IAH-TERMINAL - SECURITY EXIT LANE

SECURE EXIT LANE BREACH CONTROL

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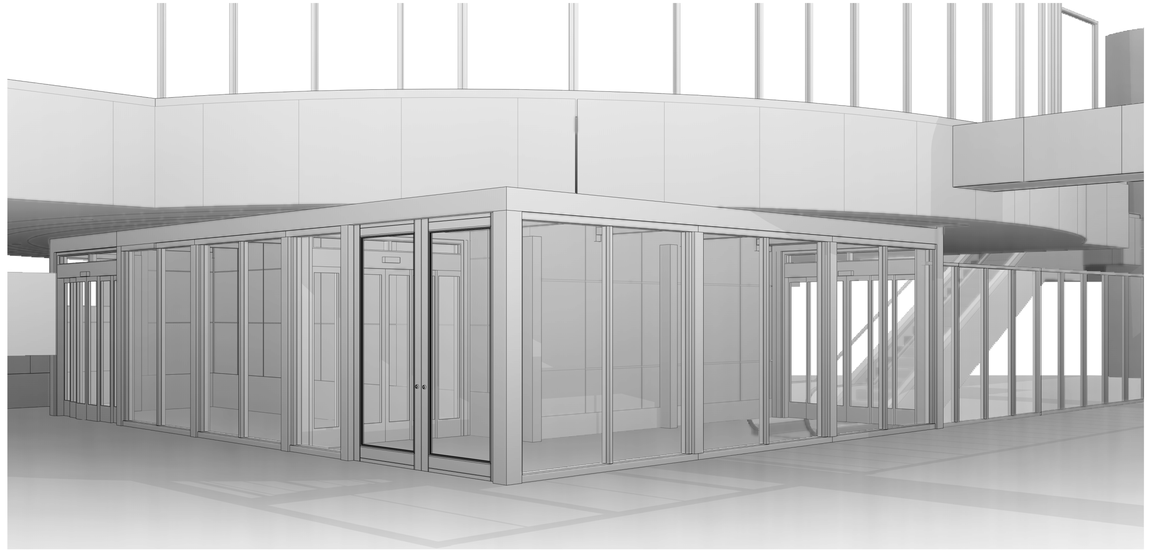
ISSUE FOR BID
100% CD 3



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PROJECT No. 1004345

3 10-20-21

FILENAME: C:\@RevitLocals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
STAMP: 10/21/2021 1:05:39 AM

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HAS DESIGN SIGN-OFF

HAS - PROJECT MANAGER
DESIGN AS SUBMITTED IS APPROVED FOR CONSTRUCTION DOCUMENTATION

DEPARTMENT OF AVIATION
RECOMMENDED:

HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE

HAS TIP 21-157 - IAH

PROJECT NUMBER
1004345

SHEET TITLE
COVER SHEET / SHEET INDEX

SHEET NUMBER
G000

SHOP DRAWINGS & SUBMITTALS

1. THE GENERAL CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH SHOP DRAWINGS FOR REVIEW AND APPROVAL, FOR ALL, BUT NOT LIMITED TO, THE FOLLOWING: MISC. STEEL, WAYFINDING AND SIGNAGE. SHOP DRAWINGS SHALL BE SUBMITTED IN THE FORM OF DIGITAL PDF PRINTS. SHOP DRAWINGS SHALL NOT BE REPRODUCTIONS OF CONTRACT DOCUMENTS.
2. CONTRACTOR NEEDS TO PROVIDE A COMPLETE MESSAGE SCHEDULE AND COMPLETE FABRICATION / ASSEMBLY DETAILS FOR ALL SIGNS FOR VERIFICATION PURPOSES AND SIGNED AND SEALED ENGINEERED DRAWINGS FOR SIGNAGE MOUNTING AND SUPPORTS.
3. THE GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SUBMITTALS, AND SHALL ORDER AND SCHEDULE DELIVERY OF MATERIALS TO AVOID DELAYS IN CONSTRUCTION. IF AN ITEM IS FOUND TO BE UNAVAILABLE OR TO HAVE A LONG LEAD TIME, THE GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY WITH A PROPOSED ALTERNATIVE.
4. THE CONTRACTOR SHALL SUBMIT FINAL CLOSEOUT DOCUMENTS FOR REVIEW.

PATCHING, REPAIR & FINISH WORK

1. THE GENERAL CONTRACTOR SHALL INCLUDE ALL X-RAY (OR OTHER REQUIRED IMAGING) AND CORE DRILL COSTS. THE GENERAL CONTRACTOR SHALL REVIEW AND COORDINATE THE SIZE AND LOCATION OF ALL SLAB OPENINGS WITH ALL RELATED DISCIPLINES. THE GENERAL CONTRACTOR SHALL SUBMIT PROPOSED LOCATIONS OF CORE DRILLING AND SLAB OPENINGS TO ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH THE WORK.
2. PATCH, REPAIR, AND INSTALL ALL FIREPROOFING AS REQUIRED BY CODE. FIREPROOF ALL NEW PENETRATIONS AS REQUIRED FOR APPROVAL BY THE AUTHORITY HAVING JURISDICTION.
3. SLAB PENETRATIONS SHALL BE SEALED AS REQUIRED TO MAINTAIN FIRE RATING, USING MATERIALS AND METHODS APPROVED BY THE AUTHORITY HAVING JURISDICTION. EXPANSION MATERIAL SHALL BE APPROVED BY THE ARCHITECT.
4. ALL DEBRIS SHALL BE REMOVED FROM THE SITE ON A DAILY BASIS, OR AS DIRECTED BY THE AUTHORITY HAVING JURISDICTION. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS FROM THE BUILDING CREATED BY THE WORK PROVIDED UNDER THIS CONTRACT AND LEAVE ALL AREAS CLEAN. TRASH IS NOT PERMITTED TO BE BURNED ON SITE.
5. ALL ABANDONED AND MISCELLANEOUS NAILS, HANGERS, STAPLES, WIRES, CONDUITS AND DEBRIS SHALL BE REMOVED FROM EXPOSED AREAS OF THE FLOORS, WALLS, AND CEILINGS. REMOVE ALL ABANDONED PIPE SLEEVES IN FLOOR SLABS. PATCH EXISTING SLAB AS REQUIRED TO MAINTAIN UL FIRE RATING OF FLOOR SLAB WHERE PIPES AND CONDUITS HAVE BEEN REMOVED.
6. THE GENERAL CONTRACTOR SHALL CONTINUOUSLY CHECK ARCHITECTURAL AND STRUCTURAL CLEARANCES FOR ACCESSIBILITY OF EQUIPMENT AND MECHANICAL AND ELECTRICAL SYSTEMS. NO ALLOWANCES OF ANY KIND WILL BE MADE FOR THE GENERAL CONTRACTOR'S NEGLIGENCE TO FORESEE MEANS OF INSTALLING EQUIPMENT INTO POSITION.
7. THE FINISHED WORK SHALL BE FIRM, WELL-ANCHORED, IN TRUE ALIGNMENT, PLUMB, LEVEL, WITH SMOOTH, CLEAN, UNIFORM, APPEARANCE WITHOUT WAVES, DISTORTIONS, HOLES, MARKS, CRACKS, STAINS, OR DISCOLORATION. JOINTING SHALL BE CLOSE FITTING, NEAT AND WELL SCRIBED. THE FINISHED WORK SHALL HAVE NO EXPOSED UNSIGHTLY ANCHORS OR FASTENERS AND SHALL NOT PRESENT HAZARDOUS, UNSAFE CORNERS. ALL WORK SHALL HAVE THE PROVISION FOR EXPANSION, CONTRACTION AND SHRINKAGE AS NECESSARY TO PREVENT CRACKS, BUCKLING, AND WARPING DUE TO TEMPERATURE AND HUMIDITY CONDITIONS.
8. GENERAL CONTRACTOR SHALL WAIVE "COMMON PRACTICE" AND "COMMON USAGE" AS CONSTRUCTION CRITERIA WHEREVER DETAILS AND CONTRACT DOCUMENTS OF GOVERNING CODES, ORDINANCES, ETC. REQUIRE QUANTITY OR BETTER QUALITY THAN COMMON PRACTICE OR COMMON USAGE WOULD REQUIRE.
9. ATTACHMENTS, CONNECTIONS OR FASTENERS OF ANY NATURE ARE TO PROPERLY AND PERMANENTLY BE SECURED IN CONFORMANCE WITH INDUSTRY BEST PRACTICES. THE DRAWINGS HIGHLIGHT SPECIAL CONDITIONS ONLY AND BY NO MEANS ILLUSTRATE EVERY CONNECTION. THE CONTRACTOR IS RESPONSIBLE FOR IMPROVING CONNECTION ACCORDINGLY.
10. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY ACCESS PANELS WHICH MAY BE REQUIRED PRIOR TO PROCEEDING WITH THE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TRADES. REQUIRED ACCESS PANELS SHALL BE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK.

PROJECT CONDITIONS

1. THE TERM "BASE BUILDING" MEANS THE EXISTING STRUCTURES WITHIN THE PROPERTY SITE WHERE THE PROJECT AND THE WORK IS CONSTRUCTED.
2. DRAWING FOR THE WORK IS BASED ON OWNER-FURNISHED BASE BUILDING DOCUMENTS AND UPON THE ARCHITECT'S LIMITED VISUAL OBSERVATIONS OF LATENT EXPOSED CONDITIONS AT THE TIME OF COMMENCING THE ARCHITECT'S DESIGN CONSULTING SERVICES.
3. THE GENERAL CONTRACTOR SHALL REVIEW AND VERIFY EXISTING CONDITIONS AS PROVIDED IN THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL DISCREPANCIES, ERRORS, INCONSISTENCIES OR AMBIGUITIES PRIOR TO PROCEEDING WITH THE WORK. ANY UNREPORTED DEFICIENCIES WILL BECOME THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CORRECT.
4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR, AND PROVIDE PROTECTION OF, ANY EXISTING FINISHES, MATERIALS, AND EQUIPMENT TO REMAIN. THE GENERAL CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED FINISHES, MATERIALS, AND EQUIPMENT AS A RESULT OF THE WORK. ALL EXISTING FINISHES TO REMAIN SHALL BE CLEANED AT THE COMPLETION OF CONSTRUCTION. THE GENERAL CONTRACTOR SHALL PHOTOGRAPH AND DOCUMENT ALL EXISTING DAMAGES, AND PROVIDE TO THE ARCHITECT, PRIOR TO PROCEEDING WITH THE WORK.
5. THE GENERAL CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST BETWEEN THE LOCATIONS OF EXISTING AND PROPOSED NEW WAYFINDING AND SIGNAGE (INCLUDING BUT NOT LIMITED TO STRUCTURAL MEMBERS, PIPING, DUCT WORK, CONDUIT AND SPRINKLERS) AND THAT CLEARANCES FOR INSTALLATION ARE PROVIDED. ELEMENTS IN CONFLICT SHALL BE DOCUMENTED AND PROVIDED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
6. IN THE EVENT OF CONFLICT BETWEEN DATA SHOWN ON DRAWINGS AND DATA PROVIDED IN THE SPECIFICATION. THE GENERAL CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE ARCHITECT OF ANY DISCREPANCIES, PRIOR TO PROCEEDING WITH THE WORK.
7. THE GENERAL CONTRACTOR SHALL NOT PROCEED WITH WORK FOR WHICH HE EXPECTS ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT AND OWNER. FAILURE TO OBTAIN SUCH AUTHORIZATION SHALL INVALIDATE A CLAIM FOR EXTRA COMPENSATION. THE CONTRACTOR SHALL NOT PROCEED WITH WORK WHICH, IF COMPLETED IN STRICT CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS, WILL RESULT IN ADDITIONAL WORK BEYOND THE SCOPE OF THE CONTRACT WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT AND OWNER. ANY FIELD CONDITIONS THAT SIGNIFICANTLY VARY FROM THE CONTRACT DOCUMENTS OR WILL RESULT IN ADDITIONAL WORK, SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
8. DO NOT SCALE DRAWINGS. STATED & WRITTEN DIMENSIONS GOVERN. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL BE RESPONSIBLE FOR THEIR ACCURACY. NO EXTRA CHARGE OR COMPENSATION SHALL BE ALLOWED BECAUSE OF DIFFERENCE BETWEEN ACTUAL DIMENSIONS AND THOSE INDICATED ON THE DRAWINGS, UNLESS THEY CONTRIBUTE TO A CHANGE IN THE SCOPE OF THE WORK. ANY DIFFERENCE FOUND SHALL BE SUBMITTED TO THE ARCHITECT FOR COORDINATION PRIOR TO ORDERING, MANUFACTURING, OR PROCEEDING WITH THE WORK. HORIZONTAL DIMENSIONS INDICATED ARE TO/FROM FACE OF FINISH, UNLESS NOTED OTHERWISE. VERTICAL DIMENSIONS ARE FROM TOP OF FLOOR SLAB EXCEPT WHERE NOTED TO BE ABOVE FINISHED FLOOR (AFF). DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL OF ARCHITECT UNLESS NOTED +/-.
9. MATERIALS INDICATED TO BE REUSED MUST BE FREE OF DEFECTS AND BE IN GOOD CONDITION OR SHALL BE REPLACED WITH NEW. UNDER THIS CONTRACT, ANY MATERIAL INDICATED TO BE REUSED WHICH IS NOT FREE OF DEFECTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT VIA A WRITTEN REQUEST FOR INFORMATION PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTORS USE OF BUILDING

1. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL BUILDING MANAGEMENT SECURITY REQUIREMENTS, INCLUDING PROJECT SITE ACCESS RULES.
2. LIMIT USE OF BASE BUILDING FOR THE WORK AND FOR CONSTRUCTION OPERATIONS, TO ALLOW CONTINUED OCCUPANCY AND USE.
3. CONFINE OPERATIONS WITHIN DESIGNATED STAGING AREAS AND COORDINATE USE OF BASE BUILDING FACILITIES AS APPROVED BY THE OWNER.
4. THIS PROJECT WILL REQUIRE WORK WITHIN THE SIDA (SECURITY IDENTIFICATION DISPLAY AREA) AREAS. THE GENERAL CONTRACTOR AND HIS SUBCONTRACTORS ARE TO HAVE PROPER SECURITY TRAINING AND CREDENTIALS AS REQUIRED AND GRANTED BY HAS. THE CONTRACTOR AND THEIR SUBS ARE TO BE AWARE OF THEIR LOCATIONS WHILE WORKING IN THESE AREAS AND PROPER BADGING MUST BE DISPLAYED AT ALL TIMES. ALL COSTS ASSOCIATED WITH OBTAINING TRAINING AND CREDENTIALS TO ACCESS THE SIDA, ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF WORK.
5. COORDINATE ANY SECURITY DEVICE REMOVAL / RELOCATION WITH HAS PRIOR TO COMMENCEMENT OF WORK.
6. MAINTAIN PROPER PATHS AND IDENTIFICATION OF EMERGENCY EGRESS.

PROJECT GENERAL DESCRIPTION

OVERALL PROGRAM NAME:
IAH TERMINAL - SECURITY EXIT LANE

PROJECT DESCRIPTION:
THE BASIS OF DESIGN IS TO PROVIDE AN EXIT LANE BREACH CONTROL (ELBC) SYSTEM THAT AUTOMATICALLY WATCHES PEOPLE AND OBJECTS FLOW THROUGH AIRPORT EXIT LANES (DEFINED AS A PASSENGER TRANSITION AREA CONTAINING A LINE OF DEMARCATION BETWEEN THE STERILE AND NON-STERILE AREA WHERE PASSENGERS ARE UNABLE TO RETURN WITHOUT SCREENING) AND PROVIDE AUTOMATED PHYSICAL BARRIER(S) PREVENTING ACCESS BACK INTO THE STERILE AREA.THE ELBC SYSTEM SHALL CONTINUOUSLY, SILENTLY, RELIABLY AND AUTOMATICALLY MONITOR THE EXIT LANE TO ACCURATELY DETECT PEOPLE TRAVELLING THE WRONG WAY AND OBJECTS THROWN FROM THE PUBLIC TO THE STERILE SIDE IN THE EXIT LANE WITHIN THE PROTECTED ZONES OF DETECTION.

PROJECT GENERAL NOTES

1. HOUSTON AIRPORT SYSTEMS (HAS) SHALL BE DESIGNATED AS "THE OWNER", PGAL ARCHITECTS SHALL BE DESIGNATED AS "THE ARCHITECT". GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH) SHALL BE DESIGNATED AS "THE LANDLORD". THE GENERAL CONTRACTOR SHALL BE BOTH LICENSED AND BONDED IN TEXAS AND SHALL PROVIDE DOCUMENTS UPON REQUEST.
2. THE WORK SHALL BE DONE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF ALL APPLICABLE SAFETY AND BUILDING CODES, AND AS APPROVED BY THE AUTHORITY HAVING JURISDICTION, INCLUDING OBSERVING ALL RULES AND REGULATIONS IN AN AIRPORT SECURE ENVIRONMENT.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SECURING AND PAYING FOR ALL PERMITS REQUIRED FOR THE WORK AND FOR THE SCHEDULING OF ALL REQUIRED INSPECTIONS DURING THE COURSE OF THE WORK.
4. THE CONTRACTOR SHALL VERIFY THAT THE DRAWINGS ARE THE LATEST ISSUE BEFORE COMMENCING CONSTRUCTION.

HAS STANDARDS

1. THIS PROJECT IS TO FOLLOW HOUSTON AIRPORT SYSTEM (HAS) STANDARDS FOR ALL DISCIPLINES. HAS STANDARDS CAN BE FOUND AT THEIR WEBSITE, HTTP://WWW.HOUSTONAIRPORTS/BIZ/TIP.
2. ANY CONFLICTS BETWEEN HAS STANDARDS AND BID/CONSTRUCTION DOCUMENTS ARE TO BE BROUGHT TO THE ARCHITECTS ATTENTION VIA RFI.
3. ANY FLOOR PENETRATION WILL NEED TO BE X-RAY SCANNED. THIS INCLUDES BUT NOT LIMITED TO FLOOR ANCHORS, CORE, ETC. ALL SCANS ARE TO BE SUBMITTED TO HAS / EOR FOR REVIEW BEFORE WORK CAN BE PERFORMED.
4. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE PREMISES AND SHALL BASE THE BID ON THE EXISTING CONDITIONS IN CONJUNCTION WITH THESE DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO THE BID OF ANY DISCREPANCIES FOUND WITH THESE DOCUMENTS OR CONFLICTS WITH EXISTING CONDITIONS VIA WRITTEN REQUEST FOR INFORMATION.
5. PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION, THE CONTRACTOR SHALL VERIFY THE GENERAL LAYOUT AND EXACT LAYOUT OF ALL WAYFINDING AND SIGNAGE AND REPORT ANY QUESTIONS OR DISCREPANCIES TO THE ARCHITECT FOR RESOLUTION VIA A WRITTEN REQUEST FOR INFORMATION.

FACILITIES

1. CORE DRILLING. THE CONTRACTOR SHALL SCAN THE AREA PRIOR TO CORE DRILLING OF CONCRETE STRUCTURES. THE CONTRACTOR SHALL USE THE GROUND PENETRATING RADAR (GPR) METHOD. THE CONTRACTOR SHALL SUBMIT A COPY OF THE GPR RESULTS TO AIRPORT STAFF, PRIOR TO CORE DRILLING, VERIFYING THAT THE AREA IS CLEAR OF CONDUITS/REBAR/PORT TENSION TENDONS/ETC.
2. HOT WORK PERMIT. THE CONTRACTOR SHALL OBTAIN A HOT WORK PERMIT FROM THE AIRPORT FOR WELDING, CUTTING, GRINDING, OR ANY OTHER ACTIVITY INVOLVING OPEN FLAMES, SPARKS, OR OTHER IGNITION SOURCES THAT MAY CAUSE SMOKE, FIRE, OR CAN TRIGGER THE FIRE DETECTION SYSTEM.

AIRSIDE / LANDSIDE

1. THE CONTRACTOR SHALL NOT BLOCK THE TERMINAL PASSENGER PATHS AND SHALL NOT BLOCK THE TSA CHECKPOINT AREAS.
2. THE CONTRACTOR SHALL MAINTAIN THE PATH OF TRAVEL TO AND FROM THE WORK AREA IN A CLEAN MANNER. THE CONTRACTOR SHALL CLEAN THE PATH OF TRAVEL, AS NEEDED AND REMOVE ANY DUST/DEBRIS FROM THE PATH OF TRAVEL.
3. BADGING : THE GENERAL CONTRACTOR'S BID SHALL INCLUDE THE COSTS OF ALL HAS BADGING FOR THE GENERAL AND SUBCONTRACTOR'S STAFF

SECURITY

1. HAS APPROVAL OF THE REQUIRED "SECURITY PLAN" IS REQUIRED PRIOR TO THE START OF ANY WORK. THE SECURITY PLAN MUST BE SUBMITTED TO HAS FOR REVIEW AND APPROVAL. THE "SECURITY PLAN" SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING:

- DATES AND TIME OF WORK
- CONTRACTOR NAME & CONTACT INFORMATION
- BADGING OF CONSTRUCTION PERSONNEL
- SUMMARY OF WORK, INCLUDING ATTACHED PLAN
- PERSONNEL & VEHICLE SECURITY CLEARANCE INFORMATION
- PERSONNEL & VEHICLE ACCESS INFORMATION. SHOW ALL PENETRATIONS OF THE SECURITY BOUNDARY. DESIGNATED ROUTE FOR WORKERS TO ACCESS VARIOUS WORK AREAS MUST BE PROVIDED & APPROVED. IDENTIFY THE PATH OF TRAVEL TO THE WORK SITE AND IDENTIFY ANY ELEVATORS AND OR DOORS TO BE USED TO ACCESS THE SITE.
- CONSTRUCTION DEBRIS - SHOW HOW CONSTRUCTION DEBRIS WILL BE DISPOSED OF OR TRANSPORTED OFF SITE
- SHOW PROPOSED LAYDOWN AREAS
- CONTACT AIRPORT SECURITY COMPLIANCE FOR TIMELINES FOR SUBMISSION AND COORDINATION OF WORK UNDER TSA GUIDELINES
- THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING PRIOR TO THE START OF WORK

CLIENT

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DEPARTMENT OF AVIATION
RECOMMENDED:
HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-156 - IAH

10-20-21

DRAWING HISTORY

No.	DATE	DESCRIPTION
1	08-06-21	100% CD
2	09-09-21	FOR INFORMATION AND REFERENCE ONLY
3	10-20-21	ISSUE FOR BID/100% CD

PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
GENERAL PROJECT INFORMATION

SHEET NUMBER
G002

FILE NAME: C:\@RevitLocals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
DATE STAMP: 10/20/2021 10:57:10 PM

APPLICABLE CODES

BUILDING CODE	**2012 IBC -** INTERNATIONAL BUILDING CODE (WITH COH AMENDMENTS)
MECHANICAL CODE	**2012 UMC -** UNIFORM MECHANICAL CODE (WITH COH AMENDMENTS)
ELECTRICAL CODE	**2017 NEC -** NATIONAL ELECTRICAL CODE (STATE MANDATED)
PLUMBING CODE	**2012 UPC -** UNIFORM PLUMBING CODE (WITH COH AMENDMENTS)
FIRE CODE	**2012 IFC -** INTERNATIONAL FIRE CODE (WITH COH AMENDMENTS)

APPLICABLE CODES

LIFE SAFETY CODE	**NFPA -** NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 1,10,13,14, 20, 70, 72, 101, 220, 221)
ENERGY CODE	**2015 IECC -** INTERNATIONAL ENERGY CONSERVATION CODE (WITH COH AMENDMENTS)
ENERGY CODE	**ASHRAE 90.1-2013** (WITH COH AMENDMENTS)
ACCESSIBILITY	**2012 - TAS** - (TEXAS ACCESSIBILITY STANDARDS / ADA

CONSTRUCTION CLASSIFICATION

OCCUPANCY TYPE:	A, NO CHANGE
NUMBER OF STORIES:	3 STORY
CONSTRUCTION TYPE:	1A
SPRINKLED:	YES
FIRE RATING OF COLUMNS:	3 HRS
STRUCTURAL ELEMENTS:	BEAMS : 3HR ELEVATOR SHAFTS : 2HR FLOORS : 3 HR
PARKING REQUIREMENTS:	N/A - EXISTING, NO CHANGE IN OCCUPANCY
REQUIRED OCCUPANCY SEPARATION:	NONE

FIRE PROTECTION

FIRE SPRINKLER:	EXISTING TO COMPLY WITH NFPA 13
FIRE ALARM:	TO COMPLY WITH NFPA 72
FIRE EXTINGUISHER CABINETS:	MAX DISTANCE TO FIRE EXTINGUISHER IS 75 FEET

EXIT ACCESS TRAVEL DISTANCE

TABLE 1016.2

OCCUPANCY	W/ SPRINKLER SYSTEM (FT)
A, E, F-1, M,R, S-1	250
I-1	250
B	300
F-2, S-2, U	400

COMMON PATH OF EGRESS TRAVEL

TABLE 1014.3

OCCUPANCY	W/ SPRINKLER SYSTEM (FT)
B, S	100
ALL OTHERS	75

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY (IBC TABLE 803.9)

	SPRINKLERED		
GROUP	EXIT ENCLOSURES AND EXIT PASSAGEWAYS	CORRIDORS	ROOMS AND ENCLOSED SPACES
A	B	B	C

FIRE PROTECTION SYSTEMS (IBC SECTION 903)

AUTOMATIC FIRE SPRINKLER SYSTEM PER NFPA 13 TO BE PROVIDED W/ 100% COVERAGE ON EACH LEVEL.
FIRE EXTIGUISHERS PROVIDED. IFC TABLE 906.3(1)

OCCUPANCY CALCULATIONS (IBC TABLE 1004.1.2)

Room #	Name	Area	Occ. Type	OLF	Occ. Load	SIDA / NON-SIDA
LEVEL 2 - TICKETING						
201	BREAK ROOM	928.24 SF	A-3	15 SF	62	NON-SIDA
202	STORAGE	116.42 SF	S-1	300 SF	1	NON-SIDA
203	IDF	106.49 SF	S-2	300 SF	1	NON-SIDA
204	STORAGE	122.03 SF	S-1	300 SF	1	NON-SIDA
205	MANAGER'S OFFICE	225.74 SF	B	100 SF	3	NON-SIDA
206	TSA IT	118.26 SF	S-2	300 SF	1	NON-SIDA
211	NEW LOBBY	1,073.6 SF	A-3	100 SF	11	NON-SIDA
212	ECONOMY	172.16 SF	B	100 SF	2	NON-SIDA
215	SOUTH QUEUEING	5,929.94 SF	A-3	100 SF	60	NON-SIDA
216	NORTH QUEUEING	5,378.38 SF	A-3	15 SF	359	NON-SIDA
217	SOUTH TICKETING	6,174.42 SF	A-3	15 SF	412	NON-SIDA
218	NORTH TICKETING	8,497.57 SF	A-3	100 SF	85	NON-SIDA
219	EXISTING LOBBY	7,946.79 SF	A-3	100 SF	80	NON-SIDA
223	GLOBAL SERVICES	789.58 SF	A-3	15 SF	53	NON-SIDA
207	REMOTE RESOLUTION ROOM	465.42 SF	B	100 SF	5	SIDA
208	PSR	56.88 SF	B	100 SF	1	SIDA
209	ELECTRICAL	15.08 SF	S-2	300 SF	1	SIDA
210	SOUTH SSCP	4,071.75 SF	A-3	100 SF	41	SIDA
213	ELECTRICAL	15 SF	S-2	300 SF	1	SIDA
214	NORTH SSCP	3,743.01 SF	A-3	100 SF	38	SIDA
220	CIRCULATION	9,745.6 SF	A-3	100 SF	98	SIDA
221	SHELL SPACE	1,602.32 SF	M	60 SF	27	SIDA
222	SHELL SPACE	1,700.2 SF	M	60 SF	29	SIDA
					1372	
TOTAL					1372	

EGRESS WIDTH PER OCCUPANT SERVED (IBC TABLE 1005.1)

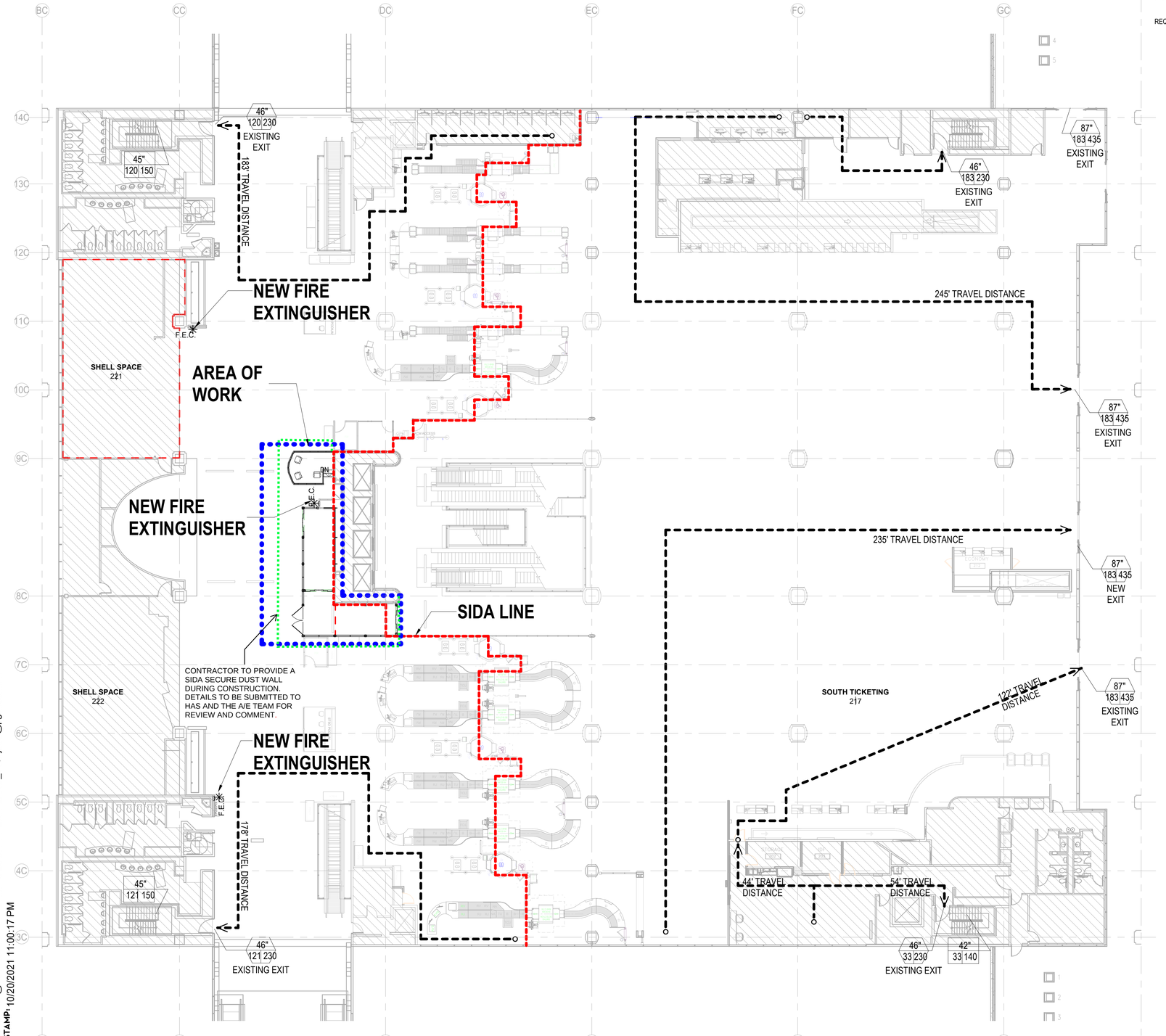
DOORS	MIN. REQUIRED	AVAILABLE CLEAR WIDTH PROVIDED
LEVEL 2: 0.2" X 1,131 OCC = 226.2 INCH/OCC	226.2"	527" PROVIDED
LEVEL 2: 0.2" X 241 OCC = 48.2 INCH/OCC	48.2"	92" PROVIDED

CORRIDOR FIRE-RESISTANCE RATING (IBC TABLE 1018.1)

GROUP	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (HOURS)
		WITH SPRINKLER SYSTEM
A,B,E,F,M,S,U	GREATER THAN 30	0

MINIMUM NUMBER OF EXITS PER OCCUPANT LOAD (IBC 1021)

OCCUPANT LOAD (PERSONS PER STORY)	MINIMUM # OF EXITS (PER FLOOR)(REQUIRED)	# OF EXITS PROVIDED
LEVEL 1: 1-500	2	5



LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL C LIFESAFETY 1/16" = 1'-0" (1)

FILE NAME: C:\@RevitLocals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
DATESTAMP: 10/20/2021 11:00:17 PM

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DEPARTMENT OF AVIATION
RECOMMENDED:

HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE

HAS TIP 21-156 - IAH

REGISTRATION

10-20-21

DRAWING HISTORY

№	DATE	DESCRIPTION
2	09-09-21	FOR INFORMATION AND REFERENCE ONLY

PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

1004345

SHEET TITLE

LIFE SAFETY ANALYSIS

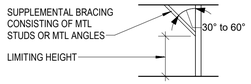
SHEET NUMBER

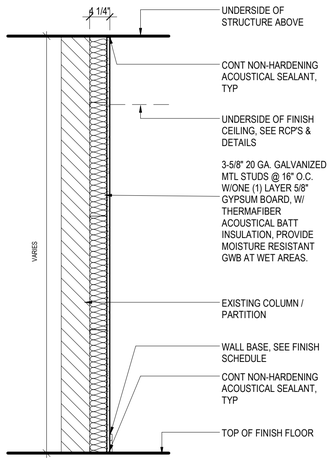
2 G003

COLD FORMED FRAMING NOTES

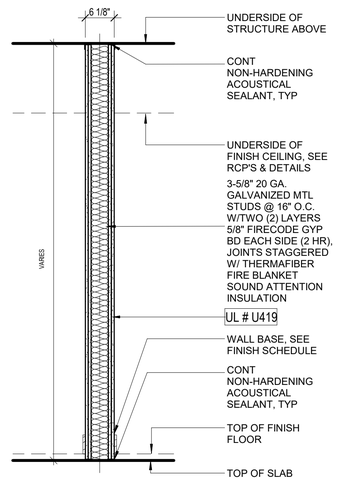
ALL METAL STUDS TO BE 20 ga. AND PLACED AT 16 INCHES 0.C. UNLESS NOTED OTHERWISE OR WHERE THE LIMITING HEIGHT REQUIRES 16ga AT 16" O.C.

1. ALL FURRING CHANNELS TO BE 25 ga. AND PLACED AT 16 INCHES 0.C. UNLESS NOTED OTHERWISE.
2. PARTITIONS SUPPORTING WALL HUNG PLUMBING FIXTURES SHALL BE 16 ga. AND PLACED 16 INCHES O.C.
3. REFER TO STRUCTURAL DRAWINGS FOR STUD ga. SIZE AND SPACING FOR ALL STRUCTURALLY DESIGNED PARTITIONS.
4. REFER TO ASTM C754 FOR LIMITING HEIGHTS CRITERIA. LIMITING HEIGHTS ARE TO BE DETERMINED BY DEFLECTION CRITERIA RATIO OF L/240, AND LATERAL PRESSURE OF 5 PSF UNLESS NOTED OTHERWISE OR DICTATED OTHERWISE BY PRESIDING BUILDING CODE. WHERE FLOOR TO STRUCTURE HEIGHT OF PARTITION EXCEEDS THE INDICATED LIMITING HEIGHT, PROVIDE SUPPLEMENTAL BRACING TO THE STRUCTURE OVERHEAD AS REQUIRED TO MAINTAIN REQUIRED DEFLECTION RATIO.
5. FOR PARTITIONS WITH "BRITTLE" FINISHES SUCH AS PLASTER AND CERAMIC TILE, DESIGN PARTITION SYSTEM TO MAINTAIN DEFLECTION RATIO WITHIN L/360. SUSPENDED CEILINGS SHALL NOT BE CONSIDERED AS BRACING.

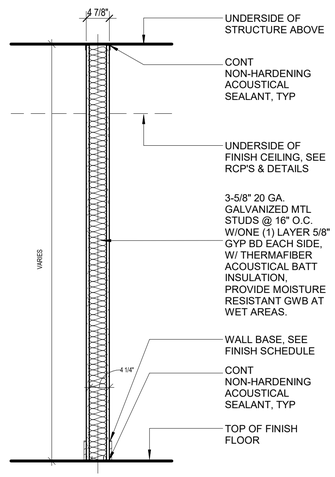




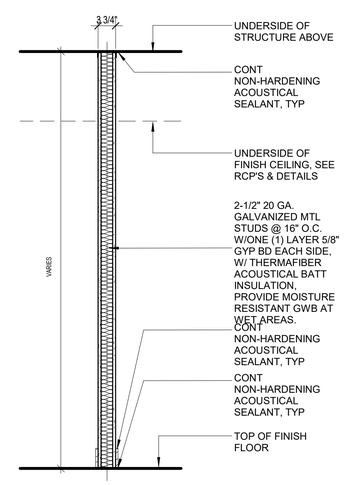
B7.1 FURRING WALL PARTITION 3-5/8" STUD 3/4" = 1'-0" (4)



B2.1 RATED PARTITION1 3/4" = 1'-0" (2)



B1.3 NON-RATED PARTITION 3-5/8" STUD1 3/4" = 1'-0" (3)

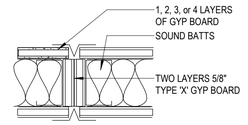


B1.1 NON-RATED PARTITION 2-1/2" STUD1 3/4" = 1'-0" (1)

ACOUSTICAL NOTES

1. ALL ACOUSTICALLY CLASSED PARTITIONS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE TO THE REFERENCED TEST.
2. STAGGER AND SEAL ALL JOINTS ON MULTIPLE GYPSUM BOARD LAYER PARTITIONS.
3. SEAL ALL PERIMETER GAPS, AIR TIGHT, AT THE FLOORS, HEAD, ADJACENT CONSTRUCTION AND AROUND ANY PENETRATING ELEMENTS WITH INTERIOR GRADE ACOUSTICAL SEALANT.
4. ALL BATTS AND BLANKETS IN RATED WALLS MUST BEAR THE REQUIRED U.L. CLASSIFICATION MARKING AS TO FIRE-RESISTANCE. ALSO REFER TO CODE COMPLIANCE DETAILS IN G010 SERIES.
5. AT ACOUSTICALLY RATED PARTITIONS, DO NOT FILL THE STUD CAVITY (DEPTH) FULLY WITH SOUND BATTS. THE WIDTH OF THE SOUND BATTS SHOULD BE SLIGHTLY SMALLER THAN CAVITY TO AVOID BATTS COMPRESSION. HOWEVER, THE ENTIRE LENGTH AND HEIGHT OF THE WALL SHOULD HAVE CONTINUOUS AND UNINTERRUPTED SOUND ATTENUATION BATTS.
6. SEAL ALL WALL INTERSECTIONS AND CONTROL JOINTS AT ACOUSTICALLY CLASSED PARTITIONS
7. SEAL ALL CONDUIT, STRUCTURAL, DUCT AND LARGE PIPE PENETRATIONS UNLESS THE PARTITION IS ALSO FIRE RATED WHERE THE CODE COMPLIANCE DETAILS
8. OUTLETS ON OPPOSITE SIDES OF ACOUSTICALLY CLASSED PARTITIONS .

FIREWALL CONTROL JOINTS



FIRE RATING NOTES

1. UNDERWRITERS LABORATORY AND OTHER TESTING AGENCY DESIGNATIONS INDICATED FOR FIRE RESISTIVE CONSTRUCTION ARE GIVEN FOR PURPOSES OF DESCRIBING CONSTRUCTION REQUIREMENTS ONLY AND ARE NOT INTENDED TO LIMIT MANUFACTURERS OF MATERIALS. COMPLY WITH THE CONSTRUCTION REQUIREMENTS OF THE INDICATED DESIGN.
2. ALL PARTITION TYPES SHOWN HERE ARE DRAWN AS "NON FIRE-RATED". WHERE FIRE RESISTIVE WALL CONSTRUCTION IS INDICATED, ON THE FLOOR PLANS, PROVIDE "TYPE X" GYPSUM WALLBOARD. AND FIRE RATED SEALANT AT PERIMETER JOINTS AND ALL PENETRATIONS, TYPICAL BOTH SIDES OF PARTITION AS INDICATED ON THE U.L. DETAILS AND ASSEMBLIES.
3. REFER TO SHEET G010 FOR U.L. LISTED ASSEMBLIES.

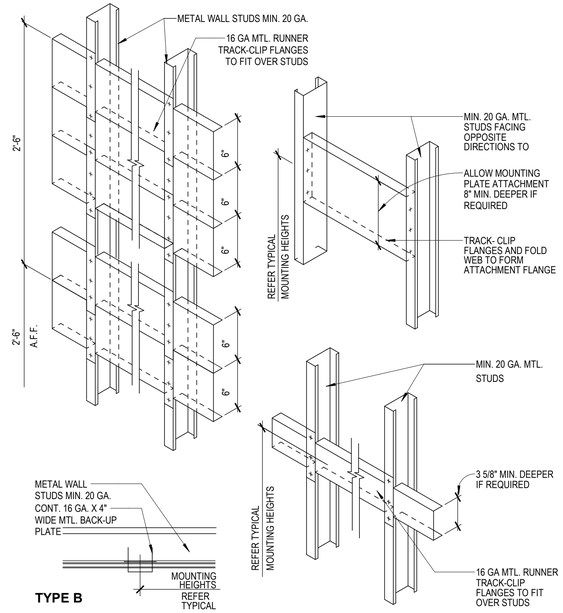
GYPSUM BOARD PARTITION PRIORITY LEGEND

PARTITION	DOOR RATING	PRIORITY
FOUR HOUR FIRE PARTITION	3 HOUR - A LABEL	PRIORITY 1 - HIGHEST
TWO HOUR FIRE/SMOKE PARTITION	1 1/2 HOUR - B LABEL	PRIORITY 2
TWO HOUR FIRE PARTITION	1 1/2 HOUR - B LABEL	PRIORITY 3
ONE HOUR FIRE/SMOKE PARTITION	3/4 HOUR - C LABEL	PRIORITY 4
ONE HOUR FIRE PARTITION	3/4 HOUR - C LABEL	PRIORITY 5
ONE HOUR FIRE PARTITION	20 MIN RATING	PRIORITY 6
NON-RATED PARTITION	NONE	PRIORITY 7 - LOWEST

GENERAL NOTES

1. ALL POSSIBLE VARIATIONS OF PARTITIONS TYPES AND U.L. FIRE RATINGS ARE NOT NECESSARILY UTILIZED IN THIS PROJECT AND ARE SHOWN FOR REFERENCE ONLY UNLESS RATED PARTITIONS ARE INDICATED ON THE FLOOR PLANS. WHERE U.L. RATED PARTITIONS ARE INDICATED, REFER TO FLOOR PLANS AND PROVIDE FIRE SEALANT AT THOSE LOCATIONS AS REQUIRED.
2. WHERE FULL HEIGHT PARTITIONS ARE PERPENDICULAR TO SPAN OF STRUCTURAL JOISTS OR GIRDERS, THE PARTITION SHALL EXTEND TO THE UNDERSIDE OF STRUCTURE AND FOLLOW THE LINE OF STRUCTURE.
3. PROVIDE CEMENTITIOUS BACKER BOARD ON ALL WALLS TO RECEIVE CERAMIC TILE FINISH. PROVIDE WATER RESISTANT GYPSUM PANELS ON CEILINGS IN ROOMS THAT INCLUDE SHOWERS. FRAMING NOT TO EXCEED SPACING RECOMMENDED BY MANUFACTURER.
4. PROVIDE ONE LAYER OF 5/8" MOISTURE RESISTANT GYPSUM BOARD AT WALLS BEHIND SINKS AND LAVATORIES WITHOUT TILE. MOISTURE RESISTANT GYPSUM BOARD SHALL BE INSTALLED WITHIN 2' OF ALL URINALS AND WATER CLOSETS, TO A HEIGHT OF 4' AFF.
5. WHERE FIRE RESISTIVE CONSTRUCTION IS INDICATED, PROVIDE TYPE X-W/R BOARD. IN CONDITIONS WHERE NOTE 3 AND 4 APPLY, INSTALL 1 LAYER OF APPLICABLE MOISTURE RESISTANT BOARD OR CEMENTITIOUS BACKER BOARD OVER THE TYPE X- W/R BOARD. INSTALL PER MANUFACTURER LIMITATIONS.
6. STC RATINGS SHOWN FOR SOUND WALLS ARE BASED ON LABORATORY TESTED ASSEMBLIES AND DO NOT NECESSARILY INDICATE THE ACTUAL STC RATING OF THE COMPLETED WORK. PROVIDE MTL. DECK FILLERS WHERE FULL HEIGHT PARTITIONS ARE PERPENDICULAR TO SPAN OF DECK. DECK FILLERS ARE TO BE COMPATIBLE WITH ALL FIRE RATED ASSEMBLIES AND ARE TO BE APPROVED BY ALL GOVERNING AGENCIES.
7. PROVIDE FIRE TREATED WOOD BLOCKING, SHEET METAL OR STEEL BACKING IN PARTITIONS TO SUPPORT WALL MOUNTED ITEMS AND EQUIPMENT, ETC.
8. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PARTITION DETAILS



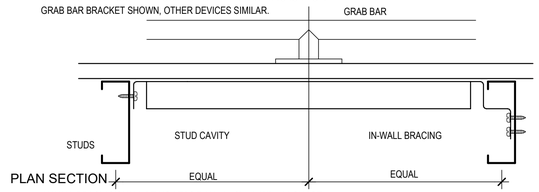
MOUNTING SUPPORT DETAILS

SCALE: NONE

PROVIDE IN-WALL BRACING IN ALL PARTITIONS OR EXTERIOR WALLS WHERE GRAB BARS, HANDRAILS, SHOWER SEATS OR OTHER EQUIPMENT ANCHORS TO METAL STUD WALLS AND IN OTHER LOCATIONS AS NOTED ON THE DRAWINGS.

CENTER STUDS ABOUT THE LOCATION OF THE DEVICE ANCHOR POINT.

GRAB BAR BRACKET SHOWN, OTHER DEVICES SIMILAR.

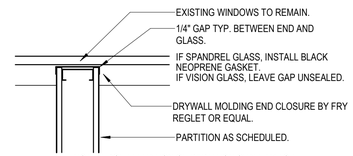


PLAN SECTION

IN-WALL BRACING SHALL BE NO LESS THAN A 6" x 1 1/4" x 14 GUAGE CHANNEL, STEEL Fy = 50ksi, AND SHALL SUPPORT A 250 POUND GRAVITY LOAD CONCENTRATED AT ANY POINT ON THE DEVICE BEING ANCHORED.

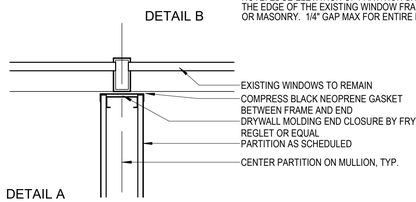
16 GA.x4" WIDE MTL BACKUP PLATE MAY BE USED

IN-WALL BRACING



NOTE: EDGE ELEVATION OF PARTITION SHALL MATCH THE EDGE OF THE EXISTING WINDOW FRAME, GLAZING, OR MASONRY. 1/4" GAP MAX FOR ENTIRE HEIGHT.

DETAIL B



DETAIL A

PARTITION AT MULLION DETAILS

SCALE: NONE

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REGISTRATION

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2	09-09-21	FOR INFORMATION AND REFERENCE ONLY
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PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

1004345

SHEET TITLE

PARTITION TYPES

SHEET NUMBER

A011

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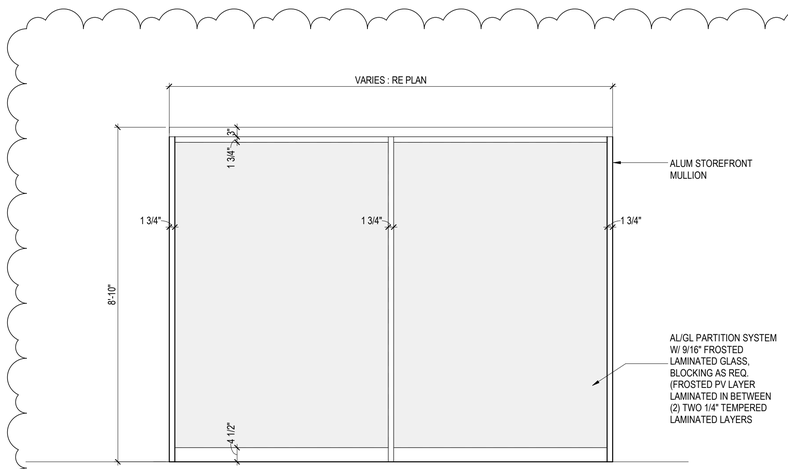
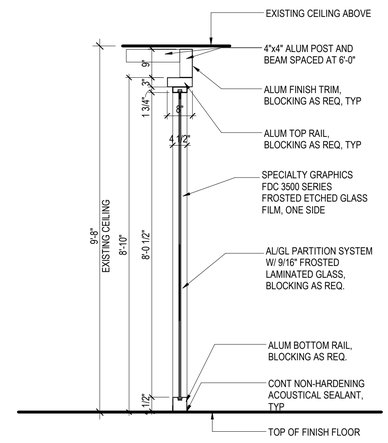


A1 FULL HEIGHT STOREFRONT W/ GLASS 1/2" = 1'-0" (4)



FULL HEIGHT STOREFRONT W/ GLASS 1/2" = 1'-0" (2)

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IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

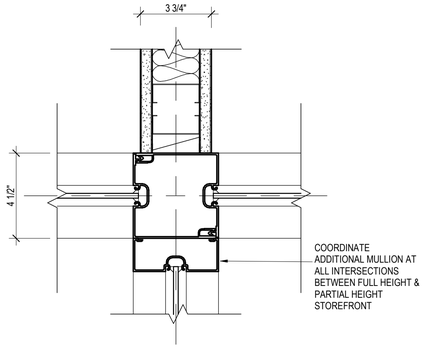
1004345

SHEET TITLE

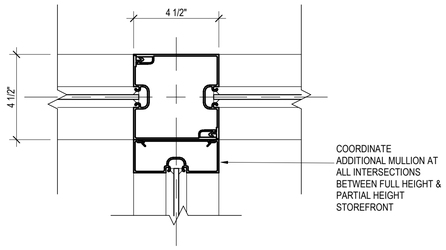
STOREFRONT TYPES

SHEET NUMBER

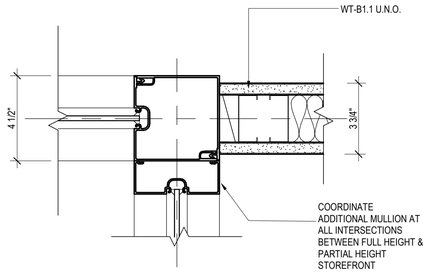
A012



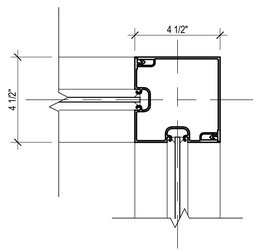
MULLION AT INTERSECTION 3" = 1'-0" 12



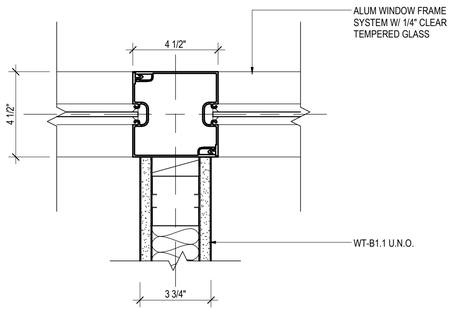
MULLION AT INTERSECTION 3" = 1'-0" 9



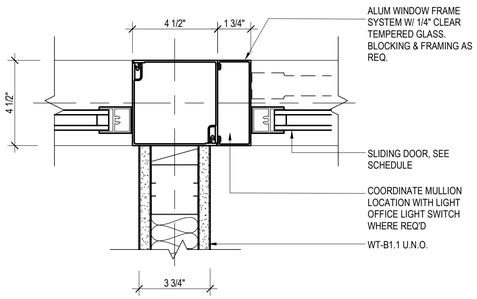
MULLION AT INTERSECTION 3" = 1'-0" 6



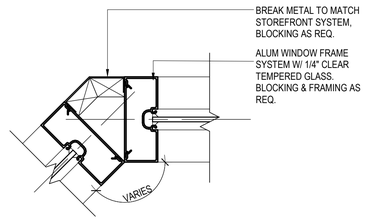
MULLION AT CORNER 3" = 1'-0" 3



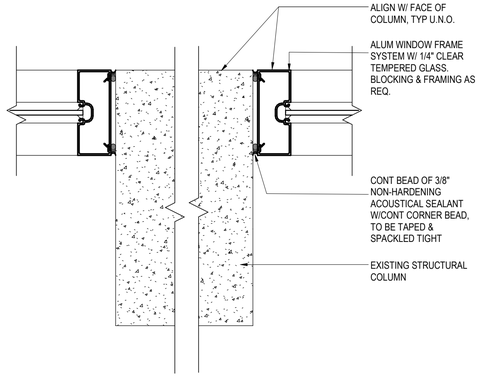
MULLION AT DIVIDING WALL 3" = 1'-0" 11



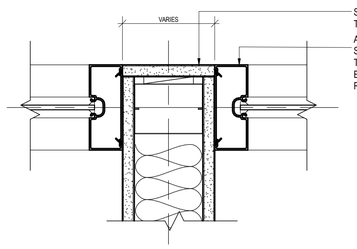
MULLION AT SLIDING DOORS & DIVIDING WALL 3" = 1'-0" 8



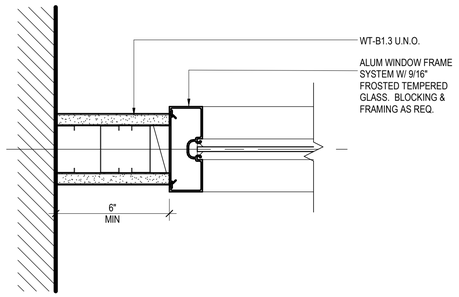
CUSTOM BREAK METAL DETAIL 3" = 1'-0" 5



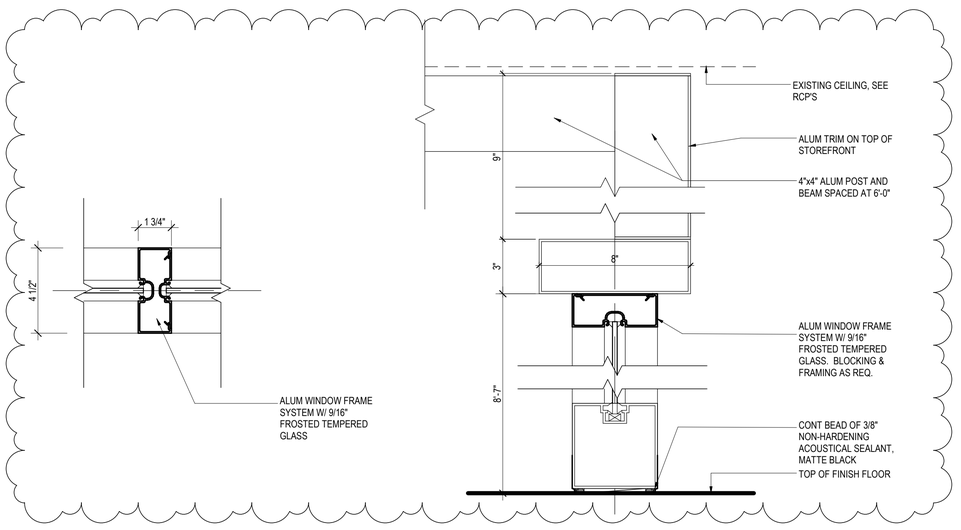
MULLION AT COLUMN 3" = 1'-0" 2



MULLION AT DIVIDING WALL 3" = 1'-0" 10



MULLION AT PERIMETER WALL 3" = 1'-0" 7



TYPICAL MULLION DETAIL 3" = 1'-0" 4

FULL HEIGHT STOREFRONT SYSTEM 3" = 1'-0" 1

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GEORGE BUSH IAH
3500 NORTH TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

1004345

SHEET TITLE

STOREFRONT DETAILS

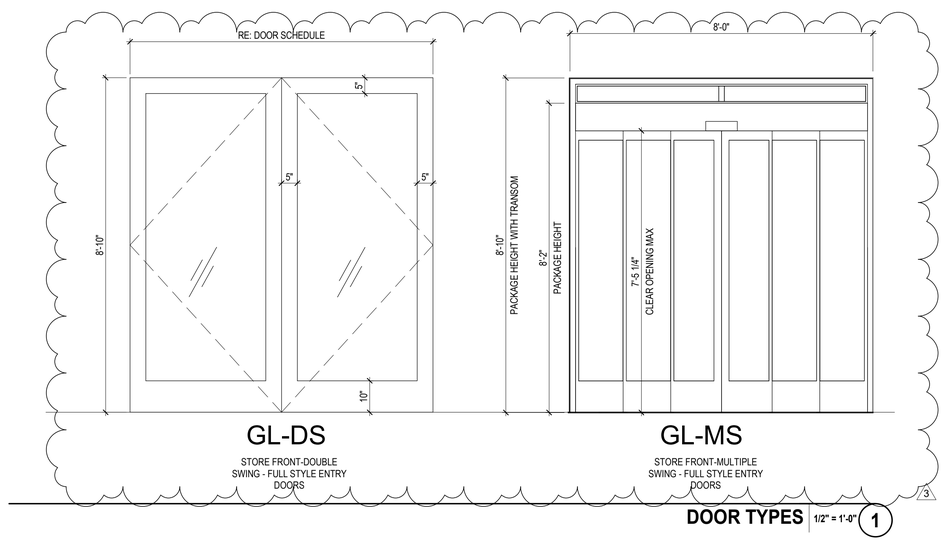
SHEET NUMBER

A013

DOOR SCHEDULE

Mark	Room Name	Panel Size Width	Height	THK	Panel Matl	Panel	Panel Finish	Frame Matl	Frame Type	Frame Finish	Details on A0.35 UNO Jamb	Head	Sill	Fire Rating	General HDWR	Remarks
LEVEL 02 - TICKETING DEPARTURES																
112	ELECTRIC PRE ALARM ZONE	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	NO TRANSOM
113	EXIT ALARM ZONE 01	8'-4"	8'-10"	--	GL	DS	GL1	AL	002	PT1					2	
114	EXIT ALARM ZONE 02	8'-0"	8'-10"	6"	GL	MS	GL1	AL	002	PT1					3	
115	ELECTRICAL CHASEWAY	EX	EX	EX	EX	EX	EX	EX	EX	EX						
116	EXIT ALARM ZONE 02	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	NO TRANSOM

3

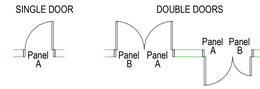


DOOR TYPES 1/2" = 1'-0" (1)

GENERAL NOTES

A. PROVIDE UNDERCUT AS REQUIRED FOR THRESHOLD MECHANICAL REQUIREMENTS.
B. PROVIDE TEMPERED GLASS WHERE REQUIRED BY CODE.
C. PROVIDE SILICONE SEALANT OVER BACKER ROD AT ALL EXTERIOR FRAMES.
D. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
E. ALL HOLLOW METAL FRAMES TO BE WELDED FRAMES.
F. SEE SHEETS A0.020 FOR FINISHES AND MATERIAL LEGENDS.
G. USE GRAY GASKETS AT ALL GLASS DOORS UNLESS NOTED OTHERWISE.
H. ALL ALUMINUM DOOR FRAMES TO BE CLEAR ANODIZED AS SPECIFIED U.N.O.
I. ALL EXIT HARDWARE TO BE TIED TO FIRE ALARM SYSTEM

DOOR PANEL LEGEND



PANEL "A" WILL ALWAYS BE FROM LEFT HINGE SWINGING OUTWARD.

FRAME MATERIALS

AL - Aluminum
HM - Hollow Metal
WD - Wood

FRAME CONFIGURATION

Transom: **0** - No Transom
1 - Transom

Sidelite: **0** - No Sidelite
1 - 1 Sidelite
2 - 2 Sidelites, 1 each side or both

Frame Config: **1** - 2" Jamb/Head Wraps Wall
2 - 2" Jamb/Head, Mfr Standard
3 - 2" Jamb, 4" Head, Masonry
4 - ---
5 - Transom & Sidelites Both Sides
6 - Sidelite On Either Side
S - Sliding Door Frame

Frame Legend: X ### (Material / Transom / Side Lite / Frame Configuration)

DOOR PANEL MATERIALS

AL - Aluminum
WD - Wood
GL - Glass
PL - Plastic Laminate

DOOR PANEL TYPES

F - Flush Panel, Single
DF - Flush Panel, Double
SS - Storefront Panel, Single
DS - Storefront Panel, Double
MS - Storefront Panel, Multiple (More than 2)

Door Panel Legend: XX - XX (Panel Material / Panel Type)

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DEPARTMENT OF AVIATION
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DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-156 - IAH

REGISTRATION

10-20-21

DRAWING HISTORY

Nr.	DATE	DESCRIPTION
1	08-06-21	100% CD
2	09-09-21	FOR INFORMATION AND REFERENCE ONLY
3	10-20-21	ISSUE FOR BID/100% CD

PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
DOOR SCHEDULE

SHEET NUMBER
A030

FILE NAME: C:\@Revit\Locals\IAH-TERM - SECURITY EXIT LANE_VOuijada@pgal.com.rvt
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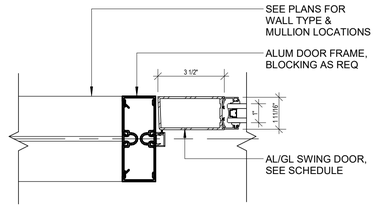
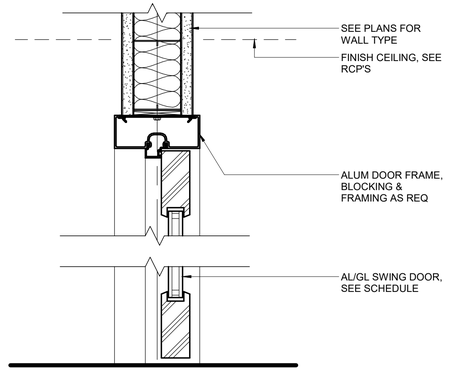
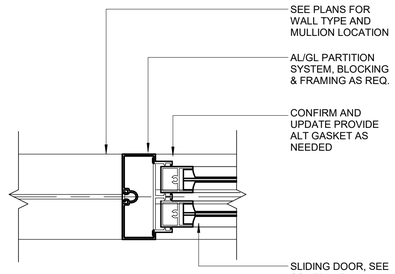
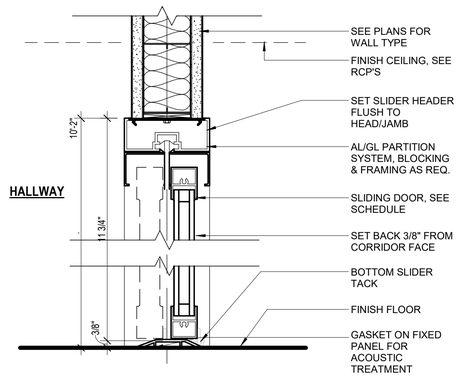




FR2 - STOREFRONT SWING DOOR FRAME TYPE 3" = 1'-0" (2)





FR1 - STOREFRONT SLIDING DOOR FRAME TYPE 3" = 1'-0" (1)

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REGISTRATION

10-20-21

DRAWING HISTORY

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1	08-06-21	100% CD
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PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

1004345

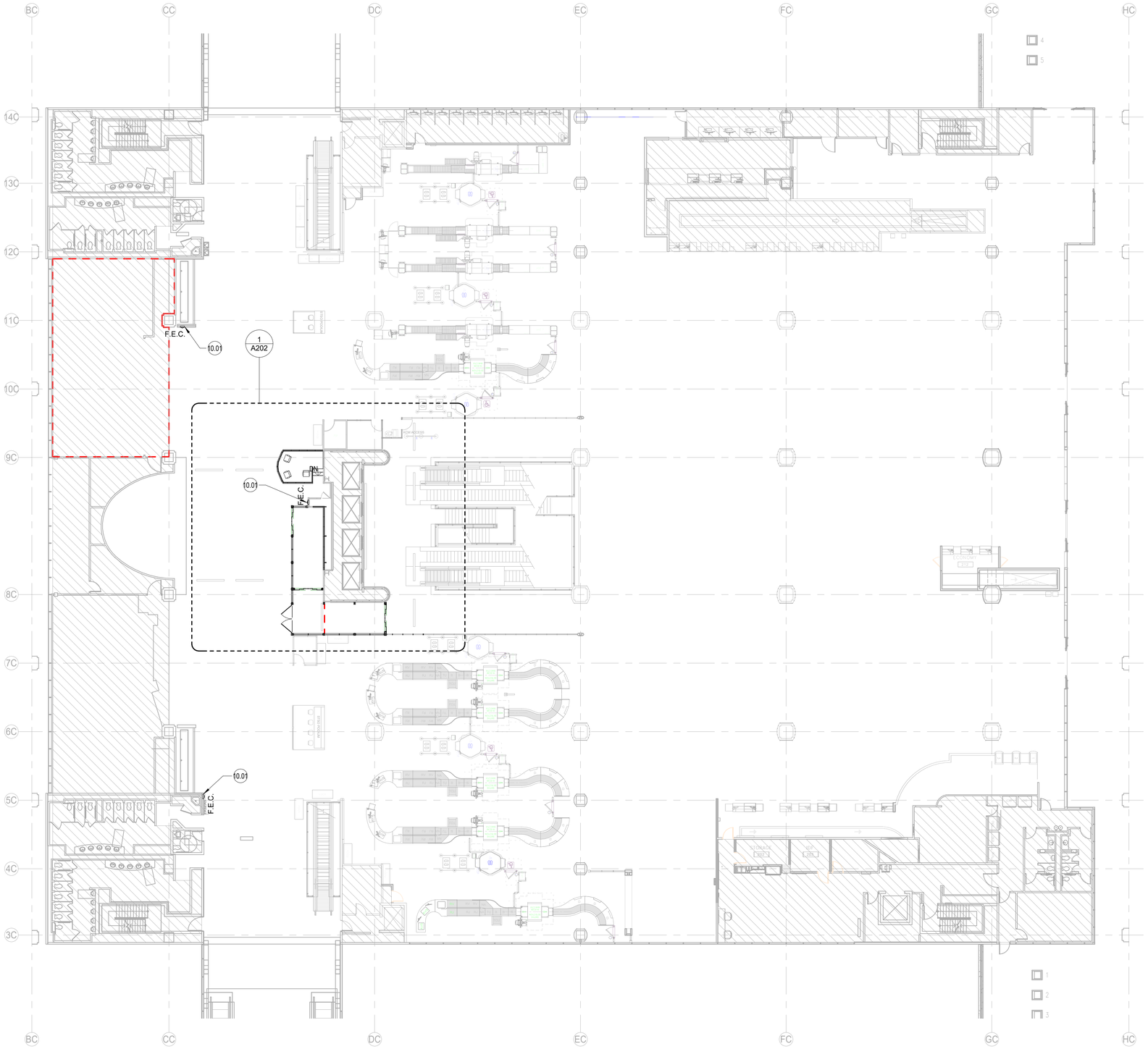
SHEET TITLE

DOOR DETAILS

SHEET NUMBER

A035

FILE NAME: C:\@Revit\Locals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
DATESTAMP: 10/21/2021 12:30:44 AM



GENERAL NOTES

1. DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFFESIONALS VIA REQUEST FOR INFORMATION (RFI).
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INCACURACY OR CONFLICTING INFORMATION BEFORE EXECURTION OF WORK.
4. REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDTIONAL INFORMATION.
5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.

LEGEND

1 / A101 SIM — VIEW REFERENCE CALLOUT

NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
10.01	PROVIDE NEW RECESSED MOUNTED FIRE EXTINGUISHER CABINET, REPAIR EXISTING FINISHES AS NEEDED

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HAS TIP 21-156 - IAH

10-20-21

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3	10-20-21	ISSUE FOR BID/100% CD

PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

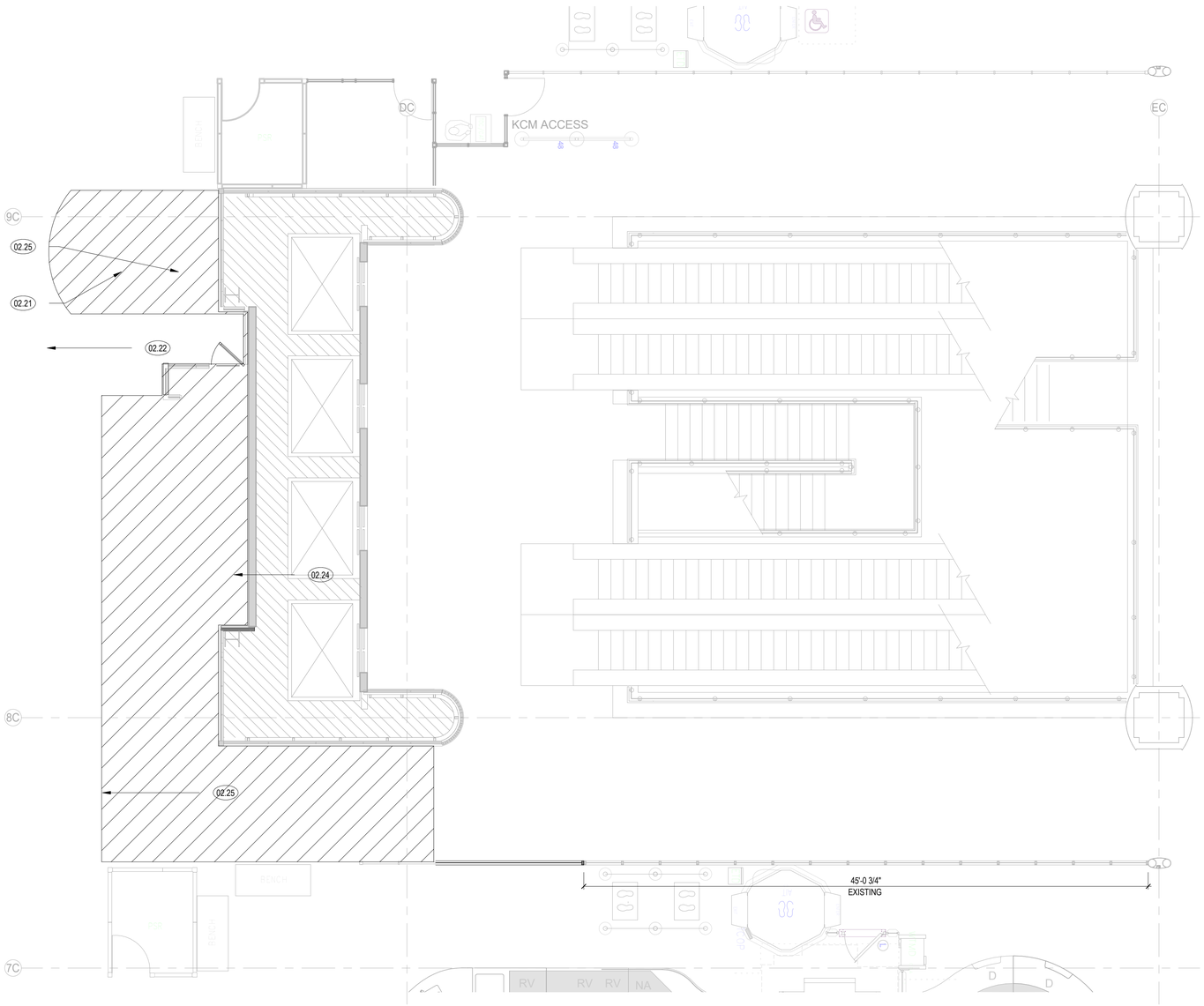
PROJECT NUMBER
1004345

SHEET TITLE
OVERALL FLOOR PLAN - TERMINAL C CENTRAL

SHEET NUMBER
A102

LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL C 1/16" = 1'-0" 1

FILE NAME: C:\@Revit\Locals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
DATE STAMP: 10/21/2021 12:31:50 AM



LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL C - PHASING PLAN 3/16" = 1'-0" (1)

GENERAL NOTES - PLAN

1. DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFESSIONALS VIA REQUEST FOR INFORMATION (RFI).
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
4. REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDTIONAL INFORMATION.
5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.
6. REFER TO DOOR SCHEDULES AND DOOR TYPES SHEET A030.
7. ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
8. CONTRACTOR SHALL FIELD COORDINATE LOCATION, SIZE AND TYPE OF BLOCKING FOR INSTALLATION OF SIGNAGE, MILLWORK, ETC. ALL CONCEALED WOOD SHALL BE FIRE RETARDANT TREATED (FRT).

GENERAL NOTES

1. CONTRACTOR TO INSURE PROPER EXITING AT AL TIMES DURING PHASING.
2. PHASED WORK AND NIGHT HOURS, AS ALLOWED BY HAS, WILL BE REQUIRED AS A SCOPE OF THE WORK.
3. THE WORK AREA SHALL BE LOCKED AND SECURED PER HAS AND TSA SECURITY REQUIREMENTS
4. PHASING PLANS SHOWN ARE GENERAL IN NATURE. THE CONTRACTOR IS TO PROVIDE AND MAINTAIN A DETAILED WORK PHASING PLAN FOR HAS/PGAL APPROVAL.

LEGEND

- EXISTING TO REMAIN
- NEW PARTITIONS
- # KEYED NOTE
- NOT INCLUDED IN SCOPE OF WORK
- EXISTING WALL TO BE DEMOLISHED
- EXISTING DOOR TO BE DEMOLISHED
- EXISTTING QUEING STATION TO BE DEMOLISHED
- TEMPORARY DUST WALLS
- EXISTING DOOR TO REMAIN
- SCOPE OF NEW WORK

PHASING PLAN KEYNOTES

02.21	PHASE ONE: DEMOLISH EXISTING POLICE BOOTH. GC TO SUPPORT EFFORT AND MAKE SAFE WITH ELECTRICAL TERMINATONS. ADD TEMP DUSTWALLS FOR DEMO SCOPE IF MORE THAN ONE NIGHT OF WORK.
02.22	PHASE TWO: INSTALL NEW DUST WALL. FIRE TREATED WOOD FRAME AND PLYWOOD, PAINTED WHITE TO PUBLIC SIDE. WALLS TO BE LOCKABLE.
02.24	PHASE THREE: DEMO WALLS SCOPE INSIDE THE WORK AREA.
02.25	PHASE FOUR: INSTALL NEW WORK PER SCOPE – TEST & CLOSEOUT.

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PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

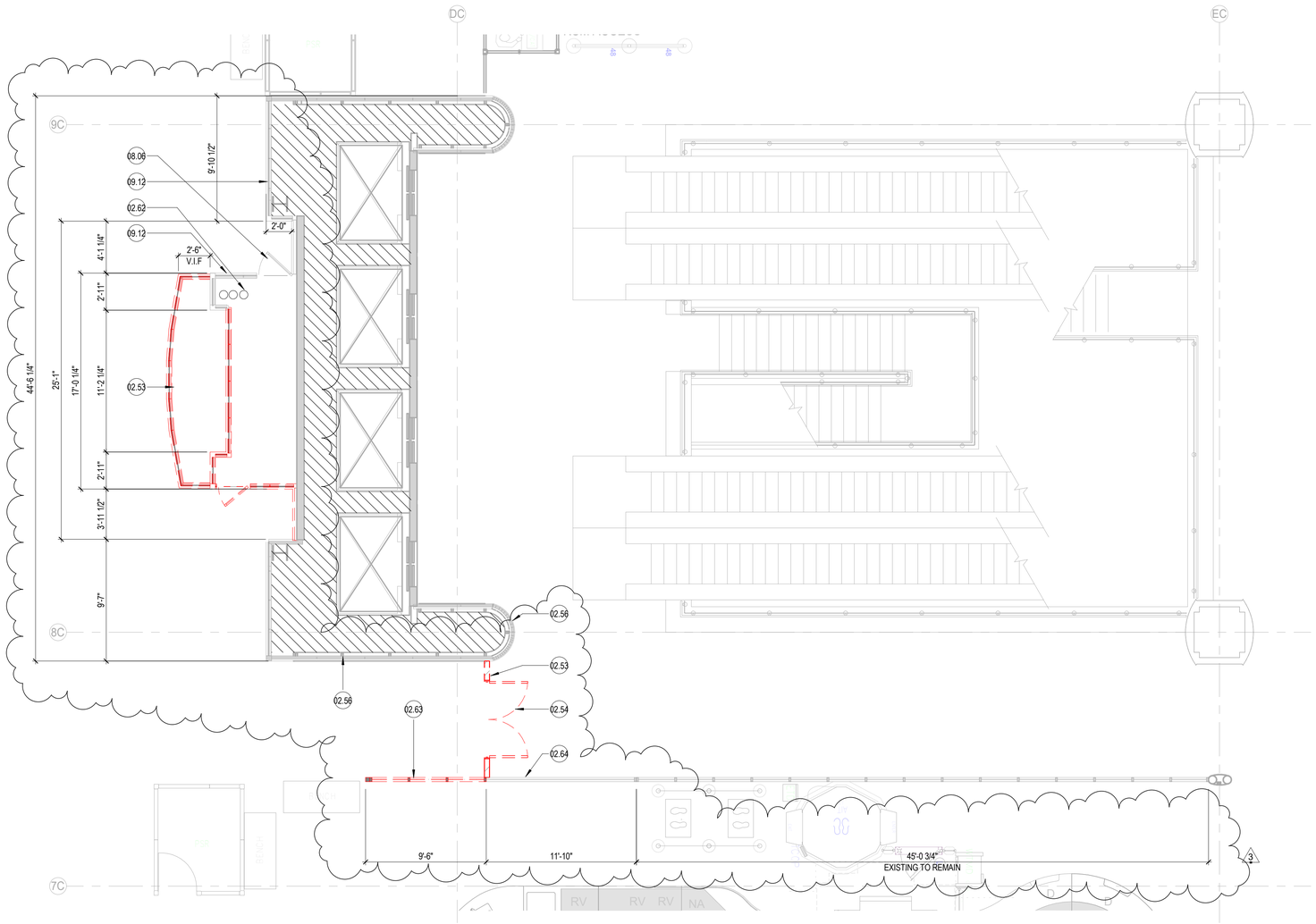
PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
ENLARGED FLOOR PLAN - TERMINAL C CENTRAL - PHASING PLAN

SHEET NUMBER
AP202

FILE NAME: C:\@RevitLocals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
DATESTAMP: 10/21/2021 1:01:27 AM



LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL C - ENLARGED DEMO 3/16" = 1'-0" 1

GENERAL NOTES - DEMO

1. DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFFESIONALS VIA REQUEST FOR INFORMATION (RFI).
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INCACURACY OR CONFLICTING INFORMATION BEFORE EXECURTION OF WORK.
4. REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDTIONAL INFORMATION.
5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.
6. REFER TO DOOR SCHEDULES AND DOOR TYPES SHEET A030.
7. ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
8. ARCHITECTURAL LIGHTING ARE FOR LOCATE AND TYPE REFERENCE ONLY, REFER TO ELECTRICAL DRAWINGS FOR FIXTURE DESIGNATIONS AND SPECIFICATIONS.
9. USE UNISTRUT BELOW MECHANICAL DUCT OR STRUCTURAL BEAMS TO ACCOMMODATE LIGHT FIXTURES AS NEEDED.
10. PATCH AND REPAIR EXISTING EXPOSED CEILINGS AS NEEDED.

LEGEND - DEMO

- EXISTING WALL TO BE DEMOLISHED
- EXISTING DOOR TO BE DEMOLISHED
- EXISTING WALL TO REMAIN
- EXISTING DOOR TO REMAIN
- QUEUING STANCHION
- # KEYED NOTE
- NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
02.53	EXISTING GYPSUM WALL AND STUD PARTITION TO BE REMOVED IN ITS ENTIRETY, V.I.F. REMOVAL TO INCLUDE BUT NOT LIMITED TO ALL WALL GYP, BASE, MOLDING, EQUIPMENT, MILLWORK, WIRING, ETC. EQUIPMENT TO BE SALVAGED TO HAS/TSA. BRING ALL WIRING BACK TO NEAREST SOURCE PANEL. CAREFULLY CUT WALLS IN AREAS WHERE PORTION OF EXISTING IS TO REMAIN. PATCH AND PREP ADJACENT FLOOR/WALLS TO RECEIVE NEW FINISHES, TYP. PROVIDE ADDITIONAL CFMF AND STEEL TO SUPPORT EXISTING WALL TO REMAIN.
02.54	EXISTING DOORS TO BE REMOVED IN THEIR ENTIRETY AND SALVAGE TO OWNER. REMOVAL TO INCLUDE HARDWARE, FRAME, ETC.
02.56	EXISTING TO REMAIN, PROTECT EXISTING FINISHES AND STOREFRONT AS NEEDED
02.62	EXISTING COMMUNICATIONS CONDUIT TO REMAIN
02.63	EXISTING STOREFRONT TO BE REMOVED, PATCH REPAIR EXISTING TERRAZZO AS NEEDED. PROVIDE ADDITIONAL SUPPORT STRUCTURE AS NEEDED FOR REMAINING STOREFRONT
02.64	EXISTING STOREFRONT TO BE REMOVED AND RE-INSTALLED IN PLACE FOR TEMPORARY EXIT. PROVIDE ADDITIONAL SUPPORT STRUCTURE AS NEED FOR REMAINING STOREFRONT
08.06	EXISTING DOOR TO REMAIN
09.12	EXISTING ACROVYN WALL PANEL SYSTEM TO REMAIN

3

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DEPARTMENT OF AVIATION
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HAS TIP 21-156 - IAH

REGISTRATION

10-20-21

DRAWING HISTORY

No.	DATE	DESCRIPTION
1	08-06-21	100% CD
2	09-09-21	FOR INFORMATION AND REFERENCE ONLY
3	10-20-21	ISSUE FOR BID/100% CD

PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

1004345

SHEET TITLE

DEMOLITION FLOOR PLAN - TERMINAL C CENTRAL

SHEET NUMBER

AD202

FILE NAME: C:\@RevitLocals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
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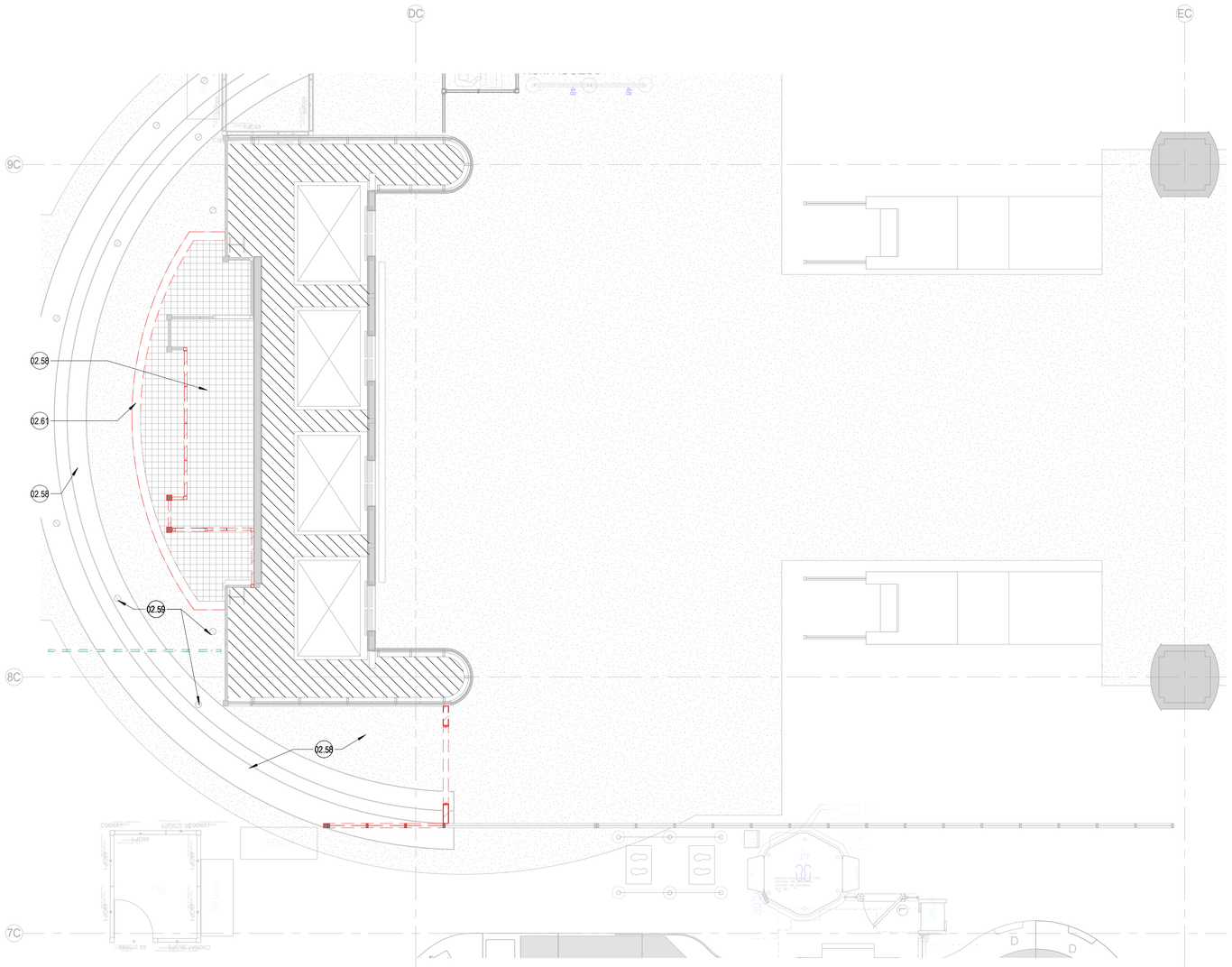

LEVEL 02 - TICKETING - REFLECTED CEILING PLAN - TERMINAL C - ENLARGED DEMO 3/16" = 1'-0" 1

GENERAL NOTES

1. DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFFESIONALS VIA REQUEST FOR INFORMATION (RFI).
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INCACURACY OR CONFLICTING INFORMATION BEFORE EXECURTION OF WORK.
4. REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDTIONAL INFORMATION.
5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.
6. REFER TO DOOR SCHEDULES AND DOOR TYPES SHEET A030.
7. ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
8. ARCHITECTURAL LIGHTING ARE FOR LOCATE AND TYPE REFERENCE ONLY, REFER TO ELECTRICAL DRAWINGS FOR FIXTURE DESIGNATIONS AND SPECIFICATIONS.
9. PATCH AND REPAIR EXISTING EXPOSED CEILINGS AS NEEDED.

LEGEND - DEMO RCP

- EXISTING WALL TO BE DEMOLISHED
- EXISTING DOOR TO BE DEMOLISHED
- EXISTING LIGHT FIXTURE TO DEMOLISHED
- EXISTING LIGHT FIXTURE TO REMAIN
- 6 X 6 ACT CEILING
- EXISTING WALL TO REMAIN
- EXISTING DOOR TO REMAIN
- # KEYED NOTE
- NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
02.58	EXISTING CEILING TO REMAIN, ANY DAMAGED TILE/GYP DURING WORK TO BE REPLACED
02.59	EXISTING DOWNLIGHTS INSTALLED OVER PROPOSED AREA OF EXIT LANE TO BE REMOVED, V.I.F. RE: ELECTRICAL
02.61	EXISTING BULKHEAD TO BE REMOVED

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10-20-21

DRAWING HISTORY

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3	10-20-21	ISSUE FOR BID/100% CD

PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
DEMOLITION REFLECTED CEILING PLAN - TERMINAL C CENTRAL

SHEET NUMBER
3 AD302

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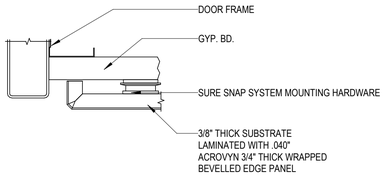
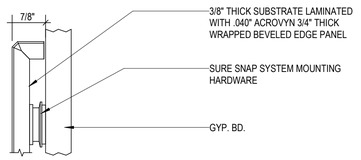
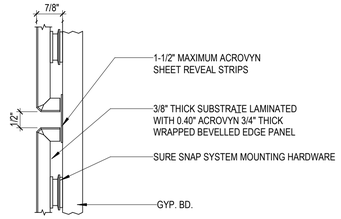


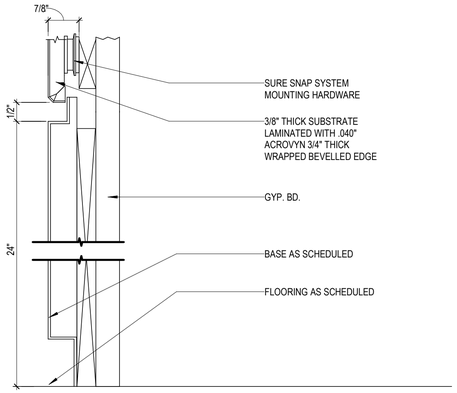
END WALL/DOOR FRAME DETAIL 6" = 1'-0" (5)



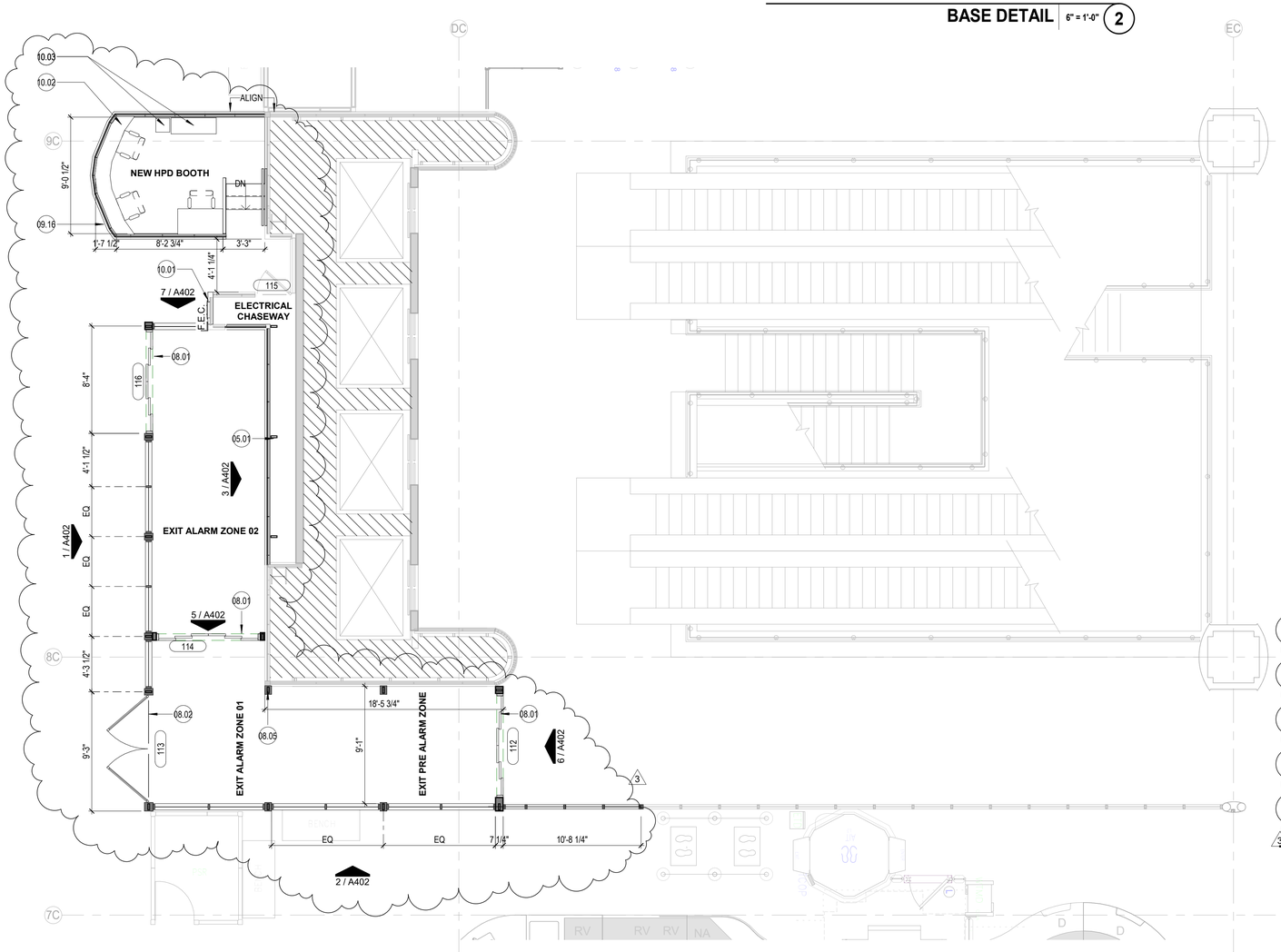
WAINSCOT TOP PANEL DETAIL 6" = 1'-0" (4)



REVEAL DETAIL 6" = 1'-0" (3)



BASE DETAIL 6" = 1'-0" (2)



LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL C - ENLARGED 3/16" = 1'-0" (1)

GENERAL NOTES - PLAN

1. DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFFESIONALS VIA REQUEST FOR INFORMATION (RFI).
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
4. REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDITIONAL INFORMATION.
5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.
6. REFER TO DOOR SCHEDULES AND DOOR TYPES SHEET A030.
7. ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
8. CONTRACTOR SHALL FIELD COORDINATE LOCATION, SIZE AND TYPE OF BLOCKING FOR INSTALLATION OF SIGNAGE, MILLWORK, ETC. ALL CONCEALED WOOD SHALL BE FIRE RETARDANT TREATED (FRT).

GENERAL NOTES

1. FIELD COOORDINATE CONDUIT ROUTING
2. EXPOSED CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES
3. LABEL SECURITY CONDUITS. REFER TO NOTES ON SHEET G002.
4. ALL SECURITY SYSTEM EQUIPMENT FURNISHINGS, CONDUIT, CABLING AND OTHER RELATED MATERIALS AND INTERFACES SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT CONTRUCTION DOCUMENTS AND SCHEDULES.
5. CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLING AND CONDUIT FROM SECURITY DEVICE LOCATIONS TO DESIGNATED NODES/ROOMS. CABLING SHALL BE OF APPROPRIATE TYPE AND GAUGE AS REQUIRED BY THE MANUFACTURER, FOR PROPER SYTEM OPERATION. CONTRACTOR SHALL ENSURE CABLES TO EACH DEVICE PROVIDE SUFFICIENT VOLTAGE, OR SIGNAL STRENGTH TO OPERATE WITHIN MANUFACTURERS SPECIFIED LIMITS.
6. CONTRACTOR SHALL COORDINATE EXACT DEVICE MOUNTING LOCATIONS WITH OWNERS DESIGNATED REPRESENTATIVE AND OTHER TRADES PRIOR TO INSTALLATION OF DEVICES AND RELATED INFRASTRUCTURE.
7. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH OWNERS DESIGNATED REPRESENTATVIE FINAL FIELD OF VIEW OF SECURITY CAMERAS.
8. ALL SECURITY CAMERAS SHALL BE PROVIDED WITH APPROPRIATE HOUSING AND MOUNTS IN IDENTIFIED LOCATIONS.
9. CONTRACTOR SHALL PATCH AND REPAIR ANY SURFACE AFFECTED FROM INSTALLLATION IN THE COURSE OF THE SCOPE OF WORK TO ORIGINAL OR MATCHING CONDITIONS.
10. EXISTING SECURITY INFRASTRUCTRE AND COMPONENTS AFFECTED BY CONSTRUCTION SHALL BE REROUTED AND/OR DECOMMISIONED.

LEGEND

- EXISTING TO REMAIN
- NEW PARTITIONS
- NEW DOOR
- NEW SLIDING DOOR
- 1271.2 — SCHEDULED DOOR. REFER TO SHEET A0.30
- A0.0 — SCHEDULED PARTITION REFER TO SHEETS A0.11
- # — KEYED NOTE
- PTXX — MATERIAL TAG
- NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
05.01	NEW STRUCTURAL STEEL TUBE,RE STRUCTURE
08.01	MULTI PANEL EXIT DOORS
08.02	VEHICULAR BYPASS DOORS
08.05	ALUMINUM TUBE COLUMN
09.16	PROVIDE BULLET PROOF FINISH AT THE HPD BOOTH AS AN ALTERNATE
10.01	PROVIDE NEW RECESSED MOUNTED FIRE EXTINGUISHER CABINET, REPAIR EXISTING FINISHES AS NEEDED
10.02	NEW 24" COUNTERTOP
10.03	RELOCATED HPD STORAGE AND WEAPONS SAFE

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DEPARTMENT OF AVIATION
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HOUSTON AIRPORT SYSTEM
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HAS TIP 21-156 - IAH

10-20-21

DRAWING HISTORY

Nr.	DATE	DESCRIPTION
1	08-06-21	100% CD
2	09-09-21	FOR INFORMATION AND REFERENCE ONLY
3	10-20-21	ISSUE FOR BID/100% CD

PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
ENLARGED FLOOR PLAN - TERMINAL C CENTRAL

SHEET NUMBER
A202

FILE NAME: C:\@RevitLocals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
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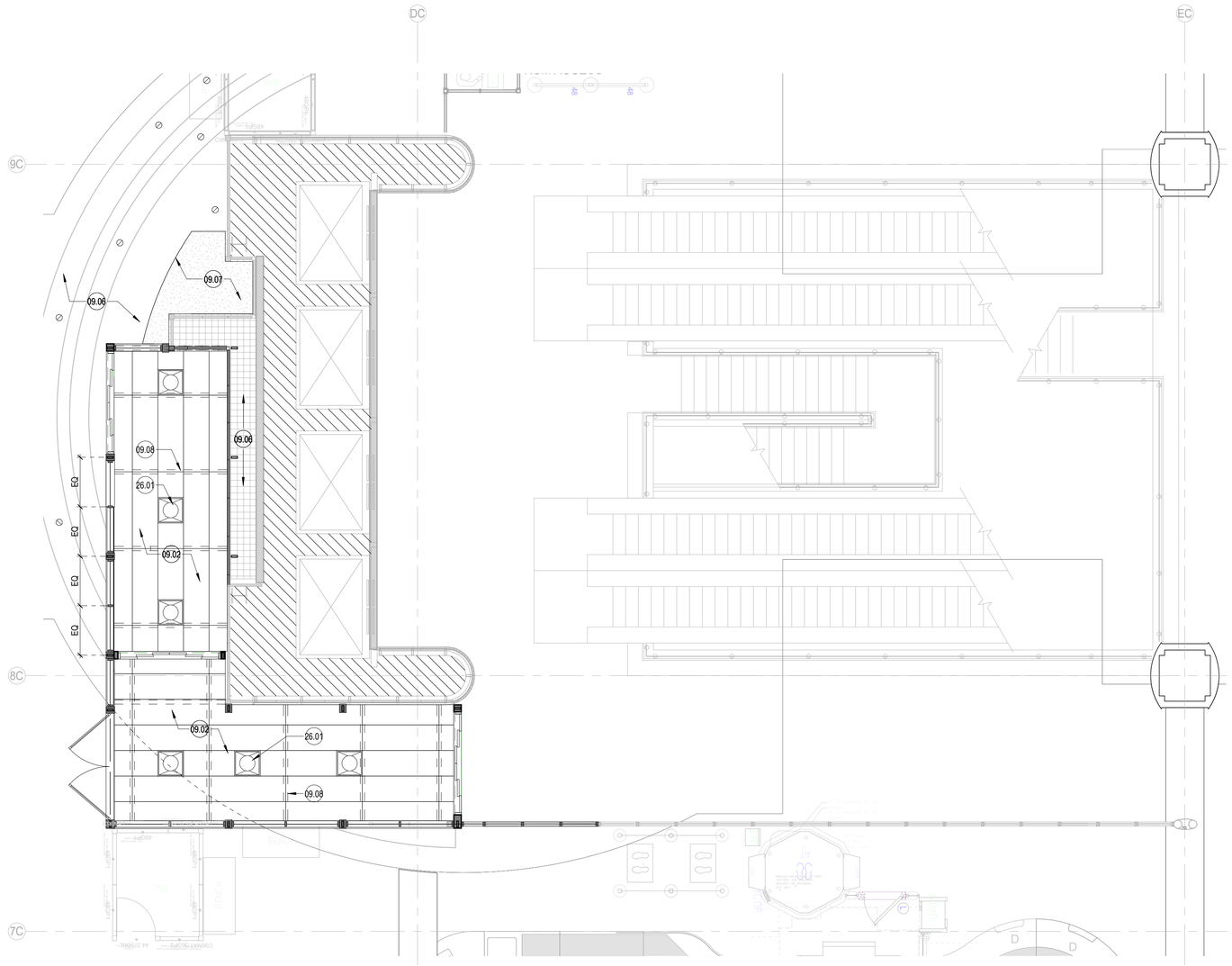

LEVEL 02 - TICKETING - REFLECTED CEILING PLAN - TERMINAL C - ENLARGED 3/16" = 1'-0" 1

GENERAL NOTES

1. DO NOT SCALE DIMENSIONS FROM DRAWINGS, ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFFESIONALS VIA REQUEST FOR INFORMATION (RFI).
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INCACURACY OR CONFLICTING INFORMATION BEFORE EXECURTION OF WORK.
4. REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDTIONAL INFORMATION.
5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.
6. REFER TO DOOR SCHEDULES AND DOOR TYPES SHEET A030.
7. ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
8. ARCHITECTURAL LIGHTING ARE FOR LOCATE AND TYPE REFERENCE ONLY, REFER TO ELECTRICAL DRAWINGS FOR FIXTURE DESIGNATIONS AND SPECIFICATIONS.
9. USE UNISTRUT BELOW MECHANICAL DUCT OR STRUCTURAL BEAMS TO ACCOMMODATE LIGHT FIXTURES AS NEEDED.
10. PATCH AND REPAIR EXISTING EXPOSED CEILINGS AS NEEDED.

GENERAL NOTES - RCP

1. FIELD COOORDINATE CONDUIT ROUTING
2. EXPOSED CODUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES
3. LABEL SECUREITY CONDUITS PER HAS STANDARDS
4. ALL SECURITY SYSTEM EQUIPMENT FURNISHINGS, CONDUIT, CABLING AND OTHER RELATED MATERIALS AND INTERFACES SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT CONTRUCTION DOCUMENTS AND SCHEDULES.
5. CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLING AND CONDUIT FROM SECURTIY DEVICE LOCATIONS TO DESIGNTATED NODES/ROOMS. CABLING SHALL BE OF APPROPRIATE TYPE AND GAUGE AS REQUIRED BY THE MANUFACTURER, FOR PROPER SYTEM OPERATION. CONTRACTOR SHALL ENSURE CABLES TO EACH DEVICE PROVIDE SUFFICIENT VOLTAGE, OR SIGNAL STRENGTH TO OPERATE WITHIN MANUFACTURERS SPECIFIED LIMITS.
6. CONTRACTOR SHALL COORDINATE EXACT DEVICE MOUNTING LOCATIONS WITH OWNERS DESIGNATED REPRESENTATIVE AND OTHER TRADES PRIOOR TO INSTALLATION OF DEVICES AND RELATED INFRASTRUCTURE.
7. CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH OWNERS DESIGNATED REPRESENTATVIE FINAL FIELD OF VIEW OF SECURITY CAMERAS.
8. ALL SECURITY CAMERAS SHALL BE PROVIDED WITH APPROPRIATE HOUSING AND MOUNTS IN IDENTIFIED LOCATIONS.
9. CONTRACTOR SHALL PATCH AND REPAIR ANY SURFACE AFFECTED FROM INSTALLLATION IN THE COURSE OF THE SCOPE OF WORK TO ORIGINAL OR MATCHING CONDITIONS.
10. EXISTING SECURTIY INFRASTRUCTRE AND COMPONENTS EFFECTED BY CONSTRUCTION SHALL BE REROUTED AND/OR DECOMMISIONED.

LEGEND

- EXISTING TO REMAIN
- LED 2X2 FLAT PANEL TROFFER, RE: ELECTRICAL
- EXISTING DOOR TO REMAIN
- EXISTING WALL TO REMAIN
- 2'X6' PERFORATED METAL CEILING
- NOT INCLUDED IN SCOPE OF WORK
- # KEYED NOTE

KEYNOTE LEGEND

NUMBER	DESCRIPTION
09.02	NEW PERFORATED CEILING PANEL SYSTEM, MCP-1
09.06	EXISTING CEILING TO REMAIN, ANY DAMAGED TILE/GYP DURING WORK TO BE REPLACED
09.07	PROVIDE NEW GYP DROP CEILING TO MATCH EXISTING FINISH AND CEILING HEIGHT OF 9'-8" V.I.F.
09.08	4"X4" POST AND BEAM ALUMINUM FRAME SYSTEM ABOVE CEILING
26.01	NEW LIGHT FIXTURE, RE: ELECTRICAL

INTERIOR CEILING FINISH

MCP-1 METAL CEILING PANEL

MANUFACTURER:	USG
TYPE:	2'X8' CELEBRATION METAL PANELS
COLOR:	PERFORATED ALUMINUM SILVER SATING PATTERN A116 (17% OPEN AREA)
SUSPENSION SYSTEM:	CELEBRATION TORSION SPRING CEILING SYSTEM
REMARKS:	USG COMPASSO STANDARD TRIM TO BE USED AS PERIMETER TRIM

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10-20-21

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IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
ENLARGED REFLECTED CEILING PLAN - TERMINAL C CENTRAL

SHEET NUMBER
A302

FILE NAME: C:\@Revit\Locals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
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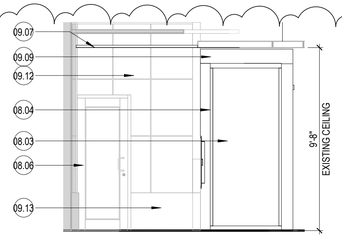
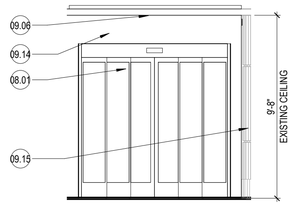
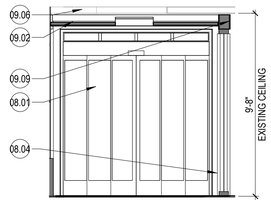


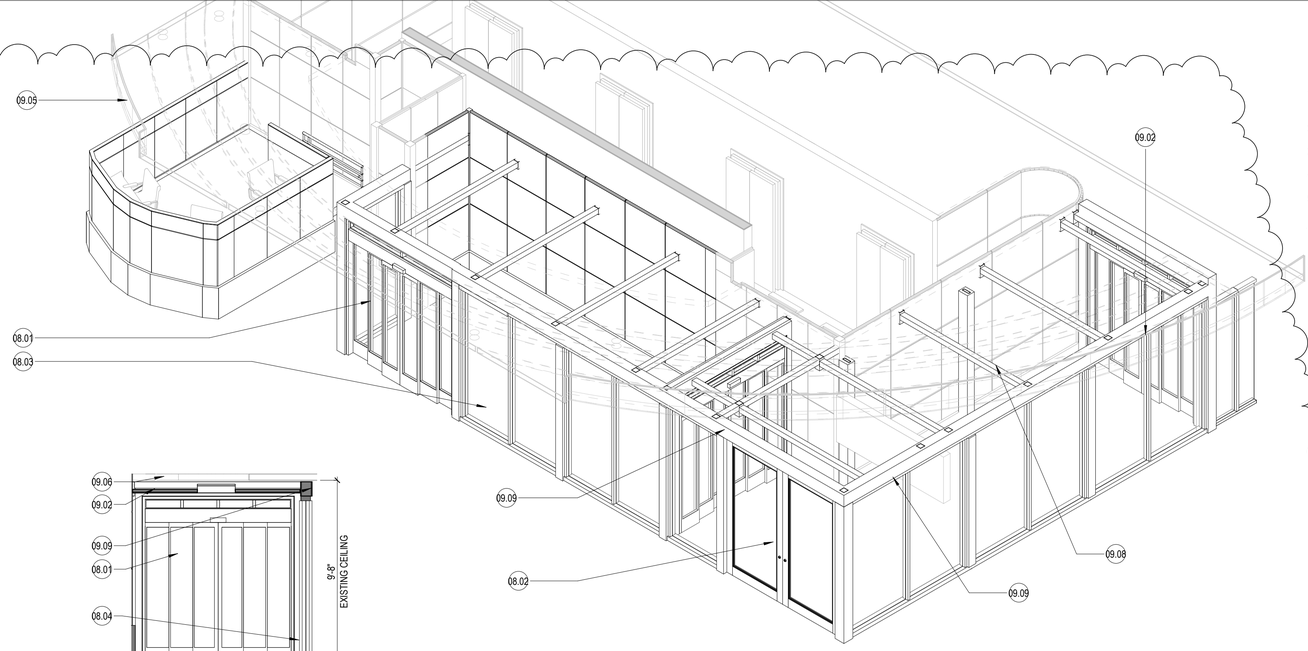
ELEVATION 07 - TERM C | 1/4" = 1'-0" | 7



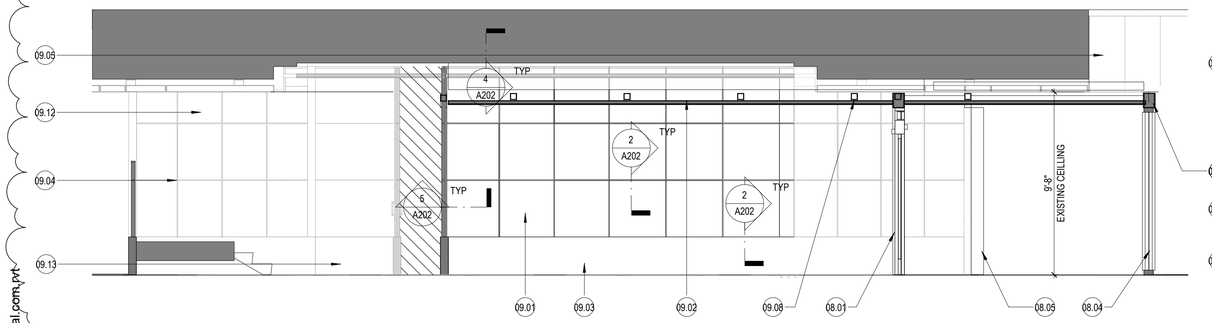
ELEVATION 06 - TERM C | 1/4" = 1'-0" | 6



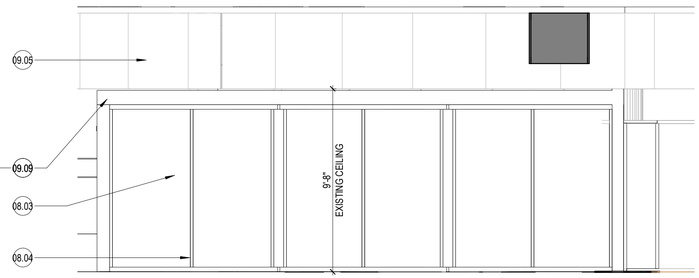
ELEVATION 05 - TERM C | 1/4" = 1'-0" | 5



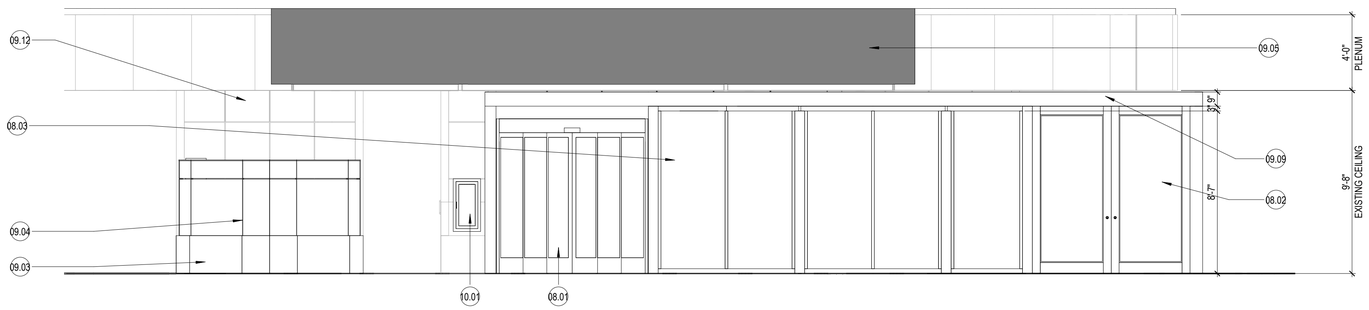
INTERIOR AXO - TERM C | 4



INTERIOR ELEVATION 03 - TERM C | 1/4" = 1'-0" | 3



INTERIOR ELEVATION 02 - TERM C | 1/4" = 1'-0" | 2



INTERIOR ELEVATION 01 - TERM C | 1/4" = 1'-0" | 1

GENERAL NOTES

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3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
4. REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDITIONAL INFORMATION.
5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.

LEGEND

SIM
1 / A101 — VIEW REFERENCE CALLOUT

NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
08.01	MULTI PANEL EXIT DOORS
08.02	VEHICULAR BYPASS DOORS
08.03	9/16" LAMINATED FROSTED GLASS WITH INTERNAL PVB FILM
08.04	ALUMINUM STOREFRONT MULLION SYSTEM
08.05	ALUMINUM TUBE COLUMN
08.06	EXISTING DOOR TO REMAIN
09.01	ACROVYN WALL PANEL SYSTEM
09.02	NEW PERFORATED CEILING PANEL SYSTEM, MCP-1
09.03	24" STAINLESS STEEL BASE
09.04	1/2" STAINLESS STEEL REVEAL
09.05	LEVEL 03 PLENUM
09.06	EXISTING CEILING TO REMAIN, ANY DAMAGED TILE/GYP DURING WORK TO BE REPLACED
09.07	PROVIDE NEW GYP DROP CEILING TO MATCH EXISTING FINISH AND CEILING HEIGHT OF 9'-8" V.I.F.
09.08	4"X4" POST AND BEAM ALUMINUM FRAME SYSTEM ABOVE CEILING
09.09	CONTINUOUS ALUMINUM TRIM FINISH AT WALL PERIMETER
09.12	EXISTING ACROVYN WALL PANEL SYSTEM TO REMAIN
09.13	EXISTING STAINLESS STEEL BASE TO REMAIN
09.14	PAINTED GYP WALL
09.15	EXISTING FINISHES TO REMAIN, ANY DAMAGED EXISTING FINISH DURING WORK TO BE REPLACED
10.01	PROVIDE NEW RECESSED MOUNTED FIRE EXTINGUISHER CABINET, REPAIR EXISTING FINISHES AS NEEDED

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10-20-21

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PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
ENLARGED ELEVATIONS & AXO - TERMINAL C CENTRAL

SHEET NUMBER
A402

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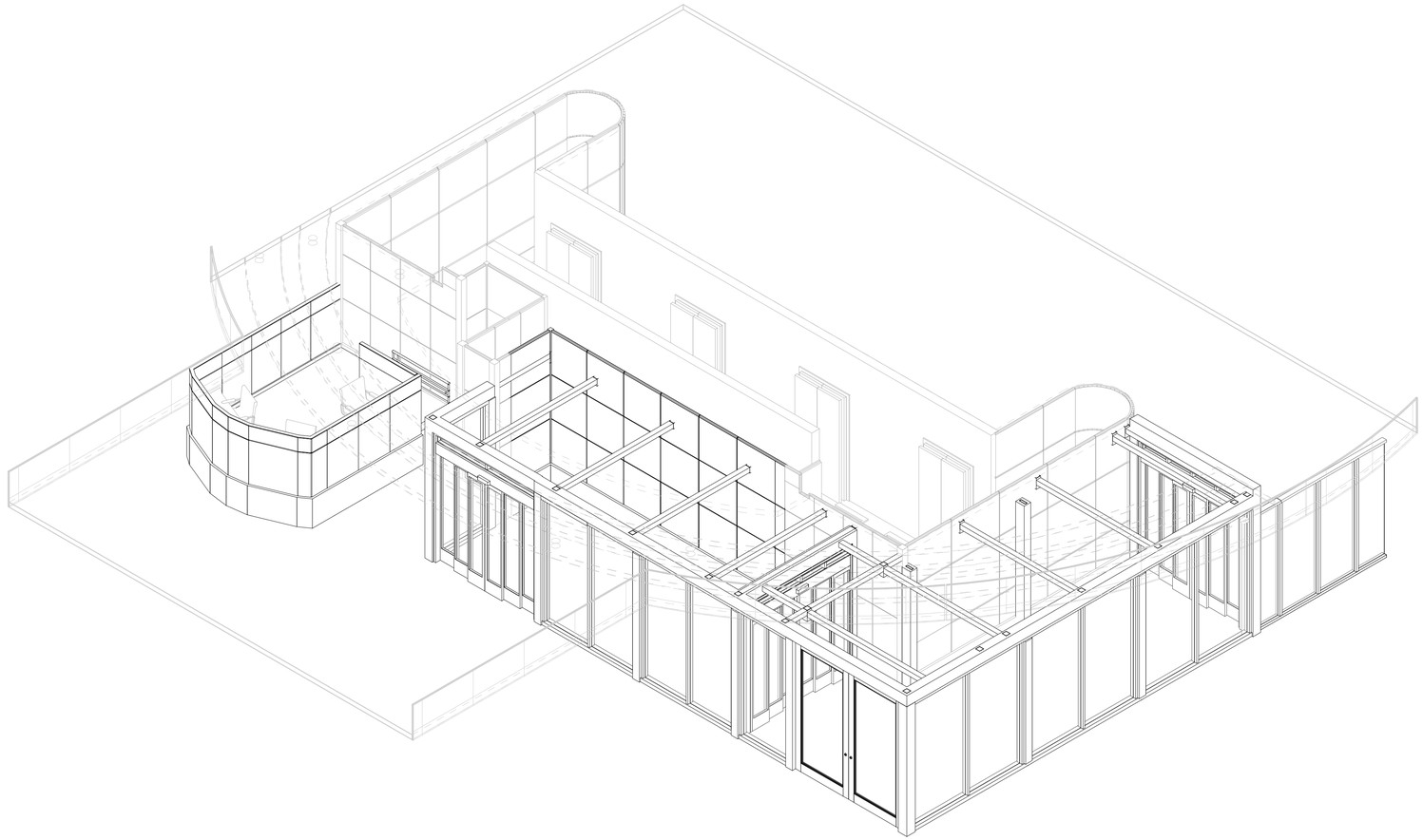

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5. REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.

LEGEND

1 / A101 SIM — VIEW REFERENCE CALLOUT

NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

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PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
ENLARGED AXO - TERMINAL C CENTRAL

SHEET NUMBER
A502

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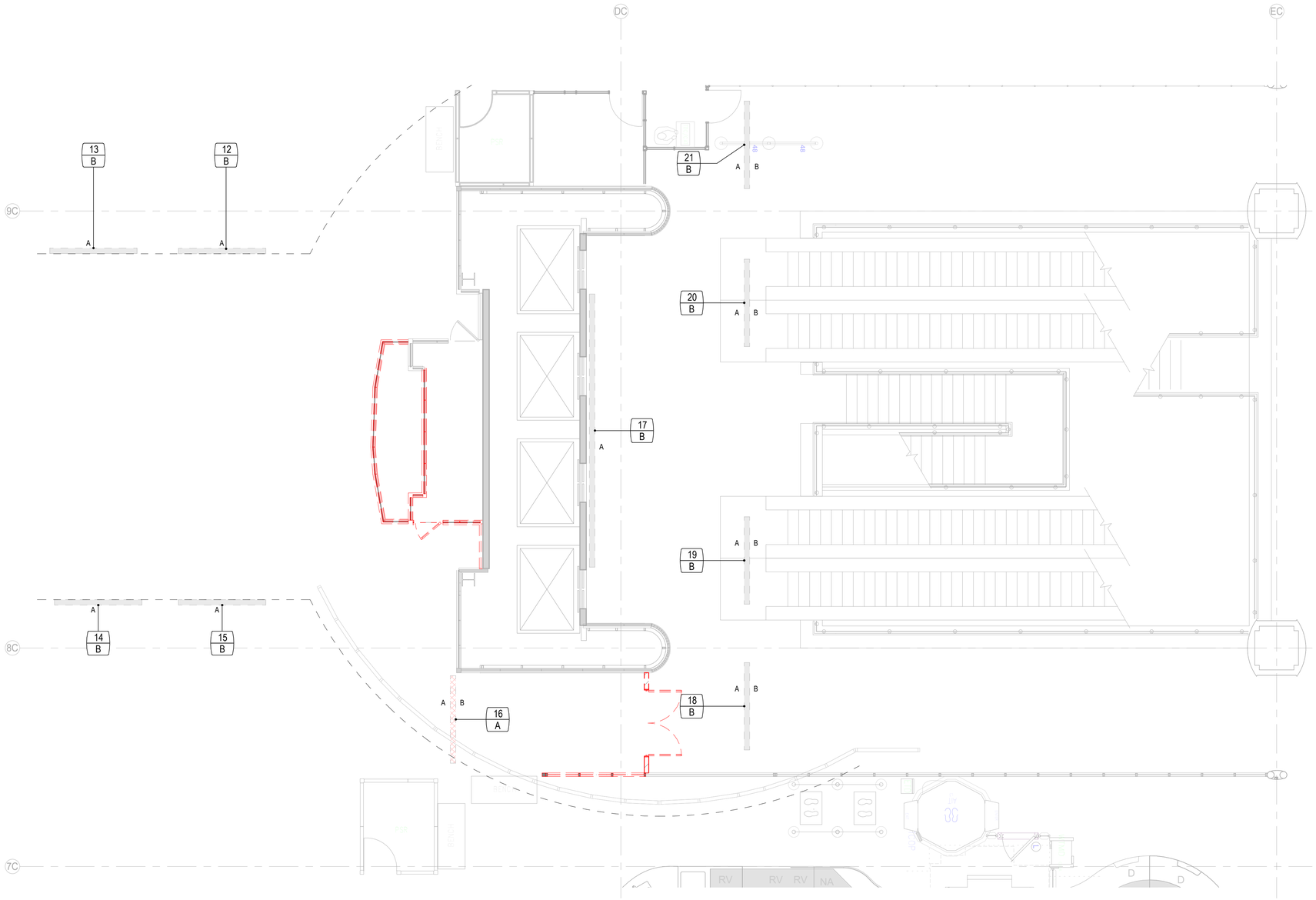

LEVEL 02 - DEMO SIGNAGE - FLOOR PLAN - TERMINAL C - ENLARGED 3/16" = 1'-0" 2

FILE NAME: C:\@RevitLocals\IAH-TERM - SECURITY EXIT LANE_VQuijada@pgal.com.rvt
DATESTAMP: 10/21/2021 12:21:27 AM

KEYNOTES

A EXISTING CEILING MOUNTED SIGN TO BE CAREFULLY REMOVED AND REMOUNTED. IF DAMAGED, SIGN SHALL BE REPLACED, PATCH/REPAIR AS REQUIRED.
B EXISTING SIGN TO REMAIN, UNLESS NOTED OTHERWISE

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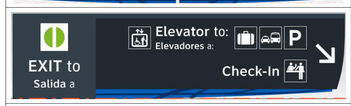
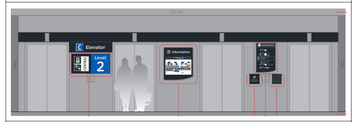
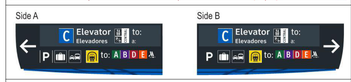
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
4. ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
5. CONTRACTOR SHALL FIELD COORDINATE LOCATION, SIZE AND TYPE OF BLOCKING FOR INSTALLATION OF SIGNAGE, MILLWORK, ETC. ALL CONCEALED WOOD SHALL BE FIRE RETARDANT TREATED (FRT).

LEGEND

EXISTING SIGNAGE TO REMAIN

EXISTING TO REPLACED

MARK 01 A KEYNOTE — SIGNAGE TAG

IMAGE	MARK	NOTES
	12	B
	13	B
	14	B
	15	B
	16	A
	17	B
	18	B
	19	B
	20	B
	21	B

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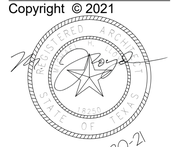
REGISTRATION



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PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

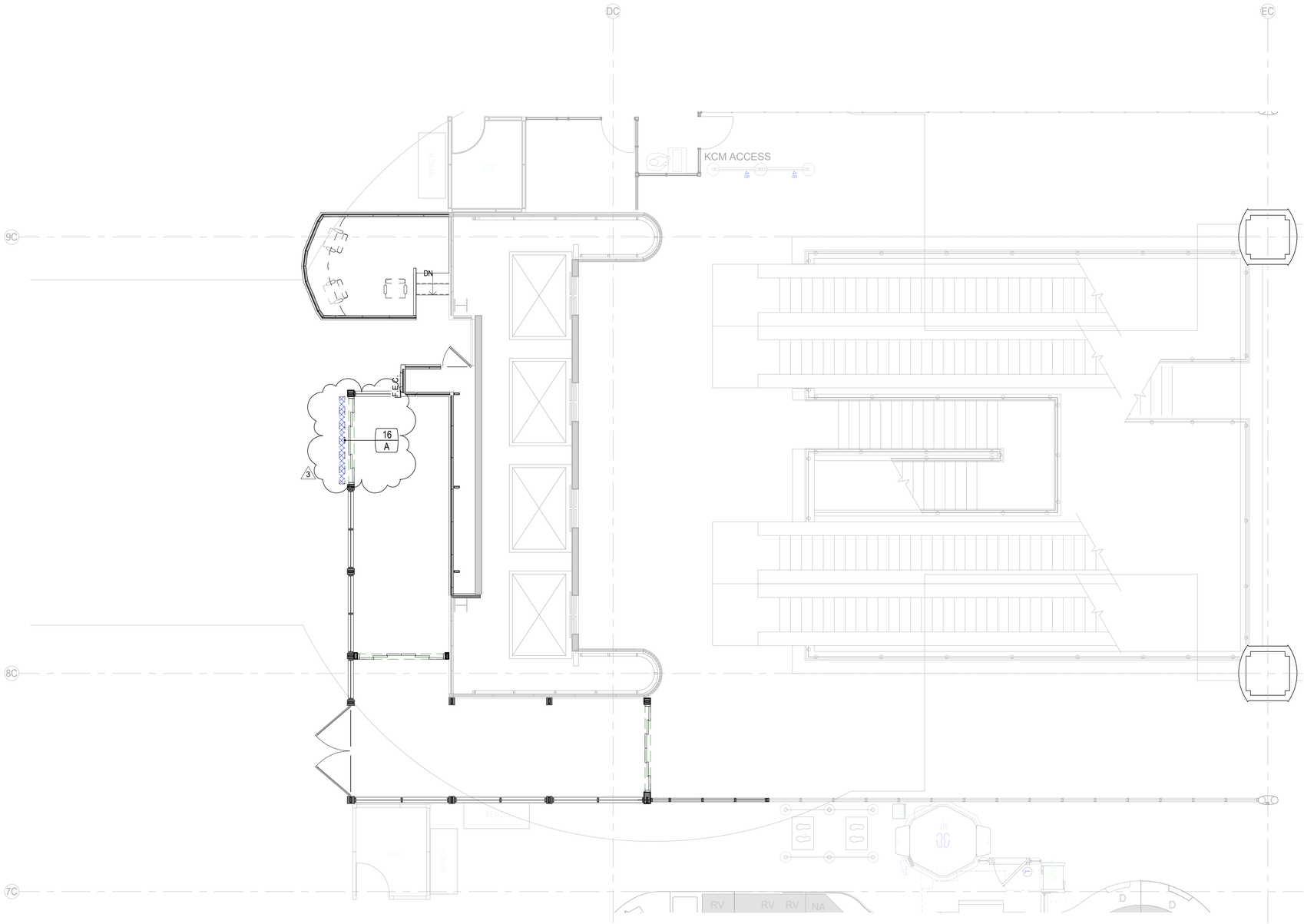
1004345

SHEET TITLE

IAH TERMINAL C SIGNAGE DEMO PLAN

SHEET NUMBER

ADG202



LEVEL 02 - SIGNAGE - FLOOR PLAN - TERMINAL C - ENLARGED 3/16" = 1'-0" (1)

KEYNOTES

A NEW SURFACE MOUNTED SIGN

3 NOTE: NEW SIGNS TO MATCH IAH TERMINAL C WAYFINDING STANDARDS

GENERAL NOTES

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LEGEND

NEW SIGNAGE

MARK 01 / A KEYNOTE — SIGNAGE TAG

IMAGE	MARK	NOTES
Side A: EXIT to: Salida ⇦ / Elevator to: Elevadores ⇨ / P / Check-in — Side B	16	A

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3500 NORTH
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HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
IAH TERMINAL C
SIGNAGE PLAN

SHEET NUMBER
AG202

GENERAL STRUCTURAL NOTES

PART I - DESIGN CRITERIA

A. GENERAL BUILDING CODE

1. THE CONSTRUCTION DOCUMENTS ARE BASED ON THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2012 WITH HOUSTON AMENDMENTS TO THE 2012 INTERNATIONAL BUILDING CODE.

B. DEAD LOADS

1. GLASS WALL : 15 PSF

C. OTHER LOADS

1. LATERAL LOAD ON GLASS WALL: 5 PSF OR
   200 LBS AT 42" ABOVE FINISH FLOOR OR
   50 PLF AT 42" ABOVE FINISH FLOOR

PART II - STRUCTURAL STEEL

A. MATERIAL

1. HOT ROLLED STRUCTURAL MEMBERS: ALL HOT ROLLED STEEL PLATES, SHAPES, SHEET PILING, AND BARS SHALL BE NEW STEEL CONFORMING TO ASTM SPECIFICATION A 6.

2. ASTM SPECIFICATION AND GRADE: CLEARLY MARK THE GRADE OF STEEL ON EACH PIECE, WITH A DISTINGUISHING MARK VISIBLE FROM FLOOR SURFACES, FOR THE PURPOSE OF FIELD INSPECTION OF PROPER GRADE OF STEEL. UNLESS NOTED OTHERWISE ON THE DRAWINGS, STRUCTURAL STEEL SHALL BE AS FOLLOWS:
   a. W- AND WT-SHAPES: ASTM A 992
   b. C-SHAPES: ASTM A 36
   c. L-SHAPES: ASTM A 36
   d. RECTANGULAR HSS: ASTM A 500, GRADE B (FY=46 KSI)
   e. STEEL PIPES: ASTM A 53 (TYPES E OR S), GRADE B.
   f. BASE PLATES: ALL BASE PLATES SHALL CONFORM TO ASTM A 36 UNLESS NOTED OTHERWISE ON THE DRAWINGS.
   g. EDGE ANGLES, BENT PLATES, ANGLE HANGERS, AND ANGLE KICKERS: ASTM A 36
   h. CONNECTION MATERIAL:
      1) ALL CONNECTION MATERIAL, EXCEPT AS NOTED OTHERWISE HEREIN OR ON THE DRAWINGS, INCLUDING BEARING PLATES, GUSSET PLATES, STIFFENER PLATES, FILLER PLATES, ANGLES, ETC. SHALL CONFORM TO ASTM A 36 UNLESS A HIGHER GRADE OF STEEL IS REQUIRED BY STRENGTH AND PROVIDED THE RESULTING SIZES ARE COMPATIBLE WITH THE CONNECTED MEMBERS.
   i. OTHER STEEL: ANY OTHER STEEL NOT INDICATED OTHERWISE SHALL CONFORM TO ASTM A 992 OR ASTM A 572, GRADE 50, EXCEPT PLATES AND ANGLES THAT SHALL BE ASTM A 36.

B. STRUCTURAL BOLTS AND THREADED FASTENERS

1. A 325 BOLTS: ALL BOLTS IN STRUCTURAL CONNECTIONS SHALL CONFORM TO ASTM A 325 TYPE 1, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.

2. THREADED ROUND STOCK: THREADED RODS SHALL CONFORM TO:
   a. ASTM A 36.

C. WELDING

1. UNLESS NOTED OTHERWISE, ELECTRODES FOR WELDING SHALL CONFORM TO E70XX (SMAW), F7XX-EXXX (SAW), ER70S-X (GMAW), OR E7XT-X (FCAW).

2. ELECTRODES FOR GRADE 60 OR GRADE 65 MATERIAL SHALL CONFORM TO E80XX (SMAW), F8XX-EXX-XX (SAW), ER80S-X (GMAW), OR E8XT-X (FCAW).

PART III - COLD-FORMED METAL FRAMING

A. MATERIALS

1. STUD AND TRACK PROFILES SHALL BE STANDARD SECTIONS USED BY MEMBERS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA). SSMA MEMBER DESIGNATIONS AS SHOWN ON THE FOLLOWING EXAMPLE:

   600 S 162-43 REPRESENTS A 6.00" DEEP, STUD SECTION, 1.625" WIDE FLANGE, 0.043" (43 MILS) MINIMUM STEEL THICKNESS.

   NOTES:
   S = STUD SECTION
   T = TRACK SECTION
   U = CHANNEL SECTION
   F = FURRING CHANNEL

2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, MEMBERS SHALL HAVE THE FOLLOWING YIELD STRENGTHS:
   a. STUDS: 33, 43 MIL THICKNESS FY = 33 KSI
   b. STUDS: 54, 68, 97 MIL THICKNESS FY = 50 KSI
   c. TRACKS: 33, 43, 54, 68, 97 MIL FY = 33 KSI
   d. U-CHANNELS, FURRING CHANNELS: FY = 33 KSI

3. ALL COLD-FORMED STEEL FRAMING MATERIALS SHALL HAVE A MINIMUM G60 GALVANIZED COATING.

B. CONNECTIONS

1. CONNECTIONS NOT FULLY DETAILED ON THE CONTRACT DOCUMENTS SHALL BE DESIGNED BY THE CONTRACTOR PER THE SPECIFICATION.

2. SCREWS: UNLESS NOTED OTHERWISE SCREWS SHALL BE AS FOLLOWS:
   a. SHEET STEEL TO SHEET STEEL: #10-16, 5/8 INCH LONG SELF DRILLING SCREWS.
   b. SHEET STEEL TO STRUCTURAL STEEL: #12-24, 1-1/2 INCH LONG SELF DRILLING SCREWS WITH NO 5 TIP STYLE.

3. POWDER ACTUATED FASTENERS: UNLESS NOTED OTHERWISE, PAF SHALL BE AS FOLLOWS:
   a. SHEET STEEL TO CONCRETE: 0.145" DIAMETER, 1-1/4" LONG, SMOOTH SHANK.
   b. SHEET STEEL TO POST-TENSIONED CONCRETE: 0.145" DIAMETER, 3/4" LONG, SMOOTH SHANK.
   c. SHEET STEEL TO STRUCTURAL STEEL: 0.145" DIAMETER, 3/4" LONG, KNURLED SHANK.
   d. MANUFACTURER. UNLESS NOTED OTHERWISE, ALL POWDER ACTUATED FASTENERS SHALL BE MANUFACTURED BY SIMPSON STRONG-TIE (LARR #25469) OR POWERS FASTENERS (LARR #25304) OR HILTI (LARR #02582) OR ITW RAMSET/RED HEAD (LARR #22668).

4. WELDING:
   a. WELDING PROCEDURES FOR SHEET STEEL TO BE IN ACCORDANCE WITH AWS D1.3. WELDERS SHALL BE CERTIFIED FOR SHEET STEEL IN ALL POSITIONS REQUIRED PER AWS D1.3
   b. SUGGESTED WELD METAL AND PROCESS FOR SHOP WELDING ARE: 60KSI WELD METAL STRENGTH(MINIMUM) - MIG.
   c. SUGGESTED METHODS FOR FIELD WELDING: 1/8 INCH E60XX (MINIMUM) ELECTRODE - SMAW.
   d. MINIMUM WELD THROAT THICKNESS (T) MUST MATCH OR EXCEED THE BASE STEEL THICKNESS OF THE THINNEST CONNECTED STEEL SHEET UNLESS NOTED OTHERWISE.
   e. AFTER WELDING ALL FLUX SHALL BE REMOVED, AND A ZINC-RICH PAINT, WITH A DRY FILM CONTAINING 94% ZINC DUST BY WEIGHT, SHALL BE APPLIED TO THE WELD AREA TO RESTORE CORROSION RESISTANCE.
   f. FIELD WELDING TO BE DONE BY WELDERS CERTIFIED BY THE LADBS FOR COLD-FORMED STEEL FRAMING. CONTINUOUS INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED.
   g. SHOP WELDS MUST BE PERFORMED IN AN LADBS-LICENSED FABRICATION SHOP.

PART IV - MISCELLANEOUS

A. CONTRACT DOCUMENTS

1. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD.

2. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE.

B. DRAWING CONFLICTS

1. THE GENERAL CONTRACTOR SHALL COMPARE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCY BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.

C. CONFLICTS IN STRUCTURAL REQUIREMENTS

1. WHERE CONFLICT EXISTS AMONG THE VARIOUS PARTS OF THE STRUCTURAL CONTRACT DOCUMENTS, STRUCTURAL DRAWINGS, GENERAL NOTES, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE ENGINEER, SHALL GOVERN.

D. EXISTING CONDITIONS

1. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING BUILDING AT THE JOB SITE AND REPORT ANY DISCREPANCIES FROM ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION AND ERECTION OF ANY MEMBERS.

2. WORK SHOWN ON THE DRAWINGS IS NEW, UNLESS NOTED AS EXISTING.

3. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WAS OBTAINED FROM EXISTING CONSTRUCTION DOCUMENTS AND LIMITED SITE OBSERVATION. THESE DRAWINGS OF EXISTING CONSTRUCTION ARE AVAILABLE FOR CONTRACTOR USE. HOWEVER, THE AVAILABLE DRAWINGS OF EXISTING CONSTRUCTION ARE NOT NECESSARILY COMPLETE. THE CONTRACTOR SHALL FIELD VERIFY ALL PERTINENT INFORMATION.

4. DEMOLITION, CUTTING, DRILLING, ETC. OF EXISTING WORK SHALL BE PERFORMED WITH GREAT CARE SO AS NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING. IF ANY ARCHITECTURAL, STRUCTURAL, OR MEP MEMBERS NOT DESIGNATED FOR REMOVAL INTERFERE WITH THE NEW WORK, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND APPROVAL OBTAINED PRIOR TO REMOVAL OF THOSE MEMBERS.

5. THE CONTRACTOR SHALL SAFELY SHORE EXISTING CONSTRUCTION WHEREVER EXISTING SUPPORTS ARE REMOVED TO ALLOW THE INSTALLATION OF NEW WORK. ALL SHORING METHODS AND SEQUENCING OF DEMOLITION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HIS ENGINEER.

6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AND DUCT WORK PRIOR TO THE START OF CONSTRUCTION AND TAKE CARE TO PROTECT EXISTING UTILITIES THAT ARE TO REMAIN IN SERVICE.

7. THE CONTRACTOR SHALL REPAIR ALL DAMAGE CAUSED DURING CONSTRUCTION WITH SIMILAR MATERIALS AND WORKMANSHIP TO RESTORE CONDITIONS TO LEVELS ACCEPTABLE TO THE ARCHITECT.

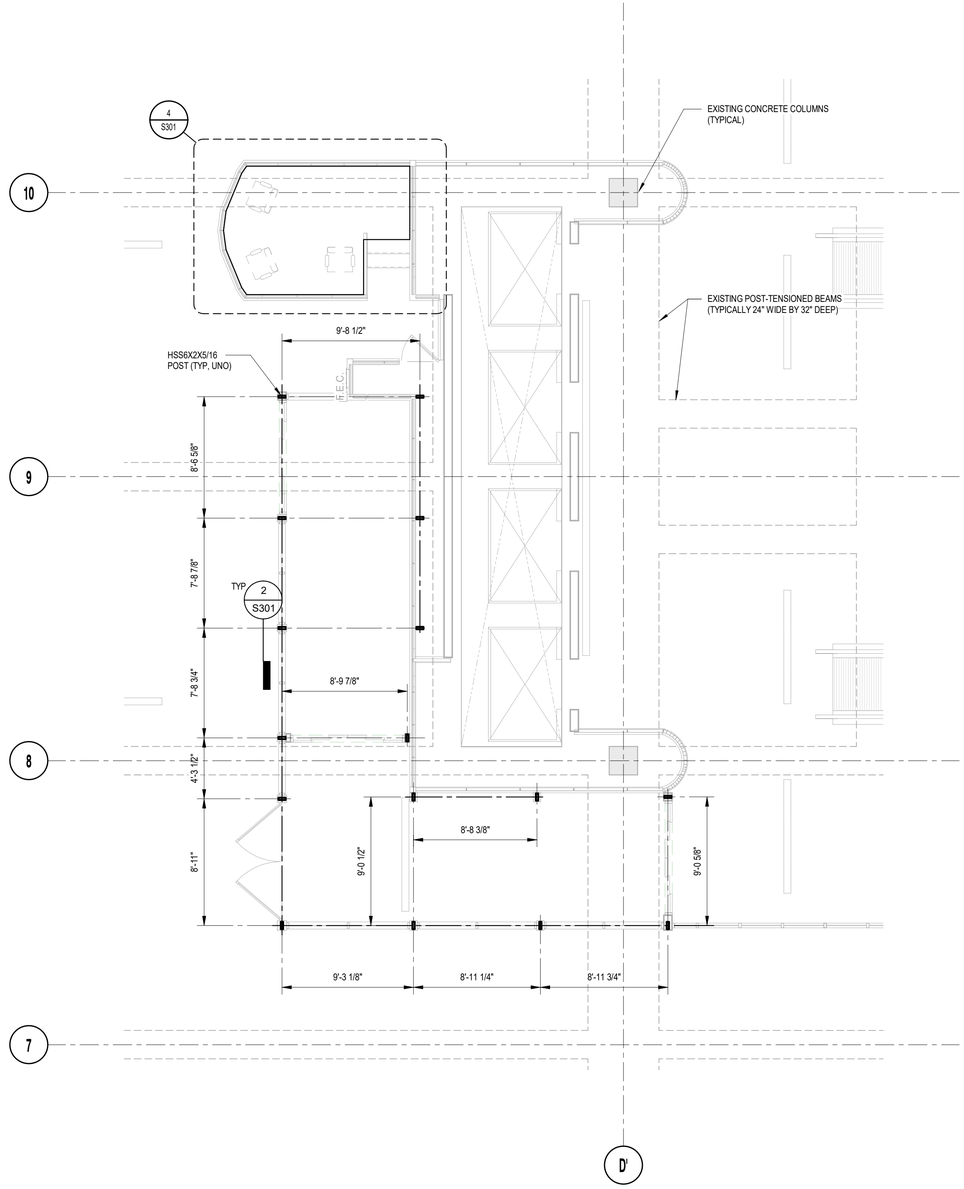
E. CONTRACTOR SUBSTITUTIONS

1. ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE STRUCTURAL CONTRACT DOCUMENTS WILL BE APPROVED ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:
   a. A COST SAVINGS TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST.
   b. THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE INTERNATIONAL CODE COUNCIL (ICC) AND THE ICC REPORT IS SUBMITTED WITH THE REQUEST.
      1) THE ICC ESR THAT IS SUBMITTED MUST REFERENCE THE BUILDING CODE UNDER WHICH THE PROJECT IS PERMITTED.
      2) ICC REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED.

2. SUBMITTALS NOT SATISFYING THE ABOVE CRITERIA WILL NOT BE CONSIDERED.

NOTES:

1. EXISTING BUILDING STRUCTURE IS POST-TENSIONED CONCRETE BEAM AND SLAB CONSTRUCTION. CONTRACTOR SHALL ENSURE THAT NO TENDONS OR REINFORCEMENT IS CUT OR OTHERWISE DAMAGED DURING THE COURSE OF CONSTRUCTION OPERATIONS. EDGES OF CORES AND ANCHORS ARE TO BE LOCATED AS FAR AS POSSIBLE FROM TENDONS OR REINFORCING, AND IN NO CASE CLOSER THAN 2 INCHES. PRIOR TO ANY DRILLING, CORING, CHIPPING, PLACEMENT OF ANCHORS, OR ANY OTHER PENETRATION OF EXISTING CONCRETE, INSTALLER SHALL ACCURATELY DETERMINE THE LOCATION OF STEEL CABLE TENDONS AND REINFORCMENT BY USE OF GROUND PENETRATING RADAR (GPR) OR OTHER APPROVED NON-DESTRUCTIVE METHOD.



1 LEVEL 02 - TICKETING - FRAMING PLAN
SCALE: 3/16" = 1'-0"

CLIENT

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DEPARTMENT OF AVIATION
RECOMMENDED:
HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-156 - IAH

REGISTRATION

TBPE Firm Registration No. 2194

STATE OF TEXAS
K. ELAINE ROGERS
65566
LICENSED PROFESSIONAL ENGINEER
10/ 20/ 2021

DRAWING HISTORY

No.	DATE	DESCRIPTION
1	10-20-21	ISSUE FOR BID/100%CD

PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

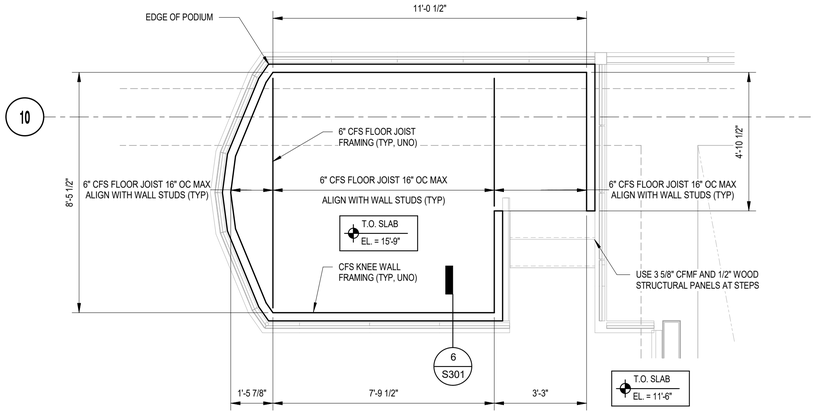
PROJECT LOCATION
GEORGE BUSH IAH
3500 N. TERMINAL RD
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
LEVEL 02 - TICKETING - FRAMING PLAN

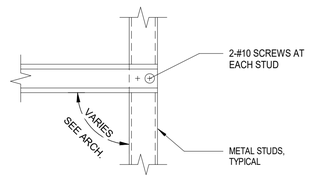
SHEET NUMBER
S200

FILE NAME: G:\Users\Ricardo.Rodriguez\Desktop\0211079_IAH-TERM - SECURITY EXIT LANE_R21.rvt
DATESTAMP 10/20/2021 5:30:06 PM

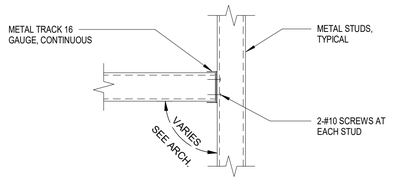


4 PARTIAL PLAN - HPD PODIUM - FRAMING PLAN

SCALE: 3/8" = 1'-0"



STUD CONNECTION WITHOUT TRACK



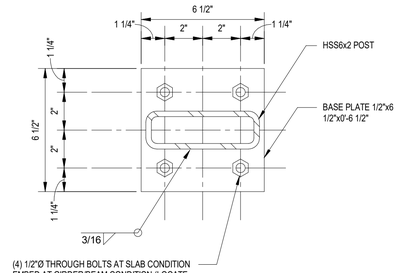
STUD CONNECTION WITH TRACK

NOTE:

1. SEE ARCHITECTURAL/INTERIOR DESIGN DRAWINGS FOR STUD CONFIGURATION.

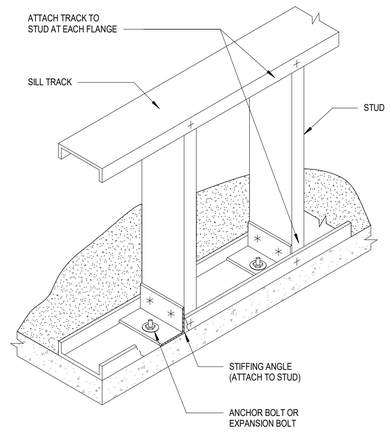
8 METAL STUD CONNECTION

SCALE: 3/4" = 1'-0"



3 SECTION

3" = 1'-0"

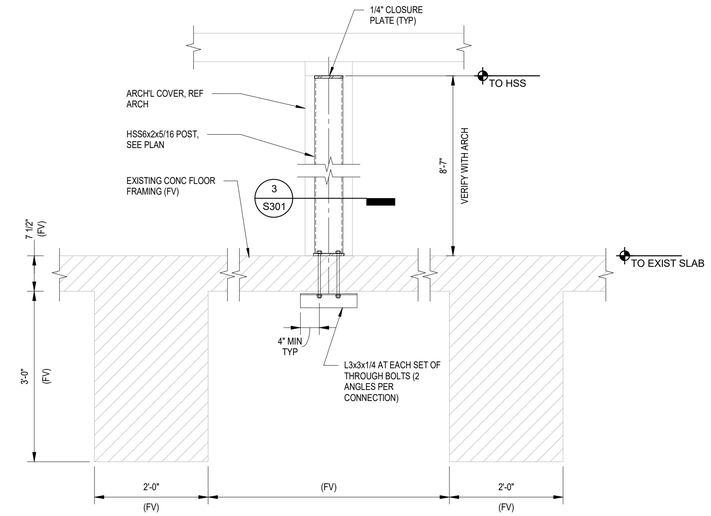


NOTE:

STIFFENER ANGLE AND ANCHOR BOLT AS REQUIRED TO SUIT DESIGN LOADS

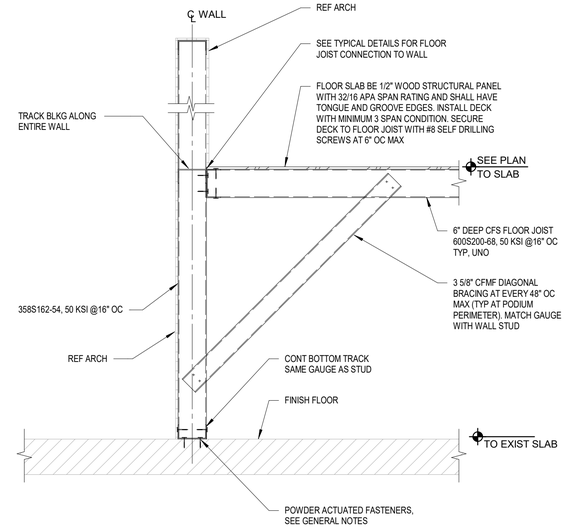
7 STIFFENED KNEEWALL

SCALE: 1" = 1'-0"



2 SECTION - AT SLAB CONDITION

3/4" = 1'-0"



6 SECTION

SCALE: 3/4" = 1'-0"

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1004345

SHEET TITLE

DETAILS

SHEET NUMBER

S301

FILE NAME: G:\Users\Ricardo.Rodriguez\Desktop\0211079_IAH-TERM - SECURITY EXIT LANE_R21.rvt
DATESTAMP 10/20/2021 5:30:14 PM

MISCELLANEOUS

SYMBOL	DESCRIPTION
3P/60A 3R NF	DISCONNECT SWITCH, NON-FUSIBLE 3 POLE, 60 AMP, NF: NON-FUSED, 3R: NEMA 3R ENCLOSURE
3P/60A 3R F:50A	DISCONNECT SWITCH, FUSIBLE 3 POLE, 60 AMP, FUSED AT 50 AMPS, 3R: NEMA 3R ENCLOSURE
3P/60A 3R Nx	COMBINATION STARTER / DISCONNECT SWITCH, FUSIBLE 3 POLE, 60 AMP, NEMA x SIZE, 3R: NEMA 3R ENCLOSURE
	MAGNETIC MOTOR STARTER
	ENCLOSED CIRCUIT BREAKER, AS INDICATED
VFD	VFD-RATED, REMOTE DISCONNECT SWITCH WITH EARLY-BREAK, AUXILIARY CONTACTS FOR VFD DECELERATE-TO-STOP SIGNAL. CONNECT CONTROL WIRING TO ASSOCIATED VFD (AS REQUIRED).
	PANELBOARD, 480 / 277V
	PANELBOARD, 208 /120V
SPD	SURGE PROTECTION DEVICE
	ELECTRICAL METER
TX	TRANSFORMER
	GROUND BUS BAR
	3/4" PLYWOOD TELEPHONE BACKBOARD
	CONCRETE ENCASED DUCTBANK
	HOMERUN TO PANEL INDICATED NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS
	WIRE IN CONDUIT CONCEALED, #12 AWG SIZE WIRE IN 1/2" CONDUIT MINIMUM UNLESS OTHERWISE NOTED
	WIRE IN CONDUIT CONCEALED BELOW SLAB OR GRADE
	CONDUIT EXPOSED
	FLEXIBLE CONDUIT
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT STUB

LOW VOLTAGE (RACEWAY ONLY)

SYMBOL	DESCRIPTION
X,N	INFORMATION OUTLET
	INFORMATION OUTLET, FLOOR MOUNTED
TV	CATV OUTLET

RECEPTACLE(S)

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE, 20 AMP, 120V U.O.N.
	DUPLEX RECEPTACLE, 20 AMP, 120V U.O.N. MOUNTED AT 48" UNLESS NOTED OTHERWISE
	QUADRAPLEX RECEPTACLE, 20 AMP, 120V U.O.N.
	QUADRAPLEX RECEPTACLE, 20 AMP, 120V U.O.N. MOUNTED AT 48" UNLESS NOTED OTHERWISE
	SINGLE RECEPTACLE, 20 AMP, 120V U.O.N.
	GFI - TYPE DUPLEX RECEPTACLE (WP: DENOTES WEATHERPROOF COVER)
	GFI - TYPE DOUBLE DUPLEX RECEPTACLE
	GFI - DUPLEX RECEPTACLE MOUNTED AT 48" UNLESS OTHERWISE NOTED
	GFI - DOUBLE DUPLEX RECEPTACLE MOUNTED AT 48" UNLESS OTHERWISE NOTED
	SPECIAL PURPOSE RECEPTACLE (NEMA RATING AS INDICATED)
	DUPLEX RECEPTACLE - HALF SWITCHED
	DUPLEX RECEPTACLE - CEILING MOUNTED
IG	DUPLEX RECEPTACLE WITH ISOLATED GROUND
	DUPLEX RECEPTACLE - FLOOR MOUNTED
J	JUNCTION BOX - CEILING MOUNTED
J	JUNCTION BOX - WALL MOUNTED
J	JUNCTION BOX - FLOOR / GROUND MOUNTED

FIELD VERIFY ALL LOCATION

1. DESIGN DRAWINGS ARE SCHEMATIC. THIS CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING OR AWARD OF CONTRACT TO INSPECT EXISTING FIELD CONDITIONS. THIS CONTRACT SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY FOR FIELD MODIFICATIONS DUE TO EXISTING CONDITIONS.
2. THE CONTRACTOR SHALL CONTACT THE ARCHITECT, ENGINEER OR OWNER PRIOR TO BIDDING FOR INTERPRETATIONS AND CLARIFICATIONS OF THE DESIGN AND INCLUDE IN HIS BID ALL COSTS TO MEET THE DESIGN INTENT. CLARIFICATIONS MADE BY THE ARCHITECT, ENGINEER OR OWNER AFTER BIDDING WILL BE FINAL AND SHALL BE IMPLEMENTED AT CONTRACTORS COST.
3. BIDDING CONTRACTORS SHALL HAVE A WORKING KNOWLEDGE OF LOCAL CODES AND ORDINANCES AND SHALL INCLUDE IN THEIR BIDS THE COST FOR ALL WORK INSTALLED IN STRICT ACCORDANCE WITH GOVERNING CODES, THE PLANS AND SPECIFICATIONS NOT WITHSTANDING. THE CONTRACTOR SHALL ALERT ARCHITECT, ENGINEER OR OWNER OF ANY APPARENT DISCREPANCIES BETWEEN GOVERNING CODES AND DESIGN INTENT.
4. EXISTING CONDITIONS REFLECTED IN DESIGN DRAWINGS WERE TAKEN FROM VARIOUS FIELD VISITS CONDUCTED FROM 5/1/19 -8/28/19 (9/20/2021-MOST RECENT). THE ENGINEER AND ARCHITECTURAL FIRM ARE NOT RESPONSIBLE FOR ANY INSTALLATIONS THAT MAY HAVE OCCURRED OUT IN THE FIELD THAT DIFFER FROM WHAT IS SHOWN ON THE PLANS. CONTRACTOR IS RESPONSIBLE TO CONDUCT A SITE VISIT TO VERIFY THE EXISTING CONDITIONS AND PROVIDE A REPORT TO THE A/E FIRMS DOCUMENTING ANY CHANGES THAT HAVE OCCURRED THAT DIRECTLY AFFECT ANY OF THE PROPOSED INSTALLATIONS INDICATED ON ANY PART OF THE DRAWINGS COMPILED IN THIS SET.

ELECTRICAL ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
A	AMPERES	IMC	INTERMEDIATE METAL CONDUIT
AC	ALTERNATING CURRENT	KCMIL	THOUSAND CIRCULAR MILS
A/C	AIR CONDITIONING	KVA	KILOVOLT - AMPERES
AFCI	ARC FAULT CIRCUIT INTERRUPTER	LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
AHU	AIR HANDLING UNIT	LTG	LIGHTING
AIC	AMPERE INTERRUPTING CAPACITY	LRA	LOCK ROTOR AMPS
AL	ALUMINUM	MC	METAL CLAD CABLE
ATS	AUTOMATIC TRANSFER SWITCH	MCB	MAIN CIRCUIT BREAKER
AWG	AMERICAN WIRE GAUGE	MCC	MOTOR CONTROL CENTER
C	CONDUIT	MCP	MOTOR CIRCUIT PROTECTION
CATV	CABLE TELEVISION	MLO	MAIN LUGS ONLY
CB	CRITICAL BRANCH	MS	MOTOR RATED SWITCH
C/B	CIRCUIT BREAKER	MTD	MOUNTED
CCTV	CLOSED CIRCUIT TELEVISION	NC	NORMALLY CLOSED
CIR	CIRCUIT	NEC	NATIONAL ELECTRICAL CODE
CKT	CIRCUIT	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CU	COPPER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
DC	DIRECT CURRENT	NL	NIGHT LIGHT
DIA	DIAMETER	NO	NORMALLY OPEN OR NUMBER
EB	EQUIPMENT BRANCH	P	POLE
EC	ELECTRICAL CONTRACTOR	PB	PUSH BUTTON, PANIC BUTTON OR PULLBOX
ECB	ENCLOSED CIRCUIT BREAKER	PNL	PANEL
EF	EXHAUST FAN	PWR	POWER
ELEV	ELEVATOR	QTY	QUANTITY
EM	EMERGENCY	REQ	REQUIRED
EMT	ELECTRICAL METALLIC TUBING	RMC	RIGID METAL CONDUIT
EP	EMERGENCY POWER	RNC	RIGID NON-METALLIC CONDUIT
EPO	EMERGENCY POWER OFF (BUTTON OR SWITCH)	RTS	REMOTE TEST STATION
ER	EXISTING TO BE REMOVED	RTU	ROOF TOP UNIT
ETR	EXISTING TO BE RELOCATED	SP	SPARE
EWC	ELECTRIC WATER COOLER	ST	SHUNT-TRIP
EX	EXISTING TO REMAIN	SW	SWITCH
F	FUSE	SYM	SYMMETRICAL
FA	FIRE ALARM	TEL	TELEPHONE
FAA	FIRE ALARM ANNUNCIATOR PANEL	TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
FLA	FULL LOAD AMPERES	TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
FMC	FLEXIBLE METAL CONDUIT	TYP	TYPICAL
G, GND	GROUND	UG	UNDERGROUND
GFCI, GFI	GROUND FAULT CIRCUIT INTERRUPTER	UL	UNDERWRITERS LABORATORY
GND	GROUND	V	VOLT
GRC	GALVANIZED RIGID METAL CONDUIT	VA	VOLT - AMPERE
HOA	HAND-OFF-AUTOMATIC SWITCH	W	WATT OR WIRE
HVAC	HEATING, VENTILATION, AIR CONDITIONING	WH	WATER HEATER
HZ	HERTZ	WP	WEATHERPROOF
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS	XFMR	TRANSFORMER
IG	ISOLATED GROUND		

LIGHTING

SYMBOL	DESCRIPTION
	CEILING MOUNTED 2'x2' / 2'x4' LUMINAIRE - RECESSED NORMAL POWER
	CEILING MOUNTED 2'x2' / 2'x4' LUMINAIRE - RECESSED EMERGENCY POWER
	CEILING MOUNTED 1'x4' LUMINAIRE RECESSED OR SURFACE MOUNTED - NORMAL POWER
	CEILING MOUNTED 1'x4' LUMINAIRE RECESSED OR SURFACE MOUNTED - EMERGENCY POWER
	CEILING MOUNTED 1'x4' LUMINAIRE PENDANT MOUNTED - NORMAL POWER
	CEILING MOUNTED 1'x4' LUMINAIRE PENDANT MOUNTED - EMERGENCY POWER
	STRIP LUMINAIRE - NORMAL POWER
	STRIP LUMINAIRE - EMERGENCY POWER
	DOWNLIGHT LUMINAIRE - NORMAL POWER
	DOWNLIGHT LUMINAIRE - EMERGENCY POWER
	WALL MOUNTED LUMINAIRE - NORMAL POWER
	WALL MOUNTED LUMINAIRE - EMERGENCY POWER
	EMERGENCY BATTERY LIGHT UNIT
	EXIT LIGHT - SINGLE FACE WITH DIRECTIONAL ARROW
	EXIT LIGHT - DOUBLE FACE
	EXIT LIGHT - WALL MOUNTED

FIRE ALARM

SYMBOL	DESCRIPTION
R	FIRE ALARM RELAY
P	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM STROBE ONLY DEVICE MINIMUM 75cd RATING
	FIRE ALARM HORN / STROBE ONLY DEVICE MINIMUM 75cd RATING
	FIRE ALARM SPEAKER / STROBE ONLY DEVICE MINIMUM 75cd RATING
	FIRE ALARM SPEAKER DEVICE
	FIRE ALARM HORN DEVICE MINIMUM 75cd RATING
	FIRE ALARM STROBE ONLY DEVICE MINIMUM 75cd RATING - CEILING MOUNTED
	FIRE ALARM HORN / STROBE ONLY DEVICE MINIMUM 75cd RATING - CEILING MOUNTED
	FIRE ALARM SPEAKER / STROBE ONLY DEVICE MINIMUM 75cd RATING - CEILING MOUNTED
	FIRE ALARM SPEAKER DEVICE - CEILING MOUNTED
	FIRE ALARM HORN DEVICE MINIMUM 75cd RATING - CEILING MOUNTED

NOTES:
A. CONNECT ALL NEW FIRE ALARM DEVICES SHOWN TO THE EXISTING FIRE ALARM CONTROL PANEL THAT SERVES THE PROPOSED AREA OF WORK.
B. PROVIDE A MINIMUM 3/4"CONDUIT TO ALL FIRE ALARM DEVICE LOCATIONS.

SWITCHES

SYMBOL	DESCRIPTION
$	SINGLE POWER TOGGLE SWITCH (LETTER DENOTES FIXTURE CONTROLLED)
$3	THREE-WAY TOGGLE SWITCH
$4	FOUR-WAY TOGGLE SWITCH
$M	MOTOR SWITCH
$F	FAN SWITCH
$D	DIMMER SWITCH, COMPATIBLE WITH 0-10V DIMMING.
$T	TIMER SWITCH (60 MINUTES)
$LV	LOW VOLTAGE SWITCH
$K	KEY SWITCH
$WP	SWITCH - WEATHERPROOF
$OS	WALL SWITCH OCCUPANCY SENSOR
$DOS	DIMMER OCCUPANCY SENSOR SWITCH
OS	OCCUPANCY SENSOR - CEILING MOUNTED
OS	OCCUPANCY SENSOR - WALL MOUNTED
PC	PHOTOCELL

GENERAL NOTES

1. THE ELECTRICAL CONTRACT DOCUMENTS ARE SCHEMATIC IN NATURE AND INDICATE THE GENERAL CONFIGURATION OF SYSTEMS AND WORK. EXAMINE ARCHITECTURAL, INTERIOR DESIGN, CIVIL, LANDSCAPE, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, TECHNOLOGY, AND FOOD SERVICE DRAWINGS AND SPECIFICATIONS FOR LOCATIONS AND REQUIREMENTS OF DEVICES, EQUIPMENT, LUMINARIES, AND SYSTEMS. CONTENT INDICATED ON THE SPECIFICATIONS BUT NOT THE DRAWINGS, OR CONTENT INDICATED ON THE DRAWINGS BUT NOT THE SPECIFICATIONS, SHALL BE INTERPRETED AS BEING PRESENT ON BOTH.
2. PROVIDE ALL DEVICES, EQUIPMENT, ACCESSORIES, MATERIALS, AND LABOR REQUIRED FOR A COMPLETE, FUNCTIONAL, AND CODE-COMPLIANT ELECTRICAL SYSTEM. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CODES AND STANDARDS INDICATED ON THIS SHEET.
3. ALL DEVICES, EQUIPMENT, ACCESSORIES, AND MATERIALS SHALL BE NEW, AND, WHERE APPLICABLE, SHALL BE LISTED BY U.L. OR ANOTHER APPROVED ELECTRICAL TESTING AGENCY.
4. COORDINATE LOCATIONS AND REQUIREMENTS OF EQUIPMENT REQUIRING ELECTRICAL SERVICE (I.E. PRINTERS, APPLIANCES, MOTORIZED PROJECTION SCREENS, MOTORIZED SHADES, ELEVATORS, TOOLS, ETC.) WITH APPROVED SHOP DRAWINGS, SPECIFICATION SHEETS, MANUFACTURER'S INSTALLATION LITERATURE, AND EQUIPMENT NAMEPLATE DATA, PRIOR TO ROUGH-IN AND INSTALLATION. PROVIDE ELECTRICAL CONNECTIONS (AS REQUIRED).
5. BID SHALL INCLUDE COSTS ASSOCIATED WITH BACKFILLING, CORE DRILLING, DIRECTIONAL BORING, EXCAVATING, AND REPAIRING OF SURFACES.
6. PAY ALL FEES, TAXES, AND OTHER COSTS ASSOCIATED WITH THE WORK ENCOMPASSED BY THE ELECTRICAL CONTRACT DOCUMENTS. PROVIDE ALL REQUIRED NOTICES AND OBTAIN ALL REQUIRED PERMITS.
7. PROVIDE COOPERATION WITH OTHER TRADES AND PROVIDE ANY INFORMATION REQUIRED TO FACILITATE THE COMPLETION OF THEIR WORK. COORDINATE DEVICE AND EQUIPMENT LOCATIONS AND MOUNTING HEIGHTS WITH OTHER TRADES PRIOR TO ROUGH-IN AND INSTALLATION. COORDINATE CONDUIT ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN AND INSTALLATION.
8. AN ALLOWANCE OF $50,000 SHALL BE ADDED FOR ANY MISCELLANEOUS MODIFICATIONS THAT WILL BE REQUIRED IN THE FIELD. ALLOWANCE SHALL BE INCLUDED IN BID WITH NO EXCEPTIONS.
9. PROVIDE TEMPORARY ELECTRICAL SERVICE(S) FOR USE BY OTHER TRADES DURING PROJECT CONSTRUCTION. UPON COMPLETION OF THE PROJECT, THE TEMPORARY ELECTRICAL SERVICE(S) SHALL BE REMOVED.
10. WITHIN THIRTY (30) DAYS OF SYSTEM ACCEPTANCE, PROVIDE RECORD DRAWINGS TO THE OWNER. DRAWINGS SHALL BE COMPRISED OF SINGLE-LINE DIAGRAMS AND FLOOR PLANS INDICATING THE LOCATIONS AND AREAS SERVED FOR ALL DISTRIBUTION.
11. WITHIN THIRTY (30) DAYS OF SYSTEM ACCEPTANCE, PROVIDE AN OPERATING MANUAL AND MAINTENANCE MANUAL TO THE OWNER. THE MANUALS SHALL INCLUDE THE FOLLOWING INFORMATION: SUBMITTAL DATA WITH EQUIPMENT RATINGS AND SELECTED OPTIONS, OPERATION AND MAINTENANCE MANUALS FOR EQUIPMENT REQUIRING MAINTENANCE, NAMES AND ADDRESSES OF A MINIMUM OF ONE (1) QUALIFIED SERVICE AGENCY.
12. COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ALL WALL-MOUNTED ELECTRICAL DEVICES AND EQUIPMENT WITH THE ARCHITECTURAL DRAWINGS, GENERAL CONTRACTOR, CASEWORK/MILLWORK, AND OTHER TRADES PRIOR TO ROUGH-IN AND INSTALLATION.
13. EQUIPMENT LOCATIONS SHALL SATISFY THE WORKING CLEARANCE REQUIREMENTS AND DEDICATED SPACE REQUIREMENTS OF NEC ARTICLE 110. PROVIDE SHOP DRAWINGS, DEMONSTRATING COMPLIANCE AND INTER-DISCIPLINARY COORDINATION, FOR ENGINEERING REVIEW.
14. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS, AND ELEVATIONS FOR LOCATIONS AND/OR MOUNTING HEIGHTS OF LUMINARIES LOCATED AT CEILINGS AND/OR WALLS. VERIFY THAT CEILING-MOUNTED LUMINARIES ARE SUITABLE FOR THE FINISHED CEILING SYSTEM INDICATED AND PROVIDE ACCORDINGLY. COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF WALL-MOUNTED LUMINARIES WITH CASEWORK, FURNITURE, AND ARCHITECTURAL ELEMENTS. WHERE ARCHITECTURAL REFLECTED CEILING PLANS INDICATE FIRE-RATED CEILING SYSTEMS, PROVIDE UL-LISTED LUMINAIRE ENCLOSURES (AS REQUIRED).
15. TYPE BX(AC) OR MC CABLE IS PROHIBITED FOR USE ON THIS PROJECT. FLEX CONDUIT IS ONLY ALLOW IN 3' MAXIMUM LENGTH FROM JUNCTION BOX TO LIGHT FIXTURES. MINIMUM CONDUIT SIZE SHALL BE 3/4".
16. PROPOSED CONDUIT ROUTINGS SHOWN ARE DIAGRAMMATIC AND DO NOT INTEND TO SHOW THE ACTUAL ROUTING CONDITIONS. THE CONTRACTOR SHALL COORDINATE EXACT CONDUIT ROUTING WITH ALL TRADES PRIOR TO COMMENCEMENT OF WORK.
17. PROVIDE A COMPLETE GROUNDING SYSTEM IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE NEC AND SPECIFICATIONS. BOND SERVICE ENTRANCE ELECTRICAL EQUIPMENT TO BUILDING STEEL, GROUND RODS, METAL WATER MAINS, LIGHTNING PROTECTION SYSTEM GROUNDING ELECTRODES (WHERE PRESENT), AND TELECOMMUNICATIONS SYSTEM GROUNDING ELECTRODES (AS REQUIRED). EQUIPMENT GROUNDING SHALL BE OF THE WIRE TYPE.
18. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG. ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS SHALL BE INSTALLED WITHIN CONDUIT, UNLESS OTHERWISE INDICATED. ALL CONDUCTORS SHALL BE COPPER, UNLESS OTHERWISE INDICATED.
19. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH CIRCUIT. MULTI-WIRE BRANCH CIRCUITS SHALL BE PROHIBITED.
20. CONNECTIONS TO TRANSFORMERS AND MECHANICAL EQUIPMENT SHALL BE MADE WITH FMC OR LFMC, UNLESS OTHERWISE INDICATED.
21. WHERE PRACTICABLE, CONDUITS SHALL BE CONCEALED BELOW SLABS, WITHIN WALLS, AND ABOVE FINISHED CEILING SYSTEMS. WHERE CONDUITS ARE EMBEDDED WITHIN CONCRETE SLABS, COORDINATE CONDUIT SIZE LIMITATIONS AND SPACING REQUIREMENTS WITH THE STRUCTURAL DRAWINGS/ENGINEER PRIOR TO INSTALLATION.
22. SEAL ALL CONDUIT PENETRATIONS AT FIRE-RATED PARTITIONS. REFER TO DETAILS FOR FURTHER INFORMATION.
23. COORDINATE ALL CONDUIT PENETRATIONS WITH ARCHITECTURAL DRAWINGS, STRUCTURAL DRAWINGS, FIELD CONDITIONS, AND OTHER TRADES. PROVIDE SEALING FITTINGS TO PROHIBIT CONDENSATION AND/OR THE PASSAGE OF GASES OR VAPORS (AS REQUIRED). CONTRACTOR SHALL CONDUCT AN X-RAY OF EXISTING SLAB(PER FLOOR) PRIOR TO ANY CORING OR PENETRATIONS. X-RAY SHALL BE CONDUCTED FOR ALL FLOOR CORES AND PENETRATIONS.
24. INCREASE FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES AS REQUIRED IN ORDER TO MAINTAIN A MAXIMUM, CUMULATIVE VOLTAGE DROP OF 5% AT THE END LOAD. MAXIMUM VOLTAGE DROP SHALL BE DISTRIBUTED AS FOLLOWS: 3% FOR FEEDERS, 2% FOR BRANCH CIRCUITS. WHERE THE VOLTAGE DROP REQUIREMENTS OF THE LOCAL ENERGY CODE ARE MORE STRINGENT, THE REQUIREMENTS OF THE LOCAL ENERGY CODE SHALL TAKE PRECEDENCE. WHERE PHASE AND NEUTRAL CONDUCTOR SIZES ARE INCREASED FOR VOLTAGE DROP, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE INCREASED PROPORTIONATELY.
25. PROVIDE ALL REQUIRED DISCONNECT SWITCHES, STARTERS, AND COMBINATION STARTER/DISCONNECT SWITCHES. MAKE CONNECTIONS TO ALL ELECTRICALLY-DRIVEN DEVICES AND EQUIPMENT PROVIDED BY THE MECHANICAL, PLUMBING, AND FIRE PROTECTION CONTRACTORS. EXAMINE EQUIPMENT NAMEPLATE RATINGS PRIOR TO ROUGH-IN AND INSTALLATION. PROVIDE OVERCURRENT PROTECTION IN ACCORDANCE WITH EQUIPMENT NAMEPLATE RATINGS. PROVIDE ALL POWER SUPPLIES, CONTROL TRANSFORMERS, RELAYS, AND OTHER ACCESSORIES REQUIRED TO FACILITATE THE PROPER OPERATION OF MECHANICAL EQUIPMENT AS DESCRIBED WITHIN THE MECHANICAL ENGINEER'S SEQUENCE OF OPERATIONS.
26. ALL INTERIOR ELECTRICAL EQUIPMENT SHALL BE OF NEMA 1 CONSTRUCTION, UNLESS OTHERWISE INDICATED. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE OF NEMA 4X CONSTRUCTION, UNLESS OTHERWISE INDICATED. EQUIPMENT RATINGS SHALL CORRESPOND TO THEIR INSTALLED ENVIRONMENTS.
27. ALL NEW AND/OR EXISTING PANELBOARDS AND SWITCHBOARDS WITHIN THE SCOPE OF THIS PROJECT SHALL BE PROVIDED WITH NEW, TYPEWRITTEN DIRECTORIES. CIRCUIT DESCRIPTIONS SHALL CONTAIN ROOM NAMES AND ROOM NUMBERS BASED UPON INSTALLED ROOM SIGNAGE.
28. PROVIDE PHENOLIC, ENGRAVED IDENTIFICATION PLACARDS AT ALL SWITCHBOARDS, SWITCHGEAR, PANELBOARDS, TRANSFORMERS, DISCONNECT SWITCHES, ENCLOSED CIRCUIT BREAKERS, CABINETS, AND AUTOMATIC TRANSFER SWITCHES. REFER TO DETAILS FOR FURTHER INFORMATION.
29. PROVIDE PHENOLIC, ENGRAVED IDENTIFICATION PLACARDS AT EACH CIRCUIT BREAKER WITHIN A DISTRIBUTION PANEL, SWITCHBOARD, OR SWITCHGEAR.
30. PROVIDE TYPEWRITTEN OR ENGRAVED PANEL AND CIRCUIT IDENTIFICATION AT DEVICE COVER PLATES.
31. PROVIDE HANDWRITTEN PANEL AND CIRCUIT IDENTIFICATION ON THE EXTERIORS OF ALL JUNCTION BOXES, PULL BOXES, AND WIREWAYS.
32. CURRENT DRAWINGS ARE BASED ON SPECIFICATIONS AND REQUIREMENTS BASED ON TYCO SECURITY DOCUMENTS (ISSUED IN MAY 2019). IF ANY OTHER MANUFACTURER OR UPDATED SYSTEM IS TO BE PROVIDED THE INFORMATION ON THE CURRENT DOCUMENTS WILL NOT BE ACCURATE. THE ENGINEER RESERVES THE RIGHT TO REVIEW ANY REVISED SPECIFICATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO BID TO ENSURE THE PROVISION NOTED ON THE DOCUMENTS ARE CORRECT OR IF THEY WILL NEED TO BE REVISED.

CODES AND STANDARDS

NFPA 70	NATIONAL ELECTRICAL CODE (2020)
NFPA 72	NATIONAL FIRE ALARM CODE (2016)
NFPA 75	STANDARD FOR THE PROTECTION OF ELECTRONIC COMPUTER / DATA PROCESSING EQUIPMENT (2013)
NFPA 90A	STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS (2015)
NFPA 90B	STANDARD FOR THE INSTALLATION OF WARM AIR HEATING AND AIR CONDITIONING SYSTEMS (2015)
NFPA 92	RECOMMENDED PRACTICE FOR SMOKE CONTROL SYSTEMS (2012)
NFPA 101	LIFE SAFETY CODE (2015)
NFPA 110	STANDARD FOR EMERGENCY AND STAND-BY POWER SYSTEMS (2015)
NFPA 780	STANDARD FOR THE INSTALLATION OF LIGHTNING PROTECTION SYSTEMS (2014)
2015 (IECC)	INTERNATIONAL ENERGY CONSERVATION CODE
	LOCAL JURISDICATION CODES AND / OR OWNER DESIGN GUIDELINES
2018 (HAS)	HAS DESIGN STANDARDS MANUAL

COMMISSIONING

1. PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL SUBMIT EVIDENCE TO THE REGISTERED DESIGN PROFESSIONAL (ELECTRICAL ENGINEER-OF-RECORD) OR REGISTERED DESIGN PROFESSIONAL'S REPRESENTATIVE THAT THE LIGHTING SYSTEMS HAVE BEEN TESTED TO ENSURE THAT THEY ARE SATISFY THE INTENT OF THESE CONTRACT DOCUMENTS AND THE MANUFACTURERS' WRITTEN INSTRUCTIONS.

SHEET INDEX

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JULIUS DARREN DAVIS
102926
LICENSED
PROFESSIONAL ENGINEER
10-20-21

DRAWING HISTORY

№	DATE	DESCRIPTION
4	08-06-21	100% CD
5	09-09-21	FOR INFORMATION AND REFERENCE ONLY
6	10-20-21	ISSUE FOR BID/100%CD

PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
ELECTRICAL LEGEND

SHEET NUMBER
E000

FILE NAME: C:\Users\jalexander\Documents\02.18018_HAS_Exit_Lanes_LOA_IAH_CENTRAL_R19_jalexander@voltairinc.com.rvt
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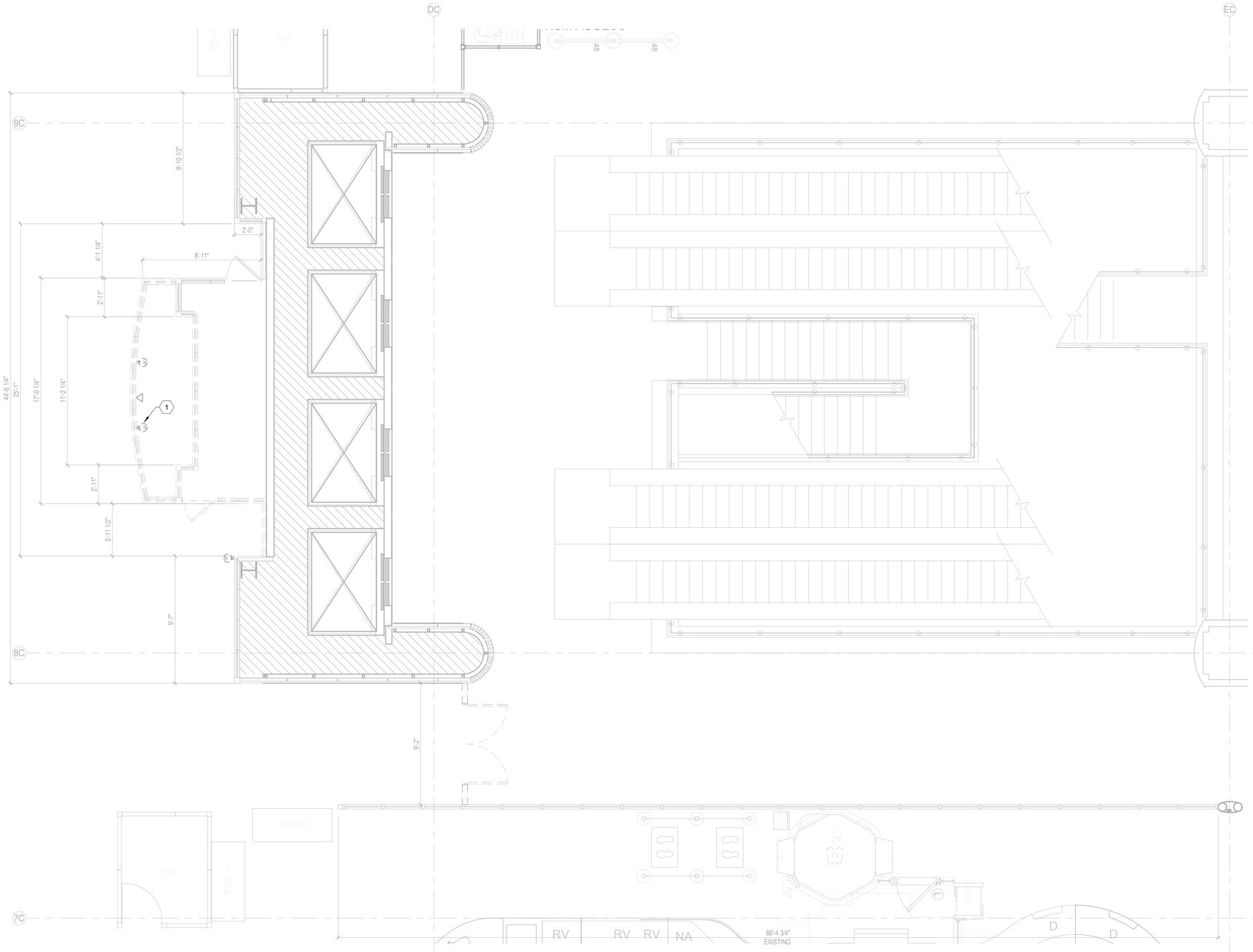

KEYNOTES

NUMBER	NOTES
1	REMOVE AND RELOCATE EXISTING CIRCUITS SERVING HPD BOOTH TO NEW LOCATION SHOWN. PROVIDE BLANK COVER PLATE FOR EXISTING OUTLETS ONCE CONDUCTORS HAVE BEEN REMOVED. ALL RELOCATED DEVICES SHALL BE INSTALLED PER H.A.S. STANDARDS AND SPECIFICATIONS TO INCLUDE BUT NOT LIMITED TO H.A.S. I.T. SPECIFICATIONS.

DEMOLITION NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS.
2. THE OWNER RESERVES THE RIGHT TO INSPECT THE MATERIAL SCHEDULED FOR REMOVAL AND SALVAGE ANY ITEMS DEEMED USEABLE AS SPARE PARTS.
3. EXISTING CONDITIONS INDICATED ON THIS DRAWING ARE TAKEN FROM EXISTING DOCUMENTS AND FIELD INVESTIGATION. IT IS RECOMMENDED FOR CONTRACTOR TO VISIT SITE AND VERIFY EXISTING CONDITIONS PRIOR TO BID.
4. THE CONTRACTOR SHALL INSURE THAT CONDUITS REMAINING WITHIN THE PROJECT AREA ARE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS. CONDUITS THAT ARE ATTACHED TO ITEMS BEING REMOVED DURING DEMOLITION SHALL BE SUPPORTED FROM THE STRUCTURE PRIOR TO REMOVING ITEM.
5. EXISTING PANEL DIRECTORIES SHALL BE UPDATED TO REFLECT CURRENT CONDITIONS.
6. CONTRACTOR SHALL PATCH, PAINT AND MATCH FINISH WITH EXISTING SURFACES TO REMAIN WHERE ELECTRICAL DEVICES ARE BEING REMOVED.
7. CONTRACTOR SHALL REVIEW NEW FLOOR PLANS FOR DEVICES TO REMAIN PRIOR TO DEMOLITION. EXISTING DEVICES TO REMAIN ARE SHOWN LIGHT IN COLOR.
8. CONTRACTOR SHALL REVIEW NEW FLOOR PLANS FOR CIRCUITS TO REMAIN AND BE REUSED FOR NEW DEVICES PRIOR TO DEMOLITION.
9. ALL CONDUCTORS AND THAT ARE NOT BEING USED, SHALL BE DISCONNECTED BACK TO THE POWER SOURCE. REMOVE ALL CONDUIT AND CONDUCTORS TO THE EXISTING PANEL.
10. ALL DEVICES SHOWN TO BE REMOVED OR REMOVED DUE TO INACTIVITY OR DEEMED NOT REQUIRED, SHALL BE DEMOLISHED(CONDUIT, CABLING, ETC.) BACK TO SOURCE AS PER NEC.

LEVEL 02 - TICKETING - DEMOLITION PLAN - TERMINAL C - POWER 1/4" = 1'-0" (1)

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10-20-21

DRAWING HISTORY

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PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH
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HOUSTON, TX 77032

PROJECT NUMBER

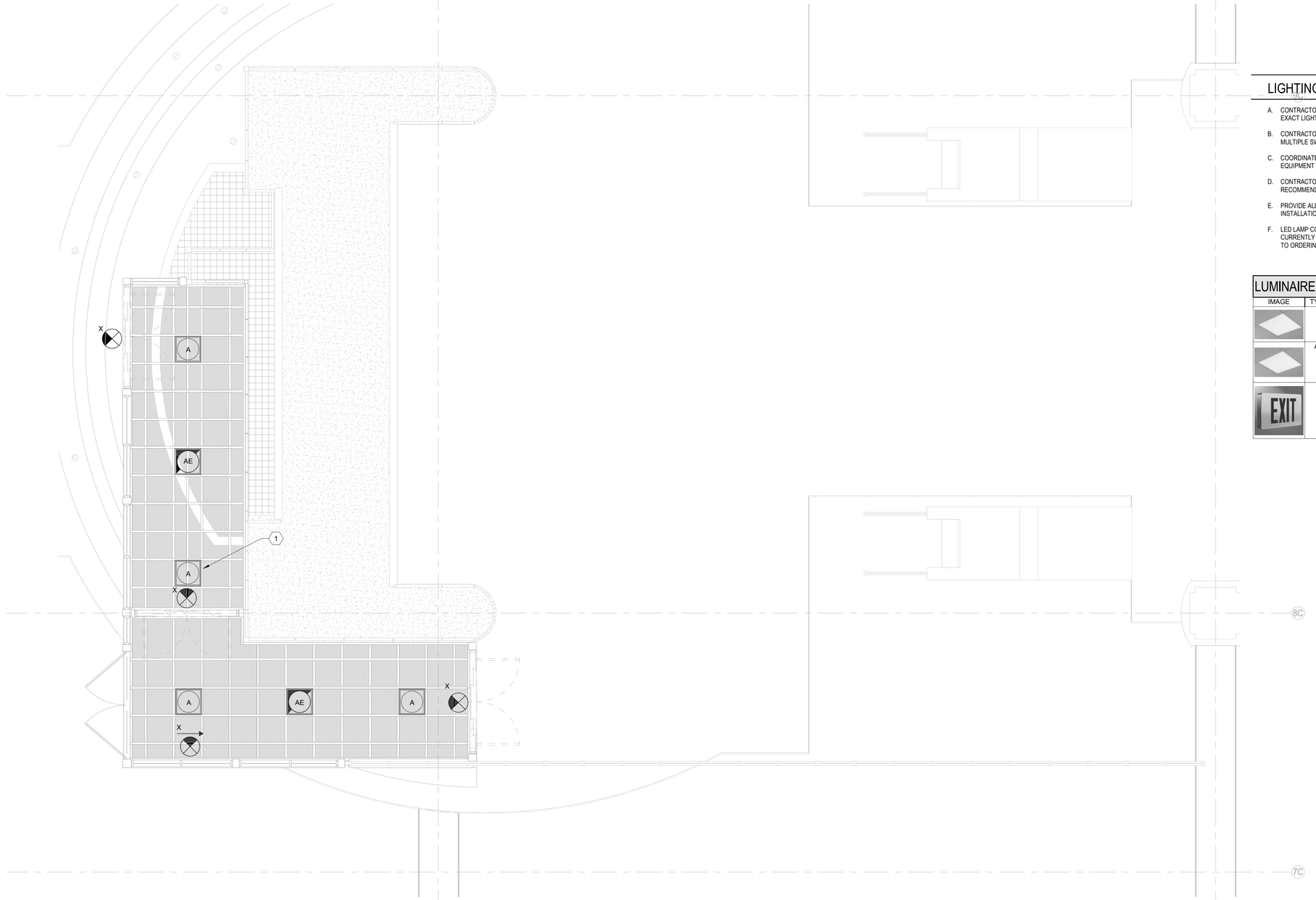
1004345

SHEET TITLE

DEMOLITION PLAN - TERMINAL C - ELECTRICAL POWER

SHEET NUMBER

E203



KEYNOTES

NUMBER	NOTES
1	CONNECT NEW LIGHT AND EXIT LIGHT FIXTURES TO CLOSEST EXISTING LIGHTING CIRCUIT NEAR EXIT LANE STRUCTURE. INTERCEPT NEAREST JUNCTION BOX AND EXTEND CIRCUIT(CONDUCTORS) TO SERVE PROPOSED EXIT LIGHTS. TYPICAL FOR ALL WHERE SHOWN.

LIGHTING NOTES

A. CONTRACTOR SHALL REFER TO FIXTURES SCHEDULE AND SPECIFICATIONS FOR EXACT LIGHTING REQUIREMENTS.

B. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SWITCH CONDUCTORS WHERE MULTIPLE SWITCHES ARE SHOWN. PROVIDE NEUTRALS FOR ALL SWITCHES SHOWN.

C. COORDINATE THE INSTALLATION OF ALL LIGHT FIXTURES WITH HVAC AND EQUIPMENT CURRENTLY SHOWN TO BE INSTALLED IN AND ABOVE CEILING.

D. CONTRACTOR SHALL PROPERLY INSTALLED FIXTURES PER MANUFACTURERS RECOMMENDATION AND CONSTRUCTION DRAWINGS.

E. PROVIDE ALL MOUNTING ACCESSORIES AND EQUIPMENT REQUIRE FOR PROPER INSTALLATION.

F. LED LAMP COLOR SHALL MATCH COLOR TEMPERATURE OF EXISTING LIGHTING CURRENTLY INSTALLED. FIELD VERIFY EXISTING LIGHT TEMPERATURE/COLOR PRIOR TO ORDERING.

LUMINAIRE SCHEDULE

IMAGE	TYPE	DESCRIPTION	MANUFACTURER	LAMP TYPE
	A	LED 2x2 FLAT PANEL TROFFER. MINIMUM 5200 LUMENS DELIVERED.	METALUX PHILIPS	LED
	AE	LED 2x2 FLAT PANEL TROFFER. MINIMUM 5200 LUMENS DELIVERED. PROVIDE WITH 90 MINUTE BATTERY PACK.	METALUX PHILIPS	LED
EXIT	X	LED EXIT LIGHT, WITH THERMOPLASTIC HOUSING AND RED LETTERING. PROVIDE WITH 90 MINUTE INTEGRAL BATTERY	METALUX PHILIPS	LED

LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL C - LIGHTING 1/4" = 1'-0" (1)

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PROJECT LOCATION
GEORGE BUSH IAH
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TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
FLOOR PLAN - TERMINAL C - LIGHTING

SHEET NUMBER
E303
6

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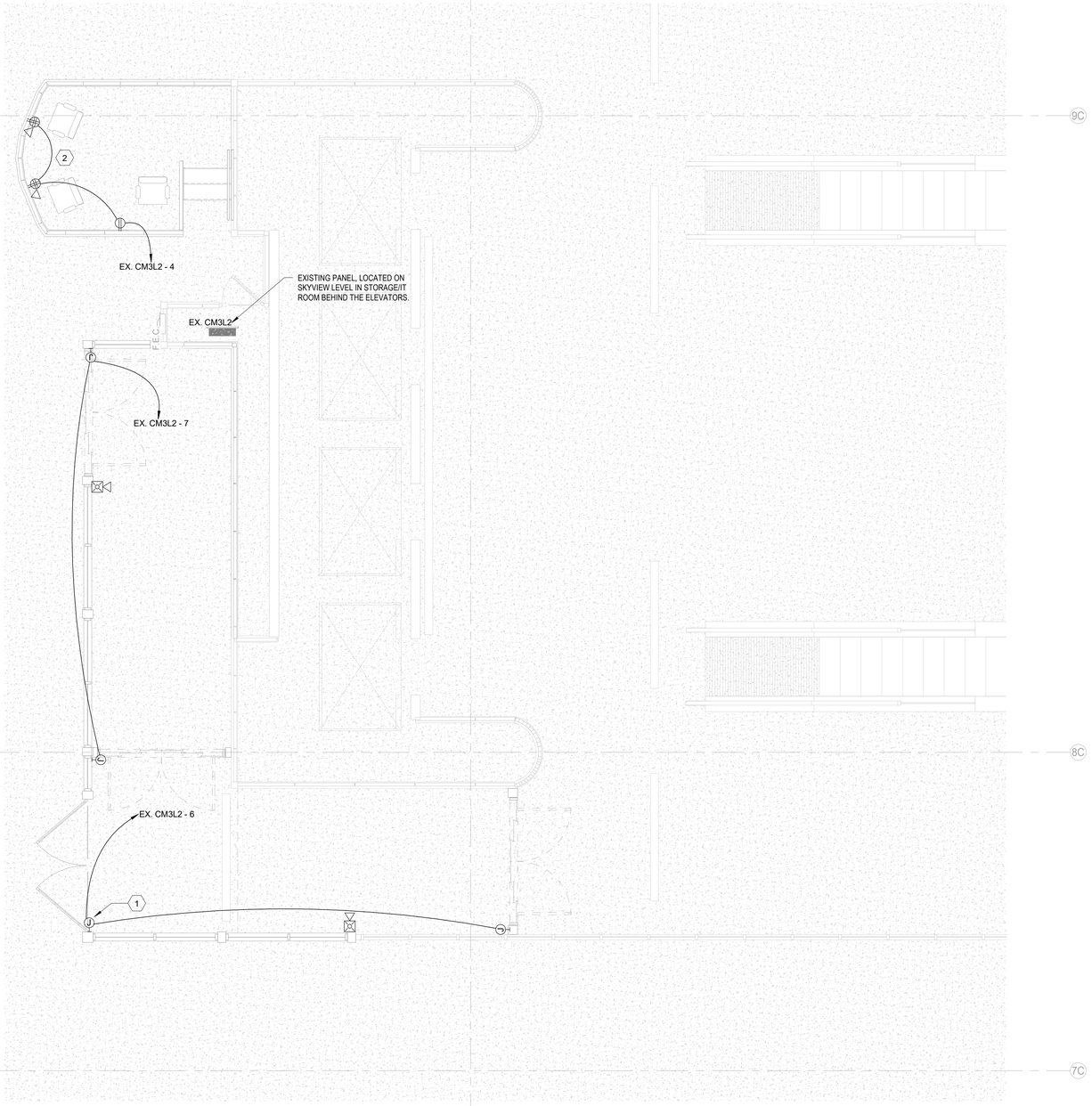
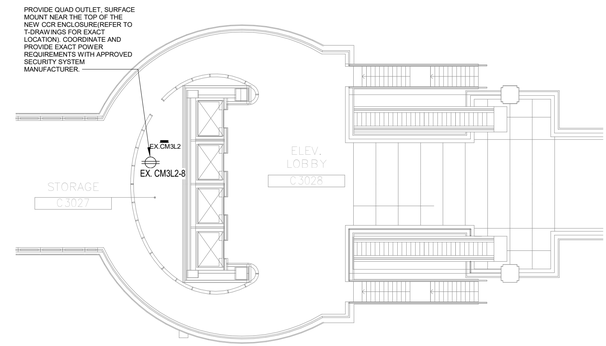


LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL C - POWER 1/4" = 1'-0" (1)



LEVEL 03 - SKYWAY - FLOOR PLAN - TERMINAL C -POWER 1/16" = 1'-0" (2)

KEYNOTES (7)

NUMBER	NOTES
1	PROVIDE 120V POWER FOR DOOR MOTOR AND CONTROLS. VERIFY WITH MANUFACTURES DOCUMENTATION FOR PROPER INSTALLATION AND ROUTING OF CONCEALED CONDUIT. ADDITIONAL CIRCUIT MAY BE REQUIRED PER DOOR MANUFACTURER. FINAL VERIFICATION WILL OCCUR DURING SUBMITTAL PROCESS. PROVIDE MOTOR RATED SWITCH TOGGLE SWITCH FOR MEANS OF DISCONNECT WHERE REQUIRED FOR DOOR MOTOR CONNECTION. VERIFY EXACT LOCATION AND REQUIREMENT WITH ELECTRICAL INSPECTOR PRIOR TO COMMENCEMENT OF WORK. ROUTE #10'S IN 1" CONDUIT FROM PANEL TO CLOSEST JUNCTION BOX LOCATION AT THE EXIT LANE HOUSING.
2	EXTEND EXISTING CIRCUITS, AND CONDUCTOR THAT SERVE THE PREVIOUS HPD WORKSTATIONS TO NEW PROPOSED LOCATION.

POWER NOTES

A. COORDINATE WITH ARCHITECTURAL ELEVATIONS AND TELECOMM DRAWINGS PRIOR TO ROUGH-IN OF ANY OUTLET DEVICES.

B. PROVIDE ADHESIVE LABELS FOR ALL RECEPTACLE OUTLETS SHOWN ON PLANS.

C. REFER TO TELECOMM (T-SERIES) DRAWINGS FOR EXACT LOCATIONS OF ALL BACKBONE/COMMUNICATION CONDUITS AND GROUNDBARS.

D. UPS AND BATTERY CABINET SHALL BE OWNER FURNISHED AND INSTALLED BY CONTRACTOR. COORDINATE WITH PROJECT MANAGER FOR EXACT REQUIREMENTS AND INSTALLATION DETAILS.

E. COORDINATE EXACT RECEPTACLE TYPE WITH OWNER PRIOR TO COMMENCEMENT OF WORK. IF L6-20P ARE REQUESTED FROM OWNER, CONTRACTOR SHALL PROVIDE PLUG ADAPTER TO CONVERT TWIST-LOCK DEVICE TO A STRAIGHT PLUG. BASIS OF DESIGN REFLECTS THE PROVISION OF L5-30P DUPLEX RECEPTACLES.

F. PROVIDE JUNCTION BOX AND OR HOUSINGS FOR ALL SURFACE MOUNTED RECEPTACLES.

G. ALL WALL PENETRATIONS SHALL BE SEALED WITH UL LISTED FIRE RATED CAULKING MATERIAL.

H. CONTRACTOR SHALL OBTAIN AND REVIEW TELECOMM (T-DRAWINGS) AND PROVIDE ALL POWER REQUIREMENTS PER NOTED LOCATION ON PLANS. PROVIDE ALL REQUIRED OUTLETS, BREAKERS, RACEWAYS, CONDUCTORS, ETC. FROM NEAREST UPS SUPPORTED ELECTRICAL PANELS.

I. ROUTE ALL FIRE ALARM DEVICES SHOWN TO THE EXISTING FIRE ALARM CONTROL PANEL SERVICE THE PROPOSE AREA OF WORK. FIELD VERIFY EXACT LOCATION PRIOR TO COMMENCEMENT OF WORK.

J. ANY FIRE ALARM DEVICES SHOWN ON ELECTRICAL DRAWINGS ARE SHOWN FOR BIDDING PURPOSES ONLY AND NOT FOR CONSTRUCTION OR INSTALLATION. THE FIRE ALARM CONTRACTOR SHALL MODIFY THE FIRE ALARM SYSTEM TO PROVIDE FULL COVERAGE OF THE PROJECT AREA IN ACCORDANCE WITH NFPA-72 AND ALL CITY, STATE, NATIONAL CODES AND STANDARDS, AND THE AUTHORITY HAVING LOCAL JURISDICTION. THE FIRE ALARM CONTRACTOR SHALL EXTEND THE EXISTING FIRE ALARM SYSTEM TO THE NEW SPACE. NEW DEVICES SHALL MATCH EXISTING FIRE ALARM SYSTEM DESIGN. TEXAS STATE FIRE MARSHALL FIRE ALARM PLANNING SUPERINTENDENT AND/OR NICET III CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR THE INSTALLATION OF THE FIRE ALARM SYSTEM TO THE AHJ FOR APPROVAL, INSTALLATION AND PROVIDE AN APPROVED COPY TO THE OWNER FOR RECORDS.

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PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH
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HOUSTON, TX 77032

PROJECT NUMBER

1004345

SHEET TITLE

FLOOR PLAN - TERMINAL C - POWER

SHEET NUMBER

E403

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GENERAL NOTES

1. CONTRACTOR IS REQUIRED TO COORDINATE ALL INSTALLATIONS IN EACH SPACE WITH OTHER TRADES. PROVIDE SHOP DRAWINGS AND LAYOUTS FOR EACH ELECTRICAL ROOM WITH PROPOSED CONDUIT ROUTES TO ALLEVIATE POTENTIAL CONFLICTS WITH MECHANICAL, PLUMBING AND TELECOMMUNICATIONS.
2. CONTRACTOR SHALL CONDUCT AMPERAGE READINGS FOR THE EXISTING SWITCHGEAR TO VERIFY AMPERAGES FOR EACH PHASE. READINGS SHALL BE RECORDED AND PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF ANY ELECTRICAL INSTALLATIONS.
3. PROVIDE PROPER LABELING FOR ALL ELECTRICAL DEVICES. REFER TO SPECIFICATIONS AND DETAILS FOR LABEL TYPES AND REQUIREMENTS.
4. CONTRACTOR SHALL PROVIDE ALL NECESSARY MOUNTING EQUIPMENT AND ACCESSORIES REQUIRED FOR PROPER INSTALLATION OF ALL DEVICES TO BE INSTALLED.
5. CONTRACTOR SHALL PLACE A LAMINATED COPY OF THE LOAD CALCULATIONS ON THE BOTTOM INTERIOR BEZEL IN EACH PANEL. LOAD CALCULATIONS ARE LOCATED ON THE PANELBOARD SHEETS AT THE BOTTOM OF EACH PANEL SCHEDULE.
6. ALL CONDUITS SHALL BE LABELED WITH THE VOLTAGE AND CIRCUITS THAT ARE HOUSED WITHIN. REFER TO SPECIFICATIONS FOR EXACT REQUIREMENTS.

KEYED NOTES (#)

1. REMOVE AND REPLACE EXISTING PANEL WITH NEW PANEL IN LOCATION SHOWN ON POWER PLANS.
2. FIELD VERIFY AND COORDINATE EXACT ROUTING OF CONDUIT PRIOR TO COMMENCEMENT OF WORK. CONDUIT SHALL BE LABELED AND MOUNTED PER H.A.S SPECIFICATIONS.
3. CONTRACTOR SHALL RELOCATE ALL EXISTING POWER SERVING EXISTING DEVICE PREVIOUSLY IN EX. UPS 1 N TO NEW 24 SPACE PANEL. PREPARE ALL NEW CONDUITS, CONDUCTORS, JUNCTION BOX, ETC. TO REDUCE DOWN TIME DURING CHANGEOVER.
4. PROVIDE THREE(3)NEW 20A/1P BREAKERS IN EXISTING PANEL TO SERVE DEVICES AT EXIT LANE STRUCTURE. NEW BREAKERS SHALL HAVE THE SAME A.I.C. RATING AS THE BREAKERS THAT ARE CURRENTLY INSTALLED.
5. CONTRACTOR SHALL UTILIZE ANY OF THE EXISTING SPARES IN EX. PANEL 2LCW, TO SERVE DOOR MOTORS IN EXIT LANE STRUCTURE .
6. CONTRACTOR SHALL CONTACT CURRENT UPS MANUFACTURER REP TO SCHEDULE MAINTENANCE ON EXISTING UPS TO VERIFY IF ONLY THE BATTERIES NEED TO BE REPLACE OR IF THE UPS DEVICE IS DEFECTIVE. BASIS OF WORK SHALL BE TO ORDER NEW BATTERIES FOR THE UPS DEVICE. CONTRACTOR SHALL BE PROVIDED WITH $40,000 ALLOWANCE FOR NEW UPS DEVICE AND BATTERIES IF DEVICE IS FOUND DEFECTIVE.

LOAD ANALYSIS

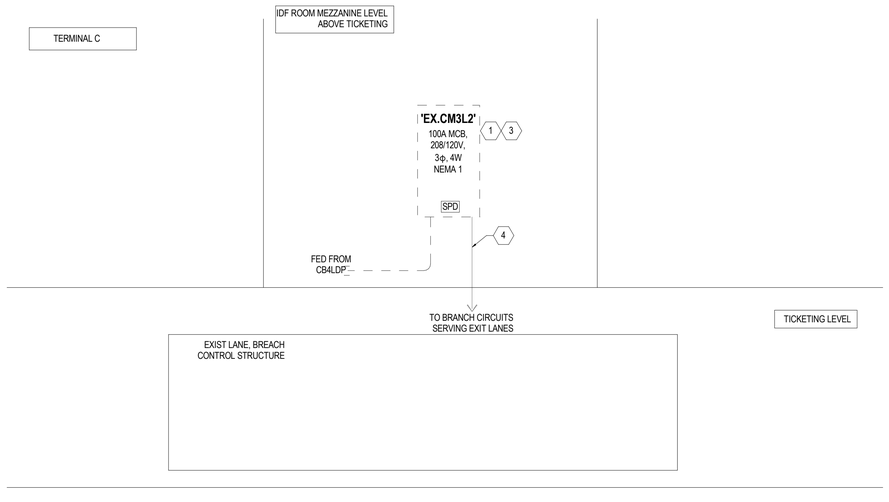
EXISTING MAX DEMAND LOAD = 8.5 KVA
NEW LOAD = 2.720 KVA

TOTAL LOAD ON PANEL = 11.220KVA (31A)

NEW PROPOSED LOAD DOES NOT EXCEED 100A CAPACITY

LEGEND

- NEW EQUIPMENT
- EXISTING EQUIPMENT TO REMAIN
- SPD — SURGE PROTECTION DEVICE



ELECTRICAL POWER RISER DIAGRAM

NOT TO SCALE

Branch Panel: EX. CM3L2

Location: ELECTRICAL CHASEWAY | **Volts:** 120/208 Wye | **A.I.C. Rating:**
Supply From: | **Phases:** 3 | **Mains Type:** MCB
Mounting: Surface | **Wires:** 4 | **Mains Rating:** 100 A
Enclosure: Type 1 | **MCB Rating:** 100 A

Notes:
PROVIDE NEW BREAKERS WITH THE SAME A.I.C. RATINGS FOR ALL NEW BREKERS SHOWN TO BE INSTALLED.

Note	Ckt	Circuit Description	Wire Size	Trip (A)	Pole	A		B		C		Pole	Trip (A)	Wire Size	Circuit Description	Ckt	Note
	1	Ex. Load		20	1	360	520					1	20		Ex. Load	2	
	3	Ex. Load		20	1			600	900			1	20		Receptacle	4	1
	5	Ex. Load		20	1					420	360	1	20		Receptacle	6	1
2	7	Receptacle		20	1	360	1100					1	20		Receptacle	8	2
2	9	Receptacle		20	1			1100	0			1	20		Spare	10	
	11	Spare		20	1					0	0	2	30		Spare(Future L5-30R)	12	
	13	Spare		20	1	0	0					--	--		--	14	
	15															16	
	17															18	
	19	Existing Load		30	3	2200										20	
	21	--		--	--			2200								22	
	23	--		--	--					2200						24	
	25															26	
	27															28	
	29															30	
	31															32	
	33															34	
	35															36	
	37															38	
	39															40	
	41															42	
		Total Load				4540 VA		4800 VA		2980 VA							
		Total Amps				40 A		42 A		25 A							

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacle	3820 VA	100.00%	3820 VA		
Spare	8500 VA	65.00%	5525 VA	**Total Conn. Load:**	12320 VA
				Total Est. Demand:	9345 VA
				Total Conn.:	34 A
				Total Est. Demand:	26 A

Notes:
1. UTILIZE EXISTING 20A/1P BREAKERS FOR PROPOSED LOADS.
2. PROVIDE AND INSTALL NEW 20A/1P BREAKERS FOR PROPOSED LOADS.

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LICENSED
PROFESSIONAL ENGINEER
10-20-21

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4	08-06-21	100% CD
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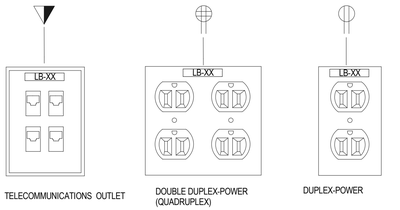
PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
ELECTRICAL RISER DIAGRAMS

SHEET NUMBER
E601

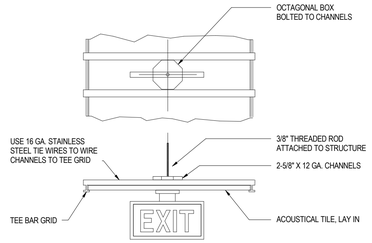


TELECOMMUNICATIONS OUTLET | DOUBLE DUPLEX-POWER (QUADRUPLEX) | DUPLEX-POWER

DETAIL NOTES:

- CONTRACTOR SHALL PROVIDE ALL WALL PLATES (STAINLESS STEEL), DEVICE, CONDUCTORS, ETC. REQUIRED FOR PROPER INSTALLATION OF A FULLY FUNCTIONING SYSTEM.
- ALL OUTLET DEVICE WALL PLATES (LIGHTING, POWER, AND DATA) SHALL BE PROVIDED WITH LABELS INDICATING ELECTRICAL CIRCUIT (EX. LB-21/POWER &LIGHTING) AND DATA OUTLETS SHALL REFLECT SWITCH PANEL LOCATION (EX. LSL-77/DATA).
- PROVIDE WHITE LABELS WITH RED LETTERING FOR ALL RECEPTACLE DEVICES THAT ARE SERVED BY EMERGENCY POWER.
- INSTALL OUTLETS WITH GROUND NODE ON THE BOTTOM OF THE OUTLET.

DEVICE OUTLET DEVICE DETAIL | F

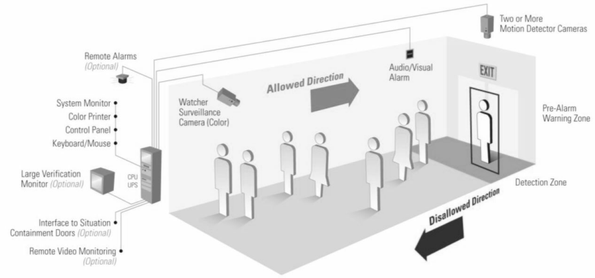


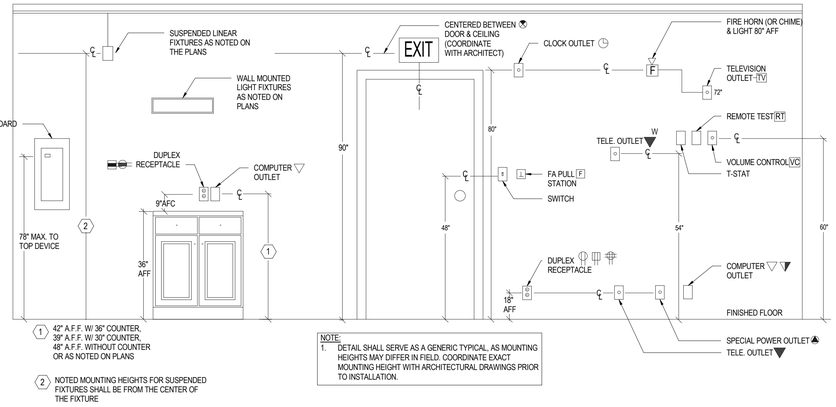
EXIT LIGHT MOUNTING DETAIL (CEILING ONLY) | C

DETAIL NOTES:

1. CONTRACTOR SHALL REFER TO LOW-VOLTAGE DRAWINGS AND PROVIDE CONDUIT, RACEWAY, BACKBOXES, ETC. FOR ALL ELECTRICAL AND LOW-VOLTAGE DEVICES.
2. CONTRACTOR SHALL COORDINATE AND CONSULT WITH SYSTEMS MANUFACTURE FOR EXACT INSTALLATION REQUIREMENTS AS IT PERTAINS TO RACEWAY AND DEVICE INSTALLATION WITH THE EXIT LANE STRUCTURE HOUSING.

EQUIPMENT INSTALLATION DETAIL | A





TYPICAL MOUNTING HEIGHT DETAIL | D

CODE COMPLIANCE NOTE:

APPLICABLE CODES AND STANDARDS:

NFPA-70, 2020 EDITION
NFPA-72, 2015 EDITION

SCOPE OF WORK:

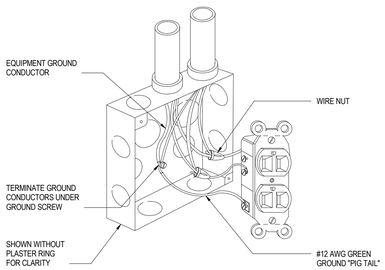
- ALL FIRE ALARM DEVICES SHOWN SHALL BE NEW AND ROUTED TO THE EXISTING FIRE ALARM TERMINAL CABINET AND CONTROL PANEL.
- THE EXISTING FIRE ALARM SYSTEM AN ADDRESSABLE SYSTEM WITH MULTIPLEXED SIGNAL TRANSMISSION, DEDICATED TO FIRE ALARM SERVICE ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL CONTROL SYSTEM FUNCTIONS.
- ALL CABLING SHALL BE COMPATIBLE WITH FIRE INSTALLED FIRE ALARM MANUFACTURER.
- THE FIRE ALARM SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 72.
- PROVIDE ADDITIONAL TERMINAL CABINETS AND BATTERIES WHERE REQUIRED FOR INSTALLATION OF ADDITIONAL FIRE ALARM DEVICE.
- ALL FIRE ALARM INSTALLATIONS SHALL MEET OR EXCEED THE CURRENT BUILDING STANDARDS.

GENERAL NOTES

1. WIRING, RACEWAYS AND FIRE ALARM DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL CODES, TEXAS FIRE PREVENTION CODE, TEXAS ADMINISTRATION FIRE CODE AND NFPA 72.
2. ALL FIRE ALARM NOTIFICATION DEVICES LOCATED IN THE INTERIOR SPACES OF THE BUILDING SHALL BE PROVIDED WITH WHITE HOUSING AND RED LETTERING.
3. PROVIDE MINIMUM 3/4" CONDUIT FOR FIRE ALARM WIRING. SIZE CONDUIT IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. CONDUIT AND JUNCTION BOXES SHALL BE PROVIDED BY THE CONTRACTOR. AS-BUILTS SHALL REFLECT THE FIELD CONDITION CONDUIT ROUTING.
4. REFER TO THE FLOOR PLANS FOR FIRE ALARM DEVICE QUANTITY AND LOCATIONS.
5. SMOKE DETECTORS SHALL NOT BE LOCATED WITHIN 36" OF HVAC SUPPLY GRILLS OR BUILDING COLUMNS.
6. RTU SHUT DOWN RELAYS SHALL BE LOCATED WITHIN 36" OF RTU CONTROLS AND INSTALLED BY THE MECHANICAL OR CONTROLS CONTRACTOR.
7. DUCT DETECTORS SHALL BE FURNISHED BY THE FIRE ALARM CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR.
8. PROVIDE FIRE STOPPING BETWEEN ALL RATED WALLS, FLOORS, CHASES AND CEILINGS USING AN APPROVED UL ASSEMBLY SUITABLE FOR THE TYPE OF CONSTRUCTION.
9. CONTRACTOR SHALL PROVIDE ALL MOUNTING ACCESSORIES AND EQUIPMENT NEEDED FOR PROPER INSTALLATION OF DEVICES.
10. CONTRACTOR SHALL TEST ALL FIRE ALARM DEVICES AND WIRING PRIOR TO COMPLETION OF INSTALLATION.
11. PROVIDE SIGNED AND SEALED FIRE ALARM SHOP DRAWINGS BY DELEGATED ENGINEER FOR PERMIT SUBMISSION TO THE LOCAL BUILDING DEPARTMENT AND/OR FIRE MARSHAL. FIRE ALARM SHOP DRAWINGS SHALL INCLUDE.
    - A. FIRE ALARM DEVICE LOCATIONS, RISER DIAGRAM AND POINT TO POINT WIRING DIAGRAM.
    - B. VOLTAGE DROP AND BATTERY CALCULATIONS INCLUDING SECONDARY SUPPLIES.
    - C. CANDELA RATINGS FOR ALL VISUAL NOTIFICATION DEVICES.
    - D. TYPE OF BUILDING CONSTRUCTION AND OCCUPANCY.
    - E. TYPE OF FIRE ALARM SYSTEM AND FIRE ALARM DEVICE CUT SHEETS.
    - F. COMPLETE LIST OF SAFETY CONTROL FUNCTIONS, SEQUENCE OF OPERATIONS IN
12. CONTRACTOR SHALL PROVIDE ADDITIONAL POWER SUPPLIES AND TERMINAL CABINETS TO WHERE REQUIRED TO SERVED THE NOTIFICATION DEVICES SHOWN ON EACH FLOOR.
13. ALL FIRE ALARM WORK SHALL BE PERFORMED BY LANDLORD APPROVED SUB.
14. PROVIDE SMOKE DETECTORS AND STROBE LIGHT(INSTALLED ABOVE LIGHT SWITCH) IN ALL STORAGE, ELECTRICAL, AND DATA ROOMS.
15. PROVIDE LED STROBES FOR ALL NOTIFICATION DEVICES.

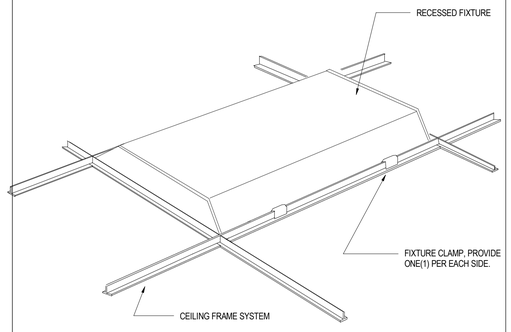
DETAILS GENERAL NOTES:

ANY FIRE ALARM DEVICES SHOWN ON ELECTRICAL DRAWINGS ARE SHOWN FOR BIDDING PURPOSES ONLY AND NOT FOR CONSTRUCTION OR INSTALLATION. THE FIRE ALARM CONTRACTOR SHALL MODIFY THE FIRE ALARM SYSTEM TO PROVIDE FULL COVERAGE OF THE PROJECT AREA IN ACCORDANCE WITH NFPA-72 AND ALL CITY, STATE, NATIONAL CODES AND STANDARDS, AND THE AUTHORITY HAVING LOCAL JURISDICTION. THE FIRE ALARM CONTRACTOR SHALL EXTEND THE EXISTING FIRE ALARM SYSTEM TO THE NEW SPACE. NEW DEVICES SHALL MATCH EXISTING FIRE ALARM SYSTEM DESIGN. TEXAS STATE FIRE MARSHALL FIRE ALARM PLANNING SUPERINTENDENT AND/OR NICET III CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR THE INSTALLATION OF THE FIRE ALARM SYSTEM TO THE AHJ FOR APPROVAL. INSTALLATION AND PROVIDE AN APPROVED COPY TO THE OWNER FOR RECORDS. TYPICAL.

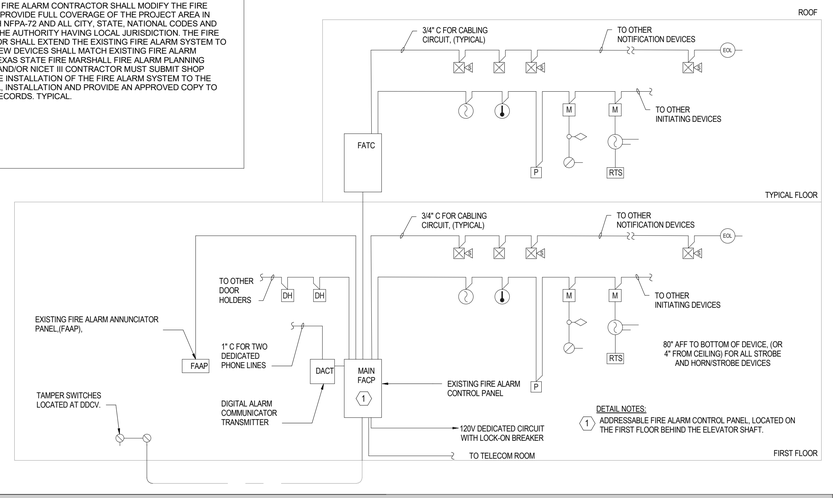


NOTE:
DUPLEX RECEPTACLE SHOWN, SIMILAR FOR ALL WIRING DEVICES.

WIRING DEVICE GROUNDING DETAIL | G



FIXTURE SUPPORT DETAIL | E



FIRE ALARM RISER DIAGRAM | B

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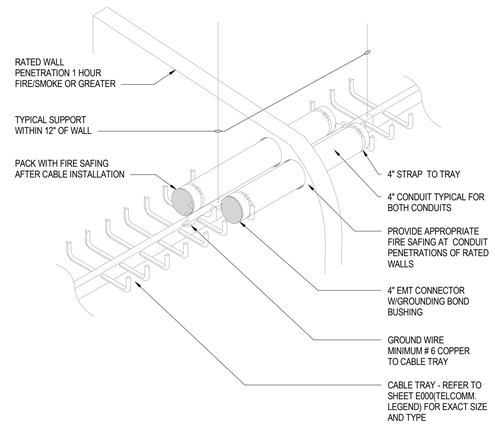
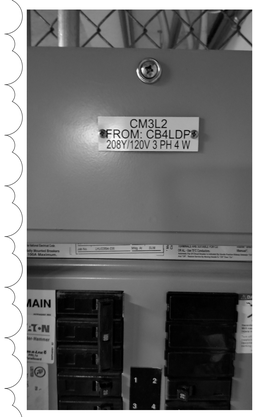
PROJECT NUMBER
1004345

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
E901



6 WALL PENETRATION DETAIL | C



EXISTING PANEL IN SKYVIEW IT ROOM | B

DETAIL NOTES:

1. EXISTING DOWNLIGHTS AND LOWVOLTAGE DEVICES WILL BE RELOCATED PER OWNERS/HAS DISCRETION. COORDINATE WITH HAS PM FOR EXACT LOCATION OF REMOVED DEVICES.
2. REMOVE AND PATCH LOCATION OF EXISTING DOWNLIGHTS.
3. REUSE EXISTING FIRE ALARM CONNECTIONS FOR NEW DEVICES TO BE INSTALLED.

EXISTING SOFFIT - TERMINAL C | A

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PROJECT NUMBER

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SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E902

SECURITY GENERAL NOTES

1. THE FOLLOWING GENERAL NOTES ARE APPLICABLE AS STATED BELOW, EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE, ON THE DRAWINGS OR IN THE BID SPECIFICATION.
2. SINGLE LINE DIAGRAMS, SCHEMATICS, DETAILS AND CONDUIT PATHS SHOWN HEREIN ARE CONCEPTUAL AND ILLUSTRATE ONLY THE FUNCTIONAL RELATIONSHIPS BETWEEN COMPONENTS OF THE SYSTEM. ACCORDINGLY, FULL SHOP DRAWING DEVELOPMENT IS REQUIRED TO REALIZE THE SPECIFIED FUNCTIONS.
3. DEVICE LOCATIONS ON PLANS ARE CONCEPTUAL. LOCATE AS SITE CONDITIONS REQUIRE AND AS APPROVED BY THE OWNER.
4. REFER TO THE BID SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK.
5. INSTALL WALL MOUNTED CARD READERS, PUSH BUTTON SWITCHES, KEYPADS, KEY SWITCHES AND OTHER WALL MOUNTED FIELD DEVICES, AT 48 INCHES MAXIMUM ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. MOUNTING HEIGHT SHALL COMPLY WITH TEXAS ACCESSIBILITY STANDARD (TAS).
6. PROVIDE PAINTING, PATCHING AND FINISHES, OF MATERIALS AND DEVICES, AS APPROVED BY THE OWNER.
7. DOOR DETAILS ILLUSTRATE FUNCTIONAL RELATIONSHIPS. ACTUAL ARCHITECTURAL CONDITIONS (SUCH AS DIRECTION OF SWING AND HAND OF DOOR) MAY VARY.
8. WORK AND MATERIALS TO CONFORM TO THE MOST CURRENT UNIFORM STANDARD SPECIFICATIONS, ASSOCIATED CODES REFERENCED BY THE (AHJ) AUTHORITY HAVING JURISDICTION, AND DETAILS FOR CONSTRUCTION, AS FURNISHED BY THE OWNER. WORK AND MATERIALS, NOT IN CONFORMANCE WITH PROJECT SPECIFICATIONS AND DETAILS, ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
9. FOR INFORMATION REGARDING FIRE RATINGS AND OCCUPANCY SEPARATIONS, REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS.
10. NEW CONDUIT CONNECTIONS TO INCLUDE INTEGRAL PROTECTIVE BUSHINGS OR CHASE NIPPLES.
11. NEW CONDUIT FOR FUTURE USE TO BE FILLED WITH 200 POUND STRENGTH PULL LINE. PROVIDE LABELING ON EACH END OF THE PULL LINE TO INDICATE LOCATION OF OTHER END.
12. NEW CONDUITS SHALL BE CONCEALED WHENEVER POSSIBLE. SURFACE MOUNTED CONDUITS ARE PERMISSIBLE ONLY WHERE APPROVED. USE ONLY CONCEALED CONDUITS WITHIN FINISHED SPACES. THE ABOVE STANDARDS ALSO APPLY TO EXTERIOR SPACES. SEEK APPROVAL FROM THE OWNER FOR EACH AREA WHERE SURFACE CONDUIT IS NECESSARY.
13. JUNCTION BOXES SHALL BE MINIMUM 4 INCH SQUARE DEEP STYLE, SIZED AS REQUIRED TO ACCOMMODATE CONDUITS UNLESS OTHERWISE NOTED. PROVIDE MOUNTING RING AS REQUIRED. PROVIDE A BLANK COVER PLATE FOR JUNCTION BOXES AND PULL BOXES WITH NO DEVICE.
14. EXPOSED BOXES AND PANELS, MOUNTED IN OR ON EXTERIOR WALLS, TO BE NEMA 4.
15. NEW CONDUIT TO BE 3/4 INCH EMT MINIMUM, UNLESS OTHERWISE NOTED. EXTERIOR CONDUIT TO BE RIGID.
16. USE 120VAC CIRCUITS UNLESS OTHERWISE NOTED. VERIFY CURRENT LOAD ON EXISTING CIRCUITS BEFORE CONNECTING NEW LOADS. COORDINATE WITH OWNER IF ADDITIONAL CIRCUITS ARE REQUIRED.
17. CONTRACTOR TO VERIFY CONDUIT AND PLENUM CABLE PATHS INDICATED ON THE DRAWINGS. CONTRACTOR MAY PROPOSE ALTERNATE ROUTING WHERE CONFLICTS ARE FOUND.
18. CONTRACTOR IS RESPONSIBLE FOR CEILING INTEGRITY, THIS INCLUDES ROUTING ABOVE CONCEALED SPLINE INTERLOCKING TILES.
19. CONTRACTOR TO OBTAIN RECERTIFICATION FOR FIRE RATED DOOR FRAME AND DOOR MODIFIED BY THIS PROJECT.
20. ACCESS CONTROL LOW VOLTAGE WIRING TO BE PLENUM RATED.
21. DO NOT EXCEED 180° IN AGGREGATE CONDUIT BENDS AND/OR 100' CONDUIT WITHOUT PULLBOX.
22. PROVIDE GROUND BUSHING ON ALL CONDUIT END IN EQUIPMENT ROOM. BOND TO APPROVED BUILDING GROUND.
23. LABEL CONDUIT EVERY 50' WITH DEVICE ID & EQUIPMENT ROOM ID WITH PERMANENT INK CABLE MADE WITH LASER CABLE MAKER. SECURE TO CONDUIT WITH CLEAR TAPE.
24. ALL WALL AND FLOOR PENETRATIONS SHALL BE SEALED WITH APPROVED FIRE STOP.
25. ALL CABLES NOT IN CONDUIT ABOVE DROP CEILING SHALL BE INSTALLED IN MIN, 1" J-HOOK EVERY 5'-8". DO NOT EXCEED 40% FILL.

23. LABEL CONDUIT EVERY 50' WITH DEVICE ID & EQUIPMENT ROOM ID WITH PERMANENT INK CABLE MADE WITH LASER CABLE MAKER. SECURE TO CONDUIT WITH CLEAR TAPE.

24. LOCATE DEVICES AS SITE CONDITIONS REQUIRE.
25. FIELD VERIFY ALL DIMENSIONS.
26. REFER TO THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK. CONTRACTOR TO PREPARE PROPOSAL FOR EACH DISCIPLINE. PROVIDE COORDINATION BETWEEN DISCIPLINES FOR CONSTRUCTION.
27. NOTIFY DESIGN CONSULTANT AND OWNER WHERE EXISTING CONDITIONS REQUIRE REPAIR PRIOR TO INSTALLATION.
28. COORDINATE ALL WORK WITH GENERAL CONTRACTOR.
29. ALL CABLE PULLS WITHIN EXISTING AND NEW CONDUITS TO BE MADE AT SAME TIME.
30. DEFINITION: BY DIVISION 8 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 8 CONTRACTOR.
31. DEFINITION: BY DIVISION 26 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 26 CONTRACTOR.
34. DEFINITION: BY DIVISION 27 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 27 CONTRACTOR.
35. DEFINITION: BY DIVISION 28 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 28 CONTRACTOR.

EQUIPMENT SYMBOLS LIST

SYMBOL	DESCRIPTION
CR	CARD READER
CB	CALL BOX (VOIP) W/ CAMERA
360	360 IP CAMERA
180 180	DUAL 180 CAMERAS
FIX	FIXED CAMERA
PTZ	PTZ HD IP CAMERA
MD	MOTION DETECTION CAMERA (BY OTHER)
W	WATCHER CAMERA (BY OTHER)
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
DB	DURESS BUTTON (UNDER DESK/TABLE/COUNTER)
D	DOOR POSITION SWITCH (FLUSH MOUNT)
ML	ELECTROMAGNETIC LOCK
M	REX MOTION SENSOR
RCT	REMOTE COMMAND TERMINAL (BY OTHER)
CCR	CENTRAL CONTROL RACK (BY OTHER)
AO	AUTO DOOR OPERATOR (BY OTHER)
	PHONE
	DATA
X	CATEGORY 6 DATA OUTLET WHERE X= QUANTITY OF CABLES

SHEET INDEX

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HAS TIP # 21-156 - IAH

REGISTRATION

STATE OF TEXAS
RAINI PAYNE
101220
LICENSED
PROFESSIONAL ENGINEER
10/20/21

DRAWING HISTORY

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PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

1004345

SHEET TITLE

INDEX, SYMBOLS & NOTES

SHEET NUMBER

TY000

TELECOM GENERAL NOTES

1. FOLLOW TELECOM STANDARDS AND PRACTICES. SEE DIVISION 27 SPECIFICATIONS AND T DRAWINGS
2. REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER (RCDD) SUPERVISOR SHALL REVIEW, APPROVE AND STAMP ALL SHOP DRAWINGS. COORDINATE DRAWINGS AND RECORD DRAWINGS.
3. ALL WALL PENETRATIONS SHALL BE SEALED WITH APPROVED FIRE STOPPING.
4. REFER TO THE ELECTRICAL FLOOR PLAN DRAWINGS FOR ADDITIONAL ROUGH-IN REQUIREMENTS. WHERE THERE ARE DRAWING DISCREPANCIES, THE CONTRACTOR SHALL INSTALL THE GREATER QUANTITY OF DEVICES.
5. REFER TO THE SITE PLAN ON AND RISER DIAGRAM FOR TELECOMMUNICATION BACKBONE CONDUITS/CABLES. FIELD COORDINATE EXACT ROUTING WITH OTHER TRADES.
6. ALL COMMUNICATIONS EQUIPMENT SHOWN SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE.
7. BOND ALL COMMUNICATIONS CABINETS, RELAY RACKS, CABLE TRAYS, AND OTHER METALLIC SUPPORTING DEVICES TO TELECOMMUNICATIONS GROUND BUSBAR INSIDE COMMUNICATIONS ROOM. BOND WITH A #6 GROUND CONDUCTOR.
8. ALL HORIZONTAL VOICE AND DATA CABLES SHALL BE DISTRIBUTED VIA MINIMUM 1" CONDUIT AND/OR CABLE TRAY. NO EXCEPTIONS.
9. SINGLE LINE DIAGRAMS, SCHEMATICS, DETAILS AND CONDUIT PATHS SHOWN HEREIN ARE CONCEPTUAL AND ILLUSTRATE ONLY THE FUNCTIONAL RELATIONSHIPS BETWEEN COMPONENTS OF THE SYSTEM. ACCORDINGLY, FULL SHOP DRAWING DEVELOPMENT IS REQUIRED TO REALIZE THE SPECIFIED FUNCTIONS.
10. DEVICE LOCATIONS ON PLANS ARE CONCEPTUAL. LOCATE AS SITE CONDITIONS REQUIRE AND AS APPROVED BY GC.
11. REFER TO THE BID SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK.
12. PAINTING, PATCHING AND FINISHES FOR DEVICES LOCATED IN EXISTING AREAS SHALL MATCH EXISTING FINISHES AS APPROVED BY GC.
13. FINISHES OF DEVICES IN NEW/REMODEL AREAS SHALL BE APPROVED BY GC.
14. WORK AND MATERIALS SHALL CONFORM TO THE MOST CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION AS FURNISHED BY GC. WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE SPECIFICATIONS AND DETAILS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
15. IN SOME INSTANCES THE IDF MAY BE OVER 90 METERS FROM THE IP DEVICE DUE TO LEGACY DESIGN STANDARDS WHEN THE BUILDING WAS CONSTRUCTED. IF TESTED CABLE DOES NOT PASS CERTIFICATION, CONTRACTOR MUST USE MIDSPAN EXTENDER INSTALLED INSIDE OF ENCLOSURE. REFERENCE DETAIL SHEETS FOR INSTALLATION DIAGRAM.

CCVS SYSTEM NOTES

1. ALL OUTDOOR CAMERAS, TERMINATION BOXES, AND PULLBOXES SHALL BE INSTALLED WITH WEATHER RESISTANT HARDWARE.
2. PROVIDE ALL INTEGRATION WITH ALARM ACCESS CONTROL SYSTEM COMPONENTS.
3. PROVIDE ALL COORDINATION WITH OTHER DISCIPLINES FOR INSTALLATION OF EQUIPMENT.
4. COORDINATE ALL SITE WORK WITH OWNER'S REP.
5. DRAWINGS INDICATE CAMERA 'HOME POSITIONS'. VERIFY FIELD OF VIEW WITH HOUSTON AIRPORT SYSTEM (HAS) REPRESENTATIVE AND DESIGN CONSULTANT DURING INSTALLATION. SUBSTITUTION OF LENS TYPE & SIZE TO ACCOMPLISH INTENDED FIELD OF VIEW SHALL BE AT NO ADDITIONAL COST.
6. CAMERAS MAY INCLUDE MULTIPLE TRANSMISSION METHODS. VERIFY EACH CAMERA PRIOR TO INSTALLATION.
7. FIELD VERIFY ALL CAMERA LOCATIONS PRIOR TO INSTALLATION. CAMERA MAY BE RELOCATED WITHIN 25' OF LOCATION SHOWN ON FLOOR PLANS WITHOUT ADDITIONAL COST.

CAMERA SERVER AND DIGITAL STORAGE NOTES

1. PROVIDE DIGITAL STORAGE FOR THIS PROJECT IN THE HAS ADMIN BUILDING AS REQUIRED.
2. THE EXISTING CAMERA SERVERS AND DIGITAL STORAGE ARE LOCATED AT THE HAS ADMINISTRATION BUILDING AND TERMINAL C. THEY ARE REDUNDANT.
3. PROVIDE HONEYWELL MAXPRO CAMERA LICENSING AS REQUIRED AT THE HAS ADMINISTRATION BUILDING AND TERMINAL C TO SUPPORT ALL HAS CAMERAS INSTALLED AS PART OF THIS PROJECT.

ACS SYSTEM NOTES

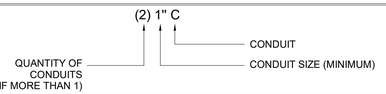
1. ALL OUTDOOR MOUNTED CARD READERS SHALL BE INSTALLED WITH WEATHER RESISTANT AND TAMPER PROOF HARDWARE.
2. CARD READER PEDESTALS SHALL BE SIZED FOR VOICE COMMUNICATIONS.
3. PROVIDE ALL INTEGRATION WITH CLOSED CIRCUIT VIDEO SURVEILLANCE COMPONENTS.
4. PROVIDE ALL COORDINATION WITH OTHER DISCIPLINES FOR INSTALLATION OF EQUIPMENT.
5. COORDINATE ALL SITE WORK WITH OWNERS REP.
6. PROVIDE ACCESS CONTROL LICENSES AS REQUIRED PART OF THIS PROJECT.
7. CARD READER iCLASS ELITE KEY SHALL BE REQUIRED, AND ONLY AUTHORIZED PURCHASER ARE AUTHORIZED TO PURCHASE. THE iCLASS ELITE PROGRAM INCLUDES A CREDENTIAL FORMAT AND CUSTOM AUTHENTICATION KEY.

SECURITY CABLE DESIGNATION/TYPE *

DESIGNATION	DESCRIPTION	USAGE	PART #
A	1 PAIR 22AWG SHIELDED	ALARM MONITORING	BELDEN 5500FE
B	2 PAIR 20AWG SHIELDED	MOTION DETECTOR, BEAM DETECTORS	BELDEN 5441 FE
C	3 PAIR 22AWG SHIELDED	CARD READER	BELDEN 5542 FE
D	2/C 18AWG	CAMERA PWR, PUSH BUTTON, LOCK PWR	BELDEN 5300 UE
E	2 PAIR 22AWG SHIELDED	DATA, CCVS PTZ CONTROL	BELDEN 5541 FE
F	2/C 18AWG SHIELDED	HORN	BELDEN 5300 UE
G	COAXIAL W/2C POWER	VIDEO	
H	1 PAIR 20AWG TWISTED	INTERCOM	BELDEN 5400 FE
I	1 PAIR TWISTED SH 18AWG PLUS 2/C 18AWG	EMERGENCY PHONE	BELDEN 5302GE
J	ENHANCED CAT-5E BONDED-PAIR UTP	NETWORK AND CAMERA	BELDEN 7815A
K	ACCESS CONTROL COMPOSITE CABLE, 4C 18AWG,3PR 22 AWG, 4C 22 AWG	LOCK PWR, CR, DOOR CONTACT, REX, 1 SPARE YELLOW JACKET	WSECCOMP2835
L	CCTV COMPOSITE CABLE 2C 18AWG, UNSHIELDED, CABLE ETHERNET (PLENUM), R659 (PLENUM)	CAM PWR, UTP/IP VIDEO ANALOG VIDEO CONNECT K112	WSECOMP-2817

* THIS TABLE IS REFERENCED AND IS SHOWN AS AN EXAMPLE OF ACCEPTABLE CABLE DESIGNATIONS. CONTRACTOR SHALL UTILIZE CABLE DESIGNATION TABLE FOR SHOP DRAWING AND RECORD DRAWING SUBMITTALS.

CONDUIT DESIGNATION KEY



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PROJECT LOCATION

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PROJECT NUMBER

1004345

SHEET TITLE

NOTES

SHEET NUMBER

TY001

ITEM	CAMERA NO.	SHEET NO.	LEVEL	CAMERA VIEW	CAMERA TYPE	CAMERA MOUNTING TYPE	TERMINATING IDF	REFERENCE MOUNTING DETAIL	DESCRIPTION
1	C2.C01	TY202	LEVEL 02	CARD READER C2.R01, ALARM POINT C2.A01	DUAL 180	CEILING MOUNT	BDF C3320	3/TY501	NEW CAMERA
2	C2.C02	TY202	LEVEL 02	CARD READER C2.R01 & C2.R02	DUAL 180	CEILING MOUNT	BDF C3320	3/TY501	NEW CAMERA
3	C2.C03	TY202	LEVEL 02	CARD READER (E) C2012, ALARM POINT C2.A01	DUAL 180	CEILING MOUNT	BDF C3320	3/TY501	NEW CAMERA
4	C2.C04	TY202	LEVEL 02	CARD READER C2.R02	DUAL 180	CEILING MOUNT	BDF C3320	3/TY501	NEW CAMERA
5	C2.C05	TY202	LEVEL 02	ALARM POINT C2.A01	DUAL 180	CEILING MOUNT	BDF C3320	3/TY501	NEW CAMERA
6	(E) C2033	TY202	LEVEL 02	ACTIVITY AT LEVEL 2 LOBBY	360	CEILING MOUNT	BDF C3320	1/TY501	RELOCATE EXISTING CAMERA

3

CAMERA SCHEDULE NTS 1

ITEM	READER NO.	SHEET NO.	LEVEL	LOCATION	ASSOCIATED CAMERA	TERMINATING IDF	DESCRIPTION
1	C2.R01	TY202	LEVEL 02	TER C EXIT LANE (MIDDLE DOOR)	C2.C01, C2.C02	BDF C3320	NEW CARD READER
2	C2.R02	TY202	LEVEL 02	TER C EXIT LANE (ENTRANCE DOOR)	C2.C02 & C2.C04	BDF C3320	NEW CARD READER
3	(E) C2012	TY202	LEVEL 02	TER C EXIT LANE (EXIT DOOR)	(E) C2033, C2.C03	BDF C3320	REUSE EXISTING CARD READER

3

CARD READER SCHEDULE NTS 2

ITEM	ALARM NO.	SHEET NO.	LEVEL	LOCATION	ASSOCIATED CAMERA	TERMINATING IDF	DESCRIPTION
1	C2.A01	TY202	LEVEL 02	TER C EXIT LANE (DOUBLE DOOR)	C2.C01 & C2.C05	BDF C3320	DOOR CONTACTS

ALARM POINT SCHEDULE NTS 3

PLAN NORTH

1 : 256 SCALE

0 2.56 5.12 12.8 25.6 m

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PROJECT NUMBER

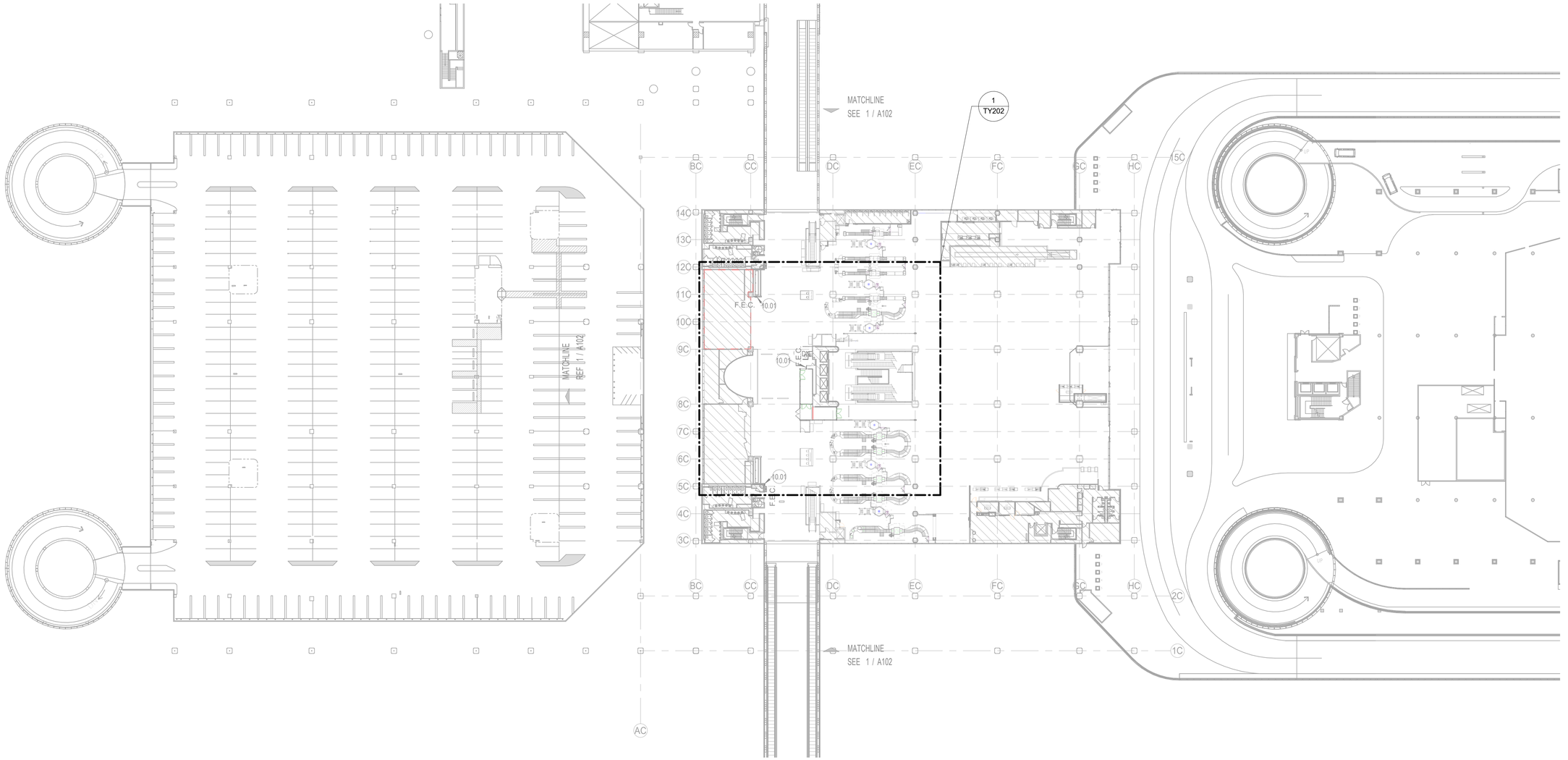
1004345

SHEET TITLE

EQUIPMENT SCHEDULES

SHEET NUMBER

TY002



OVERALL SECURITY FLOOR PLAN - TERMINAL C, LEVEL 02 1" = 40'-0" (1)

PLAN NORTH

1 : 256 SCALE

0 2.56 5.12 12.8 25.6 m

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IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

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3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

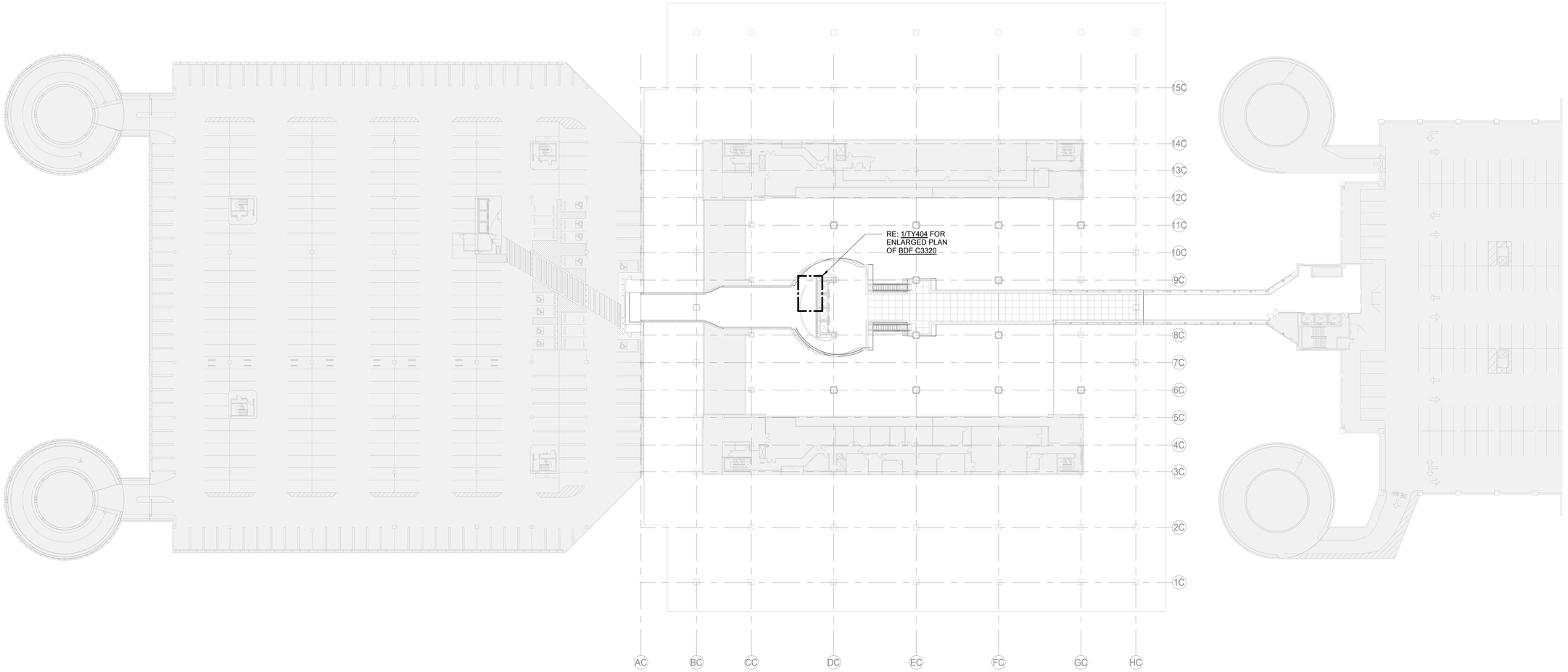
1004345

SHEET TITLE

OVERALL SECURITY FLOOR PLAN - TERMINAL C, LEVEL 02

SHEET NUMBER

TY102.2



OVERALL SECURITY FLOOR PLAN - TERMINAL C, LEVEL MEZZANINE 1" = 40'-0" (1)

PLAN NORTH

1 : 256 SCALE

0 2.56 5.12 12.8 25.6 m

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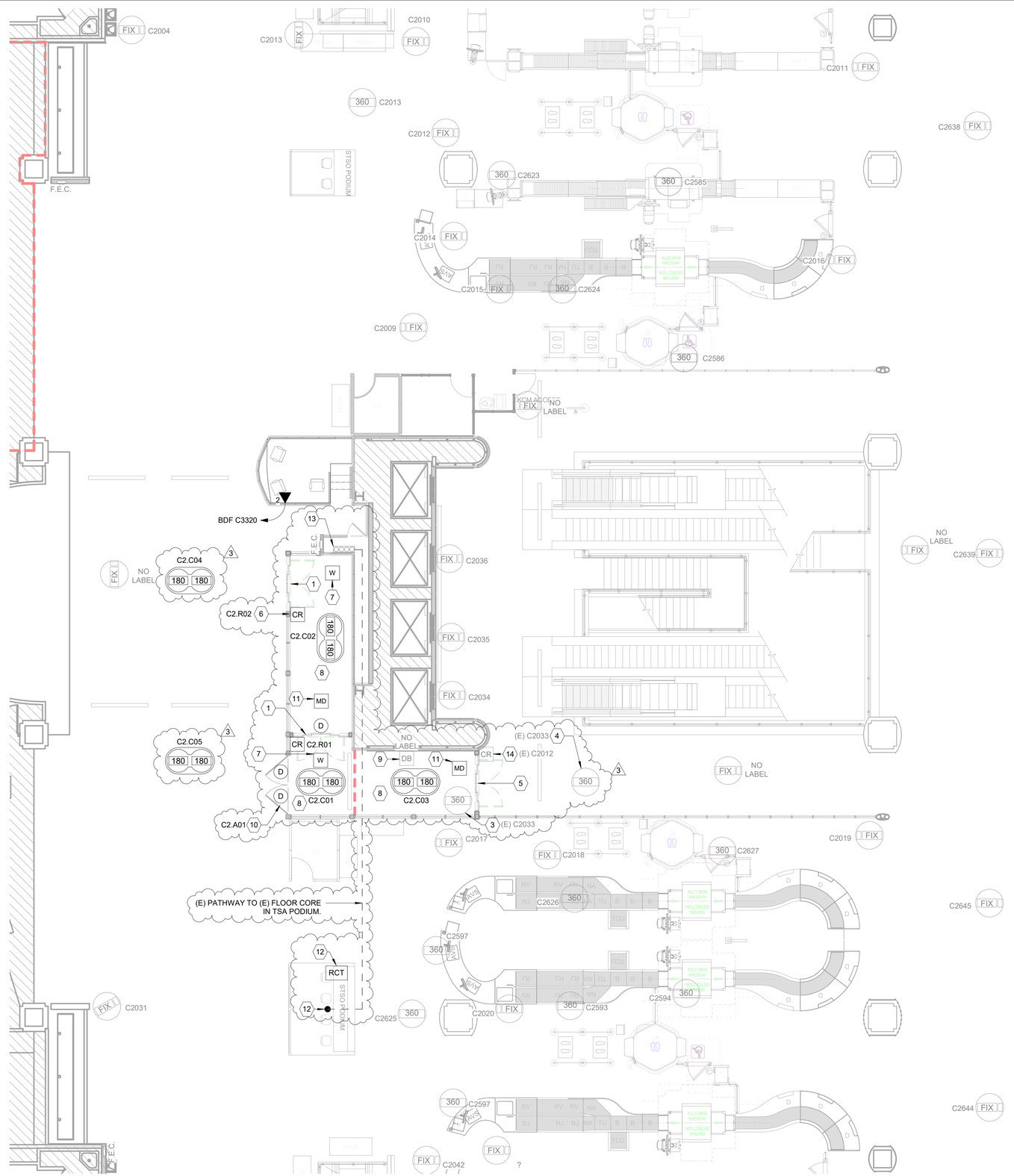
1004345

SHEET TITLE

OVERALL SECURITY FLOOR PLAN - TERMINAL C, LEVEL MEZZANINE

SHEET NUMBER

TY102.3



GENERAL NOTES:

1. ALL SECURITY DEVICES SHALL TERMINATE IN BDF C3320.
2. EXIT LANE CONTAINMENT DEVICES SHALL TERMINATE IN CCR AT BDF C3320.

KEY NOTES:

1. ADD (N) DOOR CONTACT, (N) CARD READER TO NEW DOOR. RE: 1/TY500 FOR DOOR DETAIL..
2. NOT USED.
3. (E) CAMERA TO BE RELOCATED, REMOVE ALL UNUSED CABLES.
4. RELOCATE (E) CAMERA TO THIS LOCATION.
5. ADD (N) DOOR CONTACT, REUSE AND RECONNECT (E) CARD READER C2012 TO NEW DOOR. RE: 1/TY500 FOR DOOR DETAIL.
6. ADD DOOR CONTACT, RE: 2/TY500 FOR DOOR DETAIL.
7. WATCHER CAMERA. PROVIDE QUANTITY AS REQUIRED BY SUPPLIER. TERMINATE IN CCR AT BDF C3320.
8. (E) SPEAKERS IN THE IMPACTED PROJECT AREA SHALL BE RELOCATED. COORDINATE SPEAKERS NEW LOCATIONS W/ HAS IT.
9. (E) DURESS BUTTON IN THE IMPACTED AREA SHALL BE RELOCATED. COORDINATE NEW LOCATIONS W/ TSA REP.
10. RE: 3/TY500 FOR DOOR DETAIL.
11. MOTION DETECTION CAMERA. PROVIDE QUANTITY AS REQUIRED BY SUPPLIER. TERMINATE IN CCR AT BDF C3320.
12. PROVIDE FOUR (4) DATA DROPS FOR RCT, COORDINATE W/ TSA REPRESENTATIVE FOR LOCATION ON RCT PRIOR TO INSTALLATION. EXTEND 4 DATA DROPS TO CCR IN BDF C3320. ROUTE CABLE USING (E) PATHWAY TO (E) FLOOR CORE INSIDE TSA PODIUM. THERE IS CAPACITY AVAILABLE PER SURVEY ON 9/20/2021.
13. (E) 5-4"C GOING TO BDF C3320. CAPACITY AVAILABLE FOR NEW EXIT LANE DATA CABLING.
14. REUSE EXISTING CARD READER (E) C2012. DISCONNECT FROM EXISTING DOOR HARDWARE AND RECONNECT TO THE NEW EXIT LANE DOOR HARDWARE, REPROGRAM CARD READER AS REQUIRED.

SECURITY FLOOR PLAN - TERMINAL C CENTRAL, LEVEL 02

1/8" = 1'-0" (1)

PLAN NORTH

1 : 256 SCALE

0 2.56 5.12 12.8 25.6 m

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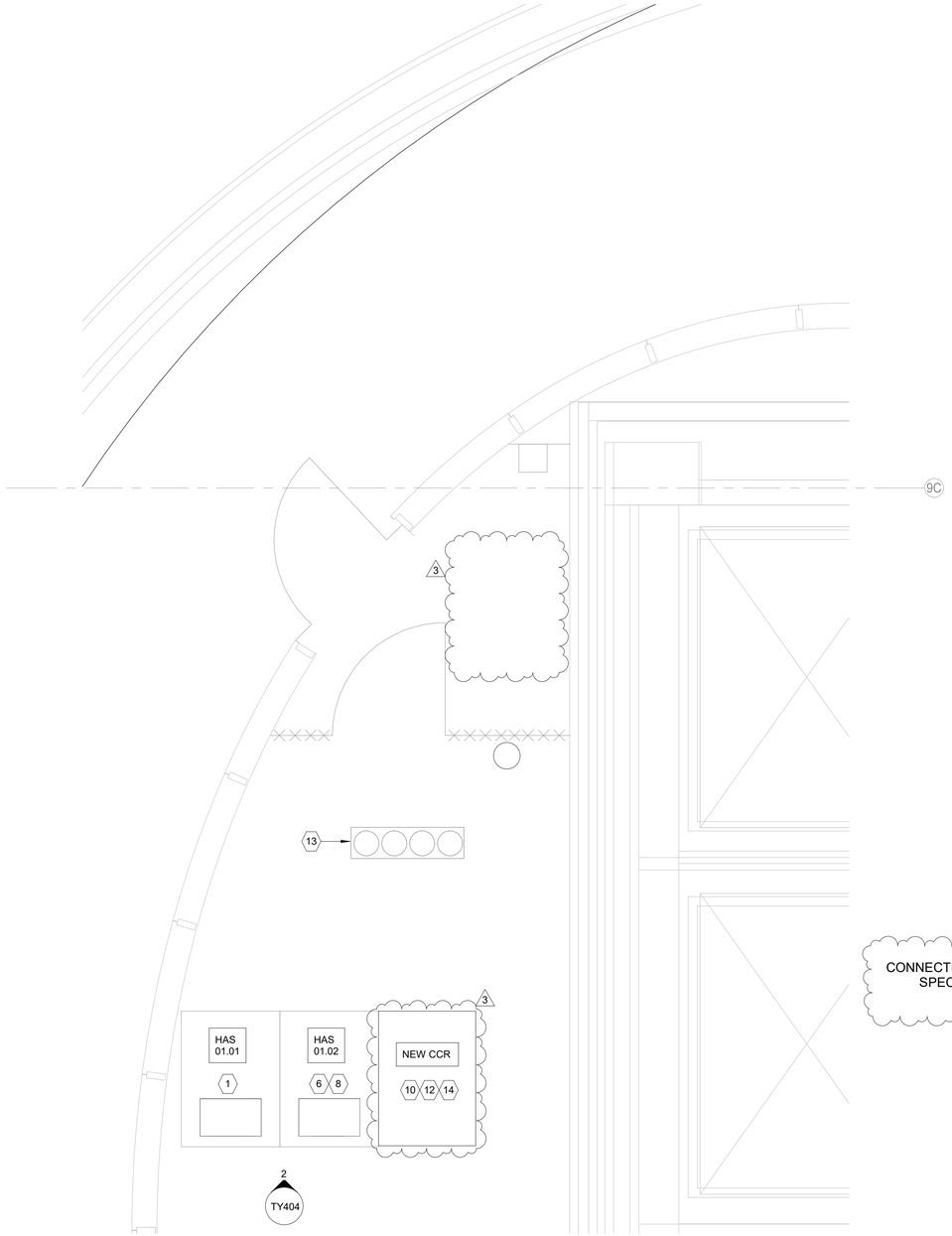
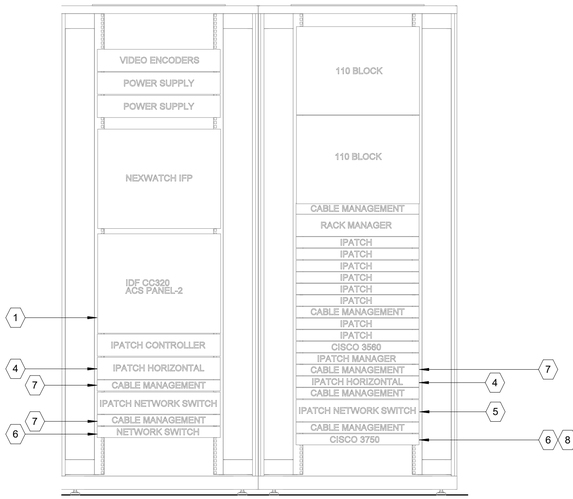
SECURITY FLOOR PLAN - TERMINAL C CENTRAL, LEVEL 02

SHEET NUMBER

TY202



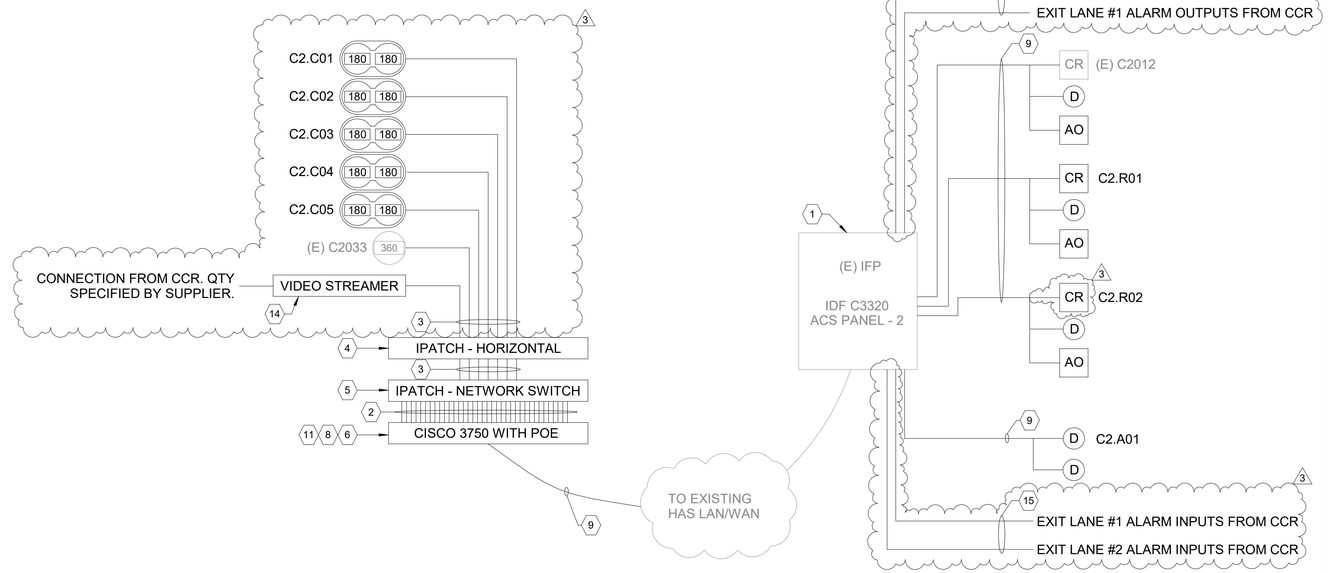
ENLARGED PLAN AT BDF C3320 1/2" = 1'-0" (1)



RACK ELEVATION AT BDF C3320 1" = 1'-0" (2)

KEY NOTES:

1. (E) IFP. PROVIDE READER, INPUT, OUTPUT MODULES AS REQUIRED FOR THIS PROJECT.
2. CAT6 PATCH CORD. ONE PER SWITCH PORT.
3. CAT6 PATCH CORD. ONE (1) PER CAMERA (TYP).
4. IPATCH HORIZONTAL, SYSTIMAX 360 48 PORT PATCH PANEL (EXISTING).
5. IPATCH NETWORK SWITCH, SYSTIMAX 360 48 PORT PATCH PANEL (EXISTING).
6. 48 PORT NETWORK SWITCH (EXISTING) (TC-C3320-9308-1).
7. CABLE MANAGEMENT.
8. TERMINATE CAMERAS IN THIS NETWORK SWITCH. COORDINATE PORTS ASSIGNMENT AND IP ADDRESSES W/ HAS IT.
9. COMPOSITE ACCESS CONTROL CABLE, ONE (1) PER DOOR.
10. THIS SPACE SHALL BE USED FOR CENTRAL CONTROL RACK (CCR). CCR RACK AND EQUIPMENT WILL BE BY OTHER.
11. PROVIDE EIGHT (8) CAT 6 CABLES BETWEEN (E) HAS NETWORK SWITCH AND CCR FOR NETWORK CONNECTIVITY. COORDINATE WITH HAS IT FOR NETWORK PORTS AVAILABILITY.
12. PROVIDE 120VAC 20A POWER CIRCUIT FOR CCR (BY DIV 26, ELECTRICAL).
13. (E) 5-4"C GOING TO CHASE CLOSET BELOW. CAPACITY AVAILABLE FOR NEW EXIT LANE CABLING.
14. VIDEO STREAMER (ANALOG TO ETHERNET). QTY AS REQUIRED FOR THIS PROJECT.
15. 3 PR 22 AWG.
16. 2 PR 22 AWG.



BDF C3320 ONE-LINE DIAGRAM 12" = 1'-0" (3)

SECURITY SENSITIVE INFORMATION – LAW ENFORCEMENT CONFIDENTIAL. DO NOT PHOTOCOPY.THIS INFORMATION IS PROTECTED AGAINST DISCLOSURE BY THE PROVISIONS CONTAINED IN THE HOMELAND SECURITY ACT OF 2002, 49 U.S.C. 114(s), AND TSA'S REGULATION IMPLEMENTING THIS AUTHORITY, SET FORTH IN 49 CFR PART 1520.

PLAN NORTH

1 : 256 SCALE

0 2.56 5.12 12.8 25.6 m

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HAS TIP # 21-156 - IAH

REGISTRATION

STATE OF TEXAS
RAINI PAYNE
101220
LICENSED
PROFESSIONAL ENGINEER

10/20/21

DRAWING HISTORY

Nr.	DATE	DESCRIPTION
1	08-06-21	100% CD
2	09-09-21	FOR INFORMATION AND REFERENCE ONLY
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PROJECT NAME

IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER

1004345

SHEET TITLE

ENLARGED PLAN AT BDF C3320

SHEET NUMBER

TY404

FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - IAH.rvt
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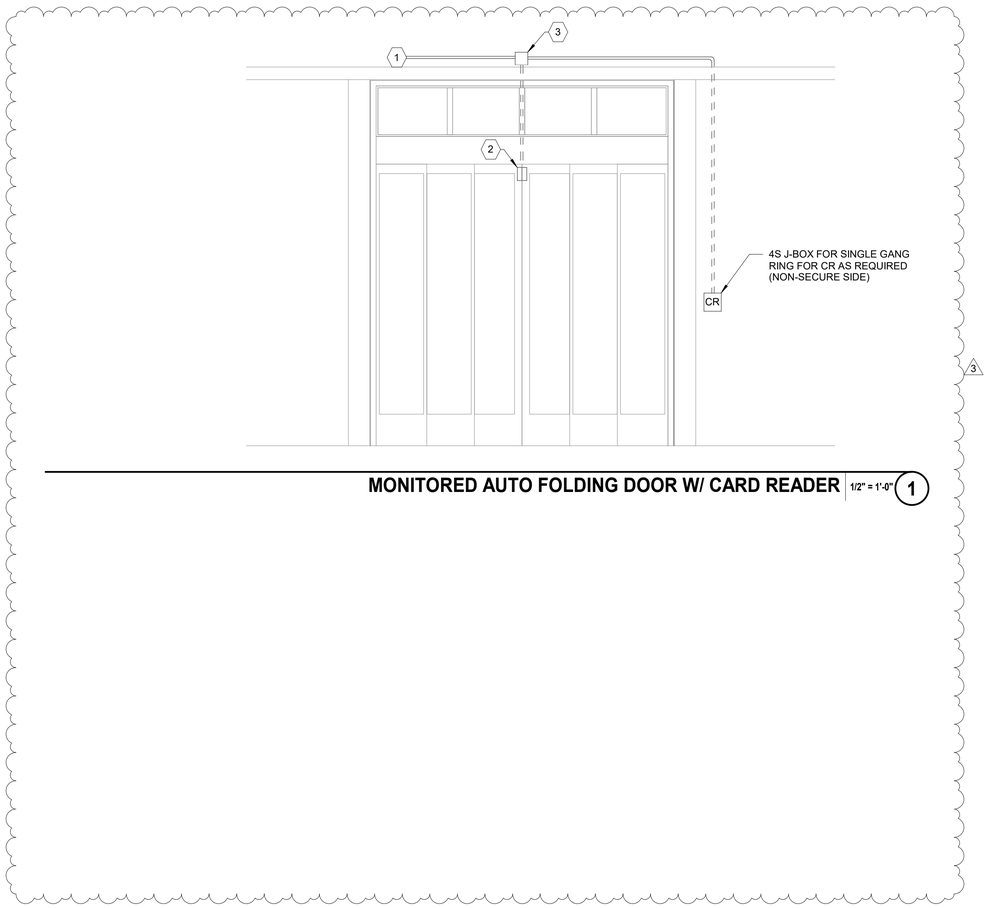
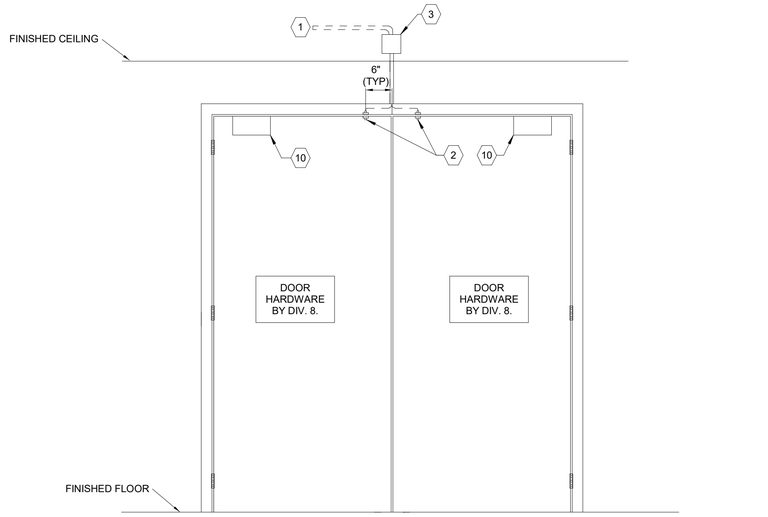
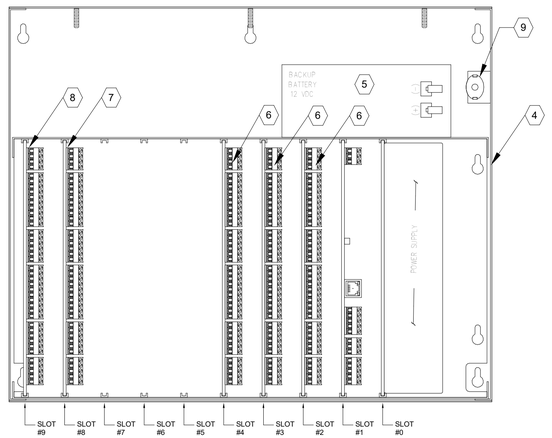


MONITORED AUTO FOLDING DOOR W/ CARD READER 1/2" = 1'-0" **1**



MONITORED DOUBLE DOOR NTS **2**



IFP DETAIL NTS **3**

GENERAL NOTES:

1. VIEW SHOWN IS FROM SECURED SIDE OF PORTAL. CONDUIT BOXED AND EQUIPMENT SHALL BE MOUNTED ON SECURED SIDE OF PORTAL, UNLESS OTHERWISE NOTED.
2. CONDUITS MAY BE COMBINED, IF COMBINED, CONTRACTOR SHALL ENSURE CONDUIT IS SIZED TO ACCEPT REQUIRED CONDUCTORS PER NEC.
3. COORDINATE MOUNTING LOCATIONS, ROUGH-IN AND FINISHES WITH THE OWNER.
4. CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
5. DOOR HARDWARE SHOWN FOR REFERENCE ONLY. TYPE OF HARDWARE MAY VARY. ALL DOOR HARDWARE SHALL HAVE KEY CYLINDER UNLESS NOTED OTHERWISE. DOOR HARDWARE BY DIV.8.
6. PROVIDE CONDUIT ONLY WHERE WIRING CANNOT ROUTE IN DOOR FRAME.
7. ALL SECURITY DOORS SHALL HAVE DOOR CLOSER.
8. COORDINATE WITH HAS FOR ADDRESSING SCHEME.
9. PROVIDE PATCH CABLE (CAT 6) FOR CONNECTIVITY TO THE NEAREST LAN/WAN.
10. CONFIGURE THE INTELLIGENT CONTROLLER (IC) TO BE ABLE TO DETECT STATIC IP AUTOMATICALLY.
11. PROVIDE BATTERY BACKUP TO SUPPORT FULL LOAD FOR 4 HOURS.
12. SUBMIT PROGRAMMING WORK SHEETS AS GENERAL SUBMITTAL REQUEST FROM HAS IT.
13. PROVIDE ADDITIONAL PANEL ENCLOSURE AND MODULE TO MEET REQUIREMENTS OF PROJECT.
14. PROVIDE FIRE ALARM RELAY AS REQUIRED FOR AUTO DOOR.

KEY NOTES:

1. 1"C. TO NEAREST IDF. TERMINATE CABLES IN IFP.
2. DOOR POSITION SWITCH, FLUSH MOUNT.
3. MOUNT 4S J-BOX 6" AFC. OR AS APPROVED BY THE OWNER.
4. PROVIDE FIELD PANEL ENCLOSURE WITH POWER SUPPLY AND BATTERY BACK UP. THE FIRST FIELD PANEL SHALL HAVE THE INTELLIGENT CONTROLLED MOUNTED TO SLOT #1.
5. BATTERY BACKUP SHALL BE SIZED TO CARRY FULL LOAD FOR FOUR (4) HOURS.
6. DUAL READER MODULE. PROVIDE DUAL READER MODULES AS NECESSARY FOR THE PROJECT.
7. PROVIDE INPUT MODULE IN SLOT 8. QTY AS REQUIRED FOR PROJECT.
8. PROVIDE OUTPUT MODULE IN SLOT 9. QTY AS REQUIRED FOR PROJECT.
9. TAMPER SWITCH
10. DOOR CLOSER (BY DIV. 8).

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PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
DOOR AND IFP DETAILS

SHEET NUMBER
TY500

FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - IAH.rvt
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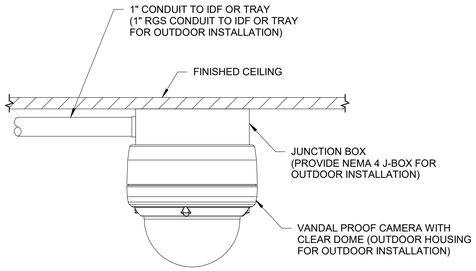
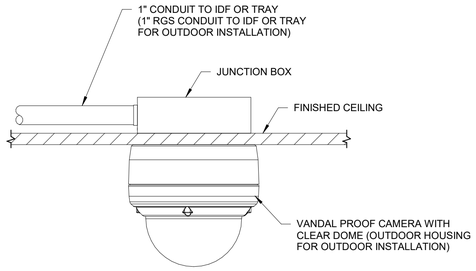
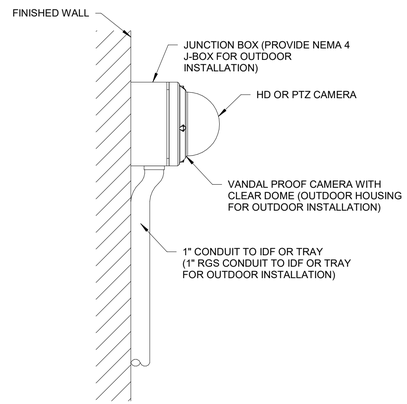


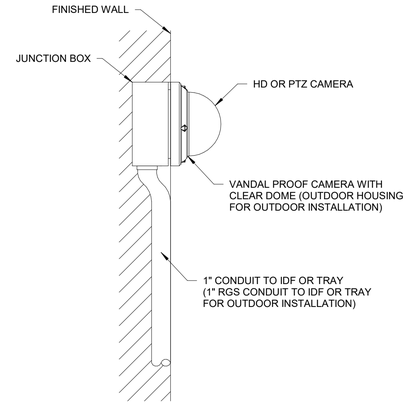
SURFACE MOUNT



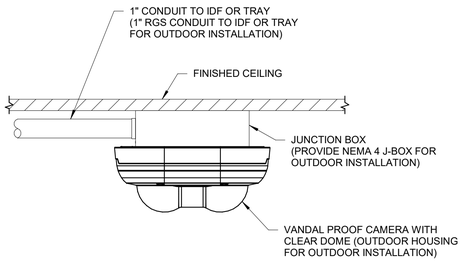
FLUSH MOUNT

TYPICAL CAMERA MOUNTING OPTION 1 - CEILING MOUNT FOR HD OR PTZ CAMERA NTS (1)

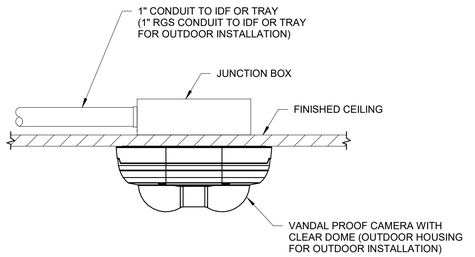




TYPICAL CAMERA MOUNTING OPTION 2 - WALL MOUNT FOR HD OR PTZ CAMERA NTS (2)

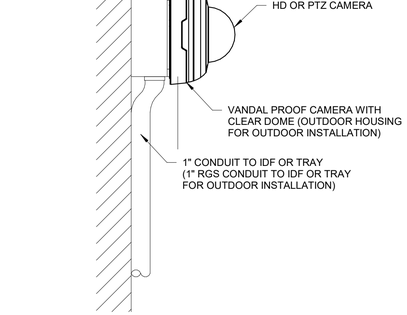


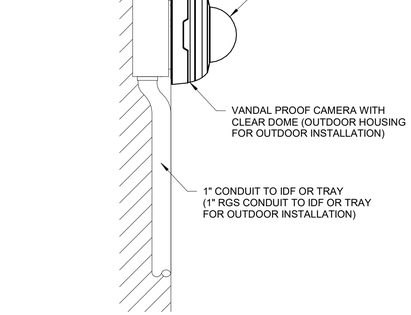
SURFACE MOUNT



FLUSH MOUNT

TYPICAL CAMERA MOUNTING OPTION 3 - CEILING MOUNT FOR DUAL 180 CAMERA NTS (3)





TYPICAL CAMERA MOUNTING OPTION 4 - WALL MOUNT FOR 360 DUAL 180 CAMERA NTS (4)

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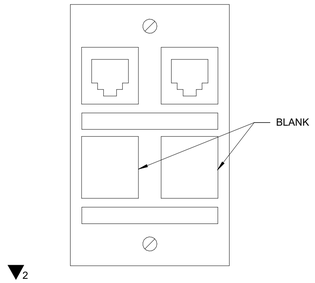
PROJECT NAME
IAH-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
GEORGE BUSH IAH
3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

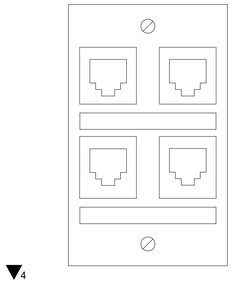
PROJECT NUMBER
1004345

SHEET TITLE
CAMERA DETAILS

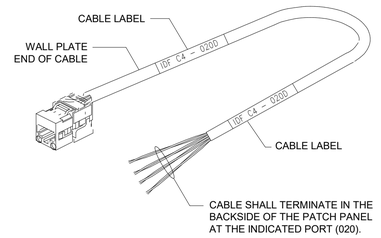
SHEET NUMBER
TY501



WORK AREA OUTLET (2) NTS 1



WORK AREA OUTLET (4) NTS 2



COMMUNICATIONS CABLE LABELING NTS 3

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3500 NORTH
TERMINAL RD.
HOUSTON, TX 77032

PROJECT NUMBER
1004345

SHEET TITLE
TELECOM DETAILS

SHEET NUMBER
TY502

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