



HOU-TERMINAL - SECURITY EXIT LANE

SECURE EXIT LANE BREACH CONTROL

WILLIAM P. HOBBY AIRPORT

7800 AIRPORT BLVD.
HOUSTON, TX 77061



ARCHITECTURE
ENGINEERING
INTERIORS
PLANNING

ALEXANDRIA
ATLANTA
AUSTIN
BOCA RATON
CHICAGO
DALLAS
HOBOKEN
HOUSTON
LAS VEGAS
LOS ANGELES

ARCHITECT



PGAL
3131 Briarpark Drive
Suite 200
Houston, TX 77042
T 713-622-1444



STRUCTURAL



HENDERSON ROGERS
STRUCTURAL ENGINEERS, LLC
2603 AUGUSTA, SUITE 800
Houston, TX 77057
T 713-430-5800

MEP

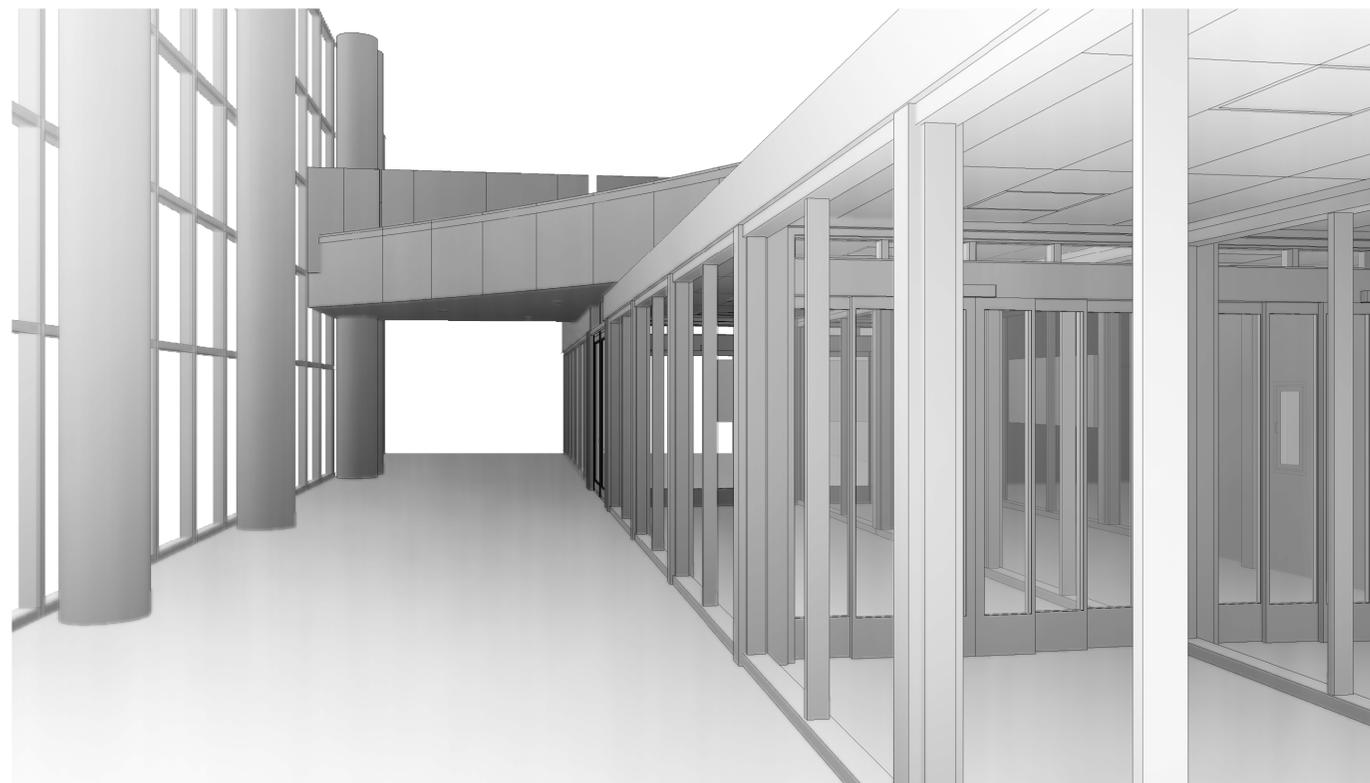


VOLT AIR
5353 West Alabama Street
Suite 205
Houston, TX 77056
T 832-371-6181

SECURITY / TELECOMMUNICATIONS



PGA ENGINEERS
3838 N. Sam Houston Pkwy E
Suite 550
Houston, TX 77032
T 346-570-2418



SHEET INDEX

Sheet No.	Sheet Name
G000	COVER SHEET / SHEET INDEX
G002	GENERAL PROJECT INFORMATION
G003	LIFE SAFETY ANALYSIS
A011	PARTITION TYPES
A012	STOREFRONT TYPES
A013	STOREFRONT DETAILS
A030	DOOR SCHEDULE
A035	DOOR DETAILS
A100	OVERALL FLOOR PLAN - TERMINAL
AP200	ENLARGED FLOOR PLAN - TERMINAL - PHASING PLAN
AD200	DEMOLITION FLOOR PLAN - TERMINAL
AD300	DEMOLITION REFLECTED CEILING PLAN - TERMINAL

SHEET INDEX

Sheet No.	Sheet Name
A200	ENLARGED FLOOR PLAN - TERMINAL
A300	ENLARGED REFLECTED CEILING PLAN
A400	ENLARGED ELEVATIONS & AXO - TERMINAL
A500	ENLARGED AXO - TERMINAL
ADG200	HOU TERMINAL SIGNAGE DEMO PLAN
AG200	HOU TERMINAL SIGNAGE PLAN
S200	ENLARGED FLOOR PLAN - TERMINAL DETAILS
S301	ENLARGED FLOOR PLAN - TERMINAL DETAILS
E000	ELECTRICAL LEGEND
E201	DEMOLITION PLAN - TERMINAL - ELECTRICAL
E301	LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL - LIGHTING
E401	LEVEL 01 - BAGGAGE CLAIM - FLOOR PLAN - TERMINAL - POWER
E402	LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL - POWER
E601	RISER DIAGRAMS - ELECTRICAL

SHEET INDEX

Sheet No.	Sheet Name
E901	ELECTRICAL DETAILS
E902	ELECTRICAL DETAILS
TY000	INDEX, SYMBOLS AND NOTES
TY001	NOTES
TY002	EQUIPMENT SCHEDULES
TY100	OVERALL SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 01
TY101	OVERALL SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 02
TY200	ENLARGED SECURITY FLOOR PLAN - TERMINAL, LEVEL 02
TY300	ENLARGED PLAN AT IDF 100.14
TY500	DOOR AND IFP DETAILS
TY501	CAMERA DETAILS
TY502	TELECOM DETAILS

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

ISSUE FOR BID
100% CD

PROJECT No. 1004345

10-20-21

BMR NAME: C:\Revit\Localis\HOU-TERM - SECURITY EXIT LANE_VQufjada@pgal.com.nvt
 STAMP: 10/21/2021 1:16:04 AM

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:
 HOU-TERM - 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. REFER TO THE GENERAL NOTES, DESIGN NOTES AND KEYNOTES ON SHEETS 1-1 THROUGH 1-20, 1-1 THROUGH 2-47, 3-1 THROUGH 3-2, 4-1 THROUGH 4-51, AGS.001 AND AGS.002.
5. 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 ARCHITECT'S 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 DUSTY 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



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE

HAS TIP 21-157 - IAH

REGISTRATION

Copyright © 2021



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

**HOU-TERMINAL
 - SECURITY
 EXIT LANE**

PROJECT LOCATION

**WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061**

PROJECT NUMBER

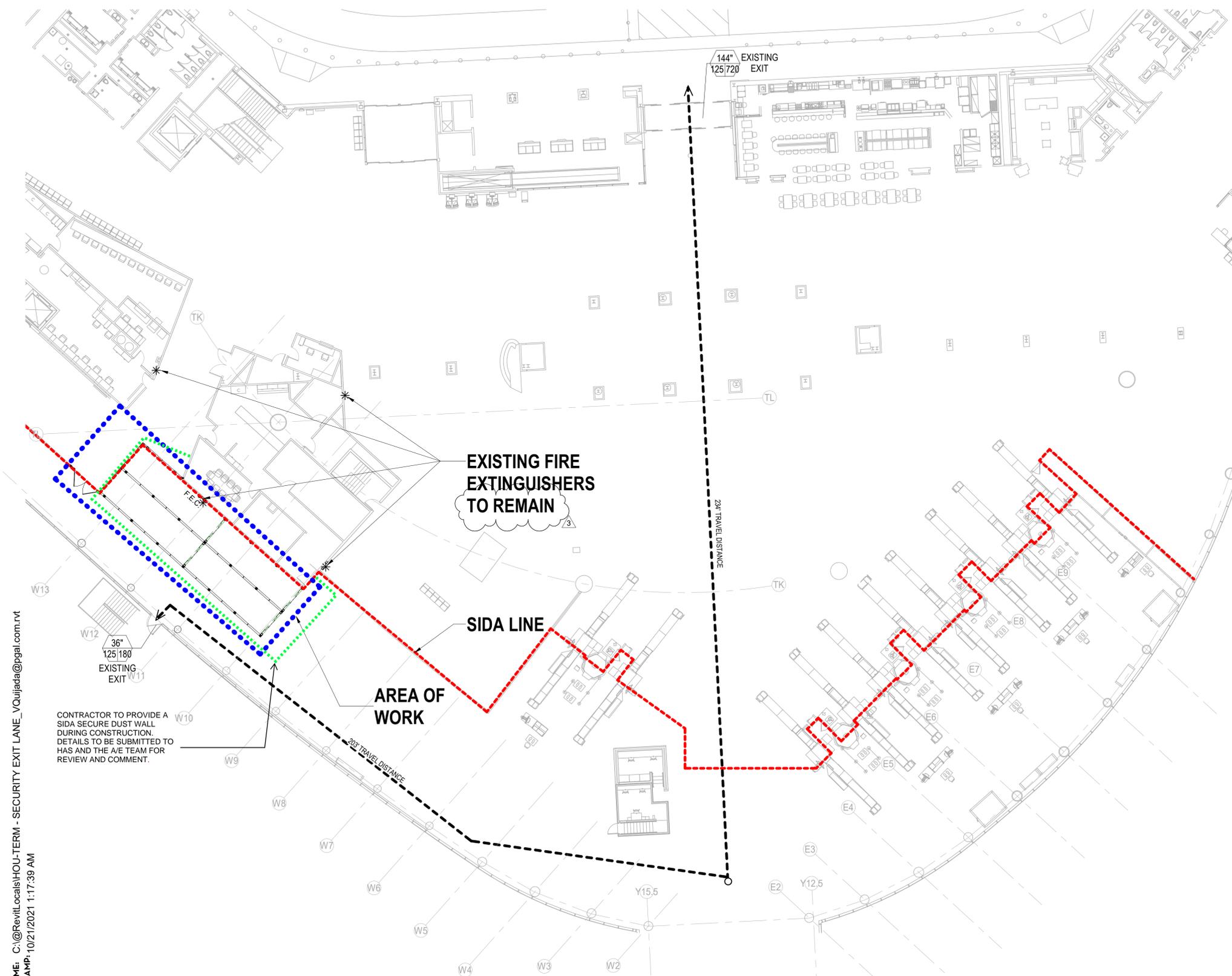
1004345

SHEET TITLE

**GENERAL PROJECT
 INFORMATION**

SHEET NUMBER

G002



FILE NAME: C:\Revit\Local\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:17:39 AM

CONTRACTOR TO PROVIDE A SIDA SECURE DUST WALL DURING CONSTRUCTION. DETAILS TO BE SUBMITTED TO HAS AND THE A/E TEAM FOR REVIEW AND COMMENT.

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)
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 ACCESSIBILITY	ASHRAE 90.1-2013 (WITH COH AMENDMENTS) / 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 : 2 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
*FIRE ALARM AND FIRE EXTINGUISHER CABINETS ARE EXISTING	

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)

GROUP	SPRINKLERED		
	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 EXTINGUISHERS PROVIDED. IFC TABLE 906.3(1)

OCCUPANCY CALCULATIONS (IBC TABLE 1004.1.2)

LEVEL 2 - TICKETING

ROOM#	NAME	AREA	OCC. TYPE	OLF	OCC. LOAD
200	LOBBY CIRCULATION	24,903 SF	A-3	100 SF	250

EGRESS WIDTH PER OCCUPANT SERVED (IBC TABLE 1005.1)

DOORS	MIN. REQUIRED	AVAILABLE CLEAR WIDTH PROVIDED
LEVEL 2: 0.2" X 250 OCC = 50 INCH/OCC	50"	180" 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	2



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



DRAWING HISTORY

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

PROJECT NAME
 HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 LIFE SAFETY ANALYSIS

SHEET NUMBER

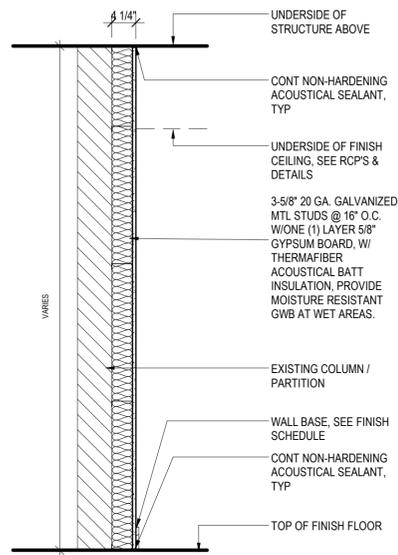
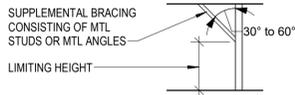
G003

FILE NAME: C:\Revit\local\HOU-TERM - SECURITY EXIT LANE_VQJjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:18:17 AM

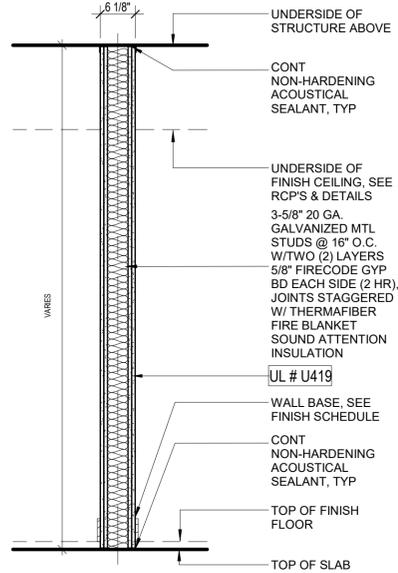
COLD FORMED FRAMING NOTES

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

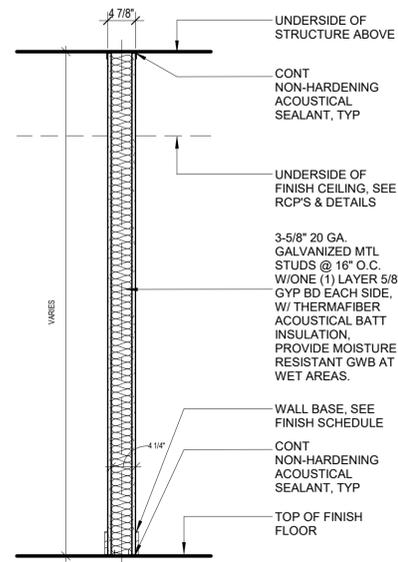
- ALL FURRING CHANNELS TO BE 25 ga. AND PLACED AT 16 INCHES O.C. UNLESS NOTED OTHERWISE.
- PARTITIONS SUPPORTING WALL HUNG PLUMBING FIXTURES SHALL BE 16 ga. AND PLACED 16 INCHES O.C.
- REFER TO STRUCTURAL DRAWINGS FOR STUD ga. SIZE AND SPACING FOR ALL STRUCTURALLY DESIGNED PARTITIONS.
- REFER TO ASTM 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.
- FOR PARTITIONS WITH "BRITTLE" FINISHES SUCH AS PLASTER AND CERAMIC TILE, DESIGN PARTITION SYSTEM TO MAINTAIN DEFLECTION RATIO WITHIN L/360. SUSPENDED CEILING SHALL NOT BE CONSIDERED AS BRACING.



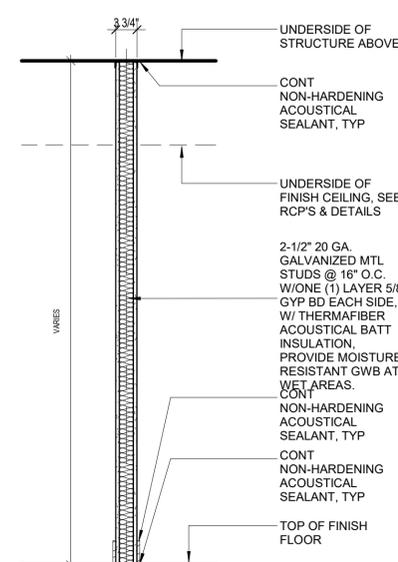
B7.1 FURRING WALL PARTITION 3-5/8" STUD 3/4" = 1'-0" 4



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



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

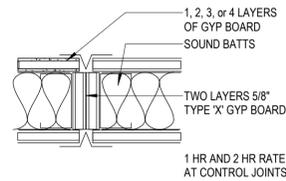


B1.1 NON-RATED PARTITION 2-1/2" STUD1 3/4" = 1'-0" 1

ACOUSTICAL NOTES

- ALL ACOUSTICALLY CLASSED PARTITIONS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE TO THE REFERENCED TEST.
- STAGGER AND SEAL ALL JOINTS ON MULTIPLE GYPSUM BOARD LAYER PARTITIONS.
- SEAL ALL PERIMETER GAPS, AIR TIGHT, AT THE FLOORS, HEAD, ADJACENT CONSTRUCTION AND AROUND ANY PENETRATING ELEMENTS WITH INTERIOR GRADE ACOUSTICAL SEALANT.
- 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.
- 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.
- SEAL ALL WALL INTERSECTIONS AND CONTROL JOINTS AT ACOUSTICALLY CLASSED PARTITIONS.
- SEAL ALL CONDUIT, STRUCTURAL, DUCT AND LARGE PIPE PENETRATIONS UNLESS THE PARTITION IS ALSO FIRE RATED WHERE THE CODE COMPLIANCE DETAILS.
- OUTLETS ON OPPOSITE SIDES OF ACOUSTICALLY CLASSED PARTITIONS.

FIREWALL CONTROL JOINTS



FIRE RATING NOTES

- 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.
- 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.
- REFER TO SHEET G010 FOR U.L. LISTED ASSEMBLIES.

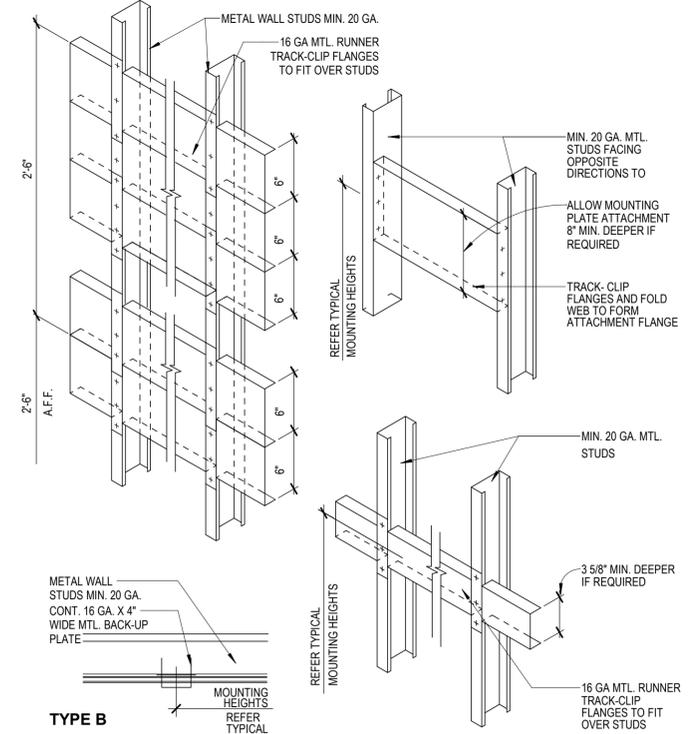
GYPSUM BOARD PARTITION PRIORITY LEGEND

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

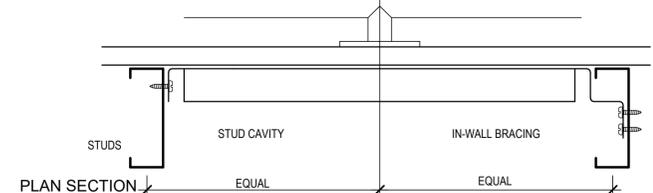
- ALL POSSIBLE VARIATIONS OF PARTITIONS TYPES AND U.L. FIRE RATINGS ARE NOT NECESSARILY UTILIZED IN THIS PROJECT AND ARE SHOWN FOR REFERENCE ONLY. UNLESS RATED PARTITIONS ARE INDICATED ON THE FLOOR PLANS, WHERE U.L. RATED PARTITIONS ARE INDICATED, REFER TO FLOOR PLANS AND PROVIDE FIRE SEALANT AT THOSE LOCATIONS AS REQUIRED.
- 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.
- PROVIDE CEMENTITIOUS BACKER BOARD ON ALL WALLS TO RECEIVE CERAMIC TILE FINISH. PROVIDE WATER RESISTANT GYPSUM PANELS ON CEILING IN ROOMS THAT INCLUDE SHOWERS. FRAMING NOT TO EXCEED SPACING RECOMMENDED BY MANUFACTURER.
- 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.
- 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.
- 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.
- PROVIDE FIRE TREATED WOOD BLOCKING, SHEET METAL OR STEEL BACKING IN PARTITIONS TO SUPPORT WALL MOUNTED ITEMS AND EQUIPMENT, ETC.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PARTITION DETAILS



TYPE B MOUNTING SUPPORT DETAILS

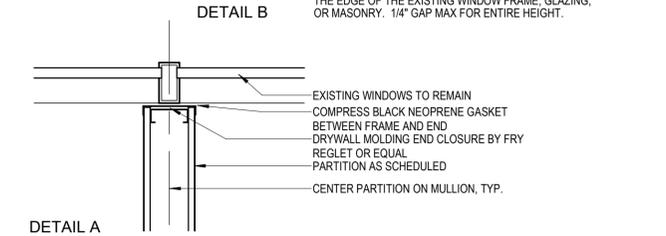
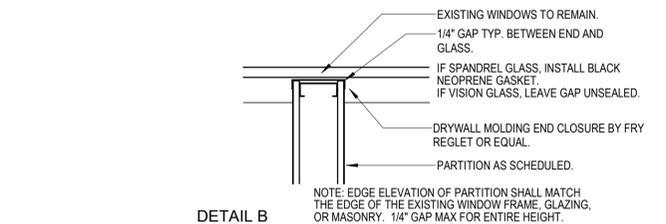
SCALE: NONE
 PROVIDE IN-WALL BRACING IN ALL PARTITIONS OR EXTERIOR WALLS WHERE GRAB BARS, HANDRAILS, SHOWER SEATS OR OTHER EQUIPMENT ANCHORS TO METAL STUD WALLS AND IN OTHER LOCATIONS AS NOTED ON THE DRAWINGS. CENTER STUDS ABOUT THE LOCATION OF THE DEVICE ANCHOR POINT. GRAB BAR BRACKET SHOWN, OTHER DEVICES SIMILAR.



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

16 GA. x 4" WIDE MTL BACKUP PLATE MAY BE USED

IN-WALL BRACING



PARTITION AT MULLION DETAILS

SCALE: NONE

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

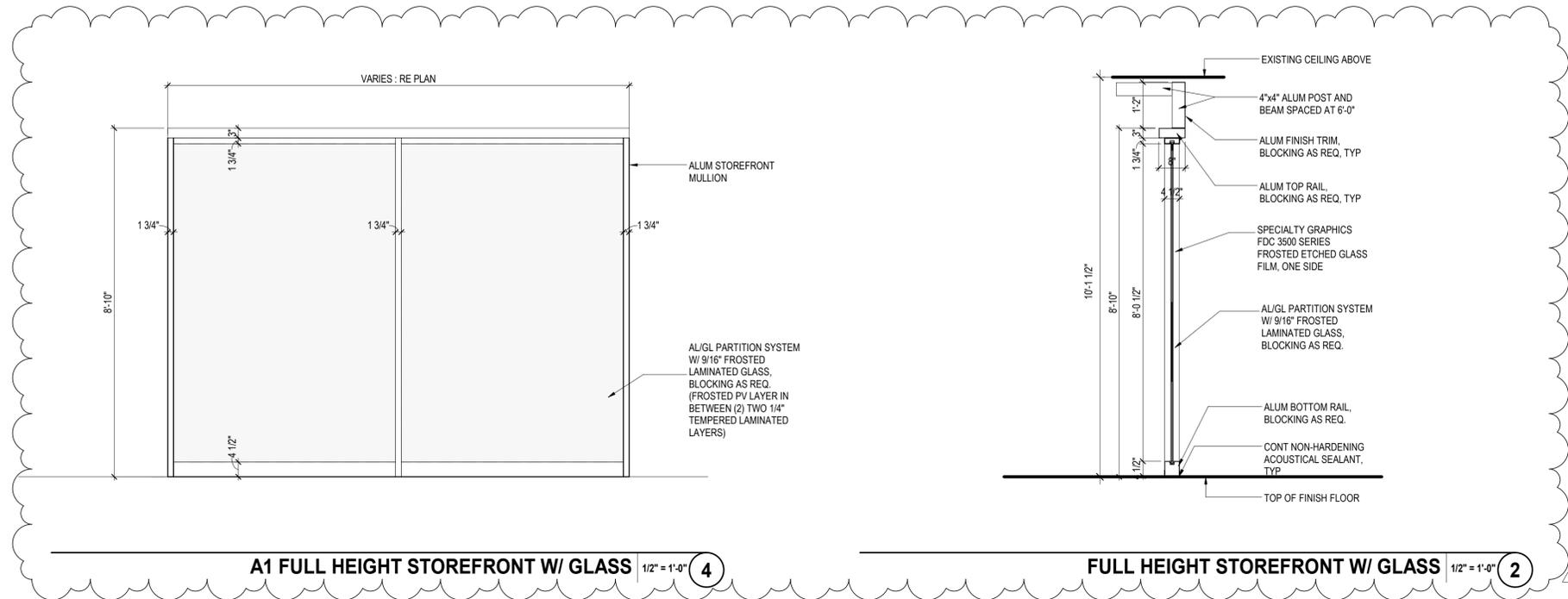
PROJECT NUMBER
 1004345

SHEET TITLE
 PARTITION TYPES

SHEET NUMBER

A011

FILE NAME: C:\Revit\Locals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TAMP: 10/21/2021 11:18:49 AM



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

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

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOLISTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
**HOU-TERMINAL
 - SECURITY
 EXIT LANE**

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

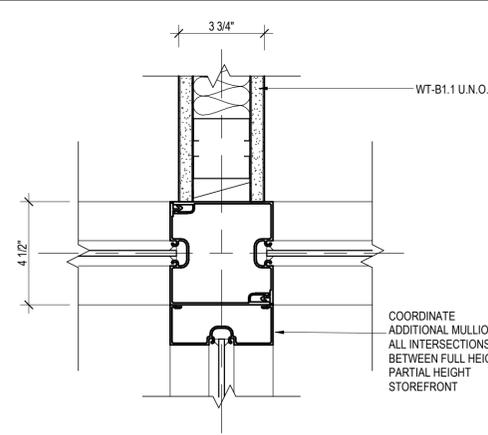
PROJECT NUMBER
 1004345

SHEET TITLE
 STOREFRONT
 TYPES

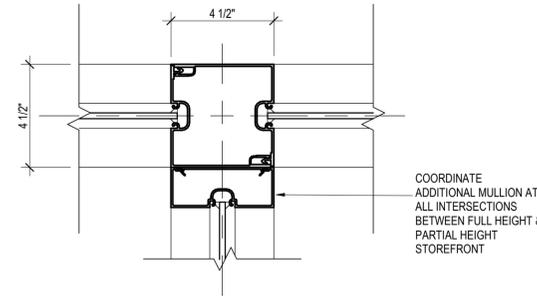
SHEET NUMBER

A012

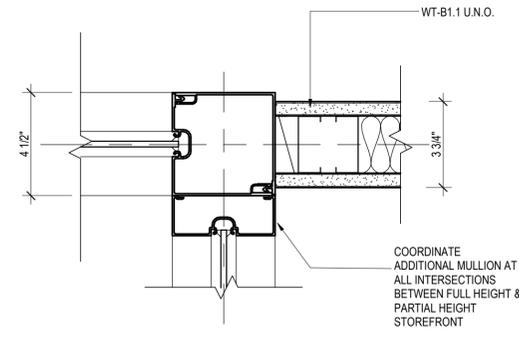
FILE NAME: C:\Revit\Locals\HOU-TERM - SECURITY EXIT LANE_VQjijada@pgal.com.rvt
 DATE/TIME: 10/20/2021 11:39:53 PM



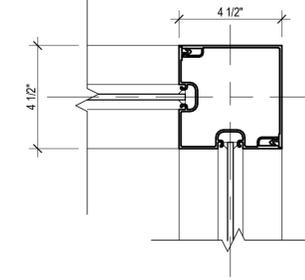
MULLION AT INTERSECTION 3" = 1'-0" 12



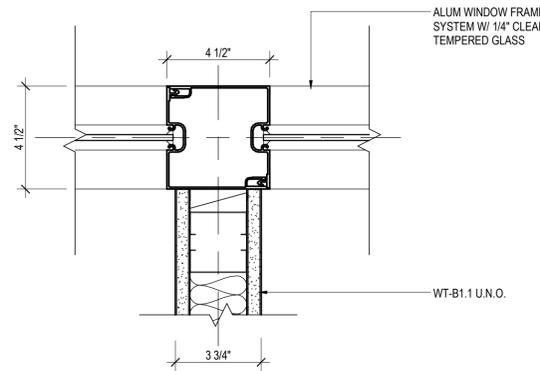
MULLION AT INTERSECTION 3" = 1'-0" 9



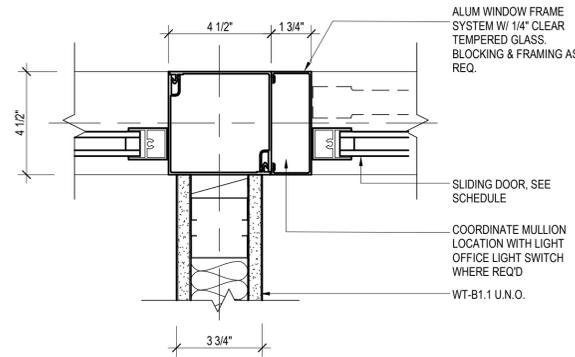
MULLION AT INTERSECTION 3" = 1'-0" 6



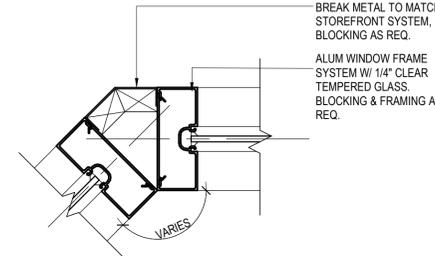
MULLION AT CORNER 3" = 1'-0" 3



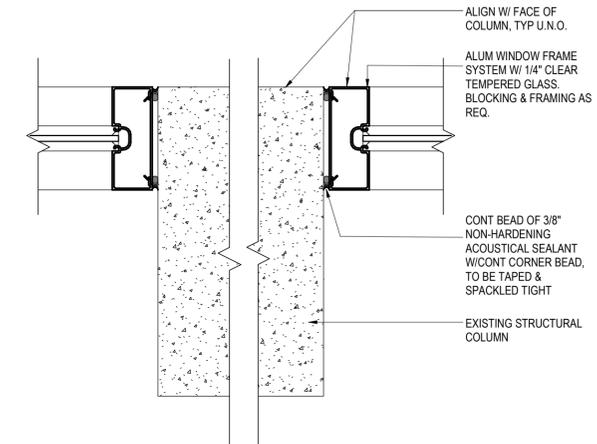
MULLION AT DIVIDING WALL 3" = 1'-0" 11



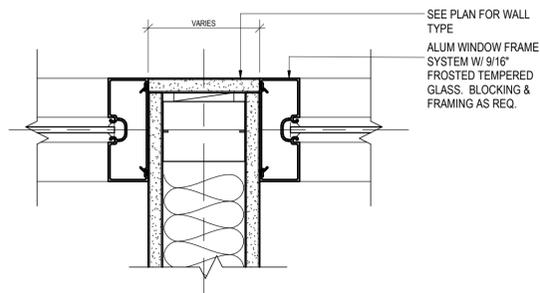
MULLION AT SLIDING DOORS & DIVIDING WALL 3" = 1'-0" 8



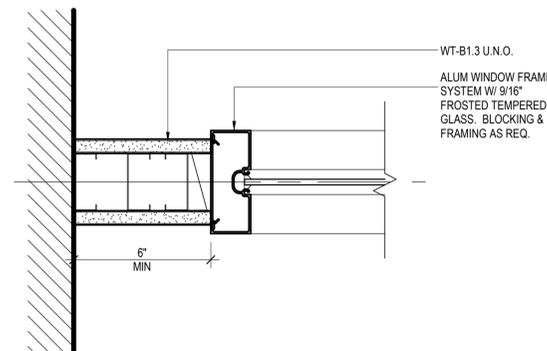
CUSTOM BREAK METAL DETAIL 3" = 1'-0" 5



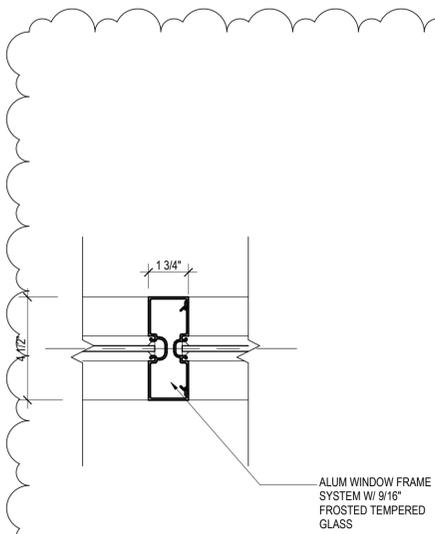
MULLION AT COLUMN 3" = 1'-0" 2



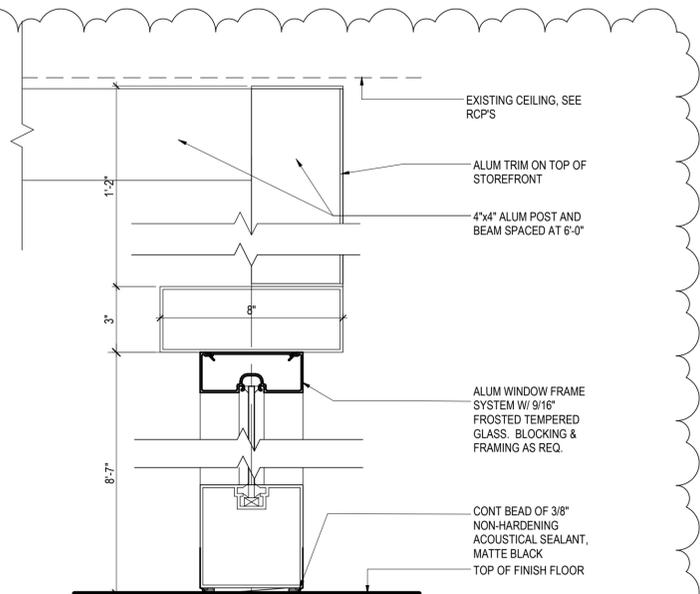
MULLION AT DIVIDING WALL 3" = 1'-0" 10



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



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



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

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 STOREFRONT
 DETAILS

SHEET NUMBER

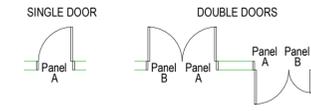
A013

FILE NAME: C:\@RevitLocals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:19:59 AM

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



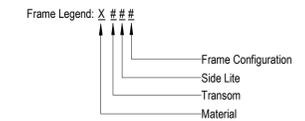
PANEL "A" WILL ALWAYS BE FROM LEFT HINGE SWINGING OUTWARD.

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
8 - Sliding Door Frame

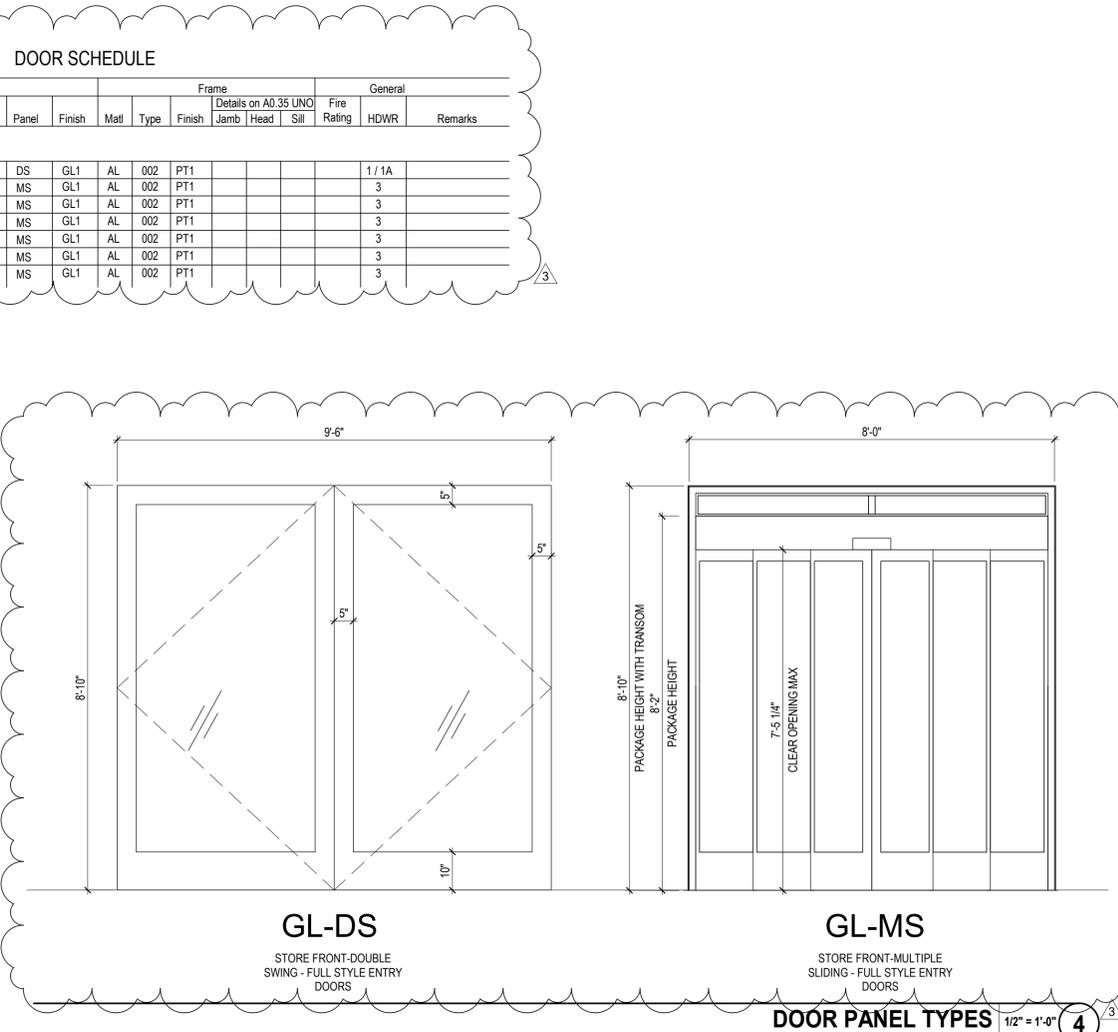
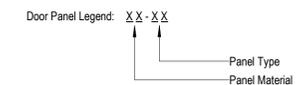


DOOR PANEL MATERIALS

- 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)



Mark	Panel						Frame					General		Remarks	
	Size		THK	Matl	Panel	Finish	Matl	Type	Finish	Details on A0.35 UNO			Fire Rating		HDWR
	Width	Height								Jamb	Head	Sill			
101	9'-6"	8'-10"	--	GL	DS	GL1	AL	002	PT1					1 / 1A	
102	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	
103	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	
104	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	
105	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	
106	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	
107	8'-0"	8'-2"	6"	GL	MS	GL1	AL	002	PT1					3	

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HAS TIP 21-157 - IAH
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE

REGISTRATION
 Copyright © 2021



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

HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION

WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER

1004345

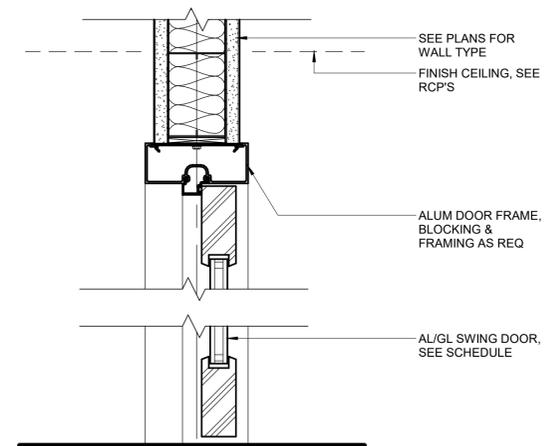
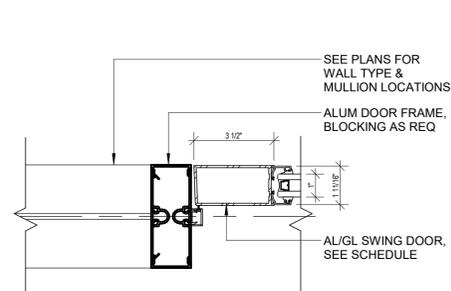
SHEET TITLE

DOOR SCHEDULE

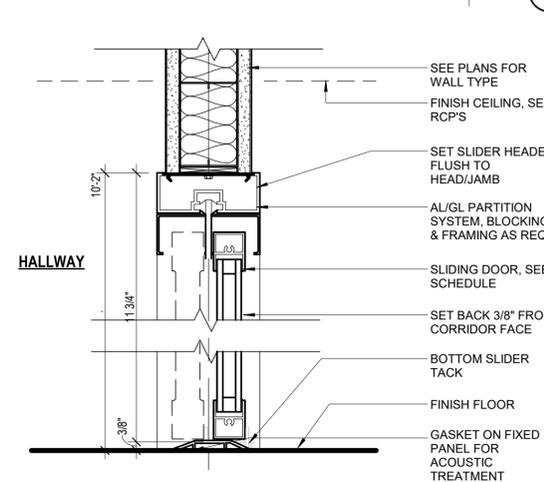
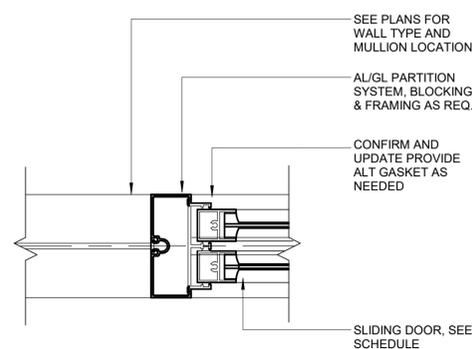
SHEET NUMBER

A030

FILE NAME: C:\Revit\Locals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:20:32 AM



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



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



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

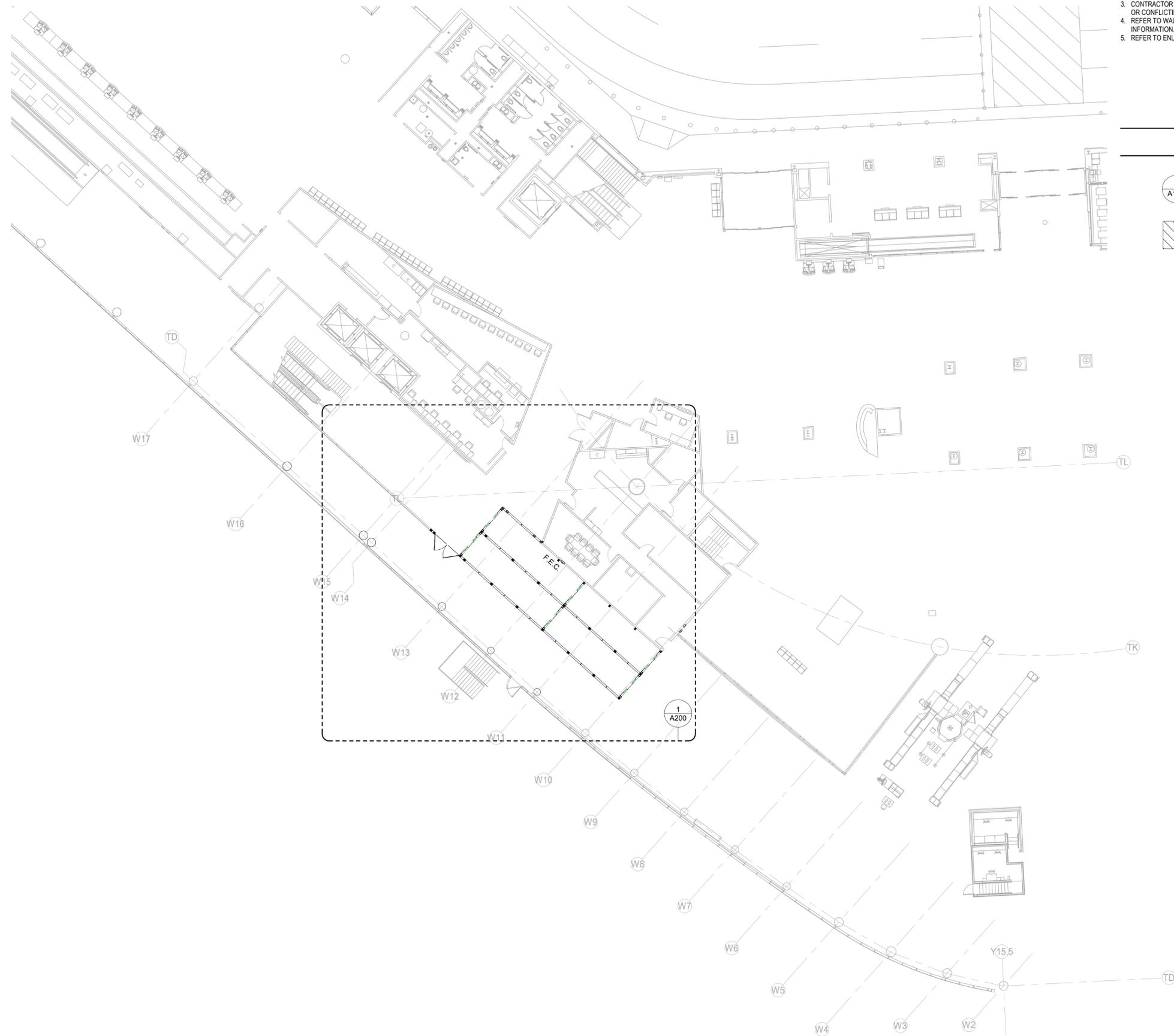
PROJECT NUMBER
 1004345

SHEET TITLE
 DOOR DETAILS

SHEET NUMBER

A035

FILE NAME: C:\@RevitLocals\HOU-TERM - SECURITY EXIT LANE_VQjijada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:21:06 AM



GENERAL NOTES

- DO NOT SCALE DIMENSIONS FROM DRAWINGS. ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFESSIONALS VIA REQUEST FOR INFORMATION (RFI).
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
- REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDITIONAL INFORMATION.
- REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.

LEGEND

- SIM VIEW REFERENCE CALLOUT
- NOT INCLUDED IN SCOPE OF WORK

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 OVERALL FLOOR
 PLAN - TERMINAL

SHEET NUMBER

A100

FILE NAME: C:\@RevitLocals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:22:12 AM



GENERAL NOTES - DEMO

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

LEGEND - PHASING PLAN

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

PHASING PLAN KEYNOTES

- 02.01 PHASE ONE: DEMO EXISTING DOORS AND ASSOCIATED WALL AS NOTED. REPAIR ANY DAMAGE TO SURFACE AND PREPARE SURFACE FOR MATCHING FINISH.
- 02.02 PHASE ONE: EXISTING GRAPHICS TO BE REMOVED AND RELOCATED. RELOCATE AND INSTALL MATCHING WALL PANEL.
- 02.03 PHASE TWO: INSTALL NEW DUST WALL. FIRE TREATED WOOD FRAME AND PLYWOOD, PAINTED WHITE TO PUBLIC SIDE. WALLS TO BE LOCKABLE.
- 02.04 PHASE THREE: BYPASS DOORS
- 02.05 PHASE THREE: RELOCATE EXISTING SIGN
- 02.06 PHASE FOUR: INSTALL NEW WORK PER SCOPE - TEST & CLOSEOUT.
- 02.07 PHASE FIVE: REMOVE DUST WALLS.

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT

PGAL

PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOLISTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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

**HOU-TERMINAL
 - SECURITY
 EXIT LANE**

PROJECT LOCATION

**WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061**

PROJECT NUMBER

1004345

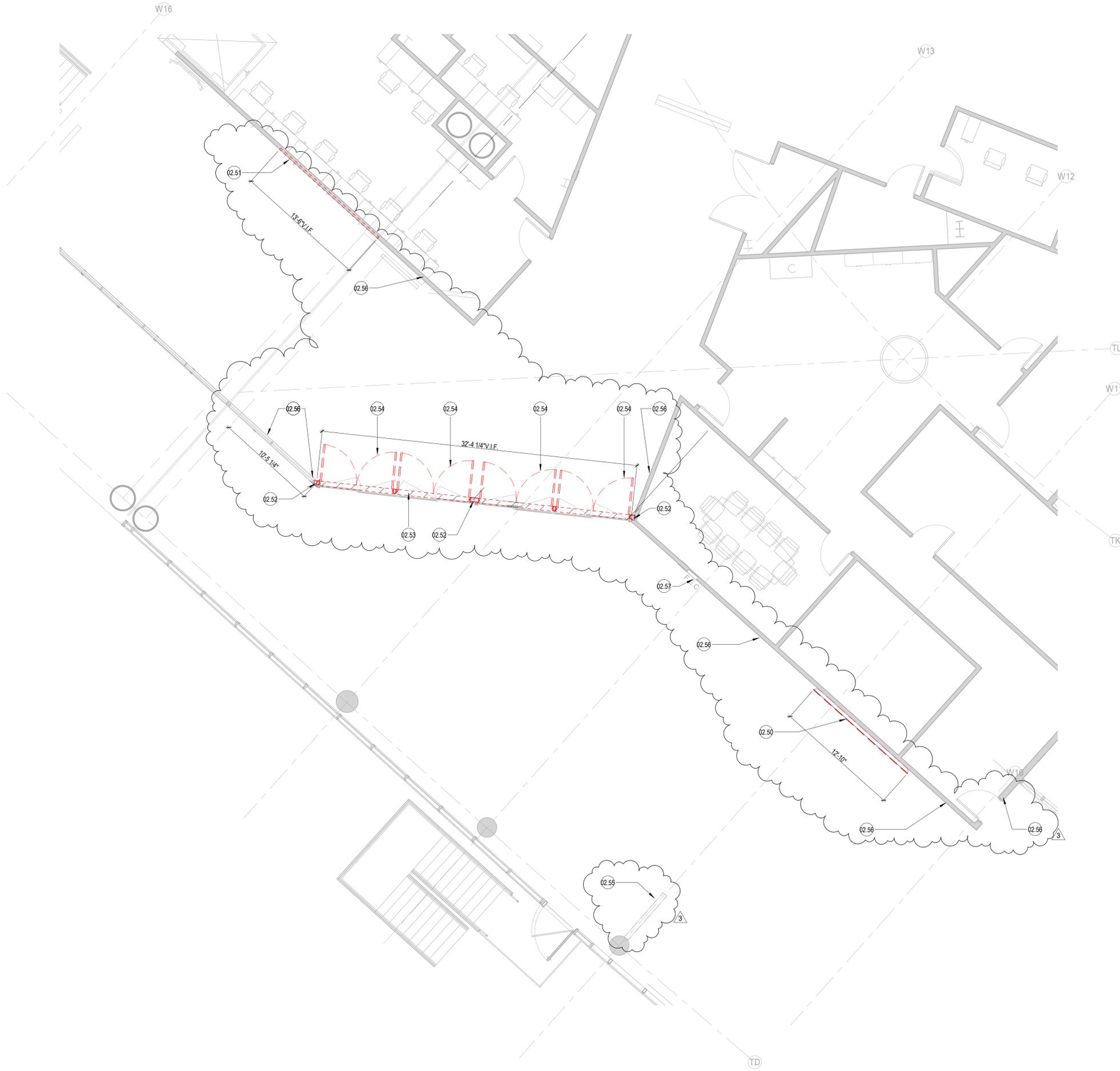
SHEET TITLE

**ENLARGED FLOOR
 PLAN - TERMINAL -
 PHASING PLAN**

SHEET NUMBER

AP200

FILE NAME: C:\Revit\Locals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:22:54 AM



GENERAL NOTES - DEMO

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

KEYNOTE LEGEND

NUMBER	DESCRIPTION
02.50	EXISTING VIDEO WALL TO BE REMOVED, RELOCATED AND RE-INSTALLED
02.51	EXISTING WALL, PANEL AND WALL BASE TO BE REMOVED, RELOCATED AND RE-INSTALLED
02.52	EXISTING STRUCTURAL STEEL COLUMNS TO REMAIN, V.I.F.
02.53	EXISTING GYPSUM WALL AND STUD PARTITION TO BE REMOVED UP TO APPROXIMATELY 10'-1 1/2". 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/ISA. 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.
02.55	EXISTING SIGN TO BE RELOCATED, RE: SIGNAGE DRAWINGS
02.56	EXISTING TO REMAIN, PROTECT EXISTING FINISHES AND STOREFRONT AS NEEDED
02.57	EXISTING FIRE EXTINGUISHER TO REMAIN

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 DEMOLITION
 FLOOR PLAN
 -TERMINAL

SHEET NUMBER

AD200

FILE NAME: C:\Revit\Locals\HOU-TERM - SECURITY EXIT LANE_VQjijada@pgal.com.rvt
 DATE/TIME: 10/21/2021 11:13:56 AM



GENERAL NOTES

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

LEGEND - DEMO RCP

- EXISTING WALL TO BE DEMOLISHED
- EXISTING DOOR TO BE DEMOLISHED
- EXISTING LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING LIGHT FIXTURE TO REMAIN
- EXISTING WALL TO REMAIN
- EXISTING DOOR TO REMAIN
- KEYED NOTE
- NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
02.52	EXISTING STRUCTURAL STEEL COLUMNS TO REMAIN, V.I.F.
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
02.60	EXISTING DOWNLIGHTS TO REMAIN
02.61	EXISTING BULKHEAD TO REMAIN

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOU-TERM-SECURITY EXIT LANE
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



DRAWING HISTORY

NO.	DATE	DESCRIPTION
3	10-20-21	ISSUE FOR BID/100%CD

PROJECT NAME
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

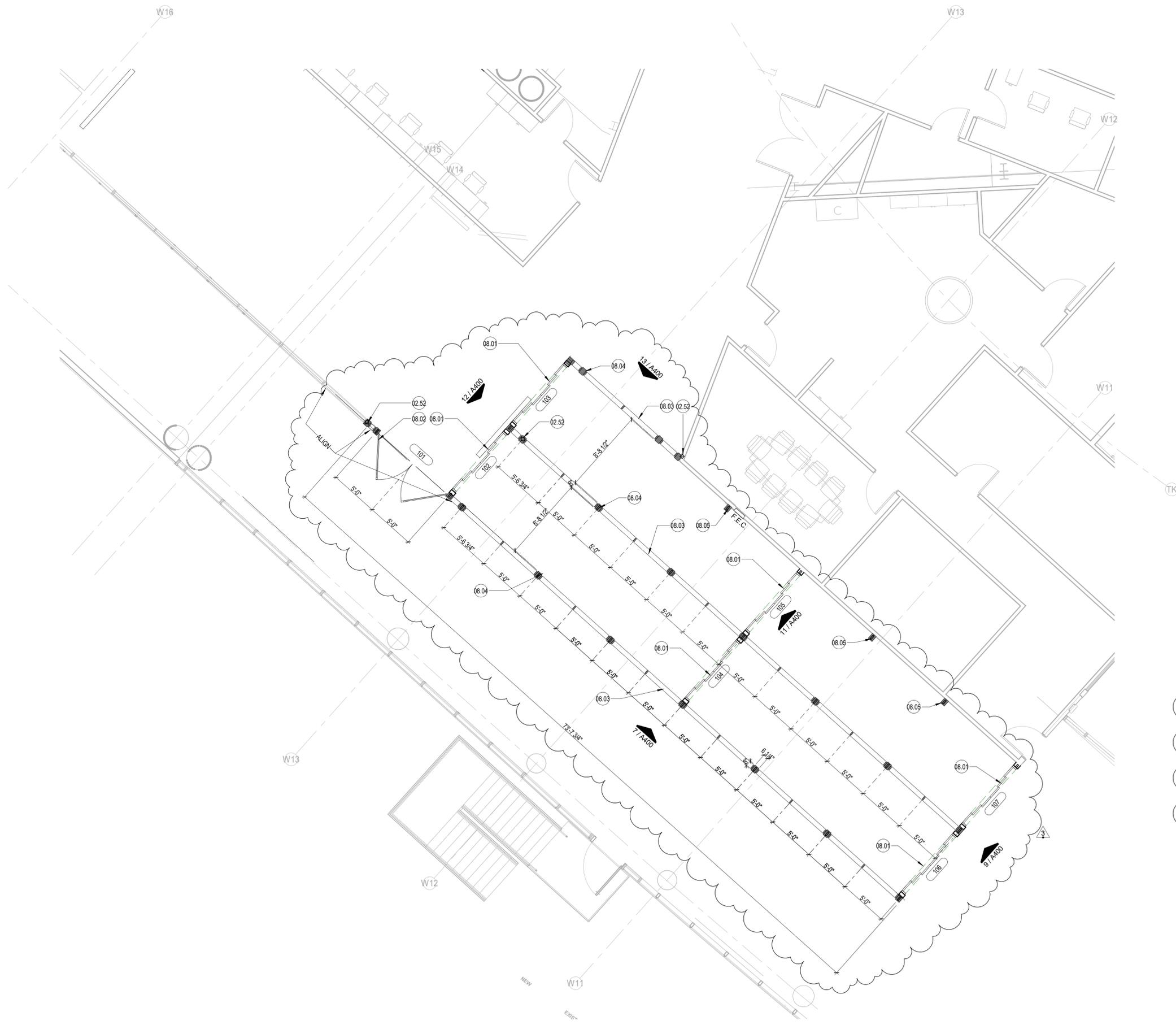
PROJECT NUMBER
 1004345

SHEET TITLE
 DEMOLITION
 REFLECTED
 CEILING PLAN -
 TERMINAL

SHEET NUMBER

AD300

FILE NAME: C:\@RevitLocals\HOU-TERM - SECURITY EXIT LANE_VQujjadaa@pgal.com.rvt
 DATE/TIME: 10/20/2021 11:42:48 PM



GENERAL NOTES - PLAN

- DO NOT SCALE DIMENSIONS FROM DRAWINGS. ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFESSIONALS VIA REQUEST FOR INFORMATION (RFI).
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
- REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDITIONAL INFORMATION.
- REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.
- REFER TO DOOR SCHEDULES AND DOOR TYPES SHEET A030.
- ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
- 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

- FIELD COORDINATE CONDUIT ROUTING
- EXPOSED CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES
- LABEL SECURITY CONDUITS. REFER TO NOTES ON SHEET G002.
- ALL SECURITY SYSTEM EQUIPMENT FURNISHINGS, CONDUIT, CABLING AND OTHER RELATED MATERIALS AND INTERFACES SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT CONSTRUCTION DOCUMENTS AND SCHEDULES.
- 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 SYSTEM OPERATION, CONTRACTOR SHALL ENSURE CABLES TO EACH DEVICE PROVIDE SUFFICIENT VOLTAGE, OR SIGNAL STRENGTH TO OPERATE WITHIN MANUFACTURER'S SPECIFIED LIMITS.
- CONTRACTOR SHALL COORDINATE EXACT DEVICE MOUNTING LOCATIONS WITH OWNERS DESIGNATED REPRESENTATIVE AND OTHER TRADES PRIOR TO INSTALLATION OF DEVICES AND RELATED INFRASTRUCTURE.
- CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH OWNERS DESIGNATED REPRESENTATIVE FINAL FIELD OF VIEW OF SECURITY CAMERAS.
- ALL SECURITY CAMERAS SHALL BE PROVIDED WITH APPROPRIATE HOUSING AND MOUNTS IN IDENTIFIED LOCATIONS.
- CONTRACTOR SHALL PATCH AND REPAIR ANY SURFACE AFFECTED FROM INSTALLATION IN THE COURSE OF THE SCOPE OF WORK TO ORIGINAL OR MATCHING CONDITIONS.
- EXISTING SECURITY INFRASTRUCTURE AND COMPONENTS EFFECTED BY CONSTRUCTION SHALL BE REROUTED AND/OR DECOMMISSIONED.

LEGEND

	EXISTING TO REMAIN
	NEW PARTITIONS
	NEW DOOR
	NEW SLIDING DOOR
	SCHEDULED DOOR. REFER TO SHEET A0.30
	SCHEDULED PARTITION REFER TO SHEETS A0.11
	MATERIAL TAG
	NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
02.52	EXISTING STRUCTURAL STEEL COLUMNS TO REMAIN, V.I.F.
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

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOU-TERM-TIP
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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

HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION

WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER

1004345

SHEET TITLE

ENLARGED FLOOR
 PLAN - TERMINAL

SHEET NUMBER

A200

FILE NAME: C:\Revit\Locals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 12:04:41 AM



GENERAL NOTES

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

GENERAL NOTES - RCP

- FIELD COORDINATE CONDUIT ROUTING
- EXPOSED CONDUIT SHALL BE PAINTED TO MATCH ADJACENT SURFACES
- LABEL SECURITY CONDUITS PER HAS STANDARDS
- ALL SECURITY SYSTEM EQUIPMENT FURNISHINGS, CONDUIT, CABLING AND OTHER RELATED MATERIALS AND INTERFACES SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT CONSTRUCTION DOCUMENTS AND SCHEDULES.
- 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 SYSTEM OPERATION. CONTRACTOR SHALL ENSURE CABLES TO EACH DEVICE PROVIDE SUFFICIENT VOLTAGE, OR SIGNAL STRENGTH TO OPERATE WITHIN MANUFACTURERS SPECIFIED LIMITS.
- CONTRACTOR SHALL COORDINATE EXACT DEVICE MOUNTING LOCATIONS WITH OWNERS DESIGNATED REPRESENTATIVE AND OTHER TRADES PRIOR TO INSTALLATION OF DEVICES AND RELATED INFRASTRUCTURE.
- CONTRACTOR SHALL FIELD VERIFY AND COORDINATE WITH OWNERS DESIGNATED REPRESENTATIVE FINAL FIELD OF VIEW OF SECURITY CAMERAS.
- ALL SECURITY CAMERAS SHALL BE PROVIDED WITH APPROPRIATE HOUSING AND MOUNTS IN IDENTIFIED LOCATIONS.
- CONTRACTOR SHALL PATCH AND REPAIR ANY SURFACE AFFECTED FROM INSTALLATION IN THE COURSE OF THE SCOPE OF WORK TO ORIGINAL OR MATCHING CONDITIONS.
- EXISTING SECURITY INFRASTRUCTURE AND COMPONENTS EFFECTED BY CONSTRUCTION SHALL BE REROUTED AND/OR DECOMMISSIONED.

LEGEND

-  EXISTING TO REMAIN
-  LED 2X2 FLAT PANEL TROFFER, RE: ELECTRICAL
-  EXISTING DOOR TO REMAIN
-  EXISTING WALL TO REMAIN
-  2X6 PERFORATED METAL CEILING
-  KEYED NOTE

KEYNOTE LEGEND

NUMBER	DESCRIPTION
02.58	EXISTING CEILING TO REMAIN, ANY DAMAGED TILE/GYP DURING WORK TO BE REPLACED
02.60	EXISTING DOWNLIGHTS TO REMAIN
02.61	EXISTING BULKHEAD TO REMAIN
09.01	NEW LIGHT FIXTURE, RE: ELEC DWGS
09.02	PROVIDE NEW PERFORATED METAL CEILING PANEL MCP-1
09.03	4"x4" POST AND BEAM ALUMINUM FRAME SYSTEM ABOVE CEILING
09.04	CONTINUOUS ALUMINUM TRIM FINISH AT WALL PERIMETER
09.05	PERIMETER OF EXISTING CEILING ABOVE

INTERIOR CEILING FINISH

MCP-1	METAL CEILING PANEL
MANUFACTURER:	USG
TYPE:	2X6 CELEBRATION METAL PANELS
COLOR:	PERFORATED ALUMINUM SILVER SATIN PATTERN A116 (17% OPEN AREA)
SUSPENSION SYSTEM:	CELEBRATION TORSION SPRING CEILING SYSTEM
REMARKS:	USG COMPASSO STANDARD TRIM TO BE USED AS PERIMETER TRIM

LEVEL 02 - TICKETING-DEPARTURES - ENLARGED RCP 3/16" = 1'-0" 1

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 ENLARGED
 REFLECTED
 CEILING PLAN

SHEET NUMBER

A300

FILE NAME: C:\@Revit\Locals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:47:33 AM

GENERAL NOTES

- DO NOT SCALE DIMENSIONS FROM DRAWINGS. ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFESSIONALS VIA REQUEST FOR INFORMATION (RFI).
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
- REFER TO WALL PARTITION/STOREFRONT TYPES SHEET A011 FOR ADDITIONAL INFORMATION.
- REFER TO ENLARGED ELEVATIONS AND AXO ON SERIES SHEETS A400.

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

LEGEND

- SIM VIEW REFERENCE CALLOUT
- NOT INCLUDED IN SCOPE OF WORK

KEYNOTE LEGEND

NUMBER	DESCRIPTION
02.57	EXISTING FIRE EXTINGUISHER TO REMAIN
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
09.04	CONTINUOUS ALUMINUM TRIM FINISH AT WALL PERIMETER

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOU-TERMINAL - SECURITY EXIT LANE
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

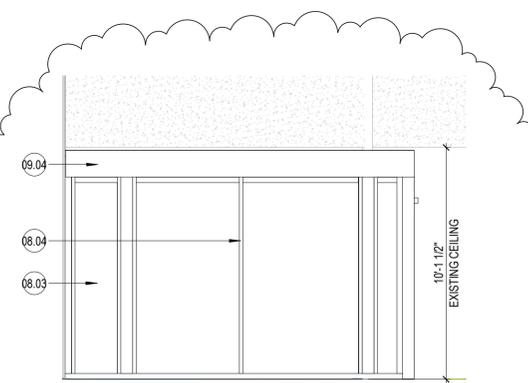
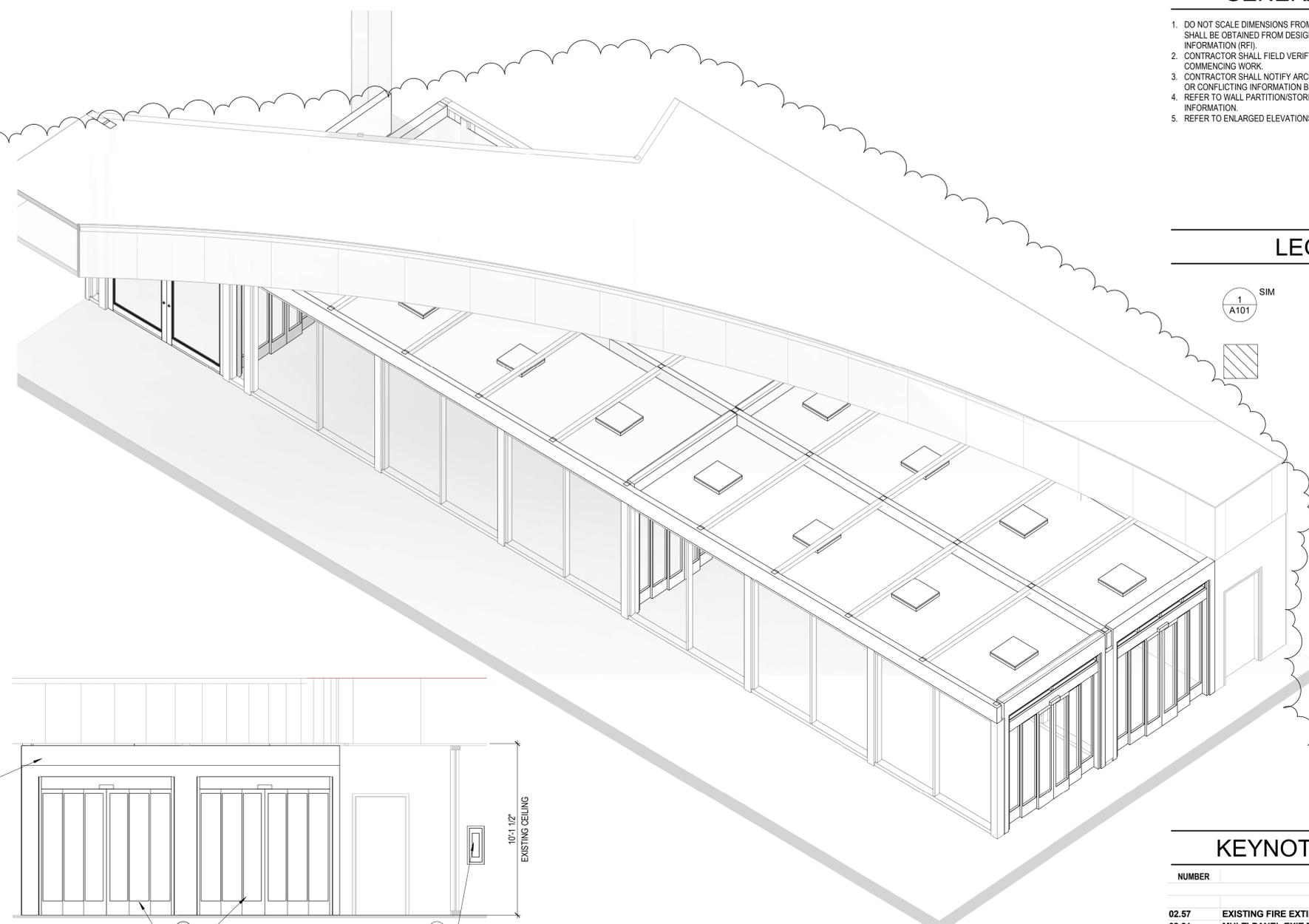
PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

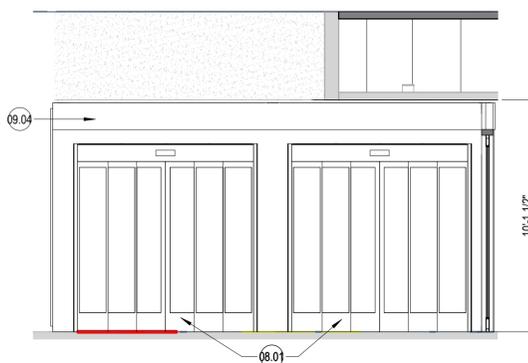
SHEET TITLE
 ENLARGED
 ELEVATIONS & AXO
 - TERMINAL

SHEET NUMBER

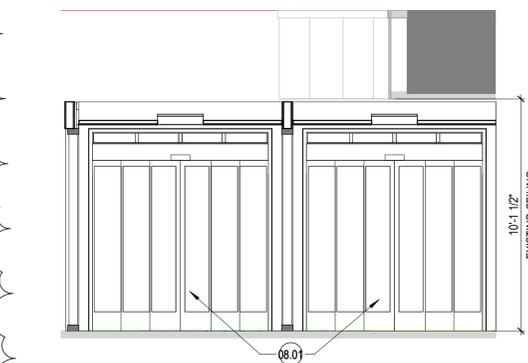
A400



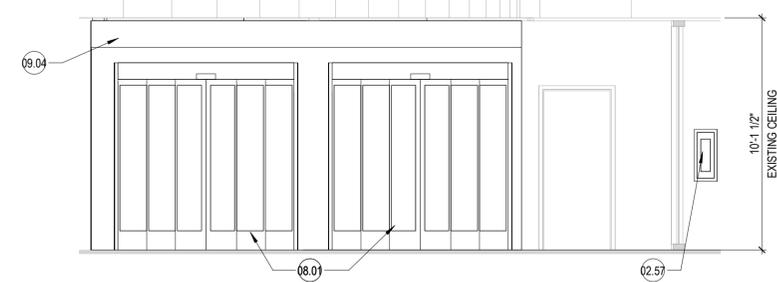
INTERIOR ELEVATION 05 1/4" = 1'-0" 13



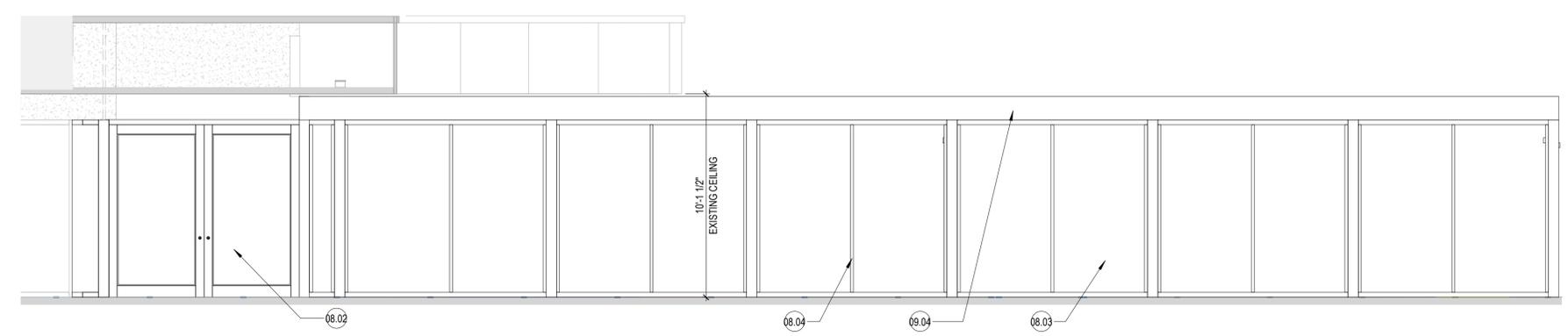
INTERIOR ELEVATION 04 1/4" = 1'-0" 12



INTERIOR ELEVATION 03 1/4" = 1'-0" 11

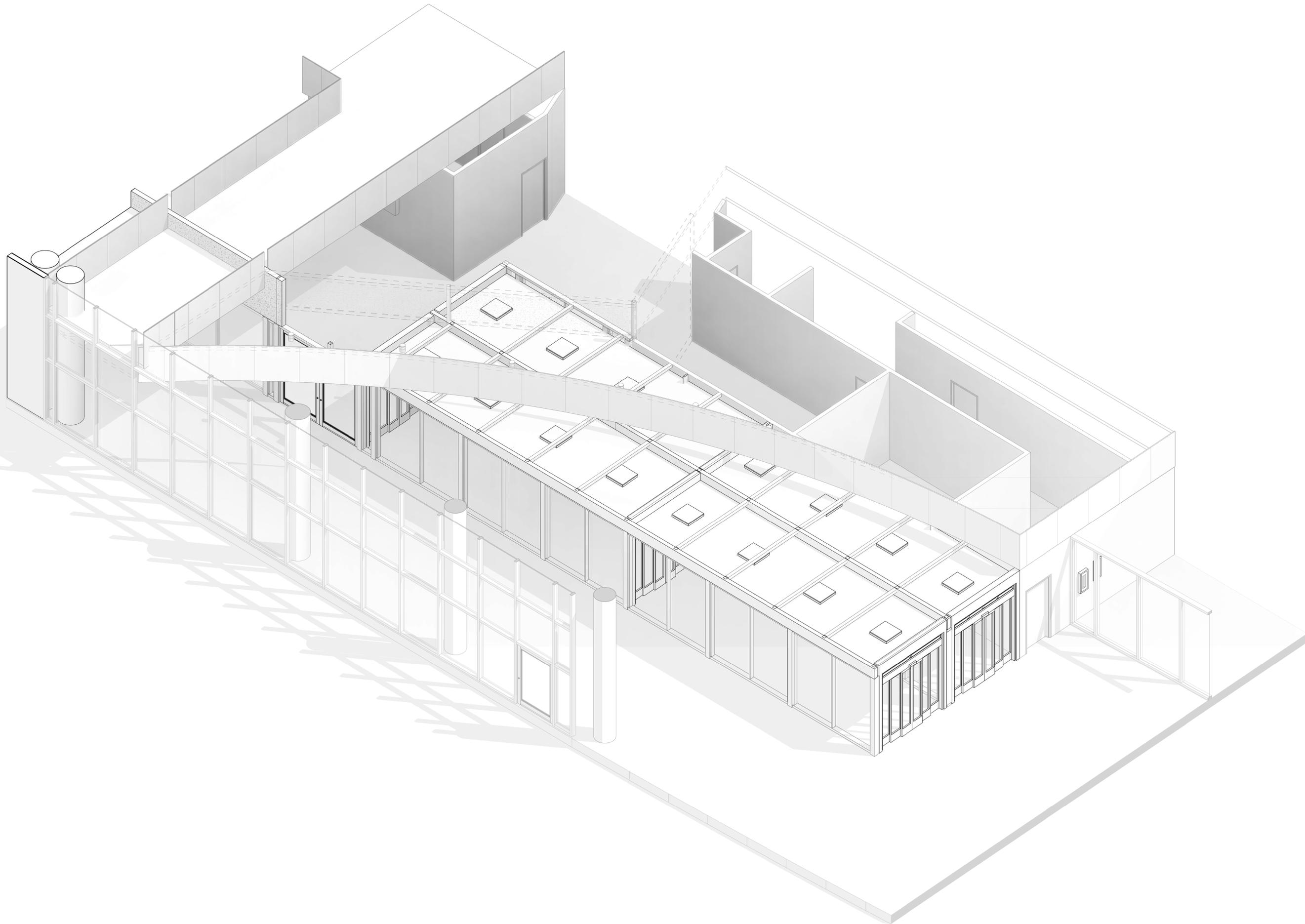


INTERIOR ELEVATION 02 1/4" = 1'-0" 9



INTERIOR ELEVATION 01 1/4" = 1'-0" 7

INTERIOR AXO 1



FILE NAME: C:\RevitLocals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 1:24:43 AM

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

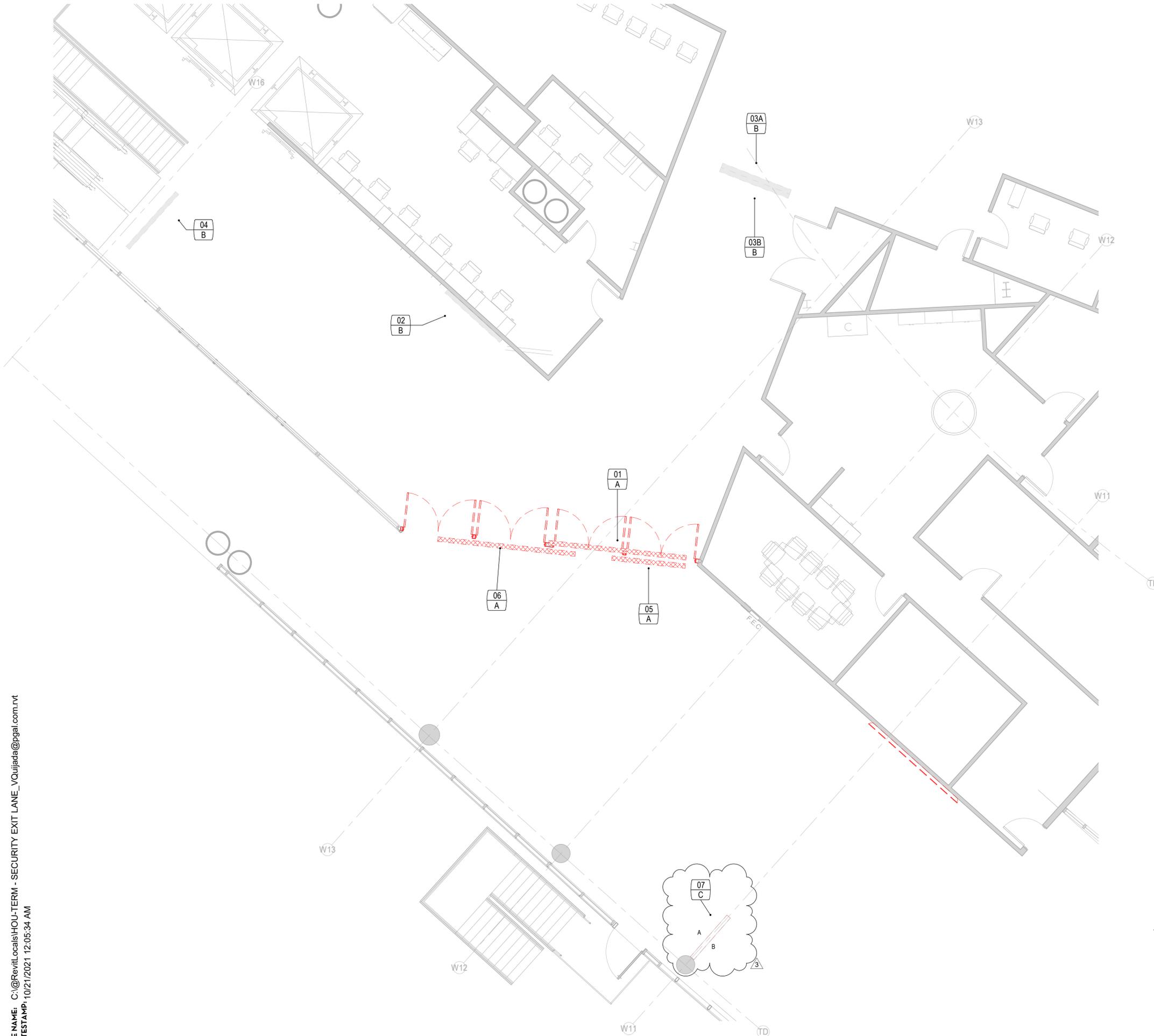
PROJECT NUMBER
 1004345

SHEET TITLE
 ENLARGED AXO -
 TERMINAL

SHEET NUMBER

A500

FILE NAME: C:\Revi\Locals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 12:05:34 AM



KEYNOTES

- A EXISTING CEILING MOUNTED SIGN TO BE REPLACED, PATCH/REPAIR AS REQUIRED.
- B EXISTING SIGN TO REMAIN, UNLESS NOTED OTHERWISE
- C EXISTING COLUMN MOUNTED SIGN TO BE RELOCATED, PATCH/REPAIR AS REQUIRED

GENERAL NOTES

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. ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
5. CONTRACTOR SHALL FIELD COORDINATED 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 BE REPLACED
- KEYNOTE SIGNAGE TAG

IMAGE	MARK	NOTES
	01 A	A
	02 B	B
	03A B	B
	03B B	B
	04 B	B
	05 A	A
	06 A	A
	07 C	C

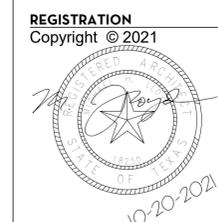


CLIENT
 HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800



ARCHITECT
 PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH



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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

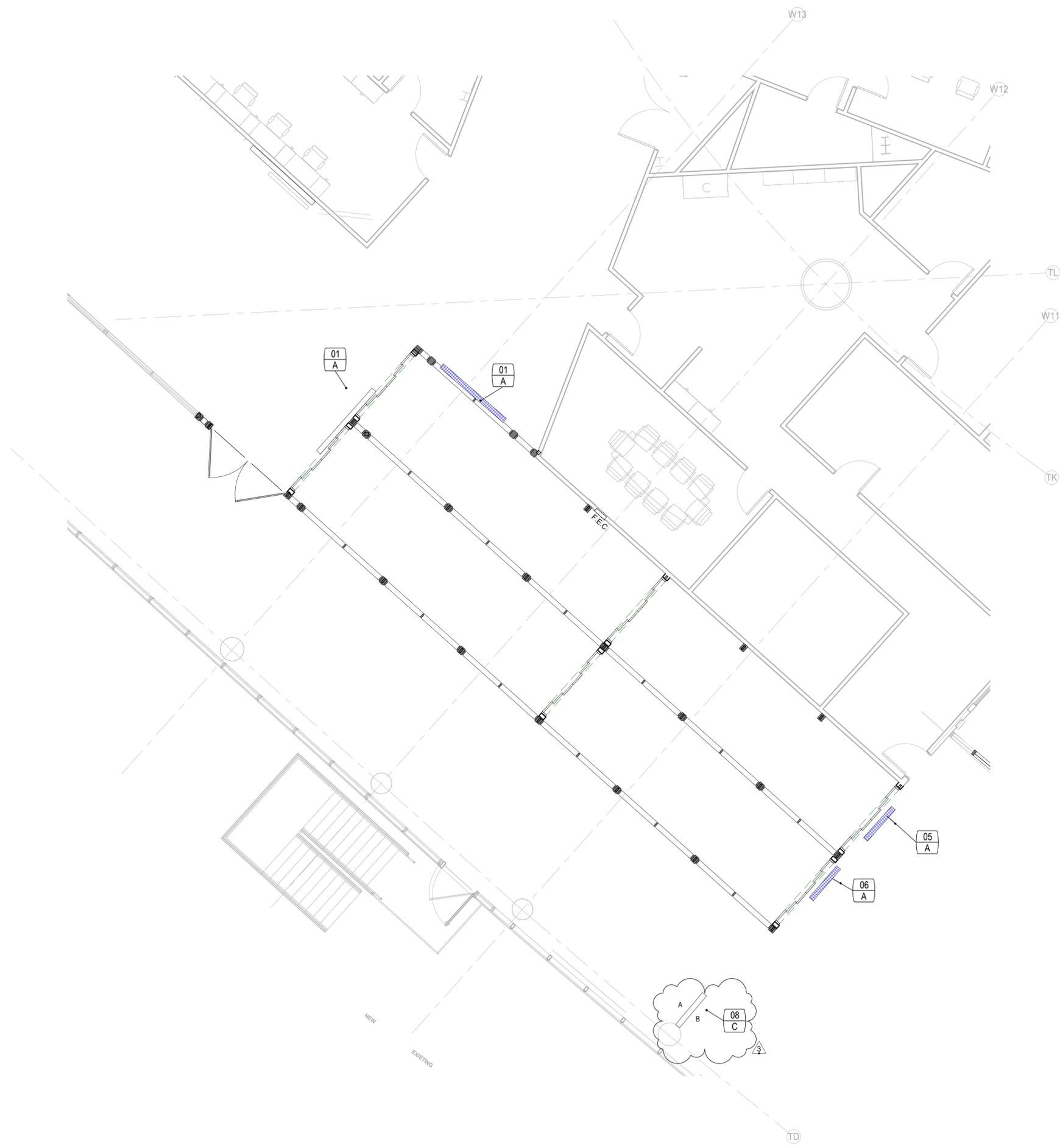
PROJECT NUMBER
 1004345

SHEET TITLE
 HOU TERMINAL
 SIGNAGE DEMO
 PLAN

SHEET NUMBER

ADG200

FILE NAME: C:\@RevitLocals\HOU-TERM - SECURITY EXIT LANE_VQujjada@pgal.com.rvt
 DATE/TIME: 10/21/2021 12:09:52 AM



KEYNOTES

A - NEW SIGNAGE
 C - RELOCATED SIGNAGE
 NOTE: NEW SIGNS TO MATCH HOBBY WAYFINDING STANDARDS

GENERAL NOTES

- DO NOT SCALE DIMENSIONS FROM DRAWINGS. ANY UNKNOWN DIMENSION SHALL BE OBTAINED FROM DESIGN PROFESSIONALS VIA REQUEST FOR INFORMATION (RFI).
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCY, INACCURACY OR CONFLICTING INFORMATION BEFORE EXECUTION OF WORK.
- ALL SHAFT PENETRATING SLAB SHALL BE RATED 2H.
- 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

- NEW SIGNAGE
- KEYNOTE SIGNAGE TAG

IMAGE	MARK	NOTES
Side A 	01	A
Side A 	05	A
Side A 	06	A
Side A / Side B 	08	C



CLIENT
 HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800



ARCHITECT
 PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP 21-157 - IAH

REGISTRATION
 Copyright © 2021

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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM P. HOBBY
 AIRPORT
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 HOU TERMINAL
 SIGNAGE PLAN

SHEET NUMBER

AG200

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

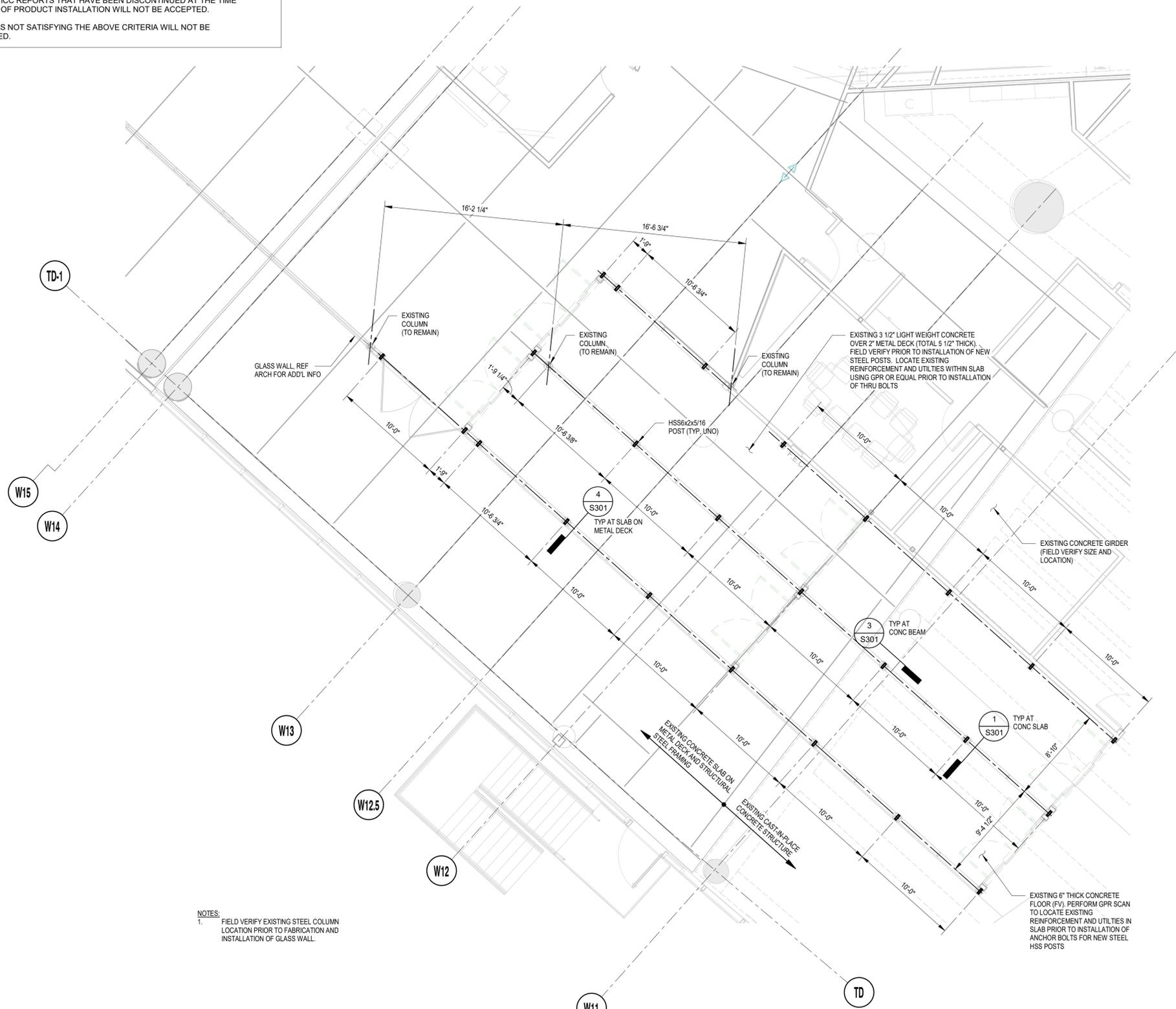
- A. MATERIAL
 1. HOT ROLLED STRUCTURAL MEMBERS: ALL HOT ROLLED STEEL PLATES, SHAPES, SHEET PILING, AND BARS SHALL BE NEW STEEL CONFORMING TO ASTM SPECIFICATION A 6.
 2. ASTM SPECIFICATION AND GRADE: CLEARLY MARK THE GRADE OF STEEL ON EACH PIECE, WITH A DISTINGUISHING MARK VISIBLE FROM FLOOR SURFACES. 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.
 - 2) 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-E0XX (SAW), ER70S-X (GMAW), OR E7XT-X (FCAW).
 2. ELECTRODES FOR GRADE 60 OR GRADE 65 MATERIAL SHALL CONFORM TO E80XX (SMAW), F8XX-E0XX (SAW), ER80S-X (GMAW), OR E8XT-X (FCAW).

PART III - 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.

PART III - MISCELLANEOUS CONTINUED

- 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. FIELD VERIFY EXISTING STEEL COLUMN LOCATION PRIOR TO FABRICATION AND INSTALLATION OF GLASS WALL.

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

FILE NAME: G:\Users\Ricardo.Rodriguez\Desktop\0211079_HOU-TERM - SECURITY EXIT LANE_R21.rvt
DATE/TIME: 10/20/2021 5:31:12 PM



CLIENT
HAS AVIATION DEPT.
16930 JOHN F. KENNEDY BLVD.
HOUSTON TX 77032
[T] 281 233 1757
[F] 281 233 1800

ARCHITECT



PGAL
3131 BRIARPARK DR.
SUITE 200
HOUSTON, TX 77042
[T] 713 622 1444
[F] 713 968 9333
www.pgal.com

DEPARTMENT OF AVIATION
RECOMMENDED:
HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-157 - IAH

REGISTRATION
Copyright © 2021
Henderson + Rogers, Inc.
TBPE Firm Registration No. 2194



DRAWING HISTORY

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

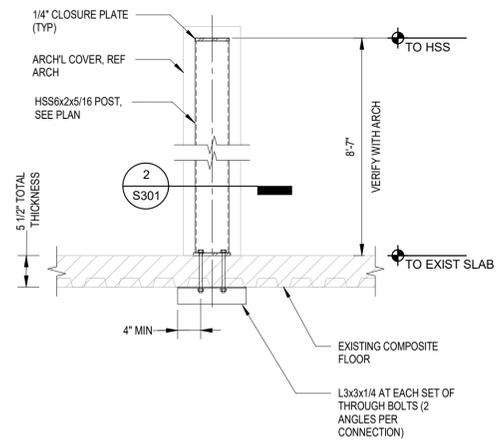
PROJECT NAME
HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
**WILLIAM P. HOBBY AIRPORT
7800 AIRPORT BLVD.
HOUSTON, TX 77061**

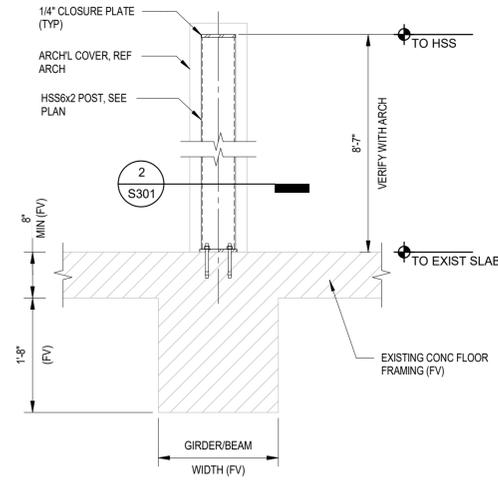
PROJECT NUMBER
1004345

SHEET TITLE
ENLARGED FLOOR PLAN - TERMINAL

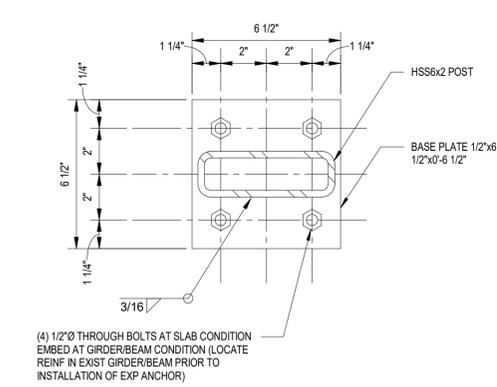
SHEET NUMBER
S200



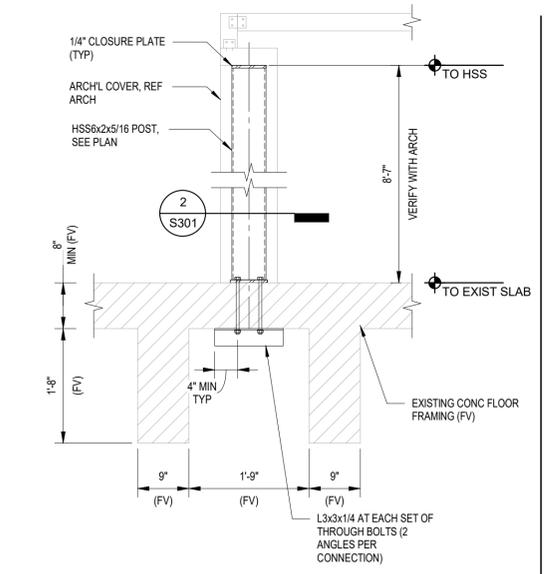
4 SECTION - AT COMPOSITE FLOOR
SCALE: 3/4" = 1'-0"



3 SECTION AT GIRDER / BEAM CONDITION
3/4" = 1'-0"



2 SECTION
3" = 1'-0"



1 SECTION - AT SLAB CONDITION
3/4" = 1'-0"

FILE NAME: G:\Users\Ricardo.Rodriguez\Desktop\0211079_HOU-TERM - SECURITY EXIT LANE_R21.rvt
DATESTAMP: 10/20/2021 5:31:17 PM



HAS AVIATION DEPT.
16930 JOHN F.
KENNEDY BLVD.
HOUSTON TX 77032
[T] 281 233 1757
[F] 281 233 1800

ARCHITECT



PGAL
3131 BRIARPARK DR.
SUITE 200
HOUSTON, TX 77042
[T] 713 622 1444
[F] 713 968 9333
www.pgal.com

DEPARTMENT OF AVIATION
RECOMMENDED:
HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP 21-157 - IAH

REGISTRATION
Copyright © 2021
Henderson + Rogers, Inc.
TBPE Firm Registration No. 2194



DRAWING HISTORY

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

PROJECT NAME
**HOU-TERMINAL
- SECURITY
EXIT LANE**

PROJECT LOCATION
WILLIAM P. HOBBY
AIRPORT
7800 AIRPORT BLVD.
HOUSTON, TX 77061

PROJECT NUMBER
1004345

SHEET TITLE
DETAILS

SHEET NUMBER
S301



HAS AVIATION DEPT.
16930 JOHN F. KENNEDY BLVD.
HOUSTON TX 77032
[T] 281 233 1757
[F] 281 233 1800

ARCHITECT



PGAL
3131 BRIARPARK DR.
SUITE 200
HOUSTON, TX 77042
[T] 713 622 1444
[F] 713 968 9333
www.pgal.com

DEPARTMENT OF AVIATION
RECOMMENDED:
HOUSTON AIRPORT SYSTEM DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - IAH

REGISTRATION
Copyright © 2021



DRAWING HISTORY		
NO.	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
HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
**WILLIAM HOBBY HOU
7800 AIRPORT BLVD.
HOUSTON, TX 77061**

PROJECT NUMBER
1004345

SHEET TITLE
ELECTRICAL LEGEND

SHEET NUMBER

E000



5353 West Alabama Suite 205
Houston, TX. 77056 Phone: 832.371.6181
Texas Firm: F-14583 Project No.: 02.18018

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, LUMINAIRES, 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.	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.
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.	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.
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.	19. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH CIRCUIT. MULTI-WIRE BRANCH CIRCUITS SHALL BE PROHIBITED.
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).	20. CONNECTIONS TO TRANSFORMERS AND MECHANICAL EQUIPMENT SHALL BE MADE WITH FMC OR LFMC, UNLESS OTHERWISE INDICATED.
5. BID SHALL INCLUDE COSTS ASSOCIATED WITH BACKDRILLING, CORE DRILLING, DIRECTIONAL BORING, EXCAVATING, AND REPAIRING OF SURFACES.	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.
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.	22. SEAL ALL CONDUIT PENETRATIONS AT FIRE-RATED PARTITIONS. REFER TO DETAILS FOR FURTHER INFORMATION.
7. PROVIDE COOPERATION WITH OTHER TRADES AND PROVIDE ANY INFORMATION REQUIRED TO FACILITATE THE COMPLETION OF THEIR WORK. COORDINATE DEVICES 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.	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).
8. AN ALLOWANCE OF \$60,000 SHALL BE ADDED FOR ANY MISCELLANEOUS MODIFICATIONS THAT WILL BE REQUIRED IN THE FIELD. ALLOWANCE SHALL BE INCLUDED IN BID WITH NO EXCEPTIONS.	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.
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.	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.
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.	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.
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.	27. ALL NEW AND/OR EXISTING PANELBOARDS AND SWITCHBOARDS WITHIN THE SCOPE OF THIS PROJECT SHALL BE PROVIDED WITH NEW, TYPENAMED DIRECTORIES. CIRCUIT DESCRIPTIONS SHALL CONTAIN ROOM NAMES AND ROOM NUMBERS BASED UPON INSTALLED ROOM SIGNAGE.
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.	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.
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.	29. PROVIDE PHENOLIC, ENGRAVED IDENTIFICATION PLACARDS AT EACH CIRCUIT BREAKER WITHIN A DISTRIBUTION PANEL, SWITCHBOARD, OR SWITCHGEAR.
14. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS, AND ELEVATIONS FOR LOCATIONS AND/OR MOUNTING HEIGHTS OF LUMINAIRES LOCATED AT CEILINGS AND/OR WALLS. VERIFY THAT CEILING-MOUNTED LUMINAIRES ARE SUITABLE FOR THE FINISHED CEILING SYSTEM INDICATED AND PROVIDE ACCORDINGLY. COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF WALL-MOUNTED LUMINAIRES WITH CASEWORK, FURNITURE, AND ARCHITECTURAL ELEMENTS. WHERE ARCHITECTURAL REFLECTED CEILING PLANS INDICATE FIRE-RATED CEILING SYSTEMS, PROVIDE UL-LISTED LUMINAIRE ENCLOSURES (AS REQUIRED).	30. PROVIDE TYPENAMED OR ENGRAVED PANEL AND CIRCUIT IDENTIFICATION AT DEVICE COVER PLATES. WALL PLATES SHALL BE STAINLESS STEEL.
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 FIXTURE. ALL CONDUIT SHALL BE A MINIMUM 3/4" IN DIAMETER.	31. PROVIDE HANDWRITTEN PANEL AND CIRCUIT IDENTIFICATION ON THE EXTERIORS OF ALL JUNCTION BOXES, PULL BOXES, AND WIREWAYS.
16. CONTRACTOR SHALL CONDUCT AN X-RAY OF THE EXISTING SLAB AND SUBMIT READINGS/RESULTS TO H.A.S. AND DESIGN TEAM FOR REVIEW AND APPROVAL PRIOR TO ANY ROUGH-INS OR CORINGS THAT ARE TO BE PERFORMED.	32. CURRENT DRAWINGS ARE BASED ON SPECIFICATIONS AND REQUIREMENTS FROM A SINGLE MANUFACTURER DOCUMENTS (ISSUED IN MAY 2019). IF ANY OTHER MANUFACTURER'S DOCUMENTS ARE AWARDED THE PROJECT, THE SELECTED MANUFACTURER SHALL BE PROVIDE UPDATED SYSTEM REQUIREMENTS. THE ENGINEER RESERVES THE RIGHT TO REVIEW ANY REVISE SPECIFICATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK TO ENSURE THE PROVISIONS NOTED ON THE DOCUMENTS ARE CORRECT PER THE SELECTED SYSTEM.

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
	FIRE ALARM RELAY
	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

SWITCHES	
SYMBOL	DESCRIPTION
	SINGLE POWER TOGGLE SWITCH (LETTER DENOTES FIXTURE CONTROLLED)
	THREE-WAY TOGGLE SWITCH
	FOUR-WAY TOGGLE SWITCH
	MOTOR SWITCH
	FAN SWITCH
	DIMMER SWITCH, COMPATIBLE WITH 0-10V DIMMING.
	TIMER SWITCH (60 MINUTES)
	LOW VOLTAGE SWITCH
	KEY SWITCH
	SWITCH - WEATHERPROOF
	WALL SWITCH OCCUPANCY SENSOR
	DIMMER OCCUPANCY SENSOR SWITCH
	OCCUPANCY SENSOR - CEILING MOUNTED
	OCCUPANCY SENSOR - WALL MOUNTED
	PHOTOCCELL

CODES AND STANDARDS	
NFPA 70	NATIONAL ELECTRICAL CODE (2020)
NFPA 72	NATIONAL FIRE ALARM CODE (2013)
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)
2017 EDT.	INTERNATIONAL BUILDING CODE (6th EDITION)
2015 (IECC)	INTERNATIONAL ENERGY CONSERVATION CODE LOCAL JURISDICTION CODES AND / OR OWNER DESIGN GUIDELINES

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	
NUMBER	NAME
E000	ELECTRICAL LEGEND
E201	LEVEL 02 - TICKETING - DEMOLITION PLAN - TERMINAL - ELECTRICAL
E301	LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL - LIGHTING
E401	LEVEL 01 - BAGGAGE CLAIM - FLOOR PLAN - TERMINAL - POWER
E402	LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL - POWER
E601	RISER DIAGRAMS - ELECTRICAL
E901	ELECTRICAL DETAILS
E902	ELECTRICAL DETAILS

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
	DUPLEX RECEPTACLE, 20 AMP, 120V U.O.N. AUTOMATIC SWITCHED RECEPTACLE
	QUADRAPLEX RECEPTACLE, 20 AMP, 120V U.O.N. HALF-AUTOMATIC SWITCHED RECEPTACLE
	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 (W/P. 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
	DUPLEX RECEPTACLE WITH ISOLATED GROUND
	DUPLEX RECEPTACLE - FLOOR MOUNTED
	JUNCTION BOX - CEILING MOUNTED
	JUNCTION BOX - WALL MOUNTED
	JUNCTION BOX - FLOOR / GROUND MOUNTED

FIELD VERIFY ALL LOCATION

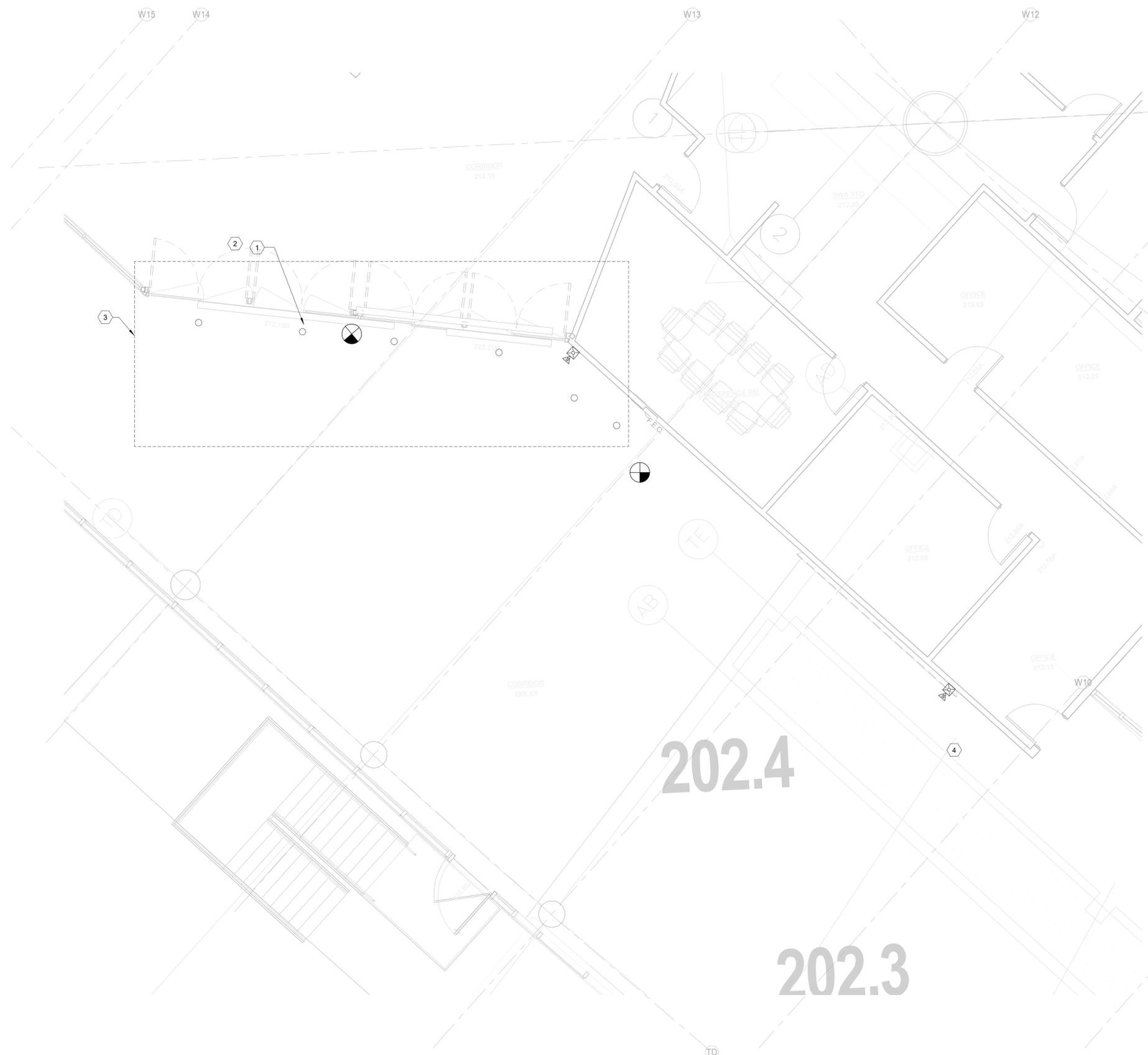
- DESIGN DRAWINGS ARE SCHEMATIC. THIS CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING OR AWARD OF CONTRACT TO INSPECT EXISTING FIELD CONDITIONS. THIS CONTRACT SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY FOR FIELD MODIFICATIONS DUE TO EXISTING CONDITIONS.
- THE CONTRACTOR SHALL CONTACT THE ARCHITECT, 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.
- 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.

MISCELLANEOUS	
SYMBOL	DESCRIPTION
	DISCONNECT SWITCH, NON-FUSIBLE 3 POLE, 60 AMP, NF, NON-FUSED, 3R, NEMA 3R ENCLOSURE
	DISCONNECT SWITCH, FUSIBLE 3 POLE, 60 AMP, FUSED AT 50 AMPS, 3R, NEMA 3R ENCLOSURE
	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-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
	SURGE PROTECTION DEVICE
	ELECTRICAL METER
	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
	CONDUIT EXPOSED
	WIRE IN CONDUIT CONCEALED BELOW SLAB OR GRADE
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT STUB

LOW VOLTAGE (RACEWAY ONLY)	
SYMBOL	DESCRIPTION
	INFORMATION OUTLET
	INFORMATION OUTLET, FLOOR MOUNTED
	CATV OUTLET

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
GROUND	GROUND	UL	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		

C:\Users\alexander\Documents\02_18018_HAS_Exit_Lanes_LOA_HOU_CENTRAL_R19_alexander@voltage.com.txt
10/20/2021 4:26:29 PM



KEYNOTES ?

- | NUMBER | NOTES |
|--------|---|
| 1 | CONTRACTOR SHALL TAG AND TRACE EXISTING CIRCUIT SERVING DOWNLIGHTS PRIOR TO REMOVAL. CIRCUIT SHALL BE UTILIZED FOR THE PROPOSED 2X2 LIGHTS ON THE NEW WORK PLANS. |
| 2 | REMOVE AND PATCH EXISTING DOWNLIGHTS THAT ARE CURRENTLY INSTALLED IN THE EXISTING SOFFIT. TYPICAL FOR ALL DOWNLIGHTS INSTALLED OVER PROPOSED AREA OF EXIT LANE STRUCTURE HOUSING. |
| 3 | REFER TO DETAIL (EXISTING EXIT SOFFIT DETAIL) FOR ALL ITEMS SHOWN FOR REMOVAL OR RELOCATION. |
| 4 | CONTRACTOR SHALL REMOVE ALL EXISTING DEVICES SHOWN ON THE PROPOSED LAYOUT UNLESS OTHERWISE NOTED. ALL ASSOCIATED WIRING/CABLING SHALL BE REMOVED BACK TO THE SOURCE. |

DEMOLITION NOTES

- A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS.
- B. THE OWNER RESERVES THE RIGHT TO INSPECT THE MATERIAL SCHEDULED FOR REMOVAL AND SALVAGE ANY ITEMS DEEMED USEABLE AS SPARE PARTS.
- C. 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.
- D. 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.
- E. EXISTING PANEL DIRECTORIES SHALL BE UPDATED TO REFLECT CURRENT CONDITIONS.
- F. CONTRACTOR SHALL PATCH, PAINT AND MATCH FINISH WITH EXISTING SURFACES TO REMAIN WHERE ELECTRICAL DEVICES ARE BEING REMOVED.
- G. CONTRACTOR SHALL REVIEW NEW FLOOR PLANS FOR DEVICES TO REMAIN PRIOR TO DEMOLITION. EXISTING DEVICES TO REMAIN ARE SHOWN LIGHT IN COLOR.
- H. CONTRACTOR SHALL REVIEW NEW FLOOR PLANS FOR CIRCUITS TO REMAIN AND BE REUSED FOR NEW DEVICES PRIOR TO DEMOLITION.
- I. 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.
- J. CONTRACTOR SHALL REMOVE AND DISCONNECT ALL EXISTING ITEMS SHOWN ON PLANS. PATCH, PAINT AND REMOVE CONDUCTORS BACK TO SOURCE (UNLESS NOTED OTHERWISE) FOR ALL EXISTING DEVICES SHOWN TO BE REMOVED. FIELD VERIFY PROPOSED WORK AREA FOR ANY ADDITIONAL DEVICES (SPEAKER, SENSORS, ETC.) THAT ARE CURRENTLY INSTALLED THAT WILL NEED TO BE REMOVED OR RELOCATED THAT WILL BE IN CONFLICT WITH THE EXIT LANE STRUCTURE.



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - IAH



REGISTRATION
 Copyright © 2021

DRAWING HISTORY		
NO.	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
HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
 WILLIAM HOBBY HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 LEVEL 02- TICKETING- DEMOLITION PLAN - TERMINAL - ELECTRICAL SHEET NUMBER

E201

VOLT AIR
 CONSULTING ENGINEERS
 5353 West Alabama Suite 205
 Houston, TX. 77056 Phone: 832.371.6181
 Texas Firm: F-14583 ProjectNo.: 02.18018

LEVEL 02 - TICKETING - DEMOLITION PLAN - TERMINAL - POWER 1/4" = 1'-0" **1**

C:\Users\jalexander\Documents\02.18018_HAS_Exit_Lanes_LOA_HOU_CENTRAL_R19_jalexander@voltageinc.com.rvt
 10/20/2021 4:26:34 PM



KEYNOTES ?

NUMBER	NOTES
1	CONTRACTOR SHALL INSTALL AND CONNECT NEW 2X2 LIGHTS TO EXISTING LIGHTING CIRCUIT (2B1-19) SERVING THE EXISTING DOWNLIGHTS THAT WERE REMOVED DURING CONSTRUCTION.

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 INSTALL FIXTURES PER MANUFACTURERS RECOMMENDATION AND CONSTRUCTION DRAWINGS.
- E. PROVIDE ALL MOUNTING ACCESSORIES AND EQUIPMENT REQUIRE FOR PROPER INSTALLATION.
- F. APPROVED LIGHTING MANUFACTURER SHALL PROVIDE PHOTOMETRIC LIGHTING LAYOUT PRIOR TO ORDERING ANY MATERIALS.
- G. PULL UNSWITCHED CONDUCTOR(HOT) TO ALL EXIT AND EMERGENCY LIGHTS.

LUMINAIRE SCHEDULE

IMAGE	TYPE	DESCRIPTION	MANUFACTURER	LAMP TYPE
	A	LED 2x2 FLAT PANEL TROFFER	METALUX FP 22 PHILLIPS	LED 5400 Lm
	AE	LED 2x2 FLAT PANEL TROFFER. PROVIDE WITH 90 MINUTE BATTERY PACK	METALUX FP 22 PHILLIPS	LED 5400 Lm
	X	LED EXIT SIGN WITH RED LETTERING AND ALUMINUM HOUSING. PROVIDE WITH 90 MINUTE BATTERY PACK	METALUX SURE LITE	LED

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

VOLT AIR
 CONSULTING ENGINEERS
 5353 West Alabama Suite 205
 Houston, TX. 77056 Phone: 832.371.6181
 Texas Firm: F-14583 ProjectNo.: 02.18018



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - IAH

REGISTRATION
 Copyright © 2021



DRAWING HISTORY

NO.	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
HOU-TERMINAL - SECURITY - EXIT LANE

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061
 PROJECT NUMBER
 1004345

SHEET TITLE
 LEVEL 02 - TICKETING - FLOOR PLAN - TERMINAL - LIGHTING

SHEET NUMBER
E301

C:\Users\alexander\Documents\02.18018_HAS_HOU_CENTRAL_R19_Exit_Lanes_LOA_HOU_CENTRAL_R19_alexander@voltage.com.rvt
10/20/2021 4:26:35 PM



KEYNOTES 7

- | NUMBER | NOTES |
|--------|---|
| 1 | PROVIDE AND INSTALL NEW RACK MOUNTED UPS. INSTALL L5-30R FOR UPS POWER CONNECTION. EXTEND CIRCUIT PANEL AS NOTED. UPS SHALL BE EATON 9PX3000RT-L LITHIUM-ION RACKMOUNT OR APPROVED EQUIVALENT. |
| 2 | UTILIZE EXISTING PANEL WITH EXISTING SPARE BREAKERS FOR THE NEW CIRCUIT SHOW FOR THE SECURITY CABINET AND EXIT LANE ENCLOSURE. ROUTE CONDUIT AND CONDUCTORS TO PROPOSED LOADS ON GROUND AND SECOND LEVEL. UPDATE PANEL SCHEDULE AND LABEL CONDUITS ACCORDING TO SPECIFICATIONS. |

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. BASIS OF DESIGN REFLECTS THE PROVISION OF L5-30R 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. 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.
- I. (*) INDICATES EXISTING DEVICE TO REMAIN.

CLIENT



HAS AVIATION DEPT.
16930 JOHN F.
KENNEDY BLVD.
HOUSTON TX 77032
[T] 281 233 1757
[F] 281 233 1800

ARCHITECT



PGAL
3131 BRIARPARK DR.
SUITE 200
HOUSTON, TX 77042
[T] 713 622 1444
[F] 713 968 9333
www.pgal.com

DEPARTMENT OF AVIATION
RECOMMENDED:

HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - IAH

REGISTRATION
Copyright © 2021



DRAWING HISTORY		
NO.	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
**HOU-TERMINAL
- SECURITY
EXIT LANE**

PROJECT LOCATION
**WILLIAM HOBBY
HOU
7800 AIRPORT BLVD.
HOUSTON, TX 77061**

PROJECT NUMBER
1004345

SHEET TITLE
**LEVEL 01 -
BAGGAGE CLAIM -
FLOOR PLAN -
TERMINAL - POWER**

SHEET NUMBER

E401



5353 West Alabama Suite 205
Houston, TX. 77056 Phone: 832.371.6181
Texas Firm: F-14583 ProjectNo.: 02.18018

LEVEL 01 - BAGGAGE CLAIM - FLOOR PLAN - TERMINAL - POWER 3/32" = 1'-0" 1

C:\Users\alexander\Documents\02.18018_HAS_Ext_Lanes_LOA_HOU_CENTRAL_R19_alexander@voltage.com.rvt
 10/20/2021 4:26:36 PM



KEYNOTES

NUMBER	NOTES
1	PROVIDE POWER AND DATA FOR TERMINAL LANE WORKSTATION. DEVICES SHALL MOUNTED TO POWER PORTION OF STORE FRONT MULLION. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF WORKSTATION WITH OWNER PRIOR TO COMMENCEMENT OF WORK. PROVIDE AND INSTALL LOW-PROFILE SURFACE MOUNTED RACEWAY WITH DUAL CHANNELS FOR ROUTING OF POWER AND DATA CABLES FROM CEILING ABOVE (HUBBELL HBL2400BDIV OR APPROVED EQUIVALENT). RACEWAY SHALL BE THE SAME FINISH AS THE EXISTING WALL MULLION. FURNISH ALL ATTACHMENTS, BOXES, FITTINGS NEEDED FOR PROPER INSTALLATION ALONG THE EXISTING MULLION.
2	CONNECT ALL NEW FIRE ALARM DEVICES TO NEAREST FIRE ALARM JUNCTION BOX TO ENSURE CONNECTION TO F.A.C.P. LOCATED ON THE FIRST LEVEL. NEAR THE SOUTHWEST ADMIN OFFICE.
3	PROVIDE ADDITIONAL JUNCTION BOXES WHERE REQUIRED FOR MOTOR CONNECTIONS. UTILIZE ADDITIONAL SPARE BREAKERS FOR POWER CONNECTIONS. CONTRACTOR SHALL PROVIDE MOTOR RATED TOGGLE SWITCH FOR MEANS OF DISCONNECT WHERE REQUIRED FOR MOTOR CONNECTION. VERIFY EXACT LOCATION AND REQUIREMENT WITH ELECTRICAL INSPECTOR PRIOR TO COMMENCEMENT OF WORK. PROVIDE CONDUIT AND FEEDERS ROUTED TO EXISTING PANEL "UWWT1LB".

POWER NOTES

- COORDINATE WITH ARCHITECTURAL ELEVATIONS AND TELECOMM DRAWINGS PRIOR TO ROUGH-IN OF ANY OUTLET DEVICES.
- PROVIDE ADHESIVE LABELS FOR ALL RECEPTACLE OUTLETS SHOWN ON PLANS.
- REFER TO TELECOMM (T-SERIES) DRAWINGS FOR EXACT LOCATIONS OF ALL BACKBONE/COMMUNICATION CONDUITS AND GROUNDBARS.
- UPS AND BATTERY CABINET SHALL BE OWNER FURNISHED AND INSTALLED BY CONTRACTOR. COORDINATE WITH PROJECT MANAGER FOR EXACT REQUIREMENTS AND INSTALLATION DETAILS.
- COORDINATE EXACT RECEPTACLE TYPE WITH OWNER PRIOR TO COMMENCEMENT OF WORK. BASIS OF DESIGN REFLECTS THE PROVISION OF L5-30R DUPLEX RECEPTACLES.
- PROVIDE JUNCTION BOX AND OR HOUSINGS FOR ALL SURFACE MOUNTED RECEPTACLES.
- ALL WALL PENETRATIONS SHALL BE SEALED WITH UL LISTED FIRE RATED CAULKING MATERIAL.
- 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 EXISTING 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.
- (*) INDICATES EXISTING DEVICE TO REMAIN.

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - IAH

REGISTRATION
 Copyright © 2021



No.	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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 LEVEL 02 -
 TICKETING - FLOOR
 PLAN - TERMINAL -
 POWER

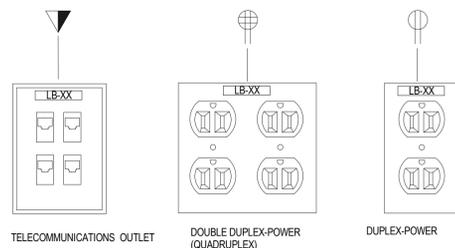
SHEET NUMBER

E402

VOLT AIR
 CONSULTING ENGINEERS

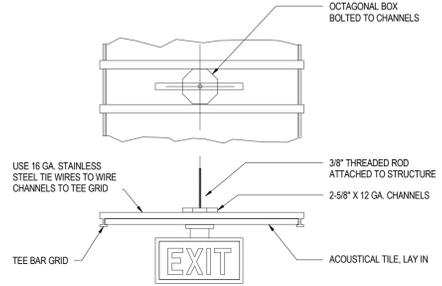
5353 West Alabama Suite 205
 Houston, TX. 77056 Phone: 832.371.6181
 Texas Firm: F-14583 Project No.: 02.18018

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



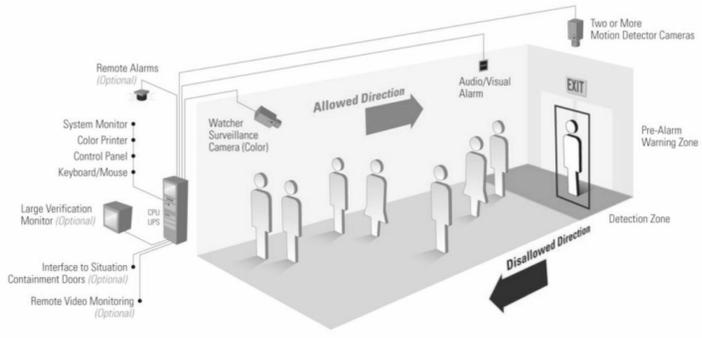
DETAIL NOTES:

- 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. LS-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.



DETAIL NOTES:

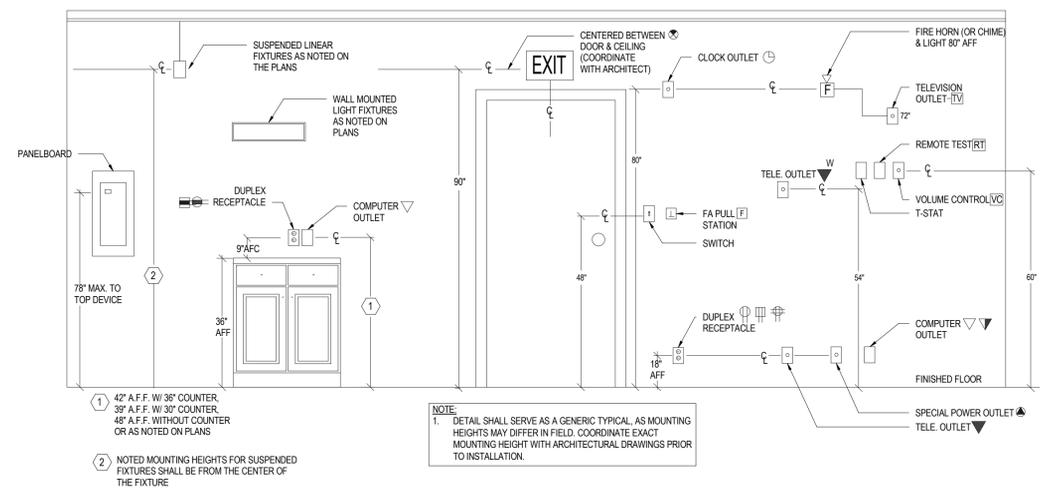
- CONTRACTOR SHALL REFER TO LOW-VOLTAGE DRAWINGS AND PROVIDE CONDUIT, RACEWAY, BACKBOXES, ETC. FOR ALL ELECTRICAL AND LOW-VOLTAGE DEVICES.
- CONTRACTOR SHALL COORDINATE AND CONSULT WITH SYSTEMS MANUFACTURE FOR EXACT INSTALLATION REQUIREMENTS AS IT PERTAINS TO RACEWAY AND DEVICE INSTALLATION WITH THE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



DEVICE OUTLET DEVICE DETAIL F

EXIT LIGHT MOUNTING DETAIL (CEILING ONLY) C

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:

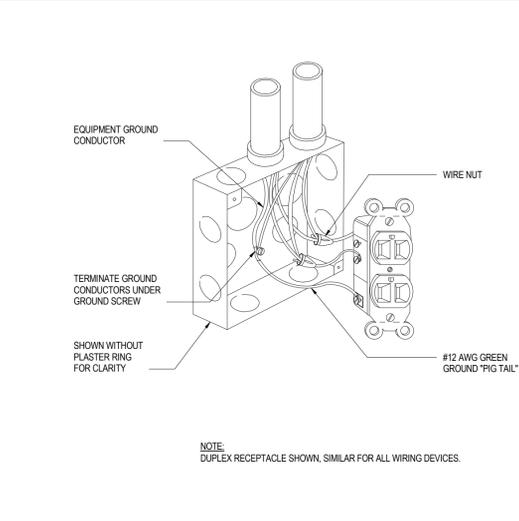
- ALL FIRE ALARM DEVICES SHOWN SHALL BE NEW AND ROUTED TO THE EXISTING FIRE ALARM TERMINAL CABINET AND CONTROL PANEL.
- THE EXISTING FIRE ALARM SYSTEM AN ADDRESSABLE SYSTEM WITH MULTIPLEXED SIGNAL TRANSMISSION, DEDICATED TO FIRE ALARM SERVICE ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL CONTROL SYSTEM 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

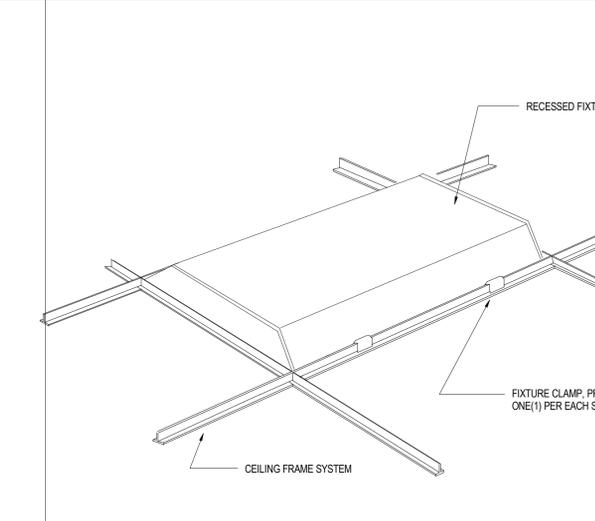
- WIRING, RACEWAYS AND FIRE ALARM DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL CODES, TEXAS FIRE PREVENTION CODE, TEXAS ADMINISTRATION FIRE CODE AND NFPA 72.
- ALL FIRE ALARM NOTIFICATION DEVICES LOCATED IN THE INTERIOR SPACES OF THE BUILDING SHALL BE PROVIDED WITH WHITE HOUSING AND RED LETTERING.
- PROVIDE MINIMUM 3/4\"/>

DETAILS GENERAL NOTES:

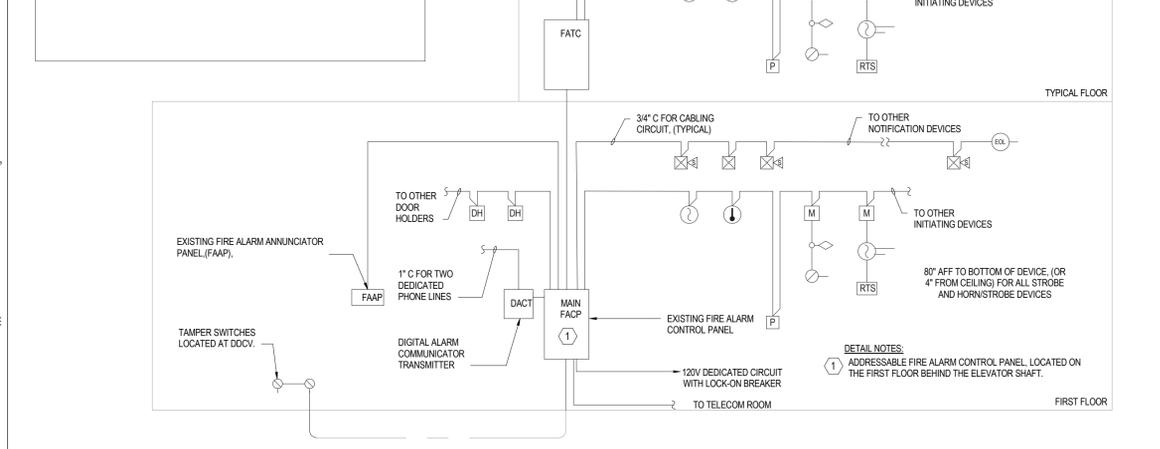
ANY FIRE ALARM DEVICES SHOWN ON ELECTRICAL DRAWINGS ARE SHOWN FOR BIDDING PURPOSES ONLY AND NOT FOR CONSTRUCTION OR INSTALLATION. THE FIRE ALARM CONTRACTOR SHALL MODIFY THE FIRE ALARM SYSTEM TO PROVIDE FULL COVERAGE OF THE PROJECT AREA IN ACCORDANCE WITH NFPA-72 AND ALL CITY, STATE, NATIONAL CODES AND 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.



WIRING DEVICE GROUNDING DETAIL G



FIXTURE SUPPORT DETAIL E



FIRE ALARM RISER DIAGRAM B



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - IAH

REGISTRATION
 Copyright © 2021



DRAWING HISTORY

NO.	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
HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
**WILLIAM HOBBY HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061**

PROJECT NUMBER
1004345

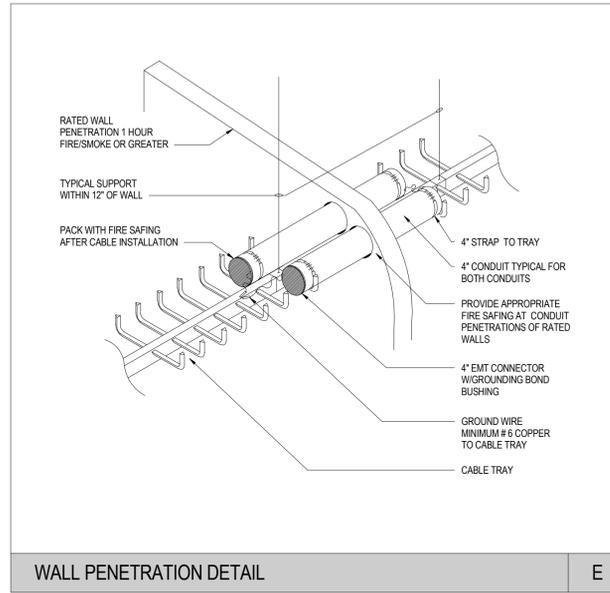
SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER

E901

VOLT AIR
 CONSULTING ENGINEERS
 5353 West Alabama Suite 205
 Houston, TX. 77056 Phone:832.371.6181
 Texas Firm: F-14583 ProjectNo.:02.18018

C:\Users\jalexander\Documents\02.18018_HAS_Exit_Lanes_LOA_HOU_CENTRAL_R19_alexander@voltage.com.rvt
 10/20/2021 4:26:37 PM



EXISTING FIRE ALARM CONTROL PANEL A



EXISTING EGRESS LANE B



EXISTING ELECTRICAL EQUIPMENT D



EXISTING EXIT SOFFIT C

- DETAIL NOTES:**
- EXISTING DOWNLIGHTS AND LOW-VOLTAGE DEVICES WILL BE RELOCATED PER OWNERS HAS DISCRETION. COORDINATE WITH HAS PM FOR EXACT LOCATION OF REMOVED DEVICES.
 - REMOVE AND PATCH LOCATION OF EXISTING DOWNLIGHTS.
 - REUSE EXISTING FIRE ALARM STROBES. EXISTING DEVICES ARE TO REMAIN.
 - VIDEO DISPLAY BOARD SHALL BE REMOVED. ENSURE ALL ASSOCIATED CONDUCTORS, WIRING, ETC. ARE REMOVED BACK TO SOURCE. EXISTING CONDUIT SHALL BE REUSED FOR NEW DATA DEVICES.



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - IAH



DRAWING HISTORY

NO.	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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 ELECTRICAL
 DETAILS

SHEET NUMBER

E902



5353 West Alabama Suite 205
 Houston, TX. 77056 Phone: 832.371.6181
 Texas Firm: F-14583 Project No.: 02.18018

FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\HOU-TERM - SECURITY EXIT LANE 080421-2 (2021).rvt
 DATESTAMP 10/20/2021 11:33:27 AM

SECURITY GENERAL NOTES

- THE FOLLOWING GENERAL NOTES ARE APPLICABLE AS STATED BELOW, EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE, ON THE DRAWINGS OR IN THE BID SPECIFICATION.
- 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.
- DEVICE LOCATIONS ON PLANS ARE CONCEPTUAL. LOCATE AS SITE CONDITIONS REQUIRE AND AS APPROVED BY THE OWNER.
- REFER TO THE BID SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK.
- 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).
- PROVIDE PAINTING, PATCHING AND FINISHES, OF MATERIALS AND DEVICES, AS APPROVED BY THE OWNER.
- DOOR DETAILS ILLUSTRATE FUNCTIONAL RELATIONSHIPS. ACTUAL ARCHITECTURAL CONDITIONS (SUCH AS DIRECTION OF SWING AND HAND OF DOOR) MAY VARY.
- 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.
- FOR INFORMATION REGARDING FIRE RATINGS AND OCCUPANCY SEPARATIONS, REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS.
- NEW CONDUIT CONNECTIONS TO INCLUDE INTEGRAL PROTECTIVE BUSHINGS OR CHASE NIPPLES.
- 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.
- 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.
- 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.
- EXPOSED BOXES AND PANELS, MOUNTED IN OR ON EXTERIOR WALLS, TO BE NEMA 4.
- NEW CONDUIT TO BE 3/4 INCH EMT MINIMUM, UNLESS OTHERWISE NOTED. EXTERIOR CONDUIT TO BE RIGID.
- USE 120VAC CIRCUITS UNLESS OTHERWISE NOTED. VERIFY CURRENT LOAD ON EXISTING CIRCUITS BEFORE CONNECTING NEW LOADS. COORDINATE WITH OWNER IF ADDITIONAL CIRCUITS ARE REQUIRED.
- CONTRACTOR TO VERIFY CONDUIT AND PLENUM CABLE PATHS INDICATED ON THE DRAWINGS. CONTRACTOR MAY PROPOSE ALTERNATE ROUTING WHERE CONFLICTS ARE FOUND.
- CONTRACTOR IS RESPONSIBLE FOR CEILING INTEGRITY, THIS INCLUDES ROUTING ABOVE CONCEALED SPLINE INTERLOCKING TILES.
- CONTRACTOR TO OBTAIN RECERTIFICATION FOR FIRE RATED DOOR FRAME AND DOOR MODIFIED BY THIS PROJECT.
- ACCESS CONTROL LOW VOLTAGE WIRING TO BE PLENUM RATED.
- DO NOT EXCEED 180° IN AGGREGATE CONDUIT BENDS AND/OR 100' CONDUIT WITHOUT PULLBOX.
- PROVIDE GROUND BUSHING ON ALL CONDUIT END IN EQUIPMENT ROOM. BOND TO APPROVED BUILDING GROUND.
- 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.
- ALL WALL AND FLOOR PENETRATIONS SHALL BE SEALED WITH APPROVED FIRE STOP.
- ALL CABLES NOT IN CONDUIT ABOVE DROP CEILING SHALL BE INSTALLED IN MIN. 1" J-HOOK EVERY 5'-8". DO NOT EXCEED 40% FILL.
- 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.
- LOCATE DEVICES AS SITE CONDITIONS REQUIRE.
- FIELD VERIFY ALL DIMENSIONS.
- REFER TO THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS REGARDING THIS WORK. CONTRACTOR TO PREPARE PROPOSAL FOR EACH DISCIPLINE. PROVIDE COORDINATION BETWEEN DISCIPLINES FOR CONSTRUCTION.
- NOTIFY DESIGN CONSULTANT AND OWNER WHERE EXISTING CONDITIONS REQUIRE REPAIR PRIOR TO INSTALLATION.
- COORDINATE ALL WORK WITH GENERAL CONTRACTOR.
- ALL CABLE PULLS WITHIN EXISTING AND NEW CONDUITS TO BE MADE AT SAME TIME.
- DEFINITION: BY DIVISION 8 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 8 CONTRACTOR.
- DEFINITION: BY DIVISION 26 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 26 CONTRACTOR.
- DEFINITION: BY DIVISION 27 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 27 CONTRACTOR.
- DEFINITION: BY DIVISION 28 - EQUIPMENT PROVIDED AND INSTALLED BY DIVISION 28 CONTRACTOR.

EQUIPMENT SYMBOLS LIST

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

SHEET INDEX

SHEET NO.	SHEET NAME
TY000	INDEX, SYMBOLS AND NOTES
TY001	NOTES
TY002	EQUIPMENT SCHEDULES
TY100	OVERALL SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 01
TY101	OVERALL SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 02
TY200	ENLARGED SECURITY FLOOR PLAN - TERMINAL, LEVEL 02
TY300	ENLARGED PLAN AT IDF 100.14
TY500	DOOR AND IFP DETAILS
TY501	CAMERA DETAILS
TY502	TELECOM DETAILS

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - IAH

REGISTRATION
 Copyright © 2021



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 FOD BID/100%CD

PROJECT NAME
**HOU-TERMINAL
 - SECURITY
 EXIT LANE**

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
**INDEX, SYMBOLS
 AND 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

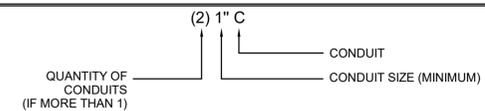
1. ALL OUTDOOR MOUNTED CARD READERS SHALL BE INSTALLED WITH WEATHER RESISTANT AND TAMPER PROOF HARDWARE.
2. CARD READER PEDESTALS SHALL BE SIZED FOR VOICE COMMUNICATIONS.
3. PROVIDE ALL INTEGRATION WITH CLOSED CIRCUIT VIDEO SURVEILLANCE COMPONENTS.
4. PROVIDE ALL COORDINATION WITH OTHER DISCIPLINES FOR 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	WSECCOMP2835
L	CCTV COMPOSITE CABLE 2C 18AWG, UNSHIELDED, CABLE ETHERNET (PLENUM), R659 (PLENUM)	CAM PWR, UTP/IP VIDEO ANALOG VIDEO CONNECT K112	WSECCOMP-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



FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\HOU-TERM - SECURITY EXIT LANE 080421-2 (2021).rvt
DATESTAMP 10/20/2021 11:33:28 AM

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.

CLIENT



HAS AVIATION DEPT.
16930 JOHN F.
KENNEDY BLVD.
HOUSTON TX 77032
[T] 281 233 1757
[F] 281 233 1800

ARCHITECT



PGAL
3131 BRIARPARK DR.
SUITE 200
HOUSTON, TX 77042
[T] 713 622 1444
[F] 713 968 9333
www.pgal.com

DEPARTMENT OF AVIATION
RECOMMENDED:

HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - IAH

REGISTRATION
Copyright © 2021



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 FOD BID/100%CD

PROJECT NAME
**HOU-TERMINAL
- SECURITY
EXIT LANE**

PROJECT LOCATION
**WILLIAM HOBBY
HOU
7800 AIRPORT BLVD.
HOUSTON, TX 77061**

PROJECT NUMBER
1004345

SHEET TITLE

NOTES

SHEET NUMBER

TY001

CLIENT



HAS AVIATION DET.
16930 JOHN F.
KENNEDY BLVD.
HOUSTON TX 77032
[T] 281 233 1757
[F] 281 233 1800

ARCHITECT



PGAL
3131 BRIARPARK DR.
SUITE 200
HOUSTON, TX 77042
[T] 713 622 1444
[F] 713 968 9333
www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - 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
HOU-TERMINAL
- SECURITY
EXIT LANE

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 EQUIPMENT
 SCHEDULES

SHEET NUMBER

TY002

ITEM	CAMERA NO.	SHEET NO.	LEVEL	CAMERA VIEW	CAMERA TYPE	CAMERA MOUNTING TYPE	TERMINATING IDF	REFERENCE MOUNTING DETAIL	DESCRIPTION
1	2.C01	TY200	LEVEL 02	CR 2.R01, 2.R03 & 2.R04	DUAL 180	CEILING MOUNT	IDF 100.14	3/TY501	NEW CAMERA
2	2.C02	TY200	LEVEL 02	CR 2.R02	HD FIX	CEILING MOUNT	IDF 100.14	1/TY501	NEW CAMERA
3	2.C03	TY200	LEVEL 02	CR 2.R03 & 2.R05	DUAL 180	CEILING MOUNT	IDF 100.14	3/TY501	NEW CAMERA
4	2.C04	TY200	LEVEL 02	CR 2.R04 & 2.R06	DUAL 180	CEILING MOUNT	IDF 100.14	3/TY501	NEW CAMERA
5	2.C05	TY200	LEVEL 02	CR 2.R05 & 2.R07	DUAL 180	CEILING MOUNT	IDF 100.14	3/TY501	NEW CAMERA
6	2.C06	TY200	LEVEL 02	CR 2.R06 & 2.R08	DUAL 180	CEILING MOUNT	IDF 100.14	3/TY501	NEW CAMERA
7	2.C07	TY200	LEVEL 02	ACTIVITY AT EXIT LANE ENTRANCE AREA	DUAL 180	WALL MOUNT	IDF 100.14	4/TY501	NEW CAMERA
8	2.C08	TY200	LEVEL 02	STAIR EXIT 215.00A	HD FIX	WALL MOUNT	IDF 100.14	2/TY501	NEW CAMERA

CAMERA SCHEDULE NTS **1**

ITEM	READER NO.	SHEET NO.	LEVEL	LOCATION	ASSOCIATED CAMERA	TERMINATING IDF	DESCRIPTION
1	2.R01	TY200	LEVEL 02	EXIT LANE (DOUBLE DOOR)	2.C01 & 2.C02	IDF 100.14	NEW CARD READER
2	2.R02	TY200	LEVEL 02	EXIT LANE (DOUBLE DOOR)	2.C01 7 2.C02	IDF 100.14	NEW CARD READER
3	2.R03	TY200	LEVEL 02	EXIT LANE (EXIT DOOR)	2.C01 & 2.C03	IDF 100.14	NEW CARD READER
4	2.R04	TY200	LEVEL 02	EXIT LANE (EXIT DOOR)	2.C01 & 2.C04	IDF 100.14	NEW CARD READER
5	2.R05	TY200	LEVEL 02	EXIT LANE (MIDDLE DOOR)	2.C03 7 2.C05	IDF 100.14	NEW CARD READER
6	2.R06	TY200	LEVEL 02	EXIT LANE (MIDDLE DOOR)	2.C04 & 2.C06	IDF 100.14	NEW CARD READER
7	2.R07	TY200	LEVEL 02	EXIT LANE (ENTRANCE DOOR)	2.C05 & 2.C07	IDF 100.14	NEW CARD READER
8	2.R08	TY200	LEVEL 02	EXIT LANE (ENTRANCE DOOR)	2.C06 & 2.C07	IDF 100.14	NEW CARD READER

CARD READER SCHEDULE NTS **2**

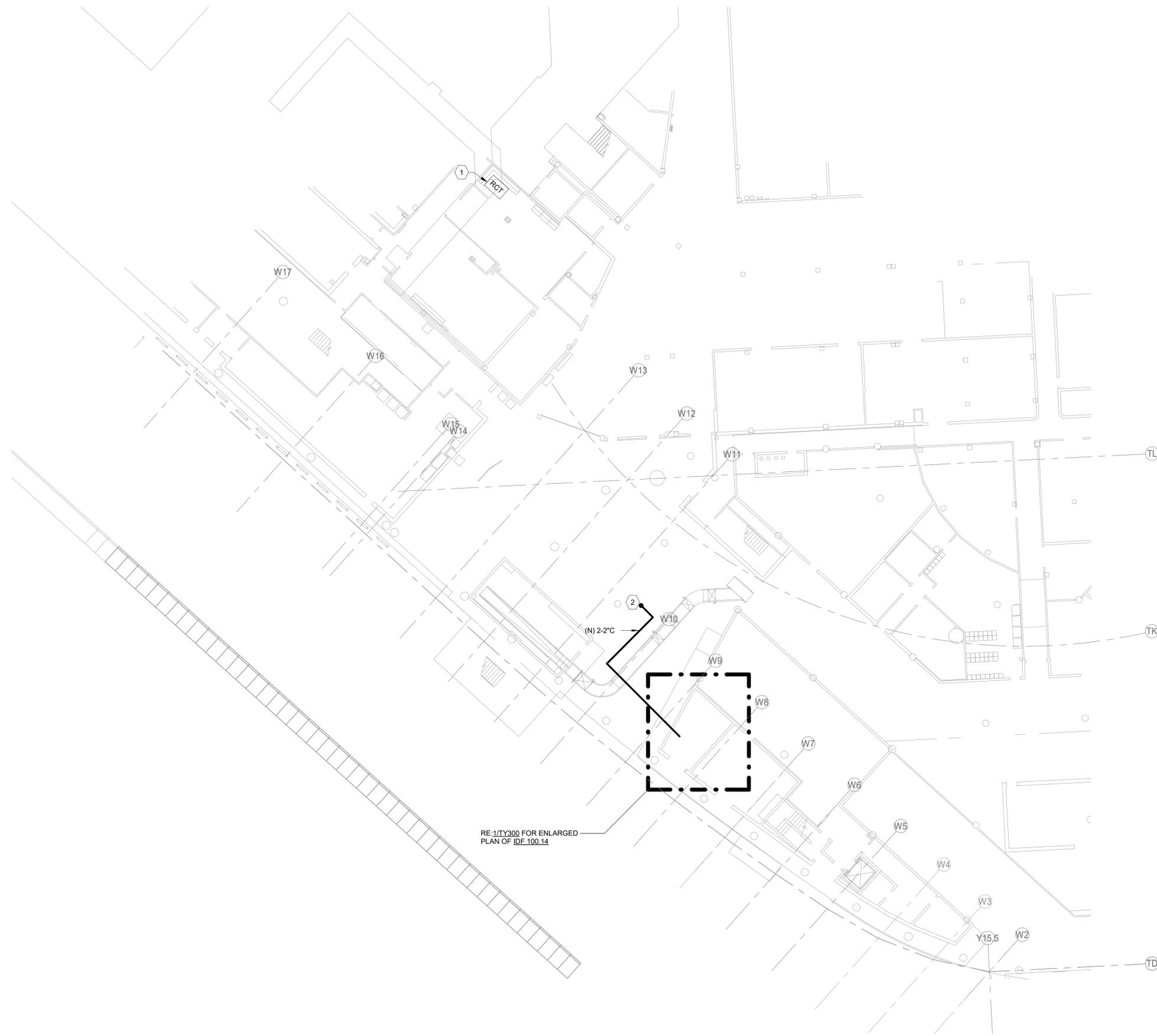
ITEM	ALARM NO.	SHEET NO.	LEVEL	LOCATION	ASSOCIATED CAMERA	TERMINATING IDF	DESCRIPTION
1	2.A01	TY300	LEVEL 02	IDF 100.14	-	IDF 100.14	NEW IFP TAMPER SWITCH

ALARM POINT SCHEDULE NTS **3**

FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - HOU.rvt
 DATE/TIME: 10/20/2021 11:34:43 AM

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.

FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - HOU.rvt
 DATE/TIME: 10/20/2021 11:34:44 AM



RE: 1/TY300 FOR ENLARGED PLAN OF IDF 100.14

GENERAL NOTES:

1. ALL SECURITY DEVICES SHALL TERMINATE IN IDF 100.14.
2. EXIT LANE CONTAINMENT DEVICES SHALL TERMINATE IN CCR AT IDF 100.14.

KEY NOTES:

1. PROVIDE FOUR (4) DATA DROPS FOR RCT, COORDINATE W/ TSA REPRESENTATIVE FOR LOCATION ON RCT PRIOR TO INSTALLATION. UTILIZE EXISTING DATA OUTLET IF POSSIBLE. THERE ARE EXISTING DATA JACKS AVAILABLE PER SURVEY ON 9/20/2021. IF EXISTING DATA OUTLET NOT AVAILABLE, EXTEND 4 DATA DROPS TO CCR IN IDF 100.14.
2. (N) 2-2\"/>

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - IAH

REGISTRATION



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

HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION

**WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061**

PROJECT NUMBER

1004345

SHEET TITLE

OVERALL SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 01

SHEET NUMBER

TY100

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.

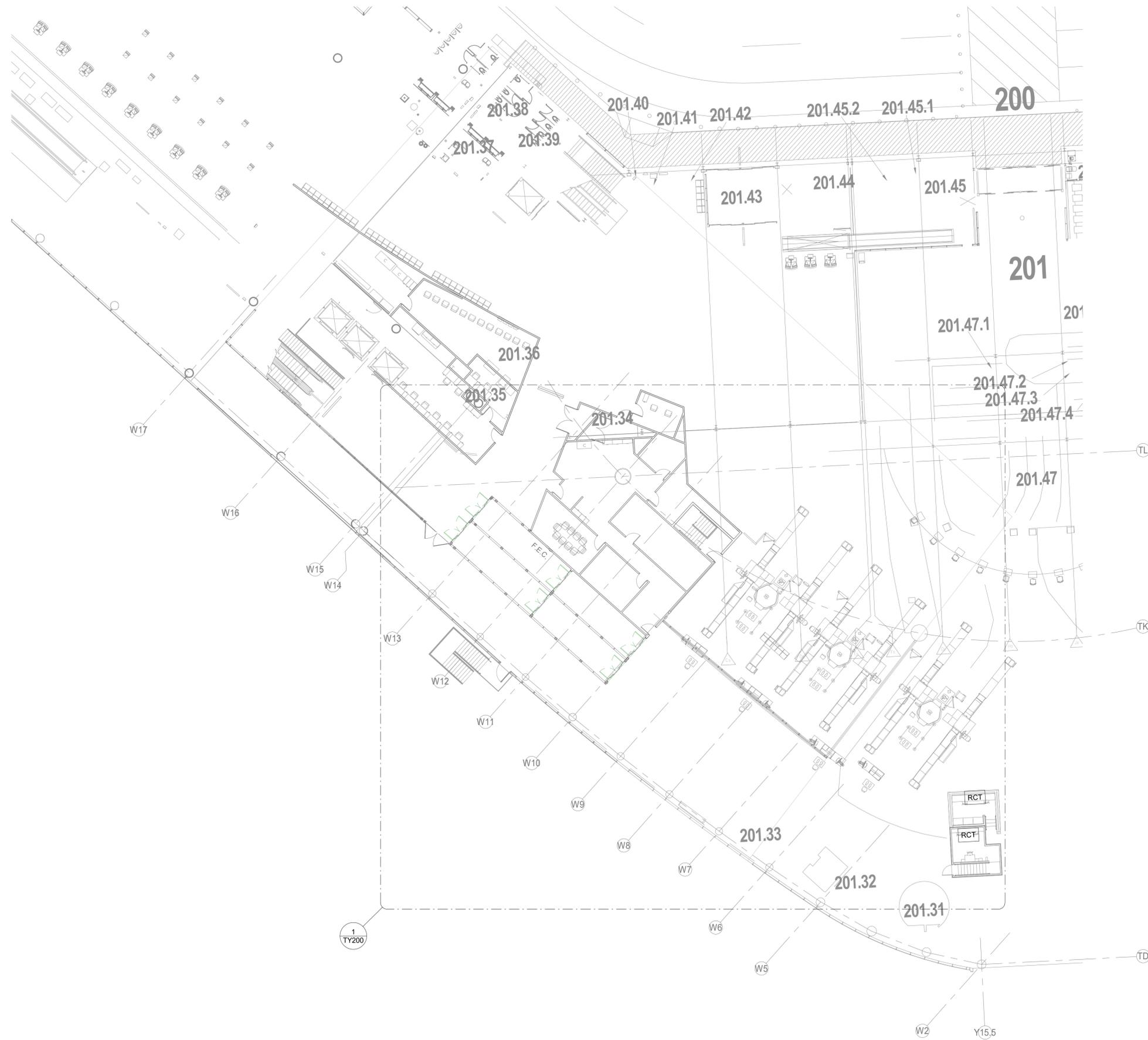
OVERALL SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 01 1/16" = 1'-0" **1**

PLAN NORTH

1:256 SCALE



FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - HOU.rvt
 DATE/TAMP: 10/20/2021 11:34:46 AM



OVERALL SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 02 1/16" = 1'-0" 1

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



CLIENT
 HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - 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
 HOU-TERMINAL
 - SECURITY
 EXIT LANE

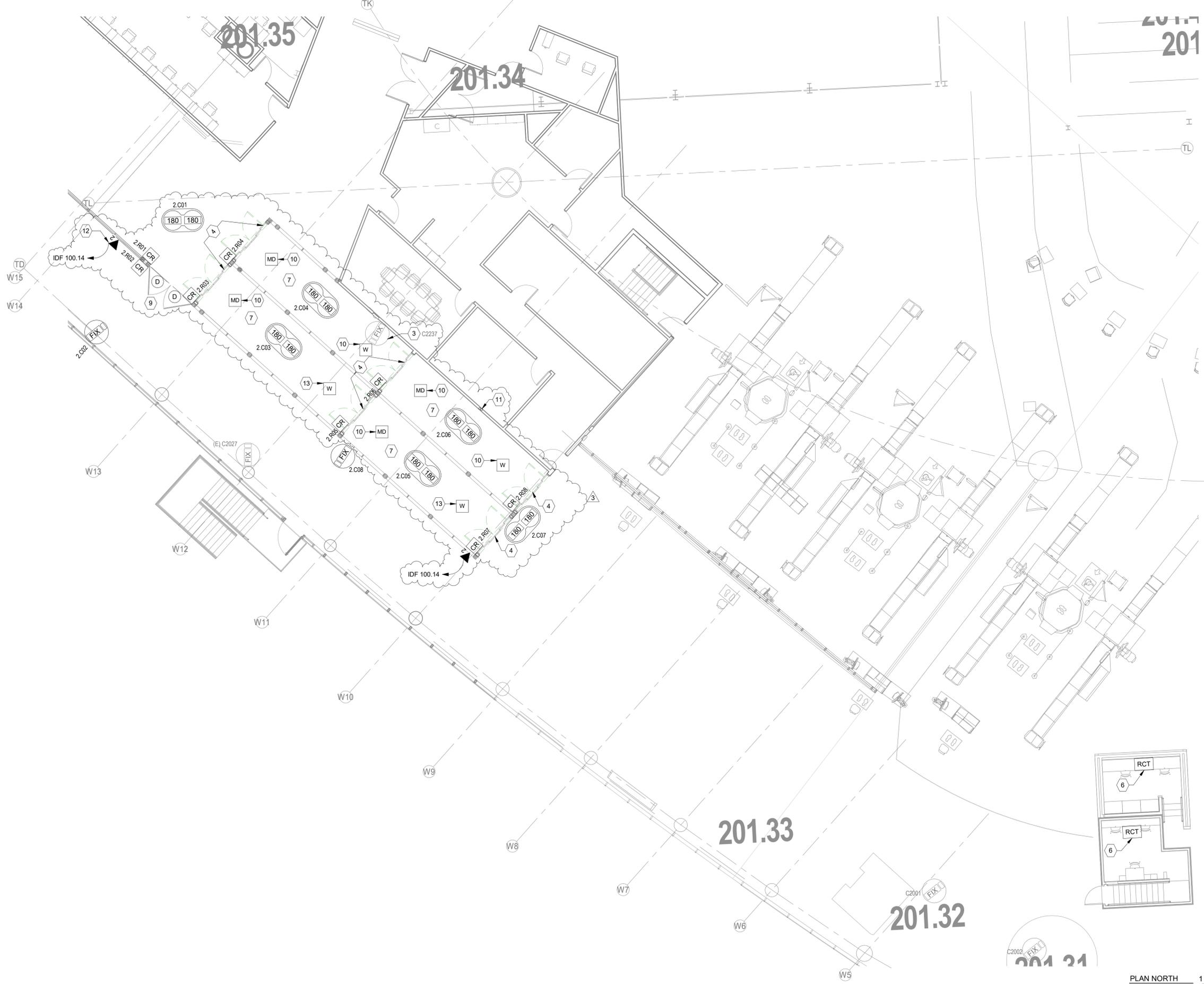
PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 OVERALL
 SECURITY FLOOR
 PLAN - HOBBY
 TERMINAL, LEVEL
 02
 SHEET NUMBER

TY101

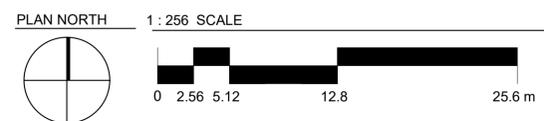
FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - HOU.rvt
 DATE/TIME: 10/20/2021 11:34:49 AM



- GENERAL NOTES:**
- ALL SECURITY DEVICES SHALL TERMINATE IN IDF 100.14.
 - EXIT LANE CONTAINMENT DEVICES SHALL TERMINATE IN CCR AT IDF 100.14.
- KEY NOTES:**
- (E) CARD READER TO BE RELOCATED, REMOVE ALL UNUSED CABLES.
 - RELOCATE (E) CARD READER TO THIS LOCATION.
 - REMOVE AND RETURN (E) CAMERA TO HAS.
 - ADD (N) DOOR CONTACT AND CARD READER. RE: 1/TY500 FOR DOOR DETAIL.
 - NOT USED.
 - PROVIDE FOUR (4) DATA DROPS FOR RCT, COORDINATE W/ TSA REPRESENTATIVE FOR LOCATION ON RCT PRIOR TO INSTALLATION. UTILIZE EXISTING DATA OUTLET IF POSSIBLE. THERE ARE EXISTING DATA JACKS AVAILABLE PER SURVEY ON 9/20/2021. IF EXISTING DATA OUTLET NOT AVAILABLE, EXTEND 4 DATA DROPS TO CCR IN IDF 100.14.
 - (E) SPEAKERS IN THE IMPACTED PROJECT AREA SHALL BE RELOCATED. COORDINATE SPEAKERS NEW LOCATIONS W/ HAS IT.
 - (E) DURESS BUTTON IN THE IMPACTED AREA SHALL BE RELOCATED. COORDINATE NEW LOCATIONS W/ TSA REP.
 - REFER TO 3/TY500 FOR DOOR DETAIL.
 - MOTION DETECTION CAMERA. PROVIDE QUANTITY AS REQUIRED BY SUPPLIER. TERMINATE IN CCR AT IDF 100.14.
 - (N) 2-2" C Routed FROM IDF 100.14 FOR NEW EXIT LANE DATA CABLING. (N) 2-2" C SHALL CORE UP TO EXIT LANE DECK THEN GOES DOWN TO EACH IT EQUIPMENT.
 - COORDINATE WITH DIV 26 TO PROVIDE 2-CHANNEL RACEWAY FOR DATA AND ELECTRICAL CABLING. MOUNT RACEWAY TO MULLION. COORDINATE WITH ARCHITECT FOR COLORS.
 - WATCHER CAMERA. PROVIDE QUANTITY AS REQUIRED BY SUPPLIER. TERMINATE IN CCR AT BDF C3320.

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.

ENLARGED SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 02 1/8" = 1'-0" 1



CLIENT
HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - 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
HOU-TERMINAL - SECURITY EXIT LANE

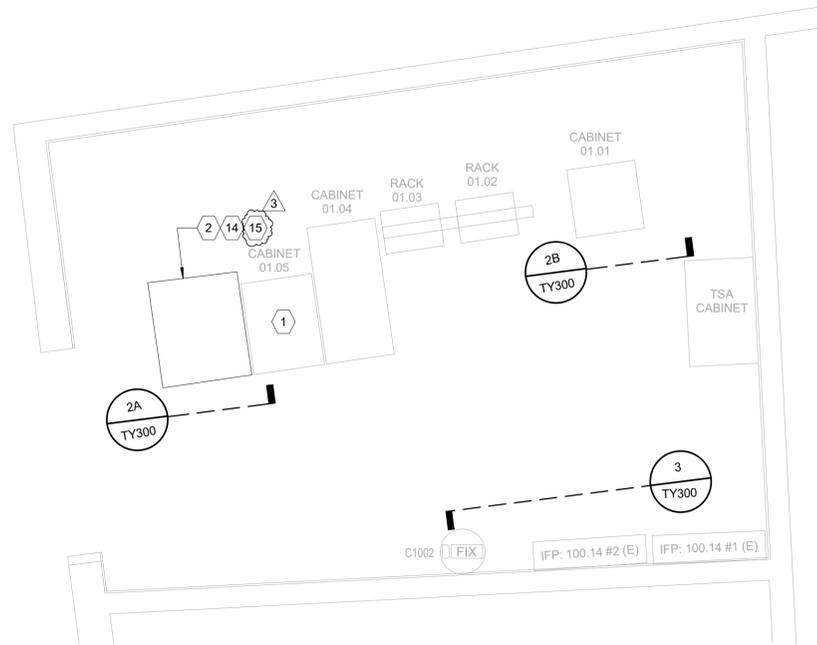
PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

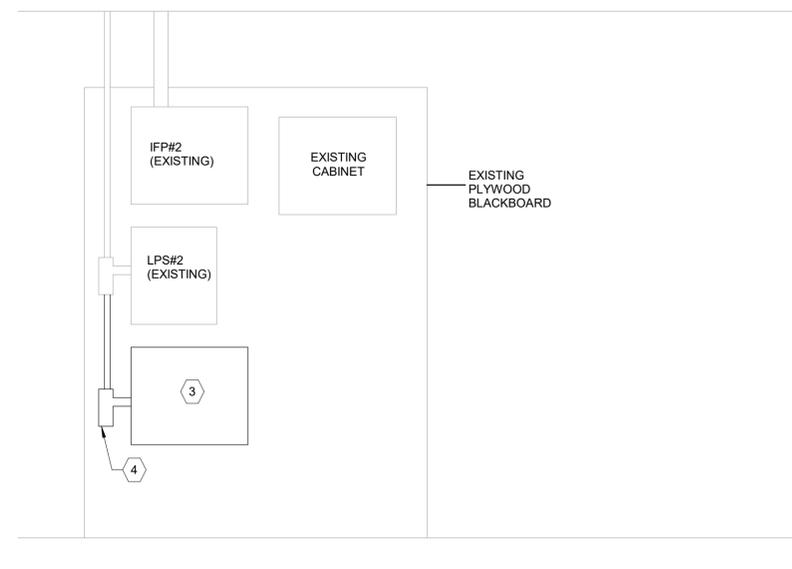
SHEET TITLE
 ENLARGED SECURITY FLOOR PLAN - HOBBY TERMINAL, LEVEL 02
 SHEET NUMBER

TY200

FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\HOU-TERM - SECURITY EXIT LANE 080421-2 (2021).rvt
 DATESTAMP 10/20/2021 11:50:13 AM

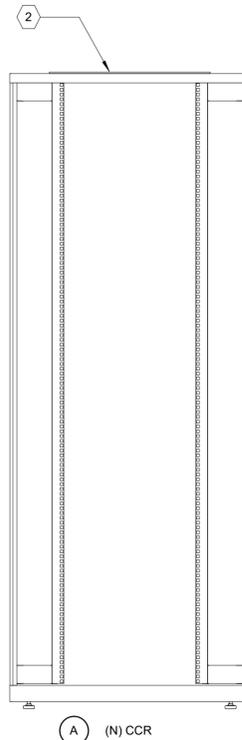


ENLARGED PLAN AT IDF 100.14 (EXISTING) 3/8" = 1'-0" 1

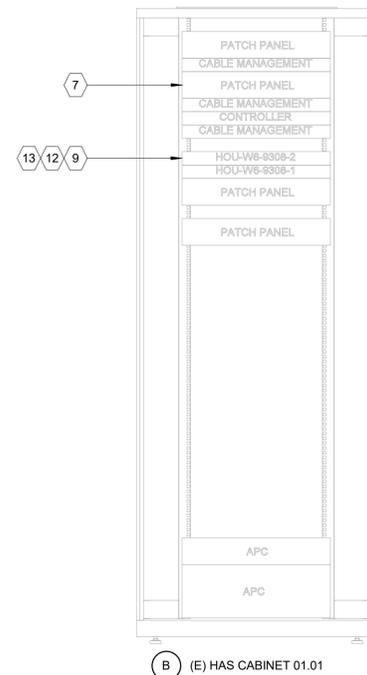


WALL ELEVATION AT IDF 100.14 1/12" = 1'-0" 3

SECURITY SENSITIVE INFORMATION - LAW ENFORCEMENT CONFIDENTIAL. DO NOT PHOTOCOPIY. 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.



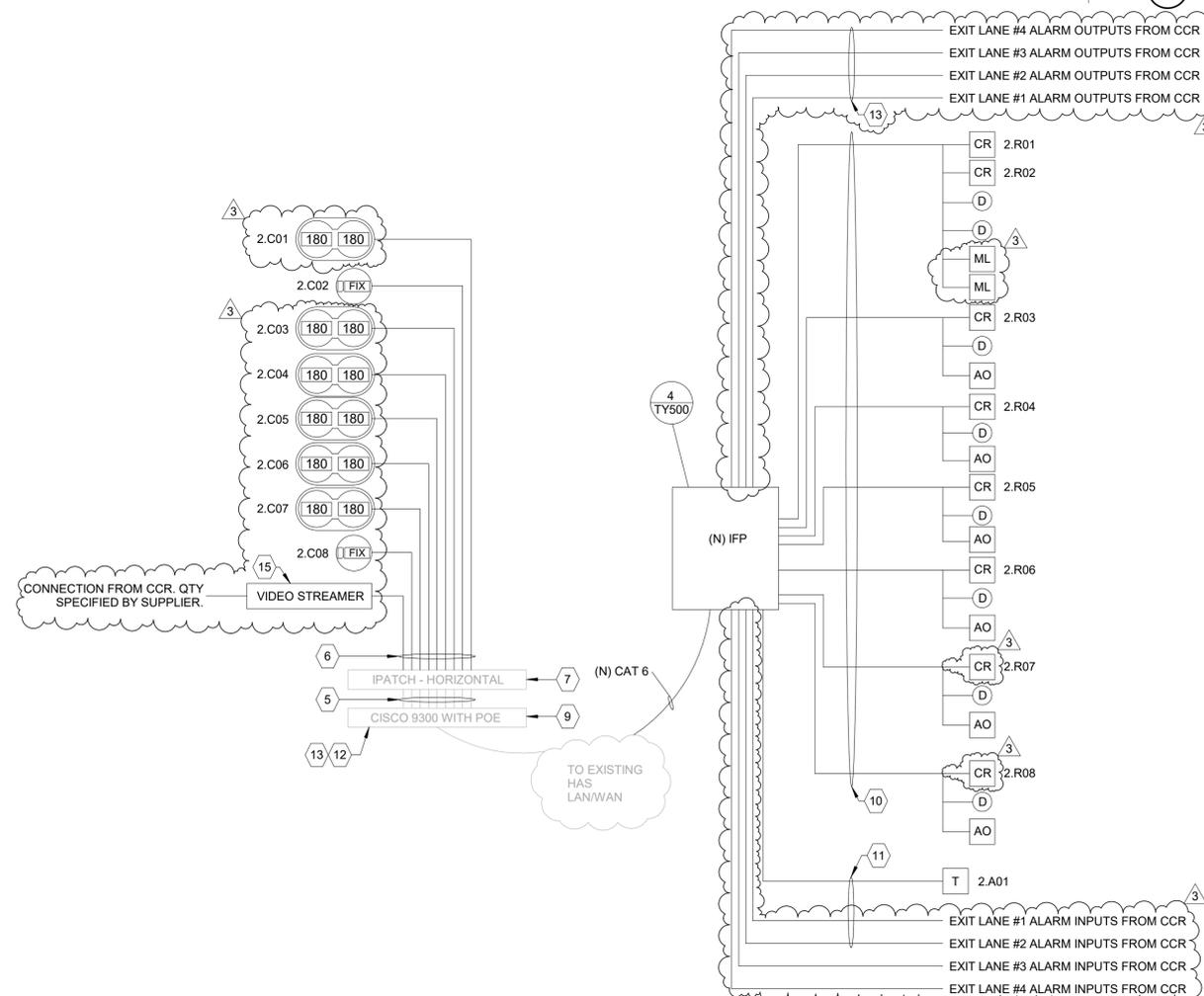
(A) (N) CCR



(B) (E) HAS CABINET 01.01

- KEY NOTES:**
- 1 COORDINATE REMOVAL OF EXISTING RACK. LEAVE SPACE FOR NEW CENTRAL CONTROL RACK (CCR).
 - 2 CENTRAL CONTROL RACK (CCR), PROVIDED BY OTHER.
 - 3 PROVIDE (N) IFP W/ READER, INPUT, OUTPUT MODULES AND POWER SUPPLY AS REQUIRED FOR THIS PROJECT.
 - 4 EXTEND 120VAC TO NEW IFP.
 - 5 (E) CAT 6 PATCH CORD.
 - 6 CAT 6, ONE (1) PER CAMERA (TYP).
 - 7 (E) IPATCH HORIZONTAL, SYSTIMAX 360 48 PORT PATCH PANEL.
 - 8 NOT USED.
 - 9 (E) 48 PORT NETWORK SWITCH (HOU-W6-9308-2).
 - 10 COMPOSITE ACCESS CONTROL CABLE.
 - 11 2 PAIR 22 AWG.
 - 12 TERMINATE CAMERAS AND (N) IFP IN THIS NETWORK SWITCH. COORDINATE PORTS ASSIGNMENT AND IP ADDRESSES W/ HAS IT.
 - 13 PROVIDE SIXTEEN (16) CAT 6 CABLES BETWEEN (E) HAS NETWORK SWITCH AND CCR FOR NETWORK CONNECTIVITY. COORDINATE WITH HAS IT FOR NETWORK PORTS ASSIGNMENT AND IP ADDRESS.
 - 14 PROVIDE 120VAC 20A POWER CIRCUIT FOR CCR (BY DIV 26, ELECTRICAL).
 - 15 VIDEO STREAMER (ANALOG TO ETHERNET). QTY AS REQUIRED FOR THIS PROJECT
 - 16 3 PAIR 22 AWG.

RACK ELEVATIONS AT IDF 100.14 1" = 1'-0" 2



ONE LINE DIAGRAM AT IDF 100.14 3/4" = 1'-0" 4

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F. KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION

RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - IAH

REGISTRATION
 Copyright © 2021



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 FOD BID/100%CD

PROJECT NAME
HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

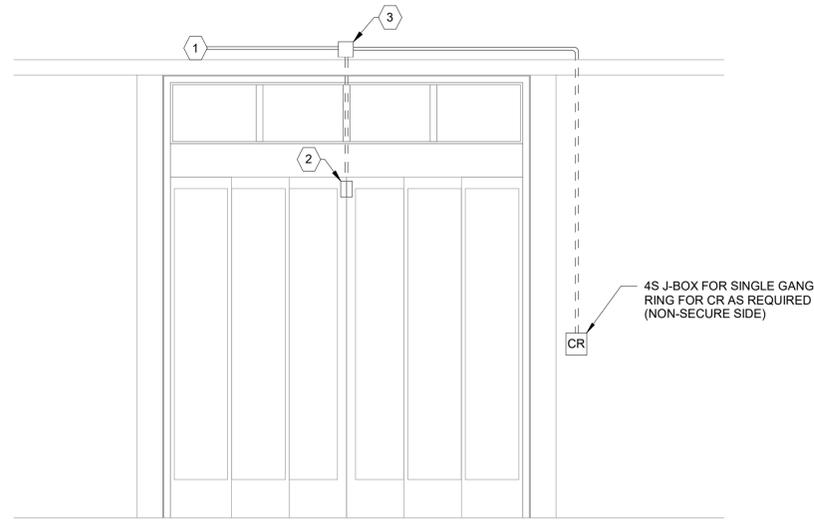
PROJECT NUMBER
 1004345

SHEET TITLE
ENLARGED PLAN AT IDF 100.14

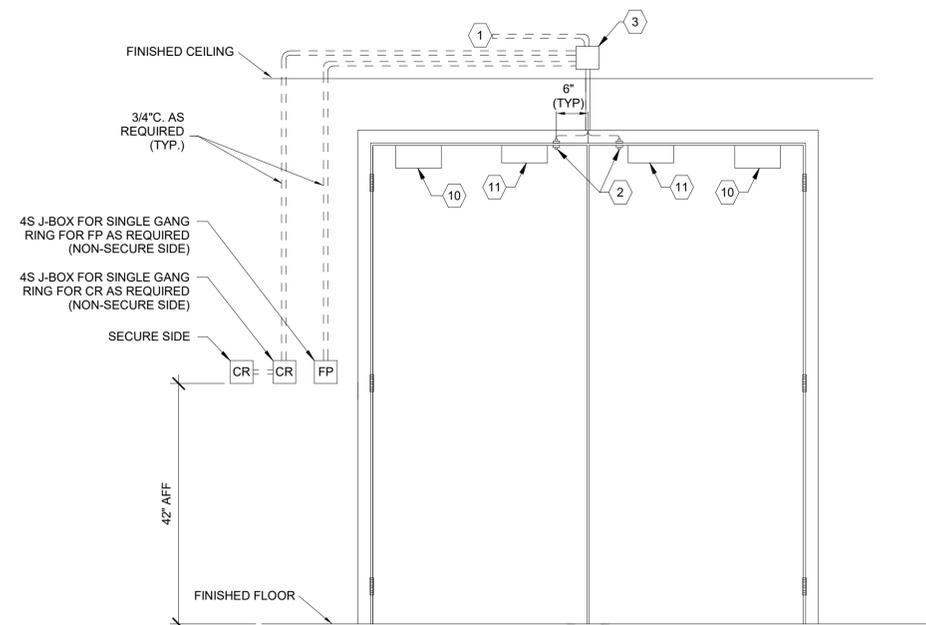
SHEET NUMBER

TY300

FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - HOU.rvt
 DATE/TAMP 10/20/2021 11:53:44 AM



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



DOOR WITH ELECTROMAGNETIC LOCKS, DOOR SWITCHES, AND CARD READERS NTS 2

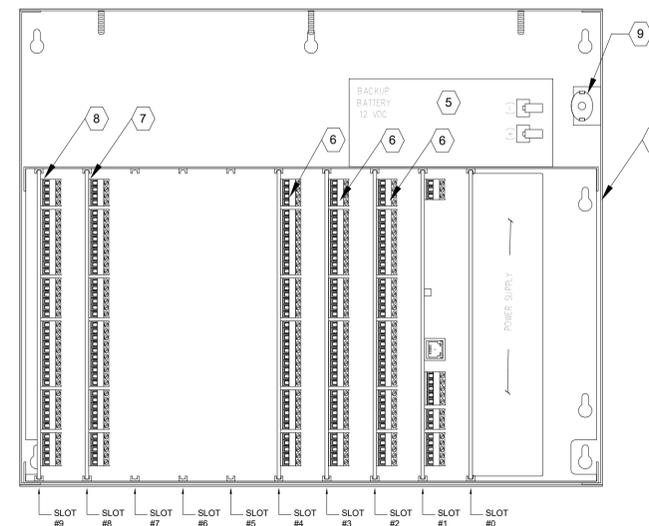
SECURITY SENSITIVE INFORMATION - LAW ENFORCEMENT CONFIDENTIAL. DO NOT PHOTOCOPY. THIS INFORMATION IS PROTECTED AGAINST DISCLOSURE BY THE PROVISIONS CONTAINED IN THE HOMELAND SECURITY ACT OF 2002, 49 U.S.C. 114(s), AND TSA'S REGULATION IMPLEMENTING THIS AUTHORITY, SET FORTH IN 49 CFR PART 1520.

GENERAL NOTES:

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

KEY NOTES:

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



IFP DETAIL NTS 3

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:

HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - 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
HOU-TERMINAL - SECURITY EXIT LANE

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
 1004345

SHEET TITLE
 DOOR AND IFP
 DETAILS

SHEET NUMBER

TY500

CLIENT



HAS AVIATION DEPT.
16930 JOHN F.
KENNEDY BLVD.
HOUSTON TX 77032
[T] 281 233 1757
[F] 281 233 1800

ARCHITECT



PGAL
3131 BRIARPARK DR.
SUITE 200
HOUSTON, TX 77042
[T] 713 622 1444
[F] 713 968 9333
www.pgal.com

DEPARTMENT OF AVIATION
RECOMMENDED:

HOUSTON AIRPORT SYSTEM
DIRECTOR OR DESIGN REPRESENTATIVE
HAS TIP # 21-157 - IAH

REGISTRATION



10/20/21
DRAWING HISTORY

NO.	DATE	DESCRIPTION
1	08-06-21	100% CD

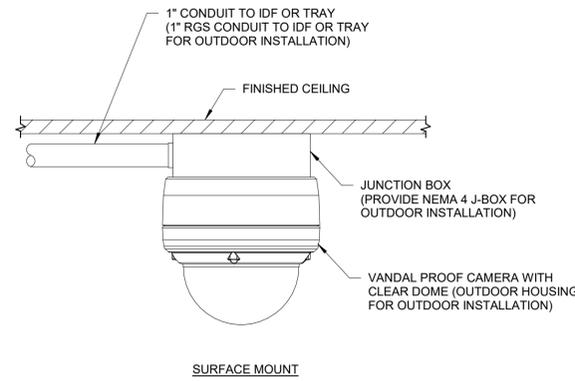
PROJECT NAME
HOU-TERMINAL
- SECURITY
EXIT LANE

PROJECT LOCATION
WILLIAM HOBBY
HOU
7800 AIRPORT BLVD.
HOUSTON, TX 77061
PROJECT NUMBER
1004345

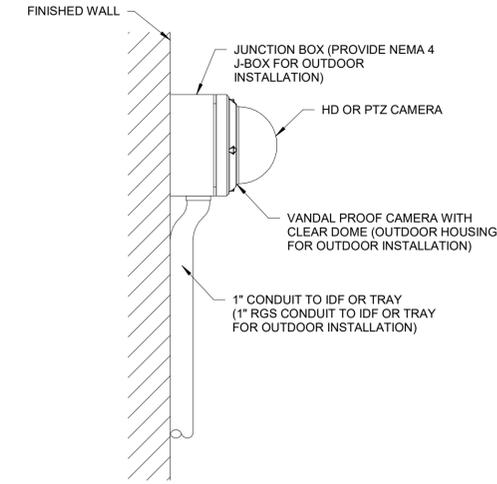
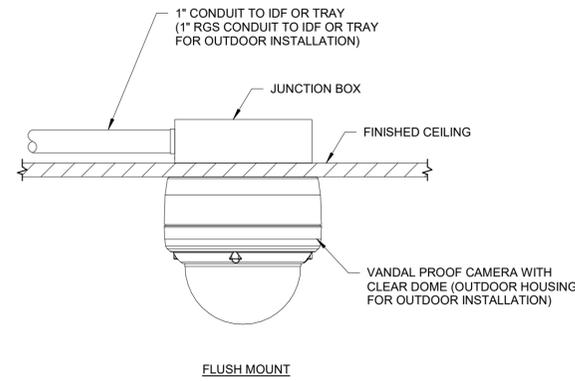
SHEET TITLE
CAMERA DETAILS

SHEET NUMBER

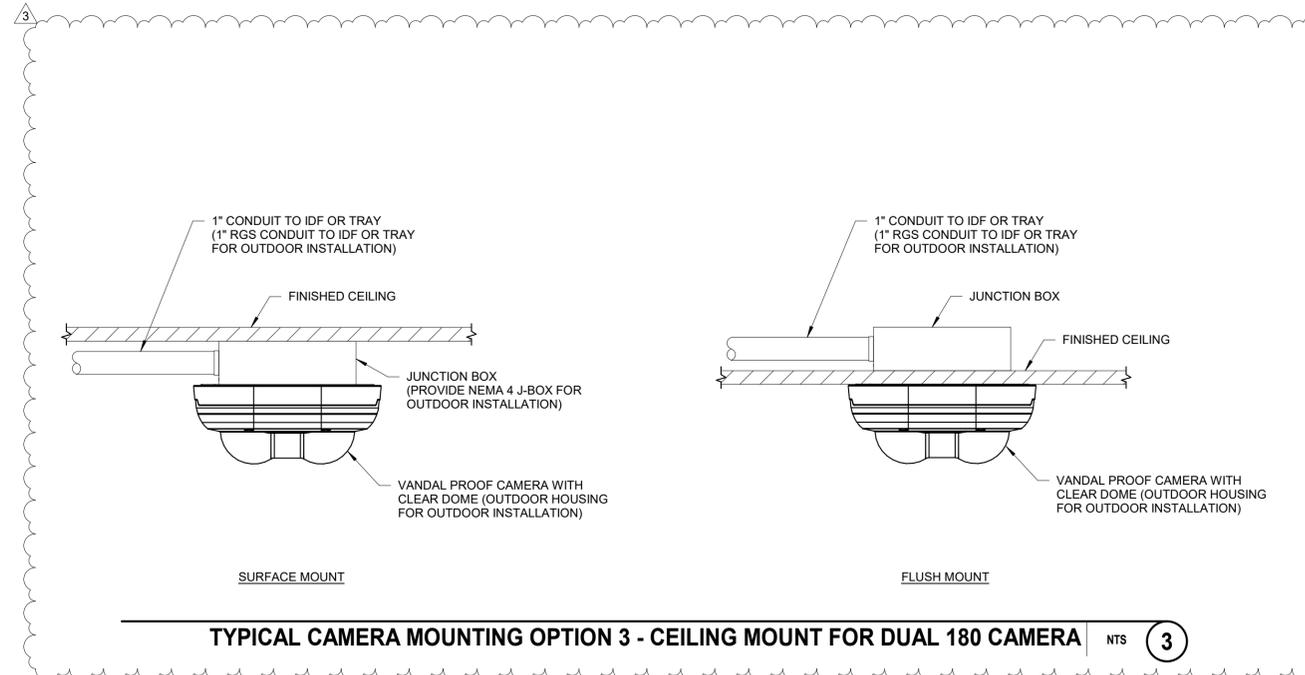
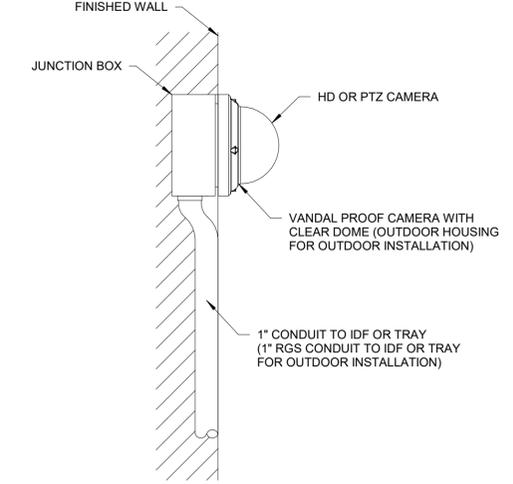
TY501



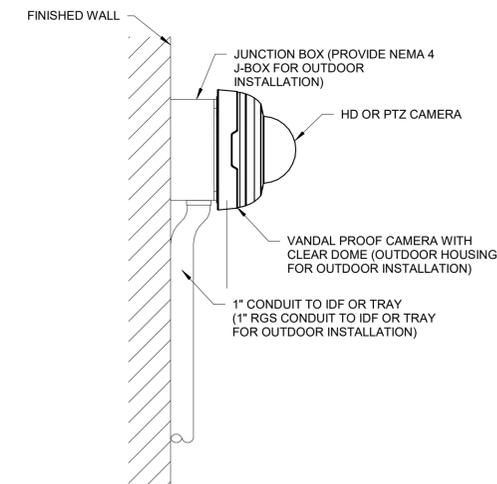
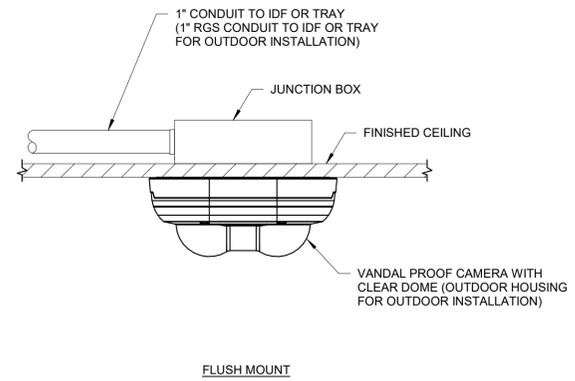
TYPICAL CAMERA MOUNTING OPTION 1 - CEILING MOUNT FOR HD OR PTZ CAMERA NTS 1



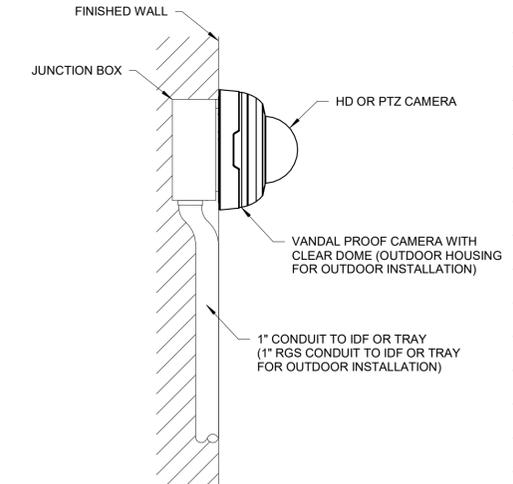
TYPICAL CAMERA MOUNTING OPTION 2 - WALL MOUNT FOR HD OR PTZ CAMERA NTS 2



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



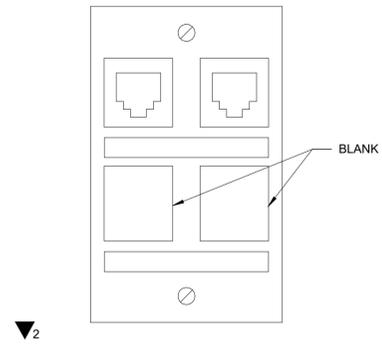
TYPICAL CAMERA MOUNTING OPTION 4 - WALL MOUNT FOR 360 DUAL 180 CAMERA NTS 4



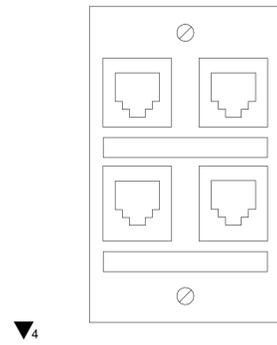
FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS - HOU.rvt
DATESTAMP: 10/20/2021 11:34:49 AM

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.

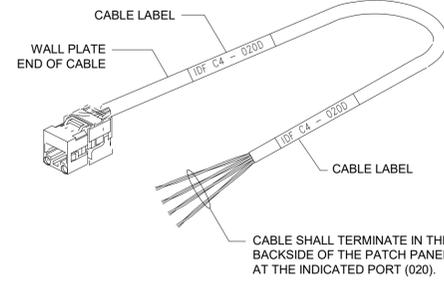
FILE NAME: D:\DW WORKING FOLDER\2018.010 - HAS EXIT LANE MODIFICATIONS\REVIT 2021\2018.010 - HAS EXIT LANE MODIFICATIONS - HOU.rvt
 DATESTAMP: 10/20/2021 11:34:49 AM



WORK AREA OUTLET (2) NTS **1**



WORK AREA OUTLET (4) NTS **2**



COMMUNICATIONS CABLE LABELING NTS **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.

CLIENT



HAS AVIATION DEPT.
 16930 JOHN F.
 KENNEDY BLVD.
 HOUSTON TX 77032
 [T] 281 233 1757
 [F] 281 233 1800

ARCHITECT



PGAL
 3131 BRIARPARK DR.
 SUITE 200
 HOUSTON, TX 77042
 [T] 713 622 1444
 [F] 713 968 9333
 www.pgal.com

DEPARTMENT OF AVIATION
 RECOMMENDED:
 HOUSTON AIRPORT SYSTEM
 DIRECTOR OR DESIGN REPRESENTATIVE
 HAS TIP # 21-157 - IAH

REGISTRATION



10/20/21
 DRAWING HISTORY

NO.	DATE	DESCRIPTION
1	08-06-21	100% CD

PROJECT NAME
**HOU-TERMINAL
 - SECURITY
 EXIT LANE**

PROJECT LOCATION
 WILLIAM HOBBY
 HOU
 7800 AIRPORT BLVD.
 HOUSTON, TX 77061

PROJECT NUMBER
1004345

SHEET TITLE
TELECOM DETAILS

SHEET NUMBER

TY502