COLUMBIA METROPOLITAN AIRPORT
Design-Build (DB) Parking Garage
Photovoltaic Microgrid System

ADDENDUM NO. 2
May 6, 2025

This Addendum is hereby made a part of the Contract Documents and Specifications of the above referenced project. All other requirements of the original Contract Documents and Specifications shall remain effective in their respective order. **ALL BIDDERS MUST ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE APPROPRIATE LOCATION ON THE PROPOSAL FORMS, AND SHALL SUBMIT THE ACKNOWLEGEMENT WITH THEIR BID.**

MODIFICATIONS TO PROPOSAL

VII Basis of Design - Electrical Narrative

ADD the following sentences to **B. General:**

13. Ground penetrative radar shall be required to ensure post tensioned cabling/reinforcing is avoided at all slab penetrations. All building penetrations shall be coordinated with the architect and structural engineer.

14. Extension of existing parking guidance system will be by CAE and CAE's vendor.

Make the following modifications to **I. Fire Alarm and Detection System:**

DELETE sentence 2. A new fire riser room will not be required.

MODIFY sentence 5, a. to read "Addressable combination rate-of-rise and fixed temperature type heat detectors. Heat detectors will be provided at new fire alarm equipment, and in affected electrical rooms, data/telephone closets, and storage rooms."

DELETE sentence 5, c. A new fire sprinkler system is not required.

ADD sentence 5, c. as follows: "A heat detection system shall be provided under all roof mounted canopies/solar panels utilizing linear heat detection system by Protectowire Fire Systems, Thermocable, Fike or equal. System shall provide full coverage of all under canopy areas. Activation of heat detection system shall facilitate emergency shutdown of PV system, send signal to BMS, and activate general fire alarm system.

ADD One Line Diagram, T101A, Alternate One-Line Diagram, depicting an alternate medium voltage solution.

ADD the following Sections to the Electrical Narrative:

PROVISIONS FOR FUTURE ENERGY PLANT

1. As part of the Columbia Metropolitan Airport's goal of transforming its energy system into a microgrid, a future energy plant may be installed at the facility. The proposed location of this energy plant is at the adjacent west parking lot next to the main airport entrance.

2. Provide a new underground electrical manhole at the proposed energy plant location for future use. Route new power cables between garage and existing terminal building through this new manhole. The manhole shall be a minimum of 8'x8' and 7' clear inside height. The manhole shall be waterproofed precast construction with duct windows, pulling irons, and cable racks on each side. Install on gravel base and provide sump basin with cover. The manhole top, frame, and cover shall be heavy duty traffic rated per AASHTO-20. The manhole shall have ¾" x 10' copper clad ground rod installed in bottom (grouted opening), exothermically welded to a #2 bare copper ground ring around entire base of manhole.

PV SYSTEM - ALTERNATE MEDIUM VOLTAGE SOLUTION

1. As an alternative solution to the PV interconnection solution described under the electrical narrative, item D, PV system, a medium voltage PV system interconnection may be utilized to minimize the required conductor sizes and quantities.
2. If this alternative design is utilized, new 13.8kV unit substations may be utilized at the parking garage and at the terminal side of the airport facility to tie the new PV System to the existing terminal electrical system.

3. The 480V, 2500A, PV distribution cabinet/switchboard located at the parking deck will be interconnected to the low voltage side of the parking garage unit substation. This unit substation will step-up the voltage from 480V to 13.8kV. This substation would then, via 15kV medium voltage cables, connect to a unit substation located near the existing terminal service, which would step the voltage down from 13.8kV to 277/480V for connection to the existing 8000A switchboard.

4. The interconnection feeder between each unit substation transformer/switchboard shall consist of a 6" duct and EPR 15kV medium voltage cable with PVC sheathing. Interconnecting feeder size shall be based on final routing/conductor length – voltage drop shall not exceed 3%.

SUBMITTED QUESTIONS

- See Attached

Site Visit

- The following firms have completed the site visit and are eligible to submit an RFP response:

- Alder Energy
- McCory Construction
- Colite
- Boyer
- Tich2-JV
- 8M Solar
- Kimley-Horn
- Ameresco
- HSGs
- Larsen & Toubro
- Krebs Ventures
- Power Factor
- CMTA
- Jet Rise
- 1st Light
- Gregory Electrical
- Chao & Associates
- Branham Group
- Metcon/Desa
- IPW Construction

ATTACHMENTS

1. Questions and Responses (2 Pages)
2. Dominion Energy Bill, April 2025 (3 Pages)
3. 15 Minute Data for Terminal and 1 hour data for Parking Garage (Embedded in this Document)
4. T101A, Alternate One-Line Diagram (1 Page)
5. 1995 Terminal Renovations – Sheet 4 & 5 (2 Pages)
6. 1995 Concourse and Connector Construction – Sheet E2 (1 Page)
7. 2020 CBIS and West Ticketing Construction – Sheet AS1 (1 Page)

CAE Terminal 15 min interval data.xlsx

Garage CAE Hourly Interval Data - 8216.xlsx

5/6/2025

Approved by Engineer

END

Columbia Metropolitan Airport

Design-Build (DB) Parking Garage Photovoltaic Microgrid System

Responses to Contractor Questions

May 5, 2025

PROJECT INFORMATION	
Project Name:	Design-Build (DB) Parking Garage Photovoltaic Microgrid System
Project Location:	Columbia Metropolitan Airport - West Columbia, SC
Engineer / Consultant:	Foth Infrastructure and Environment, LLC

RESPONSES TO QUESTIONS

	Contractor Question	Engineer / Owner Response
1	What is the project budget for Option 1, 2, and 3?	Project budget is not provided during the proposal process.
2	With the last addendum posted on May 14th and the proposal due on May 22nd, this is a short timeline to obtain final pricing from subs after release of the addenda and to finalize pricing, and to request the bid bond from our surety company and deliver the proposal by the 5/22 due date. Could you extend the due date from 5/22 to 5/29?	The schedule does not have the ability to shift due to required submittal deadlines for project approvals and funding.
3	Can you identify the location and height of the ATCT in use?	The existing ATCT has an estimated cab eye level height of 95 feet above ground level (AGL). The Tower is located at Latitude 33.944273 Longitude -81.118727. The address is 2821 Aviation Way, West Columbia, SC, 29170
4	What glare studies have been performed for the project and can you provide the glare study documentation?	A glint/glare study was completed by Barret Energy Resources Group. The study is included as a part of Addendum No. 1
5	What due diligence has been provided in regard to interconnection requests submitted to Dominion Energy? Has Dominion approved the capacity proposed in the RFP?	Site visits have been performed with Dominion. No approvals have been received. Dominion suggested upgrading the existing switch gear to make the tie in, on the site visit. Since we have recently been given the approval to upgrade the switch gear from the manufacturer, Dominion is yet to make any additional determinations.
6	We understand that the RFP is requesting a lump sum fee for design, construction and commissioning for Options 1-3 to be provided on Bid Schedules 1, 2, 3. Would you consider a different strategy for procurement that includes a 2 part agreement with Part 1 Services for the design, engineering, permitting services required to develop the project, provided as a lump sum fee, and Part 2 services for the construction of the project provided as a cost plus a percentage markup? That would allow the project to be fully engineered and approved by the stakeholders during DD phase and obtain all the permits required by the FAA, Airport authority, AHJ and utility prior to spending any money on construction and materials and a cost plus approach for construction after all permits have been obtained would remove the additional costs from subs and GC for pricing in risk/ unknowns of not having fully developed construction drawings and permits.	Procument is unable to change from the prescribed process to meeting funding requirements.
7	Is there any alternative procurement method you would consider besides lump sum fee for design, construction, and commissioning?	The project is using an alternate procurement method, Design-Build
8	What are the specifications for the photovoltaic panels that the bidders can choose for this project? Who are the approved manufacturers?	The RFP is performance based, refer to VII, Basis of Design.
9	What are the specifications for the Inverters and Rapid Shut Down devices that the bidders can choose for this project? Who are the approved manufacturers?	The RFP is performance based, refer to VII, Basis of Design.

10	Who are the approved manufacturers for the 60 mil PVC membrane roof with KEE formulation?	The RFP is performance based, refer to VII, Basis of Design.
11	Does the roof need to be fully adhered?	Refer to VII, Basis of Design.
12	Does this project need to meet FM Global requirements of other requirements specific to the insurer? If so, please provide the requirements.	No.
13	For the South Carolina General Contractor license to be provided with the response, what group classification is required for the design-build General Contractor?	The GC classification required is dependent on the work being performed by the GC. Mechanical work not covered by the GC classifications shall be completed by a contractor with the proper Mechanical Contractor classifications. See attached SC LLR description of GC and MC contractor classifications.
14	Microgrid is in the RFP title but we did not see a microgrid component. This appears to be a grid-tied solar PV system that will not be available for backup power if the grid goes down. Where is the microgrid or energy storage system described in the RFP?	The RFP does not include a description of an energy storage system as one is not required for this construction phase.
15	Who is changing the switchgear?	The selected team is responsible for all modifications to the existing system. See VII Basis of Design, specifically the Electrical Narrative.
16	Has Dominion provided documentation regarding the garage transformer?	Dominion is aware of the proposed changes and they did not do a formal report on the garage transformer. They did provide a report on the terminal switch gear.
17	Is the bidder responsible for monetizing the tax credits?	No. The bidder is responsible for properly selecting equipment and materials to maximize eligibility for the IRA tax credits. The bidder will provide necessary documentation to the Airport for its use.
18	What are the requirements of an AIP project?	Attachment D lists the requirements. There are eligible and ineligible requirements. There are not additional requirements from the AIP side
19	Public Agency - What qualifies?	the definition of a public agency as defined by the State of South Carolina is a county, municipal corporation, state or local authority, board, commission, agency, department or political subdivision created under the authority of the state. This definition is further expanded for the purpose of this RFP to include the United States Federal government.
20	DBE participation - Where does DBE criteria live.	the RFP includes the definition of a DBE as a firm that is SCDOT-UCP certified as well as additional definitions and information for the incorporation of certified DBE firms in the bidders response.
21	Can you come back for a second walkthrough?	Yes
22	Was there a load study conducted and a voltage drop.	No, a load study would be the responsibility of the selected bidder.
23	Please confirm if there is space available to land solar conductors	The RFP includes existing and proposed one line diagrams for the existing Terminal switch board and Parking Garage. Modifications of the Terminal switch board are required, see VII Basis of Design. The Parking Garage does not have space available. From the prebid meeting, the selected bidders shall provide a solution prior to the transformer for interconnection
24	Is the bidder required to do the load carrying analysis?	Yes, The bidder is responsible for the design and construction of the project. The RFP prepration team completed an initial analysis of the parking garage and this document is included for reference only. The document is not intended and shall not be used as a basis of design.
25	Can we get the existing structural?	Yes, included as a part of Addendum No. 1
26	Can we get the 15 min. interval	Yes
27	Can you design the broader microgrid design? -	This will be subsequent phase of the project and outside of the current RFP scope of work.

28	Is the financial analysis part of the proposal	Yes.
29	For Section "F" Statement of Qualifications, the RFP response must include three (3) relevant construction projects as the prime contractor. Can a RFP response be considered responsive if a subcontractor has the experience?	Yes. Bidder is to provide the subcontractor name and their role included on the relvant construction project. Provide enough information for a determination to be made on the level of involvement of the subcontractor on the project being presented.
30	During the site walk there was mention of existing utility plans for the portion of corridor that is south of the existing building. Can you provide?	Included in Addendum No. 2 are the design documents from two projects from 1996, Terminal Renovations and Concourse Constrution. These sheets depict the construction of the west 6" conduit route for the second/redundanct electric services. The third sheet is from the 2020 CBIS construction project, it depicts the existing power, fiber, sanitary sewer, storm drain, water main and two 6" PVC that were constructed in 1996 and located as a part of the 2020 project.

Dominion Energy

SERVICE FOR

RICHLAND-LEXINGTON AIRPORT DISTRICT
PO BOX 280037
COLUMBIA SC 29228

CUSTOMER SERVICE 1-800-251-7234
7am - 6pm, Monday - Friday

EMERGENCY SERVICE 1-888-333-4465
24 HOURS A DAY
Gas leaks, downed lines or power outages

APRIL STATEMENT GENERATED ON:
Apr 7 2025

Dominion Energy South Carolina

DominionEnergy.com

Summary of Charges by Account

ACCOUNT NUMBER	SERVICE ADDRESS	CUSTOMER ID	AMOUNT
1-1898-0003-5837	3000 AVIATION WAY	MAIN TERMINAL	$33,340.80
1-2100-5964-8216	3030 AVIATION WAY	PARKING GARAGE	$6,701.45

Dominion Energy

Current Charges

ACCOUNT NUMBER
1-1898-0003-5837

SERVICE ADDRESS
3000 AVIATION WAY
WEST COLUMBIA SC 29170-2191

Electric Charges

METER NUMBER
002238625

BILLING PERIOD
02/27/25 - 03/27/25

DAYS
28

RATE SCHEDULE
024 - Large General Svc TOU

TIME OF USE PERIOD	KWH	KW DEMAND	KVA DEMAND
On-peak - Non-summer	84,911	1,272	1,445
Off-peak	331,518	1,484	1,663
Super Off-peak	75,706	0	0

On-peak Bill Demand of 1,272 kW is maximum measured peak.
Off-peak Bill Demand of 212 kW is Off-Peak Bill Demand less On-Peak Demand.
Power factor is 89.00%.

Basic Facilities Charge	2,200.00
On-Peak Non-Summer 1,272 kW X $ 16.790000	21,356.88
Off-Peak 212 kW X $ 5.100000	1,081.20
Super Off-Peak 75,706 kWh X $ 0.033460	2,533.12
On-Peak Non-Summer 84,911 kWh X $ 0.089110	7,566.42
Off-Peak 331,518 kWh X $ 0.044580	14,779.07
Renewable Energy Resources	100.00
Unauthorized Energy Usage (Feb 28 - Mar 28)	650.20
Temporary Tax Credit	-280.52
State Sales Tax at 7.00 %	3,453.53
Total Electric Charges	**$53,439.90**

RATE SCHEDULE
BCA - Bill Credit Agreement

Capacity Credit Non-Summer 302 kWh X $- 0.140000	-42.28
On-Peak Non-Summer 14,857 kWh X $- 0.140000	-2,079.98
Off-Peak Non-Summer 128,406 kWh X $- 0.140000	-17,976.84
Transfer To Acct #1-1898-0003-5822	-33,340.80
Total Charges	**-$20,099.10**

Dominion Energy

ACCOUNT NUMBER
1-2100-5964-8216

SERVICE ADDRESS
3030 AVIATION WAY
WEST COLUMBIA SC 29170-2191

Electric Charges

RATE SCHEDULE
020 - Medium General Service

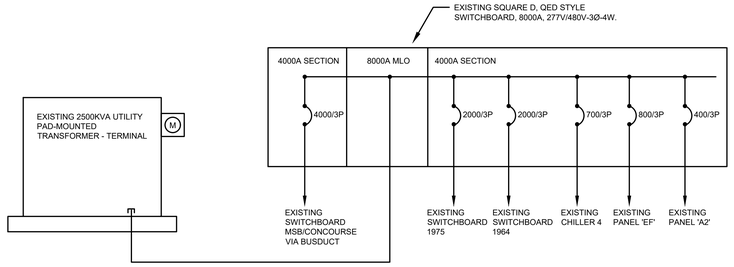
METER NO.	BILLING PERIOD	DAYS	CURRENT	PREVIOUS	CONSTANT	KWH	KW	KVA
002984190	02/28/25-03/28/25	28	5092	4492	100	60,000	128	135

Bill Demand of 150 kVA is contract demand.

Basic Facilities Charge	190.00
150 kVA X $ 19.500000	2,925.00
60,000 kWh X $ 0.053390	3,203.40
Renewable Energy Resources	7.64
Temporary Tax Credit	-63.00
State Sales Tax at 7.00 %	438.41
Transfer To Acct #1-1898-0003-5822	-6,701.45
Total Electric Charges	**$6,701.45**

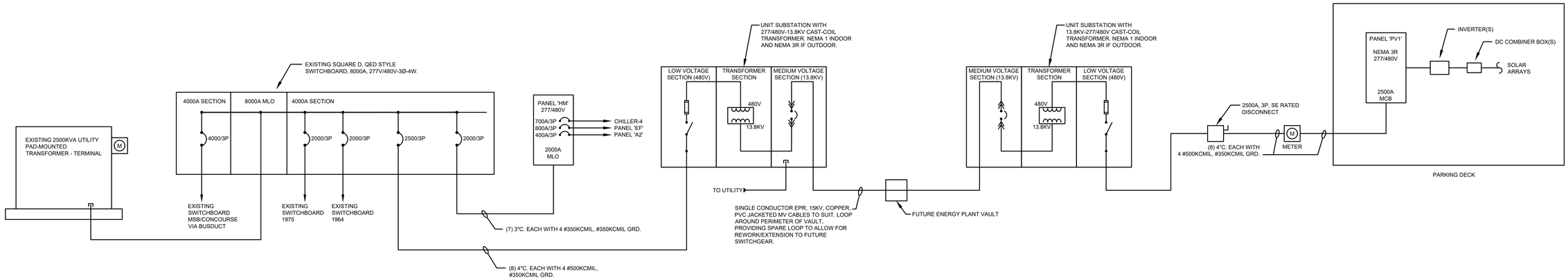
2

0970177700



COLUMBIA METROPOLITAN AIRPORT (CAE) MAIN TERMINAL PARTIAL ONE LINE DIAGRAM - EXISTING CONDITIONS

NO SCALE



COLUMBIA METROPOLITAN AIRPORT (CAE) MAIN TERMINAL PARTIAL ONE LINE DIAGRAM - ALTERNATE PROPOSED PV SYSTEM CONFIGURATION

NO SCALE

INFORMATION OBTAINED FROM THE FOLLOWING SOURCES:

UPSHUR, RILEY, AND BULTMAN AIA, ARCHITECTS - ENGINEERS
COLUMBIA AIRPORT TERMINAL BUILDING
L5 OF 5 SHTS., DATED OCT. 12, 1964, REV. NOV. 17, 1964
I5 OF 40 SHTS., DATED MAR. 2, 1964
I6 OF 40 SHTS., DATED MAR. 2, 1964
P1 OF 10 SHTS., DATED MAR. 2, 1964 - AS BUILT
P4 OF 10 SHTS., DATED MAR. 2, 1964 - AS BUILT
P8 OF 10 SHTS., DATED MAR. 2, 1964 - AS BUILT
E3 OF 14 SHTS., DATED MAR. 2, 1964

RILEY, BULTMAN, COULTER ASSOCIATES, ARCHITECTS - ENGINEERS
ADDITIONS & ALTERATIONS TO COLUMBIA METROPOLITAN AIRPORT
C1R OF 2 SHTS., DATED SEPT. 17, 1976, REV. FEB. 7, 1977
C2R OF 2 SHTS., DATED SEPT. 17, 1976, REV. FEB. 7, 1977
L9 OF 14 SHTS., DATED SEPT. 17, 1976
M8 OF 11 SHTS., DATED SEPT. 17, 1976

WILBUR SMITH AND ASSOCIATES - ARCHITECTS, ENGINEERS, PLANNERS
ELEVATOR ADDITIONS PASSENGER TERMINAL BULDING
6 OF 7 SHTS., DATED APRIL 15, 1980

AERO-DYNAMICS, CORP. - AERIAL SURVEYS, DIGITAL MAPPING, GIS
AERIAL PHOTOGRAPH - COLUMBIA METROPOLITAN AIRPORT 1993

PEARSON ENGINEERING - PLANNERS, ENGINEERS, SURVEYORS
TERMINAL AREA TOPOGRAPHY
1 OF 3 SHTS., DATED FEB. 1994, TERMINAL AREA TOPOGRAPHY

HEYWARD, WOODRUM, FANT, & ASSOCIATES, LTD. AIA
ON SITE OBSERVATION, CONDUCTED APRIL 14, 1994

HEYWARD, WOODRUM, FANT, & ASSOCIATES, LTD. AIA - COLUMBIA METROPOLITAN AIRPORT CONCOURSE & CONNECTOR
SHEET 5, DATED SEPT. 22, 1994 & REVISED MAY 15, 1995

NOTE:

SEE ALSO CIVIL, PLUMBING, MECHANICAL, ELECTRICAL & SECURITY SITE PLANS FOR MORE SPECIFIC INFORMATION REGARDING EACH DISCIPLINE.

EXACT LOCATION OF ALL UTILITIES ARE NOT VERIFIED BUT ARE SHOWN AS ACCURATLY AS POSSIBLE FROM THE SOURCES LISTED. HEYWARD, WOODRUM, FANT, & ASSOCIATES ARE NOT RESPONSIBLE FOR EXACT LOCATIONS OR FOR SERVICES NOT SHOWN. CONTRACTOR SHALL USE CAUTION WHEN EXCAVATING. ANY LINES CUT OR DAMAGED SHALL BE IMMEDIATELY REPAIRED OR REPLACED AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER. COPIES OF SOURCES LISTED ARE AVAILABLE UPON REQUEST.

NOTES:

1. THESE ELECTTRICAL LINES SHOWN ON F3I OF RILEY BULTMAN COULTER ASSOCIATES DRAWINGS DATED SEPT. 17, 1976. NO ADDITIONAL INFORMATION IS KNOWN AT THIS TIME.
2. VALVE FOR THIS LINE IS NOT AS SHOWN ON P1 OF UPSHUR, RILEY, BULTMAN DATED MARCH 2, 1964. THEREFORE ACCURATE ROUTING OF LINE IS UNKNOWN.
3. SITE OBSERVATIONS SHOW GAS REGULATOR IN THIS LOCATION. GAS LINE DOES NOT SHOW ON ANY DESIGN DRAWINGS IN HEYWARD, WOODRUM, FANT, & ASSOCIATES' POSSESSION. THEREFORE ROUTING OF GAS TO THIS LOCATION IS UNKNOWN.
4. THIS DRAWING ASSUMES ALL UTILITY WORK FOR THE "CONCOURSE & CONNECTOR" PHASE TO BE COMPLETE AND IS LABELED "EXISTING (INSTALLED BY OTHERS)"
5. SEE CIVIL ENGINEERING SHEETS FOR ANY GRADING.

SITE PLAN - EAST

SCALE 1" = 20'-0"

F:\DRWGS\130T-LAND\SITEEAST.DGS PLOTTED NOV. 30, 1995

BASELINE "C"

BASELINE "A"
CENTERLINE OF CIRCULATION SPINE
CENTERLINE OF MAIN TERMINAL
CENTERLINE OF CONNECTOR
CENTERLINE OF CONCOURSE

INTERFACE LINE
POWER AND MECHANICAL SERVICES ARE CONNECTED FROM THE TERMINAL TO THE CONCOURSE IN THE UPPER FLOOR SYSTEM OF THE CONNECTOR.

SANITARY SEWER
SAN. SEWER MANHOLE
TRENCH DRAIN
COMMUNICATIONS & SECURITY CONDUITS
SOUTH FACE OF EXISTING COLUMN MAIN FLOOR CLOSEST TO RUNWAY
2" WATER SERVICE TO KITCHEN
UGP FEED TO RP3
NEW CONDUITS FOR LOOP OF PRIMARY ELECTRICAL SERVICE (SEE ELEC.)
3" WATER SERVICE TO MAIN TERMINAL
NOTE 3.
WATER FEATURE FIRE WATER LAGOON A (SEE LANDSCAPE)
STORM DRAIN (SEE PLUMBING & LANDSCAPE)
WATER LINE (SEE PLUMBING & LANDSCAPE)
RELOCATED CARD READERS, CAMERA, CCTV POLE, & GATE OPERATOR. (SEE SECURITY)
CONNECT EXIST. MECH. LINES TO RELOCATED COOLING TOWERS
SECONDARY COOLING LINES
NEW UGP
PREVIOUSLY ABANDONED
NEW FIRE HYDRANT
NOTE 1.
UGP - PRIMARY
RELOCATED CARD READER (SEE SECURITY)
CARD READER, GATE OPERATOR, CAMERA, & CCTV POLE CURRENTLY IN POSSESION OF OWNER REINSTALL IN NEW LOCATIONS (SEE SECURITY)
NEW WALL & CURB THIS LOCATION. HOLD ALL UTILITIES 36" MIN. BELOW FIN. GRADE.
GEN. RAD.
RELOCATED COOLING TOWER
EXIST. MANHOLE RIM = 240.03 INV. OUT = 232.85
1" WATER LINE TO GARDEN - CAP AT MAIN & ABANDON REMAINDER
NEW LOADING DOCK
RELOCATE EXIST. COOLING TOWERS TO NEW LOCATION & CONNECT ALL ELEC. CONTROLS & PIPING. (SEE MECH. & ELEC.)
UGP 480
TRENCH DRAIN (SEE CIVIL)
NEW RETAINING WALL (SEE CIVIL)
TERMINATE ALL ELECTRICAL SERVICES TO CONCOURSE SEE ELECT. DRAWINGS
NEW HAND HOLE
95'-0" LENGTH OF NEW WALL
INTERFACE LINE
NOTE 2
PLUG STORM DRAIN LINE HERE
PLUG SD AT THIS POINT
EXIST. S.S. MANHOLE
EXIST. RETAINING WALL TO REMAIN, NEW SECURITY FENCE ON TOP OF WALL
EXIST. WALL
PREVIOUSLY ABANDONED
GATE OPER. TO REMAIN
SECURITY FENCE TO REMAIN
S.I.D.A.
PUBLIC
SECURE
USE EXISTING AND NEW PERMANENT SECURITY FENCING TO SECURE SITE PRIOR TO DEMOLISHING FIRST BAY OF CONCOURSE - MAINTAIN SECURE LINE UNTIL PERMANENT FENCING IS COMPLETE
RELOCATE NUMBER PAD
NEW SECURITY FENCE
EXISTING EAST CONCOURSE TO BE DEMOLISHED BY OTHERS
NEW PAVING (SEE CIVIL)
PORTION OF WALL TO BE REMOVED (SEE CIVIL DETAILS)
NOTE: SEE SHEET 44 FOR PERMANENT AND TEMPORARY FENCING DETAILS
REMOVE CARD READER (SEE SECURITY)
REMOVE GATE OPERATOR (SEE SECURITY)
REMOVE EXISTINGH SECURITY FENCING AFTER PERMANENT SECURITY FENCE IS INSTALLED
REMOVE CAMERA (SEE SECURITY)
REPLACE HAND HOLE SAME LOCATION
TIE NEW SECURITY FENCE TO EXIST. SECURITY FENCE.
135°
29'-9"±
5'-0"
70'-0" BASELINE "A" TO TIE-IN TO EXIST. FENCE
EXIST. MANHOLE RIM = 242.47 INV. IN 231.30
EXIST. SECURITY FENCE
EXIST. FIRE HYDRANT
CAP & ABANDON
ABANDON
REMOVE
PAINT EXIST. RETAINING WALLS
ENTIRE SHEET
EDGE OF BRIDGE ABOVE
PAINT EXISTING RETAINING WALL
NEW RETAINING WALL (SEE LANDSCAPE)
CONC. PAVERS W/ PAVER BORDERS (TYP.)
UP
CB
LANDSCAPING SEE ALT. L1
PAVING SEALER (SEE CIVIL)
SEE PLUMBING FOR EXTENSION OF STORM SEWER SYSTEM AT ALTERNATE No. 1
C.B.
PLANTER
INTERFACE LINE

LEGEND	TYPE OF UTILITY	NEW	EXISTING (INSTALLED BY OTHERS) (NOTE 4)	EXISTING (TO REMAIN)	EXISTING (REMOVE OR CAP & ABANDON)
	UNDERGROUND POWER	UGP	UGP	UGP	UGP
	UNDERGROUND GAS	G	G	G	G
	UNDERGROUND WATER	W	W	W	W
	UNDERGROUND SANITARY SEWER	SS	SS	SS	SS
	UNDERGROUND STORM DRAINAGE	SD	SD	SD	SD
	UNDERGROUND SECURITY	CC	CC	CC	CC
	UNDERGROUND TELEPHONE	TEL	TEL	TEL	TEL
	UNDERGROUND MECHANICAL	M	M	M	M

130-1993
DRAWN MWD
DATE SEPT. 30, 1995
REV. NOV. 30, 1995
NORTH

COLUMBIA METROPOLITAN AIRPORT
TERMINAL RENOVATIONS
RICHLAND - LEXINGTON AIRPORT COMMISSION
WEST COLUMBIA SOUTH CAROLINA

LAWRENCE H. WOODRUM COLUMBIA 2670 REGISTERED ARCHITECT STATE OF SOUTH CAROLINA

Heyward, Woodrum, Fant & Associates
ARCHITECTS, ENGINEERS & ASSOCIATES, LTD., AIA
COLUMBIA SOUTH CAROLINA

SHEET 4 OF 21 SHEETS

INFORMATION OBTAINED FROM THE FOLLOWING SOURCES:

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HEYWARD, WOODRUM, FANT, & ASSOCIATES, LTD. AIA - COLUMBIA METROPOLITAN AIRPORT CONCOURSE & CONNECTOR
SHEET 5, DATED SEPT. 22, 1994 & REVISED MAY 15, 1995

NOTE:

SEE ALSO CIVIL, PLUMBING, MECHANICAL, ELECTRICAL & SECURITY SITE PLANS FOR MORE SPECIFIC INFORMATION REGARDING EACH DISCIPLINE.

EXACT LOCATIONS OF ALL UTILITIES ARE NOT VERIFIED BUT ARE SHOWN AS ACCURATLY AS POSSIBLE FROM THE SOURCES LISTED. HEYWARD, WOODRUM, FANT, & ASSOCIATES ARE NOT RESPONSIBLE FOR EXACT LOCATIONS OR FOR SERVICES NOT SHOWN. CONTRACTOR SHALL USE CAUTION WHEN EXCAVATING. ANY LINES CUT OR DAMAGED SHALL BE IMMEDIATELY REPAIRED OR REPLACED AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER. COPIES OF SOURCES LISTED ARE AVAILABLE UPON REQUEST.

NOTES:

1. THESE ELECTTRICAL LINES SHOWN ON F3I OF RILEY BULTMAN COULTER ASSOCIATES DRAWINGS DATED SEPT. 17, 1976. NO ADDITIONAL INFORMATION IS KNOWN AT THIS TIME.
2. VALVE FOR THIS LINE IS NOT AS SHOWN ON P1 OF UPSHUR, RILEY, BULTMAN DATED MARCH 2, 1964. THEREFORE ACCURATE ROUTING OF LINE IS UNKNOWN.
3. SITE OBSERVATIONS SHOW GAS REGULATOR IN THIS LOCATION. GAS LINE DOES NOT SHOW ON ANY DESIGN DRAWINGS IN HEYWARD, WOODRUM, FANT, & ASSOCIATES' POSSESSION. THEREFORE ROUTING OF GAS TO THIS LOCATION IS UNKNOWN.
4. THIS DRAWING ASSUMES ALL UTILITY WORK FOR THE "CONCOURSE & CONNECTOR" PHASE TO BE COMPLETE AND IS LABELED "EXISTING (INSTALLED BY OTHERS)

SITE PLAN - WEST

SCALE 1" = 20'-0"

F:\DRWGS\1SOT\LAND\SITEWEST.DC5 PLOTTED: OCT. 30, 1995

EXISTING WEST CONCOURSE TO BE DEMOLISHED BY OTHERS

INTERFACE LINE

LIMIT OF NEW PAVING

NEW CURB & GUTTER (SEE CIVIL)

EXISTING SECURITY FENCE

TIE NEW SECURITY FENCE TO EXIST. SECURITY FENCE

REMOVE CARD READER (SEE SECURITY)

NEW UGP (SEE ELEC.)

EXIST. ELEC. JUNCTION BOX FOR EMPLOYEE PARKING LOT LIGHTS

EXISTING CROSSWALK

VEHICULAR HEIGHT CHECK POLE SEE SHEET 44

EDGE OF EXIST. CURB

LIGHT

C.B.

PUNCH PAD (SEE SECURITY)

NOTE: SEE SHEET 44 FOR PERMANENT AND TEMPORARY FENCING DETAILS

USE EXISTING AND NEW TEMPORARY SECURITY FENCING TO SECURE SITE PRIOR TO DEMOLISHING FIRST BAG OF CONCOURSE MAINTAIN SECURE LINE UNTIL PERMANENT FENCING IS COMPLETE

EXISTING SECURITY FENCE

NEW PLANTER

PAINT EXIST. MASONRY WALL

CONC. PAVING W/ EXPOSED AGG. BORDERS (TYP.)

CLEAN AND PAINT EXISTING CONCRETE RAIL - BASE BID PAINT EXISTING CONCRETE RAIL - ALTERNATE No. 3

CLEAN AND PAINT EXISTING RETAINING WALL

95'-0" LENGTH OF NEW WALL

EDGE OF APRON BY OTHERS

340'-0" BASELINE "A" TO TIE-IN TO EXISTING FENCE

DEMOLISH MASONRY WALL

CAP & ABANDON

REMOVE LIGHT

NEW SECURITY FENCE ON TOP OF WALL

NEW RETAINING WALL (SEE CIVIL)

EXISTING BUILDING TO BE DEMOLISHED BY OTHERS

TERMINATE ALL ELECT. SERVICE TO CONCOURSE SEE ELECT. DRWGS

RELOCATED CARD READERS, CAMERA, CCTV POLE, ETC. (SEE SECURITY)

RELOCATED CARD READER (SEE SECURITY)

28 EQUAL WIDTH 30° ANGLE PARKING SPACES AT 9'-0" MIN. EACH = 292'-4" V.I.F.

8'x8' PAVERS SEE PLANS FOR EXTENTS

NEW PAVING (SEE CIVIL)

30°

CONCRETE WHEEL STOPS (TYPICAL)

4" WIDE WHITE PAINTED PARKING STRIPES (TYPICAL)

9'-0" MIN. TYPICAL

EDGE OF EXIST. CURB

NEW PLANTER (SEE LANDSCAPE)

ROADWAY TO BAG CLAIM

SEE LANDSCAPE SHEETS FOR THIS AREA

PLUG & ABANDON (SEE LANDSCAPE)

WATER LINE (SEE PLUMBING & LANDSCAPE)

STORM DRAIN (SEE PLUMBING & LANDSCAPE)

NEW CONC. SLAB & RAMP

EXISTING TRENCH DRAIN

WATER FEATURE / FIRE WATER LAGOON B (SEE LANDSCAPE)

EXIST. MECH. TUNNEL FROM FIN. GRADE TO ELEV. 234.633

NEW CONDUITS FOR LOOP OF PRIMARY ELECTRICAL SERVICE (SEE ELEC.)

2" WATER SERVICE TO KITCHEN

3" WATER SERVICE TO MAIN TERMINAL

NOTE 3.

BASELINE "C"

SOUTH FACE OF EXISTING COLUMN MAIN FLOOR CLOSEST TO RUNWAY

BASELINE "A"
CENTERLINE OF CIRCULATION SPINE
CENTERLINE OF MAIN TERMINAL
CENTERLINE OF CONNECTOR
CENTERLINE OF CONCOURSE

INTERFACE LINE

PAVING OF THIS AREA IS A PART OF THIS CONTRACT. SEE ENLARGED PLAN ON SHEET 7.

SANITARY SEWER

SAN. SEWER MANHOLE

TRENCH DRAIN

COMMUNICATIONS & SECURITY CONDUITS

WATER FEATURE / FIRE WATER LAGOON A (SEE LANDSCAPE)

STORM DRAIN (SEE PLUMBING & LANDSCAPE)

WATER LINE (SEE PLUMBING & LANDSCAPE)

LEGEND

TYPE OF UTILITY	NEW	EXISTING (INSTALLED BY OTHERS) (NOTE 4)	EXISTING (TO REMAIN)	EXISTING (REMOVE OR CAP & ABANDON)
UNDERGROUND POWER	UGP	UGP	UGP	UGP
UNDERGROUND GAS	G	G	G	G
UNDERGROUND WATER	W	W	W	W
UNDERGROUND SANITARY SEWER	SS	SS	SS	SS
UNDERGROUND STORM DRAINAGE	SD	SD	SD	SD
UNDERGROUND SECURITY	CC	CC	CC	CC
UNDERGROUND TELEPHONE	TEL	TEL	TEL	TEL
UNDERGROUND MECHANICAL	M	M	M	M

	130-1993
DRAWN	M.W.D.
DATE	SEPT. 30, 1995
REV.	NOV. 30, 1995
NORTH	

LAWRENCE H. WOODRUM 25171 REGISTERED

SOUTH CAROLINA REGISTERED LANDSCAPE ARCHITECT

HEYWARD, WOODRUM, FANT & ASSOCIATES, COLUMBIA SOUTH CAROLINA

COLUMBIA METROPOLITAN AIRPORT

TERMINAL RENOVATIONS

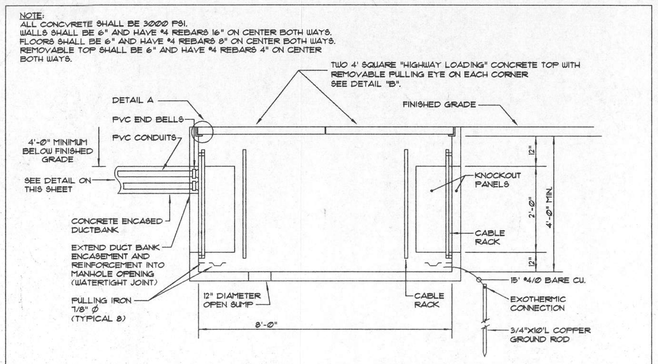
RICHLAND - LEXINGTON AIRPORT COMMISSION

WEST COLUMBIA SOUTH CAROLINA

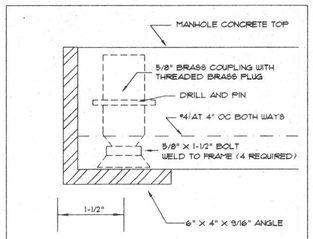
Heyward, Woodrum, Fant & Associates LTD., AIA

SHEET 5 OF 22 OF 344 SHEETS

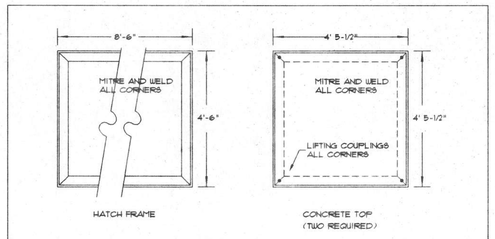
NOTE:
ALL CONCRETE SHALL BE 3000 PSI.
WALLS SHALL BE 6" AND HAVE #4 REBARS 16" ON CENTER BOTH WAYS.
FLOORS SHALL BE 6" AND HAVE #4 REBARS 8" ON CENTER BOTH WAYS.
REMOVABLE TOP SHALL BE 6" AND HAVE #4 REBARS 4" ON CENTER BOTH WAYS.



MANHOLE DETAIL
NO SCALE



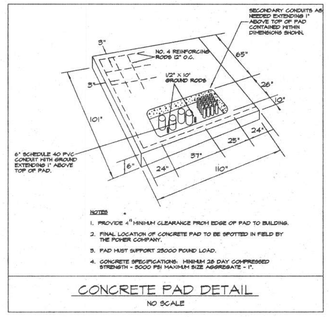
DETAIL "A"
NO SCALE



DETAIL "B"
NO SCALE

NOTE: THE RELOCATION AND RENOVATION OF EXISTING ELECTRICAL WORK IN THE EXISTING KITCHEN IN ORDER TO INSTALL BUSDUCT SHALL BE A PART OF THIS CONTRACT.

NOTE: CONCRETE PAD TO POWER SPECIFICATIONS BY THE ELECTRICAL CONTRACTOR. SECONDARY CONNECTORS AND CONNECTIONS BY THE ELECTRICAL CONTRACTOR. SEE POWER COMPANY DRAWINGS.



CONCRETE PAD DETAIL
NO SCALE

NOTE: SEE SHEET E35 FOR DUCTBANK DETAILS AND LIGHTING, POWER, AND COMMUNICATIONS PLANS FOR AREAS M001, M002, J004.

△2 ELECTRICAL SITE PLAN
SCALE: 1/8" = 1'-0"

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DATE SEPT. 22, 1994
REV.
NORTH

CONSTRUCTION SET

JOHN RAY WILLIAMS AND ASSOCIATES CONSULTING ELECTRICAL ENGINEERS No. C00079 CERTIFICATE OF AUTHORIZATION NORTH CAROLINA SOUTH CAROLINA

JOHN RAY WILLIAMS REGISTERED PROFESSIONAL ENGINEER No. 3026 NORTH CAROLINA SOUTH CAROLINA 10-15

COLUMBIA METROPOLITAN AIRPORT
CONCOURSE AND CONNECTOR
RICHLAND - LEXINGTON AIRPORT COMMISSION
WEST COLUMBIA SOUTH CAROLINA

Heyward, Woodrum, Fant & Associates LTD., AIA

SHEET E2
185
OF 252 SHEETS

PREPARED FOR:

COLUMBIA METROPOLITAN AIRPORT

PREPARED BY:

Foth

KEY MAP:

NO	DATE	BY	REVISION DESCRIPTION

CBIS AND WEST TICKETING CACO

COMBINED UTILITIES

COLUMBIA, SC

CAD FILE: 0020C007.06_CWTC_UTILITY COMPILATION.dwg

APPROVED BY:

DESIGNED	DRAWN: DJCS	CHECKED: DJCS
LETTING DATE:		PRINT DATE: 5/4/2025
PROJECT NO: 20C007.06		SHEET NO. AS1

0 20 FEET