provided MEP1 sheet.

ITEMS ON FACILITY PLAN	LAYER NAME
BUILT-IN EQUIPMENT	A-EQUP
BUILT-IN EQUIPMENT	A-EQUP-HIDN
CABINETS	A-CABT
DOORS	A-DOOR
DRAWING TITLE / NORTH ARROW	TITLE
FUME HOODS	A-HOOD
FURNITURE	A-FURN
LAB BENCHES	A-LAB-BENCH
ROOM NAMES	A-ROOM-NAME
ROOM NUMBERS	A-ROOM-NUMBER
SCALE	TITLE
SHELVES	A-CABT-UPPR
SINKS / PLUMBING FIXTURES	A-FIXT
STAIRS	A-WAL-PERM
STRUCTURAL ELEMENTS	S-COL

EXHIBIT C.2 (continued)

STRUCTURAL GRID S-COL-GRID

STRUCTURAL IDENTIFICATION S-COL-IDEN

WALLS – INTERIOR PARTITION A-WALL

WALLS – PERMANENT / BUILDING AND

WINDOW WALLS A-WALL-PERM

WINDOWS - INTERIOR A-WIND

EXHIBIT C.3 UTSW BIM Standards

Refer to UTSW Design Guidelines Exhibit C.3 if BIM Standards are required per contract.

EXHIBIT C.4 Storm Water Pollution Prevention Plan (SWPPP) Deliverables

I. General Requirements

- A. The A/E Civil Engineer (CE) is required to visit the site, in person, to evaluate the existing conditions before preparation of the SWPPP. The CE shall notify the UTSW PM at least ten (10) business days in advance of the site visit. The Owner may choose to participate in the site review. After visiting the site, the CE shall prepare the SWPPP book to include the sections listed below.
- B. The SWPPP is more than just a SWPPP drawing. A SWPPP book containing all the relevant SWPPP information for that project is to be maintained at the project site.
- C. This A/E guideline must be used in conjunction with UTSW Specification Section 01 57 23, Temporary Storm Water Pollution Control.

II. SWPPP Book Format

- A. As a minimum, one digital submission and two hard copies of the SWPPP book (one for UTSW headquarters, and one for jobsite) shall be prepared in the following format: 8-1/2 x 11-inch size paper bound in a 3-ring binder, 1-1/2-inch minimum, with table of contents, tabbed sections as described below, and with plan drawings (size and scale may vary depending on nature of project) folded and inserted.
- B. The binder is to include a cover page and spine insert on the outside of the binder indicating the title Storm Water Pollution Prevention Plan, the institution name, the UTSW project name and number, the consultant's name, and date prepared (month and year).

III. Title Page, Engineer's Seal, Signature and Date

A. First page of SWPPP book shall identify the title Storm Water Pollution Prevention Plan, the institution name, the UTSW project name and number, the consultant's name, and date (month and year) of preparation of SWPPP. Following identification of the project shall be the project engineer's seal, signature, and date.

IV. Table Of Contents

A. Include a table of contents in the SWPPP listing all ten (10) of the following Sections.

V. Section 1 - Notices of Intent (NOIs) And Permits or Construction Site Notices (CSNs) For Owner and Contractor and Notice of Termination (NOTs)

A. Draft versions of the SWPPP book shall include the incomplete unsigned NOI, CSN or NOT forms following the Table of Contents. After filing NOIs for Owner and Contractor, Owner shall distribute both completed and signed NOIs or CSNs for each copy of the SWPPP book, along with both copies of TCEQ TPEDES Construction Discharge Permits.

VI. Section 2 –Posting Notice/Contacts and Delegation Letters

A. For large construction sites of five (5) acres or larger include two (2) incomplete copies of the UTSW Posting Notice/Primary Points of Contacts form. Both forms will be completed later and posted at the entrance of the facility.

EXHIBIT C.4 (continued)

- B. A copy of the Owner's and Contractor's delegation of authority letters are to be kept in this section.
 - 1. Shared SWPPP Acceptance Certification

VII. Section 3 – Site Description

- A. This section of the SWPPP shall include a written description of the following items or map when appropriate:
 - 1. A description of the project site, followed by an 8-1/2" x 11" vicinity map. The vicinity map shall be of sufficient scale to show the project site location and the major streets and highways in and around the project location.
 - 2. A description of the nature of the project including impacts to other elements and any environmental impacts.
 - 3. Latitude and longitude of the site.
 - 4. A description of the intended sequence of major activities that disturb soils for major portions of the site (e.g., on-site mobilization, demolition, clearing, grubbing, excavation, grading, utilities, and infrastructure installation.). Include timing of activities when it becomes available.
 - 5. Estimates of the total number of acres of the campus and the total area of the site that is expected to be disturbed by excavation, grading, or other activities including off-site borrow and fill areas.
 - 6. An estimate of the runoff coefficient of the site for both the pre-construction and post-construction conditions and data describing the soil or the quality of any discharge from the site.
 - 7. The name of receiving waters and extent of wetlands.
 - 8. Identify any industrial activities such as concrete or asphalt batch plants associated with the construction of the project. If none, state so.
 - 9. A general location map or vicinity map (e.g. a portion of a city or county map), which locates the site within the overall drainage pattern of the city and/or county and shows the receiving waters and surface waters. The preference for the general location map is a color US Geological Survey Quadrangle map or equal. An 8 ½" x 11" general location map should be kept in this section or a larger quad map in the back of the 3-ring binder with other SWPPP drawings in the section titled exhibits.

VIII. Section 4 – General Permit Requirements

A. Copy of the permit requirements. Include copy of TCEQ TPDES General Permit TXR150000, March 5, 2013, containing the general permit requirements.

EXHIBIT C.4 (continued)

IX. Section 5 – Erosion and Sedimentation Controls

- A. Each SWPPP shall include a written description of appropriate control measures (i.e., Best Management Practices BMPs) that will be implemented as part of the construction activity to control pollutants in storm water discharges. The written description must clearly describe for each major activity, appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- B. Include an Erosion and Sediment Control Drawing and any control detail drawings illustrating the BMPs as exhibits in Section 10. Ensure the proposed locations of stabilized construction entrances and exits are shown on the Erosion and Sediment Control Drawing (see Section 10 of the A/E Guideline for additional contents of the drawing).
- C. Include a statement identifying which permittee is responsible for implementation.
- D. Include statements for Erosion and Sediment Controls Short- and Long-Term Goals and Criteria that include the following:
 - 1. The construction-phase erosion and sediment controls should be designed to retain sediment on site to the extent practicable.
 - All control measures must be properly selected, installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for site situations.
 - 3. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts. (i.e. sediment accumulation in streets and curbs).
 - 4. Sediment must be removed from sediment traps or sedimentation ponds when the design capacity has been reduced by 50 percent.
 - 5. Litter, construction debris, and construction chemicals exposed to storm water shall be prevented from becoming a pollutant source for storm water discharges (i.e. screening outfalls, picked up daily) Stabilization Practices include a description of interim and permanent stabilization practices for the project site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Use of impervious surfaces for stabilization should be avoided. Stabilization practices may include, but are not limited to:
 - a. Establishment of temporary vegetation
 - b. Establishment of permanent vegetation
 - c. Mulching
 - d. Geotextiles
 - e. Sod stabilization
 - f. Vegetative buffer strips

EXHIBIT C.4 (continued)

- g. Protection of trees
- h. Preservation of mature vegetation
- 1. Structural Practices include a description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices may include, but are not limited to:
 - a. Silt fences
 - b. Earth dikes
 - c. Drainage swales
 - d. Sediment traps
 - e. Check dams.
 - f. Subsurface drains
 - g. Pipe slope drains
 - h. Level spreaders
 - i. Storm drain inlet protection
 - j. Rock outlet protection
 - k. Reinforced soil retaining systems.
 - I. Gabions
 - m. Temporary and permanent sediment basins (detention ponds)
 - n. Stabilized construction exit
 - o. Rock berms

II. Section 6 – Maintenance

A. As a minimum, include a statement indicating that if site inspections identify BMPs that are not operating effectively, maintenance shall be performed before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls.

III. Section 7 – Spill Prevention

- A. List and describe the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. The general construction site superintendent is responsible for cleaning up and disposition of spills.
- B. Include a statement that spills and releases of hazardous material shall be reported to the UT Southwestern OSBC, as soon as there is knowledge of the spill. The OSBC Environmental Compliance Manager will determine if the spill is a reportable quantity and determine who must be notified. Include a statement that the contractor shall contain the spill until such time the OSBC can give direction or clean up.
- C. Include a statement that the SWPPP must be modified within 14 days of the spill to show any BMP modifications for spill prevention.

EXHIBIT C.4 (continued)

- D. Section 8 Inspections
 - a. Note to CE: Construction site "owned" by GC and responsibility of UTSW PM to make sure GC is being monitored to appropriately manage SWPPP process and any permits. This includes dumpsters.
- E. Include in the SWPPP a written description of all steps to be taken, by a qualified person, to perform inspections of site controls. Steps include but are not necessarily limited to items b. through h. below.
- F. Include statements that the owner and contractor's construction inspector shall be responsible for a routine inspection of on-site controls, once every seven (7) days, on Tuesday. One standard UTSW form shall be used for routine inspections. An after-rain event inspection will not be required if the 7-day inspection is followed.
- G. Include instructions to perform site inspections, at specified intervals and using UTSW inspection forms. Verify that all implemented site controls are functioning properly to prevent erosion and sedimentation. Note any and all deficiencies in site controls on inspection form. Inspection report forms are to be signed in accordance with the General Permit by a person qualified to make such inspections and by the individual designated as having certification authority.
- H. Include instructions to provide a copy of inspection report to party responsible for maintenance and repair of site controls. Keep copies of all inspection reports filed with SWPPP on site for review by EPA, TCEQ, MS4 operator officials, or Owner's representatives.
- Include instructions requiring when controls are found to be ineffective, or require
 modification to adequately prevent erosion and sedimentation, revise on-site copy of
 SWPPP to reflect changes made. Describe and illustrate the change and note date of
 change.
- J. Direct Contractor to perform regular inspections at beginning of workweek (Tuesday) to allow sufficient time for maintenance and repair of site controls during same workweek.
- K. Include instructions that all inspection reports, along with noted revisions to the SWPPP, shall be retained for a period of at least three years from the date the site is finally stabilized. Include copy of UTSW SWPPP Inspection Report Form. These forms are to be duplicated and used for inspection purposes.

IV. Section 9 – Non-Storm Water Discharges

- A. Include an inventory of the non-storm water substances expected to be present onsite during construction. Examples are:
 - 1. Discharges from firefighting.
 - 2. Fire hydrant flushing.
 - 3. Vehicle, building, and pavement wash water.
 - 4. Water used for dust control.
- B. If no non-storm water substances are expected, then include a statement indicating there are none.

EXHIBIT C.4 (continued)

V. Section 10 – Exhibits

- A. Erosion and Sediment Control Drawing (SWPPP drawing) plan drawing(s) and detailed drawing of controls, with plan sheet showing proposed improvements (building, paving, etc.) and indicating the following:
 - Existing drainage patterns indicated with post construction arrows to show direction of flow on site with destinations of flow described (both on-site and off-site destinations).
 - 2. Approximate slopes anticipated after major grading activities (steeper slopes shall require additional control measures until final stabilization).
 - 3. Areas of soil disturbance (limit disturbance as much as possible and protect as much of existing vegetation in place as possible).
 - 4. Areas which will not be disturbed (indicate intent to protect or preserve existing vegetation).
 - 5. Show limits of construction.
 - 6. Locations of major structural and non-structural controls identified in SWPPP (silt fences, berms, swales, dikes, inlet protection, etc).
 - 7. Locations where stabilization practices are expected to occur (exposed embankments during excavations, etc.).
 - 8. Locations of off-site material, waste, borrow or equipment storage areas (concrete wash pits, lay-down areas, soil stockpile areas, etc.).
 - 9. Surface waters (including wetlands or low areas, drainage channels, creeks, lakes, etc.).
 - 10. Locations where storm water discharges to surface water.
 - 11. Location and description of any discharge associated with industrial activity other than construction, including storm water discharges from dedicated asphalt plants and dedicated concrete plants, which is covered by this permit.
 - 12. Offsite material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.
- B. General Location Map (Quadrangle Map or equal).

EXHIBIT C.5 Survey Requirements

Refer to UTSW Design Guidelines Exhibit C.5 if Survey Requirements are required per project contract.

EXHIBIT C.6 Geotechnical Investigations

Refer to UTSW Design Guidelines Exhibit if Geotechnical Investigations Requirements are required per project contract.

EXHIBIT C.7 Basic Systems Data

(EXAMPLE) For CIP projects. To be revised throughout the design process. Submit at final DD.

Project:						
					roject No.:	
Areas:						
Gr	oss:					
As	signable:					
U-Values & SC Values:						
		Type 1	Type 2	Type 3	Type 4	Type 5
WALLS	U-Value					
	Location					
CLASS		Time 1	T	T 2	T 4	Time 5
GLASS	U-Value	Type 1	Type 2	Type 3	Type 4	Type 5
	SC Value					
	Location					
			L	L	I	I
ROOF		Type 1	Type 2	Type 3	Type 4	Type 5
	U-Value					
	Location					
FLOOR		Type 1	Type 2	Type 3	Type 4	Type 5
	U-Value					
	Location					
SLAB EDGE		Type 1	Type 2	Type 3	Type 4	Type 5
	U-Value					
	Location					

EXHIBIT C.7 Basic Systems Data (Continued)

COOLING SYSTEM

	Tons:	GPM:	·	
Туре:				
If served by central plant,	has plant capacity for this proje	ct been verified?	Yes:	_ No:
Confirmed by:				
HEATING SYSTEM				
1000 BTU:	Lb/Hr Steam:	or GPM HW:		Туре:
Prime Energy Source:				
If served by central plant,	has plant capacity for this proje	ct been verified?	Yes:	_ No:
Confirmed by:				
AIR SYSTEM Type:				
No. of prime units:		Total CFM:		
VENTILATION RATES				
CFM/person:	or CFN	ባ/sq. ft		
or Air Chg./Hr.:				
	Max. 0	D. A		
Vent Cycle?				
PLUMBING				
San. load:	FU	GPM		
Cold Water:		GPM		
Hot Water:	FU	GPM		
Storm Water:	FU	GPM		
ELECTRICAL LOADS				
Lighting:	watts/sq. ft.	kw total		
General Power:	watts/sq. ft.	kw total		
Special Power:	watts/sq. ft.	kw total		

EXHIBIT C.8 Cost Quantity Survey

(Example Format) For CIP Projects. Provide at the end of each design phase including IFC.

UT Southwestern Medical Center

Project Name:

UTSW Project Number / Work Order Number:

Title: (Design Development or Construction Document Estimate)

Summary: Base Bid (Repeat for Each Alternate Bid)

Date of Estimate:

		\$	\$/GSF (XX,XXX GSF)
DIVISION 01	GENERAL REQUIREMENTS	XXX,XXX	X.XX
DIVISION 02	EXISTING CONDITIONS	XXX,XXX	X.XX
DIVISION 03	CONCRETE	XXX,XXX	X.XX
DIVISION 04	MASONRY	XXX,XXX	X.XX
DIVISION 05	METALS	XXX,XXX	X.XX
DIVISION 06	WOOD, PLASTIC, AND COMPOSITES	XXX,XXX	X.XX
DIVISION 07	THERMAL AND MOISTURE PROTECTION	XXX,XXX	X.XX
DIVISION 08	OPENINGS	XXX,XXX	X.XX
DIVISION 09	FINISHES	XXX,XXX	X.XX
DIVISION 10	SPECIALTIES	XXX,XXX	X.XX
DIVISION 11	EQUIPMENT	XXX,XXX	X.XX
DIVISION 12	FURNISHINGS	XXX,XXX	X.XX
DIVISION 13	SPECIAL CONSTRUCTION	XXX,XXX	X.XX
DIVISION 14	CONVEYING SYSTEMS	XXX,XXX	X.XX
DIVISION 21	FIRE SUPPRESSION	XXX,XXX	X.XX
DIVISION 22	PLUMBING	XXX,XXX	X.XX
DIVISION 23	HVAC	XXX,XXX	X.XX
DIVISION 25	INTEGRATED AUTOMATION	XXX,XXX	X.XX
DIVISION 26	ELECTRICAL	XXX,XXX	X.XX
DIVISION 27	COMMUNICATIONS	XXX,XXX	X.XX
DIVISION 28	ELECTRONIC SAFETY AND SECURITY	XXX,XXX	X.XX
DIVISION 31	EARTHWORK	XXX,XXX	X.XX
DIVISION 32	EXTERIOR IMPROVEMENTS	XXX,XXX	X.XX
DIVISION 33	UTILITIES	XXX,XXX	X.XX
	SUBTOTAL:		
	ADD FOR GENERAL CONDITIONS%:	XXX,XXX	
Al	DD FOR GENERAL CONTRACTOR'S FEE%:	XXX,XXX	
	SUBTOTAL:	XXX,XXX	
	ADD FOR GENERAL CONTINGENCIES%:	XXX,XXX	
	SUBTOTAL:	XXX,XXX	X.XX
	(Describe, if any) SPECIAL CASH ALLOWANCE(S):	XXX,XXX	
	CONSTRUCTION CONTINGENCY ALLOWANCE:	XXX,XXX	
	TOTAL OF ESTIMATE:	XXX,XXX	

EXHIBIT C.8 (Continued) Cost Quantity Survey (Example)

UT Southwestern Medical Center Project Name:

UTSW Project Number / Work Order Number:

Title: (Design Development or Construction Document Estimate)

Summary: Base Bid (Repeat for Each Alternate Bid)

Date of Estimate:

REF.	DESCRIPTION	QUANTITY	<u>UNIT</u>		<u>RATE</u>	TOTAL
	- CONCRETE ST-IN-PLACE CONCRETE					
200 Retaining	g wall 1"6" deep	x,xxx	SF	XX.XX		XX,XXX
300 Concrete	topping slab	X,XXX	SF	XX.XX		XX,XXX
500 10"x 10"	Housekeeping Pad	X,XXX	EA	XX.XX		XX,XXX
510 6" House	keeping Pad	X,XXX	EA	XX.XX		XX,XXX

REFERENCE 03 30 00 - SUBTOTAL: XX,XXX

03 53 00 - CONCRETE TOPPING

010 Broom Finish concrete topping on X,XXX SF XX.XX

XX,XXX waterproof membrane

150 Concrete topping on waterproof X,XXX SF XX.XX

XX,XXX membrane to east and west terraces

REFERENCE 03 53 00 - SUBTOTAL: XX,XXX

03 35 00 - CONCRETE FINISHING

100 Broom finish to concrete topping and X,XXX SF XX.XX XX,XXX sidewalk

REFERENCE 03 35 00 - SUBTOTAL: XX,XXX

03 35 13 – HIGH-TOLERANCE CONCRETE FINISHES

010 Trowel top of elevated slabs	X,XXX	SF	XX.XX	XX,XXX
011 Deburr and patch bottom of slabs	X,XXX	SF	XX.XX	XX,XXX
015 Trowel top of pier caps	X,XXX	SF	XX.XX	XX,XXX
020 Rub finish round columns	X,XXX	SF	XX.XX	XX,XXX

REFERENCE 03 35 13 - SUBTOTAL: XX,XXX

EXHIBIT C.9 Signage Schedule Template

ROOM SIGN SCHEDULE							
Sign Number	Room Number	Room Description	SIGN TYPE	BRAILLE	QTY.	COMMENTS	
1	WA3.1T10	Restroom	346	YES	1	1,2,3,4,5	
2	WA3.102	Lobby	326	YES	1	1,2,3,4,5	
3	WA3.102A	Consultant Room	344	YES	1	1,2,3,4,5,6,7	
4	WA3.102B	Consultant Room	344	YES	1	1,2,3,4,5,6,7	
5	WA3.102C	Team Room	342	YES	1	1,2,3,4,5	
6	WA3.102D	Consultant Room	344	YES	1	1,2,3,4,5,6,7	
7	WA3.102E	Break Room	342	YES	1	1,2,3,4,5	
8	WA3.102F	Consultant Room	344	YES	1	1,2,3,4,5,6,7	
9							
10							
11							
12							
13							
14							
15							
16							
17							
		СОММ	ENTS				
1	General contract	tor to remove all existing	g signs.				
2	General Contrac	tor to patch and prep all	signage location	ons for new	signage	2.	
3a	All signs are prov	vided and installed by Sig	gnage Vendor.	Not in Con	tractor's	s Scope of	
3b	bid. A list of app	vided and installed by Sig roved Signage Vendors r ovide sample for approva	nay be obtaine	d from UTS	W. Ven	dors outside of	
4	All signage layou	its to be approved by UT	SW prior to ma	anufacture			
5	All signs to be installed in accordance with the UTSW Comprehensive Interior Signage						
6	Verify if occupar	ncy slider required					
7	Verify if schedule	e holder required					
8	Verify if name sli	ider required					

EXHIBIT C.10

Responsibility Matrix

The following responsibility matrix indicates UTSW preferences for purchasing, acquiring, and installing the items included. Project A/E shall confirm with the UTSW PM and Users if variation is present per project.

All equipment required for a project shall have the required utilities and infrastructure included within the project design to be constructed by the GC.

Items to be Identified and Quantified	Education, Research, Administrative (University)	Lease (University)	Ambulatory Clinic	Lease (Clinical)
Division 01		_		
Construction Dumpster	CFCI	CFCI	CFCI	CFCI
10 11 00 Visual Display Units				
Glass Markerboard (Wall Mounted) Mobile Glass Markerboard	OFOI OFOI	OFOI OFOI	OFOI OFOI	OFOI OFOI
10 14 00 Signs and Graphic Elements				
Room Signs, Building Signs, etc. as approved by UTSW Sign Shop and OSBC. OSBC & Lab Safety Signs as approved by UTSW Sign Shop and OSBC	CFCI CFCI	CFCI CFCI	CFCI	CFCI CFCI
10 21 23 Cubicle Curtains and Tracks				
Cubicle Tracks Cubicle Curtains	CFCI CFCI	CFCI CFCI	CFCI CFCI	CFCI CFCI
10 28 00 Toilet Accessories				
Paper Towel Dispenser (Manual) Paper Towel Dispenser (Auto) Soap Dispenser Tailet Baner Dispenser	CFCI CFCI CFCI		OFCI OFCI	
Toilet Paper Dispenser Toilet Seat Cover Dispenser (** As approved by BMO)	CFCI		OFCI OFCI	
Hand Sanitizer	CFCI		OFCI	
Built-in Trash Cans	CFCI		CFCI	
Built-in Trash Cans w/ Paper Towel	CFCI	act	CFCI	act
Loose Trash Cans	CFCI	* Per Contract	OFCI	* Per Contract
Sanitary Napkin Vending Unit	CFCI	r Cc	CFCI	r Cc
Sanitary Napkin Disposal	CFCI	. Pe	CFCI	. Pe
Specimen Pass Through	CFCI	*	CFCI	*
Folding Shower Seat, Shower Curtain Rod, Shower Curtain	CFCI		CFCI	
Under Lavatory Guards	CFCI		CFCI	
Custodial Accessories: Utility Shelf, Mop/Broom Holder, etc.	CFCI		CFCI	
Baby Changing Stations	CFCI		CFCI	
Additional Built-in Items: including grab bars, coat hooks, framed mirror units, etc.	CFCI		CFCI	

1			
Education, Research, Administrative (University)	Lease (University)	Ambulatory Clinic	Lease (Clinical)
CFCI	CFCI	OFOI	OFOI
CFCI	CFCI	CFCI	CFCI
CFCI	CFCI	OFOI	OFOI
CFCI	CFCI	CFCI	CFCI
CFCI	CFCI	OFCI	OFCI
NA	NA	OFCI	OFCI
CFCI	CFCI	CFCI	CFCI
CFCI	CFCI	CFCI	CFCI
CFCI	CFCI	CFCI	CFCI
Confi	rm per proj	ect, CFCI or	OFOI
Confi	rm per proj	ect, CFCI or	OFOI
CFCI	CFCI	CFCI	CFCI
			0. 0.
			0. 0.
CFCI	CFCI	CFCI	CFCI
	CFCI	CFCI	
	CFCI CFCI	CFCI CFCI	
CFCI			CFCI
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CFCI CFCI CFCI CFCI	CFCI CFCI CFCI	CFCI CFCI CFCI	CFCI CFCI CFCI CFCI
CFCI CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI
CFCI CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI
CFCI CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI	CFCI CFCI CFCI OFOI
	CFCI CFCI CFCI NA CFCI CFCI CFCI CFCI CFCI CFCI CFCI CFC	CFCI NA NA CFCI	CFCI CFCI OFOI CFCI CFCI OFOI CFCI CFCI OFOI CFCI CFCI OFCI CFCI CFCI OFCI NA NA OFCI CFCI CFCI CFCI CFCI CFCI CFCI CFCI CFCI

Items to be Identified and Quantified	Education, Research, Administrative (University)	Lease (University)	Ambulatory Clinic	Lease (Clinical)
11 53 19 Laboratory Specialty Equipment				
Sterilizer, Glass Washer, Dryer, Flammable Storage Cabinets	OFOI	OFOI	OFOI	OFOI
Tank Restraints	CFCI	CFCI	CFCI	CFCI
DI Water Unit, Water Purifier	OFOI	OFOI	OFOI	OFOI
Avidity Environmental System - Auto-water, environmental monitoring, lighting, room access controls.	CFCI	CFCI	-	-
Avidity Environmental System - In wall pathways and				
enclosures for low voltage controls	CFCI	CFCI	-	-
Allentown IVC Racks	OFOI	OFOI	-	-
Allentown VFV and Escutcheon	CFCI	CFCI	-	-
Animal Transfer Stations	OFOI	OFOI	-	-
Cage Processing Equipment (Rack wash, tunnel wash,	0501*	0501*		
bedding, and waste systems) *Confirm OFOI or OFCI	OFOI*	OFOI*	-	-
11 70 00 Healthcare Equipment			2.7.2.	2.7.2.
Healthcare Equipment	-	-	OFOI	OFOI
12 00 00 Furnishings				
Furniture, Chairs, etc.	OFOI	OFOI	OFOI	OFOI
12 10 00 Art				
Artwork	OFOI	OFOI	OFOI	OFOI
12 35 53 Laboratory Casework				
Metal or P-lam Laboratory Casework	CFCI	CFCI	CFCI	CFCI
12 36 00 Countertops				
Metal, Solid Surface, Epoxy, or P-lam	CFCI	CFCI	CFCI	CFCI
Stainless Steel Countertop	CFCI	CFCI	CFCI	CFCI
12 46 00 Furnishing Accessories				
Interior Waste and Recycling Containers	OFOI	OFOI	OFOI	OFOI
12 59 00 Systems Furniture				
*Power for direct connection by GC				
Office Furniture, Cubicles, Tables, Chairs, etc.	OFOI	OFOI	OFOI	OFOI
13 21 01 Special Purpose Rooms				
Pre-Manufactured Controlled Environmental Rooms, Clean				
Rooms, etc.	CFCI	CFCI	CFCI	CFCI
13 49 00 Radiation Protection				
Requirements per UTSW Medical Physics team and OSBC.	CFCI	CFCI	CFCI	CFCI

Items to be Identified and Quantified	Education, Research, Administrative (University)	Lease (University)	Ambulatory Clinic	Lease (Clinical)
13 49 46 MRI Radio Frequency Enclosure				
Requirements per UTSW Medical Physics team and OSBC.	CFCI	CFCI	CFCI	CFCI
14 92 00 Pneumatic Tube System		CECI	CECI	CECI
Pneumatic System and Components	-	CFCI	CFCI	CFCI
21 08 00 Commissioning of Fire Protection Systems		*D		*D
Commissioning of Fire Protection Systems	OFOI	*Per Contract	OFOI	*Per Contract
22 08 00 Commissioning of Plumbing Systems				
Commissioning of Plumbing Systems	OFOI	*Per Contract	OFOI	*Per Contract
22 40 00 Plumbing Fixtures				
Eye Wash - Counter / Deck Mounted	CFCI	CFCI	CFCI	CFCI
Eye Wash, Drench Hose - Counter / Deck Mounted	CFCI	CFCI	CFCI	CFCI
Toilet, Sink, Faucet, EWC, Shower, etc.	CFCI	CFCI	CFCI	CFCI
23 05 93 Testing, Adjusting, and Balancing 23 05 94 System Testing, Adjusting, and Balancing				
Test and Balance	OFOI	* Per Contract	OFOI	* Per Contract
23 08 00 Commissioning of HVAC Systems				
Commissioning of HVAC Systems	OFOI	*Per Contract	OFOI	*Per Contract
26 08 00 Commissioning of Electrical Systems				
Commissioning of Electrical Systems	OFOI	*Per Contract	OFOI	*Per Contract
Division 27 Communications				
Wall Mounted Displays Data Communications Network Cabling, Demolition, and Installation	*Confirm with IR per project.			
Data Damalikian (masis stress (C.)	0501	*Per	0501	*Per
Data Demolition (project specific) In-wall pathways and backbones for data communications	OFOI	Contract	OFOI	Contract
cabling.	CFCI	CFCI	CFCI	CFCI
27 52 23 Nurse Call System (Clinical)	-	-	CFCI	CFCI
In-wall pathways and backbones for audio visual	CFCI	CFCI	CFCI	CFCI

SECTION C SUBMITTAL REQUIREMENTS FOR DESIGN DOCUMENTS

Items to be Identified and Quantified	Education, Research, Administrative (University)	Lease (University)	Ambulatory Clinic	Lease (Clinical)
28 08 00 Commissioning of Fire Alarm Systems				
Commissioning of fire alarm systems.	OFOI	*Per Contract	OFOI	*Per Contract
Division 28 Electronic Safety and Security				
Card Reader Door Access Control Pathways, Cabling, Equipment, and Devices	CFCI	CFCI	CFCI	CFCI
28 15 23 - Internal Intercom Entry Systems (AIPhone)	CFCI	CFCI	CFCI	CFCI
28 15 23 - External Intercom Entry Systems (TalkaPhone) UTSW will program, install devices, and test.	CFCI	CFCI	CFCI	CFCI
28 23 00 - Video Surveillance System (Security)	CFCI	CFCI	CFCI	CFCI
Network Video Recording and Management System (NVRMS) - Security	OFOI	OFOI	OFOI	OFOI
Network Video Recording and Management System (NVRMS) - Clinical	OFOI	OFOI	OFOI	OFOI
28 23 33 – Clinical Video Observation System	CFCI	CFCI	CFCI	CFCI
32 30 00 Site Furnishings				
Exterior Waste and Recycling Containers Exterior Benches and Tables	CFCI OFOI	CFCI OFOI	CFCI OFOI	CFCI OFOI
	OFOI	OFOI	OFOI	OFOI
32 33 13 Site Bicycle Racks	CEC	CEC	CEC	CECI
Exterior Bicycle Racks	CFCI	CFCI	CFCI	CFCI

OFOI - Owner Furnished, Owner Installed

OFCI Owner Furnished, Contractor Installed

CFCI -Contractor Furnished, Contractor Installed

EXHIBIT C.11 Shop Drawing Reviews

The following is a reference only that indicates additional UTSW internal and external teams to be included for shop drawing reviews as noted in UTSW Master Specifications.

Shop Drawing Review and Approval	UTSW PM	UTSW OSBC	UTSW Building Maintenance	UTSW Utilities	UTSW Key Control	UTSW Access Control / Police	UTSW Elevator Shop	Specialty Consultant / Vendor
08 34 00 Special Function Doors	Х		Х		Х	Х		Х
08 41 26 All-Glass Entrances and Storefronts	Х		Х		х	х		Х
08 41 29 Automatic Entrances	Х		Х		Х	Х		Х
08 71 00 Door Hardware	Х		Χ		Х	Х		Х
08 71 13 Power Door Operators	Х		Х		Х	Χ		Х
10 22 33 Accordion Folding Partitions	Х		Х		Χ	Χ		Х
11 13 19 Stationary Loading Dock Equipment								
14 10 00 Dumbwaiters	Х	Х	Х	Х		Х	Х	Х
14 20 50 Elevators, 14 20 70 Elevator Cars 14 21 00 Electric Traction Elevators 14 22 00 Electric Traction Elevator Modernization	X	X	X	V		x	X	x
14 24 00 Hydraulic Elevators	X	^	X	X		^	^	X
22 00 10 Basic Plumbing Requirements 22 05 33 Heat Tracing for Plumbing								
Piping	Х		Χ	Χ				Х
23 00 00 Mechanical Design	V		V	V				V
Requirements 23 05 33 Heat Tracing for HVAC Piping	X		X	X				X
26 00 00 Basic Electrical Requirements	X		X	X				X
26 24 19 Motor Control Centers	X		X	X				X
32 31 36 Security Gates and Barriers	X		X	^		Х		X

PROJECT DELIVERY REQUIREMENTS SECTION C1 – DELIVERABLES CHECKLIST

_		_			1						_
Туре	Торіс	For specific drawing requirements, refer to DG Section B.	Prog.	SD	QQ	8	IFC	Submitted	Pending	N/A	Comments
		Status Legend In Submittal Phase: P - Preliminary;	U - U	pdate	e; F - I	inal					
Basic Requir	rements										
Report	Basic Data Form (CIP)	Refer to DG Section C, Exhibit C.8 to this document.	Р	U	U	U	F				
Report	Construction Cost Estimate (CIP)	Refer to DG Section C, Exhibit C.9	Р	U	U	U	F				
Report	Pending Issues Report	Refer to DG Section C, Exhibit C.1	Р	U	U	U	F				
Letter	Code Compliance Confirmation	Independent consultant for CIP, Refer to DG Section B									
	Reviews	and Exhibit B.3 for template. DD, 75% CD, and IFC.			Р	U	F				
Process	TAS Accessibility Plan Review	Confirm scheduling with UTSW PM									
Digital Subm	nissions										
	CAD Background	Refer to DG Section C, Exhibit C.2 for UTSW CAD Standards.					F				
	BIM Requirements	Refer to DG Section C, Exhibit C.5 if required.									
Specification	ns / Project Manual										
•	Schematic Design	Descriptive specifications and literature		Р							
	Design Document	Outline or preliminary for all disciplines and descriptive literature			U						
	Construction Documents	Completion level per progresses per stage of CD				U	F				
	Furniture and Equipment Packages			Р	U	U	F				
	Physicist / Shielding Report	Refer to DG Section B.			Р	U	F				
General Dra	wings										
Drawing	Building Code Analysis	Refer to DG Section B, Exhibit B.2	Р	U	U	U	F				
-	Cover and Titleblocks			Р	U	U	F				
	General Sheets	Includes: Project Data Sheet, Code Sheet, Life Safety									
		Code Compliance Statement.		Р	U	U	F				
Programmin	ng .						<u>'</u>				
Report		Facility Program, Narratives, and Applicable Code									
-		Requirements to be provided for all disciplines.	Р	U	F						
Report		Expected schedule projections for design and	1	1		1					
- 1		construction phases	Р	U	U	U	F				
Report	(CIP)	Preliminary Total Project Budget based on assemblies and anticipated quantities.	P	U	U	U	F				

Tuno	Tonic	For specific drawing requirements, refer to DG Section B.	Prog.	0	QQ	8	윤	Submitted	Pending	N/A	Comments
Туре	Topic						<u> </u>	S	Pe	IN/A	Comments
Civil and Lar	ndscane	Status Legend In Submittal Phase: P - Preliminary;	U - U	paate	e; F - I	rinai					
Civii ana zar	Survey										
		Refer to DG Section C, Exhibit C.6 for complete survey requirements.									
	SWPPP										
		Deadline and deliverables per contract and refer to DG Section C, Exhibit C.4									
Report		Note: At 50% - 75% CD, or as indicated by UTSW PM, submit SWPPP to UTSW PM for review/comment and approval. Confirm with OSBC.	P	U	U	F					
	Drawings	approvan committee cooper				•					
Drawing	Landscape Drawings	Plans and site plans.		Р	U	U	F				
Drawing	Civil Drawings	Plans and site plans.		Р	U	U	F				
Structure											
	Geotech										
Report	Geotechnical Investigations	Refer to DG Section C, Exhibit C.7.	F								
Report		Structural design report with a description of the proposed structural system, special features and project understanding.		Р	U	U	F				
	Calculations										
Report		If requested.									
	Drawings										
Drawing	Demo Plan(s)	Provide preliminary structural demolition drawings if demolition is required for the project, revise and refine at each following deliverable.		P	U	U	F				
Drawing	Plan(s)	Foundation, floor, and roof plans. Live load maps are required.		Р	U	U	F				
Drawing	Construction Details				Р	U	F				
Architecture											
Report		Architecture and interior design reports and others per discipline shall be provided that indicate scope of work involved including descriptions of all necessary systems in the project.		Р							
Report		Scope narrative.		Р	F						* Update at CD if changes occur.
Report		Program variance document.		Р	F						* Update at CD if changes occur.
Report		A Life Safety Code Design Report.		Р	U	F					

		For an existing described was a second to the DC Continue.						Submitted	Pending		
Туре	Topic	For specific drawing requirements, refer to DG Section B.	Prog.	8	8	8	윤	ubr	end	N/A	Comments
туре	Торіс						<u> </u>	Š	Ā	N/A	comments
Report		Status Legend In Submittal Phase: P - Preliminary; Revision and progression of elements presented in SD	U - U	paate) T-1	inai					
кероп		report, summary of site investigation, area tabulations									
		Description of construction phasing, if required.									
		Description of constituction phasing, if required.			U						
	Leadership Presentations										
Presentation	(CIP)	Confirm requirements with UTSW PM for initial and final									
	()	submissions.	Р	U	U						
	Drawings										
Drawing	Standard Accessibility Sheet			Р	U	U	F				
Drawing	Fire / Life Safety Drawings		1	Р	U	U	F			1	
Drawing	Site Plan(s)			Р	U	U	F				
Drawing	Circulation Path Plan		Р	U	F						
Drawing	Demo Plan(s)			Р	U	U	F				
Drawing	Floor Plan(s)			Р	U	U	F				
Drawing	Interior Finish Plan(s)				Р	U	F				
Drawing	Reflected Ceiling Plan(s)				Р	U	F				
Drawing	Roof Plan(s)				Р	U	F				
Drawing	Enlarged Floor Plan(s)				Р	U	F				
Drawing	Exterior Elevations			Р	U	U	F				
Drawing	Building Sections			Р	U	U	F				
Drawing	Wall Sections				Р	U	F				
Drawing	Wall Types	With STC or UL assembly indicated.			Р	U	F				
Drawing	Construction Details				Р	U	F				
Drawing	Door Schedule and Details				Р	U	F				
Drawing	Interior Elevations				Р	U	F				
Drawing	Furniture and Equipment Plans				Р	U	F				
Drawing	Perspective Renderings	If required per contract.		Р	U	U	F				
Drawing	Schedules				Р	U	F				
Drawing	Phasing	Information and drawings if required.		Р	U	U	F				
Report	Finish Binder (CIP)	Provide final selections at close-out.									
MEP General											
Drawing	UTSW MEP1 Sheet	Include most current sheet. Match UTSW symbols		Р	U	U	F				
Plumbing											
Report		Plumbing design reports that indicate scope of work									
		involved including descriptions of all necessary systems in									
		the project.	Р	U	F		<u> </u>				
Report		Design loads for Plumbing and Plumbing Fixture									
		requirements per code, special environmental									
		requirements, final calculations for all systems		Р	U	U	F				

								ited	<i>p</i> 0		
		For specific drawing requirements, refer to DG Section	ä		_			Submitted	Pending		
Туре	Topic	В.	Prog.	SD	DD	8	IFC	Sul	Pe	N/A	Comments
		Status Legend In Submittal Phase: P - Preliminary;	U - U	pdate	e; F - F	inal					
	SECO										
Report		Provide "Water Conservation Design Standard									
		Compliance Certification for State-Funded Buildings"									
		with initial draft of form submitted at SD.		Р	U	U	F				
	Drawings										
Drawing	Site Plan(s)			Р	U	U	F				
Drawing	Utility Plan(s)			Р	U	U	F				
Drawing	Demo Plan(s)			Р	U	U	F				
Drawing	Diagrams	Vent stack routing up through roof for all project vents,									
		riser diagrams, one-line diagrams for all systems, control									
		diagrams, and flow diagrams.		Р	U	U	F				
Drawing	Floor Plan(s)			Р	U	U	F				
Drawing	Roof Plan(s)			Р	U	U	F				
Drawing	Enlarged Floor Plan(s)				Р	U	F				
Drawing	Construction Details				Р	U	F				
Drawing	Schedules	Refer to DGs Section C – Equipment Schedules and					_				
		Coordination.			P	U	F				
Drawing	Design Criteria			Р	U	U	F				
Mechanical				ĺ							
Report		Mechanical design reports for HVAC system, gross design									
		loads, supply and return air system, principal piping									
		materials, and fire protection system. Shall include design									
		conditions.		Р	U	U	F				
	SECO										
Report		Provide SECO/ASHRAE 90.1 Compliance form initial draft									
		to be issued at SD.		Р	U	U	F				
	Design Criteria										
Report		Update and resubmit at final DD design calculations the									
		"Basic Data" form, refer to Exhibit C.8	Р	U	U	U	F				
	Drawings										
Drawing	Site Plan(s)			Р	U	U	F				
Drawing	DemoPlan(s)			Р	U	U	F				
Drawing	Diagrams			Р	U	U	F				
Drawing	Floor Plan(s)			Р	U	U	F				
Drawing	Roof Plan(s)			Р	U	U	F				
Drawing	Enlarged Floor Plan(s)				Р	U	F				
Drawing	Construction Details				Р	U	F				
Drawing	Controls	Include Sequence of Operations.			Р	U	F				

								pe			
		For specific drawing requirements, refer to DG Section	où.					Submitted	Pending		
Туре	Topic	В.	Prog.	SD	αa	8	IFC	Sub	Pen	N/A	Comments
		Status Legend In Submittal Phase: P - Preliminary;	U - U	pdate	e; F - I	Final					
Drawing	Schedules	Refer to DGs Section C – Equipment Schedules and									
		Coordination.			Р	U	F				
Electrical	<u> </u>										
Report	Schematic Design Report	Electrical report shall provide indicated scope of work									
		involved including descriptions of all necessary systems in									
		the project.		Р	U	U	F				
Report	Lighting Controls	Lighting controls Sequence of Operation (SOO) or									
		Narrative.		Р	U	U	F				
	Drawings										
Drawing	Site Plan(s)		-	Р	U	U	F			1	
Drawing	Utility Plan(s)			Р	U	U	F				
Drawing	DemoPlan(s)			Р	U	U	F				
Drawing	Diagrams	One-line or riser diagram, nominal power riser diagram,									
		emergency power riser diagram, grounding riser diagram.									
				Р	U	U	F				
Drawing	Floor Plan(s)	Power plans.		Р	U	U	F				
Drawing	Lighting Plan			P	U	U	F				
Drawing	Roof Plan(s)			Р	U	U	F				
Drawing	Enlarged Floor Plan(s)			-	P	U	F				
Drawing	Construction Details				P	U	F				
Drawing	Controls			-	P	U	F				
Drawing	Panel Schedules				P	U	F				
Drawing	Light Schedules				Р	U	F				
Drawing	Equipment Schedules	Refer to DGs Section C – Equipment Schedules and			_	l	_				
Daniela -	51 16 1	Coordination.			Р	U	F				
Drawing	Electrical Calculations	Lighting photometrics, fault current/coordination,		P	U	u	_				
Data / Tashu	nology / Security	emergency power, and electrical load.		٢	U	U	F				
Data / Techn	lology / Security	Design criteria for each discipline, code requirements,									
		special environmental requirements, final calculations									
		for all systems.									
		ioi ali systeilis.		Р	U	U	F				
	Drawings										
Drawing	Communications Site Plan(s)		_	P	U	U	F			1	
Drawing	Communications Utility Plan(s)		_	Р	U	U	F			1	
Drawing	Communications Demo Plan(s)		-	P	U	U	F				
Drawing	Communications Plan(s) / RCP(s)		_	P	U	U	F			1	
Drawing	Communications Room Plan(s)		_	Р	U	U	F			1	
Drawing	Communications Details				Р	U	ΙF				

Туре	Торіс	For specific drawing requirements, refer to DG Section B.	Prog.	SD	DD	9	IFC	Submitted	Pending	N/A	Comments
		Status Legend In Submittal Phase: P - Preliminary;	U - U	pdate	e; F - F	inal					
Drawing	Security Plan(s) / RCP(s)			Р	U	U	F				
Drawing	Security Details				Р	U	F				
Drawing	Audiovisual (AV) Plan(s) / RCP(s)			Р	U	U	F				
Drawing	Audiovisual (AV) Details				Р	U	F				
Drawing	Audiovisual (AV) Schedules	Refer to DGs Section C – Equipment Schedules and Coordination.			Р	U	F				
Fire Protection											
		Final updated design criteria, code requirements, and special requirements.			U						
	Drawings										
Drawing	Site Plan(s)			Р	U	U	F				
Drawing	Utility Plan(s)			Р	U	U	F				
Drawing	DemoPlan(s)			Р	U	U	F				
Drawing	Floor Plan(s)			Р	U	U	F				
Drawing	Enlarged Floor Plan(s)				Р	U	F				
Drawing	Construction Details				Р	U	F				
Drawing	Schedules	Refer to DGs Section C – Equipment Schedules and Coordination.			Р	U	F				

DOCUMENT HISTORY

Issue Date	Description	Editor
06/13/2024	Initial Issuance	EV