Office of Procurement

Conway, SC 29526

3230 Hwy 319 E
Conway, SC 29526

843.915.5380 (Ph)
843.365.9861 (Fx)

Horry County
SOUTH CAROLINA
Committed to Excellence

TO: ALL INTERESTED PARTIES

FROM: Kimberly Massie, CPPB,
Director of Procurement

DATE: **May 31, 2018**

SUBJECT: **ADDENDUM #1**
IFB # 2017-18-719 Taxiway A Rehabilitation - Bid Package 1 at Myrtle Beach International Airport (MYR)

ADDENDUM #1

This Addendum forms a part of the bid documents for this project and modifies/amends/clarifies/adds to the original documents as described below. Acknowledgement of receipt and inclusion of the effects of this addendum shall be included on each offeror's form of proposal.

NOTICE of REVISIONS:

PROJECT MANUAL:

Special Provisions

1. **REVISE** the last sentence of the second paragraph of SP-26 "Subgrade Undercut" to read as follows:

   "In areas to be paved, ground stabilization fabric shall be installed in accordance with Item P-405 "Ground Stabilization Fabric" and the area backfilled with either crushed aggregate subbase material in accordance with Item P-209 "Crushed Aggregate Base Course" or select material backfill in accordance with Item P-152 "Excavation, Subgrade, and Embankment". The type of material shall match that of the above pavement layer; i.e., P-209 Crushed Aggregate Base Course shall be used for Type 1, 2, 4, 5, and 6 pavement, while P-152 Select Material Backfill shall be used for Type 3 and 7 pavement."

2. **ADD** the following as the last paragraph of SP-26 "Subgrade Undercut":

   "Payment for furnishing and placing the select material backfill shall be made at the contract unit price per cubic yard for Item P-152 "Select Material Backfill", which price shall be full compensation for furnishing all materials, for all preparation, hauling, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the work."

DRAWINGS:

Sheet 20 of 192

3. **REVISE** the first sentence of Note 4 to read as follows:

   "PAYMENT WILL BE MADE FOR PLACEMENT UP TO 4,000 TONS OF ITEM R-305 SCDOT STONE FOR THE CONTACTOR'S STAGING AREA AND BATCH PLANT LOCATION."

4. **ADD** the following Note 6:

   "6. IN ORDER TO RESERVE SPACE FOR A FUTURE BATCH PLANT FOR SUBSEQUENT PROJECTS, THE CONTRACTOR'S BATCH PLANT SITE SHALL BE LIMITED TO A MAXIMUM AREA OF 4 ACRES. THE ENGINEER SHALL PROVIDE DIMENSIONS OF THE AREA FOR THE CONTRACTOR'S USE PRIOR TO THE NOTICE-TO-PROCEED."

Sheet 80 of 192

5. **ADD** the following Note 2 to the "TYPE 7 TEMPORARY BITUMINOUS TAXIWAY PAVEMENT SECTION":

   "2. EXCAVATION REQUIRED TO PLACE THE P-152 SELECT MATERIAL BACKFILL SHALL BE PAID FOR UNDER THE P-152 UNCLASSIFIED EXCAVATION PAY ITEM."

Sheet 82 of 192

6. **REPLACE** the "STORMWATER MANAGEMENT RECTANGULAR JUNCTION BOX (STRUCTURE D106)" detail with the revised "STORMWATER MANAGEMENT RECTANGULAR JUNCTION BOX (STRUCTURE D106)" detail shown in Exhibit No. 82-1 of Addendum #1.

Sheet 83 of 192

7. **ADD** the "STORMWATER MANAGEMENT STRUCTURE (D112)" detail shown in Exhibit No. 83-1 of Addendum #1.

Sheet 92 of 192

8. **ADD** the following Note 4 to the "TYPE 3 PCC TAXIWAY PAVEMENT SECTION" detail:

   "4. EXCAVATION REQUIRED TO PLACE THE P-152 SELECT MATERIAL BACKFILL SHALL BE PAID FOR UNDER THE P-152 UNCLASSIFIED EXCAVATION PAY ITEM."

Sheet 112 of 192

9. **ADD** the following Note 3:

   "3. THE FAA FIBER OPTIC CABLE IS 12 STRAND SINGLE MODE."

10. **ADD** the following Note 4:

    "4. THE AIRPORT FIBER OPTIC CABLE IS 96 STRAND SINGLE MODE."

11. **ADD** the following Note 5:

    "5. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER 24 HOURS IN ADVANCE OF DISRUPTION OF SERVICE TO THE AIRPORT FIBER OPTIC CABLE. SERVICE SHALL BE RESTORED WITHIN 8 HOURS OF DISRUPTION."

QUESTIONS/ANSWERS

Question #1: **The question was asked during the pre-bid meeting that stone excavated from the site can be put in the millings stockpile area. Please verify that this is the case.**

Answer: *Yes, excavated stone may be put in the millings stockpile area.*

Question #2: **Would the Owner consider setting up a bid item for temporary seeding?**

Answer: *No, there will not be a bid item for temporary seeding.*

Question #3: **Is the clearing and grubbing item strictly for the temporary batch plant site?**

Answer: *Yes, the clearing and grubbing pay item is exclusive to the batch plant area.*

Question #4: **Can the contractor use P-304 CTB base in lieu of P-306 econocrete? If so can you please provide the P-304 specification.**

Answer: *Yes, as stated in Note 2 of the "Type 1 PCC Taxiway Pavement Section" and "Type 3 PCC Taxiway Pavement Section" details on Sheet 92 of 192, "The Contractor may*

substitute P-304 Cement Treated Base Course for the P-306 Lean Concrete Pavement. Payment for the P-304 Cement Treated Base Course, if used by the Contractor, in lieu of P-306 Lean Concrete Pavement, will be made at the contract unit price per square yard for P-306 Lean Concrete". Specification Item P-304 Cement Treated Base Course was included in the As-Bid Specifications.

Question #5: **Please clarify the bedding for Rigid concrete pipe. The specification states that all rigid pipe will be in a concrete cradle (701-3.2a) whereas the detail (sheet 82 of 192) shows crushed aggregate base for bedding.**

Answer: *The specification states a concrete cradle is required for Class A pipe bedding. The details on Sheet 82 of 192 call for Class B bedding which consists of a bed of crushed aggregate as noted in Item D-701-3.2a.*

Question #6: **Please clarify that the P-209 Backfill will be paid for under the bid item #26 for P-209 as stated on the details (sheet 82 of 192). The bedding is incidental to the pipe but the backfill is to be paid for as per detail notes.**

Answer: *Yes, the pipe bedding is incidental to the cost of the pipe as shown in the details. The aggregate backfill between the pipe bedding and the pavement section shall be paid for under the P-209 Crushed Aggregate Base Course pay item.*

Question #7: **The bid items for Pot-Holing the amount of holes to be dug is not specified. Can we have a guideline to use? Say every 200 ft or what can be expected?**

Answer: *The number of pot holes shall be such that the Contractor has sufficient information to satisfy themselves on the depth and alignment of all underground utilities.*

Question #8: **Will the airport state that the Batch plant set up will not be required to be hurricane proof?**

Answer: *The Airport will not require the batch plant to be hurricane proof. The Contractor shall ensure that his equipment meets all federal, state, and local safety requirements*

Question #9: **Are gate guards required when the gate access is open and being used by the contractor?**

Answer: *Yes, any temporary opening in the perimeter fence shall be continuously observed by the Contractor's designated employee. Reference is directed to Project Note No. 21 on Sheet 4 of 192.*

Question #10: **Are escorts required for delivery trucks onsite?**

Answer: *Escorts are required for any vehicles accessing the Aircraft Operations Area operated by personnel without a valid Airport security badge. All escorts will be provided by the Contractor.*

Question #11: **Is there a possible waste site on airport property for excess excavation coming from the cut or from the pipe excavation?**

Answer: *There is no location for a waste site on the airport property. All excess excavation shall be disposed of off-site in accordance with local, state, and federal guidelines. Reference is directed to Project Note No. 40 on Sheet 4 of 192.*

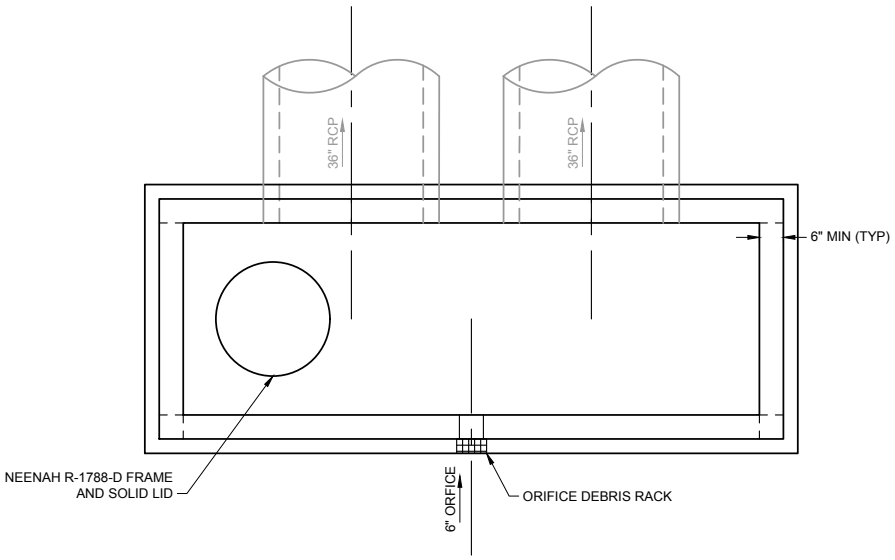
Question #12: **Will there be any aircraft parking planning and striping at the gate required for this project??**

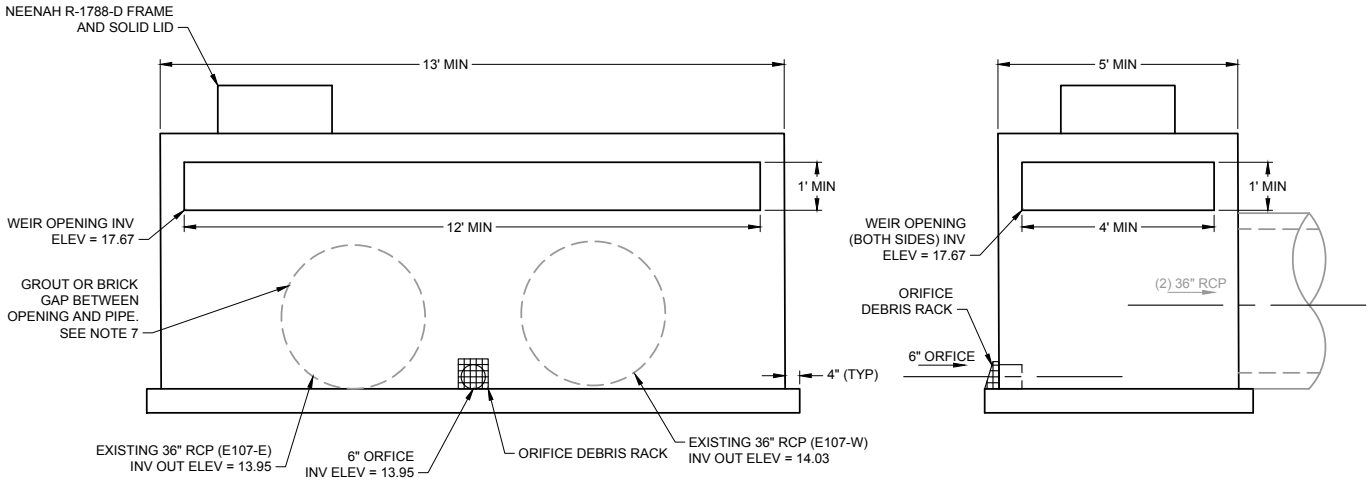
Answer: *No.*

ATTACHMENTS:

1. Exhibit No. 82-1, "Stormwater Management Structure (D106)" Detail
2. Exhibit No. 83-1, "Stormwater Management Structure (D112)" Detail
3. Pre-bid meeting attendance list
4. Pre-bid meeting agenda
5. Pre-bid meeting presentation

This Addendum does not change the due date/time or any terms and conditions of the solicitation.





STORMWATER MANAGEMENT RECTANGULAR JUNCTION BOX (STRUCTURE D106)

NTS

NOTES:

1. CONSTRUCTION AND STEEL REINFORCING SHALL BE IN CONFORMANCE WITH ASTM C890 AND ASTM C913 REQUIREMENTS.

2. CONCRETE SHALL BE 4000 PSI MINIMUM.

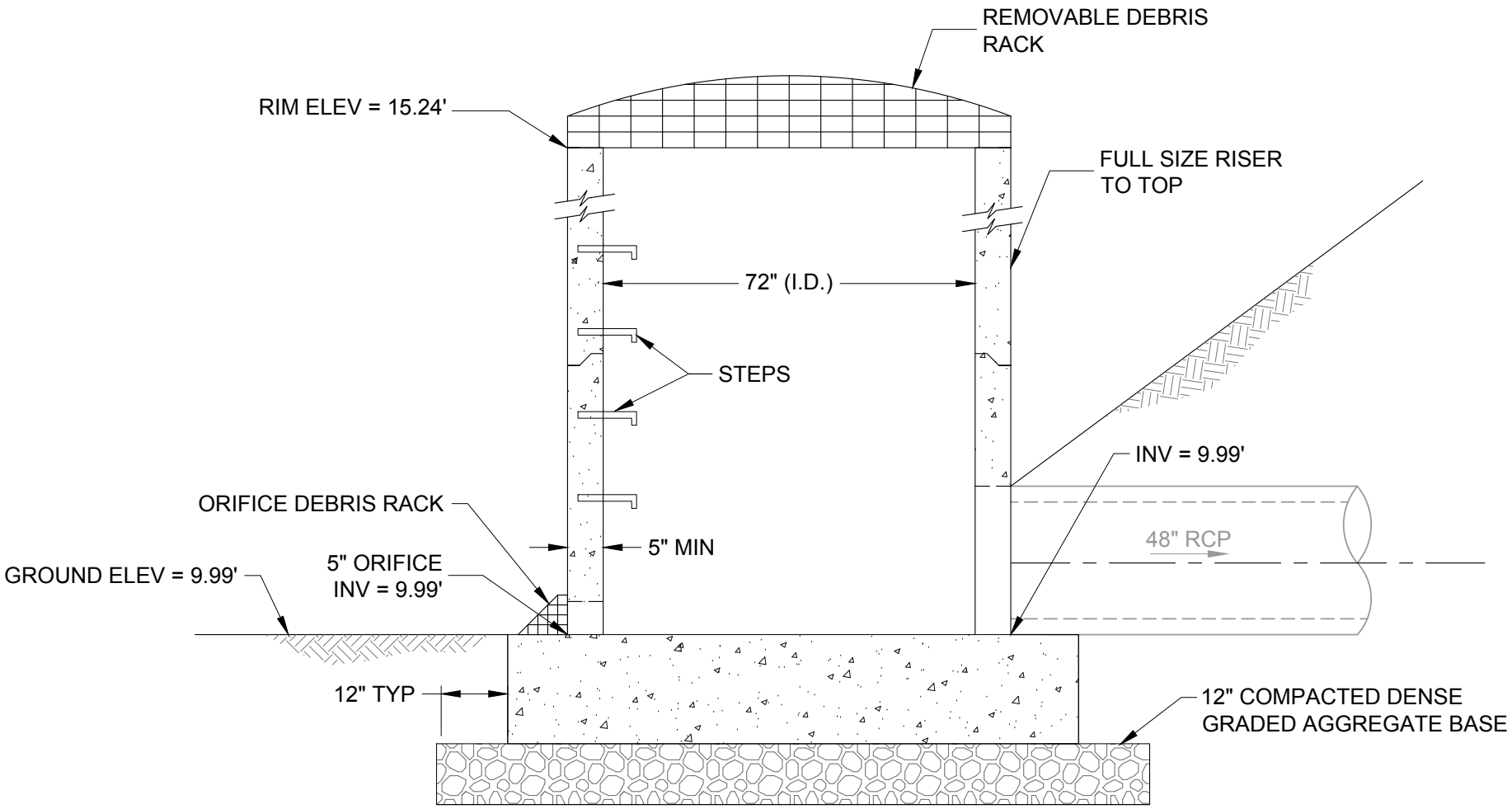
3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING DESIGNS (INCLUDING STRUCTURAL CALCULATIONS AND ASSUMPTIONS) SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF SOUTH CAROLINA FOR BASES, RISERS, AND TOP SLABS. THE SHOP DRAWING FOR EACH STRUCTURE SHALL BE COMPLETE WITH BASE, RISER(S), TOP SLAB, FRAME AND GRATE(S), STEPS, REINFORCING, ETC. PRIOR TO SUBMITTAL.

   SEALED SHOP DRAWING OF STRUCTURE SHALL INCLUDE OR SHOW, AS A MINIMUM:
   - STEEL REINFORCEMENT SIZES AND SPACING
   - CONCRETE WALL, BASE AND TOP SLAB THICKNESS
   - ROUGH PIPE OPENINGS AND THEIR INVERTS
   - FINISHED FLOW LINE INVERTS
   - STEP LOCATION WITH RESPECT TO LID OR GRATE
   - CERTIFICATION THAT STRUCTURE MEETS ASTM C-478 REQUIREMENTS
   - DESIGN LOADING: H20 LOADING

5. BASE SLAB SHALL BE INCIDENTAL TO STRUCTURE. EXTEND BASE SLAB AS REQUIRED.

6. THE CONTRACTOR SHALL PROVIDE GASKETED (ASTM C443) JOINTS FOR ALL CONCRETE STRUCTURES INSTALLED UNDER THIS PROJECT. THE CONTRACTOR SHALL INSTALL STANDARD STEPS IN ALL STRUCTURES. THE CONTRACTOR SHALL INSTALL INLET SHAPING IN ALL DRAINAGE STRUCTURES. NO SEPARATE MEASUREMENT WILL BE MADE FOR THE ABOVE REFERENCED ITEMS.

7. GROUT SHALL BE TYPE S MORTAR MATERIAL IN ACCORDANCE WITH SECTION 718 OF THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).



STORMWATER MANAGEMENT STRUCTURE (D112)

NTS

NOTES:

1. SEE "NON-AIRCRAFT RATED MANHOLE AND DROP INLET DETAIL" FOR NOTES.

Myrtle Beach International Airport
IFB 2017-18-719 Taxiway A Rehabilitation - Bid Package 1
SITE VISIT SIGN-IN SHEET
& Pre-Bid Meeting
Thursday, May 24, 2018 08:30AM

DELTA AIRPORT CONSULTANTS, INC.

NAME (print please)	COMPANY	Phone Number	E-Mail Address
Breck Dunne	HCDA	843-848-7412	DunneBc@HorryCounty.org
Ken Urbanial	HCDA	843-353-6410	Urbanial@HorryCounty.org
April Johnston	HCDA	843-839-7355	johnstoa@horrycounty.org
Michael Boyle	McCarthy Improvement Co.	864-918-6126	mboyle@mccarthyimprovement.com
David Gaylor	McCarthy Improvement Co	563-726-1010	DGAYLOR@MCCARTHYIMPROVEMENT.COM
Wayne Moore	Summers Concrete	229-740-1417	wayne@summersconcrete.com
Daron Stalvey	Stalvey const co Inc	843-450-2676	Stalvey Concrete@Yahoo.com
Lou Almonte	Palmetto Corp.	843-365-2156	LALMONTE@PALMETTOCORP.NET
Brad Mullis	Summers Concrete	229-560-0391	brad@summersconcrete.com
Denny Floyd	A.O Hardee & Son	843-458-4459	denny@aohardee-son.com
Brian Sarvis	Ao Hardee and son	843-602-1396	brian@aohardee-son.com
Woody Moore	J. Moore Elect. inc	803 568 4734	jmec04@[illegible].net
Jon Bowman	Palmetto Supreme Environmental	864-228-7071	jon.bowman@palmettosupreme.com
Edward Wessel	Hi-Way Paving, Inc.	614-679-3782	Edwessel@hiwaypaving.com
Josh Jordan	SME	843-340-0679	jdjordan@smeinc.com
Kara Fugate	SME	843-692-6789	Kfugate@smeinc.com
L. Dean Weaver	L. Dean Weaver Company	843-352-2122	dean@ldwinc.com
Jeremy Crady	Terracon	843-277-8396	jeremy.crady@terracon.com
Andrew Isenhour	Tensar	843-829-2867	AIsenhour@TensarCorp.com
Amy Norris	Horry County Procurement	843-915-5380	norrisa@horrycounty.org

NAME (print please)	COMPANY	Phone Number	E-Mail Address
Elizabeth Lattimore	~~B~~ Delta Airport Consultants	919-840-7604	elattimore@deltaairport.com
Doug Sander	Delta Airport Consultants	919-840-7604	dsander@deltaairport.com
Scott Van Moppes	Airport	843-448-1580	vanmoppess@horrycounty.org
Judi Olustead	"	"	olusteaj@horrycounty.org
STEPHEN GRANT	OHMEGA GROUP, LLC	803.883.0483	sgrant@ohmegagroup.com

PRE-BID MEETING AGENDA

Taxiway A Rehabilitation – Bid Package 1

Myrtle Beach International Airport
Myrtle Beach, South Carolina

AIP Project No. 3-45-0065-Pending-2018
Bid No.2017-18-79
HCDA Project No. A0111
Delta Project No.18003

Location of Meeting:	Myrtle Beach International Airport General Aviation (GA) Terminal
Date of Meeting:	Thursday, May 24, 2018

1. Introductions & Attendance List
2. Plans & Specifications Availability
3. Bid Submission & Opening
4. Addendums & Bidder Questions
5. Project Scope & Funding Sources
6. Review of General Provisions
7. Review of Technical Specifications
8. Review of Plans
9. Other Discussion Items

PRE-BID MEETING

Taxiway A Rehabilitation – Bid Package 1

Horry County

Myrtle Beach International Airport

AIP PROJECT NO. 3-45-0065-PENDING-2018

BID NO: 2017-18-719

HCDA PROJECT NO. A0111

General Aviation (GA) Terminal

10:00 AM May 24, 2018

Horry County
SOUTH CAROLINA
Committed to Excellence

myrtle beach
INTERNATIONAL AIRPORT

AGENDA

1. Introductions & Attendance List
2. Plans & Specifications Availability
3. Bid Submission & Opening
4. Addendums & Bidder Questions
5. Project Scope & Funding Sources
6. Review of General Provisions
7. Review of Technical Specifications
8. Review of Plans
9. Other Discussion Item

Introductions & Attendance List

- Airport staff
- Delta staff
- Please sign in

Plans & Specifications Availability

http://www.deltaairport.com

Bid Submission & Opening

Bid Due

Date: June 19, 2018
Time: 2:00 PM – Local time
Location: Horry County Office of Procurement
3230 Highway 319 East, Conway, SC

Addendums & Bidder Questions

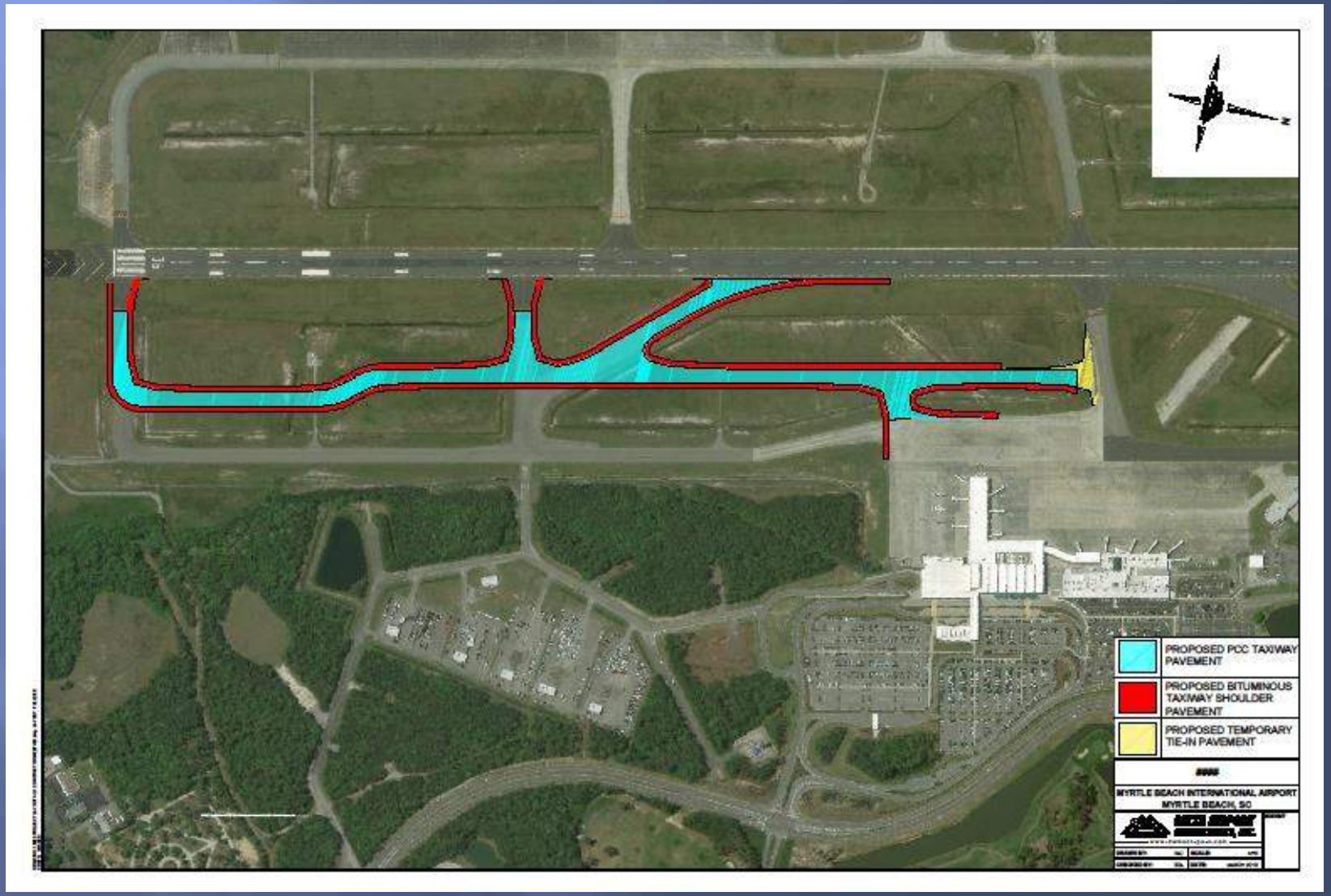
- At least one Addendum will be issued
- Questions must be emailed to both:

Douglas Sander
Delta Airport Consultants
dsander@deltaairport.com

Amy Norris
Horry County Procurement Office
norrisA@horrycounty.org

- No later than June 7, 2018 @ 2:00pm local time

Project Area



Review of General Provisions

- Section 20: Proposal
  Bid Bond / Certified Checks
  Addendums
- Section 30: Contract
  Contract Bonds
  Commercial and General Liability & Automobile Insurance
- Section 50: Stake Out
- Section 60: Plant Inspections
  Field Office
  Shop Drawings
  Operations and Maintenance Manuals

Review of General Provisions

- Section 70: Facilities and Utilities Contacts
- Section 80: Prime Contractor
  CPM Progress Schedule
  Contract Time
- Section 90: Partial Payments
  Retainage
  Escrow Account
- Section 100: Contractor Quality Control Program
- Section 110: Percent Within Limits

Special Provisions

- Time Extensions
- Safety Plan Compliance Document
- Subgrade Undercut
- Cost Breakdown – Lump Sum Items
- Preliminary Project Preparation
- QC
- Subsurface Utility Engineering
- Failure to Maintain Safety Measurements
- Fiber Optic Cable Relocation
- Liquidated Damages
- Contractor Penalty Payments
- Badging Requirements

Technical Specifications

- P-100: Mobilization – limits
- P-140: Pavement Removal
- P-150: Demolition
- P- 151: Clearing and Grubbing
- P-152: Unclassified Excavation
- P-153: Controlled Low Strength Material
- P-156: Erosion & Sediment Control
- P-160: Pavement Surface Cold Planing

Technical Specifications (cont)

- P-209: Crushed Aggregate Base Course
- P-304: Cement Treated Base Course
- P-306: Lean Concrete Base Course
- P-401: Bituminous Pavement
- P-405: Ground Stabilization Fabric
- P-410: High Performance Geogrid
- P-501: Portland Cement Concrete Pavement

Technical Specifications (cont)

- P-502: Spall Repair
- M-103: Closed Runway and Taxiway Markers
- M-107: Aviation Barricades
- M-602: Bituminous Prime Coat
- M-603: Bituminous Tack Coat
- P-605: Joint Sealing Filler
- P-606: Adhesive Compounds, Two Component for Sealing Wire to Lights and Pavement

Technical Specifications (cont)

- P-607: Expansion Joints
- P-608: Emulsified Asphalt Seal Coat
- P-610: Structural Portland Cement Concrete
- P-619: Paint Removal
- P-620: Runway & Taxiway Painting
- D-701: Pipe
- D-705: Underdrain

Technical Specifications (cont)

- D-751: Drainage Structures
- D-752: Concrete Culvert, Headwalls, and Misc. Drainage
- T-901: Seeding
- T-908: Mulching
- L-100: General Provisions and Requirements for Electrical Work
- L-104: General Provisions and Safety Requirements and Temporary Airfield Lighting
- L-105: Alterations, Removal and Demolition

Technical Specifications (cont)

- L-108: Underground Cable
- L-109: Electrical Vault
- L-110: Duct Banks & Conduits
- L-115: Electrical Manholes and Junction Structures
- L-125: Airport Lighting Systems
- Section 263213.13: Diesel Emergency Engine Generators
- Section 263600: Transfer Switches

Technical Specifications (cont)

- R-305: SC Aggregate Base Course
- R-401: SC Asphalt Concrete Pavement
- R-804: SC Riprap
- R-815: SC Turf Reinforcement Matting

Technical Specifications (Cont.)

- Appendix A: Geotechnical Report
- Appendix B: Addendum to Geotechnical Report
- Appendix C: Sample Submittal Form
- Appendix D: AC 150 / 5370-2G

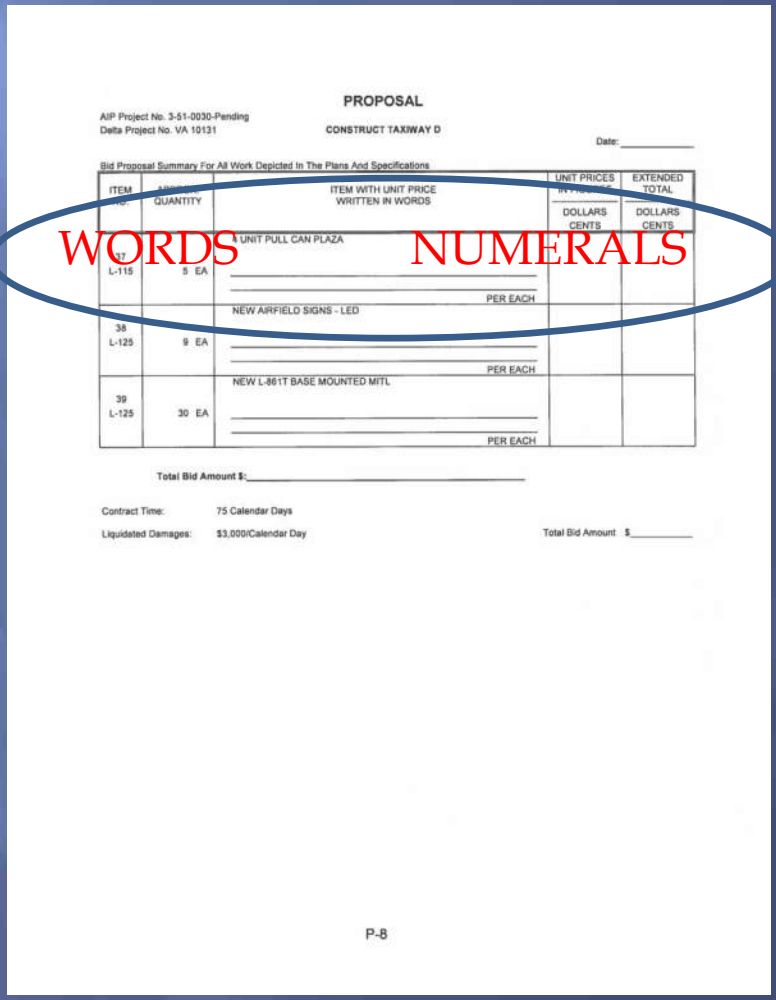
"Operational Safety on Airports During Construction"

- Appendix E: Construction Safety and Phasing Plan

Review of Bid Forms

- Complete Proposal is required to be submitted.
- Required to bid on both Alternates.
- Unit Price Based Bid.
- Bid Bond is required to be submitted.

Bid From



PROPOSAL

AIP Project No. 3-51-0030-Pending
Delta Project No. VA 10131

CONSTRUCT TAXIWAY D

Date: _____

Bid Proposal Summary For All Work Depicted In The Plans And Specifications

ITEM NO.	AIRPORT QUANTITY	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICES IN FIGURES DOLLARS CENTS	EXTENDED TOTAL DOLLARS CENTS
37 L-115	5 EA	5 UNIT PULL CAN PLAZA _____ _____ PER EACH		
38 L-125	9 EA	NEW AIRFIELD SIGNS - LED _____ _____ PER EACH		
39 L-125	30 EA	NEW L-861T BASE MOUNTED MITL _____ _____ PER EACH		

WORDS NUMERALS

Total Bid Amount $:_____

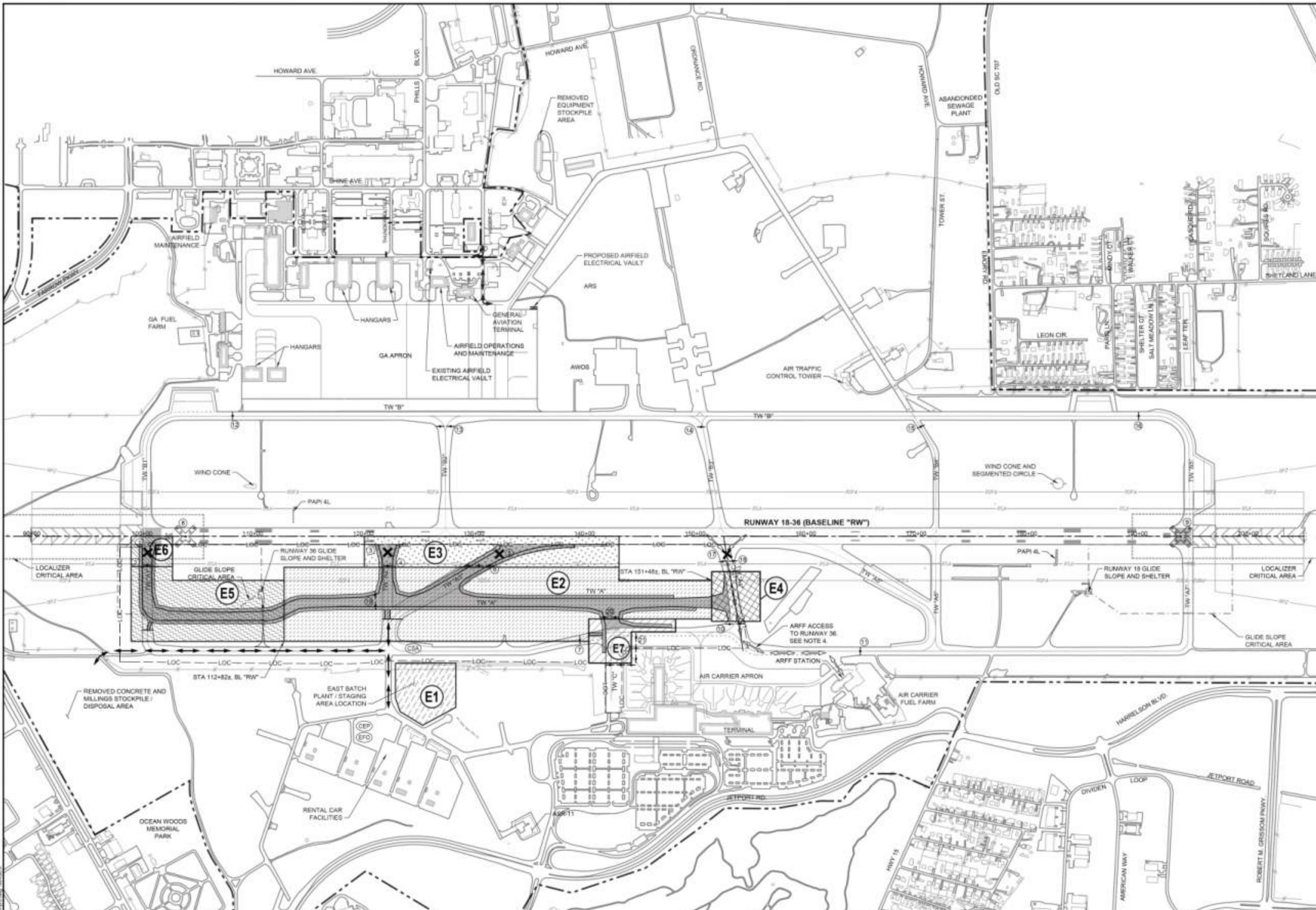
Contract Time: 75 Calendar Days

Liquidated Damages: $3,000/Calendar Day

Total Bid Amount $_____

P-8

Review of Plans



LEGEND

- WORK AREA/PHASE LABEL
- CLOSED RUNWAY MARKER - MOBILE LIGHTED
- CLOSED TAXIWAY MARKER - LIGHTED
- CLOSED RUNWAY/TAXIWAY MARKER LABEL
- CONTRACTOR EMPLOYEE PARKING
- CONTRACTOR STAGING AREA
- ENGINEER'S FIELD OFFICE
- TRAINED FLAGMAN/GATE GUARD
- AVIATION BARRICADES
- HAUL ROUTE (TWO-WAY TRAFFIC)
- ARFF ACCESS ROUTE
- EXISTING FENCE
- EXISTING GLIDE SLOPE CRITICAL AREA
- EXISTING LOCALIZER CRITICAL AREA
- EXISTING OBSTACLE FREE ZONE
- EXISTING AIRPORT PROPERTY LINE
- EXISTING RUNWAY OBJECT FREE AREA
- EXISTING RUNWAY PROTECTION ZONE
- EXISTING RUNWAY SAFETY AREA
- PROPOSED TAXIWAY CONSTRUCTION
- PROPOSED WORK AREA E1
- PROPOSED WORK AREA E2
- PROPOSED WORK AREA E3
- PROPOSED WORK AREA E4
- PROPOSED WORK AREA E5
- PROPOSED WORK AREA E6
- PROPOSED WORK AREA E7

CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE

MARKER #	TYPE	IN PLACE DURING WORK IN AREA:						
		E1	E2	E3	E4	E5	E6	E7
1	CLOSED TAXIWAY	X	X	X	X	X	X	
2	AVIATION BARRICADES	X	X	X	X	X	X	
3	CLOSED TAXIWAY	X	X	X	X			
4	AVIATION BARRICADES	X	X	X	X			
5	CLOSED TAXIWAY	X	X	X	X			
6	AVIATION BARRICADES	X	X	X	X			
7	AVIATION BARRICADES	X	X	X	X	X	X	X
8 *	CLOSED RUNWAY			X			X	
9 *	CLOSED RUNWAY			X			X	
10	AVIATION BARRICADES			X	X		X	
11 *	AVIATION BARRICADES			X			X	
12 *	AVIATION BARRICADES			X			X	
13 *	AVIATION BARRICADES			X			X	
14 *	AVIATION BARRICADES			X			X	
15 *	AVIATION BARRICADES			X			X	
16 *	AVIATION BARRICADES			X			X	
17	CLOSED TAXIWAY				X			
18	AVIATION BARRICADES				X			
19	AVIATION BARRICADES					X	X	
20	AVIATION BARRICADES							X
21	AVIATION BARRICADES							X

* - REQUIRED FOR NIGHTLY CLOSURES OF RUNWAY 18-36

NOTES

1. "CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE" REFLECTS ALL MARKERS IN-PLACE DURING THE PROJECT, NOT JUST THE MARKERS REQUIRED FOR THAT PARTICULAR WORK AREA.
2. INSTALL BARRICADES #2, #4, #6, AND #18 OUTSIDE THE EDGE OF THE RUNWAY SAFETY AREA (RSA) (250' FROM CENTERLINE).
3. BARRICADES AT TAXIWAY/TAXIWAY INTERSECTIONS SHALL BE PLACED OUTSIDE OF THE TAXIWAY SAFETY AREA (TSA) OF THE INTERSECTING TAXIWAY (85.5' FROM CENTERLINE).
4. CONTRACTOR TO MAINTAIN TAXIWAY "A4" AVAILABLE FOR USE BY ARFF AT ALL TIMES FOR THE DURATION OF THE PROJECT.

SCALE: 1"=400' — 400 0 400 800 FEET

NO.	REVISIONS	BY	APP.	DATE

1750 E. International Drive, Suite 3
Raleigh, North Carolina 27623
phone: (919) 840-7604 • fax: (919) 840-7624
www.deltaairport.com

DELTA AIRPORT CONSULTANTS, INC.

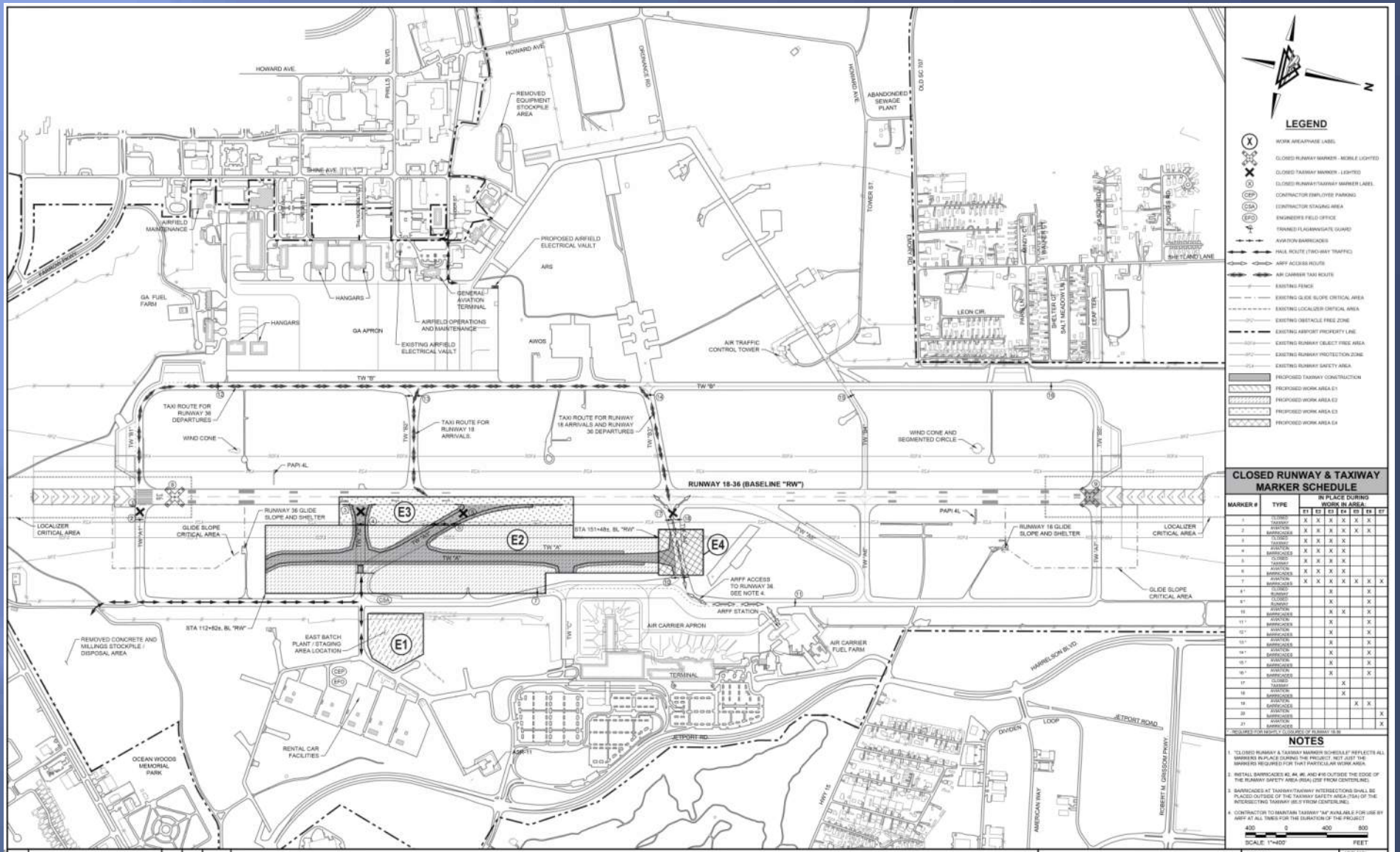
Digitally signed by Tracy J Saunders
Date: 2018.05.17 12:56:29-04'00'

TAXIWAY A REHAB (BID PACK 1)

OVERALL PHASING LAYOUT ALTERNATE 1

MYRTLE BEACH INTERNATIONAL AIRPORT

AIP NO.	JOB NO.
3-45-0065-PENDING-2018	18003
DRAWN BY: PJW	SHEET 5 OF 192
DESIGNED BY: TJS/JDB	
SCALE: 1" = 400'	DATE: MAY 2018



LEGEND

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- CLOSED RUNWAY MARKER - MOBILE LIGHTED
- CLOSED TAXIWAY MARKER - LIGHTED
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- CEP — CONTRACTOR EMPLOYEE PARKING
- CSA — CONTRACTOR STAGING AREA
- EPO — ENGINEER'S FIELD OFFICE
- TRAINED FLAGMAN/SAFETY GUARD
- AVIATION BARRICADES
- HAUL ROUTE (TWO-WAY TRAFFIC)
- ARFF ACCESS ROUTE
- AIR CARRIER TAXI ROUTE
- EXISTING FENCE
- EXISTING GLIDE SLOPE CRITICAL AREA
- EXISTING LOCALIZER CRITICAL AREA
- EXISTING OBSTACLE FREE ZONE
- EXISTING AIRPORT PROPERTY LINE
- EXISTING RUNWAY OBJECT FREE AREA
- EXISTING RUNWAY PROTECTION ZONE
- EXISTING RUNWAY SAFETY AREA
- PROPOSED TAXIWAY CONSTRUCTION
- PROPOSED WORK AREA E1
- PROPOSED WORK AREA E2
- PROPOSED WORK AREA E3
- PROPOSED WORK AREA E4

CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE

MARKER #	TYPE	IN PLACE DURING WORK IN AREA: E1	E2	E3	E4	E5	E6	E7
1	CLOSED TAXIWAY	X	X	X	X	X	X	
2	AVIATION BARRICADES	X	X	X	X	X	X	
3	CLOSED TAXIWAY	X	X	X	X			
4	AVIATION BARRICADES	X	X	X	X			
5	CLOSED TAXIWAY	X	X	X	X			
6	AVIATION BARRICADES	X	X	X	X			
7	AVIATION BARRICADES	X	X	X	X	X	X	X
8 *	CLOSED RUNWAY			X			X	
9 *	CLOSED RUNWAY			X			X	
10	AVIATION BARRICADES			X	X		X	
11	AVIATION BARRICADES			X			X	
12	AVIATION BARRICADES			X			X	
13	AVIATION BARRICADES			X			X	
14	AVIATION BARRICADES			X			X	
15	AVIATION BARRICADES			X			X	
16	CLOSED TAXIWAY				X			
17	AVIATION BARRICADES				X			
18	AVIATION BARRICADES					X	X	
20	AVIATION BARRICADES							X
21	AVIATION BARRICADES							X

* INCLUDES FOR NIGHTLY CLOSURES OF RUNWAY 18-36

NOTES

1. "CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE" REFLECTS ALL MARKERS IN PLACE DURING THE PROJECT, NOT JUST THE MARKERS REQUIRED FOR THAT PARTICULAR WORK AREA.
2. INSTALL BARRICADES #2, #4, #6, AND #16 OUTSIDE THE EDGE OF THE RUNWAY SAFETY AREA (RSA) (250' FROM CENTERLINE).
3. BARRICADES AT TAXIWAY/TAXIWAY INTERSECTIONS SHALL BE PLACED OUTSIDE OF THE TAXIWAY SAFETY AREA (TSA) OF THE INTERSECTING TAXIWAY (65.5' FROM CENTERLINE).
4. CONTRACTOR TO MAINTAIN TAXIWAY "A4" AVAILABLE FOR USE BY ARFF AT ALL TIMES FOR THE DURATION OF THE PROJECT.

0 400 800
SCALE: 1"=400' FEET

NO.	REVISIONS	BY	APP.	DATE

1750 E. International Drive, Suite 3
Raleigh, North Carolina 27623
phone: (919) 840-7604 • fax: (919) 840-7624
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DELTA AIRPORT CONSULTANTS, INC.

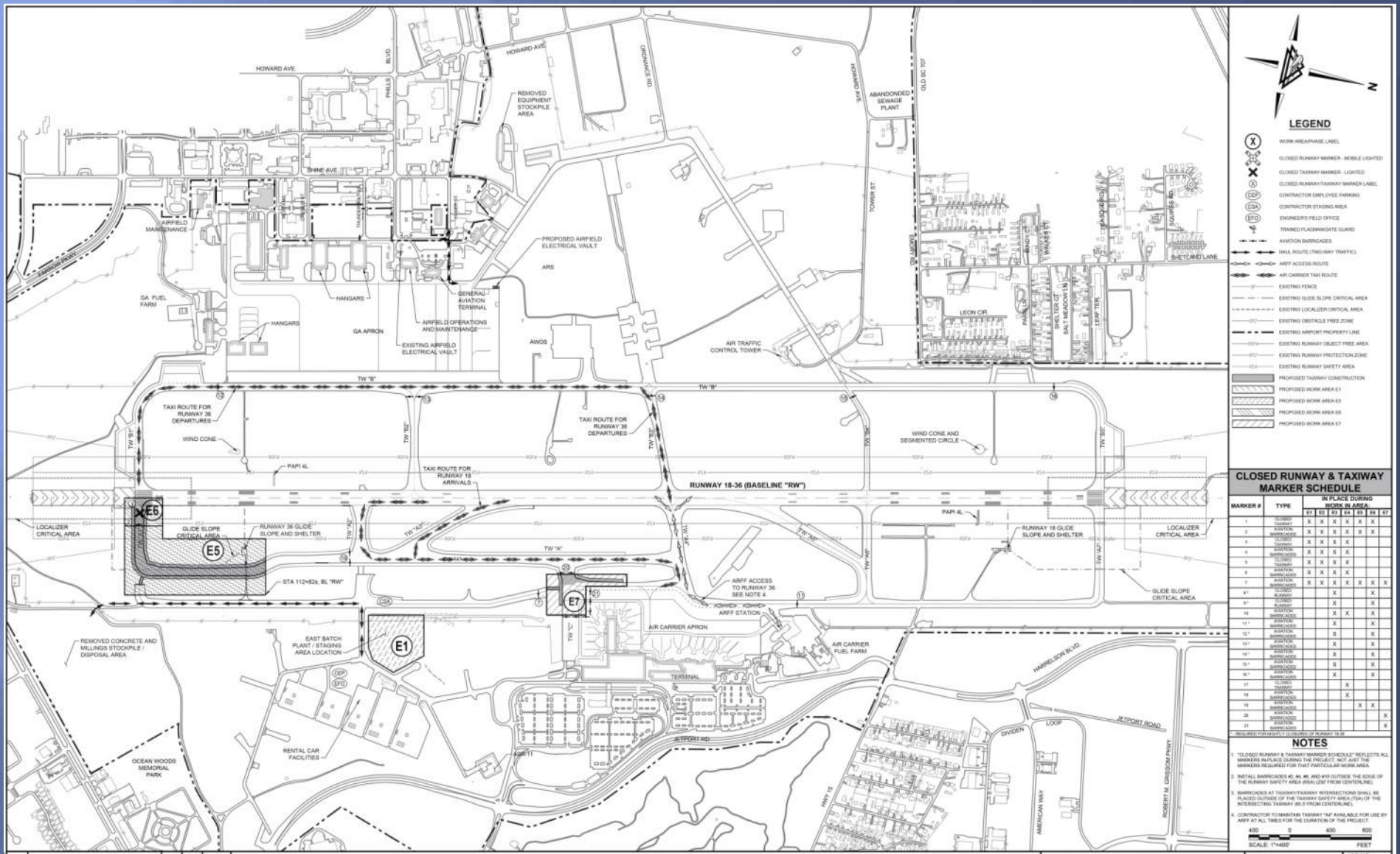
Digitally signed by Tracy J Saunders
Date: 2018.05.17 12:58:31-04'00'

TAXIWAY A REHAB (BID PACK 1)

PHASING LAYOUT - WORK AREAS E2-E4 - ALTERNATE 1

MYRTLE BEACH INTERNATIONAL AIRPORT

AIP NO.	JOB NO.
3-45-0065-PENDING-2018	18003
DRAWN BY: PJW	SHEET 6
DESIGNED BY: TJS/JDB	OF 192
SCALE: 1" = 400'	DATE: MAY 2018



LEGEND

- WORK AREA/PHASE LABEL
- CLOSED RUNWAY MARKER - MOBILE LIGHTED
- CLOSED TAXIWAY MARKER - LIGHTED
- CLOSED RUNWAY/TAXIWAY MARKER LABEL
- CEP — CONTRACTOR EMPLOYEE PARKING
- CSA — CONTRACTOR STAGING AREA
- EFO — ENGINEER'S FIELD OFFICE
- TRAINED FLAGMAN/GATE GUARD
- AVIATION BARRICADES
- HAUL ROUTE (TWO-WAY TRAFFIC)
- ARFF ACCESS ROUTE
- AIR CARRIER TAXI ROUTE
- EXISTING FENCE
- EXISTING GLIDE SLOPE CRITICAL AREA
- EXISTING LOCALIZER CRITICAL AREA
- EXISTING OBSTACLE FREE ZONE
- EXISTING AIRPORT PROPERTY LINE
- EXISTING RUNWAY OBJECT FREE AREA
- EXISTING RUNWAY PROTECTION ZONE
- EXISTING RUNWAY SAFETY AREA
- PROPOSED TAXIWAY CONSTRUCTION
- PROPOSED WORK AREA E1
- PROPOSED WORK AREA E5
- PROPOSED WORK AREA E6
- PROPOSED WORK AREA E7

CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE

MARKER #	TYPE	IN PLACE DURING WORK IN AREA: E1	E2	E3	E4	E5	E6	E7
1	CLOSED TAXIWAY	X	X	X	X	X	X	
2	AVIATION BARRICADES	X	X	X	X	X	X	
3	CLOSED TAXIWAY	X	X	X	X			
4	AVIATION BARRICADES	X	X	X	X			
5	CLOSED TAXIWAY	X	X	X	X			
6	AVIATION BARRICADES	X	X	X	X			
7	AVIATION BARRICADES	X	X	X	X	X	X	X
8 *	CLOSED RUNWAY			X				X
9 *	CLOSED RUNWAY			X				X
10	AVIATION BARRICADES			X	X			X
11 *	AVIATION BARRICADES			X				X
12 *	AVIATION BARRICADES			X				X
13 *	AVIATION BARRICADES			X				X
14 *	AVIATION BARRICADES			X				X
15 *	AVIATION BARRICADES			X				X
16 *	AVIATION BARRICADES			X				X
17	CLOSED TAXIWAY				X			
18	AVIATION BARRICADES				X			
19	AVIATION BARRICADES					X	X	
20	AVIATION BARRICADES							X
21	AVIATION BARRICADES							X

* - REQUIRED FOR NIGHTTIME CLOSURES OF RUNWAY 18-36

NOTES

1. "CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE" REFLECTS ALL MARKERS IN PLACE DURING THE PROJECT, NOT JUST THE MARKERS REQUIRED FOR THAT PARTICULAR WORK AREA.
2. INSTALL BARRICADES #2, #4, #6, AND #18 OUTSIDE THE EDGE OF THE RUNWAY SAFETY AREA (RSA) (250' FROM CENTERLINE).
3. BARRICADES AT TAXIWAY/TAXIWAY INTERSECTIONS SHALL BE PLACED OUTSIDE OF THE TAXIWAY SAFETY AREA (TSA) OF THE INTERSECTING TAXIWAY (65.5' FROM CENTERLINE).
4. CONTRACTOR TO MAINTAIN TAXIWAY "A4" AVAILABLE FOR USE BY ARFF AT ALL TIMES FOR THE DURATION OF THE PROJECT.

400 0 400 800
SCALE: 1"=400' FEET

NO.	REVISIONS	BY	APP.	DATE

1750 E. International Drive, Suite 3
Raleigh, North Carolina 27623
phone: (919) 840-7604 • fax: (919) 840-7624
www.deltaairport.com

DELTA AIRPORT CONSULTANTS, INC.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 30578 TRACY J. SAUNDERS

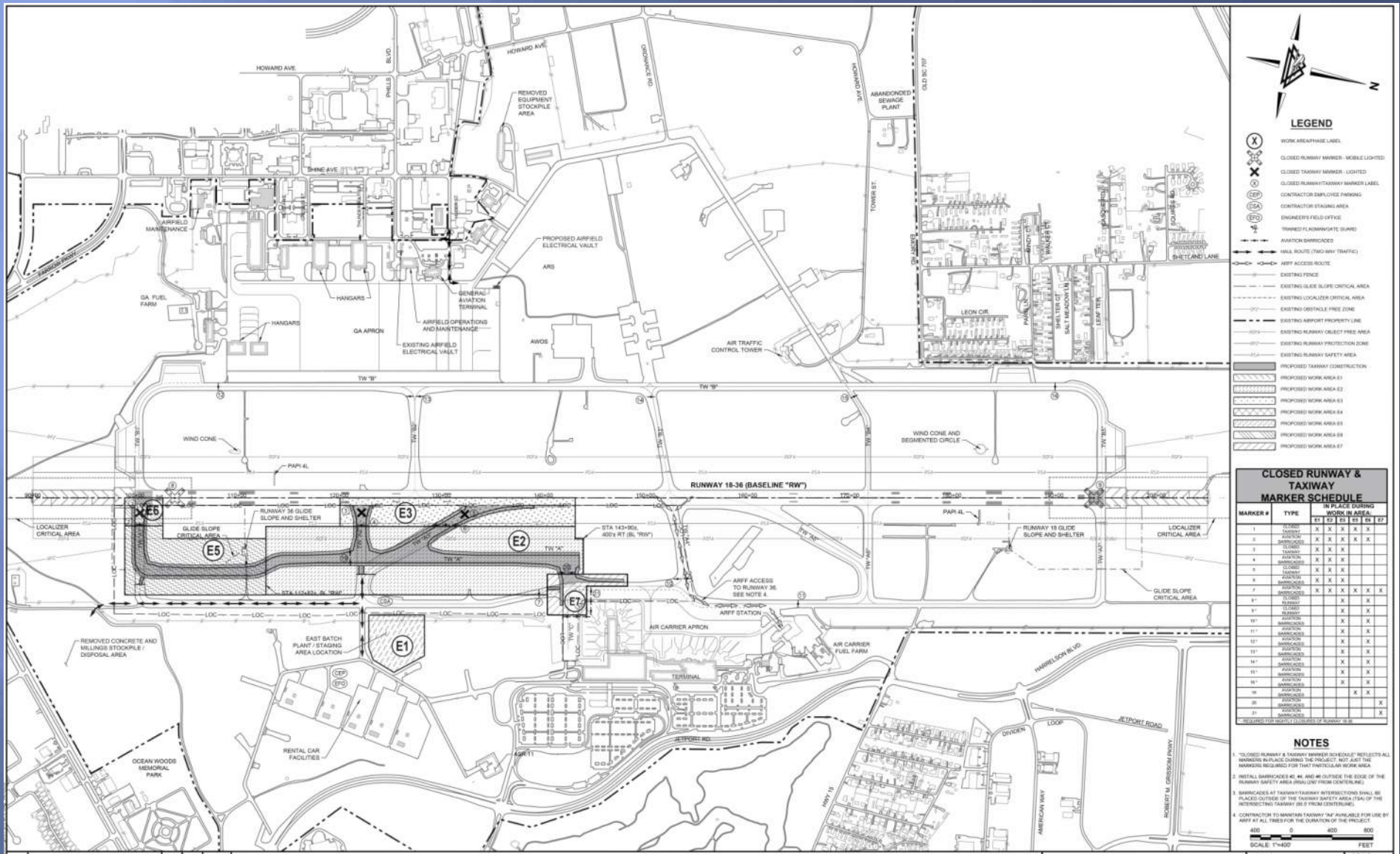
Digitally signed by Tracy J Saunders
Date: 2018.05.17 12:56:32-04'00'

TAXIWAY A REHAB (BID PACK 1)

PHASING LAYOUT - WORK AREAS E5-E7 - ALTERNATE 1

MYRTLE BEACH INTERNATIONAL AIRPORT

AIP NO. 3-45-0065-PENDING-2018
JOB NO. 18003
DRAWN BY: PJW
DESIGNED BY: TJS/JDB
SCALE: 1" = 400'
DATE: MAY 2018
SHEET 7 OF 192



LEGEND

- WORK AREA/PHASE LABEL
- CLOSED RUNWAY MARKER - MOBILE LIGHTED
- CLOSED TAXIWAY MARKER - LIGHTED
- CLOSED RUNWAY/TAXIWAY MARKER LABEL
- CEP — CONTRACTOR EMPLOYEE PARKING
- CSA — CONTRACTOR STAGING AREA
- EFO — ENGINEER'S FIELD OFFICE
- TRAINED FLAGMAN/SAFE GUARD
- AVIATION BARRICADES
- HAUL ROUTE (TWO-WAY TRAFFIC)
- ARFF ACCESS ROUTE
- EXISTING FENCE
- EXISTING GLIDE SLOPE CRITICAL AREA
- EXISTING LOCALIZER CRITICAL AREA
- EXISTING OBSTACLE FREE ZONE
- EXISTING AIRPORT PROPERTY LINE
- EXISTING RUNWAY OBJECT FREE AREA
- EXISTING RUNWAY PROTECTION ZONE
- EXISTING RUNWAY SAFETY AREA
- PROPOSED TAXIWAY CONSTRUCTION
- PROPOSED WORK AREA E1
- PROPOSED WORK AREA E2
- PROPOSED WORK AREA E3
- PROPOSED WORK AREA E4
- PROPOSED WORK AREA E5
- PROPOSED WORK AREA E6
- PROPOSED WORK AREA E7

CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE

MARKER #	TYPE	IN PLACE DURING WORK IN AREA: E1	E2	E3	E4	E5	E7
1	CLOSED TAXIWAY	X	X	X	X	X	
2	AVIATION BARRICADES	X	X	X	X	X	
3	CLOSED TAXIWAY	X	X	X			
4	AVIATION BARRICADES	X	X	X			
5	CLOSED TAXIWAY	X	X	X			
6	AVIATION BARRICADES	X	X	X			
7	AVIATION BARRICADES	X	X	X	X	X	X
8*	CLOSED RUNWAY				X		X
9*	CLOSED RUNWAY				X		X
10*	AVIATION BARRICADES				X		X
11*	AVIATION BARRICADES				X		X
12*	AVIATION BARRICADES				X		X
13*	AVIATION BARRICADES				X		X
14*	AVIATION BARRICADES				X		X
15*	AVIATION BARRICADES				X		X
16*	AVIATION BARRICADES				X		X
18	AVIATION BARRICADES					X	X
26	AVIATION BARRICADES						X
31	AVIATION BARRICADES						X

* REQUIRED FOR NIGHTLY CLOSURES OF RUNWAY 18-36

NOTES

1. "CLOSED RUNWAY & TAXIWAY MARKER SCHEDULE" REFLECTS ALL MARKERS IN PLACE DURING THE PROJECT, NOT JUST THE MARKERS REQUIRED FOR THAT PARTICULAR WORK AREA.
2. INSTALL BARRICADES #2, #4, AND #6 OUTSIDE THE EDGE OF THE RUNWAY SAFETY AREA (RSA) (250' FROM CENTERLINE).
3. BARRICADES AT TAXIWAY/TAXIWAY INTERSECTIONS SHALL BE PLACED OUTSIDE OF THE TAXIWAY SAFETY AREA (TSA) OF THE INTERSECTING TAXIWAY (80.5' FROM CENTERLINE).
4. CONTRACTOR TO MAINTAIN TAXIWAY "A4" AVAILABLE FOR USE BY ARFF AT ALL TIMES FOR THE DURATION OF THE PROJECT.

400 0 400 800
SCALE: 1"=400' FEET

NO.	REVISIONS	BY	APP.	DATE

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DELTA AIRPORT CONSULTANTS, INC.

SOUTH CAROLINA PROFESSIONAL ENGINEER — TRACY J. SAUNDERS

Digitally signed by Tracy J Saunders
Date: 2018.05.17 12:56:35-04'00'

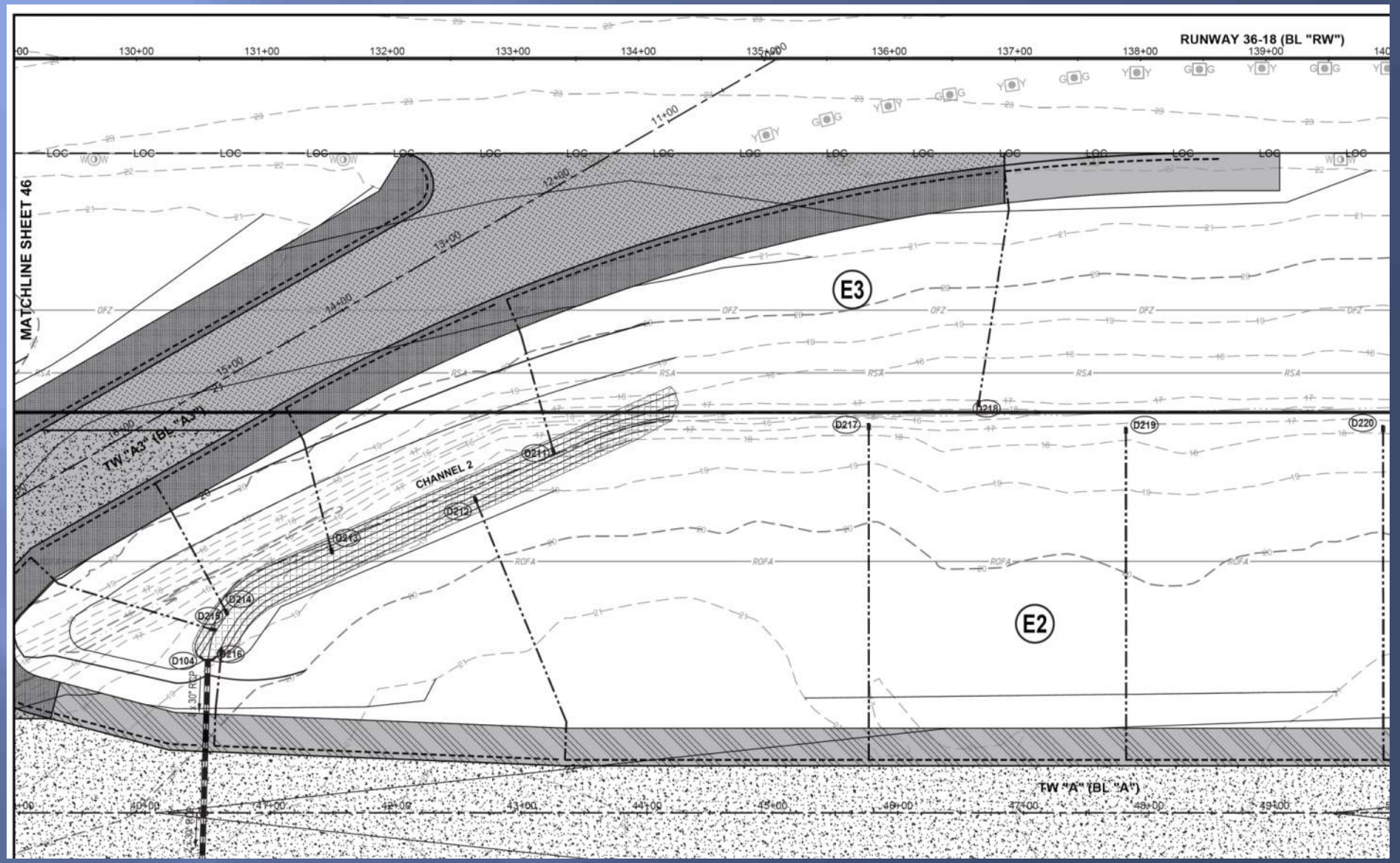
TAXIWAY A REHAB (BID PACK 1)

OVERALL PHASING LAYOUT ALTERNATE 2

MYRTLE BEACH INTERNATIONAL AIRPORT

AIP NO. 3-45-0065-PENDING-2018
JOB NO. 18003
DRAWN BY: PJW
DESIGNED BY: TJS/JDB
SCALE: 1" = 400'
DATE: MAY 2018
SHEET 9 OF 192

Closure Period For RSA work 12:00 PM to 6:00 AM



JOINT SEAL AND EXPANSION MATERIAL NOTES

GENERAL

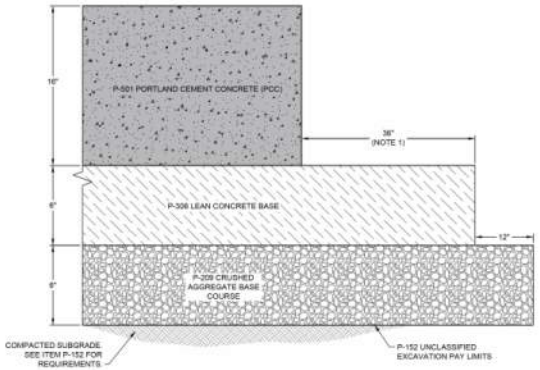
1. THE CONTRACTOR SHALL SUBMIT THE MANUFACTURER'S LITERATURE AND RECOMMENDATIONS FOR INSTALLATION OF THE SEALANT TO THE ENGINEER FOR APPROVAL.
2. ALL JOINTS SHALL BE MECHANICALLY CLEANED OF ALL CURING COMPOUND AND BLOWN OUT WITH COMPRESSED AIR BEFORE INSTALLATION OF THE SEALANT.
3. THE CONTRACTOR SHALL DEMONSTRATE HIS/HER ABILITY TO COMPLY WITH THE DRAWINGS AND SPECIFICATION REQUIREMENTS BY PLACING A TEST SECTION WHICH INCLUDES BOTH LONGITUDINAL AND TRANSVERSE JOINTS.
4. CONCRETE TO CONCRETE JOINTS SHALL BE SEALED WITH DOW CORNING 888, 890-SL SILICONE SEALANT OR APPROVED EQUIVALENT. ALL JOINTS SEALED WITH DOW CORNING 888, 890-SL OR APPROVED EQUIVALENT SHALL BE PRIMED, PRIOR TO THE INSTALLATION OF THE SEALANT, WITH A PRIMER RECOMMENDED BY THE SEALANT MANUFACTURER.
5. CONCRETE TO ASPHALT JOINTS SHALL BE SEALED WITH DOW CORNING 890-SL SILICONE JOINT SEALANT OR APPROVED EQUIVALENT.
6. THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN FOR SEALING ALL JOINTS WITH THE DIMENSIONS OF MATERIAL, WIDTHS, DEPTHS, APPROPRIATE FOR THE TYPE SEAL SELECTED, TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A CERTIFIED MANUFACTURER'S REPRESENTATIVE ON SITE DURING THE FIRST DAY OF JOINT SEALING INSTALLATION.
7. BACKER ROD SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER. CARE SHALL BE TAKEN TO AVOID STRETCHING THE BACKER ROD DURING INSTALLATION AND TO INSTALL IT AT THE RECOMMENDED DEPTH.
8. BACKER ROD SHALL BE NON-ABSORBENT CLOSED CELL.
9. BACKER ROD SHALL BE CONTINUOUS BETWEEN JOINT INTERSECTIONS AND CONSIST OF A SINGLE PIECE OF APPROPRIATE SIZE AS RECOMMENDED BY THE MANUFACTURER.
10. EXPANSION JOINTS BETWEEN CONCRETE SECTIONS SHALL CONSIST OF SELF-EXPANDING CORK MATERIAL IN ACCORDANCE WITH ASTM D1752. EXPANSION JOINTS THAT TRANSITION FROM CONCRETE TO BITUMINOUS SHALL CONSIST OF EXPANSION MATERIAL IN ACCORDANCE WITH ASTM D994.
11. EXPANSION MATERIAL FOR ALL EXPANSION JOINTS SHALL BE ONE (1) CONTINUOUS PIECE IN THE VERTICAL DIRECTION.

DOWEL BAR NOTES

1. THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN BEFORE PLACEMENT OF ANY CONCRETE TO OUTLINE HIS/HER PLAN FOR INSTALLATION OF DOWELS IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. REFERENCE IS DIRECTED TO ITEM P-501-4.10 OF THE SPECIFICATIONS FOR DOWEL SPACING LAYOUT.
3. DOWEL BASKETS FOR THE TRANSVERSE JOINTS SHALL BE FIRMLY ANCHORED TO THE UNDERLYING LAYER.
4. LONGITUDINAL DOWELS SHALL BE DRILLED AND EPOXIED IN THE HARDENED CONCRETE. DOWELS SHALL BE INSTALLED TO MEET THE SPECIFICATION TOLERANCE WITH NO VOIDS AT THE INTERFACE BETWEEN THE DOWELS AND THE CONCRETE.
5. IF THE CONTRACTOR ELECTS TO PLACE TWO (2) ADJACENT LANES WITH A LARGER PAVING WIDTH, THE DOWELED CONSTRUCTION JOINT (TYPE E) IN THE CENTER OF THE WIDER LANE SHALL BE REPLACED WITH A DOWELED CONTRACTION JOINT (TYPE C).
6. ALL DOWEL BARS SHALL BE CENTERED ON THE JOINT LINE.

WELDED WIRE FABRIC NOTES

1. WELDED WIRE FABRIC SHALL BE INSTALLED IN ALL ODD-SHAPED SLABS AND IN SLABS CONTAINING STRUCTURES.
2. WELDED WIRE FABRIC SHALL BE WWF 12 X 12 - W8 X W8 UNLESS OTHERWISE APPROVED BY THE ENGINEER, AND SHALL BE PLACED AT A DEPTH OF T/4 PLUS ONE INCH, WHERE T IS THE SLAB THICKNESS.

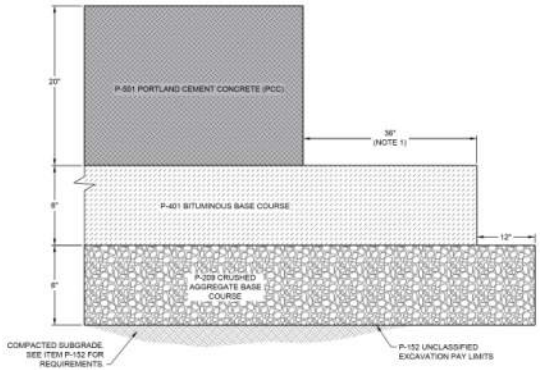


TYPE 1 PCC TAXIWAY PAVEMENT SECTION

NTS

NOTES:

1. IF THE CONTRACTOR ELECTS TO UTILIZE FIXED FORMS IN LIEU OF SLIP FORMING, THE OFFSET SHALL BE 12".
2. THE CONTRACTOR MAY SUBSTITUTE P-304 CEMENT TREATED BASE COURSE FOR THE P-306 LEAN CONCRETE PAVEMENT. PAYMENT FOR THE P-304 CEMENT TREATED BASE COURSE, IF USED BY THE CONTRACTOR IN LIEU OF P-306 LEAN CONCRETE PAVEMENT, WILL BE MADE AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR P-306 LEAN CONCRETE.
3. STRENGTH REQUIREMENTS OUTLINED IN ITEM P-304-3.2 SHALL BE OBTAINED UTILIZING A MAXIMUM CEMENT CONTENT OF 6.0 PERCENT BY WEIGHT OF AGGREGATE. DURING PRODUCTION, THE CEMENT CONTENT SHALL NOT VARY BY MORE THAN ±0.5 PERCENT FROM THE DESIGN.
4. IF ORDERED BY THE ENGINEER, THE CONTRACTOR SHALL UNDERCUT THE SUBGRADE AND PLACE P-405 GROUND STABILIZATION FABRIC.
5. REFERENCE IS DIRECTED TO SP-26, "SUBGRADE UNDERCUT" OF THE SPECIFICATIONS.

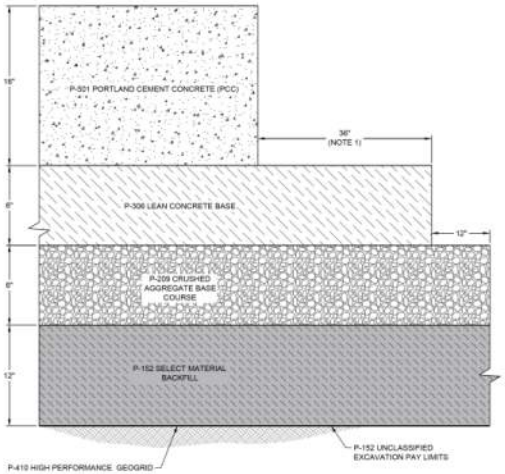


TYPE 2 PCC TAXIWAY PAVEMENT SECTION

NTS

NOTES:

1. IF THE CONTRACTOR ELECTS TO UTILIZE FIXED FORMS IN LIEU OF SLIP FORMING, THE OFFSET SHALL BE 12".
2. IF ORDERED BY THE ENGINEER, THE CONTRACTOR SHALL UNDERCUT THE SUBGRADE AND PLACE P-405 GROUND STABILIZATION FABRIC.
3. REFERENCE IS DIRECTED TO SP-26, "SUBGRADE UNDERCUT" OF THE SPECIFICATIONS.
4. PLACE P-603 TACK COAT BETWEEN LIFTS OF P-401 BASE COURSE.
5. THE CONTRACTOR SHALL APPLY LIME SLURRY WHITEWASH ON THE BITUMINOUS BASE PRIOR TO PLACEMENT OF THE P-501 PORTLAND CEMENT CONCRETE. LIME SLURRY SHALL BE A MIXTURE OF HYDRATED LIME AND WATER. MIXTURE SHALL BE AS RECOMMENDED BY THE SUPPLIER. SALT SHALL NOT BE ADDED. THE WHITEWASH MIXTURE AND RATE OF APPLICATION SHALL PRODUCE A UNIFORM COLOR ON THE SURFACE. ADDITIONAL APPLICATIONS OF THE MIXTURE SHALL BE APPLIED AS REQUIRED TO MAINTAIN A UNIFORM COLOR.
6. CURING COMPOUND MEETING THE REQUIREMENTS OF AASHTO M-148 MAY BE USED FOR WHITEWASH AT THE RATE OF ONE (1) GALLON PER 200 SQUARE FEET.



TYPE 3 PCC TAXIWAY PAVEMENT SECTION

NTS

NOTES:

1. IF THE CONTRACTOR ELECTS TO UTILIZE FIXED FORMS IN LIEU OF SLIP FORMING, THE OFFSET SHALL BE 12".
2. THE CONTRACTOR MAY SUBSTITUTE P-304 CEMENT TREATED BASE COURSE FOR THE P-306 LEAN CONCRETE PAVEMENT. PAYMENT FOR THE P-304 CEMENT TREATED BASE COURSE, IF USED BY THE CONTRACTOR IN LIEU OF P-306 LEAN CONCRETE PAVEMENT, WILL BE MADE AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR P-306 LEAN CONCRETE.
3. STRENGTH REQUIREMENTS OUTLINED IN ITEM P-304-3.2 SHALL BE OBTAINED UTILIZING A MAXIMUM CEMENT CONTENT OF 6.0 PERCENT BY WEIGHT OF AGGREGATE. DURING PRODUCTION, THE CEMENT CONTENT SHALL NOT VARY BY MORE THAN ±0.5 PERCENT FROM THE DESIGN.

NO.	REVISIONS	BY	APP.	DATE

1750 E. International Drive, Suite 3
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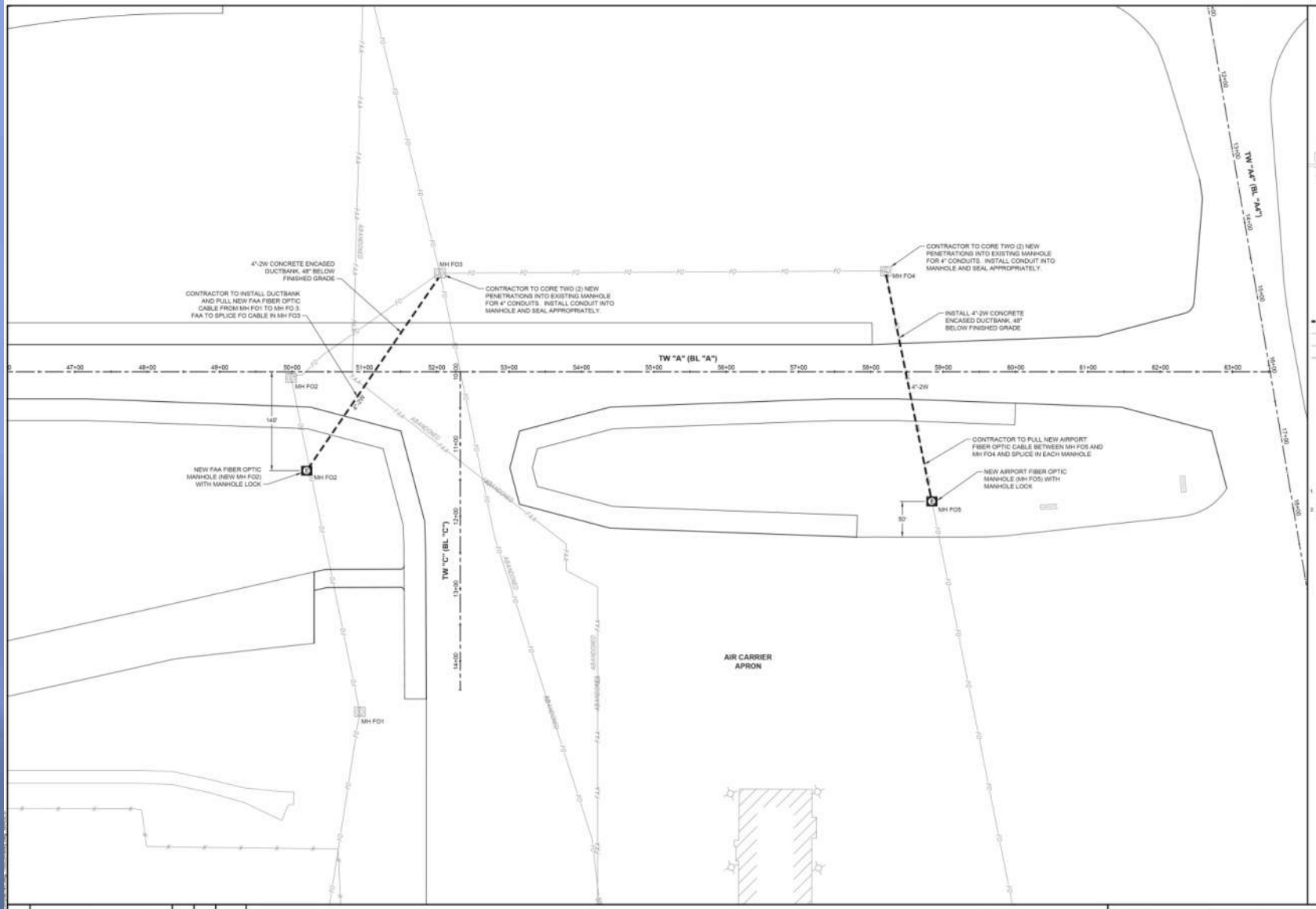
www.deltaairport.com

DELTA AIRPORT CONSULTANTS, INC.

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 18578 TRACY J. SAUNDERS

Digitally signed by Tracy J Saunders
Date: 2018.05.17 12:59:28-04'00'

TAXIWAY A REHAB (BID PACK 1)	AIP NO: 3-45-0065-PENDING-2018		JOB NO. 18003
PCC PAVING NOTES & DETAILS	DRAWN BY: FJW		SHEET 92 OF 192
	DESIGNED BY: TJS/JDB		
MYRTLE BEACH INTERNATIONAL AIRPORT	SCALE: NONE	DATE: MAY 2018	



NO.	REVISIONS	BY	APP.	DATE

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DELTA AIRPORT CONSULTANTS, INC.

SOUTH CAROLINA PROFESSIONAL ENGINEER 30183 TRACY J. SAUNDERS

Digitally signed by Tracy J Saunders
Date: 2018.05.17 13:00:03-04'00'

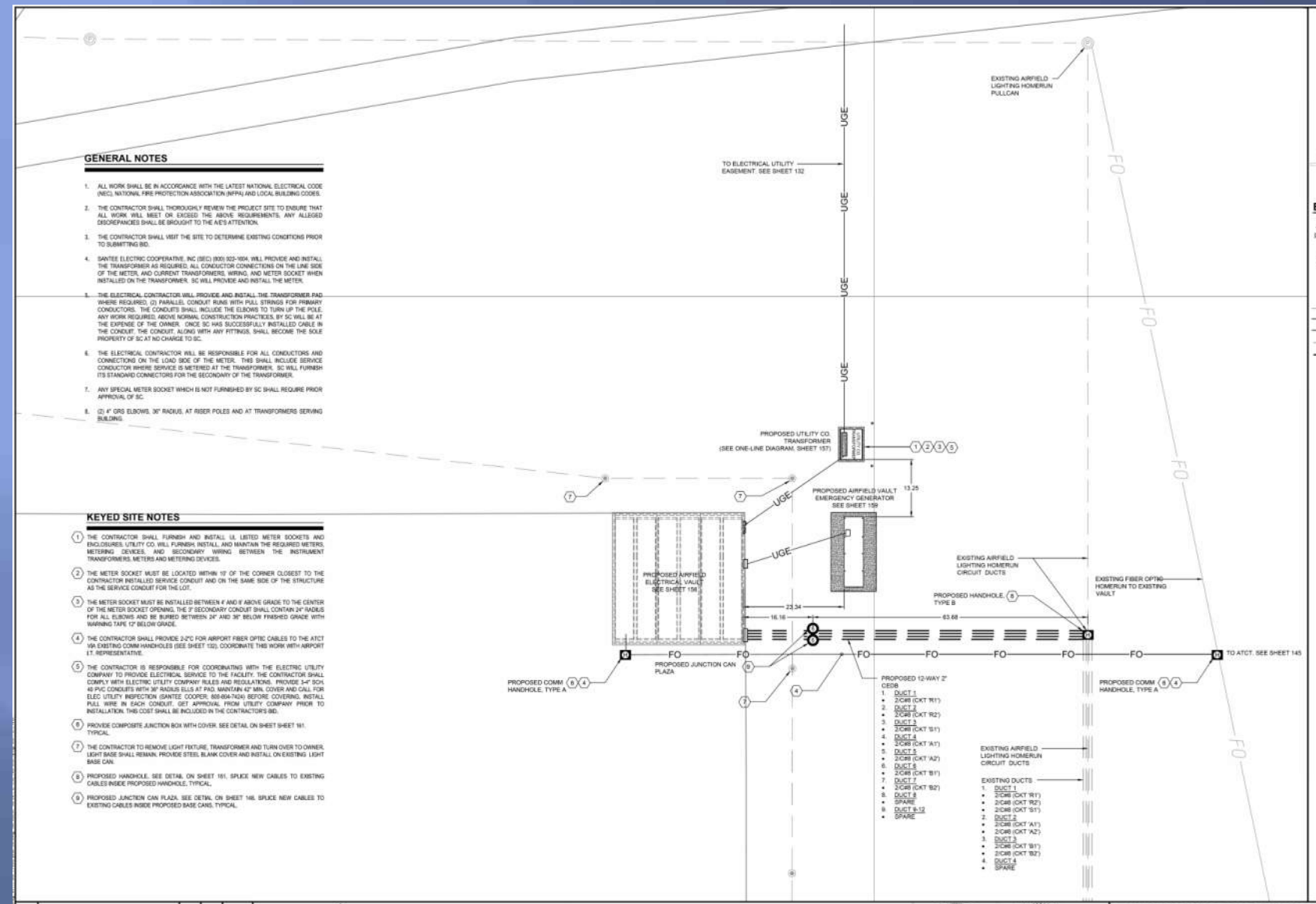
TAXIWAY A REHAB (BID PACK 1)	AIP NO. 3-45-0065-PENDING-2018		JOB NO. 18003
FIBER OPTIC RELOCATION PLAN	DRAWN BY: DWS		SHEET 112 OF 192
	DESIGNED BY: DES/TJS		
MYRTLE BEACH INTERNATIONAL AIRPORT	SCALE: 1" = 60'	DATE: MAY 2018	

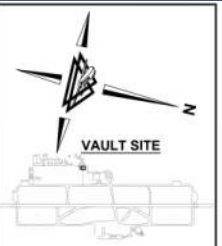
GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND LOCAL BUILDING CODES.
2. THE CONTRACTOR SHALL THOROUGHLY REVIEW THE PROJECT SITE TO ENSURE THAT ALL WORK WILL MEET OR EXCEED THE ABOVE REQUIREMENTS. ANY ALLEGED DISCREPANCIES SHALL BE BROUGHT TO THE A/E'S ATTENTION.
3. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE EXISTING CONDITIONS PRIOR TO SUBMITTING BID.
4. SANTEE ELECTRIC COOPERATIVE, INC (SEC) (800) 922-1604, WILL PROVIDE AND INSTALL THE TRANSFORMER AS REQUIRED. ALL CONDUCTOR CONNECTIONS ON THE LINE SIDE OF THE METER, AND CURRENT TRANSFORMERS, WIRING, AND METER SOCKET WHEN INSTALLED ON THE TRANSFORMER. SC WILL PROVIDE AND INSTALL THE METER.
5. THE ELECTRICAL CONTRACTOR WILL PROVIDE AND INSTALL THE TRANSFORMER PAD WHERE REQUIRED, (2) PARALLEL CONDUIT RUNS WITH PULL STRINGS FOR PRIMARY CONDUCTORS. THE CONDUITS SHALL INCLUDE THE ELBOWS TO TURN UP THE POLE. ANY WORK REQUIRED, ABOVE NORMAL CONSTRUCTION PRACTICES, BY SC WILL BE AT THE EXPENSE OF THE OWNER. ONCE SC HAS SUCCESSFULLY INSTALLED CABLE IN THE CONDUIT, THE CONDUIT, ALONG WITH ANY FITTINGS, SHALL BECOME THE SOLE PROPERTY OF SC AT NO CHARGE TO SC.
6. THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL CONDUCTORS AND CONNECTIONS ON THE LOAD SIDE OF THE METER. THIS SHALL INCLUDE SERVICE CONDUCTOR WHERE SERVICE IS METERED AT THE TRANSFORMER. SC WILL FURNISH ITS STANDARD CONNECTORS FOR THE SECONDARY OF THE TRANSFORMER.
7. ANY SPECIAL METER SOCKET WHICH IS NOT FURNISHED BY SC SHALL REQUIRE PRIOR APPROVAL OF SC.
8. (2) 4" GRS ELBOWS, 36" RADIUS, AT RISER POLES AND AT TRANSFORMERS SERVING BUILDING.

KEYED SITE NOTES

1. THE CONTRACTOR SHALL FURNISH AND INSTALL UL LISTED METER SOCKETS AND ENCLOSURES. UTILITY CO. WILL FURNISH, INSTALL, AND MAINTAIN THE REQUIRED METERS. METERING DEVICES, AND SECONDARY WIRING BETWEEN THE INSTRUMENT TRANSFORMERS, METERS AND METERING DEVICES.
2. THE METER SOCKET MUST BE LOCATED WITHIN 10' OF THE CORNER CLOSEST TO THE CONTRACTOR INSTALLED SERVICE CONDUIT AND ON THE SAME SIDE OF THE STRUCTURE AS THE SERVICE CONDUIT FOR THE LOT.
3. THE METER SOCKET MUST BE INSTALLED BETWEEN 4' AND 6' ABOVE GRADE TO THE CENTER OF THE METER SOCKET OPENING. THE 3' SECONDARY CONDUIT SHALL CONTAIN 24" RADIUS FOR ALL ELBOWS AND BE BURIED BETWEEN 24" AND 36" BELOW FINISHED GRADE WITH WARNING TAPE 12" BELOW GRADE.
4. THE CONTRACTOR SHALL PROVIDE 2-2"C FOR AIRPORT FIBER OPTIC CABLES TO THE ATCT VIA EXISTING COMM HANDHOLES (SEE SHEET 132). COORDINATE THIS WORK WITH AIRPORT I.T. REPRESENTATIVE.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ELECTRIC UTILITY COMPANY TO PROVIDE ELECTRICAL SERVICE TO THE FACILITY. THE CONTRACTOR SHALL COMPLY WITH ELECTRIC UTILITY COMPANY RULES AND REGULATIONS. PROVIDE 3-4" SCH. 40 PVC CONDUITS WITH 36" RADIUS ELLS AT PAD. MAINTAIN 42" MIN. COVER AND CALL FOR ELEC. UTILITY INSPECTION (SANTEE COOPER, 888-894-7424) BEFORE COVERING. INSTALL PULL WIRE IN EACH CONDUIT. GET APPROVAL FROM UTILITY COMPANY PRIOR TO INSTALLATION. THIS COST SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
6. PROVIDE COMPOSITE JUNCTION BOX WITH COVER. SEE DETAIL ON SHEET SHEET 161. TYPICAL.
7. THE CONTRACTOR TO REMOVE LIGHT FIXTURE, TRANSFORMER AND TURN OVER TO OWNER. LIGHT BASE SHALL REMAIN. PROVIDE STEEL BLANK COVER AND INSTALL ON EXISTING LIGHT BASE CAN.
8. PROPOSED HANDHOLE. SEE DETAIL ON SHEET 161. SPLICE NEW CABLES TO EXISTING CABLES INSIDE PROPOSED HANDHOLE, TYPICAL.
9. PROPOSED JUNCTION CAN PLAZA. SEE DETAIL ON SHEET 146. SPLICE NEW CABLES TO EXISTING CABLES INSIDE PROPOSED BASE CANS, TYPICAL.





ELECTRICAL SYMBOL LEGEND

SYMBOL STATUS

EXISTING

SYMBOL	DESCRIPTION
	L-807 ELECTRICAL PULLCAN
	L-807 ELECTRICAL PULLCAN PLAZA (# INDICATES NUMBER OF CANS)
	PROPOSED HANDHOLE
FO	EXISTING FIBER OPTIC LINE
FO	PROPOSED FIBER OPTIC LINE
UGE	PROPOSED UNDERGROUND ELECTRICAL LINE
	EXISTING CONDUIT & CABLE
	PROPOSED CONDUIT & CABLE
P	EXISTING PULLCAN

60 0 60 120
SCALE: 1"=60' FEET

NO.	REVISIONS	BY	APP.	DATE

OHMEGA
The Ohmega Group, LLC | Be Brilliant.
Consulting Engineers
1588 LADY STREET, SUITE K, COLUMBIA, SC 29201
T: 803-865-9469 | WWW.OHMEGAGROUP.COM
SC COA NO: 4760

DELTA AIRPORT CONSULTANTS, INC.
1750 E. International Drive, Suite 3 Raleigh, North Carolina 27623
phone: (919) 840-7604 fax: (919) 840-7624 www.deltairport.com

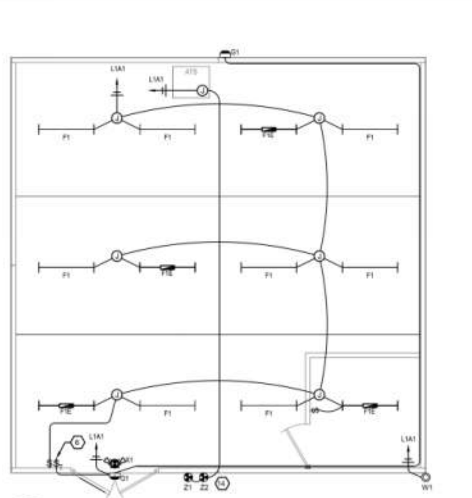
SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 5-15-18 No. 25642 MARK A. MORLEY
SOUTH CAROLINA THE OHMEGA GROUP LLC NO. 4760 CERTIFICATE OF AUTHORIZATION

TAXIWAY A REHAB (BID PACKAGE 1)

VAULT AREA ENLARGED

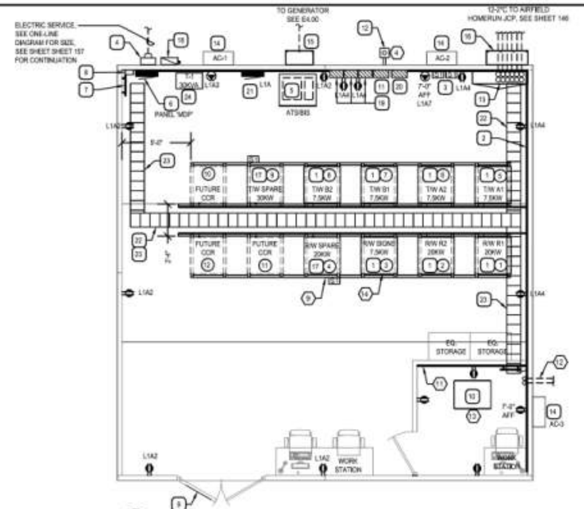
MYRTLE BEACH INTERNATIONAL AIRPORT

AIP NO. 3-45-0065-PENDING
JOB NO. 17059
DRAWN BY: BPR
DESIGNED BY: MAM/BPR
SCALE: 1" = 10'
DATE: MAY 2018
SHEET 146 OF 192



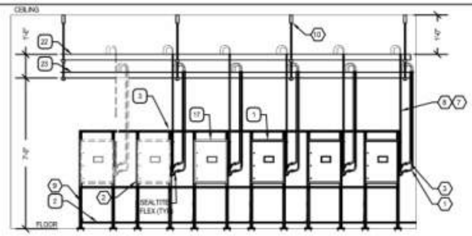
ELECTRICAL VAULT PLAN - LIGHTING

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



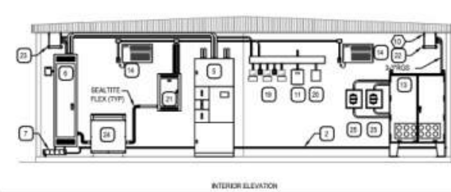
ELECTRICAL VAULT PLAN - POWER

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



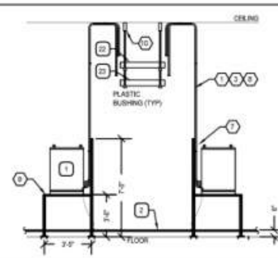
1 **REGULATOR RACK ELEVATION - FRONT VIEW**

SCALE: NOT TO SCALE



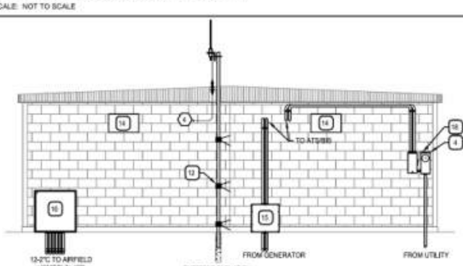
2 **VAULT BUILDING REAR ELEVATION**

SCALE: NOT TO SCALE



3 **REGULATOR RACK ELEVATION - SIDE VIEW**

SCALE: NOT TO SCALE



4 **VAULT BUILDING REAR ELEVATION**

SCALE: NOT TO SCALE

KEYED NOTES

1. PROVIDE REGULATOR CONTROL CONDUCTORS 12#12 IN 1" RIGID STEEL CONDUIT FROM REGULATOR TO L-854 CONTROLLER.
2. PROVIDE (1) #6 BARE COPPER GROUND FROM REGULATOR TO EQUIPMENT GROUND BUS.
3. PROVIDE REGULATOR INPUT POWER CONDUCTORS IN RIGID STEEL CONDUIT. SEE ONE-LINE DIAGRAM SHEET SHEET 157 FOR SIZES.
4. PROVIDE 1" SLEEVE THROUGH WALL FOR ANTENNA LEAD-IN CABLE.
5. LIGHTING FIXTURES SHALL BE:
   A. TYPE F1: 4' LED STRIP LUMINAIRE, SURFACE MOUNT WITH WIRE GUARD, LED, 120V. AS MANUFACTURED BY EATON (SNLED), OR APPROVED EQUAL.
   B. TYPE F1E: SAME AS TYPE F1, EXCEPT WITH EMERGENCY BATTERY BALLAST.
   C. TYPE G1: LED WALLPACK LUMINAIRE, FULL CUT-OFF, 120V, WET LOCATION LISTED. AS MANUFACTURED BY EATON (XTOR8B), OR APPROVED EQUAL.
   D. TYPE X1: LED COMBO EXIT/EMERGENCY LIGHT, 120V, RED TEXT. AS MANUFACTURED BY EATON (LPXC), LITHONIA (LHQM), OR APPROVED EQUAL.
   E. TYPE Z1: LED ROTATING SIGNAL LIGHT, 120V, NEMA 4X, WITH WALL-MOUNT BRACKET, AS MANUFACTURED BY FEDERAL SIGNAL (371 LED), OR APPROVED EQUAL. RED COLOR.
   F. TYPE Z2: LED ROTATING SIGNAL LIGHT, 120V, NEMA 4X, WITH WALL-MOUNT BRACKET, AS MANUFACTURED BY FEDERAL SIGNAL (371 LED), OR APPROVED EQUAL. GREEN COLOR.
   G. TYPE W1: LED L-810 OBSTRUCTION LIGHT, 120V.
6. PROVIDE WALL MOUNTED TIMER FOR EXTERIOR LIGHTING FIXTURE, SEE 4/SHEET 158.
7. SUPPORT CONDUIT IN ACCORDANCE WITH NEC REQUIREMENTS.
8. PROVIDE REGULATOR 5KV FIELD CONDUCTORS IN 2" RIGID STEEL CONDUIT TO 5KV CABLE TRAY.
9. PROVIDE HEAVY DUTY STEEL FRAME EQUIPMENT RACK, UNISTRUT OR APPROVED EQUAL.
10. PROVIDE 3/8" THREADED ROD HANGAR SPACED ON 6FT CENTERS.
11. 3/4"X8'H PLYWOOD BACKBOARD. PAINT PLYWOOD BACKBOARD WITH 2 COATS OF GRAY FLAME RETARDANT PAINT ON ALL SIDES. A-C GRADE BOARD WITH A-SIDE OUT.
12. 2-2"C FOR AIRPORT'S FIBER AND COPPER COMMUNICATIONS CABLES. SEE 146.
13. THE CONTRACTOR SHALL RELOCATE AND MODIFY THE EXISTING EATON CROUSE-HINDS ALCMS SYSTEM. THE MODIFIED SYSTEM SHALL INCORPORATE THE NEW/MODIFIED AIRFIELD LIGHTING CIRCUITS ADDED/AFFECTED UNDER THIS SCOPE. THE CONTRACTOR SHALL CONTACT THE MANUFACTURER (MANUFACTURER'S SALES REP: ERIC LOCKE, 561-213-5017, ERICMLOCKE@EATON.COM) TO UPDATE THE ALCMS SOFTWARE AND TOUCH SCREEN DISPLAY GRAPHICS/FUNCTIONS FOR THE VAULT, MAINTENANCE OFFICE AND FAA AIR TRAFFIC CONTROL TOWER (ATCT). MODIFICATION WORK SHALL INCLUDE BUT NOT BE LIMITED TO: PROGRAMMING, UPDATING COMPUTER GRAPHICS, RECALIBRATION OF THE MONITORING UNIT FOR RELOCATED EXISTING CCR'S, CALIBRATION OF NEW CCR'S, ETC. COORDINATE THIS WORK WITH FAA, OWNER AND EATON CROUSE-HINDS TO PRODUCE A COMPLETE AND OPERATIONAL ALCMS. REFER TO SPECIFICATIONS FOR SCOPE OF MODIFICATIONS WORK. THE EXISTING ALCMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING CONSTRUCTION. SWITCH-OVER SHALL BE CAREFULLY COORDINATED WITH THE AIRPORT, FAA AND MANUFACTURER.
14. FIXTURE Z1 SHALL BE WIRED THROUGH THE ATS AUXILIARY CONTACTS TO ACTIVATE WHEN THE ATS SWITCH IS IN EMERGENCY POSITION. FIXTURE Z2 SHALL BE WIRED THROUGH THE ATS AUXILIARY CONTACTS TO ACTIVATE WHEN THE SWITCH IN THE NORMAL POSITION.

VAULT EQUIPMENT SCHEDULE

TAG	DESCRIPTION
1	PROPOSED L-828 CONSTANT CURRENT REGUALTOR (CCR), FERRORESONANT TYPE, 480 VOLT, 6.6 AMP, WITH DIGITAL METER AND 120 VOLT CONTROL, AND INTEGRAL S-1 CUTOUT. SEE REGULATOR SCHEDULE.
2	EQUIPMENT GROUND BUS ROUTED ON PERIMETER WALLS AS SHOWN, SEE DETAIL 3/SHEET 155
3	PROVIDE 5 KV, SERIES CUTOUT SEE DETAIL 8/SHEET 158.S-1 CUTOUT INSIDE A WALL-MOUNTED, 18"X14"X8", NEMA 12 HINGED ENCLOSURE WITH QUICK-RELEASE LATCH. ONE S-1 CUTOUT FOR EACH SPARE CCR.
4	PROVIDE UTILITY COMPANY METER, SEE ONE-LINE DIAGRAM SHEET SHEET 157 FOR COMPLETE DESCRIPTION
5	AUTOMATIC GENERATOR TRANSFER SWITCH/BYPASS ISOLATION SWITCH, SEE ONE-LINE DIAGRAM SHEET SHEET 157 FOR COMPLETE DESCRIPTION
6	PANEL 'MDP', 277/480 VOLT, 3 PHASE, 4 WIRE. SEE ONE-LINE DIAGRAM SHEET SHEET 157 FOR COMPLETE DESCRIPTION
7	SERVICE ENTRANCE GROUND BAR, SEE DETAIL 2/SHEET 155.
8	TRANSIENT VOLTAGE SURGE SUPRESSOR (TVSS) SEE ONE-LINE DIAGRAM SHEET SHEET 157 FOR COMPLETE DESCRIPTION
9	PROVIDE WARNING SIGN SEE DETAIL 6/SHEET 158.
10	RELOCATED ALCMS SYSTEM LOCKABLE CABINET AND LCD MONITOR, PC, COMMUNICATIONS MODEMS, PRINTER AND UPS. SEE SHEET 160.
11	RELOCATED L-854 RADIO CONTROLLER
12	PROVIDE ANTENNA FOR L-854 RADIO CONTROLLER, SEE DETAIL 3/SHEET 158.
13	FIELD CABLE CABINET. PROVIDE 60" BY 48" BY 12", NEMA 12 ENCLOSURE WITH 2-DOORS, HOFFMAN NO. A604812LPG OR APPROVED EQUAL. PROVIDE COLOR-CODED L-823 CONNECTORS FOR EACH FIELD CIRCUIT CONDUCTOR. SEE CCR SCHEDULE.
14	THROUGH WALL A/C UNIT WITH ELECTRICL HEAT. 12,000 BTU COOLING, 11,200 BTU HEATING, 9.7 EER, 230 VOLT, R-410A REFRIGERANT, ELECTRONIC CONTROLS, 3470 WATT ELECTRIC HEATER, GE MODEL AJEQ12DCF OR EQUAL FURNISHED COMPLETE WITH RAB47 WALL SLEEVE AND CORD WITH NEMA 6-20P CAP.
15	GENERATOR SERVICE PULL BOX. PROVIDE 24" BY 24" BY 12", NEMA 4X STAINLESS STEEL ENCLOSURE WITH SCREW COVER, HOFFMAN NO. ASE24X24X12SSNK OR APPROVED EQUAL.
16	AIRFIELD CIRCUITS PULL BOX. PROVIDE 36" BY 36" BY 12", NEMA 4X STAINLESS STEEL ENCLOSURE WITH SCREW COVER, HOFFMAN NO. AASE36X36X12SSNK OR APPROVED EQUAL.
17	RELOCATED L-828 CONSTANT CURRENT REGULATOR (CCR), FERRORESONANT TYPE, 480 VOLT, 6.6 AMP, WITH DIGITAL METER AND 120 VOLT CONTROL. TO BE USED AS SPARE. SEE REGULATOR SCHEDULE.
18	MAIN SERVICE DISCONNECT. SEE ONE-LINE DIAGRAM SHEET SHEET 157 FOR COMPLETE DESCRIPTION
19	RELOCATED CROUSE-HINDS "DIGITRAC" ALCMS INTERFACE. SEE SHEET 160.
20	RELOCATED BEACON CONTACTOR
21	PANEL 'L1A', 240/120 VOLT, 1 PHASE, 3 WIRE. SEE ONE-LINE DIAGRAM SHEET SHEET 157 FOR COMPLETE DESCRIPTION
22	5KV CABLE TRAY, 12 WIDE, 12" RUNG SPACING, LADDER TYPE
23	600V CABLE TRAY, 12 WIDE, 12" RUNG SPACING, LADDER TYPE
24	STEP-DOWN TRANSFORMER, 480V PRI.240/120V SECONDARY, 30KVA, 1 PHASE, 3 WIRE, DRY TYPE

CONSTANT CURRENT REGULATOR SCHEDULE

CCR NO.	CCR ID	CCR KW	CCR STEPS	INPUT VOLTAGE	INPUT CURRENT*	OUTPUT AMPERAGE	FED FROM	CKT COLOR	MANUFACTURER	REMARKS
1	RUNWAY 18-36 NORTH (CKT R1)	15	5	480	34A	6.6A	MDP	YELLOW	PROPOSED CCR L-828	WITH CONTROL AND MONITORING OPTION COMPATIBLE WITH DIGITRAC SYSTEM
2	RUNWAY 18-36 SOUTH (CKT R2)	15	5	480	34A	6.6A	MDP	ORANGE	PROPOSED CCR L-828	WITH CONTROL AND MONITORING OPTION COMPATIBLE WITH DIGITRAC SYSTEM
3	RUNWAY SIGNS (CKT S1)	7.5	3	480	17A	6.6A	MDP	BLACK	PROPOSED CCR L-828	WITH CONTROL AND MONITORING OPTION COMPATIBLE WITH DIGITRAC SYSTEM
4	SPARE #1 (RUNWAY)	20	3	480	46A	6.6A	MDP	BLACK	CROUSE HINDS	EXISTING RELOCATED, CONNECTED AS HOT SWAPPABLE SPARE. SEE 9/SHEET 158
5	TAXIWAY A NORTH (CKT A1)	7.5	3	480	17A	6.6A	MDP	BLUE	PROPOSED CCR L-828	WITH CONTROL AND MONITORING OPTION COMPATIBLE WITH DIGITRAC SYSTEM
6	TAXIWAY A SOUTH (CKT A2)	7.5	3	480	17A	6.6A	MDP	RED	PROPOSED CCR L-828	WITH CONTROL AND MONITORING OPTION COMPATIBLE WITH DIGITRAC SYSTEM
7	TAXIWAY B NORTH (CKT B1)	7.5	3	480	17A	6.6A	MDP	GREEN	PROPOSED CCR L-828	WITH CONTROL AND MONITORING OPTION COMPATIBLE WITH DIGITRAC SYSTEM
8	TAXIWAY B SOUTH (CKT B2)	7.5	3	480	17A	6.6A	MDP	WHITE	PROPOSED CCR L-828	WITH CONTROL AND MONITORING OPTION COMPATIBLE WITH DIGITRAC SYSTEM
9	SPARE #2 (TAXIWAY)	30	3	480	69A	6.6A	MDP	BLACK	CROUSE HINDS	EXISTING RELOCATED, CONNECTED AS HOT SWAPPABLE SPARE. SEE 9/SHEET 158
10	FUTURE CCR	–	–	480	–	6.6A	MDP	BLACK		
11	FUTURE CCR	–	–	480	–	6.6A	MDP	BLACK		
12	FUTURE CCR	–	–	480	–	6.6A	MDP	BLACK		

* BASED ON CROUSE HINDS

NO.	REVISIONS	BY	APP.	DATE

OHMEGA
The Ohmega Group, LLC | Be brilliant.
Consulting Engineers
1509 LADY STREET, SUITE K, COLUMBIA, SC 29201
T: 803-883-0463 | WWW.OHMEGAGROUP.COM
SC COA NO. 4793

DELTA AIRPORT CONSULTANTS, INC.
1750 E. International Drive, Suite 3 Raleigh, North Carolina 27623
phone: (919) 840-7604 fax: (919) 840-7624 www.deltairport.com

TAXIWAY A REHAB (BID PACKAGE 1)

AIRFIELD ELECTRICAL VAULT DETAILS

MYRTLE BEACH INTERNATIONAL AIRPORT

AIP NO.: 3-45-0065-PENDING
JOB NO.: 17059
DRAWN BY: BPR
DESIGNED BY: MAM/BPR
SCALE: NONE
DATE: MAY 2018

SHEET 156 OF 192

Other Discussion Items