ADDENDUM 4

June 10, 2020

ITB AP 59-20

CONSTRUCT BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION – DESTIN-FORT WALTON BEACH AIRPORT (VPS)

This addendum modifies the requirements of the Solicitation Document dated: May 18, 2020.

The following items take precedence over referenced portions of the Contract Documents for the above-named Project and shall become a part thereof.

Where any item called for in the Contract Documents is supplemented hereby, the original requirements shall remain in effect. All supplemental items and conditions shall be considered as added thereto.

Where any original items or condition is amended, voided or superseded hereby, the provisions of such items or conditions not so specifically amended, voided or superseded shall remain in effect.

The Last Day For Questions Deadline was Friday, June 05, 2020 (at 3:00 p.m. C.D.S.T.). **There is no extension on the date for the Last Day For Questions.**

Note: The ITB Opening Date & Time has changed to Wednesday 24 June, 2020 at 3:00 p.m. (C.D.S.T.).

CONTRACT DOCUMENT MODIFCIATIONS

Page/ Dwg No.	ITEM	DESCRIPTIONS	REMARKS
ITC-3	Section 3	Deleted portion of last sentence.	Contractor to be licensed to perform work in the State of Florida before bid submission.
BF-3	Sections 5 and 6	Added last sentence to Section 5. Added to sentence in Section 6.	Added verbiage regarding timing of substantial completion of construction of Phases 1 and 2.
Spec TOC Pages 2 and 3	Table of Contents	Added Section 088853 to Page 2. Added Section 102113 to Page 3.	
Spec 01 45 29 Page 2	Section 1.3.B	Revised reference to Paragraph 3.10.E	
Spec 07 54 19	Article 2.2	Updated PVC Roofing, Roof Insulation, and Walkways to include requested substitution (and conditional requirements for approval as substitute)	
Spec 08 88 53	New Section	Created new specification section for requirements for security glazing in door lites.	
Spec 09 51 13	Articles 1.1, 2.4, 2.5, and 2.8	Revised/added articles to include information related to Sound Absorbing Ceiling Units.	
Spec 10 21 23	New Section	Created new specification section for requirements for Toilet Partitions.	
Spec 34 77 39 Page 41-42	Section 2.01.A.	Nord is added under drive manufacturers	See “A4” mark on the page
Spec 34 77 39 Page 55	Section 2.02.K.	Nord is added under VFD manufacturers	See “A4” mark on the page
Dwg. G0-002	BHS Mechanical	Added Sheet G0-002 to sheet index.	Sheet G0-002 was added as part of Addendum 3.

Dwg. S0-003		Deleted references to owner retaining special inspector and testing agency.
Dwg. S1-102		Deleted extra canopy support foundations in employee break area Provided additional keynotes to reflect Bid Alternate No. 1 scope.
Dwg. S1-202		Provided additional keynotes to reflect Bid Alternate No. 1 scope.
Dwg. S6-001	Concrete Pier	Added note to Typical Pier Diagram. Revised Type IV and Type V concrete pier.
Dwg. AE1-102	Solar shade in Employee Break Area	Revised to include column layout for solar shade structure.
Dwg. AE2-101	Interior Elevations – Detail 03	Updated detail to include information of wall reveals.
Dwg. AE4-001	Enlarged Plans – Dtls 08, 11, 12	Updated details to indicate concrete stairs and metal handrails and guardrails.
Dwg. AE4-002	Enlarged Plans – Dtl 02	Updated enlarged plans to indicate necessary toilet accessories.
Dwg. AE6-001	Door Schedule	Updated door schedule to include missing information (finishes, glazing, etc.)
Dwg. AE7-101	Signage	Updated signage schedule to include rooms A182, A183, A184, and A188. Added new sign type for use at A183, A184, and A188
Dwg. AE7-102	Signage	Updated signage plan to include signage locations for rooms A182, A183, A184, and A188.
Dwg. IN1-001	Finish Schedule	Updated finish schedule to include Sound Absorbing Ceiling Units
Dwg. QE1-101-1	BHS Electrical	Added crossover control station at TC1-09
Dwg. QE5-004	BHS Electrical	Changed ATR designation from existing to new in tables

Bid Questions:

1. Page 61 of the BHS specification states: C. Automatic Tag Reader (Optical ATR) 1. ATR as manufactured by: a. Cognex (Is SICK an approved supplier of the ATR?)

Answer: SICK is listed in Addendum 3 specifications.

2. Page 64 of the BHS specification states: D. Baggage Measuring Array (BMA) 1. BMA as manufactured by: a. SICK, Model Number BDS200 dimensioning system (Is Cognex an approved supplier of the BMA?)

Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

3. What is the estimated value of the project?

Answer: The County's estimated budget for this project is under $20 million dollars.

4. Request to have Siemens merge add to acceptable merge supplier.

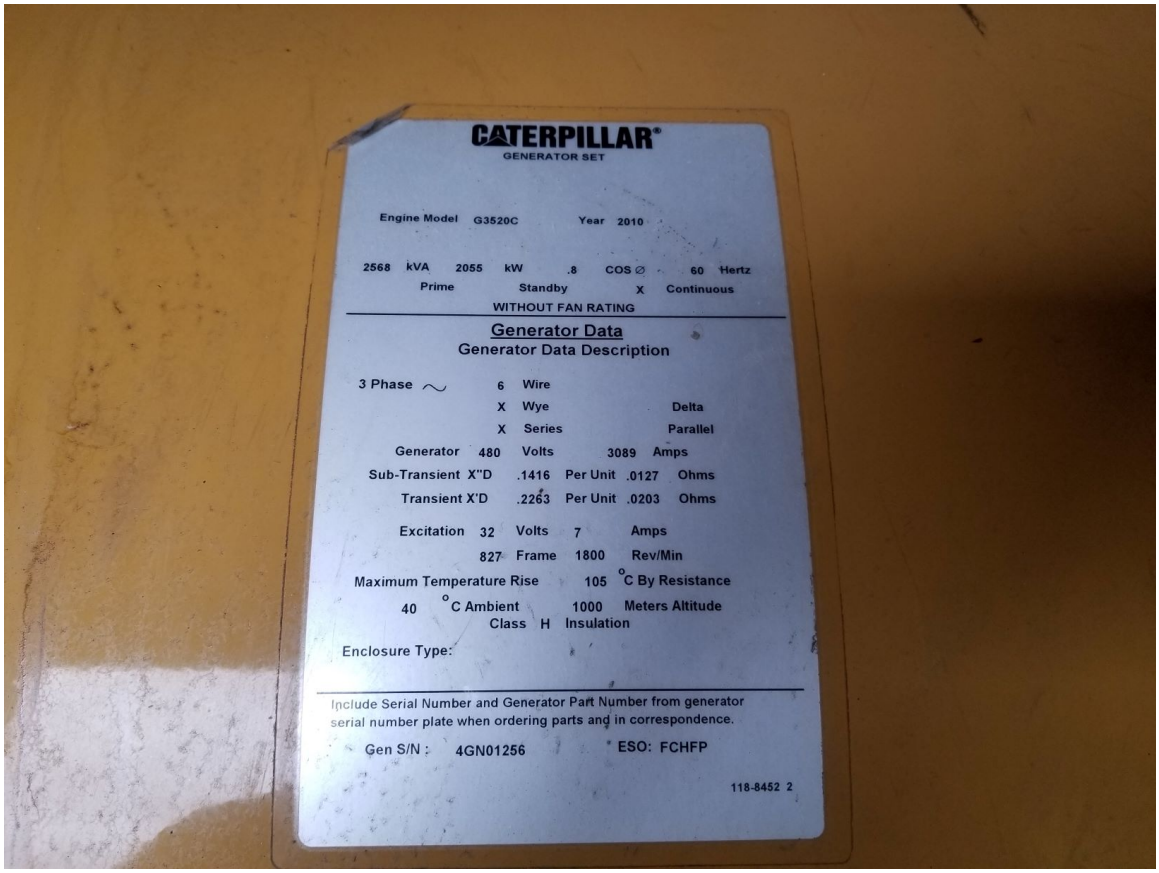
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

5. Addendum 3 Questions and Answers Number 28 advises to provide "Temporary Cooling" for the Airline support spaces. Please provide the following information so the proper temporary cooling (maybe heat) can be provided:
   a. Design conditions that can be tolerated for the area for two weeks, while AHU-2 is being replaced.
   b. Can this work commence in Jan-Feb time frame?
   c. Where can a temporary unit be located? Will the existing roof be able to support 7000 lbs temporary A/C unit?
   d. This unit will need a power source. Please advise.
   e. Can we provide openings in the roof for the temporary supply and return ducts?
   f. A design for this temporary system would be much appreciated.

Answer: a. Indoor air conditions for summer to be 75 deg F and 50 % RH, for winter 70 deg F.
b. Yes, replacement can be done during the Jan-Feb months.
c. Contractor can provide one unit or multiple indoor coolers to maintain space air temperature. Do not locate the temporary unit on the roof.
d. It is recommended to provide temporary power to the unit.
e. No new roof openings. Contractor can make temporary connection to the main supply and return duct under the roof and connect the temporary unit to them.
f. The temporary unit shall match the design conditions mentioned in the mechanical schedule.

6. The previous addendum had a question that asked about the generator manufacture and type. Could you provide the name tag information on the generator set if it is accessible so we could have more information regarding the size?

Answer: See images below of existing generator nameplates.


CATERPILLAR
GENERATOR SET
Engine Model G3520C Year 2010
2568 kVA 2055 kW .8 COS ∅ 60 Hertz
Prime Standby X Continuous
WITHOUT FAN RATING
Generator Data
Generator Data Description
3 Phase 6 Wire
X Wye Delta
X Series Parallel
Generator 480 Volts 3089 Amps
Sub-Transient X"D .1416 Per Unit .0127 Ohms
Transient X'D .2263 Per Unit .0203 Ohms
Excitation 32 Volts 7 Amps
827 Frame 1800 Rev/Min
Maximum Temperature Rise 105 °C By Resistance
40 °C Ambient 1000 Meters Altitude
Class H Insulation
Enclosure Type:
Include Serial Number and Generator Part Number from generator serial number plate when ordering parts and in correspondence.
Gen S/N : 4GN01256 ESO: FCHFP
118-8452 2


KOHLER
KOHLER CO. KOHLER WI. USA
MODEL 300REOZV
SPEC. GM24738-GA2
SERVICE DUTY: STANDBY
HZ: 60 RPM: 1800 FUEL: DIESEL
SERIAL 0703035
MFG DT: 0204
SINGLE PHASE
THREE PHASE
VOLTAGE (CODE)
AMPS
GEN. MODEL: 4UA13
INSUL: NEMA CLASS
MATL: 300REOZV
UNBALANCED LOAD CAPABILITY=100% OF RATED CURRENT
LISTED
STATIONARY ENGINE GENERATOR ASSEMBLY
KOHLER. FOR SALES & SERVICE
800
IN THE U.S. & CANADA
1-800-544-2444

7. The feeders from the MDPs to the five PDPs and the UPS system are shown on the electrical sheet E6-001 as being in the building electrical package yet 1.15 3. A. 1. states "1) Furnish and install all services, feeder, and fused disconnects for branch circuits from the MDP each disconnect to each PDP as specified." Who will be responsible for this work? Please clarify.

Answer: Equipment provided and installed by BHS subcontractor. Electrical subcontractor to provide and connect power feed as indicated on plans.

8. Typically Federally funded projects do not require State Licenses prior to award as stated in Paragraph 3 on Page ITC-3 Instructions to Respondents-Qualifications of Contractors; however, in Paragraph 12 Page ITC-8 Instructions to Respondents it states "If the contractor is an out-of-state corporation, the bid shall contain evidence of contractor's authority and qualification to do business as an out-of-state corporation in the State of Florida. A state contractor license # for the State of Florida shall also be included on the bid form. Contractor shall be licensed in accordance with the requirements of Chapter 489, Florida Statutes." Since there is a conflict, please clarify on a federally funded project whether a license is required prior to submitting a bid.

Answer: The contractor is to be licensed to perform work in the State of Florida before bid submission. The requirement on Page ITC-3 has been revised accordingly.

9. Paragraph 2.3.A.1 refers to the Basis of Design as Z-146T, which is a High Density Fireproofing for Tunnels and severe Industrial conditions. I think that the Z-146 product should be specified, as it is a High Density Fireproofing material that would be equal to the Isolatek Type M-II material. The Z-146T would be equal to the Isolatek Type M-II/P, which is an Industrial product. Please clarity if the Monokote Z-146 is acceptable, or if the Monokote Z-146T is required, with the Isolatek M-II/P required as the equal.

Answer: Monokote Z-146T was specifically chosen as Basis of Design for its increased resistance to wind and rain under hurricane conditions. Architect takes no exception to Isolatek M-II/P.

10. Reference BHS Specification 347739; page 35, Item 1.16, A, 5. The BHS Contractor is responsible for providing Controls system which is compatible with the existing system. Need more definition of what is considered "COMPATIBLE". The existing Control System is not designed as a Distributive System architecture. Does this mean a Distributive Design is NOT required?

Answer: Controls system for the new BHS must be distributed via EtherNet/IP. "Compatibility" in this specific section refers to the tie-in during phasing – BHSC needs to ensure smooth operation when BHS utilizes both existing and new control system.

11. Reference BHS Specification 347739; page 41, PART 2 - PRODUCTS 2.01 MECHANICAL A. Drives 1. Motors a. All motors as manufactured by: Lenze 8400 Motec. Logan Teleflex requests that NORD (extensive Approved BHS installations) be included as an Approved Drive Unit.
Answer: Approved.

12. Reference BHS Specification 347739; page 42, PART 2 - PRODUCTS 2.01 MECHANICAL A. Drives 2. Reducers a. All reducers as manufactured by: 1) Lenze, G500 gearbox. Logan Teleflex requests that NORD (extensive Approved BHS installations) be included as an Approved Reducer.
Answer: Approved.

13. Reference BHS Specification 347739; page 47, Item N, Vertical Sortation Unit (VSU)/Vertical Merge Unit (VMU) 1. Vertical Sorter Units as manufactured by: a. G & S Airport Conveyor, b. Glidepath, c. Jervis B. Webb, d. Siemens, e. Vanderlande Industries, Inc. Request that Logan Teleflex, by virtue of its VSU Machine being an Approved BHS Vertical Sort Machine for various BHS Projects, be included as an Approved Equal to this listing.
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

14. Reference BHS Specification 347739; page 49, Item R, 45° Merge 1. 45° merges as manufactured by: a. Portec, Inc., b. Transnorm System, Inc. Request that Daifuku Webb by virtue of its Merge Machines being an Approved BHS Machine for various BHS Projects, be included as an Approved Equal to this listing.
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

15. Reference BHS Specification 347739; page 50, Item U, Sliding Top Inspection Tables 1. Sliding Top Inspection Tables as manufactured by: a. Lucasey, b. Or approved equal 2. Tables using a sliding configuration must have a 48” of slide movement. Request that MORCON, which has supplied Slide Tables for various BHS Projects, be included as an Approved Equal to this listing.
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

16. Reference BHS Specification 347739; page 55, K. Variable Frequency Drives, 1. VFDs/VFD components as manufactured by: a. Lenze. Logan Teleflex requests that NORD (which meets or exceeds all Specification criteria) be included as an Approved VFD.
Answer: Approved.

17. Specs 095100 call for fry reglet trim at the walls and axiom trim in the ceilings; where in the drawings are these items called out?
Answer: The referenced section number is not one provided by the Architect. Axiom trim mentioned in section 09 51 13 is not required for the project.

18. Sheet AE1-102 Keynote 08-0506 calls for steel column protection painted safety yellow-refer to structural. There is no detail on the structural drawings for this column protection. The applicable columns sit on piers that extend 4' above the top of slab. Please request detail from Arch/Eng. for this giving the extent of guard, thickness of material and anchorage to pier.

Answer: Detail added to Sheet S6-001.

19. There appears to be bent plate jambs at the OH door (ref o5/AE6-001) and bent plate head, jamb & sill at the baggage conveyor openings (ref. 4/AE5-021). If these are structural thickness plates and not gauge metal trim, we need a design thickness of the plates and size of rough openings at the baggage conveyor openings.

Answer: These components are gauge metal trim serving as closure pieces for the wall assemblies.

20. Is it possible the owner plans to carry LV and Security here? There are no specifications sections for communications cabling or security listed. Just specifications for the raceways.

Answer: Electrical contractor shall provide junction boxes and raceway only. Low voltage and security wiring and devices will be provided and installed by owner's preferred vendor.

21. Sheet S0-003 – Part 3 Paragraph 3.1.A Testing Agency shall be retained by the Owner….; Part 1 paragraph 1.1.B. – Owner to retain a special inspector…; Section 014500 Paragraph 1.2.A.2. "Inspection and testing services….are to be provided by the owner…"; Section 014529 Paragraph 1.3.A. states "The contractor shall engage a separate agency to serve as a Threshold Inspector.." Please clarify the conflicts in the specifications and the Special Inspection Notes on the Plans. Who provides the testing & inspection cost?

Answer: Section 014529 shall be used to determine who provides testing and inspection costs. Sheet S0-003 has been revised.

22. On drawing sheet E6-001, it shows two 75KVA transformers in the new electrical room. Above panel L-PDP there is a note that says "Panel L-PDP and Transformer provided by others". Please confirm whether or not the other transformer feeding panel L1B is to be provided by others as well or if it is to be provided by the EC.

Answer: Equipment provided and installed by BHS subcontractor. Electrical subcontractor to provide and connect power feed as indicated on plans.

23. Note 2 on sheet ESL-101, refers to a connection to a "Code Blue CB1 Pedestal or equal". Will EC provide this pedestal or will it be FBO?

Answer: Contractor shall provide and install equipment. Provide base per manufacturer's installation instructions.

24. Addendum 3 Question & Answer number 28. Please provide the electrical requirements for the Temporary Heating/Cooling/Humidity controls. What size circuit? Where will this electrical be pulled from?
Answer: Mechanical subcontractor to provide temporary power for temporary equipment.

25. Section 095113 Paragraph 2.3.F. – Is this Perimeter Trim (Axion) required? If so, please provide details and locations on the drawings?
Answer: Axiom perimeter trim is not required for the project.

26. Section 092950 paragraph 2.2.A.4.a. – There are reveals in the existing gypsum board walls – Are these reveals to be matched in the new concourse expansion? Please provide details and layout drawings if they are required. It was stated in the pre-bid that finishes for the new expansion were matched to the existing. Please clarify.
Answer: Reveals in gypsum board walls are only required as shown on revised detail 3/AE2.101.

27. Can "Dens Shield Tile Backer Board" be used in lieu of cement backer board?
Answer: Dens Shield Tile Backer Board is not an acceptable substitution for cement backer board listed in specifications.

28. In the Pre-Bid, there was a lot of discussion about a fabric shade structure over the Employee Break Area A189. It is not shown on the drawings. Please provide a drawing showing the size and shape of the Shade Structure. The power point rendering shows 4 post; Sheet S1-102 shows locations for 8 post foundations (see keynote 07.018); Sheet AE1-102 shows locations for 6 post. Please provide clarification of what the shade structure is to look like. Size appears to be 26' x 42' per the Pre Bid Power Point. Please clarify.
Answer: Sheet AE1-102 will be revised to show 4 posts and indicate size.

29. Substitution Request: for single ply roofing system, Carlisle SynTec Systems' Sure-Flex PVC single-ply roofing system.
Answer: Requested substitution is acceptable as long as some conditions are met. Spec section 07 54 19 has been revised to include these conditions.

30. Please describe the process of how OOG baggage introduced to the system? There is a central (non-screened) line indicated on drawing QM1-100 which is for OOG baggage but the specification (SECTION 347739 – CHECKED BAGGAGE INSPECTION SYSTEM) states to use 39* power bends after the ticketing conveyors which would be unsuitable for OOG baggage.
Answer: OOG bags are introduced to the system at the ticket counter belts.

31. Document (ITB AP 59-20 ADDENDUM No. 3) page 42 shows the "new BHS layout", which differs to all other drawings and phasing drawings within the tender information. Is this to be tendered as an option?
Answer: The "new BHS layout" shown on the PowerPoint presentation page 42 matches Sheet QM1-100.1, which identifies the new BHS along with the future overall plan.

32. Drawing QE1-102.1, Fire/security doors for Oversized Screening (room A187, near column AA-7), Please confirm that the fire/security doors for Oversized Screening operate in standalone mode and they are not controlled by the BHS system.
Answer: Confirmed.

33. Drawings QE1-101.1 and QM7-101, Drawing QM7-101 shows a crossover at TC1-09. Drawing QE1-101.1 does not show a pair of Type 16 Control Stations for a crossover. Please confirm there is a crossover at TC1-09 that requires a pair of Type 16 Control Stations.
Answer: Confirmed.

34. Project Manual_347739_Check Baggage Inspection System, General: Will site parking be provided by the airport or should we assume costs for that?
Answer: Site parking will be provided in the contractor staging and laydown area. If additional parking is needed for contractor/subcontractor personnel beyond the approved laydown area, then arrangements will be made by the Airport without adding any additional contract costs.

35. Project Manual_347739_Check Baggage Inspection System, Part 2-Products-2.01 Mechanical T.1.a.: We request approval of slope plate devices manufactured by Mechanica.
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

36. Project Manual_347739_Check Baggage Inspection System, Part 2-Products-2.01 Mechanical T.1.a.: Will the make-up devices have a clockwise or counter-clockwise rotation?
Answer: Clockwise rotation.

37. Project Manual_347739_Check Baggage Inspection System, Part 2-Products-2.01 Mechanical R.1: We request approval of merge conveyors manufactured by BEUMER.
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

38. Project Manual_347739_Check Baggage Inspection System, General: Is there an allowance we need to carry in our bid for spare parts?
Answer: Yes, refer to the specification page 25, section 1.11.A.1.

39. BHS Electrical Drawing Set Drawing QE5-004: The equipment list on the BHS Network Diagram shows 2 existing ATRs with redundant controllers; however, these are not depicted as existing on the layout drawings. Please clarify the quantity if any of existing ATRs to be recontroled.
Answer: There are no existing ATRs to be controlled. All ATRs are new.

40. BHS Electrical Drawing Set Drawing QM7-102: Catwalk crossover with vertical ladders are indicated for MU2. Should we assume the same is applicable for MU1?
Answer: No, it is not applicable to MU1.

41. Addendum 3 Alternate 1 QM1-100-A: Alternate 1 indicates de-scope of the MU2 line and makeup device. Should this also include one or both ATRs?
Answer: De-scope does not affect the ATR requirement.

42. Is there a requirement for a temporary BHS high level control system when Ticket Counter 3 is enabled and running in temporary configuration? If so, will this be located in its permanent location in the BHS Control Office?
Answer: A temporary HMI to show the temporary configuration is not required by this project. Instead, the new upper level monitors in the BHS control room must show the operational conveyors (e.g., TC3 and sortation through phase 2 to 4) and conveyors in new CBIS. VTC recommends creating two screens (one for temporary day operation and one for the final) during phasing.

43. Please explain the use of Zone Faults? More detailed data is available through the BHS SAC reports and could be used in place of Zone Reports.
Answer: VTC does not understand this request. Please specify referenced specification sections/pages and/or drawing sheets.

44. With the elevated slab poured for the make-up devices is it still necessary for the BHSC to supply impact protection too?
Answer: BHSC to supply impact protection.

45. Can Cognex be an approved vendor for the ATR and the ATR/BMA instead of just the ATR?
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

46. Who is providing cabinetry in the new BHS Control Office?
Answer: BHSC is responsible for providing server lack/cabinet for BHS upper level system and PLC cabinets for the PLCs.

47. Is the Oversize slide required in Phase 1 or 2? The drawings show it in Phase 3, but you may need it for temporary operations in Phase 1 and 2.
Answer: Oversize slide is required in Phase 3.

48. What is the anticipated award date? What is the building ready date for BHS installation of Phase 1 & 2?
Answer: The County anticipates to move forward with the project pending acceptable bids within budget. Following bid evaluation and recommendation for award the Intent to Award is likely to be posted in July 2020. Pending no issues through that process, an anticipated contract would be developed and signed as early as September 2020 with pre-construction and notice to proceed in October 2020.

49. Can Five Star Airport Alliance be approved to supply VSUs and 45-degree merges?
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

50. Is there a location set for the CBRA table mock-up?
Answer: BHSC to coordinate location with Owner.

51. Geo-Tex tubs are identified as the tub manufacture in the specification. The specification calls out the ASL bottom and ASL insert. Geo-Tex can no longer provide the ASL bottom and insert due to material availability. They report a non-slip surface is what they provide now. Will this meet the specification requirements?
Answer: BHSC to provide Geo-Tex's replacement tub.

52. What license is required for the BHS subcontractors to install the conveyor? Is it required before they bid the work?
Answer: The general contractor (GC) should be licensed to perform work in the State of Florida. All other specifications should be met by technical installers that will act as subcontractors to the GC.

53. What are the working hours? Days or nights?
Answer: The Airport does not intend to impose work hour restrictions on the contractor unless localized actions affect the safety or movement of employees or passengers. There may be a few select items that are coordinated as night-specific items during phase changes or other work that would affect operations. However, the phasing is such that any limitations should be minimized, and the intent is to provide as much flexibility for the contractor to make physical progress as possible.

54. Regarding the HAND/OFF/AUTO (HOA) Selector Switch:
a. Are these switches mandatory for each motor/VFD?
b. Or are they only mandatory for unit equipment like VSU, HSU,...?
c. Or do these switches have to be incorporated into the control station for a conveyor section?

Answer: These switches are mandatory for each motor/VFD.

55. Sheet AE7-102 – There are no signs indicated for Toilet Rooms A183, A184, & A188. Normally toilet room signs are required before Certificate of Occupancy can be issued.
Answer: AE7-101 and AE7-102 will be updated to include room signage for A182, A183, A184, and A188.

56. Sheet AE1-101 steps at doors A150B & A150C; Sheet AE1-102 steps at Door A151A; Sheet AE4-001 details 08, 11, & 12/AE4-001; and Sheet S1-101 & S-102 shows recesses at doors A150B (-1.27'), A150C (-0.83'), & A151A (-1.11'). What are the step made of – Concrete of Steel? Please provide details.
Answer: Steps are to be concrete. Details on AE4-001 will be updated to clarify.

57. On sheet AE4-001 detail 02 it states sound absorbing acoustical units are they referring to the ceiling tile called out in the finish schedule or something else. If it something else, please specify what it is.
Answer: Specification 09 51 13 has been revised to include information for the sound absorbing acoustical units.

58. Due to the mechanical & Electrical work on the existing ceiling, is there a warranty on the existing roof system? If so, who holds the warranty? Will cut the existing roof system for new work void any warranty for the roof?
Answer: With the roof approaching 20 years old, there is not an active warranty on the terminal roof at VPS. Although there is not a concern with voiding a warranty, the contractor shall protect the roof from damage, and all areas (new and existing) within the project limits will be inspected for damage and leaks/issues prior to acceptance and throughout the project warranty period. Contractor will be responsible for any damages/repairs to the roofing system for any remaining roofing that is left within the project limits.

59. Sheet AE4-002 – Toilet Accessory Legend – "Note: Refer to Specification Section 10 28 00 for more Information." Please provide Specification Section 10 28 00.
Answer: Section has been previously included in the Release for Bid Set dated 05/15/20.

60. Sheet AE4 -002 – Please provide a Specification Section for Toilet Partitions.
Answer: Section 10 21 13 – PLASTIC TOILET PARTITIONS has been included in the set.

61. Sheet AE4-002 - Toilet Accessory Legend – Items 2 is not shown on the enlarged plans. Are they required?
Answer: Yes, AE4-002 has been revised to include.

62. Sheet AE4-002 - Accessory Plan – Item 1, 2, 6, 13, 14 are not shown in Room A188. Are they required?
Answer: Items 1, 6, 13, and 14 are required. Sheet AE4-002 has been revised to include.

63. Sheet AE4-002 - Accessory Plan – Item 6 is not shown in the handicap toilet of the mens restroom A183. Is it required?
Answer: Item 6 was indicated in the handicap toilet stall in Addendum 3.

64. Detail 3 on bid drawing QM5-006 requires two (2) light curtains for each conveyor crossover to stop the conveyor when flagged or blocked with a lighted mushroom button to restart the conveyor with a delay and alarm. Will photoeyes be acceptable in lieu of the light curtains?
Answer: To ensure safety, the light curtains detect wider range of the blockage (body of person who go across) and suitable for this application. In order to accept substitution with the photoeyes, VTC needs to understand the alternative application in detail and makes sure it does not compromise safety. Therefore, VTC cannot approve the use of photoeyes in this area of application via this addendum.

65. Section X on page 60 of the 347739 BHS specification states “Shaft encoders must be EtherNet/IP absolute encoders”. Please accept the Allen-Bradley RSB-P64AJ/8-30 as an acceptable substitution.
Answer: The proposed shaft encoder part deviates design intention; therefore, it is approved via Addendums for bidding purpose. This subject will be discussed in detail after the project is awarded and the BHSC is on board.

66. Please reference section 347739 2.01 R: Can Siemens be added as a supplier for the 45° Merge?
Answer: Not approved, winning bidder may submit an RFS per the specifications for review.

67. Please reference section 347739 2.01 V: Please confirm the BHS subcontract is responsible for supplying 500 of the low-profile plastic tubs by Geo Tex, Inc.
Answer: Confirmed.

68. Please reference Addendum #3: Addendum 3 only describes two alternates for the project. Are we correct to assume that they are the only two alternates that we will be pricing and not Alternates 3 and 4?
Answer: Yes

69. Please reference Addendum #3: Alternate 1 of Addendum 3 clearly shows eliminating the conveyors and divert associated with the second makeup unit; however, what about the BHS controls equipment that is only necessary because there is a second makeup unit? This would include the SAC, the ATR, queue conveyors CL1-10 through CL1-13, and the shaft encoders for tracking to the eliminated divert. What about the PLC programming associated with the tracking that would only be necessary if there is a second makeup unit?

Answer: Alternate 1 of Addendum 3 eliminates all controls work associated with the deduction, which includes PLC code for the associated equipment and SAC configuration. Hardware of the Controls system will not be deducted as it still needs to satisfy the base scope.

70. Please confirm that the Owner is the generator of all unknown pre-existing hazardous material and will sign transportation manifests as such in the event that abatement is necessary.

Answer: Confirmed. The facility being modified was constructed in 2003 therefore hazardous materials such as asbestos or lead paint should not be an issue during construction. No hazardous materials are known to exist.

71. Please confirm that Owner will indemnify the Contractor for any loss, cost, expense, or fine related to any pre-existing hazardous material.

Answer: Confirmed. There should not be any.

72. Please confirm that Liquidated Damages will be the sole and exclusive remedy for delay. Please consider putting a reasonable cap on Liquidated Damages.

Answer: Liquidated Damages (LDs) are the sole monetary contract avenue in the bid documents to account for time delays and operational costs associated with continued contract management, portering of bags, etc. LDs are established by a standard scale provided by FDOT based on contract value. The specific LD value per day will be stipulated in the construction contract agreement between the Contractor and County. A draft copy of the contract is included within the solicitation.

73. Please confirm a mutual waiver of consequential damages, as listed, will be inserted into the final contract documents: “In no event shall any Indemnified Party or the Contractor be liable to the other for any indirect, special or consequential damages (including, but not limited to, loss of profits, interest, earnings or loss of use) whether arising in contract, tort or otherwise.”

Answer: Contract documents will be addressed with the Okaloosa County Purchasing Department and Legal Counsel once the intent to award is published and protest period completed. A draft copy of the contract is included within the solicitation.

74. Please confirm the contractor is required to pay sales tax on all permanent materials installed on the project.

Answer: Correct, the County will not be purchasing any items, material or equipment, directly for contractor use such that sales tax would be avoided.

75. Sheet AE6-001 – DOOR SCHEDULE – Comments – What does "CR" stand for?

Answer: "CR" abbreviation stands for "Card reader"

76. Sheet AE6-001 – DOOR SCHEDULE – looks incomplete –

a. Door Marks A182A thru A186B do not list – Material for Door; Material for most of the Frames, and finish is <by category>. Please provide the additional information.
b. Door that at indicated as type B which is a door with a narrow lite. The glazing column shows N/A. Please provide glazing type.
c. Finishes for the Doors & Frames – We can assume that the HM frames and doors paint, but can you provide the finish for the wood doors and for the frames and doors that are listed as <By Category>
d. All the Frame Types are listed as Type 1 which is detailed as a hollow metal frame. I would assume that some of these doors are Aluminum storefront type doors.

Answer: a. Missing information will be updated in AE6-001.
b. Glazing type will be included in updated specifications.
c. The finish for the wood doors is to match existing. The exact pattern / color of wood is unknown to the Architect at this time.
d. Correct. Doors within the vestibules are Aluminum storefront doors.

77. Sheet AE2-101 Elevation 3 shows the existing Glazing system to remain. Detail 2/AE5-081 shows the existing mullion (which is an intermediate mullion) supporting the curtain wall system. This needs to be reviewed, do not believe the existing mullion will be able to meet the structural requirements to support the curtain wall. Who is to provide engineering to confirm that the modification to the existing window system will meet all required structural and wind loads?

Answer: As shown in 2/AE5-081, a new structural member is included in the design to support the existing to remain curtain wall. Engineering for the structural member has been provided by the Structural Engineer for the project. The modifications to and associated engineering of the curtain wall itself is to be done as delegated design as described in spec section 08 44 13.

78. The demolition of the existing BHS happens in phase 2 per the drawing QM8-002. Don't we have to finish Phase 2 and test the temporary outbound BHS before the demolition the exiting BHS? Shouldn't the demo of the existing BHS happen in Phase 3?

Answer: Yes, temporary outbound BHS is tested before the demolition of the existing BHS, then after testing the existing BHS is removed.

79. On drawing QM8-002 there is a comment regarding porter of outbound bags from Phase 2 until Phase 4. Who is responsible for portering baggage to the temporary check-in screening at TC3?

Answer: The Airport will be responsible for portering baggage to the temporary check-in screening at TC3.

80. What are the requirements for standby during the conditional acceptance period?

Answer: See specification 347739, section 1.13; specifically, paragraph 3, "Warranties are effective from the Substantial Completion date for each phase as agreed upon by the Owner and BHSC."

81. The Column details on Sheet AE5-041 does show Fireproofing on the Columns, except for the columns at the Vestibule.

a. Do the Columns supporting the Vestibule Roofs require Fireproofing? How are they rated?
b. Do the Columns supporting the Outbound Luggage Roof Assembly require a 1 Hour rating? How are they Rated?

Answer: a. Yes. Columns supporting vestibule roofs shall receive spray applied fire proofing to provide 1-hr rated protection.

b. Yes. Lower portion of column is enclosed in concrete masonry. Above the masonry, column should receive 1-hr rated spray applied fireproofing.

82. Paragraph 1.1.A.2 of Section 078100 Applied Cementitious Fireproofing is "Patching and repair of existing applied Fireproofing."

a. What is the Scope of the patch and Repair of Existing Fireproofing?
b. What areas is this required in?
c. Where are the pictures/video showing existing Conditions of the Existing Fireproofing?
d. What type of Fireproofing was used on the Existing Facility?
e. What is the extent of the areas needing Patching and repair?
f. When will we be able to make site visits to view existing conditions?

Answer: a. Patching/repairing scope is anticipated to only be needed where new construction (connection of new structure or bracing for example) impacts or disturbs existing spray applied fireproofing.

b. The area most likely to be affected would be the new Screening Room (existing Baggage Make-up).

c. No pictures/videos have been provided. A site visit was available to prospective bidders to view existing conditions after the pre-bid conference on 5/28/20.

d. Existing fireproofing appears to be spray applied. Exact manufacturer/product data is unknown to Design Team at this time.

e. The area most likely to be affected would be the new Screening Room (existing Baggage Make-up).

f. A site visit was available to prospective bidders to view existing conditions after the pre-bid conference on 5/28/20.

83. Can more information be provided regarding existing AHU-2?
Answer: See AH-2 on existing drawing excerpts dated 8/5/03 attached (M0.1, M2.1A, M2.1.1A, M2.2.1A)

Attachments: Revised Specifications
Revised Plans
Existing Drawing Excerpts

END OF ADDENDUM 4

1. Defined Terms

Certain additional terms used in the Instruction to Contractors have the meanings indicated below which are applicable to both the singular and plural thereof.

1.1 Contractor – one who submits a Bid directly to Owner as distinct from sub-contractor, who submits a bid to a Contractor

1.2 Issuing Office/Purchasing Department – the office from which the Project Documents are to be issued and where the bid procedures are to be administered.

1.3 Successful Contractor – the lowest, responsible and responsive Contractor to whom Owner (on the basis of Owner's evaluation as hereinafter provided) makes an award.

2. Copies of Project Documents

2.1 Complete sets of the Project Documents may be obtained from BidNet and the Okaloosa County website.

2.2 Complete sets of Project Documents must be used in preparing Bids; neither Owner nor Architect/Engineer assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Project Documents.

2.3 Owner and Architect/Engineer in making copies of Project Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

3. Qualifications of Contractors

To demonstrate qualifications to perform the Work, each Contractor must upon Owner's request, provide detailed written evidence such as financial data, previous experience, present commitments and other such data as may be called for below. Each Bid must contain evidence of Contractors qualification to do business in the state where the Project is located.

4. Examination of Documents and Site

4.1 It is the responsibility of each contractor before submitting a Bid:

4.1.1 To examine thoroughly these documents and other related data identified (including "technical data" referred to below);

4.1.2 To visit the site to become familiar with and satisfy Contractor as to the general, local and site conditions that may affect cost, progress, performance, or furnishing of the Work;
4.1.3 To consider federal, state, and local Laws and Regulations that may affect cost, progress, performance or furnishing of the Work;

5. **Contract Time**: Contractor agrees that Work will be substantially complete **420** calendar days after the date when the (NTP) Contract Time commences to run, and will be completed and ready for final inspection and final payment within **450** calendar days after the date when the (NTP) Contract Time commences to run. In addition to the total contract time, Phases 1 and 2 will be substantially complete and ready to receive/install temporary baggage screening equipment provided by TSA within **300** calendar days.

6. **Liquidated Damages**: Contractor accepts the provisions of the Agreement as to liquidated damages identified in the Okaloosa County Standard Clauses, in the event of failure to achieve substantial completion of the Phase 1 and 2 work scope and the provision above for temporary screening equipment acceptance within the Substantial Completion time and achieve final completion of the work within the Final Completion time as specified in the Agreement.

The following documents are attached to and made a condition of this Bid:

Bid Schedule (BF-8)

Bid Affidavit (BF-10)

Bid Bond. (BF-12)

Required Contractor's Qualification Questionnaire (BF-16)

Form of Non-collusion Affidavit (BF-19)

Certification of Non-Segregated Facilities (BF-21)

Public Entity Crimes (BF-23)

Certificate as to Corporate Principal (BF-27)

Certified Copy of Resolution of Board of Directors (BF-29)

Conflict of Interest Disclosure Form (BF-31)

Drug-Free Workplace Certification (BF-33)

Certification of Contractor Regarding Trench Safety (BF-35)

Indemnification and Hold Harmless (BF-37)

Insurance Compliance (BF-39)

Affidavit – Worker’s Compensation (BF-41)

Recycled Content Form (BF-43)

a. Soil survey of the location of borrow soil materials, samples of existing soil materials, and delivery to the Contractor's Testing Laboratory.
b. Samples of concrete aggregates and delivery to the Contractor's Testing Laboratory.
c. Concrete mix designs as prepared by his concrete supplier.
d. Site-situated storage boxes for concrete cylinders
e. Concrete coring, tests of below strength concrete, and load tests, if ordered by the RPR, Architect, or Engineer.
f. Certification of reinforcing steel and prestressing steel mill order.
g. Certification of structural steel mill order.
h. Certification of portland cement, lime, fly ash.
i. Certification of welders and preparation of Welding Procedure Specifications.
j. Tests, samples, and mock-ups of substitute material where the substitution is requested by the Contractor and the tests are necessary in the opinion of the RPR, Architect or Engineer to establish equality with specified items.
k. The making and testing of concrete cylinders for the purpose of evaluating strength at time of form stripping or for post-tensioning or the time spent evaluating the in situ strength of concrete using the Maturity Method.
l. Any other tests when such costs are required by the Contract Documents to be paid by the Contractor.
m. Concrete Testing and sampling.

5. Payment for Tests of Suspected Deficient Work: If, in the opinion of the Building Official, RPR, Architect, or Engineer, any of the work of the Contractor is not satisfactory, the Contractor shall furnish and pay for all tests that the RPR, Architect, or Engineer deem advisable to determine its proper construction. The RPR shall pay all costs if the tests prove the questioned work to be satisfactory.

1.3 ADDITIONAL CONTRACTOR TESTING RESPONSIBILITIES

A. Threshold Inspection: The Contractor shall engage a separate agency to serve as a Threshold Inspector to provide Threshold Inspection services for the items outlined in the Threshold Inspection Plan. The scope of these services is not included in this section and is to be provided separately as outlined in the Threshold Inspection Plan. These inspections are mandatory for conformance to the legal requirements of the Florida Building Code and shall be in addition to the inspections and tests otherwise defined in this specification.

B. The General Contractor shall engage a Geotechnical Engineer to provide inspection services for the foundations as outlined below in Paragraph 3.10.E.

C. The General Contractor shall provide a copy of the project plans and specifications to the Testing Laboratory prior to the start of construction and prior to any pre- installation meetings.

1.4 CONTRACTOR RESPONSIBILITIES

SECTION 07 54 19 - POLYVINYL CHLORIDE (PVC) MEMBRANE ROOFING SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Adhered polyvinyl chloride (PVC) roofing system.
2. Substrate board.
3. Roof insulation.
4. Cover board.
5. Walkways.

1.2 DEFINITIONS

A. Roofing Terminology: Definitions in ASTM D 1079 and glossary in NRCA The NRCA Roofing Manual: Membrane Roof Systems apply to the work.

1.3 ACTION SUBMITTALS

A. Product Data: Submit technical data for each type of product; including insulation and roof system component fasteners, and a copy of FM Approvals' RoofNav listing.

B. Shop Drawings: Submit roof plans, sections, details, and attachments to other work, including the following:
1. Layout and thickness of insulation.
2. Base flashings and membrane terminations.
3. Flashing details at penetrations.
4. Tapered insulation thickness and slopes.
5. Roof plan showing orientation of steel roof deck and orientation of roof membrane, fastening spacings, and patterns for mechanically fastened roofing system.
6. Insulation fastening patterns for corner, perimeter, and field-of-roof locations.
7. Tie-in with air barrier.

C. Samples: Submit samples for:
1. Roof membrane and flashing, of color required.
2. Walkway pads or rolls, of color required.

D. Wind Uplift Resistance Submittal: Submit for roofing system, indicating compliance with wind uplift performance requirements.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: Submit data for Installer and manufacturer.

B. Manufacturer Certificates:
1. Performance Requirement Certificate: Signed by roof membrane manufacturer, certifying that roofing system complies with requirements.
a. Submit evidence of compliance with performance requirements.

2. Warranty Certificate: Submit certificate signed by roof membrane manufacturer, certifying that materials supplied are acceptable for roofing system warranty.

C. Product Test Reports: For roof membrane and insulation, tests performed by independent qualified testing agency indicating compliance with specified requirements.

D. Evaluation Reports: Submit ICC-ES reports for components of roofing system.

E. Field Test Reports:
1. Fastener pullout test results and manufacturer's revised requirements for fastener patterns.

F. Field quality control reports.

G. Maintenance Data: Submit roofing system data to include in maintenance manuals.

H. Certified statement from existing roof membrane manufacturer stating that existing roof warranty has not been affected by work performed and that the existing warranty is in full effect.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer having minimum 10 years documented experience in the manufacture of roofing systems that is [**UL listed**] [**listed in FM Approvals' RoofNav**] for roofing system identical to the system being installed.

B. Installer Qualifications: Entity having minimum 5 years documented experience, who is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product, and is eligible to receive manufacturer's warranty.

C. Source Limitations: Obtain components for roofing system from roof membrane manufacturer or manufacturers approved by roof membrane manufacturer.

D. Preliminary Roofing Conference: Before starting roof deck construction, conduct conference at site.

E. Preinstallation Roofing Conference: Conduct conference at site.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

D. Handle and store roofing materials, and place equipment in a manner to avoid permanent deflection of deck.

1.7 FIELD CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.8 WARRANTY

A. Total System Warranty: Written warranty signed by manufacturer in which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period.
   1. Warranty includes roofing, base flashings, roof insulation, fasteners, cover boards, substrate board, roofing accessories, and components of roofing system.
   2. Warranty Period 20 years from date of Substantial Completion and shall include coverage for wind speeds up to 100 mph from date of Substantial Completion.

B. Installer’s Warranty: Submit roofing Installer's warranty, signed by Installer, covering its work, including components of roofing system such as roofing, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period:
   1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. General Performance: Installed roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Roof system and flashings shall remain watertight.
   1. Accelerated Weathering: Roof membrane shall withstand 2000 hours of exposure when tested according to ASTM G 152, ASTM G 154, or ASTM G 155.
   2. Impact Resistance: Roof membrane shall resist impact damage when tested according to ASTM D 3746, ASTM D 4272/D 4272M, or the Resistance to Foot Traffic Test in FM Approvals 4470.

B. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roof membrane manufacturer based on testing and field experience.

C. Wind Uplift Resistance: Design roofing system to resist the following wind uplift pressures when tested according to FM Approvals 4474, UL 580, or UL 1897:
   1. Zone 1 (Roof Area Field): 71.4 lbf/sq. ft. (kPa/sq. m).
   2. Zone 2 (Roof Area Perimeter): 119.7 lbf/sq. ft. (kPa/sq. m).
      a. Location: From roof edge to 8 foot inside roof edge.
   3. Zone 3 (Roof Area Corners): 180 lbf/sq. ft. (kPa/sq. m).
      a. Location: 8 foot in each direction from building corner.

4. FM Approvals' RoofNav Listing: Roof membrane, base flashings, and component materials shall comply with requirements in FM Approvals 4450 or FM Approvals 4470 as part of a roofing system and shall be listed in FM Approvals' RoofNav for Class 1 or noncombustible construction, as applicable. Identify materials with FM Approvals Certification markings.
5. Fire/Windstorm Classification: Class 1A-120.
6. Hail Resistance Rating: MH

D. ENERGY STAR Listing: Roofing system shall be listed on the DOE's ENERGY STAR Roof Products Qualified Product List for low slope roof products.

E. Energy Performance: Roofing system shall have an initial solar reflectance of not less than 0.70 and an emissivity of not less than 0.75 when tested according to CRRC-1.

F. Exterior Fire Test Exposure: ASTM E 108 or UL 790, Class A for application and roof slopes indicated; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

G. Fire Resistance Ratings: Comply with fire resistance rated assembly designs indicated. Identify products with appropriate markings of applicable testing agency.

2.2 POLYVINYL CHLORIDE (PVC) ROOFING **A 4**

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Sarnafil Inc.
2. Seaman Corporation.
3. Carlisle SynTec.

B. PVC Sheet: ASTM D 4434, Type II, Grade I, glass fiber reinforced, felt backed.
1. Products: Subject to compliance with requirements, provide the following:
a. Sarnafil Inc.; Sarnafil G410 felt backed. (NOA No. 15-0731.12).
2. Thickness: 72 mils nominal.
3. Exposed Face Color: White.

C. KEE Sheet: ASTM D 6754, fabric reinforced, felt backed.
1. Products: Subject to compliance with requirements, provide the following:
a. Seaman Corporation; FiberTite-XT fleece backed. (NOA No. 15-1026.09).
1) Thickness: 50 mils nominal.
b. Carlisle SynTec; Sure-Flex KEE HP PVC fleece-backed. (NOA No. 16-0404.10)
1) Thickness: 135 mils nominal.
~~2. Thickness: 50 mils nominal.~~
3. Exposed Face Color: White.

2.3 AUXILIARY MEMBRANE ROOFING MATERIALS

A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with roofing.
1. Liquid-type auxiliary materials shall comply with VOC limits of authorities having jurisdiction.

2. Adhesives and sealants that are not on the exterior side of weather barrier shall comply with the following limits for VOC content:
   a. Plastic Foam Adhesives: 50 g/L.
   b. Gypsum Board and Panel Adhesives: 50 g/L.
   c. Multipurpose Construction Adhesives: 70 g/L.
   d. Fiberglass Adhesives: 80 g/L.
   e. Single-Ply Roof Membrane Adhesives: 250 g/L.
   f. Single-Ply Roof Membrane Sealants: 450 g/L.
   g. Nonmembrane Roof Sealants: 300 g/L.
   h. Sealant Primers for Nonporous Substrates: 250 g/L.
   i. Sealant Primers for Porous Substrates: 775 g/L.
   j. Other Adhesives and Sealants: 250 g/L.

B. Sheet Flashing: Manufacturer's standard sheet flashing of same material, type, reinforcement, thickness, and color as sheet membrane.

C. Bonding Adhesive: Manufacturer's standard, urethane- or solvent-based adhesive in low VOC formulation.

D. Edge Metal: Heat-weldable metal sheet, formed from manufacturer's standard unsupported thermoplastic sheet membrane, not less than 30 mils thick, laminated to 0.022-inch-thick G90 galvanized steel sheet, and capable of being formed into a variety of shapes and profiles.

E. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel bars, approximately 1 by 1/8-inch-thick; with anchors.

F. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer.

G. Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.

2.4 ROOF INSULATION **A 4**

A. General: Preformed roof insulation boards manufactured or approved by thermoplastic membrane roofing manufacturer, selected from manufacturer's standard sizes suitable for application, of thicknesses indicated and that produce FM Approvals-approved roof insulation.

B. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, Class 1, Grade 2, glass-fiber mat facer on both major surfaces.
   1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
      a. Sarnafil Inc.
      b. Seaman Corporation.
      c. Carlisle SynTec.
   2. Compressive Strength: 20 psi.
   3. Size: 48 by 48 inches.
   4. Thickness:

a. Base Layer: Not less than 1-1/2 inches.
b. Upper Layer: As required to meet specified R-value.

5. Tapered Insulation: Provide factory-tapered insulation boards Material: Match specified roof insulation.
6. Minimum Thickness: 1/4 inch.
7. Slope:
   a. Roof Field: 1/4 inch per foot unless otherwise indicated on Drawings.
   b. Saddles and Crickets: 1/2 inch per foot unless otherwise indicated on Drawings.

C. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.

2.5 INSULATION ACCESSORIES

A. General: Furnish roof insulation accessories recommended by insulation manufacturer for intended use and compatibility with membrane roofing.

B. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulation and cover boards to substrate, and acceptable to roofing system manufacturer.

C. Insulation Adhesive: Insulation manufacturer's recommended adhesive formulated to attach roof insulation to substrate or to another insulation layer as follows:
1. Bead-applied, low-rise, one-component or multicomponent urethane adhesive.

D. Cover Board: ASTM C 1177/C 1177M, glass-mat, water-resistant gypsum board or ASTM C 1278/C 1278M fiber-reinforced gypsum board.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Georgia-Pacific Gypsum LLC.
   b. National Gypsum Company.
   c. USG Corporation.
2. Thickness: 1/2 inch.
3. Surface Finish: Factory primed.

2.6 WALKWAYS **A4**

A. Flexible Walkways: Factory-formed, double layer, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads or rolls, maximum 36 inches (914 mm) wide, approximately 3/16 inch (5 mm) thick and acceptable to roofing system manufacturer; contrasting color or visually distinctive from roof membrane; minimum 3 inch gap between pads to allow drainage.
1. Products:
   a. Crossgrip XTRA; Sika USA
   b. FTR Crossgrip; Seaman Corporation
   c. Sure-Flex PVC Crossgrip Walkway, Carlisle SynTec.

2.7 ROOF SYSTEM AND COMPONENT ASSEMBLY PROTECTION

A. All roof components and component system installations shall be fully protected against puncture, marring and other damage by materials, personnel, equipment, temporary supports or any other materials, equipment or other construction activities for the full duration of construction and until Final Completion.

B. Protection shall consist of a minimum of 1-inch thick extruded polystyrene board insulation, ASTM C578, Type IV with 3/4-inch CDX plywood cover for the entire roof area where construction activities occur.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements and other conditions affecting performance of the work.
   1. Verify that roof openings and penetrations are in place, curbs are set and braced, and roof drain bodies are securely clamped in place.
   2. Verify that wood blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
   3. Verify that surface plane flatness and fastening of steel roof deck complies with requirements in Section 053100.
   4. Verify that minimum concrete drying period recommended by roofing system manufacturer has passed.
   5. Verify that concrete substrate is visibly dry and free of moisture, and that minimum concrete internal relative humidity is not more than 75 percent, or as recommended by roofing system manufacturer, when tested according to ASTM F 2170.
      a. Test Frequency: One test probe per each 1000 sq. ft. (93 sq. m), or portion thereof, of roof deck, with no fewer than three test probes.
      b. Submit test reports within 24 hours of performing tests.
   6. Verify that concrete curing compounds that will impair adhesion of roofing components to roof deck have been removed.
   7. Verify that joints in precast concrete roof decks have been grouted flush with top of concrete.
   8. Verify that adjacent cementitious wood fiber panels are vertically aligned to within 1/8 inch (3.2 mm) at top surface.

B. Proceed with installation after correcting unsatisfactory conditions.

3.2 PREPARATION

A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing system installation according to roofing system manufacturer's written instructions. Remove sharp projections.

B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.3 ROOFING INSTALLATION

A. Install roofing system according to roofing system manufacturer's written instructions, FM Approvals' RoofNav assembly requirements, and FM Global Property Loss Prevention Data Sheet 1-29.

B. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at end of workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

C. Coordinate installation and transition of roofing system component serving as an air barrier with specified air barriers.

3.4 INSULATION INSTALLATION

A. Coordinate installing roofing system components, so insulation is not exposed to precipitation or left exposed at end of workday.

B. Comply with roofing system and insulation manufacturer's written instructions for installing roof insulation.

C. Install insulation under area of roofing in thickness required to achieve a minimum thermal resistance value of R-30, except at sumps surrounding roof drains.
   1. Install insulation in two or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches in each direction.

D. Installation Over Metal Decking:
   1. Install roof substrate board over metal decking as indicated herein.
   2. Install fully adhered vapor retarder over substrate board.
   3. Install fully adhered layers of insulation with end joints staggered not less than 12 inches in adjacent rows and with long joints continuous at right angle to flutes of decking.
      a. Locate end joints over crests of decking.
      b. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
      c. Make joints between adjacent insulation boards not more than 1/4 inch in width.
      d. Fill gaps exceeding 1/4 inch with spray in place foam insulation compatible with board materials.
      e. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
      f. Adhere base layer of insulation to substrate board using adhesive according to FM Approvals' RoofNav listed roof assembly requirements for specified Windstorm Resistance Classification and FM Global Property Loss Prevention Data Sheet 1-29, as follows:
         1) Set each layer of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining insulation in place.
   4. Install upper layer of insulation and tapered insulation with joints of each layer offset not less than 24 inches from previous layer of insulation.

a. Install with long joints continuous and with end joints staggered not less than 12 inches in adjacent rows.
b. Trim insulation neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
c. Make joints between adjacent insulation boards not more than 1/4 inch in width.
d. Fill gaps exceeding 1/4 inch with spray in place foam insulation compatible with board materials.
e. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
f. Adhere additional layers of insulation to base layer using adhesive according to FM Approvals' RoofNav assembly requirements and FM Global Property Loss Prevention Data Sheet 1-29 for specified Windstorm Resistance Classification, as follows:
    1) Set additional layers of insulation in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining coverboard in place.

3.5 INSTALLATION OF COVER BOARDS

A. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Offset joints of insulation below a minimum of 6 inches in each direction.
    1. Trim cover board neatly to fit around penetrations and projections, and to fit tight to intersecting sloping roof decks.
    2. At internal roof drains, conform to slope of drain sump.
        a. Trim cover board so that water flow is unrestricted.
    3. Cut and fit cover board tight to nailers, projections, and penetrations.
    4. Adhere cover board to substrate using adhesive according to FM Approvals' RoofNav listed roof assembly requirements for specified Windstorm Resistance Classification and FM Global Property Loss Prevention Data Sheet 1-29, as follows:
        a. Set cover board in ribbons of bead-applied insulation adhesive, firmly pressing and maintaining boards in place.

3.6 ADHERED MEMBRANE ROOFING INSTALLATION

A. Adhere membrane roofing over area to receive roofing and install according to membrane roofing system manufacturer's written instructions.

B. Start installation of membrane roofing in presence of membrane roofing system manufacturer's technical personnel.

C. Accurately align membrane roofing and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

D. Membrane Adhesive: Apply to substrate at rate required by manufacturer, and install fabric- or fleece-backed roof membrane.

E. In addition to adhering, mechanically fasten membrane roofing securely at terminations, penetrations, and perimeter of roofing.

F. Apply membrane roofing with side laps shingled with slope of roof deck where possible.

G. Contractor shall ensure installation of membrane is free of wrinkles, fish-mouths or other anomalies in all membranes, related flashings and accessories.

H. Seams: Clean seam areas, overlap membrane roofing, and hot-air weld side and end laps of membrane roofing and sheet flashings according to manufacturer's written instructions to ensure a watertight seam installation.

1. Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of sheet membrane as required by manufacturer.
2. Verify field strength of seams a minimum of twice daily and repair seam sample areas. Retain seam samples for review by Owner, Architect and manufacturer's representative. Samples shall be marked with date and location typical.
3. Repair tears, voids, and lapped seams in roofing that does not comply with requirements.

I. Apply approved urethane sealant over deck drain flange at roof drains and securely seal membrane roofing in place with clamping ring.

3.7 BASE FLASHING INSTALLATION

A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.

B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.

C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

D. Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

3.8 WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products in locations indicated and as follows. Loose lay or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions for compliance with RoofNav Assembly and uplift requirements.

1. For loose laid walkways, provide 2-inch-wide heat welded tabs field fabricated from PVC membrane at regular intervals to prevent dislocation of the walkway materials. Place tabs on both sides of walkway at each end and at segment centers. Loop tabs through openings of the walkway products and heat weld to PVC roof membrane.
2. Install flexible walkways at the following locations and as indicated on Drawings:
   a. Perimeter of each rooftop unit.
   b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
   c. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
   d. Top and bottom of each roof access ladder and ships' ladder.

e. Between each roof access ladder, Ships' Ladder and each rooftop unit location or path connecting rooftop unit locations
f. As required by roof membrane manufacturer's warranty requirements.
g. Provide 6-inch clearance between adjoining pads and rolls.

3.9 FIELD QUALITY CONTROL

A. Manufacturer's Field Services: At the start of the installation, periodically as the Work progresses, and after completion, furnish the services of the roofing manufacturer's technical representative at the job site as necessary to advise on every phase of the Work. As a minimum, furnish full-time attendance during the first 2 work days, at least once every week during installation, and furnish technical assistance to the Installer as may be required. The representative shall examine the roofing substrates before installation of the vapor retarder; and examine the completed vapor retarder installation before it is covered.

1. Vapor retarder: Inspect the vapor retarder prior to and during installation to assure substrate is properly prepared to receive the vapor retarder, full adhesion and manufacturer's quality requirements are maintained throughout the installation period. If vapor retarder is utilized as a temporary roof, the manufacturer's representative shall inspect the vapor retarder prior to the installation of the remaining roof assembly to ensure the integrity of the vapor retarder system. Perform any and all repairs recommended by the manufacturer's representative prior to continuing installation.
   a. Provide indicated roof protection as required by this Section for all areas of installed vapor retarder and temporary roof components.
   b. All penetrations and identified possible breach points shall be repaired by the Contactor at no additional cost to the project.
   c. Significant breach points or other anomalies noted during the review of the vapor retarder may require an additional layer of vapor retarder to be provided by the Contractor at no additional cost to the project as determined by the Architect in consultation with the roofing system manufacturer's representative.
2. Fastener Tests: Manufacturer's representative shall witness Contractor perform two fastener pull out tests per SPRI FX-1 test procedure to verify the integrity of the roofing fasteners and compliance with required performance criteria.
3. Securement Tests: Perform two membrane adhesive pull tests according to SPRI IA-1 to verify the integrity of the roof membrane adhesive and compliance with the required performance criteria.
4. Field Seams: Inspect the field seams to assure manufacturer's quality requirements are maintained throughout the installation period. Each field seam shall be 100% inspected and a written report prepared by the roofing manufacturer's technical representative shall be submitted for review prior to final acceptance.
5. Coordinate final inspections by the roofing membrane Manufacturer shall be coordinated at least two weeks in advance with the Owner, Architect, and roofing consultant so that their attendance can be properly coordinated. Final inspection reports and signed, completed punch list reports by the Manufacturer shall be submitted to the Owner. Submittal of the roofing warranty alone is not acceptable.

B. Testing Agency: Engage a qualified testing agency to perform tests and to inspect substrate conditions, surface preparation, roof membrane application, sheet flashings, protection, and drainage components, and to furnish reports to Architect.
   1. Electronic Field Vector Mapping: Immediately upon completion of the roof system installation the Testing Agency shall survey entire roof area for potential leaks using electronic field vector mapping. Installer shall inform roofing manufacturer, Architect and Owner's representative of the schedule date for EFVM testing.
   2. Installer shall make repairs as recommended by the roofing system manufacturer's recommendations to uphold the warranty at no additional cost to the project.

C. A roof inspection is required by manufacturer before warranty issue. Revise scope of inspection and source of report to a qualified roofing consultant or an independent testing agency and inspection if preferred.

D. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion, in presence of Architect, and to prepare inspection report.

E. Repair or remove and replace components of roofing system where inspections indicate that they do not comply with specified requirements at no additional cost to the project.

F. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.

3.10 PROTECTING AND CLEANING

A. Roof system and component protection installation:
   1. Protect all roof components and partial system installations against puncture and other damage by materials, material staging and transportation, personnel, equipment, temporary supports or any other materials, equipment or other construction activities for the full duration of construction and until Final Completion. Components shall include but not be limited to the vapor retarder or any portion thereof.
   2. Lay specified insulation board over installed roof system or related components for full area. Utilize full size boards without mechanical fasters or adhesive. Stagger all seams at half-board running bond type pattern and cover with 3/4-inch CDX plywood as specified. Plywood cover shall also be placed with staggered seams at half-board running bond type pattern without mechanical fasteners or adhesive. Ensure seams of insulation and plywood are no greater than 1/8 inch in all areas. Provide sand bag weights at seams or other intervals to guard against uplift and shifting of protection materials. Protection shall remain in place for the duration of all construction activities.
   3. When protection is removed, the entire area shall be swept to collect and remove fasteners and other small items which may cause penetrations in the roofing system or components. Remove all foreign items from the roof area and provide thorough cleaning to remove any deleterious items, marring, surface defects or discoloration of the finished system.

B. Protect membrane roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing

for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

C. Correct deficiencies in or remove membrane roofing system that does not comply with requirements; repair substrates; and repair or reinstall membrane roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

D. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

This Page is Intentionally Left Blank

SECTION 08 88 53 - SECURITY GLAZING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Monolithic polycarbonate for the following applications:
   1. Doors.

1.2 DEFINITIONS

A. Glazing Manufacturers: Firms that produce primary glass, monolithic plastic glazing, or fabricated security glazing, as defined in referenced glazing publications.

B. Interspace: Space between lites of air-gap security glazing or insulating security glazing.

1.3 ACTION SUBMITTALS

A. Product Data: Technical data including recommended installation and cleaning data.

B. Samples:
   1. Security Glazing: Submit samples for each type of security glazing; 4-inches square.

C. Security Glazing Schedule: List security glazing types and thickness for each size opening and location. Use same designations indicated on Drawings. Indicate coordinated dimensions of security glazing and construction that receives security glazing, including clearances and glazing channel dimensions.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: Submit data for installers.

B. Product Certificates: Submit manufacturer’s certificates for each type of product indicated.

C. Preconstruction adhesion and compatibility test reports.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: A qualified installer who employs glazing installers for this Project who are certified under the National Glass Association Glazier Certification Program.

B. Source Limitations for Security Glazing: Obtain security glazing from single source from single manufacturer using the same types of lites, plies, interlayers, and spacers for each security glazing type indicated.
   1. Source Limitations for Tinted Glass: Obtain from single source from single primary glass manufacturer for each tint color indicated.

C. Sealant Testing Agency Qualifications: Qualified according to ASTM C 1021 for testing indicated.

D. Preconstruction Adhesion and Compatibility Testing: Test each security glazing type, tape sealant, gasket, glazing accessory, and glazing framing member for adhesion to and compatibility with elastomeric glazing sealants.

1.6 COORDINATION

A. Coordinate glazing channel dimensions to provide necessary bite on security glazing, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Protect security glazing and glazing materials according to manufacturer's written instructions. Prevent damage from condensation, temperature changes, direct exposure to sun, or other causes.

1.8 FIELD CONDITIONS

A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
   1. Do not install glazing sealants when ambient and substrate temperature conditions are outside limits permitted by sealant manufacturer or below 40 degrees F (4.4 degrees C).

1.9 WARRANTY

A. Polycarbonate Sheet: Written warranty signed by Manufacturer in which Manufacturer agrees to replace polycarbonate sheet that deteriorates within specified warranty period. Deterioration of polycarbonate sheet is defined as defects developed from normal use that are not attributed to maintaining and cleaning polycarbonate sheet contrary to manufacturer's written instructions. Defects include yellowing and loss of light transmission.
   1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Security Glazing:
   1. Installed security glazing shall withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss or breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing; or other defects in construction.
   2. Installed security glazing shall withstand security-related loads and forces without damage to the glazing beyond that allowed by referenced standards.

B. Safety Glazing: Where safety glazing is indicated, provide glazing that complies with 16 CFR 1201, Category II.

2.2 SECURITY GLAZING

A. Glazing Publications: Comply with published recommendations of security glazing and glazing material manufacturers and organizations below unless more stringent requirements are indicated.

Refer to these publications for glazing terms not otherwise defined in this Section or in referenced standards.

1. GANA Publications: Glazing Manual.

B. Plastic Glazing Labeling: Identify plastic sheets with appropriate markings of applicable testing and inspecting agency, indicating compliance with required fire test response characteristics.

C. Safety Glazing Labeling: Where safety glazing is indicated, permanently mark glazing with certification label of the Safety Glazing Certification Council or another certification agency acceptable to authorities having jurisdiction. Label shall indicate manufacturer's name, type of glazing, glass thickness, and safety glazing standard with which glazing complies.

D. Fire Test Response Characteristics of Polycarbonate Sheets: As determined by testing polycarbonate sheets identical to those used in security glazing products by a qualified testing agency acceptable to authorities having jurisdiction.

1. Self-ignition temperature of 650 degrees F (343 degrees C) or more when tested according to ASTM D 1929 on plastic sheets in thicknesses indicated for the work.
2. Smoke Developed Index of 450 or less when tested according to ASTM E 84, or smoke density of 75 or less when tested according to ASTM D 2843 on plastic sheets in thicknesses indicated for the Work.
3. Burning extent of 1 inch (25 mm) or less when tested according to ASTM D 635 at a nominal thickness of 0.060 inch (1.52 mm) or thickness indicated for the work.

2.3 POLYCARBONATE SECURITY GLAZING

A. Polycarbonate Sheet: ASTM C 1349, Appendix X1, Type II, coated, mar resistant, UV stabilized polycarbonate with coating on exposed surfaces and Type I, standard, UV stabilized polycarbonate where no surfaces are exposed.

2.4 GLAZING SEALANTS

A. Compatibility: Provide glazing sealants that are compatible with one another and with other materials they contact, including security glazing, seals of insulating security glazing and air gap security glazing, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

1. Suitability: Comply with sealant and security glazing manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.
2. Colors of Exposed Glazing Sealants: Selected by Architect.

B. Security Sealant: Nonsag, tamper resistant sealant for joints with low movement complying with ASTM C 920, Grade NS, Class 12.5 or 25, Use NT, and with a Shore A hardness of at least 45 when tested according to ASTM C 661.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    a. BASF Corp. - Construction Chemicals.
    b. Pecora Corporation.

2.5 GLAZING TAPES

A. Back Bedding Mastic Glazing Tapes: Preformed, butyl based, 100 percent solids elastomeric tape; nonstaining and nonmigrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and security glazing manufacturers for application indicated; and complying with ASTM C 1281 and AAMA 800 for products indicated:
   1. AAMA 806.3 tape, for glazing applications in which tape is subject to continuous pressure.

2.6 MISCELLANEOUS GLAZING MATERIALS

A. Provide products of material, size, and shape complying with referenced glazing standard, requirements of manufacturers of security glazing and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.

B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.

2.7 FABRICATION OF SECURITY GLAZING

A. Fabricate security glazing in sizes required to fit openings indicated, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine framing for security glazing for compliance with the following:
   1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
   2. Minimum required face or edge clearances.
   3. Minimum required bite.
   4. Effective sealing between joints of framing members.

B. Proceed with installation after correcting unsatisfactory conditions.

3.2 PREPARATION

A. Clean glazing channels and other framing members receiving security glazing immediately before glazing. Remove coatings not firmly bonded to substrates.

3.3 GLAZING

A. Comply with combined written instructions of manufacturers of security glazing, sealants, gaskets, and glazing materials unless more stringent requirements are indicated, including those in referenced glazing publications.

B. Protect edges of security glazing from damage during handling and installation. Remove damaged security glazing from Project site and legally dispose of off Project site. Damaged security glazing includes units with edge or face damage or other imperfections that, when installed, could weaken security glazing and impair performance and appearance.

C. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.

D. Do not exceed edge pressures stipulated by security glazing manufacturers for installing lites.

3.4 SEALANT GLAZING (WET)

A. Install continuous spacers, or spacers combined with cylindrical sealant backing, between security glazing and glazing stops to maintain face clearances and to prevent sealant from extruding into glazing channel and blocking weep systems. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.

B. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to security glazing and channel surfaces.

C. Tool exposed surfaces of sealants to provide a substantial washaway from security glazing.

3.5 CLEANING AND PROTECTION

A. Immediately after installation remove nonpermanent labels and clean surfaces.

B. Protect security glazing from contact with contaminating substances resulting from construction operations, including weld splatter. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains.
   1. If, despite such protection, contaminating substances do come into contact with security glazing, remove substances immediately as recommended in writing by security glazing manufacturer. Remove and replace security glazing that cannot be cleaned without damage.

C. Wash security glazing on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash security glazing as recommended in writing by security glazing manufacturer.

3.6 MONOLITHIC POLYCARBONATE SECURITY GLAZING SCHEDULE

A. Security Glazing Type SG: Monolithic polycarbonate with mar resistant coating on both surfaces.
   1. Detention Security Grade: Grade 4 according to ASTM F 1915 torch and small blunt impactor test.
   2. Thickness: 1/2 inch (12.7 mm).

END OF SECTION

This Page is Intentionally Left Blank

SECTION 09 51 13 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY **A 4**

A. Section Includes:
1. Acoustical ceiling panels and suspension system.
2. Perimeter trim.
3. **Sound Absorbing Ceiling Units.**
4. **Acoustical Sealant.**

1.2 ACTION SUBMITTALS

A. Product Data: Technical data for each ceiling panel and gird component with installation instructions indicating special procedures, and perimeter conditions requiring special attention.

B. Samples: Submit 12 inches by 12 inches (300 mm by 300 mm) samples illustrating material and finish of acoustical units; submit 12 inch (300 mm) long sample of each suspension system main runner, cross runner, edge trim, and retention clips.
1. Acoustical Panels: Set of 12 inches by 12 inches (300 mm by 300 mm) Samples of each type, color, pattern, and texture.
2. Exposed Suspension System Members, Moldings, and Trim: Set of 12 inch (300 mm) long Samples of each type, finish, and color.

C. Certificate: Submit manufacturer's certification that suspension system is capable of supporting light fixtures, grilles and acoustical panels.

1.3 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:
1. Ceiling suspension system members.
2. Structural members to which suspension systems will be attached.
3. Method of attaching hangers to building structure.
   a. Furnish layouts for cast in place anchors, clips, and other ceiling attachment devices whose installation is specified in other Sections.
4. Carrying channels or other supplemental support for hanger wire attachment where conditions do not permit installation of hanger wires at required spacing.
5. Size and location of initial access modules for acoustical panels.
6. Items penetrating finished ceiling and ceiling-mounted items including the following:
   a. Lighting fixtures.
   b. Diffusers.
   c. Grilles.
   d. Speakers.
   e. Sprinklers.
   f. Access panels.
   g. Perimeter moldings.
7. Show operation of hinged and sliding components covered by or adjacent to

B. Product Test Reports: Submit for each acoustical panel ceiling, for tests performed by manufacturer.

C. Evaluation Reports: Submit ICC-ES report for each acoustical panel ceiling suspension system.

D. Field quality control reports.

1.4 QUALITY ASSURANCE

A. Qualifications:
1. Grid Manufacturer: Entity having minimum 5 years documented experience who specializes in manufacturing ceiling grids.
2. Acoustical Unit Manufacturer: Entity having minimum 5 years documented experience who specializes in manufacturing acoustical units.
3. Installer: Entity having minimum 5 years documented experience who employs trained and experienced installers.

B. Source Limitations:
1. Acoustical Ceiling Panel: Obtain each type through one source from a single manufacturer.
2. Suspension System: Obtain each type through one source from a single manufacturer.

C. Preinstallation Conference: Conduct conference at site.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver acoustical panels, suspension system components, and accessories to site and store in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.

C. Handle acoustical panels carefully to avoid chipping edges or damaging units in any way.

1.6 FIELD CONDITIONS

A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
1. Pressurized Plenums: Operate ventilation system for not less than 48 hours before beginning acoustical panel ceiling installation.

B. Coordinate layout and installation of acoustical ceiling units and suspension system components with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire suppression system components (if any) and partition system (if any).

1.7 EXTRA MATERIALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
1. Acoustical Ceiling Units: Full size panels equal to 2 percent of quantity installed.

2. Suspension System Components: Quantity of each exposed component equal to 2 percent of quantity installed.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Acoustical Panel Standard: Provide ceiling panels complying with ASTM E 1264 and designated by type, form, pattern, acoustical rating, and light reflectance unless otherwise indicated.

B. Surface Burning Characteristics: Ceiling panels with surface burning characteristics complying with IBC Chapter 8 and ASTM E 1264 for Class A materials determined by testing identical products in accordance with ASTM E 84:
1. Flame Spread Index: Class A according to ASTM E 1264.
2. Smoke Developed Index: 50 or less.

2.2 ACOUSTICAL PANELS

A. Manufacturer: Subject to compliance with requirements, provide ceiling panels and grid systems by one of the following:
1. Acoustic Ceiling Panel:
a. Armstrong World Industries, Inc.

B. Classification: Standard and fire resistance rated panels.

C. Acoustical Panel: **ACT 1.**
1. Product: Ultima 1912 Beveled.
2. Nominal Size: 24 inch by 24 inch by 5/8 inch (610 mm by 610 mm by 15 mm).
3. Composition: Wet formed mineral fiber, ASTM E 1264, Class A.
4. Finish: Factory applied vinyl latex paint.
5. Color: White.
6. Ceiling Attenuation Class: 35 db.
7. Noise Reduction Coefficient: 0.75.
8. Light Reflectance: LR-1, over 80 percent.
9. Edge: Tegular.
10. Pattern: Type IV, Form 2, E.

D. Antimicrobial Treatment: Broad spectrum, antimicrobial formulation that inhibits fungus, mold, mildew, and gram-positive and gram-negative bacteria and showing no mold, mildew, or bacterial growth when tested according to ASTM D 3273, ASTM D 3274, or ASTM G 21 and evaluated according to ASTM D 3274 or ASTM G 21.

2.3 METAL SUSPENSION SYSTEM

A. Manufacturer: Subject to compliance with requirements, provide ceiling panels and grid systems by one of the following:
1. Concealed and Exposed Suspension Grid:
a. Armstrong World Industries, Inc.

B. Metal Suspension System Standard: Provide direct hung, metal suspension system and accessories according to ASTM C 635/C 635M and designated by type, structural classification, and finish indicated.
   1. High Humidity Finish: Where indicated, provide coating tested and classified for severe environment performance according to ASTM C 635/C 635M.

C. Standard Exposed Tee Grid - Ceiling Grid Type 1: ASTM C 635, non-fire-rated.
   1. Structural Classification: Intermediate duty system.
   2. End Condition of Cross Runners: Override (stepped) or butt edge type.
   3. Face Design: Flat, flush.
   4. Cap Material: Commercial quality cold rolled steel with galvanized coating.
   5. Face Flange Width: 9/16 inch.
   6. Exposed Finish: Baked on enamel, white satin finish matching ceiling panel color.
   7. Products: Subject to compliance with requirements, provide products of one of the following:
      a. Suprafine by Armstrong World Industries.

D. Rough Suspension: Galvanized steel carrying channels and hangers, sized and type to suit application and to rigidly secure complete acoustic unit ceiling system, with maximum deflection of L/360.

E. Grid Accessories: Stabilizer bars, furring clips, splices, retention clips, and edge moldings as required to complete and compliment suspended ceiling grid system.

F. Perimeter Trim: Extruded aluminum alloy 6063 trim channel, 6 inch (150 mm) wide face with 3/4 inch (19 mm) horizontal legs, straight or curved sections with special bosses formed for attachment to the tee bar connection clip or hanging clip; commercial quality, extruded aluminum, factory applied baked polyester paint.
   1. Acceptable Product:
      a. Axiom by Armstrong.
      b. Compässo Elite by USG.

2.4 SOUND-ABSORBING CEILING UNITS A 4

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Decoustics Limited; a CertainTeed Ceilings company.
   2. Kinetics Noise Control, Inc.

B. Sound Absorbing Ceiling Units:
   1. Basis-of-Design Product: Subject to compliance with requirements, provide Kinetics Noise Control, Inc.; Quiet Tile.
   2. Sound-Absorbing Ceiling Panels: Manufacturer's standard mineral-fiber board facing panel laminated to a gypsum board backing material with a viscoelastic sound dampening adhesive.
   3. Panel Construction:
      Facing Panel: Complying with ASTM E 1264 for type, form, and pattern as follows:

1) **Basis-of-Design Product: Subject to compliance with requirements, provide USG Interiors, Inc.; Mars ClimaPlus, or comparable product by one of the following:**
Armstrong World Industries, Inc.
CertainTeed Corp.
Chicago Metallic Corporation.
2) **Type and Form: Type III, mineral base with membrane-faced overlay; Form 1 and 2.**
3) **Pattern: E (lightly tectured), G (smooth).**

Core: Gypsum board material weighing 1.80 lbs. per sq. ft., minimum.
Panel Adhesive: Sound deadening, viscoelastic layer, factor bonding the facing panel to the gypsum board core.

4. **Color: White.**
5. **LR: Not less than 0.82.**
6. **NRC: Not less than 0.75.**
7. **CAC: Not less than 49.**
8. **Edge/Joint Detail: Square.**
9. **Thickness: 1-1/16 inch (30 mm).**
10. **Modular Size: 24 by 24 inches (610 by 610 mm).**
11. **Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical panels treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold, mildew, and gram-positive and gram-negative bacteria and showing no mold, mildew, or bacterial growth when tested according to ASTM D 3273 and evaluated according to ASTM D 3274 or ASTM G 21.**

2.5 METAL SUSPENSION SYSTEM FOR SOUND-ABSORBING CEILING UNITS A 4

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. **Armstrong World Industries, Inc.**
2. **CertainTeed Corp.**
3. **Chicago Metallic Corporation.**
4. **USG Interiors, Inc.; Subsidiary of USG Corporation.**

B. Metal Suspension System:
1. **Basis-of-Design Product: Subject to compliance with requirements, provide USG Interiors, Inc.; DX/SXL, or comparable product by one of the following:**
2. **Wide-Face, Capped, Double-Web, Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet; prepainted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 (Z90) coating designation; with prefinished 15/16-inch- (24-mm-) wide metal caps on flanges.**
Structural Classification: Heavy-duty system.
End Condition of Cross Runners: Override (stepped) or butt-edge type.
Face Design: Flat, flush.
Cap Material: Steel or aluminum cold-rolled sheet.
Cap Finish: Painted white.

~~2.4~~ **2.6** ACCESSORIES

C. Attachment Devices: Size for five times the design load indicated in ASTM C 635/C 635M, Table 1 Direct Hung unless otherwise indicated. Comply with seismic design requirements.
   1. Anchors in Concrete: Anchors of type and material indicated below, with holes or loops for attaching hangers of type indicated and with capability to sustain, without failure, a load equal to five times that imposed by ceiling construction, determined by testing according to ASTM E 488/E 488M or ASTM E 1512 as applicable, conducted by a qualified testing and inspecting agency.
      a. Type: Post-installed expansion or Post-installed bonded anchors.
      b. Corrosion Protection: Carbon steel components zinc plated according to ASTM B 633, Class SC 1 (mild) service condition.
   2. Power Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion resistant materials, with clips or other accessory devices for attaching hangers of type indicated and with capability to sustain, without failure, a load equal to 10 times that imposed by ceiling construction, as determined by testing according to ASTM E 1190, conducted by a qualified testing and inspecting agency.

D. Wire Hangers, Braces, and Ties: Provide wires:
   1. Zinc Coated, Carbon Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
   2. Stainless Steel Wire: ASTM A 580/A 580M, Type 304, nonmagnetic.
   3. Size: Wire diameter sufficient for its stress at three times hanger design load (ASTM C 635/C 635M, Table 1 Direct Hung) will be less than yield stress of wire, but not less than 0.106-inch (2.69 mm) diameter wire.

E. Flat Hangers: Mild steel, zinc coated or protected with rust inhibitive paint.

F. Angle Hangers: Angles with legs not less than 7/8-inch (22 mm) wide; formed with 0.04 inch (1 mm) thick, galvanized steel sheet complying with ASTM A 653/A 653M, G90 (Z275) coating designation; with bolted connections and 5/16 inch (8 mm) diameter bolts.

~~2.4~~ **2.7** METAL EDGE MOLDINGS AND TRIM

G. Roll Formed, Sheet Metal Edge Moldings and Trim: Type and profile necessary for edges and penetrations that comply with design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension-system runners.
   1. Edge moldings shall fit acoustical panel edge details and suspension systems indicated and match width and configuration of exposed runners unless otherwise indicated.
   2. For lay in panels with reveal edge details, provide stepped edge molding that forms reveal of same depth and width as that formed between edge of panel and flange at exposed suspension member.
   3. For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.

2.8 ACOUSTICAL SEALANT A 4

A. Acoustical Sealant: Manufacturer's standard sealant complying with ASTM C 834 and effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.
   1. Exposed and Concealed Joints: Nonsag, paintable, nonstaining latex sealant.

2. Concealed Joints: Nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic-rubber sealant.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut for compliance with requirements that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical panel ceilings.

B. Examine acoustical panels before installation. Reject acoustical panels that are wet, moisture damaged, or mold damaged.

C. Proceed with installation after correcting unsatisfactory conditions.

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less than half width panels at borders unless otherwise indicated, and comply with layout shown on reflected ceiling plans.

B. Layout openings for penetrations centered on the penetrating items.

3.3 INSTALLATION

A. Install acoustical panel ceilings according to ASTM C 636/C 636M and manufacturer's written instructions.

B. Exposed Grid Suspension System: Suspend ceiling hangers from building's structural members:
1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
2. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension-system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.
3. Secure wire hangers to ceiling suspension members and to supports above with a minimum of three tight turns. Connect hangers directly to structure or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
4. Secure flat, angle, channel, and rod hangers to structure, including intermediate framing members, by attaching to inserts, eye screws, or other devices that are secure and appropriate for both the structure to which hangers are attached and the type of hanger involved. Install hangers in a manner that will not cause them to deteriorate or fail due to age, corrosion, or elevated temperatures.
5. Do not support ceilings directly from permanent metal forms or floor deck. Fasten hangers to cast in place hanger inserts, post-installed mechanical or adhesive anchors, or power actuated fasteners that extend through forms into concrete.
6. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.

7. Do not attach hangers to steel deck tabs.
8. Do not attach hangers to steel roof deck. Attach hangers to structural members.
9. Space hangers not more than 48 inches (1220 mm) o.c. along each member supported directly from hangers unless otherwise indicated; provide hangers not more than 8 inches (200 mm) from ends of each member.
10. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards.

C. Edge Moldings: Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.
1. Apply acoustical sealant in a continuous ribbon concealed on back of vertical legs of moldings before they are installed.
2. Screw attach moldings to substrate at intervals not more than 16 inches (400 mm) o.c. and not more than 3 inches (75 mm) from ends. Miter corners accurately and connect securely.
3. Do not use exposed fasteners, including pop rivets, on moldings and trim.

D. Install suspension system runners to be square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

E. Form expansion joints to accommodate plus/minus 1-inch (25 mm) movement. Maintain visual closure.

F. Acoustical Panels: Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide precise fit.
1. Arrange directionally patterned acoustical panels:
   a. As indicated on reflected ceiling plans.
2. For square edged panels, install panels with edges fully hidden from view by flanges of suspension system runners and moldings.
3. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.
4. Where round obstructions occur, provide preformed closers to match edge molding.

3.4 ERECTION TOLERANCES

A. Suspended Ceilings: Install main and cross runners level to a tolerance of 1/8 inch in 12 feet (3 mm in 3.6 m), noncumulative.

B. Moldings and Trim: Install moldings and trim to substrate and level with ceiling suspension system to a tolerance of 1/8 inch in 12 feet (3 mm in 3.6 m), noncumulative.

3.5 FIELD QUALITY CONTROL

A. Perform the following tests and inspections of completed installations of acoustical panel ceiling hangers and anchors and fasteners in successive stages and when installation of ceiling suspension systems on each floor has reached 20 percent completion, but no panels have been installed. Do not proceed with installations of acoustical panel ceiling hangers for the next area until test results for previously completed installations of acoustical panel ceiling hangers show compliance with requirements.
1. Within each test area, testing agency will select one of every 10 power actuated fasteners and post-installed anchors used to attach hangers to concrete and will test them for 200 lbf

(890 N) of tension; it will also select one of every two post-installed anchors used to attach bracing wires to concrete and will test them for 440 lbf (1957 N) of tension.

2. When testing discovers fasteners and anchors that do not comply with requirements, testing agency will test those anchors not previously tested until 20 pass consecutively and then will resume initial testing frequency.

B. Acoustical panel ceiling hangers, anchors, and fasteners will be considered defective if they do not pass tests and inspections.

C. Prepare test and inspection reports.

3.6 CLEANING

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage.

B. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION

This Page is Intentionally Left Blank

SECTION 10 21 13 - PLASTIC TOILET PARTITIONS A 4 (Entire Section)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Solid plastic toilet partitions configured as toilet enclosures, and urinal screens.

1.2 ACTION SUBMITTALS

A. Product Data: Technical data including construction details, material descriptions, dimensions of individual components and profiles, and finishes for toilet compartments.

B. Shop Drawings: Submit plans, elevations, sections, details, and attachment details.
1. Show locations of cutouts for compartment-mounted toilet accessories.
2. Show locations of centerlines of toilet fixtures.
3. Show locations of floor drains.

C. Samples: Upon requires of Architect, submit actual sample of finished products for each type of toilet compartment indicated.
1. Size: 6 inch (152 mm) square, of same thickness indicated for work.
2. Include each type of hardware and accessory.

D. Product Schedule: Submit schedule prepared by or under the supervision of supplier, detailing location and selected colors for toilet compartment material.

1.3 INFORMATIONAL SUBMITTALS

A. Certificates:
1. Product Certificates: Submit for each type of toilet compartment by manufacturer.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance Data: Submit data to include in maintenance manuals.

1.5 COORDINATION

A. Coordinate requirements for blocking, reinforcing, and other supports concealed within wall.

1.6 FIELD CONDITIONS

A. Field Measurements: Verify actual locations of toilet fixtures, walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements, and coordinate before fabrication.

1.7 WARRANTY

A. Written warranty signed by manufacturer in which manufacturer agrees to repair or replace components of toilet enclosure units that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Structural failures including detachment of components from each other or from the substrates, delamination, and permanent deformation beyond normal use.
      b. Deterioration of metals, metal finishes, plastics, and materials beyond normal use.
   2. Warranty Period: Five years from date of Substantial Completion.

1.8 EXTRA MATERIALS

A. Extra Stock Material: Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Door Hinges: One hinge(s) with associated fasteners.
   2. Latch and Keeper: One latch(es) and keeper(s) with associated fasteners.
   3. Door Bumper: One bumper(s) with associated fasteners.
   4. Door Pull: One door pull(s) with associated fasteners.
   5. Fasteners: 10 fasteners of each size and type.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Fire Performance: Tested in accordance with, and pass the acceptance criteria of, NFPA 286.

B. Surface Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
   1. Flame Spread Index: 25 or less.
   2. Smoke Developed Index: 450 or less.

C. Accessibility Requirements: Comply with applicable requirements.
   1. U.S. Architectural and Transportation Barriers Compliance Board Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG) 2010.
   2. ICC/ANSI A117.1 Accessible and Useable Building and Facilities.
   3. Florida Accessibility Standards.

2.2 SOLID PLASTIC TOILET PARTITIONS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Accurate Partitions Corp., an ASI Group Company.
   2. AJW Architectural Products.
   3. American Sanitary Partition Corporation.
   4. Ampco by AJW.
   5. General Partitions Mfg. Corp.

6. **Global Partitions Corp., an ASI Group Company.**
7. **Hadrian Manufacturing Inc.**
8. **Marlite.**
9. **PSISC.**
10. **Scranton Products.**
11. **Weis-Robart Partitions, Inc.**

B. Toilet Enclosure Style: Floor anchored.

C. Urinal Screen Style: Wall hung with floor-anchored pilaster..

D. Door, Panel, and Pilaster Construction: Solid, high density polyethylene (HDPE) panel material, not less than 1 inch (25 mm) thick, seamless, with eased edges, no sightline system, and with homogenous color and pattern throughout thickness of material.
1. **Integral Hinges: Configure doors and pilasters to receive integral hinges.**
2. **Heat Sink Strip: Continuous, extruded aluminum strip fastened to exposed bottom edges of solid-plastic components to hinder malicious combustion.**
3. **Color and Pattern: Match colors and patterns of existing toiler room partitions.**

E. Pilaster Shoes and Sleeves (Caps): Polymer.
1. **Polymer Color and Pattern: Matching pilaster.**

F. Urinal Screen Post: Post design of material matching the thickness and construction of pilasters; with shoe and sleeve (cap) matching that on the pilaster.

G. Brackets (Fittings):
1. **Full Height (Continuous) Type: Standard design; polymer or extruded aluminum (to match existing).**
   a. **Polymer Color and Pattern: Matching panel.**

2.3 HARDWARE AND ACCESSORIES

A. Hardware and Accessories, Standard Duty: Operating hardware and accessories.
1. **Material: Chrome plated zamac.**
2. **Hinges: Continuous, cam type that swings to a closed or partially open position, allowing emergency access by lifting door.**
3. **Latch and Keeper: Surface mounted latch unit, designed for emergency access, and with combination rubber faced door strike and keeper. Provide units comply with regulatory requirements for accessibility at compartments designated as accessible.**
4. **Coat Hook: Combination hook and rubber tipped bumper, sized to prevent inswinging door from hitting compartment mounted accessories.**
5. **Door Bumper: Rubber tipped bumper at outswinging doors.**
6. **Door Pull: Standard unit at outswinging doors complying with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible.**

B. Hardware and Accessories, Heavy Duty: Heavy duty operating hardware and accessories.
1. **Hinges: Minimum 0.062 inch (1.59 mm) thick stainless steel continuous, cam type that swings to a closed or partially open position, allowing emergency access by lifting door. Mount with through bolts.**

2. **Latch and Keeper: Heavy duty, surface mounted, cast stainless steel latch unit, designed to resist damage due to slamming, with combination rubber faced door strike and keeper, and with provision for emergency access. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible. Mount with through bolts.**
3. **Coat Hook: Heavy duty combination cast stainless steel hook and rubber tipped bumper, sized to prevent inswinging door from hitting compartment mounted accessories. Mount with through bolts.**
4. **Door Bumper: Heavy duty, rubber tipped, cast stainless steel bumper at outswinging doors. Mount with through bolts.**
5. **Door Pull: Heavy duty, cast stainless steel pull at outswinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible. Mount with through bolts.**

C. Anchorages and Fasteners: Standard exposed fasteners of stainless steel, finished to match the items that are being secured, with theft resistant type heads. Provide sex type bolts for through bolt applications. For concealed anchors, use stainless steel, hot dip galvanized steel, or other rust resistant, protective coated steel compatible with related materials.

2.4 MATERIALS

A. Aluminum Castings: ASTM B26/B26M.

B. Aluminum Extrusions: ASTM B221 (ASTM B221M).

C. Stainless Steel Sheet: ASTM A240/A240M or ASTM A666, Type 304, stretcher leveled standard of flatness.

D. Stainless Steel Castings: ASTM A743/A743M.

E. Zamac: ASTM B86, commercial zinc alloy die castings.

2.5 FABRICATION

A. Fabrication: Fabricate toilet compartment components to sizes indicated. Coordinate requirements and provide cutouts for through-partition toilet accessories where required for attachment of toilet accessories.

B. Overhead Braced Units: Provide corrosion resistant supports, leveling mechanism, and anchors at pilasters to suit floor conditions. Provide shoes at pilasters to conceal supports and leveling mechanism.

C. Floor Anchored Units: Provide corrosion resistant anchoring assemblies with leveling adjustment nuts at pilasters for structural connection to floor. Provide shoes at pilasters to conceal anchorage.

D. Ceiling Hung Units: Provide corrosion resistant anchoring assemblies with leveling adjustment nuts at pilasters for connection to structural support above finished ceiling. Provide assemblies that support pilasters from structure without transmitting load to finished ceiling. Provide sleeves (caps) at tops of pilasters to conceal anchorage.

E. Floor and Ceiling Anchored Units: Provide corrosion resistant anchoring assemblies with leveling adjustment nuts at tops and bottoms of pilasters. Provide shoes and sleeves (caps) at pilasters to conceal anchorage.

F. Urinal Screen Posts: Provide corrosion resistant anchoring assemblies with leveling adjustment nuts at bottoms of posts. Provide shoes and sleeves (caps) at posts to conceal anchorage.

G. Door Size and Swings: Unless otherwise indicated, provide 24 inch (610 mm) wide, inswinging doors for standard toilet compartments and 36 inch (914 mm) wide, outswinging doors with a minimum 32 inch (813 mm) wide, clear opening for compartments designated as accessible.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions for compliance with requirements for fastening, support, alignment, operating clearances, and other conditions affecting performance of the Work.
1. Confirm location and adequacy of blocking and supports required for installation.

B. Proceed with installation after correcting unsatisfactory conditions.

3.2 INSTALLATION OF PLASTIC TOILET COMPARTMENTS

A. Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
1. Maximum Clearances:
a. Pilasters and Panels: 1/2 inch (13 mm).
b. Panels and Walls: 1 inch (25 mm).
2. Full Height (Continuous) Brackets: Secure panels to walls and to pilasters with full height brackets.
a. Locate bracket fasteners, so holes for wall anchors occur in masonry or tile joints.
b. Align brackets at pilasters with brackets at walls.

B. Floor Anchored Units: Set pilasters with anchors penetrating not less than 2 inches (51 mm) into structural floor unless otherwise indicated in manufacturer's written instructions. Level, plumb, and tighten pilasters. Hang doors and adjust, so tops of doors are level with tops of pilasters when doors are in closed position.

C. Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.

3.3 ADJUSTING

A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on inswinging doors

to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on outswinging doors to return doors to fully closed position.

END OF SECTION

K. Area 2, Zone 7 – CBRA

1. Level 3 – Explosive Trace Detection (ETD) Screening: All Alarmed, Error, Lost-In-Track, missed diverts, OOG bags, and unresolved OSR bags, must be transported to the CBRA.
2. Bags must be delivered to the CBRA utilizing queues. CBRA queuing method must follow functionalities described in PGDS.
3. Bags must be tracked on the alarm line queues arriving at the designated search work stations. Bags arriving on the queue may display an "unknown" status on the Bag Removal Point (BRP) HMI.
4. Bags with "unknown" status will be carted to transport baggage from CBRA to reinsert belt.
5. Sequence of CBRA operation must meet procedures described in PGDS.
6. After screening the bag, the TSO will either "Alarm" or "Clear" the bag.
    a. Alarmed Bags must be processed in accordance with the local Law Enforcement Officer (LEO) procedures.
    b. Cleared Bags must be placed on the ALCL conveyor for transport to the baggage make-up area. The bag must be logged in the BDR as an "ETD Cleared" bag, along with the Workstation ID.

L. Area 3 – Cleared Baggage Subsystem

1. The Cleared Baggage Subsystem consists of:
    a. Level 1 (EDS) Clear Decision Point to Make-up Area
    b. Level 2 (OSR) Clear Decision Point to Make-up Area
    c. Level 3 (ETD) Clear Lines to Make-up Area
2. Primary sortation ATR through secondary sortation to individual make-up or sort pier devices.
    a. The primary sortation system consists of an ATR identifying the sort destination via the IATA bar code utilized on the bag tag.
    b. Cleared bags which read correctly are directed to a divert point to be transported to the appropriate make-up device or sort pier.
    c. In the event of a no-read by the ATR, the bag must be identified as no-read in the BDR, and sent to the manual encode station, the default make-up device, or the sort pier.

PART 2 - PRODUCTS

2.01 MECHANICAL

A. Drives

1. Motors
    a. All motors as manufactured by:
        1) Lenze 8400 Motec
A3 2) SEW
A4 3) Nord
    b. General
        1) The conveyors must be driven by AC induction motors that conform to NEMA standards.

2) Conveyors designed to be utilized as queues or in high cycle applications must have high efficiency motors.
3) All other conveyors must have premium efficiency motors.
4) Motors must be sized for maximum load and belt speed requirements under continuous operation (minimum of 2 Horse Power (HP)) and, where applicable, must be capable of withstanding shock caused by frequent starting and stopping under load conditions.
5) Motors must also be of the constant speed (nominal 1800 Revolutions Per Minute (RPM)), continuous service, and ball-bearing type with a minimum of class "F" insulation.
6) All motors must be copper-wound, Totally Enclosed Fan Cooled (TEFC) construction, with a NEMA T-frame, and must be provided with overload protection in the control panel.
7) The service factor for motors must be a minimum of 1.15.
8) On inclines and declines 10 degrees or greater, motors must be equipped with automatically applied mechanical brakes to prevent overrun after the motors are de-energized.

2. Reducers

a. All reducers as manufactured by:
1) Lenze, G500 gearbox
A3 2) SEW – KT Series
A4 3) Nord
b. Reducers must be right-angle helical bevel, shaft mounted, and with integral or C-Faced motors. All reducers must be mounted with concentric taper-lock type hub or manufacturer's approved concentric locking device.
c. All reducers must be sized for Class II application.
d. All shaft mounted reducers must be capable of being installed in the A and B position (left hand/right hand).
e. All reducers must be equipped with drip pans that are constructed as:
1) A minimum 14 gauge sheet metal with a minimum depth of ¾".
2) Drip pan must be fitted with a non-leaking drain plug.
3) Drip pan must be painted to match conveyor color.
4) Drip pan must be sized to match drive and catch all dripping fluids.

B. Pulley Assemblies

1. General

a. All pulleys must be equipped with taper lock type hubs, and 1-7/16" minimum diameter AISI 1045 TG&P shafts mounted in precision and ground flange type ball bearing units.
b. All pulleys must be single piece steel construction and have steel end discs attached to the rim by continuous welding. Welding of shafts to end discs is not permitted.
c. All pulley and shaft assemblies must have a maximum concentricity tolerance of 0.060".
d. The shaft run out of each assembly must not exceed 0.004" TIR (Total Indicated Runout)/inch of shaft length measured from the pulley hub.
e. All pulleys must be dynamically balanced for a minimum speed of 400 fpm.
f. All exposed rotating shafts must be covered with caps or collars.

2. Head and Tail Pulleys

I. Pull Boxes, J-boxes

1. Junction boxes must conform to NEMA code requirements.

J. Motor Starters (Distributed Controls)

1. Motor starters as manufactured by:
   a. Non-reversing
      1) Allen-Bradley 190 Series (IEC type)
   b. Reversing
      1) Allen-Bradley 190 Series (IEC type)
2. Starters must incorporate thermal overload protection in all phases.
3. Minimum starter size must be NEMA size "O" (or IEC equivalent).
4. Motor starters must be equipped with an integral or separate HOA switch. The hand mode must bypass the control circuit and provide local power to the motor for maintenance operation.
5. Non-reversing motor starters must consist of three-pole, single-throw, magnetic across-the-line contactors, each with a holding contact and auxiliary contacts as required.
6. Non-reversing motor starters must have three manual reset, thermal overload relays.
7. Reversing motor starters must have electrical and mechanical interlocks.

K. Variable Frequency Drives (VFDs)

1. VFDs/VFD components as manufactured by:
   a. Lenze
A4 b. Nord 205E-151-340-A
2. Power separation for VFDs is required to facilitate the installation of harmonic filters, if the filters are required.
3. VFDs must have the dynamic breaking option and dynamic braking resistors.
4. VFDs must be EtherNet/IP compatible and must incorporate diagnostic and reporting functions over the EtherNet/IP network.
5. VFDs must have compatibility and connectivity to fulfill required network topology by itself or with an additional device such as an E-Taps.

L. Motor Safety Disconnects

1. If available, utilize VFD manufacture’s built-in MSD
2. Motor safety disconnects as manufactured by:
   a. Allen-Bradley, 194E
   b. Square D, MD series
   c. Turck, A9669
3. Motor safety disconnects must be 3-pole OFF/ON rotary switch type.
4. Motor safety disconnects must come with at least one auxiliary contact (N.O.) to monitor OFF/ON condition on Graphics and Report.
5. Enclosures must be IP65 rated or higher.
6. Motor safety disconnect must be lockable on Off position.
7. Motor safety disconnects must meet the requirements specified by the drive manufacturer.

SHEET INDEX

Sheet Number	Sheet Name	Release For Bid Set
GENERAL		
G0-001	COVER SHEET	■
G0-002	SHEET INDEX	■
CIVIL		
D1-100	DEMOLITION PLAN	■
CD1-100	LAYOUT PLAN	■
CP1-100	PAVING-GRADING-DRAINAGE PLAN	■
CU1-100	UTILITY PLAN	■
SWPPP1-100	STORMWATER POLLUTION PREVENTION PLAN AND NOTES	■
STRUCTURAL		
S0-001	GENERAL NOTES	■
S0-002	GENERAL INFORMATION	■
S0-003	SPECIAL INSPECTION NOTES	■
S1-100	FLOOR PLAN - LEVEL 01 - OVERALL	■
S1-101	FLOOR PLAN - LEVEL 01 - SECTOR 01	■
S1-102	FLOOR PLAN - LEVEL 01 - SECTOR 02	■
S1-200	ROOF PLAN - OVERALL	■
S1-201	ROOF PLAN - SECTOR 01	■
S1-202	ROOF PLAN - SECTOR 02	■
S4-001	ENLARGED PLANS	■
S5-001	GENERAL FOUNDATION DETAILS	■
S5-002	GENERAL ROOF DECK DETAILS	■
S5-003	GENERAL MASONRY DETAILS	■
S5-004	FOUNDATION DETAILS	■
S5-005	STEEL AND ROOF DECK DETAILS	■
S5-006	STEEL DETAILS	■
S6-001	MISCELLANEOUS SCHEDULES	■
S6-002	MASONRY SCHEDULES	■
ARCHITECTURE		
AG0-001	STANDARDS AND SYMBOLS	■
AG1-100	LIFE SAFETY PLAN - OVERALL	■
AD1-100	DEMO FLOOR PLAN - LEVEL 01 - OVERALL	■
AD1-101	DEMO FLOOR PLAN - LEVEL 01 - SECTOR 01	■
AD1-102	DEMO FLOOR PLAN - LEVEL 01 - SECTOR 02	■
AZ1-100	DEMO REFLECTED CEILING PLAN - OVERALL	■
AZ1-101	DEMO REFLECTED CEILING PLAN - SECTOR 01	■
AE0-001	WALL & PARTITION TYPES	■
AE0-002	TYPICAL UL HEAD DETAILS	■
AE1-100	FLOOR PLAN - LEVEL 01 - OVERALL	■
AE1-101	FLOOR PLAN - LEVEL 01 - SECTOR 01	■
AE1-102	FLOOR PLAN - LEVEL 01 - SECTOR 02	■
AE1-200	ROOF PLAN - OVERALL	■
AE1-201	ROOF PLAN - SECTOR 01	■
AE1-202	ROOF PLAN - SECTOR 02	■
AR1-100	REFLECTED CEILING PLAN - LEVEL 01 - OVERALL	■
AR1-101	REFLECTED CEILING PLAN - LEVEL 01 - SECTOR 01	■
AR1-102	REFLECTED CEILING PLAN - LEVEL 01 - SECTOR 02	■
AE2-101	INTERIOR ELEVATIONS	■
AE2-102	GLAZING ELEVATIONS	■
AE3-001	EXTERIOR ELEVATIONS	■
AE3-002	EXTERIOR ELEVATIONS	■
AE4-001	ENLARGED PLANS	■
AE4-002	ENLARGED PLANS	■
AE4-003	ENLARGED PLANS	■
AE5-001	BUILDING SECTIONS	■
AE5-021	WALL SECTIONS	■
AE5-022	WALL SECTIONS	■
AE5-023	WALL SECTIONS	■
AE5-041	PLAN DETAILS	■
AE5-061	SECTION DETAILS	■
AE5-081	ROOF DETAILS	■
AE5-082	ROOF DETAILS	■
AE6-001	DOOR AND FRAME DETAILS	■
AE7-101	SIGNAGE PLAN - SECTOR 01	■
AE7-102	SIGNAGE PLAN - SECTOR 02	■
IN1-001	FINISH FLOOR PLAN - SECTOR 01	■
IN1-002	FINISH FLOOR PLAN -SECTOR 02	■
BHS MECHANICAL		
QM0-001	BHS NOTES AND LEGENDS	■
QM1-100	BHS MECH PLAN - LEVEL 01 - OVERALL	■
6 QM1-100-A	BHS MECHANICAL PLAN - LEVEL 01 - ALTERNATES	■
QM1-100.1	BHS MECH PLAN - LEVEL 01 - OVERALL - FUTURE	■
QM1-101	BHS MECH PLAN - LEVEL 01 - SECTOR 01	■
QM1-101.1	BHS MECH PLAN - LEVEL 01 - SECTOR 01 - LOWER	■
QM1-101.2	BHS MECH PLAN - LEVEL 01 - SECTOR 01 - UPPER	■
QM1-102	BHS MECH PLAN - LEVEL 01 - SECTOR 02	■
QM1-102.1	BHS MECH PLAN - LEVEL 01 - SECTOR 02 - LOWER	■
QM1-102.2	BHS MECH PLAN - LEVEL 01 - SECTOR 02 - UPPER	■
QM2-001	BHS ELEVATIONS	■
QM2-002	BHS ELEVATIONS	■
QM2-003	BHS ELEVATIONS	■
QM2-004	BHS ELEVATIONS	■
QM4-001	ENLARGED CBRA PLANS	■
QM5-001	BHS SUPPORT DETAILS - 1	■
QM5-002	BHS SUPPORT DETAILS - 2	■
QM5-003	BHS EQUIPMENT DETAILS - 1	■
QM5-004	BHS EQUIPMENT DETAILS - 2	■
QM5-005	BHS EQUIPMENT DETAILS - 3	■
QM5-006	BHS CATWALK DETAILS - 1	■
QM5-007	BHS CATWALK DETAILS - 2	■
QM6-001	CONVEYOR MANIFEST	■
QM7-101	BHS ACCESS PLAN - LEVEL 01 - SECTOR 01	■
QM7-101.1	BHS EDS/TCU ACCESS - LEVEL 01 - SECTOR 01	■
QM7-101.2	BHS TSA ACCESS - LEVEL 01 - SECTOR 01	■
QM7-102	BHS ACCESS PLAN - LEVEL 01 - SECTOR 02	■

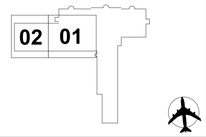
SHEET INDEX

Sheet Number	Sheet Name	Release For Bid Set
QM8-001	BHS PHASING PLAN - PHASE 1	■
QM8-002	BHS PHASING PLAN - PHASE 2	■
QM8-003	BHS PHASING PLAN - PHASE 3	■
QM8-004	BHS PHASING PLAN - PHASE 4	■
BHS ELECTRICAL		
QE1-100	BHS ELEC PLAN - LEVEL 1 - OVERALL	■
QE1-101.1	BHS ELEC PLAN - LEVEL 01 - SECTOR 01 - LOWER	■
QE1-101.2	BHS ELEC PLAN - LEVEL 01 - SECTOR 01 - UPPER	■
QE1-102.1	BHS ELEC PLAN - LEVEL 01 - SECTOR 02 - LOWER	■
QE1-102.2	BHS ELEC PLAN - LEVEL 01 - SECTOR 02 - UPPER	■
QE5-001	BHS ELECTRICAL DETAILS - 1	■
QE5-002	BHS ELECTRICAL DETAILS - 2	■
QE5-003	ISD NETWORK DIAGRAM	■
QE5-004	BHS NETWORK DIAGRAM	■
QE6-001	PDP SCHEDULES	■
QE7-100	OVERALL PDP LOWER	■
QE7-101	OVERALL PDP UPPER	■
FIRE PROTECTION		
F0-001	FIRE PROTECTION LEGEND	■
FD1-101	FIRE PROTECTION DEMOLITION - LEVEL 01 - SECTOR 01	■
F1-100	FIRE PROTECTION RENOVATION OVERALL	■
F1-101	FIRE PROTECTION RENOVATION - LEVEL 01 - SECTOR 01	■
F1-102	FIRE PROTECTION RENOVATION - LEVEL 01 - SECTOR 02	■
F5-001	FIRE PROTECTION DETAILS	■
PLUMBING		
P0-001	PLUMBING SYMBOLS, AND ABBREVIATIONS	■
PD1-101	PLUMBING DEMOLITION - LEVEL 01 - SECTOR 01	■
P1-101	PLUMBING RENOVATION - LEVEL 01 - SECTOR 01	■
P1-102	PLUMBING RENOVATION - LEVEL 01 - SECTOR 02	■
P1-201	PLUMBING RENOVATION - ROOF LEVEL - SECTOR 01	■
P1-202	PLUMBING RENOVATION - ROOF LEVEL - SECTOR 02	■
P3-001	ENLARGED NEW BATHROOMS PLAN	■
P5-001	PLUMBING DETAILS	■
P5-002	PLUMBING DETAILS	■
P6-001	PLUMBING SCHEDULES	■
P9-001	STORM WATER ISOMETRIC RISER	■
P9-002	GAS ISOMETRIC RISER	■
P9-003	SANITARY ISOMETRIC RISER	■
P9-004	DOMESTIC WATER ISOMETRIC RISER	■
MECHANICAL		
M0-001	MECHANICAL SYMBOLS, ABBREVIATIONS	■
MD1-101	MECHANICAL DEMOLITION - LEVEL 01 - SECTOR 01	■
MD1-201	MECHANICAL DEMOLITION - ROOF LEVEL - SECTOR 01	■
M1-101	MECHANICAL RENOVATION - LEVEL 01 - SECTOR 01	■
M1-102	MECHANICAL RENOVATION - LEVEL 01 - SECTOR 02	■
M1-201	MECHANICAL RENOVATION - ROOF LEVEL - SECTOR 01	■
M1-202	MECHANICAL RENOVATION - ROOF LEVEL - SECTOR 02	■
MP-101	MECHANICAL PIPING RENOVATION - LEVEL 01 - SECTOR 01	■
MP-102	MECHANICAL PIPING RENOVATION - LEVEL 01 - SECTOR 02	■
MP-201	MECHANICAL PIPING RENOVATION - ROOF LEVEL - SECTOR 01	■
MP-202	MECHANICAL PIPING RENOVATION - ROOF LEVEL - SECTOR 02	■
M5-001	MECHANICAL DETAILS	■
M5-002	MECHANICAL DETAILS	■
M5-003	MECHANICAL DETAILS	■
M6-001	MECHANICAL SCHEDULES	■
M7-001	MECHANICAL CONTROLS	■
ELECTRICAL		
E0-001	ELECTRICAL SYMBOLS AND ABBREVIATIONS	■
ESLD-101	SITE DEMOLITION - LEVEL 01	■
ELD1-101	LIGHTING DEMOLITION - LEVEL 01 - SECTOR 01	■
EPD1-101	POWER DEMOLITION - LEVEL 01 - SECTOR 01	■
EPD1-201	POWER DEMOLITION - ROOF LEVEL - SECTOR 01	■
EYD1-101	SYSTEMS DEMOLITION - LEVEL 01 - SECTOR 01	■
ESD1-101	SECURITY DEMOLITION - LEVEL 01 - SECTOR 01	■
ESL-101	SITE RENOVATION - LEVEL 01	■
EL1-101	LIGHTING RENOVATION - LEVEL 01 - SECTOR 01	■
EL1-102	LIGHTING RENOVATION - LEVEL 01 - SECTOR 02	■
EP1-101	POWER RENOVATION - LEVEL 01 - SECTOR 01	■
EP1-102	POWER RENOVATION - LEVEL 01 - SECTOR 02	■
EP4-101	POWER RENOVATION - LEVEL 01 - ENLARGED PLANS	■
EP4-102	POWER RENOVATION - LEVEL 01 - ENLARGED PLANS	■
EP1-201	POWER RENOVATION - ROOF LEVEL - SECTOR 01	■
EP1-202	POWER RENOVATION - ROOF LEVEL - SECTOR 02	■
EY1-101	SYSTEMS RENOVATION - LEVEL 01 - SECTOR 01	■
EY1-102	SYSTEMS RENOVATION - LEVEL 01 - SECTOR 02	■
EY4-101	SYSTEMS RENOVATION LEVEL 1 - ENLARGED PLANS	■
ES1-101	SECURITY RENOVATION - LEVEL 01 - SECTOR 01	■
ES1-102	SECURITY RENOVATION - LEVEL 01 - SECTOR 02	■
ELP1-201	LIGTHNING PROTECTION - ROOF LEVEL - SECTOR 01	■
ELP1-202	LIGHTNING PROTECTION - ROOF LEVEL - SECTOR 02	■
E5-001	ELECTRICAL DETAILS	■
E5-002	ELECTRICAL DETAILS	■
E5-003	ELECTRICAL DETAILS	■
E6-001	ELECTRICAL RISER DIAGRAM	■
E6-002	PANEL SCHEDULES	■
E6-003	EQUIPMENT CONNECTION SCHEDULE	■
E6-004	LIGHTING FIXTURE SCHEDULE	■

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRAEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. CREWS
CHECKED: M. HEDMAN
SCALE:

RELEASE FOR BID SET

05/15/2020

SHEET TITLE:

SHEET INDEX

SHEET NUMBER:

G0-002

THRESHOLD INSPECTION PLAN

PART 1 ADMINISTRATION

1.1 GENERAL INFORMATION

A. SPECIAL INSPECTIONS NOT BY GRAEF.

B. THIS IS A THRESHOLD BUILDING AS DEFINED BY CHAPTER 553 OF THE FLORIDA STATUTES AND THEREFORE REQUIRES A SPECIAL INSPECTOR. △C

C. THE SPECIAL INSPECTOR SHALL ENSURE THAT THE STRUCTURAL PORTIONS OF THE BUILDING CONSTRUCTION ARE EXECUTED IN SUBSTANTIAL CONFORMANCE WITH THE OFFICIAL CONTRACT DOCUMENTS. OFFICIAL CONTRACT DOCUMENTS ARE DEFINED AS THE PERMITTED DRAWINGS, RECORDED ADDENDUMS AND AMENDMENTS, AND THE PROJECT SPECIFICATIONS WITH ALL THE REVISIONS THERETO.

D. THE SPECIAL INSPECTOR SHALL NOT MAKE DESIGN DECISIONS, DIRECT THE CONTRACTOR'S WORK, NOR BE RESPONSIBLE FOR THE CONSTRUCTION MEANS AND METHODS.

E. PROPOSALS FOR SPECIAL INSPECTION SERVICES ARE TO BE SEPARATE AND INDEPENDENT FROM OTHER MATERIAL TESTING AND QUALITY ASSURANCE SERVICES.

1.2 QUALIFICATIONS OF THE SPECIAL INSPECTOR

A. THE SPECIAL INSPECTOR SHALL BE A REGISTERED ENGINEER WITH SPECIAL INSPECTOR CERTIFICATION BY THE FLORIDA BOARD OF PROFESSIONAL ENGINEERS. ANY FUTURE REQUIREMENTS, IF ENACTED BY LAW, WILL ALSO BE APPLICABLE. AN AUTHORIZED REPRESENTATIVE UNDER THE RESPONSIBLE CHARGE OF THE SPECIAL INSPECTOR MAY UNDERTAKE INSPECTIONS AND SITE VISITS. THE AUTHORIZED REPRESENTATIVE MUST BE QUALIFIED BY EDUCATION OR LICENSURE FOR BOARD RULE 61G15-35.

B. THE SPECIAL INSPECTOR SHALL ENSURE THAT HIS AUTHORIZED REPRESENTATIVE IS EXPERIENCED IN THE STRUCTURAL SYSTEM BEING INSPECTED. DOCUMENTATION OF SUCH EXPERIENCE AND EDUCATIONAL BACKGROUND OF THE AUTHORIZED REPRESENTATIVE SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR VERIFICATION AND APPROVAL PRIOR TO COMMENCING INSPECTION WORK.

C. AS USED IN THIS PLAN, THE TERM SPECIAL INSPECTOR SHALL INCLUDE HIS REPRESENTATIVE UNLESS OTHERWISE STATED.

1.3 RESPONSIBILITIES AND LIMITATIONS

A. THE SPECIAL INSPECTOR DOES NOT SURROGATE THE OWNER'S REPRESENTATIVE OR THE ARCHITECT/ENGINEER-OF-RECORD'S RESPONSIBILITIES.

B. IT IS NOT INTENDED THAT THE CONTRACTOR'S CONTRACTUAL OR STATUTORY OBLIGATIONS ARE IN ANY WAY RELIEVED OR FOREGONE BY THE PRESENCE OF THE SPECIAL INSPECTOR. THE CONTRACTOR HAS THE SOLE RESPONSIBILITY FOR ANY DEVIATIONS FROM THE OFFICIAL CONTRACT DOCUMENTS AND FOR QUALITY CONTROL.

C. THE SPECIAL INSPECTOR IS TO PROVIDE SERVICES ONLY WITH REGARD TO THE STRUCTURAL FRAME OF THE BUILDING INCLUDING FOUNDATION, PRIMARY AND SECONDARY FRAMING SYSTEMS, EXTERIOR WALL GLASS AND STOREFRONT SYSTEMS, PRECAST CONCRETE PANELS AND ANY OTHER ITEMS SPECIFICALLY INCLUDED IN THE SPECIAL INSPECTION GUIDELINES.

D. THE SPECIAL INSPECTOR IS NOT RESPONSIBLE FOR THE INSPECTION OF ANY SAFETY PROVISIONS TO COMPLY WITH OSHA REQUIREMENTS OR OTHER SAFETY STANDARDS WHICH APPLY DURING THE CONSTRUCTION PERIOD, NOR BUILDING ELEMENTS SUCH AS GLASS, ROOFING, FIRE PROTECTION, INSULATION, MECHANICAL/ELECTRICAL/PLUMBING SYSTEMS, SITE WORK AND ANY ARCHITECTURAL COMPONENTS THAT DO NOT CONTRIBUTE DIRECTLY TO THE LOAD BEARING CAPACITY OF THE STRUCTURAL FRAME.

E. ALL SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE THRESHOLD INSPECTOR LAW, CHAPTER 553.79 OF THE FLORIDA STATUTES.

F. IT SHALL BE THE RESPONSIBILITY OF THE SPECIAL INSPECTOR TO OBSERVE THE CONSTRUCTION OF STRUCTURAL COMPONENTS ONLY, AND TO REPORT TO THE CONCERNED PARTIES THAT THE STRUCTURE IS BUILT IN GENERAL CONFORMANCE WITH THE OFFICIAL CONTRACT DOCUMENTS, AND IF NOT, THE LOCATIONS AND DESCRIPTIONS OF THOSE INSTANCES.

G. SINCE THE SPECIAL INSPECTOR DOES NOT CERTIFY THAT THE OFFICIAL CONTRACT DOCUMENTS ARE, IN THEMSELVES, IN COMPLIANCE WITH THE GOVERNING BUILDING CODE, ALL CERTIFICATIONS ISSUED WILL REFER TO COMPLETED WORK BEING IN SUBSTANTIAL CONFORMANCE WITH THE OFFICIAL CONTRACT DOCUMENTS, RATHER THAN THE APPLICABLE BUILDING CODES.

H. AT THE COMPLETION OF STRUCTURAL WORK, THE SPECIAL INSPECTOR SHALL CERTIFY THAT "TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE STRUCTURE (ADD PROJECT DESCRIPTION HERE) AND THE CONSTRUCTION OF ALL LOAD BEARING COMPONENTS COMPLIES WITH THE OFFICIAL CONTRACT DOCUMENTS".

1.4 DUTIES OF THE SPECIAL INSPECTOR

A. THE SPECIAL INSPECTOR IS RESPONSIBLE TO THE OWNER AND THE ENFORCING AGENCY HAVING JURISDICTION FOR THIS PROJECT.

B. THE SPECIAL INSPECTOR IS RESPONSIBLE FOR THOROUGH KNOWLEDGE OF THE CONTRACT DOCUMENTS INCLUDING THE SPECIFICATIONS AND APPROPRIATE PORTIONS OF THE GOVERNING CODES. THE SPECIAL INSPECTOR IS ALSO RESPONSIBLE FOR THE EXERCISE OF GOOD JUDGMENT.

C. PRIOR TO PERFORMING INSPECTIONS, HE SHALL ALSO OBTAIN COPIES OF PROPERLY RECORDED RFI'S RELATED TO THE WORK FROM THE CONTRACTOR.

D. THE SPECIAL INSPECTOR SHALL OBSERVE AND RECORD THE CONDITIONS OF THE WORK BEING INSPECTED, THE PROGRESS OF WORK, ANY DEVIATIONS OF THE STRUCTURAL COMPONENTS FROM THE OFFICIAL CONTRACT DOCUMENTS AND ANY VERBAL INSTRUCTIONS GIVEN TO THE CONTRACTOR SHALL BE NOTED AND REPORTED.

E. THE SPECIAL INSPECTOR IS RESPONSIBLE FOR VERIFYING THAT THE TESTING AGENCY COMPLIES WITH THE CONTRACT DOCUMENTS.

F. THE SPECIAL INSPECTOR SHALL VISIT THE SITE WITH ENOUGH FREQUENCY TO ENSURE THAT HIS AUTHORIZED REPRESENTATIVE IS COMPLYING WITH THIS PLAN.

1.5 REPORTING

A. THE SPECIAL INSPECTOR SHALL RECORD PROGRESS, CONDITIONS, OBSERVATIONS, TESTING AND ANY DEVIATION FROM THE CONTRACT DOCUMENTS.

B. IT IS THE RESPONSIBILITY OF THE SPECIAL INSPECTOR OR HIS AUTHORIZED REPRESENTATIVE TO IMMEDIATELY NOTIFY THE CONTRACTOR, ARCHITECT/ENGINEER OF RECORD OF THE FOLLOWING:

1. THE USE OF MATERIALS, EQUIPMENT OR WORKMANSHIP THAT DOES NOT CONFORM TO THE OFFICIAL CONTRACT DOCUMENTS, GOVERNING BUILDING CODES OR GENERALLY ACCEPTED INDUSTRY STANDARDS THAT MAY CAUSE IMPROPER CONSTRUCTION.

2. ANY STRUCTURAL COMPONENTS THAT HAVE BEEN CONSTRUCTED WITHOUT TESTING OR INSPECTIONS PRIOR TO OR DURING THE CONSTRUCTION AND THAT CANNOT BE INSPECTED OR TESTED IN PLACE USING NON-DESTRUCTIVE METHODS.

C. THE SPECIAL INSPECTOR SHALL MAINTAIN A LOG OF SUCH NON-CONFORMING ITEMS WITH THE DESCRIPTION OF THE ITEM, DATE FIRST OBSERVED, AND DATE THE DEFICIENCY WAS CORRECTED. THE LOG SHALL BE DISTRIBUTED TO THE CONTRACTOR, THE OWNER'S REPRESENTATIVE, THE ARCHITECT AND THE STRUCTURAL ENGINEER OF RECORD ON A WEEKLY BASIS.

D. INSPECTION REPORTS SHALL BE WRITTEN AFTER EACH INSPECTION. THE SPECIAL INSPECTOR IS RESPONSIBLE FOR MAINTAINING A LOG OF INSPECTIONS AND COPIES OF INSPECTION REPORTS AVAILABLE AT THE JOBSITE. THE REPORTS SHALL CONSIST OF SOME OR ALL OF THE FOLLOWING:

1. NAME AND LOCATION OF THE PROJECT.
2. NAME OF THE INSPECTOR.
3. DATE AND TIME OF INSPECTIONS.
4. WEATHER CONDITIONS DURING INSPECTION.
5. NAME OF THE CONTRACTOR'S REPRESENTATIVE OR OWNER'S REPRESENTATIVE PRESENT DURING INSPECTIONS.
6. DESCRIPTIONS OF THE PORTIONS OF STRUCTURE BEING INSPECTED.
7. CHANGES MADE DURING OBSERVATIONS.
8. ANY PART OF THE STRUCTURAL COMPONENT THAT IS NOT IN COMPLIANCE WITH THE OFFICIAL CONTRACT DOCUMENTS.
9. COMMENTS ON OTHER REPORTS SUCH AS: TESTING REPORTS, GEOTECHNICAL ENGINEER'S INSPECTION REPORTS, SHORING AND RE-SHORING ENGINEER'S INSPECTION REPORTS WHEN APPLICABLE.
10. PHOTOGRAPHS.

E. FIELD REPORTS SHALL BE SIGNED BY THE PERSON PERFORMING THE INSPECTION. WEEKLY SUMMARY OF INSPECTIONS AND REPORTS SHALL BE SUBMITTED TO THE OWNER, ENFORCING AGENCY, ARCHITECT AND STRUCTURAL ENGINEER UNDER A COVER LETTER SIGNED AND SEALED BY THE SPECIAL INSPECTOR.

F. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE SPECIAL INSPECTOR SHALL ISSUE TO THE OWNER, ENFORCING AGENCY, ARCHITECT AND STRUCTURAL ENGINEER A SIGNED AND SEALED LETTER STATING THAT THE STRUCTURE HAS BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE OFFICIAL CONTRACT DOCUMENTS. THIS STATEMENT SHALL BE IN CONFORMANCE WITH SECTION 553.79(7)A OF THE FLORIDA STATUTES.

1.6 OWNER REQUIREMENTS

A. THE OWNER SHALL PROVIDE THE SPECIAL INSPECTOR A COMPLETE SET OF THE OFFICIAL CONTRACT DOCUMENTS INCLUDING DRAWINGS, SPECIFICATIONS AND THE GEOTECHNICAL REPORT WHEN CONSTRUCTION BEGINS. THE OWNER SHALL ALSO ARRANGE THROUGH HIS AUTHORIZED REPRESENTATIVE, TO PROVIDE ANY REVISIONS TO THE CONTRACT DOCUMENTS, INCLUDING RFI'S, ADDENDUMS, ETC. AND COPIES OF THE APPROVED SHOP DRAWINGS.

B. THE OWNER SHALL ALSO ARRANGE FOR ALL NECESSARY CONSTRUCTION RECORDS TO BE FURNISHED TO THE SPECIAL INSPECTOR IN A TIMELY MANNER. SUCH RECORDS INCLUDE CONCRETE CYLINDER TEST REPORTS, SOIL DENSITY TEST REPORTS, MILL RECORDS, SHOP DRAWINGS, PILE INSTALLATION RECORDS, ETC.

C. THE OWNER SHALL REQUIRE IN THE CONTRACT WITH THE CONTRACTOR TO PROVIDE THE SPECIAL INSPECTOR TO HAVE ADEQUATE ACCESS TO PERFORM THE INSPECTIONS AND REQUEST THE INSPECTIONS IN A TIMELY MANNER.

1.7 CONTRACTOR REQUIREMENTS

A. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR A WORK SPACE AT THE PROJECT SITE FOR KEEPING INSPECTION RECORDS, CONTRACT DOCUMENTS AND TELEPHONE/FAX/INTERNET CONNECTIONS.

B. THE CONTRACTOR SHALL COOPERATE AND ASSIST THE SPECIAL INSPECTOR WITH PERFORMING INSPECTION DUTIES AND WILL PROVIDE ACCESS TO THE WORK DURING ALL WORKING HOURS.

C. THE INSPECTOR MAY MAKE SPOT INSPECTIONS OF THE WORK IN PROGRESS IN ORDER FOR EARLY DETECTION OF ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. HOWEVER, THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF CORRECTING DEVIATIONS FROM THE CONTRACT DOCUMENTS DISCOVERED AT ANY TIME.

D. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 24 HOUR NOTICE FOR ALL INSPECTIONS.

E. IF ANY OF THE CONTRACTOR'S WORK IS NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, THE WORK MAY EITHER BE CORRECTED OR THE CONTRACTOR MAY SUBMIT TO THE ARCHITECT/ENGINEER A REQUEST TO ACCEPT THE DEVIATION.

F. CONSTRUCTION THAT HAS NOT BEEN INSPECTED MAY REQUIRE TESTING OR REMOVAL AS DECIDED BY THE STRUCTURAL ENGINEER.

PART 2 INSPECTIONS

2.1 GENERAL

A. SPECIAL INSPECTIONS REQUIRED FOR THE FOLLOWING MATERIALS, SYSTEMS, COMPONENTS AND WORK IN ACCORDANCE WITH THE THRESHOLD INSPECTION PLAN:

1. CAST-IN-PLACE CONCRETE
2. STEEL FRAMING
3. WELDING/BOLTING
4. REINFORCED CONCRETE MASONRY
5. REINFORCING STEEL
6. FOUNDATIONS - SOIL

B. THE STRUCTURE IS DEPICTED ON STRUCTURAL PLANS THAT ARE PART OF THE OFFICIAL CONTRACT DOCUMENTS. ALL SPECIFICATION SECTIONS RELATED TO THE STRUCTURE, ALL APPLICABLE ADDENDA, APPROVED SHOP DRAWINGS AND PROPERLY RECORDED RESPONSES TO THE RFI'S (REQUESTS FOR INFORMATION) SHALL GOVERN THE REQUIREMENTS OF THE WORK.

C. FOR REQUIRED FREQUENCY OF INSPECTIONS, REFER TO CHAPTER 17 OF THE 2009 INTERNATIONAL BUILDING CODE.

2.2 SUBSURFACE PREPARATIONS

A. THE GEOTECHNICAL TESTING AGENCY SHALL MONITOR AND TEST BACKFILL AND COMPACTIONS OPERATIONS AS DESCRIBED IN THE GEOTECHNICAL ENGINEERING REPORT. THE SPECIAL INSPECTOR SHALL ENSURE THAT THE TESTING AGENCY IS ONSITE MONITORING THE SUBSURFACE PREPARATION. △C

B. THE SPECIAL INSPECTOR SHALL BE FURNISHED WITH THE TESTING AGENCY'S DAILY REPORTS AS WELL AS THE COMPLETION REPORT TO BE REVIEWED AND MAINTAINED IN HIS FILE.

C. VERIFY THAT ANY SUB-GRADE DISTURBED BY OTHER TRADES HAS BEEN PROPERLY RE-COMPACTED.

2.3 CAST-IN-PLACE REINFORCED CONCRETE

A. THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO THE PLACEMENT OF ANY STRUCTURAL CONCRETE.

B. SHORING

1. VERIFY THAT THE SHORING AND RE-SHORING ENGINEER HAS CONFIRMED THAT THE SHORING AND RE-SHORING ARE IN COMPLIANCE WITH THEIR DRAWINGS.
2. CHECK LOCATION, SPACING, SUITABILITY, GENERAL SIZE AND QUALITY OF SHORING FOR CONFORMANCE WITH THE SHORING AND RE-SHORING PLANS SUBMITTED.
3. CONFIRM THE TIMING OF SHORING, RE-SHORING AND FORMWORK REMOVAL COMPLY WITH THE CONTRACT DOCUMENTS AND THE SHORING AND RE-SHORING DRAWINGS.

C. FORMWORK

1. INSPECT FORMS FOR THEIR CORRECT LOCATIONS, REQUIRED DIMENSIONS, ALIGNMENT, BRACING, FORM TIES AND SPACERS.
2. VERIFY THAT THE FORM IS CLEAN AND ALL FOREIGN MATERIALS HAVE BEEN REMOVED.
3. VERIFY THAT THE FORMS HAVE BEEN PROPERLY COATED.
4. AFTER FORMWORK REMOVAL, SPOT CHECK CONCRETE SURFACES FOR HONEYCOMBING OR VOIDS.

D. JOINTS

1. REVIEW LOCATIONS OF ALL JOINTS SUCH AS EXPANSION, CONTRACTION AND CONSTRUCTION JOINTS AS SHOWN ON THE CONSTRUCTION DOCUMENTS OR OTHERWISE APPROVED DOCUMENT SUCH AS THE CONTRACTOR'S CONSTRUCTION JOINT PLAN.
2. VERIFY THAT THE PREPARATION OF JOINTS AS REQUIRED BY THE DRAWINGS AND/OR SPECIFICATIONS, SUCH AS WET SAND BLASTING, ROUGHENING, WETTING, ETC. CONFORMS TO CONTRACT DOCUMENTS OR MANUFACTURER RECOMMENDATIONS.
3. VERIFY THAT SAW CUT JOINTS ARE TO THE PROPER DEPTH AND HAVE BEEN PROVIDED IN THE TIME FRAME INDICATED ON THE CONTRACT DOCUMENTS.
4. VERIFY THAT DOWELS, KEYWAYS, AND BULKHEADS IN STRUCTURAL MEMBERS COMPLY WITH CONTRACT DOCUMENTS.
5. EXPANSION JOINTS SHOULD BE FREE FROM DEBRIS OR IRREGULARITIES THAT WOULD INTERFERE WITH FREE MOVEMENT.
6. CHECK IF FILLER HAS BEEN INSTALLED AND SECURELY FASTENED IN EXPANSION JOINTS IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR MANUFACTURER'S RECOMMENDATIONS.

E. REINFORCING

1. CHECK IF ALL REINFORCEMENT IS IN PLACE IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS. IN THE EVENT OF ANY CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND SUPPLIER'S SHOP DRAWINGS, NOTIFY THE ENGINEER OF RECORD IMMEDIATELY. THE FOLLOWING ITEMS MUST BE CHECKED BY THE SPECIAL INSPECTOR PRIOR TO THE PLACEMENT OF CONCRETE:

   a. CHECK REINFORCEMENT FOR SIZE, QUANTITY, BENDING, GRADE AND BAR-TO-BAR SPACING.
   b. CHECK IF REINFORCEMENT HAS BEEN CLEANED OF ALL LOOSE, FLAKY RUST AND SCALE, GREASE OR OTHER FOREIGN MATERIALS WHICH WOULD REDUCE OR PREVENT BOND.
   c. CHECK TO ENSURE THAT THE REINFORCEMENT IS TIED AND SUPPORTED SECURELY SO THAT IT WILL NOT BE DISPLACED DURING CONCRETE PLACEMENT.
   d. CHECK CONCRETE COVER OF ALL REINFORCEMENT FOR COMPLIANCE WITH SPECIFICATIONS AND CONTRACT DOCUMENTS.
   e. CHECK EMBEDMENT LENGTH, SPLICE LOCATIONS AND LENGTHS, AND LAP LENGTHS FOR COMPLIANCE. NO SPLICES SHOULD BE MADE WITHOUT THE APPROVAL OF THE ENGINEER.
   f. VERIFY APPROVAL OF MECHANICAL COUPLERS AND PROPER INSTALLATION PER MANUFACTURER'S SPECIFICATIONS.
   g. CHECK ADDITIONAL REINFORCING REQUIRED AT OPENINGS.
   h. CHECK FOR PROPER LAYERING OF MAIN REINFORCING VERSES TEMPERATURE REINFORCING STEEL IN ONE-WAY SLABS.
   i. VERIFY SIZE AND SPACING OF WELDED WIRE FABRIC, THAT IT IS ADEQUATELY SUPPORTED AND TIED TO RESIST DISPLACEMENT DURING CONCRETE PLACEMENT, AND THAT ITS SPLICES ARE OF ADEQUATE LENGTH AND PROPERLY TIED.

F. EMBEDDED FIXTURES

1. UNLESS OTHERWISE PROVIDED OR APPROVED, ANCHOR BOLTS, INSERTS, PIPE SLEEVES, PIPES, CONDUIT, WIRING, FLASHING, INSTRUMENTS, AND OTHER EMBEDDED FIXTURES SHOULD BE FIXED FIRMLY IN CORRECT POSITION BEFORE CONCRETE IS PLACED.
2. IF EMBEDDED ITEMS ARE IN CONFLICT WITH EACH OTHER OR WITH REINFORCING STEEL, THE RELOCATION OF THESE ITEMS AND/OR CUTTING, BENDING, DISPLACEMENT OR OMISSION OF STEEL REINFORCING BARS SHALL NOT BE ALLOWED EXCEPT AS APPROVED BY THE ENGINEER.
3. CHECK IF ALL EMBEDDED ITEMS ARE IN PLACE AS SHOWN ON THE APPROVED CONTRACT DOCUMENTS.

G. OPENINGS

1. LOCATIONS OF ALL OPENINGS SHALL BE CHECKED.
2. ADDITIONAL OPENINGS THAT ARE NOT SHOWN IN THE CONTRACT DOCUMENTS THAT ARE GREATER IN SIZE THAN 12" X 12" SHALL BE APPROVED BY THE ENGINEER.

H. CONCRETE PLACEMENT

1. THE SPECIAL INSPECTOR SHALL BE PRESENT ON THE SITE FOR ALL CONCRETE POURS.
2. VERIFY THAT ALL REINFORCING CORRECTIONS HAVE BEEN COMPLETED PRIOR TO CONCRETE PLACEMENT.
3. VERIFY THAT THE NECESSARY CONSOLIDATION AND PLACING TECHNIQUES ARE BEING USED.
4. VERIFY THAT THE PROPER MIXES ARE BEING DELIVERED TO EACH AREA AND THAT THE BATCH TIME LEAVES SUFFICIENT TIME TO POUR ALL CONCRETE FROM THE TRUCK.
5. VERIFY THAT ANY CONCRETE MIX WHICH HAS ADDED WATER AT THE SITE HAS BEEN BROUGHT TO THE CONTRACTOR'S ATTENTION AND THAT A SET OF CONCRETE CYLINDERS IS TAKEN FROM THE MIX AFTER THE WATER IS ADDED. ADDING WATER TO A MIX WHICH HAS A SPECIFIC WATER/CEMENT RATIO REQUIREMENT IS NOT ALLOWED.
6. VERIFY THAT THE CONCRETE TESTING LAB TECHNICIAN IS PRESENT AT THE SITE.
7. VERIFY THAT THE SLUMP, AIR CONTENT, AND TEMPERATURE ARE WITHIN THE SPECIFIED RANGES.
8. VERIFY THAT CONCRETE IS PLACED IN A CONTINUOUS FASHION AND THAT NO CONCRETE HAS AGED PAST THE LIMITATIONS OF THE CONTRACT DOCUMENTS. DOCUMENT SPECIFICALLY WHERE ANY CONCRETE IS PLACED WHICH DOES NOT MEET THESE REQUIREMENTS.
9. THE UNIFORMITY OF FRESHLY MIXED CONCRETE SHALL BE VISUALLY CHECKED.
10. RECORD REJECTED BATCHES CAREFULLY, WITH REASONS FOR REJECTION AND REPORT PROMPTLY TO THE CONTRACTOR AND THE ARCHITECT/ENGINEER.
11. CHECK FOR HONEYCOMBING AND ROCK POCKETS OF CAST CONCRETE AFTER THE REMOVAL OF FORMS. DURING REPAIRS, CHECK IF THEY HAVE BEEN CUT BACK TO SOLID MATERIAL AND ALSO IF ALL LOOSE MATERIALS HAVE BEEN REMOVED. ANY LARGE AREAS SHOULD BE REPORTED TO THE ENGINEER OF RECORD.
12. CHECK THE CONTRACT DOCUMENTS FOR THE REQUIREMENTS OF TREATING DEFECTIVE AREAS OF CONCRETE.
13. CHECK FOR COMPLETE CURING OF AREAS OF CONCRETE THAT HAVE BEEN PATCHED.
14. VERIFY THAT THE VARIOUS CURING COMPOUNDS AND TOPPINGS HAVE BEEN PLACED AS REQUIRED BY THE CONTRACT DOCUMENTS.
15. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.

I. INSPECT EXPANSION ANCHORS AND CHEMICAL ADHESIVE ANCHORING USED TO SUPPORT WORK AS FOLLOWS:

1. VERIFY HOLE DIAMETER, DEPTH, LOCATION, SPACING AND EDGE DISTANCE. CONFIRM THAT THE HOLE HAS BEEN CLEANED AS REQUIRED BY THE MANUFACTURER.
2. VERIFY THAT EXPANSION ANCHORS ARE PROPERLY TIGHTENED.
3. VERIFY THAT THE EPOXY TYPE IS PROPER FOR THE APPLICATION. VERIFY EPOXY MIXING AND INSTALLATION COMPLIES WITH MANUFACTURER'S REQUIREMENTS.

PART 3 TESTING AND SUBMITTALS

3.1 MATERIAL TESTING

A. TESTING AGENCY SHALL PERFORM ALL TESTS DESCRIBED IN THE CONTRACT DOCUMENTS. THE TESTING AGENCY SHALL PROVIDE REPORTS FOR EACH TEST TO THE OWNER, CONTRACTOR, ARCHITECT/ENGINEER AND SPECIAL INSPECTOR. △C

B. THE SPECIAL INSPECTOR SHALL REVIEW ALL MATERIAL TEST REPORTS AND COMMENT ON ANY RESULTS THAT DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.

3.2 STRUCTURAL SUBMITTALS

A. THE SPECIAL INSPECTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL STRUCTURAL SUBMITTALS.

B. THE SPECIAL INSPECTOR SHALL BE GIVEN ONE COPY OF ALL STRUCTURAL SUBMITTALS, WITH EVIDENCE OF REVIEW BY THE CONTRACTOR AND ARCHITECT/ENGINEER, FOR HIS RECORD AND USE.

C. SUBMITTALS SHALL INCLUDE BUT ARE NOT LIMITED TO:

1. THE DELEGATED SHORING AND RE-SHORING ENGINEER'S SIGNED AND SEALED INSPECTION REPORTS SHALL BE RECEIVED PRIOR TO THE PLACEMENT OF CONCRETE.
2. REINFORCING STEEL FABRICATION AND PLACEMENT SHOP DRAWINGS AND BAR LISTS. MILL REPORTS FOR ALL REINFORCING STEEL TO BE INCORPORATED INTO THE WORK SHALL BE PROVIDED TO THE SPECIAL INSPECTOR.
3. CONCRETE MIX DESIGNS FOR ALL PROPOSED STRENGTHS AND GRADES OF CONCRETE.
4. FABRICATION AND ERECTION DRAWINGS FOR EMBEDDED PLATES, HANGERS AND ALL OTHER STRUCTURAL METALS.

DESTIN FORT WALTON BEACH FLY VPS AIRPORT FlyVPS.com A SERVICE OF OKALOOSA COUNTY

VTC

CORGAN

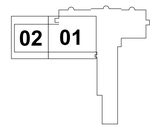
GRAEF

SCOTT D. HINRICHS LICENSE No. 67810 STATE OF FLORIDA PROFESSIONAL ENGINEER

GRAEF
CERT # 4270

06/10/2020

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP

DRAWN: HQ

CHECKED: SDH

SCALE: 12" = 1'-0"

RELEASE FOR BID SET

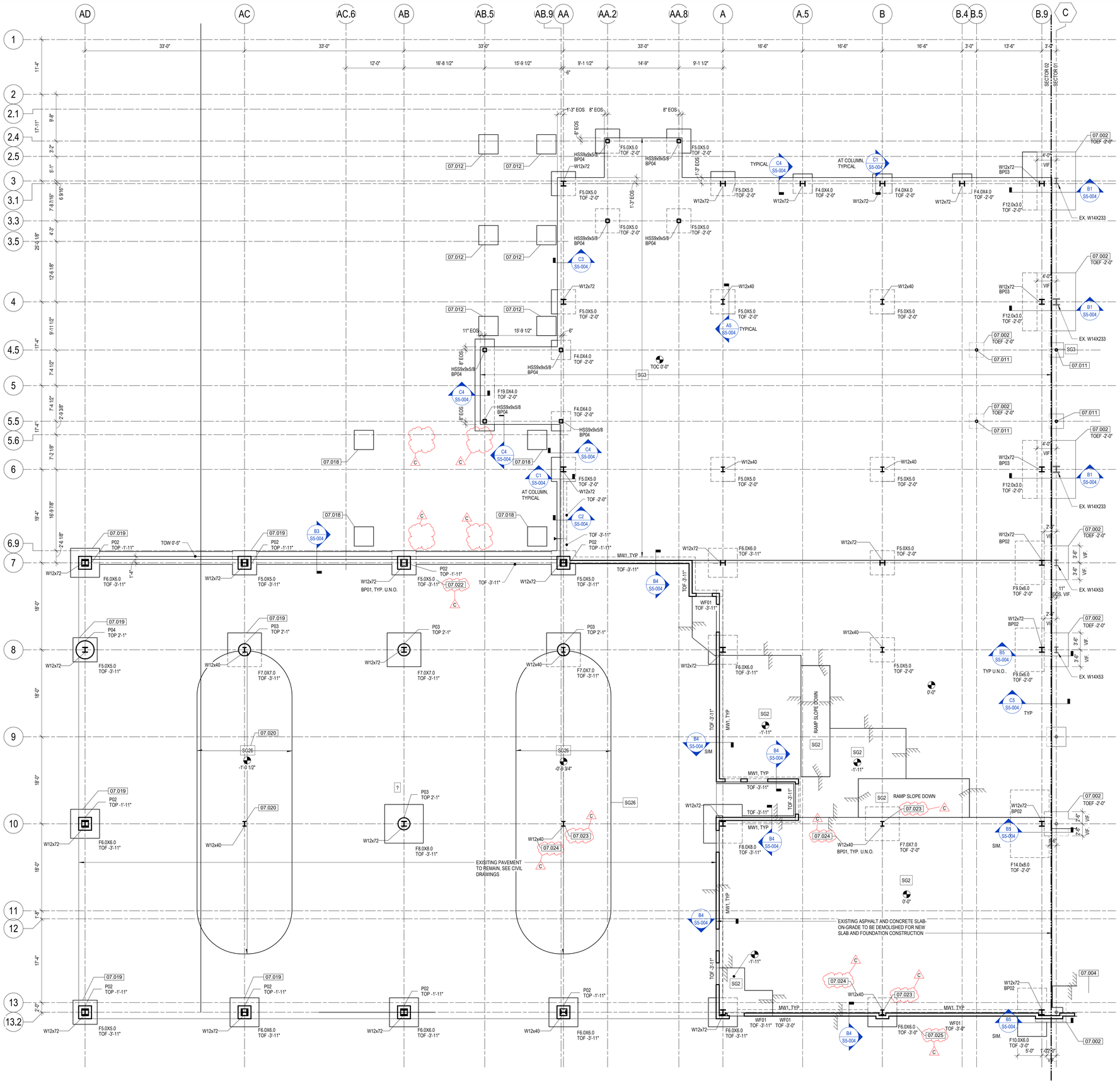
05/15/2020

SHEET TITLE:

SPECIAL INSPECTION NOTES

SHEET NUMBER:

S0-003



GENERAL SHEET NOTES

- REFERENCE ELEVATION AT THE TOP OF THE SLAB-ON-GRADE IS EL. 0'-0". ACTUAL ELEVATION IS 88.92'. ELEVATION ABOVE OR BELOW THE REFERENCE ELEVATION ARE NOTED AS PLUS (+) OR MINUS (-).
- SEE "SCHEDULES" SHEET(S) FOR FOOTING, PIER, BASE PLATE, AND MASONRY WALL SCHEDULES.
- SEE "GENERAL DETAILS" SHEET(S) FOR THE FOLLOWING DETAILS:
  - OPENING REINFORCEMENT
  - SLAB ON GRADE CONTROL AND CONSTRUCTION JOINT
  - WALL CONTROL AND CONSTRUCTION JOINT
  - WALL CORNER
  - WALL INTERSECTION
  - FOOTING STEP
  - SLAB ON GRADE DEPRESSION
  - CMU WALL ON SLAB ON GRADE
  - INTERIOR COLUMN ISOLATION JOINT
  - EXTERIOR COLUMN ISOLATION JOINT

SHEET KEYNOTES

07.002 EXISTING FOOTING.
07.004 EXISTING SLAB-ON-GRADE TO REMAIN.
07.011 DEMO EXISTING VESTIBULE COLUMNS AND ROOF STRUCTURE.
07.012 FOUNDATION TO BE DESIGNED BY CANOPY SUPPLIER. NOTIFY AND COORDINATE WITH EOR WHERE CANOPY AND BUILDING FOUNDATIONS NEED TO BE COMBINED DUE TO THEIR CLOSE PROXIMITY.
07.018 FOUNDATION FOR SOLAR SHADE TO BE DESIGNED BY SUPPLIER. NOTIFY AND COORDINATE WITH EOR WHERE SOLAR SHADE AND BUILDING FOUNDATIONS NEED TO BE COMBINED DUE TO THEIR CLOSE PROXIMITY.
07.019 DELETE SPREAD FOOTING, PIER, AND COLUMN AS PART OF BID ALTERNATE NO. 1.
07.020 DELETE AS PART OF BID ALTERNATE NO. 1.
07.022 REVISE FOOTING TO F6.0x6.0 AS PART OF BID ALTERNATE NO. 1.
07.023 ROTATE COLUMN 90 DEGREES AS PART OF BID ALTERNATE NO. 1.
07.024 REVISE COLUMN SIZE TO W12x72 AS PART OF BID ALTERNATE NO. 1.
07.025 REVISE FOOTING TO F7.0x7.0 AS PART OF BID ALTERNATE NO. 1.

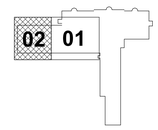
DESTIN FORT WALTON BEACH FLY VPS AIRPORT FlyVPS.com A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRAEF

SCOTT D. HINRICHS LICENSE No. 67810 STATE OF FLORIDA PROFESSIONAL ENGINEER

GRAEF
CERT # 4270
06/10/2020

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
B	ADDENDUM 3	06/03/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: KRN
CHECKED: SDH
SCALE: 1/8" = 1'-0"

RELEASE FOR BID SET

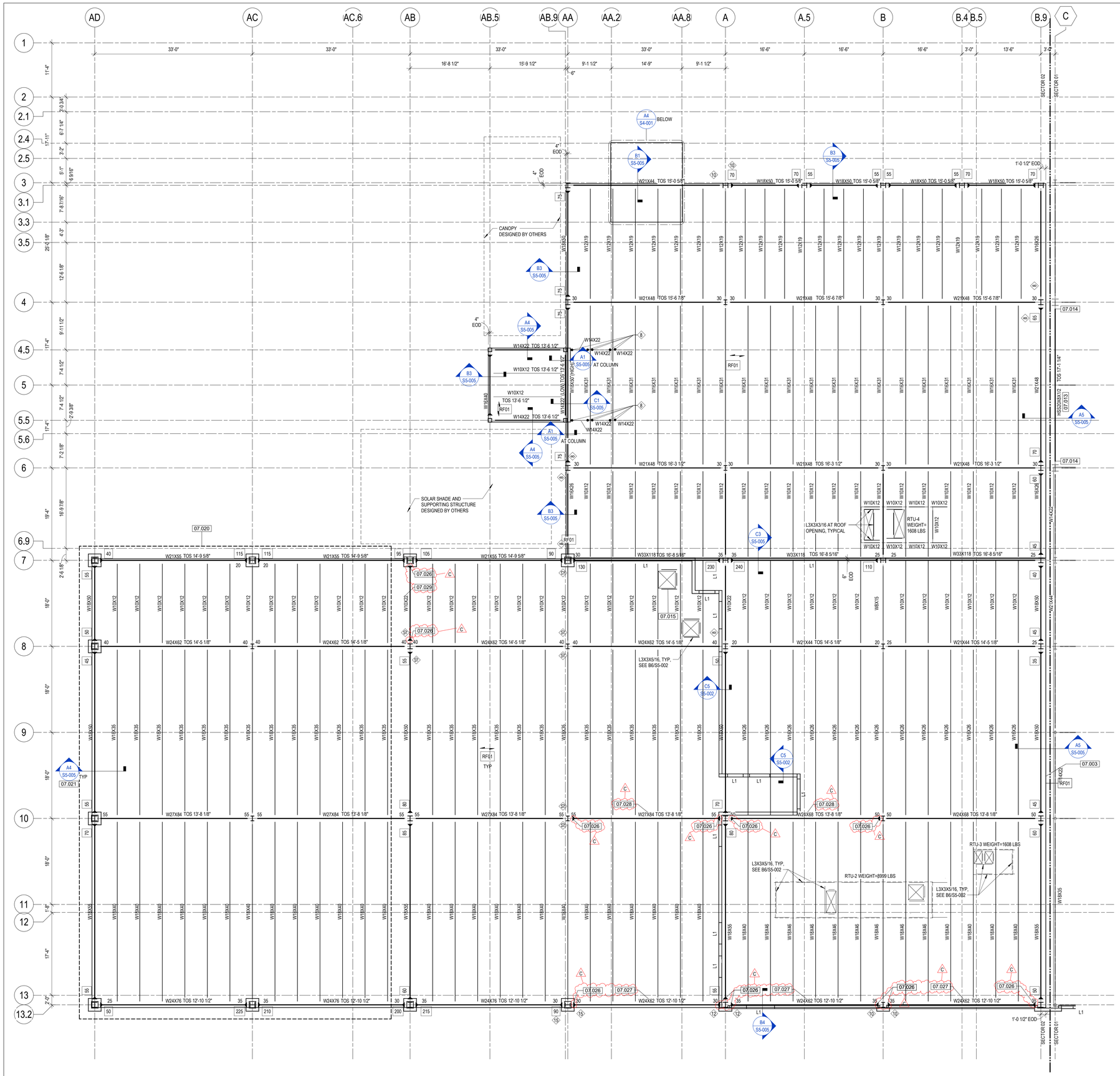
05/15/2020

SHEET TITLE:

FLOOR PLAN - LEVEL 01 - SECTOR 02

SHEET NUMBER:

S1-102



GENERAL SHEET NOTES

- PROVIDE MECHANICAL SUBFRAME FOR ALL DUCT PENETRATIONS THROUGH ROOF. COORDINATE SIZE AND LOCATION WITH MECHANICAL CONTRACTOR.
- REFER TO PLUMBING DRAWINGS FOR ROOF DRAIN LOCATIONS.
- BEAMS SHALL BE EQUALLY SPACED IN A BAY UNLESS NOTED OTHERWISE ON PLAN.
- SEE "GENERAL DETAILS" SHEET(S) FOR THE FOLLOWING DETAILS:
  - ROOF DRAIN SUBFRAME
  - MECHANICAL SUBFRAME
  - ROOF PERIMETER EDGE ANGLE OR BENT PLATE SPLICE
  - EDGE CONDITION AT DECK OPENING OR EDGES
- FOR BEAM END REACTIONS NOT SHOWN ON PLAN, DESIGN FOR A FACTORED END REACTION OF 15 KIPS.
- SEE "SCHEDULES" SHEET(S) FOR FLOOR/ROOF SCHEDULE.

SHEET KEYNOTES

07.003	EXPANSION JOINT, SEE ARCHITECTURAL DRAWINGS.
07.013	NEW HSS BEAM TO SUPPORT CURTAIN WALL. COORDINATE ELEVATION AND CURTAIN WALL ATTACHMENT WITH ARCHITECTURAL DRAWINGS AND CURTAIN WALL SUPPLIER. PROVIDE TEMPORARY SHORING FOR CURTAIN WALL AS REQUIRED UNTIL BEAM IS IN PLACE.
07.014	PROVIDE SEATED CONNECTION AT EXISTING COLUMN PER DETAIL A6/SS-006.
07.015	L3x3x5/16 AROUND OPENING AT ROOF HATCH. SEE B6/SS-002. COORDINATE SIZE AND LOCATION WITH ARCHITECTURAL DRAWINGS AND SUPPLIER.
07.020	DELETE AS PART OF BID ALTERNATE NO. 1.
07.021	MOVE TO GRID AB AS PART OF BID ALTERNATE NO. 1.
07.026	PROVIDE MOMENT CONNECTION AS PART OF BID ALTERNATE NO. 1 ONLY.
07.027	REVISE BEAM SIZE TO W24x76 AS PART OF BID ALTERNATE NO. 1.
07.028	REVISE BEAM SIZE TO W24x94 AS PART OF BID ALTERNATE NO. 1.
07.029	REVISE BEAM SIZE TO W18x50 AS PART OF BID ALTERNATE NO. 1.

DESTIN FORT WALTON BEACH FLY VPS AIRPORT FlyVPS.com A SERVICE OF OKALOOSA COUNTY

VTC

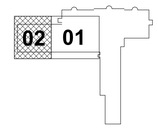
CORGAN

GRAEF

SCOTT D. HINRICHS LICENSE No. 67810 STATE OF FLORIDA PROFESSIONAL ENGINEER

GRAEF CERT # 4270 06/10/2020

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
B	ADDENDUM 3	06/03/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: KRN
CHECKED: SDH
SCALE: 1/8" = 1'-0"

RELEASE FOR BID SET

05/15/2020

SHEET TITLE:

ROOF PLAN - SECTOR 02

SHEET NUMBER:

S1-202

CONCRETE FOOTING SCHEDULE

MARK	SIZE			REINFORCEMENT		REMARKS
	LENGTH	WIDTH	THICKNESS	BOTTOM	TOP	
F4.0X4.0	4'-0"	4'-0"	1'-4"	(5)#5 EW	(5)#5 EW	
F5.0X5.0	5'-0"	5'-0"	1'-4"	(6)#5 EW	(6)#5 EW	
F6.0X6.0	6'-0"	6'-0"	1'-6"	(7)#6 EW	(7)#5 EW	
F7.0X7.0	7'-0"	7'-0"	1'-6"	(8)#6 EW	(8)#5 EW	
F8.0X8.0	8'-0"	8'-0"	1'-6"	(9)#6 EW	(9)#5 EW	
F9.0x6.0	9'-0"	6'-0"	1'-6"	(7)#6 LONG, (10)#6 SHORT	(7)#5 LONG, (10)#6 SHORT	5" CLEAR COVER FOR TOP SHORT REINFORCEMENT
F10.0X6.0	10'-0"	6'-0"	1'-0"	(7)#5 LONG, (11)#5 SHORT	(7)#5 LONG, (11)#5 SHORT	2" CLEAR COVER FOR TOP REINFORCEMENT
F12.0x3.0	12'-0"	3'-0"	2'-6"	(5)#7 LONG, (16)#7 SHORT	(5)#7 LONG, (16)#7 SHORT	5" CLEAR COVER FOR TOP SHORT REINFORCEMENT
F14.0x8.0	14'-0"	8'-0"	1'-0"	(12)#6 LONG, (14)#6 SHORT	(12)#5 LONG, (14)#5 SHORT	2" CLEAR COVER FOR TOP REINFORCEMENT
F19.0X4.0	19'-0"	4'-0"	1'-4"	(5)#5 LONG, (20)#5 SHORT	(5)#5 LONG, (20)#5 SHORT	

FLOOR / ROOF SCHEDULE

MARK	DESCRIPTION	REMARKS
SG1	VARIABLE THICKNESS CONCRETE OVERLAY WITH 6X6-W2.1XW2.1 WELDED WIRE FABRIC FOR 5" THICK OR LESS OVERLAY AND #4@12" EACH WAY FOR MORE THAN 5" THICK OVERLAY, SECURED IN THE TOP THIRD OF SLAB THICKNESS.	
SG2	6" CONCRETE SLAB-ON-GRADE WITH #3 @ 12" EACH WAY, 2" COVER FROM TOP OF SLAB	OVER A 10 MIL VAPOR RETARDER PLACED ON A COMPACTED FILL
SG3	5" CONCRETE SLAB-ON-GRADE WITH 6X6-W2.1XW2.1 WELDED WIRE FABRIC	OVER A 10 MIL VAPOR RETARDER PLACED ON A COMPACTED FILL
SG26	26" THICK CONCRETE MAT WITH #5@12" EACH WAY, TOP AND BOTTOM	
RF01	1 1/2"-20 GAGE METAL ROOF DECK	

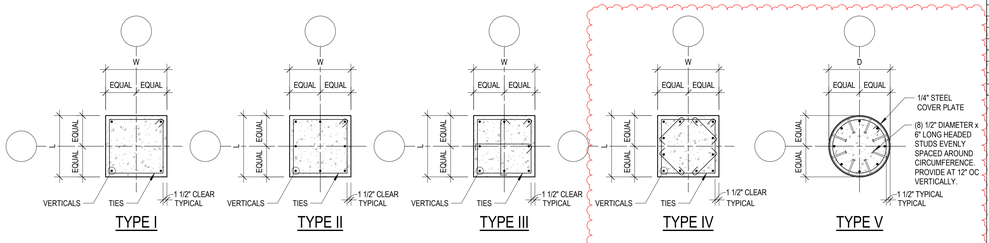
BASE PLATE SCHEDULE

MARK	SIZE			ANCHOR BOLTS	ANCHOR BOLT EMBEDMENT (Le)	DETAIL	REMARKS
	LENGTH, L	WIDTH, W	THICKNESS, t				
BP01	1'-6"	1'-6"	1"	(4) 3/4"	12"	A6/S6-001	
BP02	1'-8"	1'-4"	1"	(4) 3/4"	12"	B5/S5-004	
BP03	1'-6"	1'-6"	1"	(4) 3/4"	12"	A5/S6-001	DRILL AND EPOXY ANCHOR INTO EXISTING FOOTING
BP04	1'-5"	1'-5"	1"	(4) 3/4"	12"	A4/S6-001	

STEEL COLUMN SCHEDULE NOTES:
1. BPXX = BASE PLATE. SEE PLAN.
2. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 UNLESS NOTED OTHERWISE.

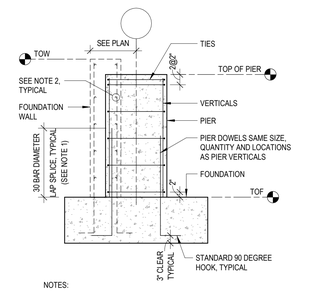
CONCRETE PIER SCHEDULE

MARK	TOP OF PIER ELEVATION	TYPE	SIZE			REINFORCEMENT		REMARKS
			LENGTH, L	WIDTH, W	DIAMETER, D	VERTICALS	TIES	
P02	-1'-11"	IV	2'-6"	2'-8"		12-#8	#4@12"	
P03	2'-1"	V			2'-6"	9-#8	#4@12"	
P04	2'-1"	V			3'-9"	12-#8	#4@12"	



TYPE I | TYPE II | TYPE III | TYPE IV | TYPE V

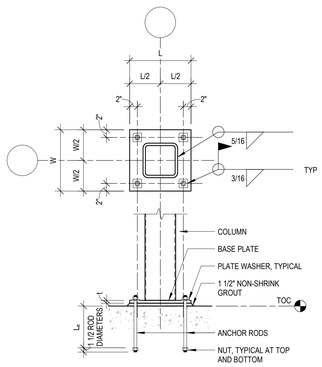
C



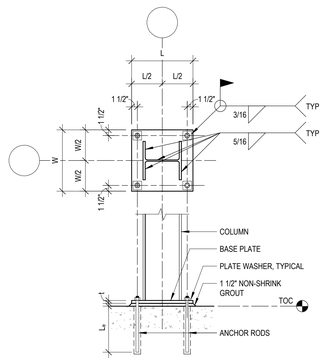
NOTES:
1. CONTRACTOR OPTION TO ELIMINATE SPLICE AND PROVIDE CONTINUOUS VERTICALS FOR SHORT PIERS.
2. CONTINUE FOUNDATION WALL HORIZONTAL REINFORCEMENT THROUGH PIER.
3. STEEL COLUMN SHALL BEAR ON FOUNDATION AND BE ENCASED BY PIER.

C

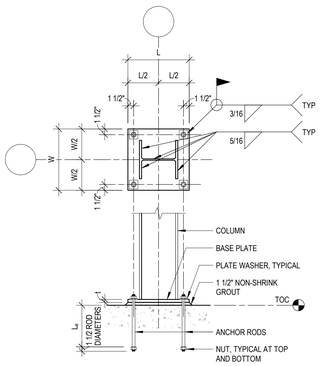
TYPICAL PIER DIAGRAM



A4 BASE PLATE
3/4" = 1'-0"



A5 BASE PLATE
3/4" = 1'-0"



A6 BASE PLATE
NTS

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC

CORGAN

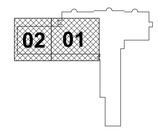
GRAEF

SCOTT D. HINRICHS
LICENSE No. 67810
STATE OF FLORIDA
PROFESSIONAL ENGINEER

GRAEF
CERT # 4270

06/10/2020

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: KRN
CHECKED: SDH
SCALE: As indicated

RELEASE FOR BID SET

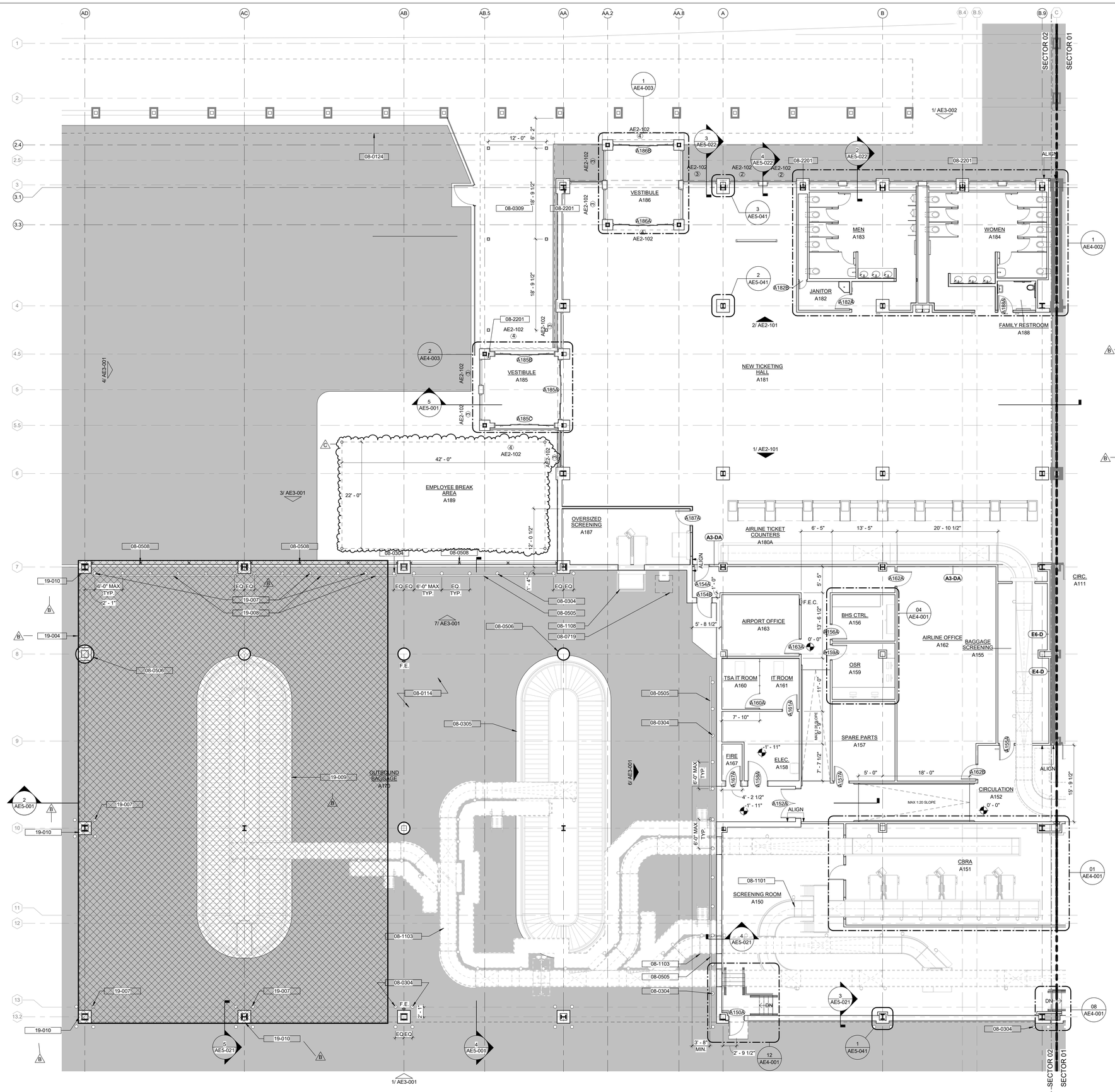
05/15/2020

SHEET TITLE:

MISCELLANEOUS SCHEDULES

SHEET NUMBER:

S6-001



GENERAL PLAN NOTES

1. ALL WALLS ARE TYPE A3 UNLESS NOTED OTHERWISE.
2. ALL CORRIDOR WALLS ARE TYPE A6 UNLESS NOTED OTHERWISE.
3. ALL INTERIOR FLOOR LEVELS ARE AT EL.100'-0" UNLESS NOTED OTHERWISE.
4. PROVIDE CONTROL JOINTS IN GYPSUM BOARD WALLS ABOVE THE CORNER OF ALL INTERIOR DOOR AND WINDOW FRAMES IN THE CENTER OF STRAIGHT WALLS 30'-0" IN LENGTH OR GREATER OR AS INDICATED ON INTERIOR ELEVATIONS. PROVIDE HORIZONTAL CONTROL JOINTS AT 10'-0" A.F.F. THROUGHOUT BUILDING, TYP.
5. ALL INTERIOR WINDOWS TO BE MOUNTED AT 86" A.F.F.TO TOP OF FRAME UNLESS NOTED OTHERWISE.
6. ALL WALL-MOUNTED FIRE EXTINGUISHERS TO BE MOUNTED AT 45° MAX. TO EXTINGUISHER HANDLE U.N.O.
7. ALL CRASH PADS TO BE MOUNTED AT 4" A.F.F. TO BOTTOM OF PAD U.N.O.
8. PROVIDE ROOF HATCHES ABOVE ALL STEEL LADDERS FOR ROOF ACCESS.
9. PROVIDE PLASTIC LAMINATE WINDOW SILL INSIDE ALL EXTERIOR WINDOWS (EXCEPT CLERESTORY WINDOWS.)
10. PROVIDE 4'-0" HIGH CORNER GUARDS AT ALL EXPOSED GYP. BOARD CORNERS MOUNTED AT 4" A.F.F. TO BOTTOM RE: SPECS.

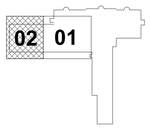
KEYNOTE LEGEND

08-0114	EXISTING SLOPING APRON PAVEMENT TO REMAIN. REFER STRUCTURAL DRAWINGS FOR MORE INFORMATION
08-0124	EDGE OF EXISTING CURBSIDE CANOPY. CONTRACTOR TO VERIFY HEIGHT ABOVE GRADE AND HORIZONTAL LOCATION.
08-0304	6" DIAMETER CONCRETE FILLED METAL BOLLARDS PAINTED SAFETY YELLOW (TYP.)
08-0305	CONCRETE HOUSEKEEPING PAD. HORIZONTAL DIMENSIONS TO MATCH BHS DEVICE. TOP OF PAD ELEVATION TO REMAIN CONSISTENT FOR ENTIRE LENGTH. TYP.
08-0309	NEW CONCRETE WALKWAY. REF. TO CIVIL DRAWINGS.
08-0505	STEEL CHANNEL GUARDRAIL PAINTED SAFETY YELLOW. INSTALL W/CENTER OF RAIL AT 30" A.F.F.
08-0506	STEEL COLUMN PROTECTION PAINTED SAFETY YELLOW, TYP. REFER TO STRUCTURAL. DELETE AS PART OF BID ALTERNATE 1
08-0508	CHAINLINK FENCE WITH SLATS.
08-0719	NEW ROOF HATCH WITH LADDER OVERHEAD
08-1101	BAGGAGE CONVEYORS SHOWN FOR REFERENCE, REFER TO BAGGAGE.
08-1103	OVERHEAD BAGGAGE CONVEYORS SHOWN FOR REFERENCE. REFER TO BAGGAGE.
08-1108	OVERSIZED BAGGAGE EQUIPMENT FOR REFERENCE, REFER TO BAGGAGE.
08-2201	NEW ROOF DRAIN, TYP. REFER TO PLUMBING FOR MORE INFORMATION.
19-004	BID ALTERNATE 1.
19-007	CONCRETE FILLED METAL BOLLARD. DELETE AS PART OF BID ALTERNATE 1.
19-008	STEEL CHANNEL GUARDRAIL. DELETE AS PART OF BID ALTERNATE 1.
19-009	CONCRETE HOUSEKEEPING PAD. DELETE AS PART OF BID ALTERNATE 1.
19-010	CMU COLUMN ENCLOSURE. DELETE AS PART OF BID ALTERNATE 1.

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
B	ADDENDUM 3	06/03/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. SMOTHERS
CHECKED: K. MCGILBERRY
SCALE: 1/8" = 1'-0"

RELEASE FOR BID SET

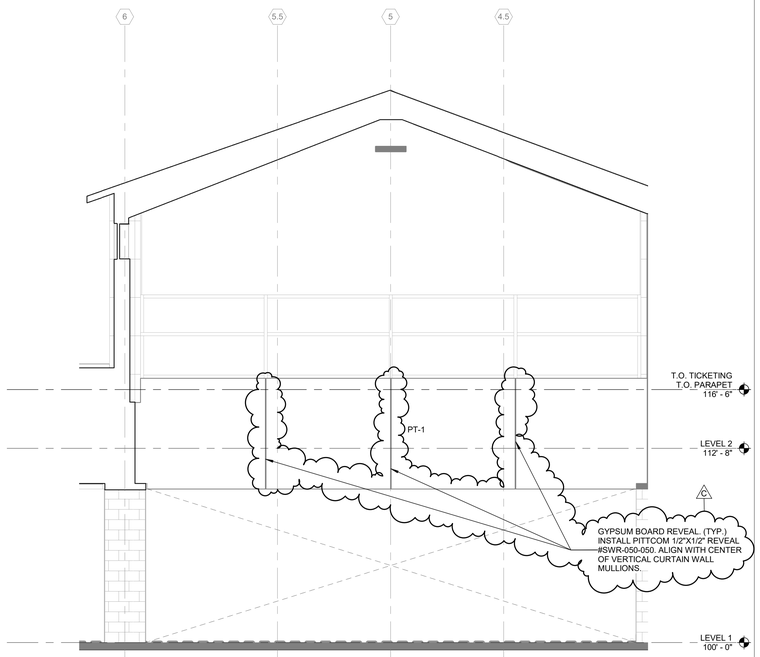
05/15/2020

SHEET TITLE:

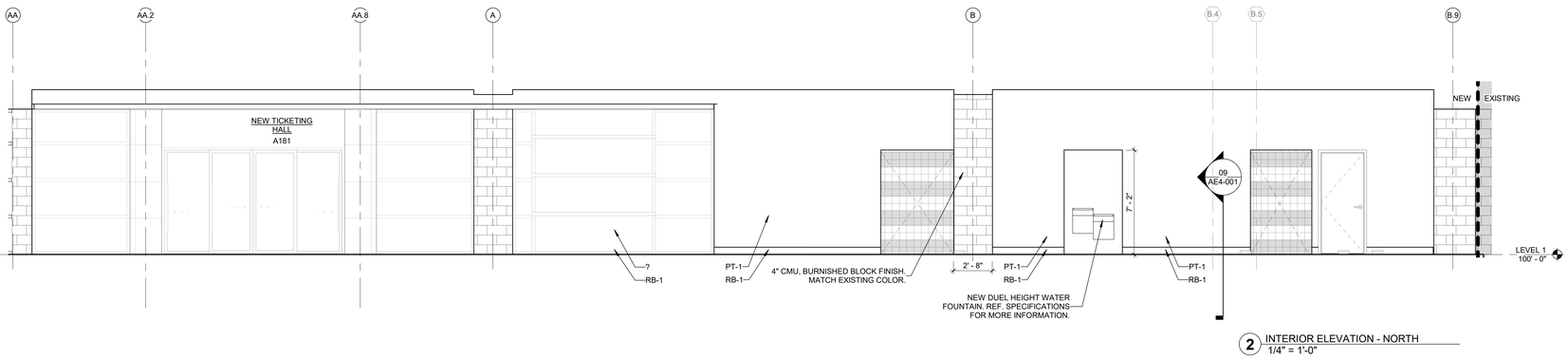
FLOOR PLAN - LEVEL 01 - SECTOR 02

SHEET NUMBER:

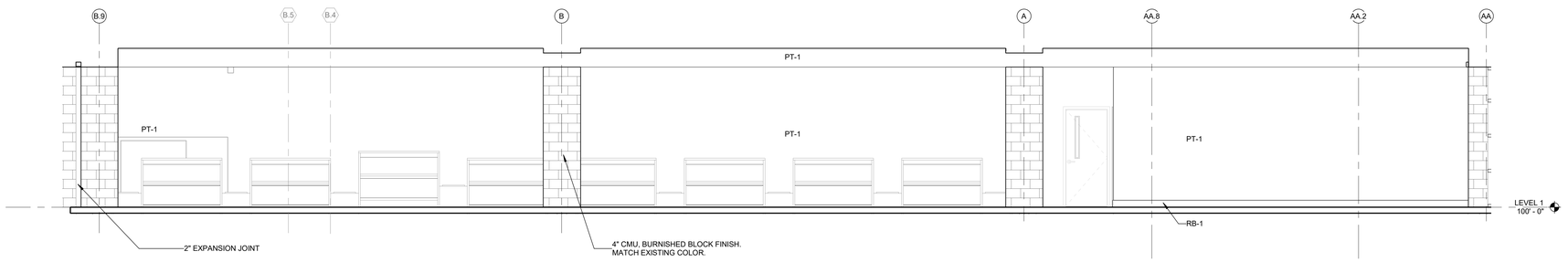
AE1-102



3 INTERIOR ELEVATION - EXISTING CLERESTORY
1/4" = 1'-0"



2 INTERIOR ELEVATION - NORTH
1/4" = 1'-0"



1 INTERIOR ELEVATION - TICKETING
1/4" = 1'-0"

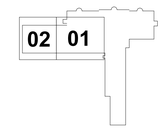
INT. MATERIALS LEGEND

PT-1, PT-2, PT-3, RB-1, WC-1, F-1, FRP-1, PL-1, SS-1, WF-1

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. SMOTHERS
CHECKED: K. MCGILBERRY
SCALE: 1/4" = 1'-0"

RELEASE FOR BID SET

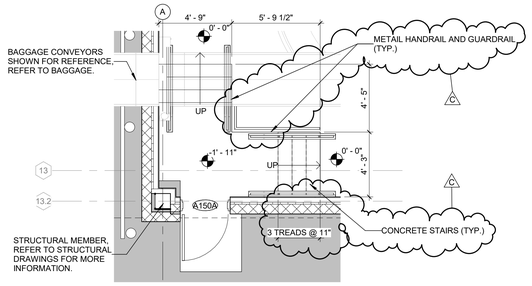
05/15/2020

SHEET TITLE:

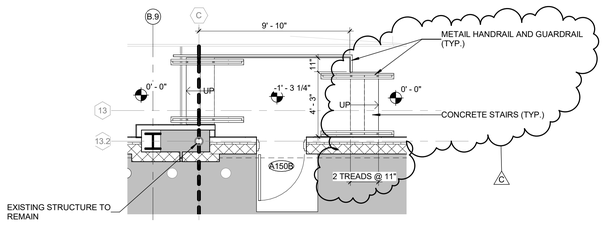
INTERIOR ELEVATIONS

SHEET NUMBER:

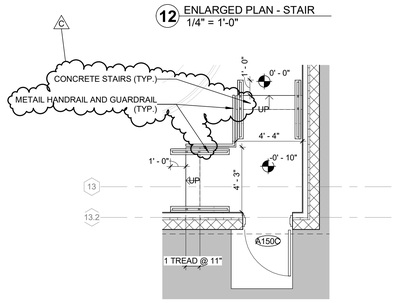
AE2-101



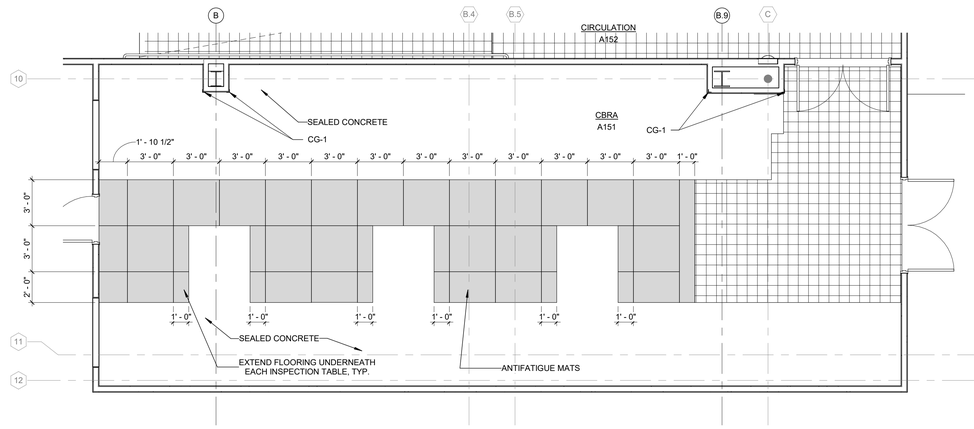
12 ENLARGED PLAN - STAIR
1/4" = 1'-0"



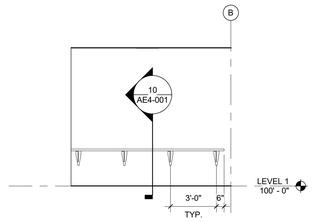
08 ENLARGED PLAN - STAIR
1/4" = 1'-0"



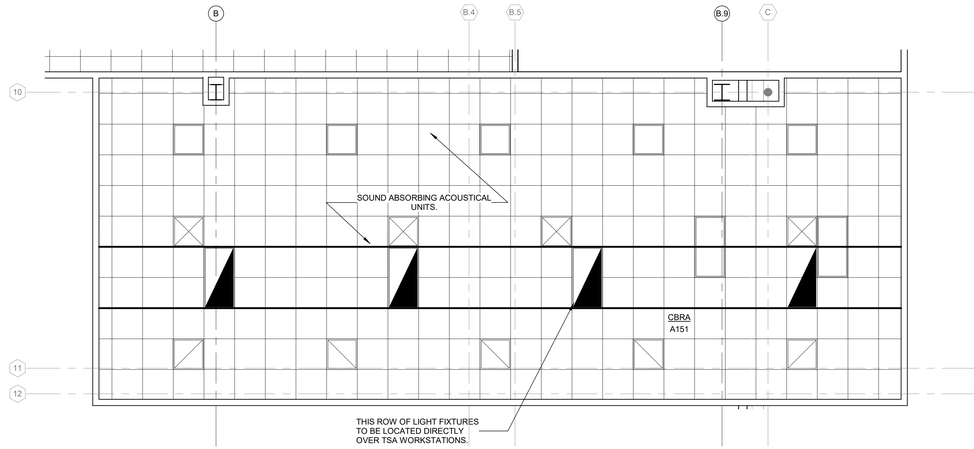
11 ENLARGED PLAN - STAIR
1/4" = 1'-0"



03 ENLARGED FINISH PLAN - CBRA ROOM
1/4" = 1'-0"



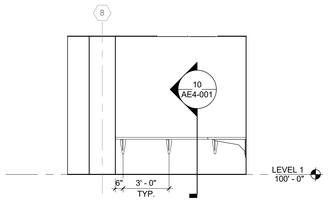
07 INTERIOR ELEVATION BHS CTRL
1/4" = 1'-0"



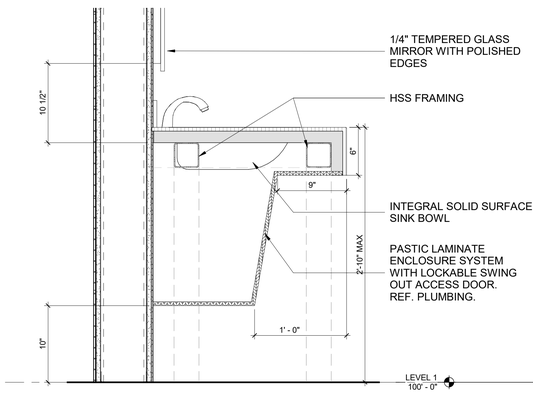
02 ENLARGED RCP - CBRA ROOM
1/4" = 1'-0"

10 SECTION DETAIL - MILLWORK
1 1/2" = 1'-0"

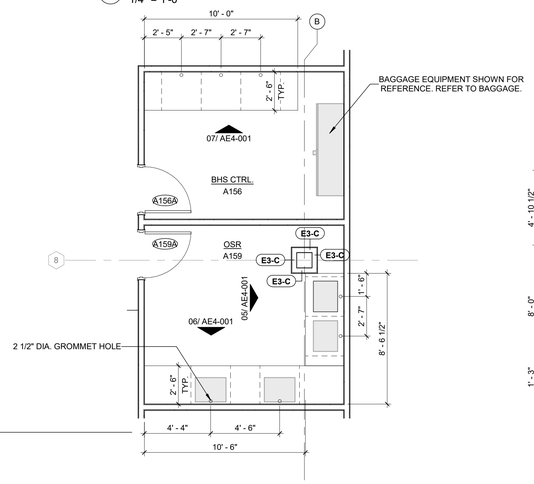
06 INTERIOR ELEVATION - OSR
1/4" = 1'-0"



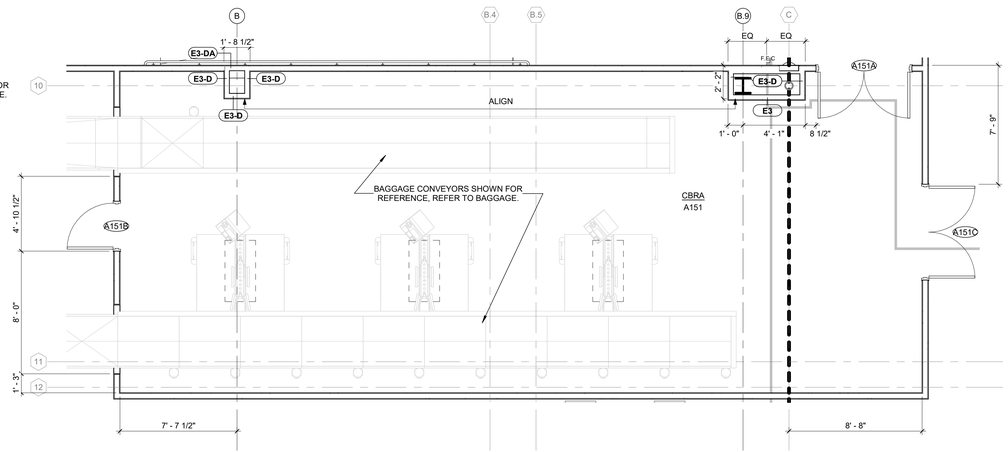
05 INTERIOR ELEVATION - OSR
1/4" = 1'-0"



09 SECTION DETAIL - VANITY/SHELF
1 1/2" = 1'-0"



04 ENLARGED PLAN - BHS CTRL & OSR
1/4" = 1'-0"

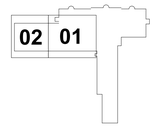


01 ENLARGED PLAN - CBRA ROOM
1/4" = 1'-0"

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. SMOTHERS
CHECKED: K. MCGILBERRY
SCALE: As indicated

RELEASE FOR BID SET

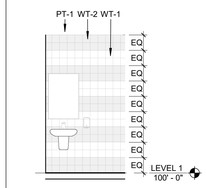
05/15/2020

SHEET TITLE:

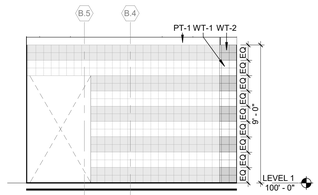
ENLARGED PLANS

SHEET NUMBER:

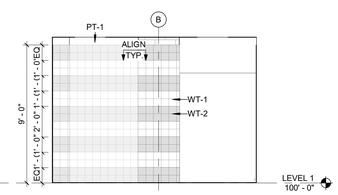
AE4-001



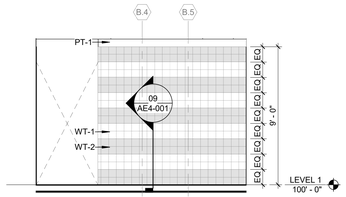
16 INTERIOR ELEVATION - ADA WATER CLOSET
1/4" = 1'-0"



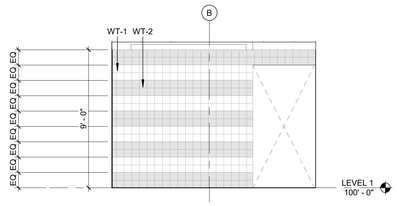
15 INTERIOR ELEVATION - WOMEN'S RESTROOM
1/4" = 1'-0"



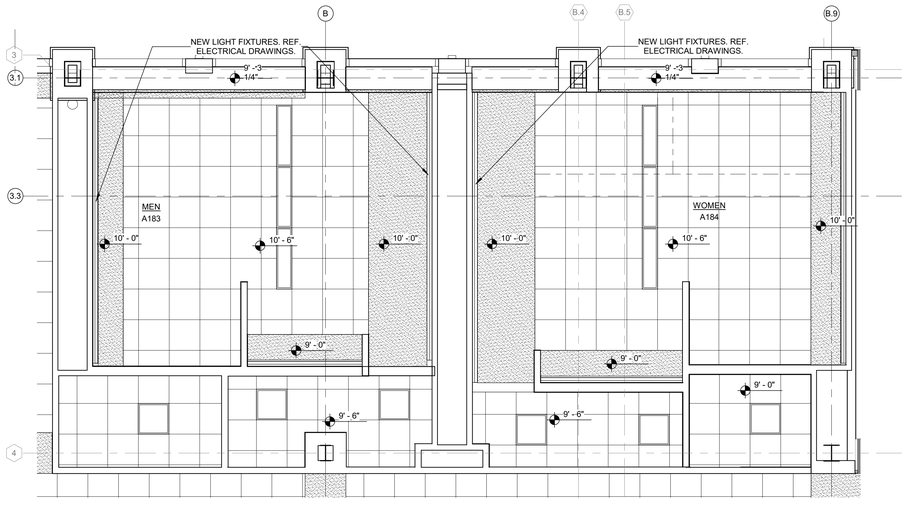
9 INTERIOR ELEVATION - MEN'S RESTROOM
1/4" = 1'-0"



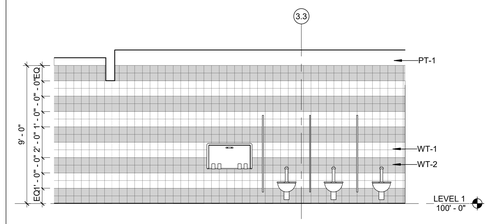
14 INTERIOR ELEVATION - WOMEN'S RESTROOM
1/4" = 1'-0"



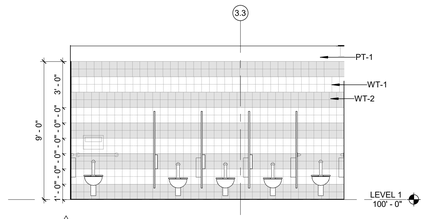
8 INTERIOR ELEVATION - MEN'S RESTROOM
1/4" = 1'-0"



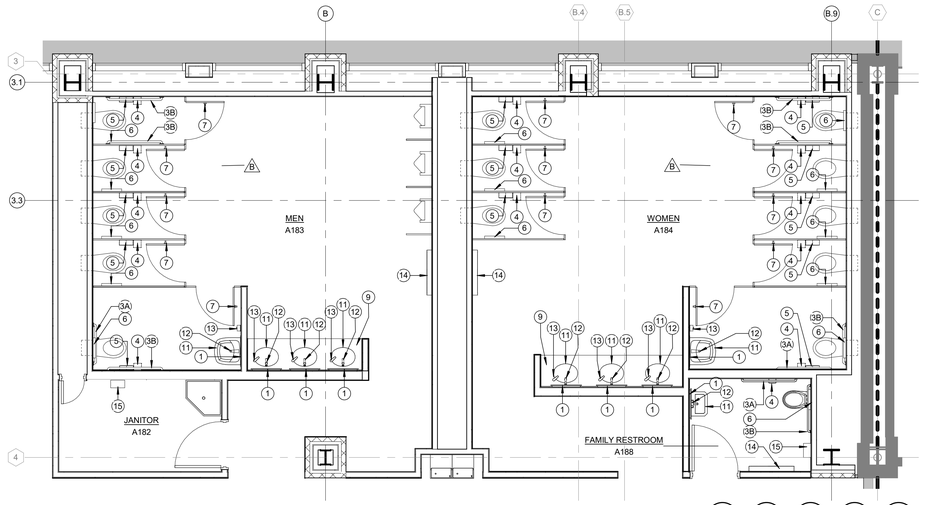
4 ENLARGED RCP - RESTROOM
1/4" = 1'-0"



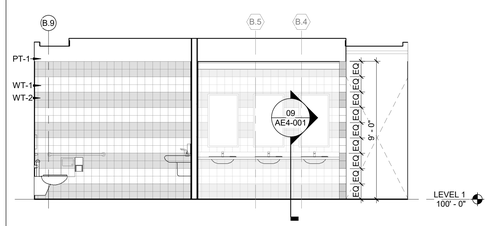
13 INTERIOR ELEVATION - WOMEN'S RESTROOM
1/4" = 1'-0"



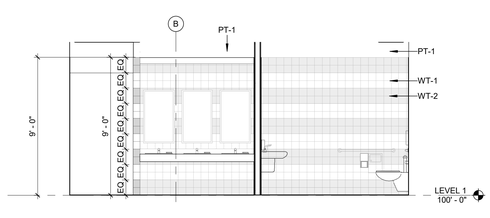
7 INTERIOR ELEVATIONS - MEN'S RESTROOM
1/4" = 1'-0"



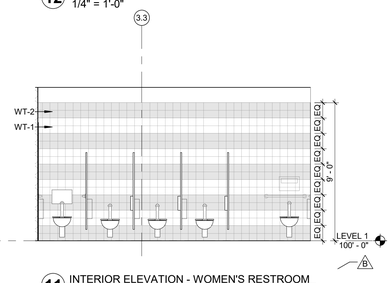
2 ACCESSORIES PLAN
1/4" = 1'-0"



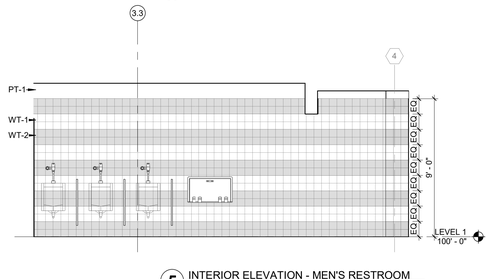
12 INTERIOR ELEVATION - WOMEN'S RESTROOM
1/4" = 1'-0"



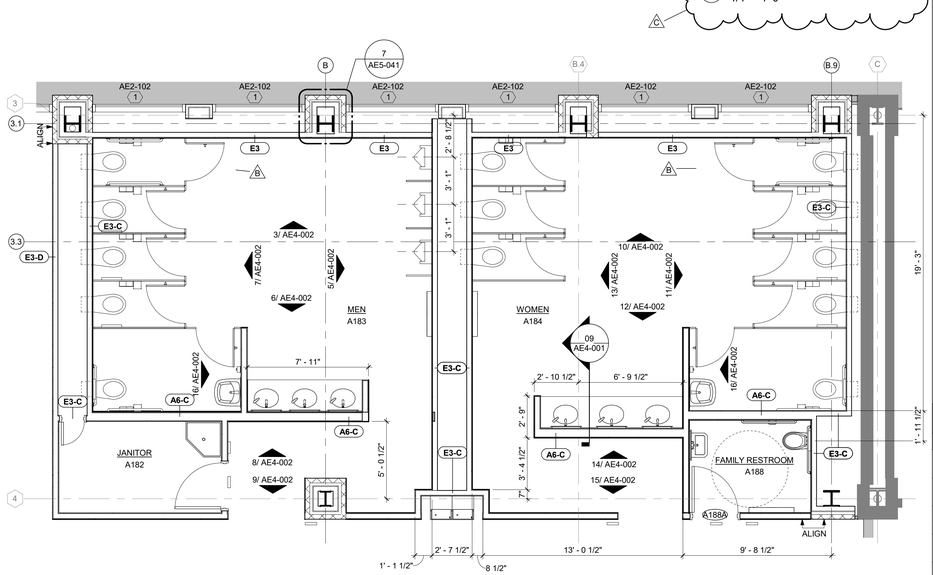
6 INTERIOR ELEVATION - MEN'S RESTROOM
1/4" = 1'-0"



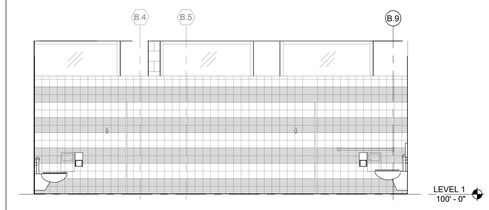
11 INTERIOR ELEVATION - WOMEN'S RESTROOM
1/4" = 1'-0"



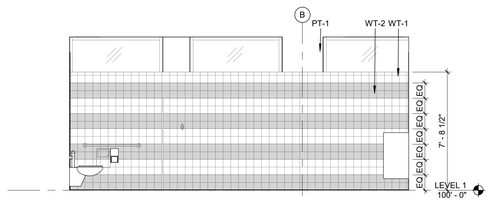
5 INTERIOR ELEVATION - MEN'S RESTROOM
1/4" = 1'-0"



1 ENLARGED RESTROOM PLANS
1/4" = 1'-0"



10 INTERIOR ELEVATION - WOMEN'S RESTROOM
1/4" = 1'-0"



3 INTERIOR ELEVATION - MEN'S RESTROOM
1/4" = 1'-0"

KEYNOTE LEGEND

08-2603	NEW LIGHT FIXTURES. REF. ELECTRICAL DRAWINGS.

TOILET ACCESSORY LEGEND

NOTE: REFER TO SPECIFICATION SECTION 10 28 00 FOR MORE INFORMATION

1. WALL MOUNTED MIRROR
2. SANITARY NAPKIN DISPOSAL
3. GRAB BARS
   - 3A 36" UNIT
   - 3B 42" UNIT
4. JUMBO ROLL TOILET TISSUE DISPENSER
5. N/A
6. SEAT COVER DISPENSER
7. PARTITION HOOK
8. N/A
9. SOLID SURFACE (SS-1) COUNTERTOP
10. N/A
11. SINK
12. FAUCET
13. SOAP DISPENSER
14. BABY CHANGING STATION
15. MOP AND BROOM HOLDERS

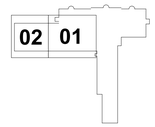
RCP LEGEND

	2X2 LAY-IN CEILING		GYP. BD. CEILING
ES	EXPOSED STRUCTURE		2X4 LAY-IN LENS FIXTURE
1' - 0"	1' - 0" FINISHED CEILING HEIGHT A.F.F.		1"X2" HUNG LIGHT STRIP
	RETURN AIR DIFFUSER		SUPPLY AIR DIFFUSER
	CEILING SPEAKER		EMERGENCY EXIT FIXTURE
	FENCE TOP ENCLOSURE		

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
B	ADDENDUM 3	06/03/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: F. KAREEM
CHECKED: K. MCGILBERRY
SCALE: As indicated

RELEASE FOR BID SET

05/15/2020

SHEET TITLE:

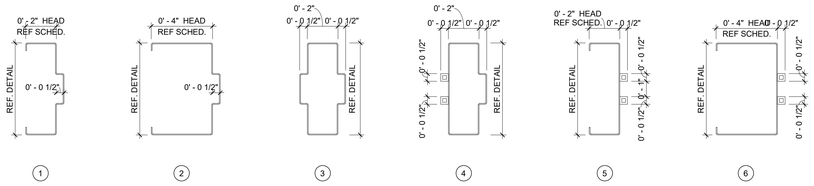
ENLARGED PLANS

SHEET NUMBER:

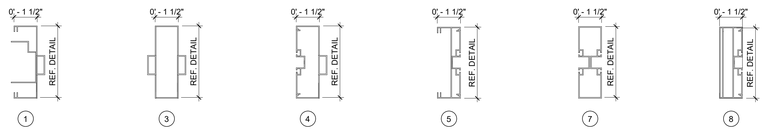
AE4-002

DOOR SCHEDULE

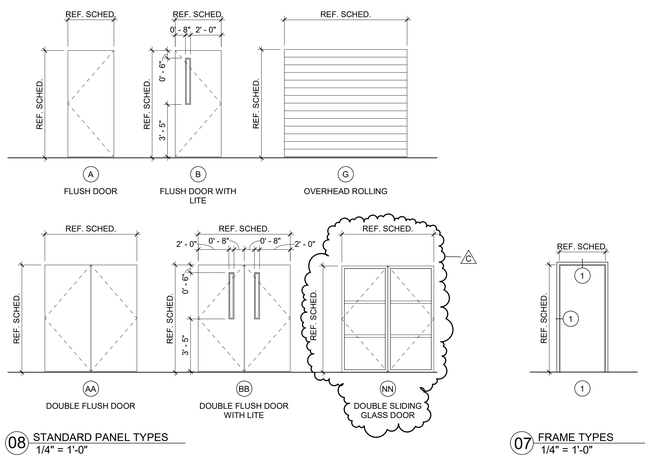
DOOR NUMBER	ROOM FROM ROOM	ROOM TO ROOM	DOOR WIDTH	DOOR HEIGHT	DOOR PANEL TYPE	DOOR MATERIAL	DOOR FINISH	DOOR THICKNESS	DOOR GLAZING	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	FRAME DETAILS HEAD	FRAME DETAILS JAMB	HARDWARE SET	FIRE RATING	STC RATING	COMMENTS
LEVEL 1																		
A125C		EXTERIOR	3' - 0"	7' - 0"	B	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	02/AE6-001	03/AE6-001	1.0			CR, BOTH SIDES
A150A	SCREENING ROOM		3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	02/AE6-001	03/AE6-001	2.0			CR
A150B	SCREENING ROOM		3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	02/AE6-001	03/AE6-001	2.0			CR
A150C	SCREENING ROOM		3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	02/AE6-001	03/AE6-001	2.0			CR
A150D		SCREENING ROOM	20' - 0"	8' - 0"	OH-ROLL	MTL	MATCH EXISTING	0' - 1 3/4"	N/A	No Frame	MTL	MATCH EXISTING	02/AE5-061	03/AE6-001	12.0			FOR HARDWARE REFER TO SPECIFICATIONS
A150E	CIRC.	SCREENING ROOM	3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.0			CR
A150F	SCREENING ROOM	CIRCULATION	3' - 0"	7' - 0"	A	WD	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.0			CR
A151A	CIRCULATION	CBRA	6' - 0"	7' - 0"	BB	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.2			CR
A151B	CBRA	SCREENING ROOM	3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.0			CR
A151C	CBRA	SCREENING ROOM	6' - 0"	7' - 0"	AA	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.1			CR
A152A	CIRCULATION	OUTBOUND BAGGAGE	6' - 0"	7' - 0"	BB	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	02/AE6-001	03/AE6-001	3.2			CR
A154A	AIRLINE TICKET COUNTERS	CIRCULATION	3' - 0"	7' - 0"	B	WD	MATCH EXISTING	0' - 1 3/4"	REFER TO SPECS C	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	9.0			
A154B	CIRCULATION	OUTBOUND BAGGAGE	3' - 0"	7' - 0"	B C	HM	MATCH EXISTING	0' - 1 3/4"	REFER TO SPECS	1	HM C	MATCH EXISTING	02/AE6-001	03/AE6-001	1.0			CR, BOTH SIDES
A155A	BAGGAGE SCREENING	CIRCULATION	3' - 0"	7' - 0"	A	WD	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.0			
A156A	CIRCULATION	BHS CTRL.	3' - 0"	7' - 0"	A	WD	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.0			CR
A157A	CIRCULATION	SPARE PARTS	3' - 0"	7' - 0"	A	WD	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	7.0			
A158A	OUTBOUND BAGGAGE	ELEC.	4' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	02/AE6-001	03/AE6-001	5.0	1 HR		CR
A159A	CIRCULATION	OSR	3' - 0"	7' - 0"	A	WD	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.0			CR
A160A	IT ROOM	TSA IT ROOM	3' - 0"	7' - 0"	J	FENCE	MATCH EXISTING	0' - 1"	N/A	1	MTL	MATCH EXISTING	N/A	N/A	14.0			CR
A161A	ELEC.	IT ROOM	3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	4.0			CR
A162A	CIRCULATION	AIRLINE OFFICE	3' - 0"	7' - 0"	A	WD	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	6.0			
A162B	AIRLINE OFFICE	CIRCULATION	3' - 0"	7' - 0"	A	WD	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	6.0			
A167A	FIRE	OUTBOUND BAGGAGE	3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	02/AE6-001	03/AE6-001	4.3	1 HR		
A182A	MEN	JANITOR	3' - 0"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	5.1			
A182B		JANITOR	1' - 6"	7' - 0"	A	HM	MATCH EXISTING	0' - 1 3/4"	N/A	1	HM	MATCH EXISTING	06/AE6-001	04/AE6-001	5.2			
A185A	VESTIBULE	NEW TICKETING HALL	6' - 0"	7' - 2"	NN	ALUM	REFER TO SPECS	0' - 1"	N/A	1	ALUM	REFER TO SPECS			3.1			
A185B		VESTIBULE	6' - 0"	7' - 2"	NN	ALUM	REFER TO SPECS	0' - 1"	N/A	1	ALUM	REFER TO SPECS			3.0			
A185C	EMPLOYEE BREAK AREA	VESTIBULE	6' - 0"	7' - 2"	NN	ALUM	REFER TO SPECS	0' - 1"	N/A	1	ALUM	REFER TO SPECS C			3.0			
A186A	VESTIBULE	NEW TICKETING HALL	6' - 0"	7' - 2"	NN	ALUM	REFER TO SPECS	0' - 1"	N/A	1	ALUM	REFER TO SPECS			3.1			
A186B		VESTIBULE	6' - 0"	7' - 2"	NN	ALUM	REFER TO SPECS	0' - 1"	N/A	1	ALUM	REFER TO SPECS			3.0			
A187A	OVERSIZED SCREENING	AIRLINE TICKET COUNTERS	3' - 0"	7' - 0"	A C	HM	WD-1: ENTER WOOD NAME	0' - 1 3/4"	N/A	1	HM	HM	06/AE6-001	04/AE6-001	4.0			CR
A190A	EDS STORAGE	SCREENING ROOM	2' - 8 1/4"	7' - 0"	J	FENCE	MATCH EXISTING	0' - 1"	N/A	No Frame	MTL	MATCH EXISTING	N/A	N/A	15.0			FENCE DOOR



10 H. M. FRAME PROFILES
3" = 1'-0"

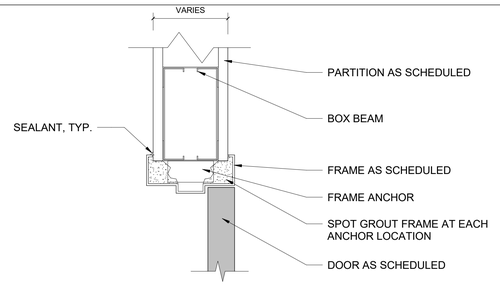


09 AL. KNOCKDOWN FRAME PROFILE
3" = 1'-0"

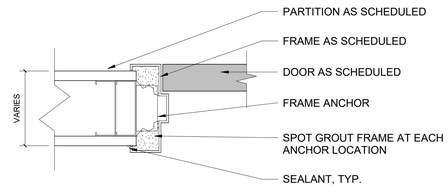


08 STANDARD PANEL TYPES
1/4" = 1'-0"

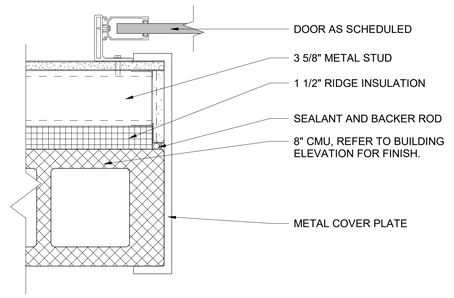
07 FRAME TYPES
1/4" = 1'-0"



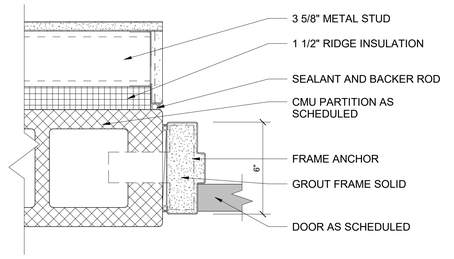
06 STANDARD STUD WALL HEADER DETAIL
3" = 1'-0"



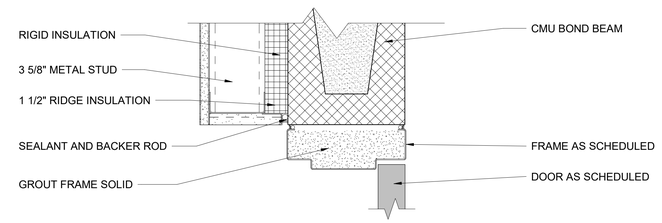
04 STANDARD STUD WALL JAMB DETAIL
3" = 1'-0"



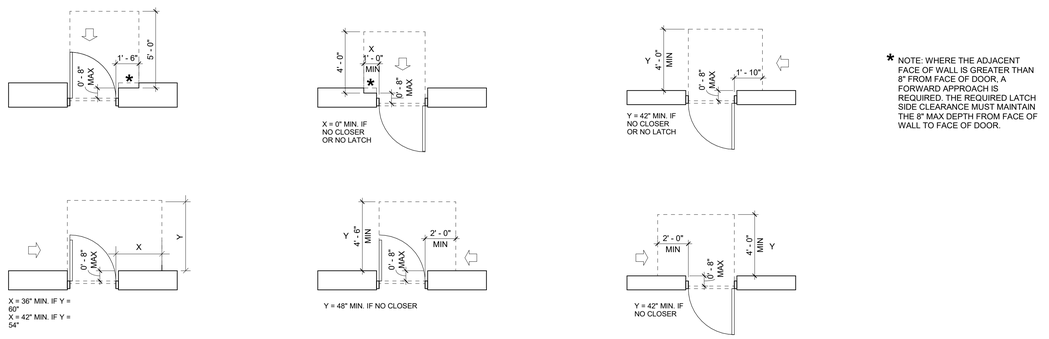
05 EXTERIOR WALL - OVERHEAD DOOR JAMB DTL
3" = 1'-0"



03 EXTERIOR WALL - DOOR JAMB DTL
3" = 1'-0"



02 EXTERIOR WALL - DOOR HEADER DTL
3" = 1'-0"



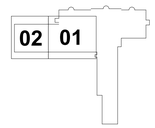
01 REQUIRED DOOR CLEARANCES FOR WALLS GREATER THAN 8" THICK
1/4" = 1'-0"

* NOTE: WHERE THE ADJACENT FACE OF WALL IS GREATER THAN 8" FROM FACE OF DOOR, A FORWARD APPROACH IS REQUIRED. THE REQUIRED LATCH SIDE CLEARANCE MUST MAINTAIN THE 8" MAX DEPTH FROM FACE OF WALL TO FACE OF DOOR.

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. SMOTHERS
CHECKED: K. MCGILBERRY
SCALE: As indicated

RELEASE FOR BID SET

05/15/2020

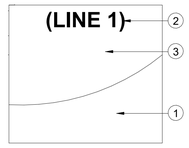
SHEET TITLE:

DOOR AND FRAME DETAILS

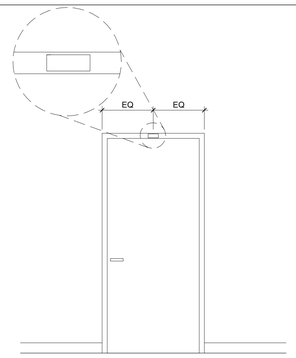
SHEET NUMBER:

AE6-001

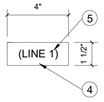
NOTE:
- CONTRACTOR TO VALIDATE SIGN AND GRAPHIC SIZE WITH EXISTING.
- PROVIDE BRAILLE (TYPE AND POSITION) AS REQUIRED IN 2014 FBC: ACCESSIBILITY, 703.3 - BRAILLE



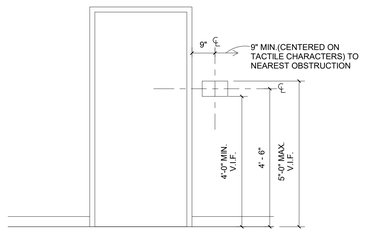
03 SIGN TYPE S1 DETAIL
3" = 1'-0"



05 SIGN TYPE S2 MOUNTING HEIGHT
1/2" = 1'-0"

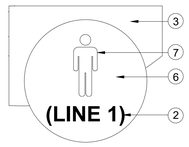


02 SIGN TYPE S2 DETAIL
3" = 1'-0"

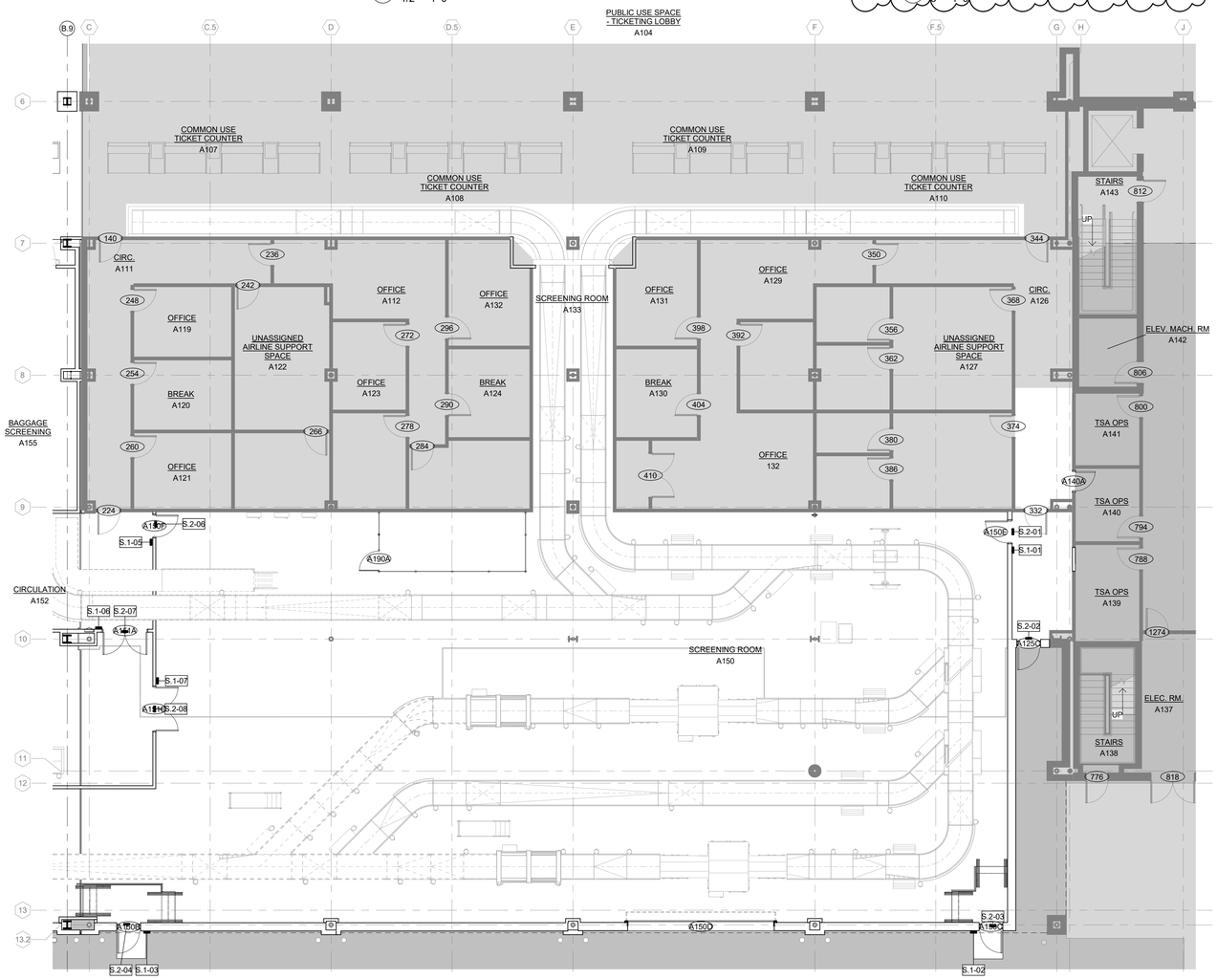


04 SIGN TYPE S1 MOUNTING HEIGHT
1/2" = 1'-0"

NOTE:
- CONTRACTOR TO VALIDATE SIGN AND GRAPHIC SIZE WITH EXISTING.
- PROVIDE BRAILLE (TYPE AND POSITION) AS REQUIRED IN 2014 FBC: ACCESSIBILITY, 703.3 - BRAILLE



06 SIGN TYPE S3 DETAIL
3" = 1'-0"



KEY NOTES:

1. BLUE BACKGROUND
2. 1" RAISED TEXT, WHITE COLOR. FONT: TREBUCHET MS BOLD, CONTRACTOR TO VERIFY FONT AND SIZE WITH EXISTING.
3. TEAL BACKGROUND
4. BLACK BACKGROUND
5. 5/8" TEXT, WHITE COLOR
6. RED-ORANGE BACKGROUND
7. MEN/WOMEN/FAMILY PICTOGRAPH, WHITE COLOR

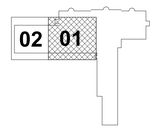
SIGNAGE SCHEDULE

SIGN TYPE	SIGN SYMBOL	SIGN NUMBER	SIGN TEXT	SIGN DETAIL
S.1	S.1-01	A150E	SCREENING ROOM	04/AE7-101
S.1	S.1-02	A150	AUTHORIZED PERSONNEL ONLY	04/AE7-101
S.1	S.1-03	A150	AUTHORIZED PERSONNEL ONLY	04/AE7-101
S.1	S.1-04	A150	AUTHORIZED PERSONNEL ONLY	04/AE7-101
S.1	S.1-05	A150	SCREENING ROOM	04/AE7-101
S.1	S.1-06	A151	CBRA	04/AE7-101
S.1	S.1-07	A151	CBRA	04/AE7-101
S.1	S.1-08	A151	CBRA	04/AE7-101
S.1	S.1-09	A162	OFFICE	04/AE7-101
S.1	S.1-10	A162	OFFICE	04/AE7-101
S.1	S.1-11	A157	SPARE PARTS	04/AE7-101
S.1	S.1-12	A159	OSR	04/AE7-101
S.1	S.1-13	A156	BHS CTRL	04/AE7-101
S.1	S.1-14	A163	OVERSIZED SCREENING	04/AE7-101
S.1	S.1-15	A154	OVERSIZED SCREENING	04/AE7-101
S.1	S.1-16	A158	ELECTRICAL RM	04/AE7-101
S.1	S.1-17	A161	IT RM	04/AE7-101
S.1	S.1-18	A167	FIRE	04/AE7-101
S.1	S.1-30	A154	CIRCULATION	04/AE7-101
S.1	S.1-31	A187	OVERSIZED SCREENING	04/AE7-101
S.1	S.1-32	A155A	BAGGAGE SCREENING	04/AE7-101
S.1	S.1-33	A187	JANITOR	04/AE7-101
S.2	S.2-01	A150E	A150E	05/AE7-101
S.2	S.2-02	A125C	A125C	05/AE7-101
S.2	S.2-03	A150C	A150C	05/AE7-101
S.2	S.2-04	A150B	A150B	05/AE7-101
S.2	S.2-05	A150A	A150A	05/AE7-101
S.2	S.2-06	A150F	A150F	05/AE7-101
S.2	S.2-07	A151A	A151A	05/AE7-101
S.2	S.2-08	A151C	A151C	05/AE7-101
S.2	S.2-09	A151B	A151B	05/AE7-101
S.2	S.2-10	A152	A152	05/AE7-101
S.2	S.2-11	A157	A157	05/AE7-101
S.2	S.2-12	162B	162B	05/AE7-101
S.2	S.2-13	162A	162A	05/AE7-101
S.2	S.2-14	159A	159A	05/AE7-101
S.2	S.2-15	A156	A156	05/AE7-101
S.2	S.2-16	A163	A163	05/AE7-101
S.2	S.2-17	A158	A158	05/AE7-101
S.2	S.2-18	A167	A167	05/AE7-101
S.2	S.2-19	A161	A161	05/AE7-101
S.2	S.2-20	A154B	A154B	05/AE7-101
S.2	S.2-21	A154A	A154A	05/AE7-101
S.2	S.2-22	A187A	A187A	05/AE7-101
S.2	S.2-23	A155A	A155A	05/AE7-101
S.2	S.2-24	A182	A182	05/AE7-101
S.2	S.2-25	A184	A184	05/AE7-101
S.3	S.3-01	A183	MEN	04/AE7-101
S.3	S.3-02	A184	WOMEN	04/AE7-101
S.3	S.3-03	A188	FAMILY	04/AE7-101

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. SMOTHERS
CHECKED: K. MCGILBERRY
SCALE: As indicated

RELEASE FOR BID SET

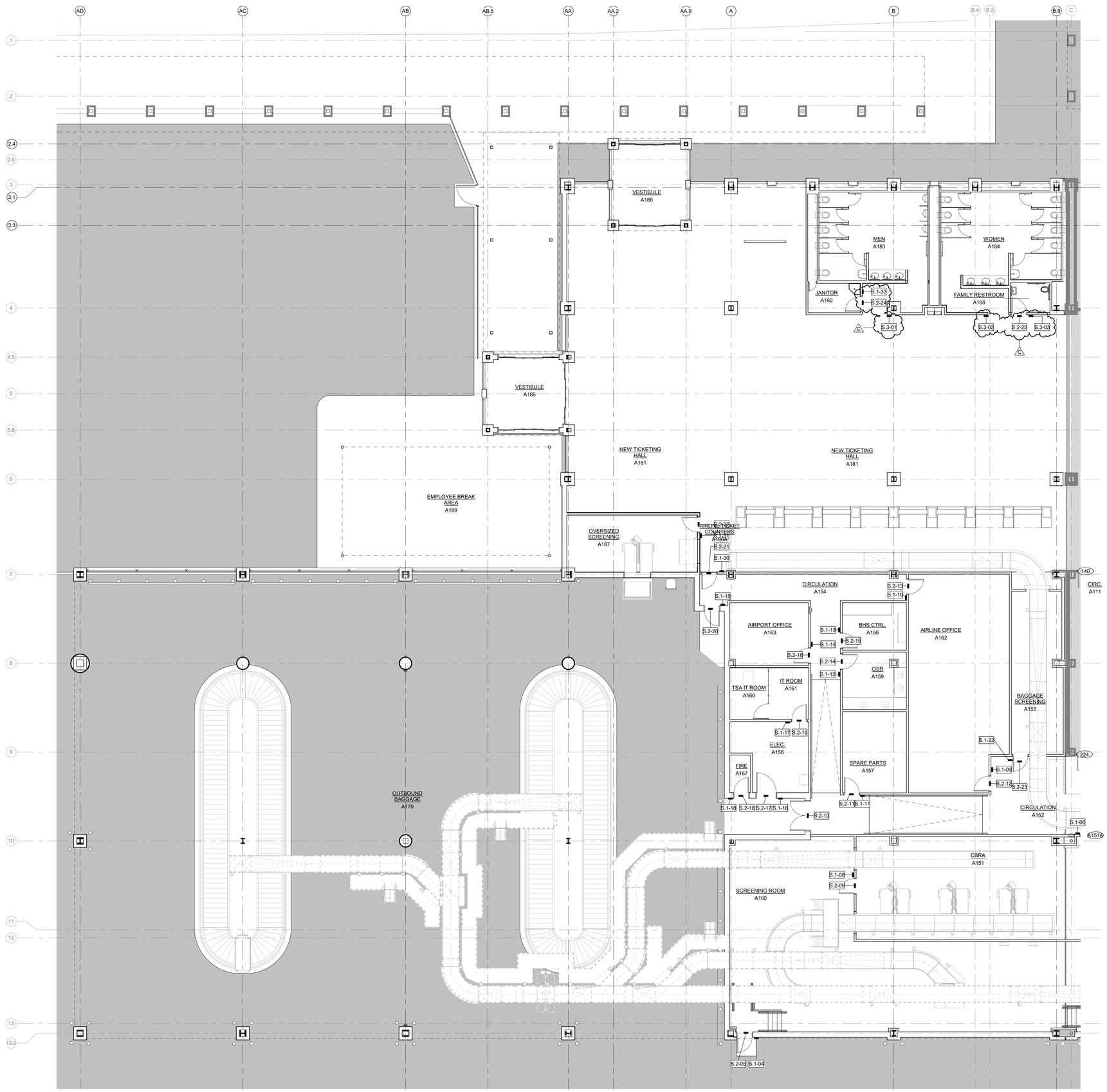
05/15/2020

SHEET TITLE:

SIGNAGE PLAN - SECTOR 01

SHEET NUMBER:

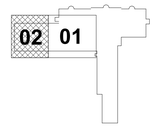
AE7-101



DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. SMOTHERS
CHECKED: K. MCGILBERRY
SCALE: 1/8" = 1'-0"

RELEASE FOR BID SET

05/15/2020

SHEET TITLE:

SIGNAGE PLAN - SECTOR 02

SHEET NUMBER:

AE7-102

ROOM FINISH SCHEDULE

Room Number	Room Name	Floor Finish	Base Finish	Milllwork Finish	Wall Finish	Ceiling Finish	Comments
A133	SCREENING ROOM	SC-1	RB-1	(none)	PT-1	(none)	
A139	TSA OPS	EXISTING TO REMAIN	RB-1	(none)	PT-1	ACT-1	
A140	TSA OPS	EXISTING TO REMAIN	RB-1	(none)	PT-1	ACT-1	
A141	TSA OPS	EXISTING TO REMAIN	RB-1	(none)	PT-1	ACT-1	
A150	SCREENING ROOM	SC-1	RB-1	(none)	PT-1	(none)	
A151	CBRA	VCT-1, AFM-1, SC-1	RB-1	(none)	PT-1	ACT-2	Anti-fatigue matt flooring at inspection table area.
A152	CIRCULATION	VCT-1	RB-1	(none)	PT-1	ACT-1	
A154	CIRCULATION	VCT-1	RB-1	(none)	PT-1	ACT-1	
A155	BAGGAGE SCREENING	SC-1	(none)	(none)	(none)	(none)	
A156	BHS CTRL	VCT-1	RB-1	PL-1	PT-1	ACT-1	
A157	SPARE PARTS	SC-1	RB-1	(none)	PT-1	ACT-1	
A158	ELEC.	SC-1	RB-1	(none)	PT-1	(none)	
A159	OSR	VCT-1	RB-1	PL-1	PT-1	ACT-1	
A160	TSA IT ROOM	SC-1	RB-1	(none)	PT-1	(none)	
A161	IT ROOM	SC-1	RB-1	(none)	PT-1	(none)	
A162	AIRLINE OFFICE	VCT-1	RB-1	(none)	PT-1	ACT-1	
A163	AIRPORT OFFICE	VCT-1	RB-1	(none)	PT-1	ACT-1	
A167	FIRE	SC-1	RB-1	(none)	PT-1	(none)	
A180A	AIRLINE TICKET COUNTERS	LVT-1	RB-1	(none)	PT-1	ACT-1	
A180B	TICKETING QUEUEING	LVT-1	RB-1	(none)	PT-1	ACT-1	
A181	NEW TICKETING HALL	CPT-1	RB-1	(none)	PT-1	ACT-1	
A182	JANITOR	SC-1	CB-1	(none)	PT-1	(none)	
A183	MEN	T-1	CB-1	(none)	(none)	ACT-1	
A184	WOMEN	T-1	CB-1	(none)	(none)	ACT-1	
A185	VESTIBULE	CPT-1	RB-1	(none)	PT-1	ACT-1	
A186	VESTIBULE	CPT-1	RB-1	(none)	PT-1	ACT-1	
A187	OVERSIZED SCREENING	VCT-1	RB-1	(none)	PT-1	ACT-1	
A188	FAMILY RESTROOM	T-1	RB-1	(none)	(none)	ACT-1	

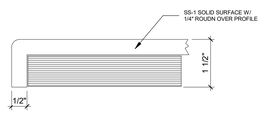
FINISH SCHEDULE

CODE	DESCRIPTION	MANUFACTURER	STYLE	COLOR / FINISH	SIZE	COMMENTS	CONTACT
BASE							
CB-1	COVE BASE	AMERICAN OLEAN	A-3601 COVE BASE, STRAIGHT TOP	0087 ALMOND	6"H 6"W	-	
RB-1	RUBBER BASE	JOHNSONITE	BASEWORKS	63 BURNT UMBER	4"	-	-
CEILINGS							
ACT-1	ACOUSTICAL CEILING TILE	ARMSTRONG	ULTIMA CRYSTAL/FELT	WHITE	24" X 24" X 5/8"	-	-
ACT-2	ACOUSTICAL CEILING TILE - SOUND ABSORBING CEILING PANELS	USG INTERIORS, INC	LOOS CAMAFOR	WHITE	24" X 24"	REFER TO 08 91 13 FOR SOUND ABSORBING BACKING MATERIAL REQUIRMENTS	
FLOORS							
AFM-1	ANTI-FATIGUE MATT	REF. SPECIFICATIONS					
CPT-1	CARPET TILE	INTERFACE	8802	102908 ATLANTIC	1'-7.7"X1'-7.7"	MATCH EXISTING	
FT-1	PORCELAIN PAVER TILE	LAUFEN	BASILICA	MINERVA CREAM UP	12" X 12"	-	
LVT-1	LUXURY VINYL TILE	INTERFACE	TEXTURED WOOD GRAIN	A00405 GREY DUNE	7'-4.6" X 7'-4.7"	MATCH EXISTING	
SC-1	SEALED CONCRETE	REF. SPECIFICATIONS	-	CLEAR	-	-	-
VCT-1	VINYL COMPOSITION TILE	ARMSTRONG	IMPERIAL TEXTURE EXCELON	51605 CAMEL BEIGE	12" X 12"	-	-
WC-1	WALL COVERING	MOCLEN-TEX	EDSYSTYLE	3408-ES, NEUTRAL	-	-	-
MILLWORK							
PL-1	PLASTIC LAMINATE	WILSONART	STANDARD HPL	4M42-60 CANYON ZEPHYR, MATTE	REF TO DRAWINGS	-	-
PL-2	PLASTIC LAMINATE	NEVAMAR	STANDARD HPL MR8008	BIRCH MATRIX, TEXTURED/SUEDE FINISH			
PL-3	PLASTIC LAMINATE	PIONITE	STANDARD HPL AT111	CARAMEL CRISPL, TEXTURED/SUEDE FINISH			
PL-4	PLASTIC LAMINATE	NEVAMAR	STANDARD HPL S3022	DEEP BLUE, TEXTURED/SUEDE FINISH			
SS-1	SOLID SURFACE	WILSONART	GIBRALTAR	9070ML ARCTIC MELANGE		ALTERNATE FOR DISCONTINUED 9090-ML EUREKA MELANGE	
PAINT							
PT-1	PAINT	SHERWIN-WILLIAMS	PAINT ON GYPSUM WALL BOARD	MATCH EXISTING (CI 2002 BONE)	-	-	-
WALL TILE AND PANELS							
CG-1	CORNER GUARD	INPRO	STAINLESS STEEL CORNER GUARD	STAINLESS STEEL	1 1/2" X 1 1/2" X 48"	-	-
WT-1	CERAMIC TILE	AMERICAN OLEAN	BRIGHT	0011 VANILA GLAZED	6" X 6"	-	
WT-2	CERAMIC TILE	AMERICAN OLEAN	MATTE	0087 ALMOND, MATTE GLAZED	6" X 6"	-	

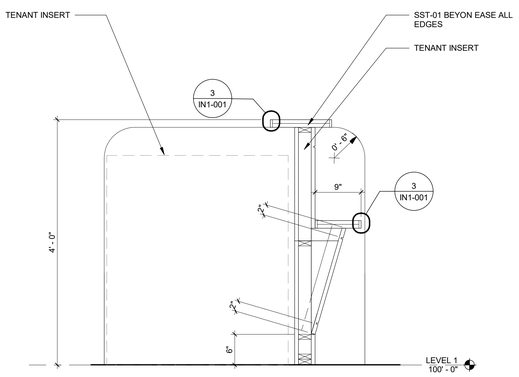
GENERAL FINISH NOTES

1. UPON COMPLETION OF THE WORK, THE GEN. CONTRACTOR SHALL REMOVE FROM THE PREMISES ALL WASTE MATERIALS, RUBBISH, WRAPPINGS AND CARTONS, ETC. AS GENERATED BY FINISH MATERIALS.
2. ANY SURFACE MOUNTED PLUG MOLD AND CONDUIT TO BE PAINTED TO MATCH ADJACENT WALL.
3. ALL GENERAL WALL PAINT TO BE "P1" AND BASE "B1" UNLESS OTHERWISE NOTED. ONE PRIME COAT AND TWO FINISH COATS.
4. CONTRACTOR SHALL INSPECT ALL SURFACES TO RECEIVE PAINTING AND CORRECT ALL DEFECTS BEFORE START OF WORK.
5. CARPET INSTALLATION METHOD ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. CUT AROUND ALL POWER IN FEEDS AS REQUIRED.
6. ALL CARPET INSTALLATIONS TO BE APPROVED BY THE ARCHITECT. ANY DOMING, CUPPING OR EXAGGERATED SEAMS ARE UNACCEPTABLE. GC TO SUBMIT SEAMING PLAN TO ARCHITECT FOR APPROVAL.
7. CARPET CONTRACTOR SHALL REMOVE ALL SPOTS AND ADHESIVE SMEARS FROM SURFACE WITH MANUFACTURER'S APPROVED CLEANING AGENT.
8. RESILIENT FLOORING TILES ARE TO BE ROTATED INSTALLATION METHOD U.N.O.
9. ALL RESILIENT FLOORING TO BE INSTALLED AS PER THE MANUFACTURER'S SPECIFIC REQUIREMENTS.
10. CONTRACTOR TO PROVIDE AND INSTALL VINYL REDUCING STRIPS TO MATCH CARPET BETWEEN THE CARPETED AND VINYL TILED AREAS. ARCHITECT TO APPROVE COLOR. JOHNSONITE OR EQUAL.
11. ALL BASE ON CARPET TO BE STRAIGHT. INSTALL COVE BASE ON V.C.T.
12. CONTRACTOR TO VERIFY STOCK OF ALL EXISTING FINISHES.
13. PAINTING CONTRACTOR TO TOUCH UP WORK AFTER ALL TRADES.
14. SUPPLY 10% ATTIC STOCK OF CARPET TO RE-CARPET AT FUTURE TIME AS REQUIRED. PROVIDE BREAKOUT COST OF ATTIC STOCK.
15. CONTRACTOR TO INCLUDE OVERTIME AS NECESSARY TO COMPLETE NOXIOUS WORK (FUMES) SO AS NOT TO DISRUPT OTHER TRADES/ ADJOINING OCCUPIED AREAS.
16. UNDERSIDE OF CONCRETE SLAB, EXPOSED BEAMS AND COLUMNS EQUIPMENT, ELECTRIC CONDUIT AND ANY MISCELLANEOUS ITEMS ARE TO BE PROPERLY PREPARED AND PRIMED TO RECEIVE A PAINT FINISH. SEE WALL AND CEILING/SLAB LEGEND.

1 FINISH FLOOR PLAN
1/8" = 1'-0"

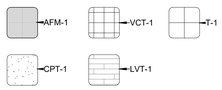


3 MILLWORK DETAIL - TICKET COUNTER LEDGE
6" = 1'-0"



2 MILLWORK SECTION - TICKETING COUNTER, TYP
1" = 1'-0"

FINISH FLOOR LEGEND



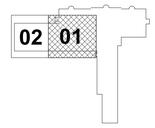
DESTIN FORT WALTON BEACH FLYVPS AIRPORT FlyVPS.com A SERVICE OF OKALOOSA COUNTY

VTC

CORGAN

GRÄEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. SMOTHERS
CHECKED: K. MCGILBERRY
SCALE: As indicated

RELEASE FOR BID SET

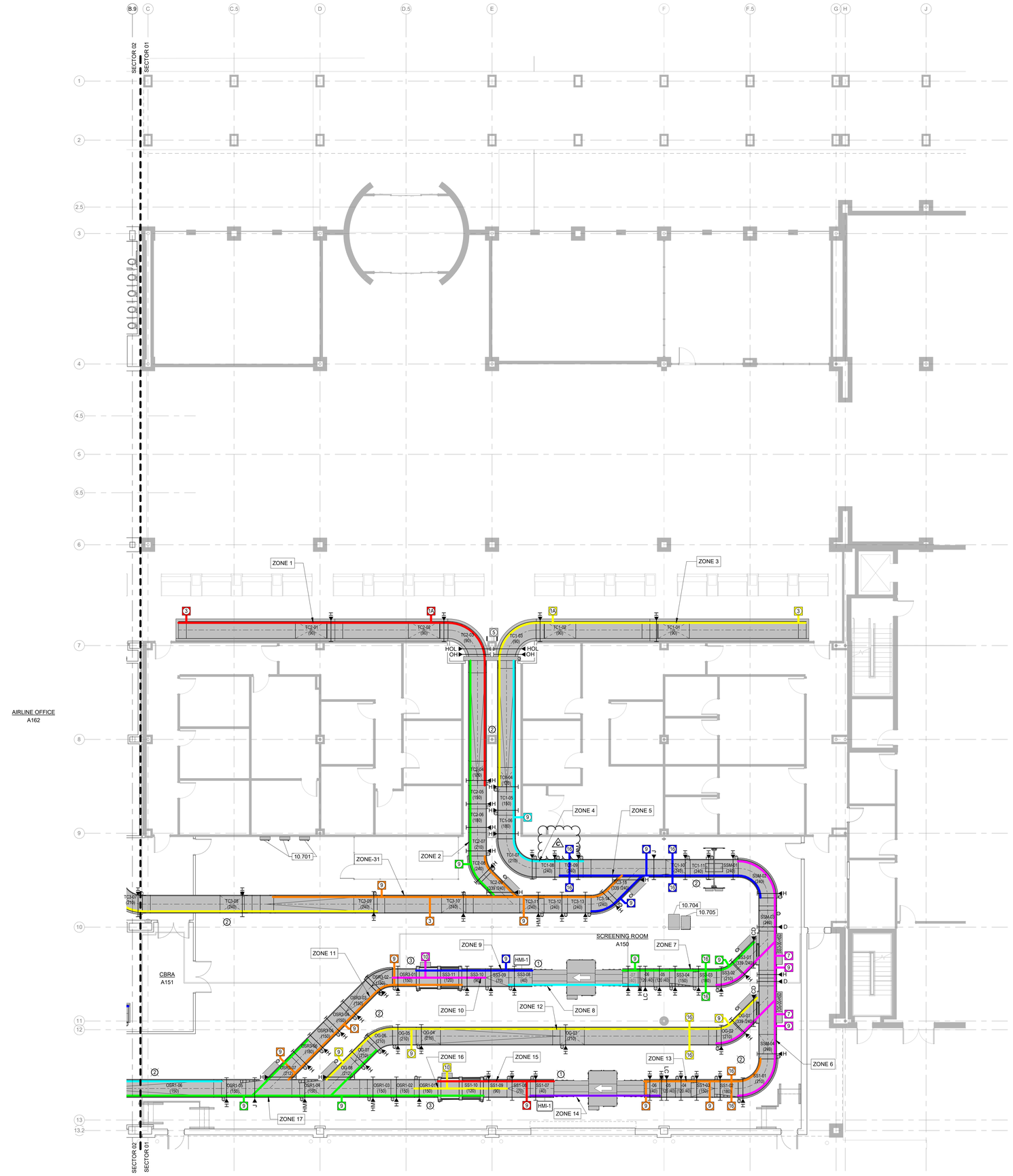
05/15/2020

SHEET TITLE:

FINISH FLOOR PLAN - SECTOR 01

SHEET NUMBER:

IN1-001



KEYNOTES

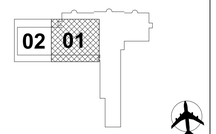
10.701	200A 480V POWER DISTRIBUTION PANEL (PDP)
10.704	UPS CONTROL BOX
10.705	UPS BATTERY CABINET

* AN ADDITIONAL SYSTEM STAUS DISPLAY (SSD) WILL BE REQUIRED IN THE EXISTING AIRPORT OPERATION ROOM (NOT SHOWN)

DESTIN FORT WALTON BEACH
FLY VPS
AIRPORT
FlyVPS.com
A SERVICE OF OKALOOSA COUNTY

VTC
CORGAN
GRAEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
B	ADDENDUM 3	06/03/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. CREWS
CHECKED: M. HEDMAN
SCALE: 1/8" = 1'-0"

RELEASE FOR BID SET

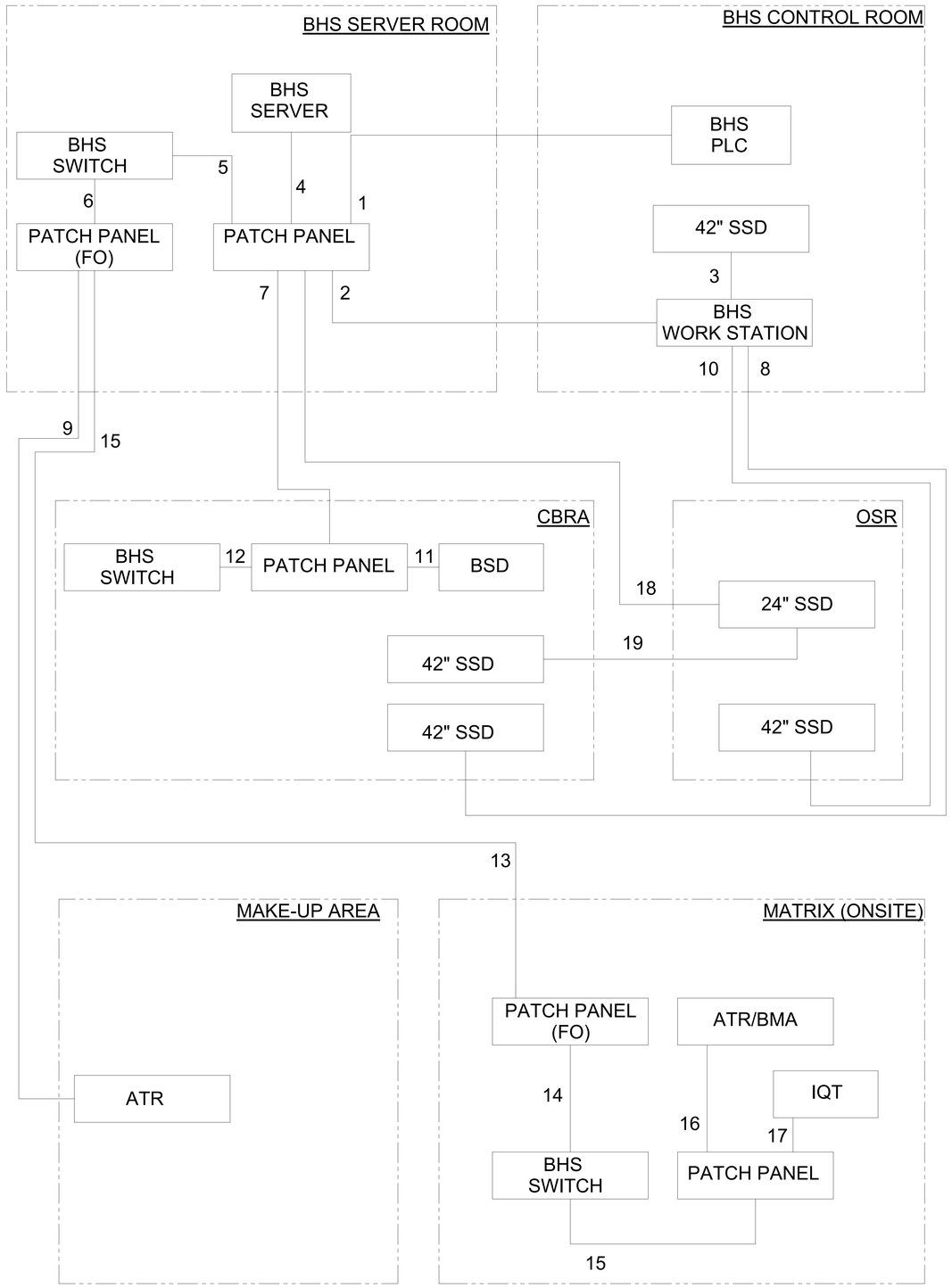
05/15/2020

SHEET TITLE:

BHS ELEC PLAN - LEVEL 01 - SECTOR 01 - LOWER

SHEET NUMBER:

QE1-101.1



ABBREVIATIONS

ATR	AUTOMATIC TAG READER
BHSC	BHS CONTRACTOR
BSD	BAGGAGE SYSTEM DISPLAY
C	CAT6
FO	FIBER OPTIC
IQT	IMAGE QUALITY
ISD	INLINE SCREENING DEVICE
MDS	MAINTENANCE DIAGNOSTICS SYSTEM
MEC	MANUAL ENCODE CONSOLE
MFO	MULTIMODE FIBER OPTIC CABLE
PC	PATCH CORD - COPPER
PF	PATCH CORD - FIBER
PLC	PROGRAMMABLE LOGIC CONTROLLER
PVS	PRIMARY VIEWING STATION
SAC	SORT ALLOCATION CABLE
SFO	SINGLEMODE FIBER OPTIC CABLE
SSD	SYSTEM STATUS DISPLAY
SVS	SECONDARY
TSAC	TSA CONTRACTOR
V	VIDEO CABLE (HDMI)

CABLE LEGEND

NUMBER	NEW/ EXISTING	TYPE	QTY	GENERAL NOTES
1	N	C	7	1 SPARE
2	N	C	2	1 SPARE
3	N	V	1	
4	N	C	2	
5	N	PC	24	CONNECT TO ALL CAT6 PORTS IN BHS SWITCH
6	N	PF	4	2 FROM MEC & 4 FROM ATR
7	N	C	2	
8	N	C	2	THIS IS TO USE HDMI SPLITTER
9	N	MFO	1	8 STRAND CABLE
10	N	C	1	THIS IS TO USE HDMI SPLITTER
11	N	C	20	EACH BSD REQUIRES 1 SPARE CABLE
12	N	PC	24	CONNECT TO ALL SWITCH CAT6 PORTS
13	N	MFO	2	8 STRAND CABLE (TOTAL 16 FIBERS)
14	N	PF	7	ATR (BMA) & IQT
15	N	PC	24	CONNECT ALL CAT 6 PORTS IN BHS SWITCH
16	N	C	4	EACH ATR (OR BMA) REQUIRES 2 CABLES
17	N	C	3	
18	N	C		
19	N	C		

EQUIPMENT LIST

LOCATION	NAME	NEW/ EXISTING	QTY	GENERAL NOTES
BHS SERVER ROOM	BHS SERVER	N	2	MDS (QTY:2) THEY ARE REDUNDANTS
	BHS SWITCH	N	2	QTY MAY VARY DEPENDING ON # OF PORTS PER SWITCH
	PATCH PANEL	N	1	QTY MAY VARY DEPENDING ON # OF PORTS PER PATCH PANEL
	PATCH PANEL (FO)	N	1	
BHS CONTROL ROOM	BHS PLC	N	6	QTY REPRESENTS # OF PLC RACKS (3 PAIRS OF HOT BACKUP PLCs)
	WORK STATION	N	1	
	42" SSD	N	2	
CBRA	BHS SWITCH	N	1	QTY MAY VARY DEPENDING ON # OF PORTS PER SWITCH
	PATCH PANEL	N	1	QTY MAY VARY DEPENDING ON # OF PORTS PER PATCH PANEL
	42" SSD	N	1	
	42" BDD	N	1	
	BSD	N	10	
OSR	42" SSD	N	1	
	24" SSD	N	1	
MATRIX	IQT	N	3	QTY MATCHES TO # OF MACHINES
	ATR/BMA	6 N	2	REDUNDANT CONTROLLERS
MAKE-UP AREA	ATR	6 N	2	REDUNDANT CONTROLLERS

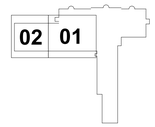
DESTIN FORT WALTON BEACH FLY VPS AIRPORT FlyVPS.com A SERVICE OF OKALOOSA COUNTY

VTC

CORGAN

GRAEF

KEY PLAN:



REVISIONS

REV	DESCRIPTION	DATE
A	RELEASE FOR BID SET	05/15/2020
B	ADDENDUM 3	06/03/2020
C	ADDENDUM 4	06/10/2020

BAGGAGE HANDLING SYSTEM AND WEST TERMINAL EXPANSION

PROJECT NO: C18-2709-AP
DRAWN: R. CREWS
CHECKED: M. HEDMAN
SCALE: NTS

RELEASE FOR BID SET

05/15/2020

SHEET TITLE:

BHS NETWORK DIAGRAM

SHEET NUMBER:

QE5-004

AIR HANDLER SCHEDULE

MARK	LOCATION	TYPE	SERVICE	CFM TOTAL	MIN. OA	FAN DATA: TYPE	TOTAL S.P.	E.S.P.	VOLTAGE	HP.	STARTER	COOLING COIL DATA: EAT °F DB/WB	LAT °F DB/WB	MBH	CHILLED-WTR.TEMP.	GPM	MAX. P.D.(CHW)	MAX. P.D.(AIR)	MAX.CFV (F.P.M.)	MIN. ROWS/F.P.I.	HEATING CFM	HEATING COIL DATA: TYPE	EAT DB	LAT DB	CAP. MBH	ENTERING TEMP/PRESS	GPM	MAX. P.D. (HW) FT.	MAX. P.D. (AIR) IN.	REMARKS
AH-1	MECH. MEZZ.	VV	TICKET LOBBY	20,225	3,600	FC	5.0	4.0	480/3/60	30	VFD	78.5/64.9	55.0/54.2	665.5	44°	112	20	0.6	550	6/12	12,025	HW	52.0°	65.04°	135.4	180°	6.7	10	.1	Ⓐ Ⓓ Ⓔ
AH-2	ROOF	VV	ATO OFFICES	22,325	2,950	FC	5.0	4.0	480/3/60	30	VFD	77.9/64.5	55.0/54.2	695.09	44°	116	20	0.6	550	6/12	12,165	HW	56.4°	65.99°	126.6	180°	6.3	10	.1	Ⓑ Ⓓ Ⓔ Ⓕ
AH-3	MECH. MEZZ.	VV	BAG CLAIM CAR RENTAL	17,620	3,000	FC	4.5	3.5	480/3/60	25	VFD	78.9/65.3	55.0/54.2	589.7	44°	98	20	0.6	550	6/12	8,610	HW	50.5°	65.3°	137.8	180°	6.9	10	.1	Ⓓ Ⓔ
AH-4	MECH. MEZZ.	VV	CONCESSIONS	10,000	3,210	FC	4.5	3.5	480/3/60	15	VFD	82.1/67.5	55.0/53.4	436.96	44°	73	20	0.6	550	6/12	5,000	HW	37.2°	65.54°	153.8	180°	7.7	10	.1	Ⓓ Ⓔ
AH-5	MECH. ROOM	VV	HOLD ROOMS 1C	21,640	5,410	FC	4.5	3.5	480/3/60	40	VFD	80.5/66.4	55.0/53.8	837.69	44°	140	20	0.6	550	6/12	10,470	HW	43.2°	65.0°	247.6	180°	12.4	10	.1	Ⓒ Ⓔ
AH-6	MECH. ROOM	VV	A.A. OFFICES	8,790	2,400	FC	4.5	3.5	480/3/60	15	VFD	81.0/66.8	55.0/53.7	354.04	44°	59	20	0.6	550	6/12	4,100	HW	39.9°	65.0°	111.7	180°	5.6	10	.1	Ⓓ Ⓔ
AH-7	ROOF	VV	HOLD ROOMS	31,800	6,450	FC	4.5	3.5	480/3/60	40	VFD	79.6/65.7	55.0/54.0	1115.62	44°	186	20	0.6	550	6/12	15,585	HW	48.1°	65.1°	286.9	180°	14.3	10	.1	Ⓓ Ⓔ Ⓕ
AH-8	ROOF	VV	HOLD ROOMS	12,430	5,000	FC	4.5	3.5	480/3/60	20	VFD	83.8/68.8	55.0/54.0	579.17	44°	96	20	0.6	550	6/12	6,215	HW	29.4°	65.44°	243.1	180°	12.2	10	.1	Ⓓ Ⓔ Ⓕ
AH-9	MECH. MEZZ.	VV	BAG CLAIM OFFICES	13,470	3,450	FC	4.5	3.5	480/3/60	20	VFD	80.6/66.5	55.0/53.8	525.99	44°	88	20	0.6	550	6/12	6,735	HW	43.4°	65.0°	157.8	180°	7.9	10	.1	Ⓓ Ⓔ
AH-10	MECH. ROOM	CV	AIRPORT OPERATION	1600	300	FC	2.0	1.0	480/3/60	1 1/2	CXL	79.1/65.4	55.0/54.2	54.71	44°	9	20	0.6	550	6/12	1,600	HW	59.0°	108.0°	85.1	180°	4.3	10	.1	Ⓓ Ⓔ

Ⓐ PROVIDE WITH DRIVES FOR PRESENT CONDITION OF 16,245 CFM @ 4.5 TSP
Ⓑ PROVIDE WITH DRIVES FOR PRESENT CONDITION OF 19,130 CFM @ 4.5 TSP
Ⓒ AIR PURIFICATION UNIT
Ⓓ 30" ACCESS FOR FUTURE AIR PURIFICATION
Ⓔ REFER TO PLANS FOR ARRANGEMENT/COMPONENTS
Ⓕ VIBRATION ISOLATION ROOF CURB

FAN SCHEDULE

MARK	SERVICE	TYPE	APPROX. SIZE	FLOW (CFM)	STATIC PRESS.	MAX. RPM	MAX. OV/TS	VOLTAGE	H. P.	STARTER TYPE	OPERATING WEIGHT	REMARKS
EF-1A	BLDG. EXHAUST-1A	INLINE CENT.	9"	1170	.5	1549	813/5323	120/1/60	1/2	MMS	95	Ⓑ Ⓒ
EF-1B	BLDG. EXHAUST-1A	INLINE CENT.	9"	1200	.5	1411	696/4848	120/1/60	1/2	MMS	95	Ⓑ Ⓒ
EF-2A	BLDG. EXHAUST	ROOF MNTD.	14"	1000	.625	1028	1026/3936	120/1/60	1/4	MMS	85	Ⓐ Ⓑ Ⓒ
EF-3	BLDG. EXHAUST	INLINE CENT.	16"	2025	.625	988	563/4333	120/1/60	1/4	MMS	160	Ⓑ Ⓒ
EF-4	BLDG. EXHAUST	ROOF MNTD.	20"	2890	.625	783	540/4382	480/3/60	3/4	CXL	220	Ⓐ Ⓑ
EF-5A	BLDG. EXHAUST	INLINE CENT.	12"	1000	.625	1285	580/4415	120/1/60	1/4	MMS	95	Ⓑ Ⓒ
EF-5B	BLDG. EXHAUST	INLINE CENT.	18"	2430	.75	932	620/4514	480/3/60	3/4	CXL	190	Ⓑ
EF-6A	BLDG. EXHAUST	ROOF MNTD.	12"	660	.5	819	1175/3967	120/1/60	1/3	MMS	101	Ⓐ Ⓑ Ⓒ
EF-6B	BLDG. EXHAUST	ROOF MNTD.	8"	245	.25	819	1175/3967	120/1/60	1/6	MMS	80	Ⓐ Ⓑ Ⓒ
EF-7	BLDG. EXHAUST	ROOF MNTD.	30"	2230	.5	502	1173/4008	480/3/60	1	CXL	208	Ⓐ Ⓑ
EF-8A	BLDG. EXHAUST	ROOF MNTD.	22"	2880	.5	646	1203/4059	480/3/60	3/4	CXL	123	Ⓐ Ⓑ
EF-9	NOT USED											
EF-10	ELEC. CLOSET	SIDEWALL	24"	1200	.375	795	376/4995	120/1/60	1/4	MMS	70	Ⓑ Ⓒ
EF-11	ELEV. ROOM	SIDEWALL	20"	1000	.375	917	442/4801	120/1/60	1/4	MMS	60	Ⓑ Ⓒ
EF-12	ELEC. CLOSET	SIDEWALL	24"	1200	.375	795	376/4995	120/1/60	1/4	MMS	70	Ⓑ Ⓒ
EF-13	ELEC. CLOSET	SIDEWALL	24"	1200	.375	795	376/4995	120/1/60	1/4	MMS	70	Ⓑ Ⓒ
VF-1	BOILER ROOM	ROOF SUPPLY	18"	3500	.75	651	1598/2556	480/3/60	1	CXL	336	Ⓐ Ⓓ
VF-2A	TUG DRIVE	ROOF SUPPLY	36"	8400	.375	602	/5674	480/3/60	1 1/2	CXL	544	Ⓐ
VF-2B	TUG DRIVE	ROOF EXHAUST	36"	8800	.375	443	/5693	480/3/60	1 1/2	CXL	275	Ⓐ
VF-3A	TUG DRIVE	ROOF SUPPLY	33"	5400	.375	604	/4175	480/3/60	1	CXL	528	Ⓐ
VF-3B	TUG DRIVE	ROOF EXHAUST	24"	5800	.375	729	/4644	480/3/60	1	CXL	123	Ⓐ
VF-4	FIRE PMP ROOM	WALL EXHAUST	14"	1600	.375	1750	6414/1723	120/1/60	1/4	MMS	27	Ⓑ Ⓒ

Ⓐ FACTORY ROOF CURB
Ⓑ BACKDRAFT DAMPER
Ⓒ DISCONNECT SWITCH
Ⓓ MOTORIZED DAMPER

BOILER SCHEDULE

MARK	TYPE	SERVICE	APPROXIMATE SIZE	OUTPUT CAP. MBH	OUTPUT FLOW	TEMP. IN / OUT	VESSEL DES. PRESS.	FUEL TYPE	FUEL CONSUMPTION	FLUE CONNECTION	UNIT VOLTAGE	BLOWER H.P.	CONTROL VOLTAGE	CONTROL TYPE	OPERATING WEIGHT	REMARKS
B-1	HOT WATER	BLDG. HEATING	98 Bhp	3,280	200 gpm	150/180	30 psi	NATURAL GAS	4,000,000	32"	120/1/60	-	120/1/60	MODULATING	10,000 lbs	
B-2	HOT WATER	BLDG. HEATING	98 Bhp	3,280	200 gpm	150/180	30 psi	NATURAL GAS	4,000,000	32"	120/1/60	-	120/1/60	MODULATING	10,000 lbs	

UNIT HEATER SCHEDULE

MARK	TYPE	SERVICE	CFM	CAPACITY BTUH	WORKING FLUID	FLUID FLOW	FLUID TEMP./PRESS.	MAX FLUID PRESS. DROP	FAN HP	VOLTAGE	REMARKS
UH-1	CABINET	VESTIBULE	320	21,000	WATER	1.1	180°	10'	1/25	120/1/60	Ⓐ Ⓑ
UH-2	HORIZ.	STAIRS 1B	815	12,000	WATER	0.6	180°	10'	1/25	120/1/60	Ⓑ
UH-3	HORIZ.	STAIRS 1C	815	12,000	WATER	0.6	180°	10'	1/25	120/1/60	Ⓑ
UH-4	HORIZ.	MECH RM	815	12,000	WATER	0.6	180°	10'	1/25	120/1/60	Ⓑ
UH-5	HORIZ.	STAIRS 1D	815	12,000	WATER	0.6	180°	10'	1/25	120/1/60	Ⓑ
UH-6	HORIZ.	ELEV RM 1D	815	12,000	WATER	0.6	180°	10'	1/25	120/1/60	Ⓑ
UH-7	HORIZ.	STAIRS 1D	815	12,000	WATER	0.6	180°	10'	1/25	120/1/60	Ⓑ
UH-8	HORIZ.	MECH ROOM 2A	1535	31,200	WATER	1.6	180°	10'	1/8	120/1/60	Ⓑ
UH-9	HORIZ.	MECH ROOM	1535	31,200	WATER	1.6	180°	10'	1/8	120/1/60	Ⓑ
UH-10	HORIZ.	MECH ROOM 2A	815	12,000	WATER	0.6	180°	10'	1/25	120/1/60	Ⓑ
UH-11	VERT.	BOILER RM 2B	2220	61,900	WATER	3.2	180°	10'	1/6	120/1/60	Ⓑ
UH-12	HORIZ.	MECH RM 2B	1535	31,200	WATER	1.6	180°	10'	1/8	120/1/60	Ⓑ
UH-13	HORIZ.	MECH RM 2B	1535	31,200	WATER	1.6	180°	10'	1/8	120/1/60	Ⓑ

Ⓐ HORIZONTAL RECESSED WITH INTEGRAL GRILLES
Ⓑ THERMOSTAT

DIFFUSER, REGISTER, & GRILLE SCHEDULE

TYPE	SERVICE	CFM RANGE	SIZE	NECK	RUNOUT
1	SUPPLY AIR SQUARE CEILING DIFFUSER	0-130	6"/24"x24"	6" Φ	6" Φ
		135-300	8"/24"x24"	8" Φ	8" Φ
		305-340	10"/24"x24"	10" Φ	10" Φ
		345-645	12"/24"x24"	12" Φ	12" Φ
2	RETURN AIR/ EXHAUST AIR CEILING REGISTER	0-100	6"x6"	——	——
		105-250	8"x8"	——	——
		255-600	12"x12"	——	——
		605-1000	18"x18"	——	——
		1005-1800	24"x24"	——	——
3	LINEAR SUPPLY CEILING DIFFUSER	0-135	48"L/1 SLOT (3/4" WIDE EA.)	6" Φ	6" Φ
		140-300	48"L/2 SLOT (3/4" WIDE EA.)	8" Φ	8" Φ
		305-400	48"L/3 SLOT (3/4" WIDE EA.)	10" Φ	10" Φ
		405-600	48"L/4 SLOT (3/4" WIDE EA.)	12" Φ	12" Φ
4	SIDEWALL SUPPLY REGISTER	80-100	10"x4"	——	10"x4"
		105-250	10"x8"	——	10"x8"
		255-450	14"x8"	——	14"x8"
		455-600	20"x8"	——	20"x8"
		605-900	16"x12"	——	16"x12"
		905-1000	18"x12"	——	18"x12"
		1005-1200	26"x10"	——	26"x10"
5	SIDEWALL RETURN/ EXHAUST REGISTER	0-250	8"x8"	——	8"x8"
		255-600	18"x8"	——	18"x8"
		605-1000	24"x12"	——	24"x12"
		1005-1200	30"x12"	——	30"x12"
6	LINEAR SUPPLY DIFFUSER	0-135	48"L/1 SLOT (3/4" WIDE EA.)	——	6" Φ
		140-300	48"L/2 SLOT (3/4" WIDE EA.)	——	8" Φ
		305-400	48"L/3 SLOT (3/4" WIDE EA.)	——	10" Φ
		405-600	48"L/4 SLOT (3/4" WIDE EA.)	——	12" Φ
		605-750	48"L/6 SLOT (3/4" WIDE EA.)	——	14" Φ
7	CONCENTRIC JET DIFFUSER (NOTE 5&6)	0-480	3-6"Φ NOZZELS	36x12	2-8" Φ
		485-600	3-8"Φ NOZZELS	42x14	1-12" Φ
		605-850	3-8"Φ NOZZELS	42x14	2-10" Φ

NOTES:
1. REFER TO MECHANICAL FLOOR PLANS FOR LOCATIONS AND QUANTITIES.
2. EXACT LOCATION OF ALL CEILING MOUNTED DIFFUSERS, REGISTERS, & GRILLES SHALL BE AS SHOWN ON THE ARCH. REFLECTED CEILING PLANS
3. RUNOUT SIZES ARE AS NOTED IN SCHEDULE UNLESS OTHERWISE NOTED ON PLANS OR DETAILS
4. NOT ALL SIZES SHOWN MAY BE USED ON THIS PROJECT
5. JET DIFFUSERS MOUNTED ABOVE 14'-0" A.F.F. ARE TO HAVE JET PATERN THROW
6. NECK SIZE VARIES FROM MFR. TO MFR. COORDINATE W/ SUCCESSFUL BIDDER. PLENUM DEPTH SHALL NOT BE LESS THAN 12"

AIR-COOLED CHILLER SCHEDULE

MARK	TYPE	CAP. (TONS)	GPM	EWT/ LWT	MAX. P.D. (FT.H20)	OA AMBIENT	VOLTAGE	UNIT KW	COMPRESSOR F.L.A.	CONDENSER FAN F.L.A.	TOTAL F.L.A.	STARTER TYPE	CONTROL TYPE	REMARKS
ACCH-1	SCREW	265	540	56/44	20	95°	480/3/60	329.5	440	(18) 3.0 EA.	488	REDUCED VOLTAGE	DDC	Ⓐ Ⓑ
ACCH-2	SCREW	265	540	56/44	20	95°	480/3/60	329.5	440	(18) 3.0 EA.	488	REDUCED VOLTAGE	DDC	Ⓐ Ⓑ

Ⓐ PROVIDE PROTECTIVE CORROSION RESISTANT COATING ON CONDENSER FINS
Ⓑ DISCONNECT SWITCH

COMPUTER ROOM AC UNIT SCHEDULE

MARK	TYPE	CAPACITY (TOT/SENS)	VOLTAGE INDOOR	VOLTAGE OUTDOOR	F.L.A. INDOOR/OUTDOOR	REHEAT TYPE	HUMIDIFIER TYPE	FILTER	REMARKS
CRAC-1	CEILING MNTD.	12,400/10,900	208/1/60	208/1/60	25.0/8.5	ELEC. (3.6 KW)	INFRARED	1" T.A.	Ⓐ

Ⓐ DISCONNECT SWITCH

PUMP SCHEDULE

MARK	SERVICE	TYPE	APPROX SIZE	GPM	HEAD $FT.H_2O$	RPM	MIN. EFF.	VOLT/PH	HP	STARTER TYPE	OPERATING WEIGHT	REMARKS
CHP-1	ACCH-1	END SUCTION	5X4	540	70	1760	76%	480/3/60	15	CXL		
CHP-2	ACCH-2	END SUCTION	5X4	540	70	1760	76%	480/3/60	15	CXL		
HWP-1	B-1	INLINE	2X2	220	80	1760	68%	480/3/60	7 1/2	CXL		
HWP-2	B-2	INLINE	2X2	220	80	1760	68%	480/3/60	7 1/2	CXL		

FAN COIL UNIT SCHEDULE

MARK	TYPE	CFM	COOLING CAP TOTAL/SENS	HEATING CAP	VOLTAGE	H. P.	FILTER TYPE	CHW GPM	CHW P.D.	HW GPM	HW P.D.	CHW RUNOUT	HW RUNOUT	E.S.P.	COOLING EAT/LAT	HEATING EAT/LAT	REMARKS
FC-1	HORIZONTAL	800	15.4/12.5	30.2	120/1/60	1/6	TA	3.16	3.8	2.01	15.1	3/4	3/4	.2	80/	70/	Ⓐ Ⓑ

Ⓐ AUXILLARY DRAIN PAN
Ⓑ VALVE PACKAGE

SPLIT SYSTEM HEAT PUMP

INDOOR UNIT	UNIT DESIGNATION	AC-1	AC-2	AC-3
	MANUFACTURER	EMI	EMI	EMI
	MODEL	CAH 30	CAH 30	WAH 09
	SUPPLY AIR FLOW (CFM)	900	900	310
	OUTSIDE AIR FLOW (CFM)	-	-	-
	ESP (IN WG)	-	-	-
	FAN MOTOR HORSEPOWER	1/6	1/6	1/50
	TOTAL COOLING CAPACITY (BTU/HR)	28,900	28,900	9800
	FLA/	0.8	0.8	0.8
	VOLTAGE	208/1/60	208/1/60	120/1/60
	HEATING (BTU/HR)	27,750	27,750	9700
	AUXILLARY HEAT	NONE	NONE	NONE
CONDENSING UNIT	UNIT DESIGNATION	CU-1	CU-2	CU-3
	MANUFACTURER	EMI	EMI	EMI
	MODEL	SHC 30D	SHC 30D	SHC 09
	AMBIENT TEMPERATURE (DB °F)	95°F	95°F	95°F
	CONDENSER FAN MOTOR (FLA)	1.0	1.0	1.0
	COMPRESSOR (RLA)	11.5	11.5	3.8
	TOTAL (MCA)	15.4	15.4	5.8
	VOLTAGE	208/1/60	208/1/60	208/1/60
REMARKS		Ⓐ Ⓑ Ⓒ	Ⓐ Ⓑ Ⓒ	Ⓑ Ⓒ Ⓓ

Ⓐ DUCTLESS FLUSH MOUNTED SPLIT SYSTEM W/INTEGRAL GRILLE
Ⓑ INTEGRAL CONDENSATE PUMP
Ⓒ COASTAL CLIMATE COOLING COILS
Ⓓ HIGH WALL EVAPORATOR INDOOR UNIT

UNIT HEATER SCHEDULE (ELECTRIC)

UNIT DESIGNATION	EUH-1	EUH-2	EUH-3	EUH-4
SERVICE	STAIRS - 1A	STAIRS	STAIRS	FIRE PMP RM
TYPE	HORIZ	HORIZ	HORIZ	HORIZ
MANUFACTURER	TRANE	TRANE	TRANE	TRANE
MODEL	FFBB 030	FFBB 030	FFBB 030	FFBB 030
AIR FLOW (CFM)	300	300	300	300
FAN MOTOR HORSEPOWER	1/6	1/6	1/6	1/6
ENTERING/LEAVING AIR (DB ° F)	60/122.9	60/122.9	60/122.9	60/122.9
CAPACITY (KW)	6.0	6.0	6.0	6.0
VOLTAGE	480/60/3	480/60/3	480/60/3	208/60/3
REMARKS	Ⓐ Ⓑ	Ⓐ Ⓑ	Ⓐ Ⓑ	Ⓐ Ⓑ

Ⓐ DISCONNECT SWITCH
Ⓑ UNIT MOUNTED THERMOSTAT

G S & P

Design Services For The Built Environment

Atlanta
Birmingham
Charlotte
Columbus
Dallas
Fort Lauderdale
Indianapolis
Jacksonville
Louisville
Nashville
Richmond
Tampa

GRESHAM SMITH AND PARTNERS

OKALOOSA REGIONAL AIRPORT
1701 HIGHWAY 85N
EGLIN AFB, FLORIDA

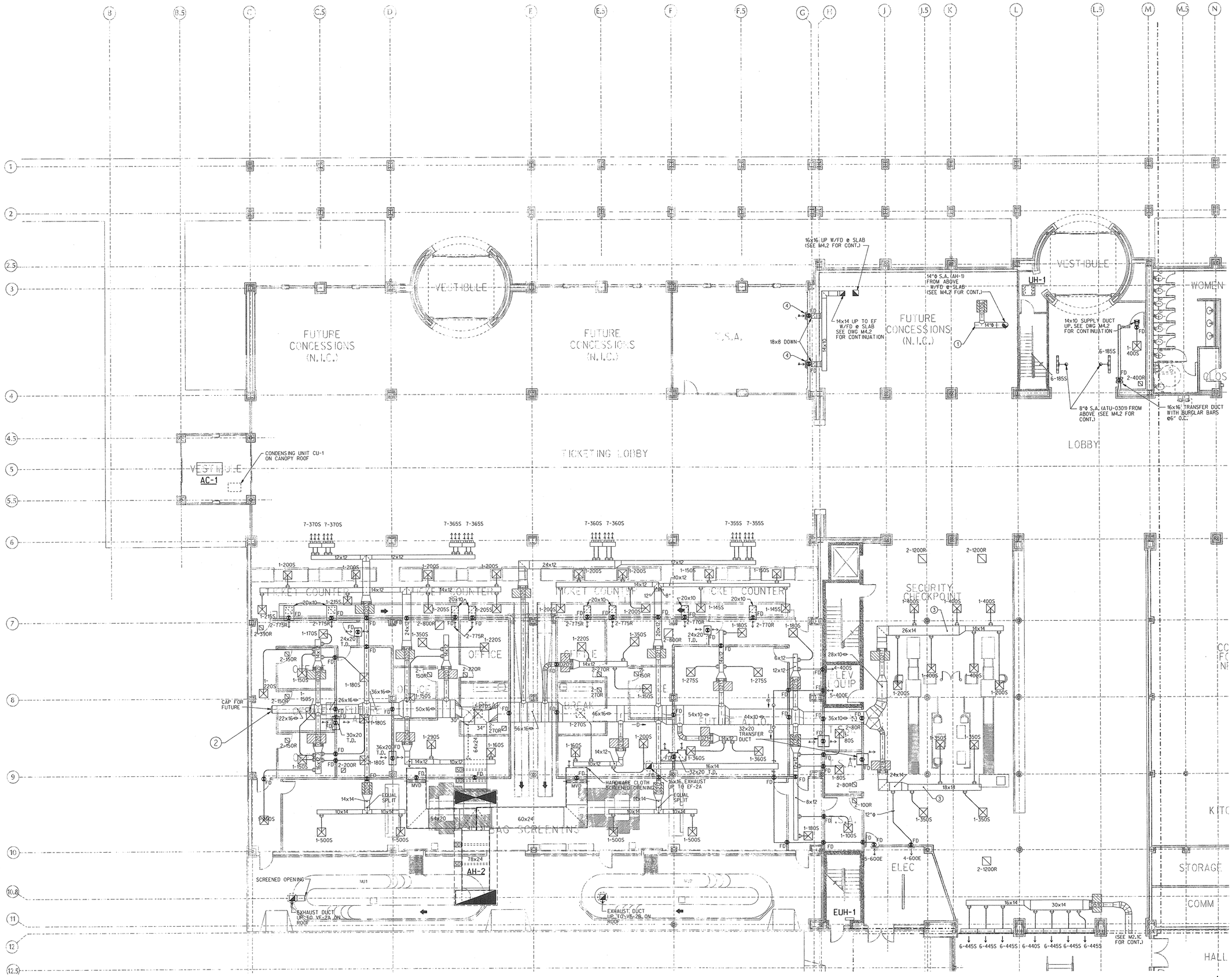
REVISION

No. –	Date –	Revision
	. .	
	. .	
	. .	
	. .	
	. .	
	. .	
	. .	
	. .	
	. .	
	. .	
	. .	
	. .	

Project:
TERMINAL EXPANSION
OKALOOSA REGIONAL AIRPORT
EGLIN AFB, FLORIDA

Sheet Title:
HVAC SCHEDULES

GSP No: 17182.03
File:
Scale:
Drawn By:
Checked By:
Sheet: M0.1
Date: AUGUST 5, 2003



NOTES:

1. CAP 14"ø FOR FUTURE 1190 CFM
2. CAP 22"x16"⇔ FOR FUTURE 3195 CFM
3. RUN DUCT BETWEEN LIGHTS
4. BRUSHED ALUMINUM 24"x8" TYPE 5 GRILLE 5-585E MOUNTED @ 6" A.F.F.

NORTH

HVAC
FIRST FLOOR PLAN – PART A
NEW CONSTRUCTION

4' 0 4' 8' 16'

GS&P

Design Services For The Built Environment

- Atlanta
- Birmingham
- Charlotte
- Columbus
- Dallas
- Fort Lauderdale
- Indianapolis
- Jacksonville
- Louisville
- Nashville
- Richmond
- Tampa

GRESHAM SMITH AND PARTNERS

OKALOOSA COUNTY

OKALOOSA REGIONAL AIRPORT
1701 HIGHWAY 85N
EGLIN AFB, FLORIDA

REVISION		
No. –	Date –	Revision

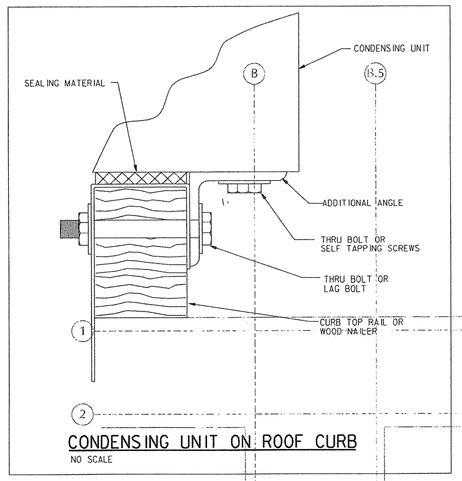
Project:
TERMINAL EXPANSION
OKALOOSA REGIONAL AIRPORT
EGLIN AFB, FLORIDA

Sheet Title:
HVAC
FIRST FLOOR
PART A

GSP No: 17182.03
File: Drawn By:
Scale: Checked By:
Sheet:

M2.1A

Date: AUGUST 5, 2003



CONDENSING UNIT ON ROOF CURB

NO SCALE

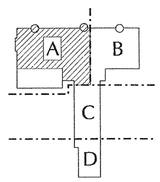
NOTES:

1. VALVE AND CAP 1" HWS&R FOR FUTURE 4.3 GPM
2. VALVE AND CAP 3/4" HWS&R FOR FUTURE 1.6 GPM

NORTH

HVAC PIPING
FIRST FLOOR PLAN – PART A
NEW CONSTRUCTION

4' 0 4' 8' 16'



GS&P

Design Services For The Built Environment

Atlanta
Birmingham
Charlotte
Columbus
Dallas
Fort Lauderdale
Indianapolis
Jacksonville
Louisville
Nashville
Richmond
Tampa

GRESHAM SMITH AND PARTNERS

OKALOOSA COUNTY

OKALOOSA REGIONAL AIRPORT
1701 HIGHWAY 85N
EGLIN AFB, FLORIDA

REVISION		
No.	Date	Revision

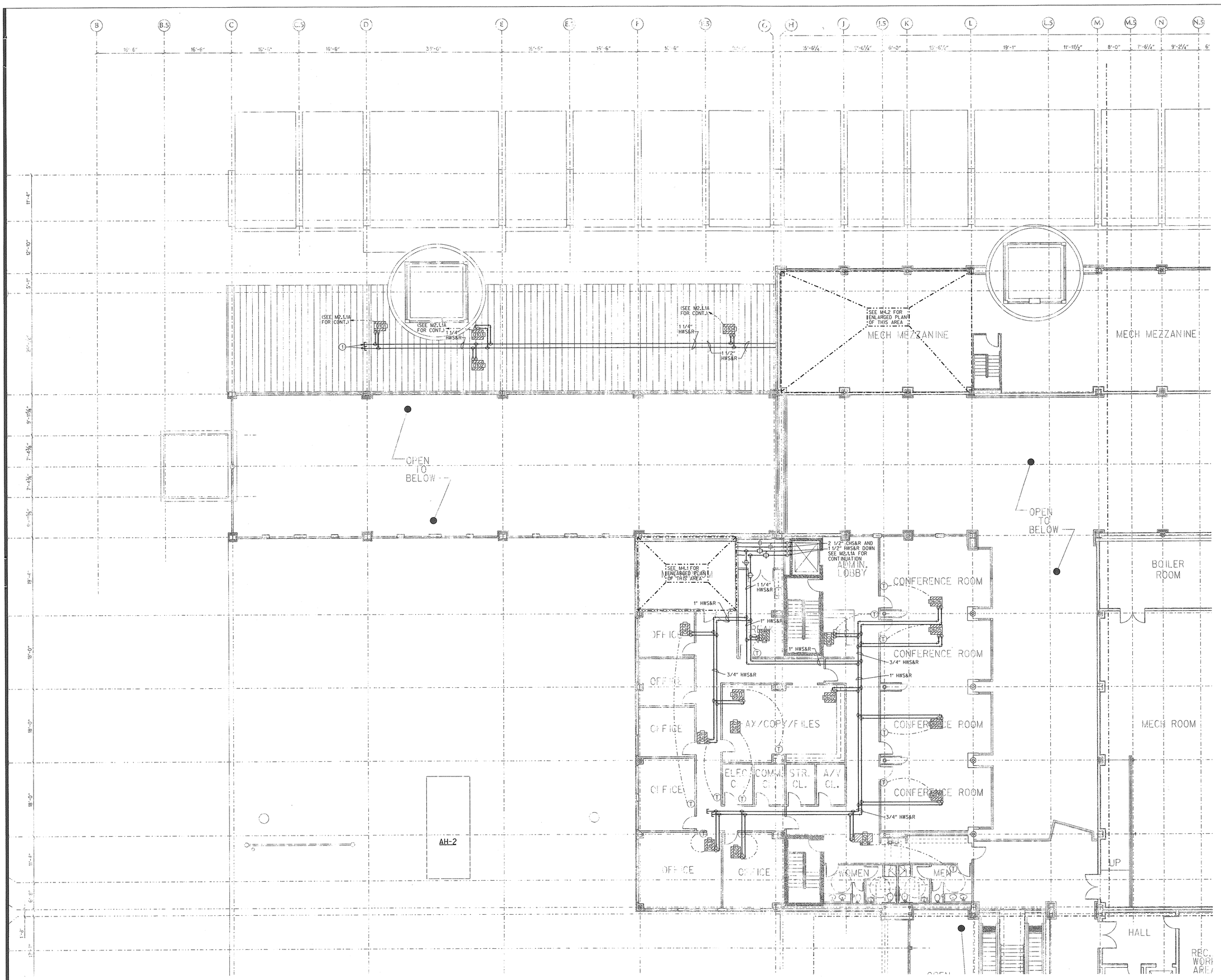
Project:
TERMINAL EXPANSION
OKALOOSA REGIONAL AIRPORT
EGLIN AFB, FLORIDA

Sheet Title:
HVAC PIPING
FIRST FLOOR
PART A

GSP No: 17182.03
File: Drawn By:
Scale: Checked By:

Sheet:
M2.1.1A

Date: AUGUST 5, 2003

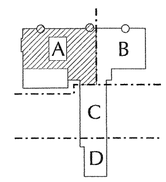


NOTE:
① CAP 3/4" HWS&R FOR FUTURE - 2.7 GPM

NORTH

HVAC PIPING
SECOND FLOOR PLAN – PART A
NEW CONSTRUCTION

4' 0 4' 8' 16'



GS&P

Design Services For The Built Environment

Atlanta
Birmingham
Charlotte
Columbus
Dallas
Fort Lauderdale
Indianapolis
Jacksonville
Louisville
Nashville
Richmond
Tampa

GRESHAM SMITH AND PARTNERS

OKALOOSA COUNTY

OKALOOSA REGIONAL AIRPORT
1701 HIGHWAY 85N
EGLIN AFB, FLORIDA

REVISION		
No. –	Date –	Revision

Project:
TERMINAL EXPANSION
OKALOOSA REGIONAL AIRPORT
EGLIN AFB, FLORIDA

Sheet Title:
HVAC PIPING
SECOND FLOOR
PLAN PART A

GSP No: 17182.03
File: Drawn By:
Scale: Checked By:

Sheet:
M2.2.1A

Date: AUGUST 5, 2003