RECONSTRUCT RUNWAY 4-22

TUSCALOOSA NATIONAL AIRPORT
TUSCALOOSA, ALABAMA

AIP No. 3-01-0072-33-2019

MARCH 29, 2020

AIRPORT VICINITY MAP
1. SCHEDULE OF WORK

A. It is the intent of the owner and these specifications that the TUSCALOOSA NATIONAL AIRPORT will remain open to air traffic during the construction work accomplished under this project.

B. The contractor shall conform to and adhere to the schedule of work. The use of aircraft by airport, and taxiways adjacent to areas where the contractor is working will be so scheduled as to reduce disturbance to the contractor's operations in the interest of maintaining air traffic flow. The contractor shall be required to give the owner a minimum of 48 hours notice prior to beginning a new work area. All proposed work changes in the schedule shall be discussed at the pre-construction conference with all affected parties and the owner. The contractor shall be required to follow the approved schedule of work unless deviations therefore are approved by the engineering.

C. The contractor shall control, higher work force in a manner consistent with the schedule. When events require the contractor to be modified, the contractor shall react promptly and provide a revised schedule to the engineer. A schedule of work shall be a living document which is evolving from the schedule. The engineer may require the contractor to submit a revised schedule. The schedule shall be reviewed at least weekly by the engineer to assure that it is current.

D. The owner may require the contractor to add to their plant equipment or construction force, as well as increase the working hours, if operations are behind schedule due to weather or other factors. If the contractor consistently refuses or fail to recover lost time, to the extent the work is deviating from the schedule. The owner may take such actions to terminate the contract for default on the part of the contractor, or to assign portions of the work to other contractors. All additional costs associated with this will be borne by the contractor.

E. The contractor shall maintain an adequate supervision for the proper execution of the control of all work required. Night work shall be undertaken only with the advance written permission of the engineer.

F. Staging/Storage Areas: The exact limits of the contractor's staging and storage area shall be established by the contractor with the approval of the engineer within the limits of the construction work. The contractor's staging and storage shall be kept neat and clean, and no trash shall remain on the site. All disturbances shall be removed prior to and after work activities. The contractor shall be responsible for performing all work necessary to provide the complete construction, maintenance, restoration, or repair of staging and storage areas to their original condition. The contractor shall be responsible for removing all tools and equipment used in the staging and storage areas to their original condition. The contractor shall be responsible for removing all tools and equipment used in the staging and storage areas to their original condition.

2. HAUL/ACCESS ROADS:

A. The contractor shall be responsible for constructing and maintaining haul roads and access roads within the limits of construction, staging area, and between construction areas. The contractor shall conduct his hauling operations between the work sites. All hauling operations shall be performed in a manner consistent with the schedule of work. The contractor shall be responsible for protecting all the roadways from damage due to construction activities. The contractor shall be responsible for maintaining all access roads in a safe and workable condition.

B. Any additional haul or access roads requested by the contractor for higher operations or staging and storage areas to their original condition. The contractor shall be responsible for protecting all the roadways from damage due to construction activities. The contractor shall be responsible for maintaining all access roads in a safe and workable condition.

C. Drainage, and structures prior to any excavations. Additional buried utilities, cables, storm drains, and drainage structures encountered by the contractor shall be notified to the engineer in writing prior to the commencement of work. The contractor shall be responsible for coordinating with the appropriate agencies for the protection of all these utilities and structures. The contractor shall be provided with engineering specifications for these structures. The contractor shall be responsible for maintaining all access roads in a safe and workable condition.
SAFETY PLAN AND REQUIREMENTS

1. AIRCRAFT OPERATIONS SHALL ALWAYS HAVE PRIORITY OVER ANY AND ALL OF THE CONTRACTOR'S OPERATIONS, AND THE CONTRACTOR SHALL NOT ALLOW HIS EMPLOYEES, SUPPLIERS, OR ANY OTHER PERSONS, WHEN WORKING AERIAL WING, TO ENTER OR REMAIN ON OR ALLOW ANY PLANT OR MATERIALS TO BE Brought OR REMAIN UPON ANY PART OF THE AIRPORT. IN THE EVENT OF THE ENGINEER, WOULD BE A POTENTIAL HAZARD TO AIRCRAFT SHOULD AIRWAYS, RUNWAYS, OR TAXWAYS BE REQUIRED (BE USED BY AIRCRAFT, AND SHALL BE THE SUPERVISING ENGINEER OF THE PROJECT. THE CONTRACTOR WILL PROVIDE THE NECESSARY PERSONNEL TO MAINTAIN SAFETY IN THE AIRPORT FOR SAFETY, THE ENGINEER MAY IN HIS SOLE DISCRETION ORDER THE CONTRACTOR TO SUSPEND OR HARM OPERATIONS, IDENTIFY PERSONNEL, PLANT EQUIPMENT, AND MATERIALS TO A SAFE DISTANCE AND STAY BY THE RUNWAY, TAXWAY OR NO LONGER REQUIRED FOR USE BY THE CONTRACTOR.

2. LIMITS ON CONSTRUCTION
   a. RUNWAY SAFETY AREAS. NO WORK IS PROPOSED NOR WILL BE CONDUCTED WITHIN THE RUNWAY SAFETY AREAS OF RUNWAY 12, WHICH WILL REMAIN OPEN AND IN ACTIVE USE DURING CONSTRUCTION. RUNWAY 42 W32 WILL BE CLOSED FOR THE DURATION OF PHASE 1 AND 2 CONSTRUCTION. PHASE 2 AND 3 CONSTRUCTION WILL BE OPENED WITH THE RUNWAY 32 THRESHOLD DISPLACED.
   b. AIRCRAFT OPERATIONS. IN THE INSTANCES THAT THE ACT CANNOT RESUME AIR TRAFFIC AROUND THE ACTIVE CONSTRUCTION AREA, THE CONTRACTOR, PERSONNEL, SUB MATERIALS, ETC. WILL BE REQUIRED TO STOP WORK AND VACATE THE AREA AND STAY OUTSIDE THE ASSOCIATED SAFETY AREA UNTIL THE ACTS GIVE CLEARANCE TO RETURN TO THE WORK AREA.
   c. TRAVEL ON ACTIVE AIRFIELD PATWAYS. AT TIMES, THE WORK WILL REQUIRE TRAVEL ON OR ACROSS ACTIVE AIRFIELD PATWAYS TO MOVE PERSONNEL AND MATERIALS TO THE WORK AREAS. THE WORK WILL BE ACCOMPLISHED IN CLOSE COORDINATION WITH AIR TRAFFIC CONTROL. CONTRACTOR WILL BE REQUIRED TO HAVE AN ADEQUATE NUMBER OF MEMBERS OF HIS WORKFORCE TRAINED AND CERTIFIED IN THE AIRPORT PROCEDURES FOR NAVIGATING SAFELY AROUND THE AIRFIELD MOVEMENT BEING CONDUCTED. THE CONTRACTOR WILL BE REQUIRED TO POST BARRICADES OR PAVED PATHWAYS TO FOLLOW THE PROCEDURES. THE TRAINING CLASS WILL BE SCHEDULED BY THE CONTRACTOR TO THE SUPERVISION OF THE PROJECT. AND PROVIDES FREE OF CHARGE. CONTRACTOR WILL DESIGNATE THE ADEQUATE NUMBER OF PERSONNEL FOR ENSURING ALL MOVEMENT AND CONSTRUCTION EQUIPMENT THAT WILL BE CARRYING MATERIAL AND ANY NON-BADGED PERSONNEL TO THE WORK SITES.
   d. WORK OUTSIDE THE REAL OF RUNWAY 42 AND 30 MAY BE PERFORMED WITHOUT CLOSURES OF AIRFIELD PATWAY AREAS PROVIDED THAT PERSONNEL AND EQUIPMENT REMAIN CLEAR OF THE ACTIVE TARMAC PATWAY AND TAXIWAY INTERNET FREE AREAS (TOFA), NO MATERIAL, EQUIPMENT, SPILTS, FUSES, OR VEHICLES OF ANY KIND MAY BE STORED OR PARKED WITHIN THE LIMITS OF THE ISSUES AT TIMES. A FURTHER PROVISION OF WORK ADJACENT TO TOFA AND TAXIWAY AREAS WILL BE THAT ALL CREWS SHALL HAVE A FOREMAN, BADGED AND TRAINED IN AIR PROCEDURES OF URBAN ROADWAY CONTRACTORS, AND SHALL BE FULLY PREPARED TO BALANCE OR LOCATE ANY PERSONNEL OR MATERIALS WHICH MIGHT UNACCOUNTABLY BECOME DANGER TO THE AVIATION FACILITIES.
   e. NO WORK WITHIN THE APPROACH DEPARTURE ZONES OF ACTIVE RUNWAYS WILL BE ALLOWED UNLESS OTHERWISE APPROVED BY THE AIRPORT MANAGER.

3. THE USE OF CHAINES AND OTHER ELEVATED EQUIPMENT WILL BE CLOSETLY REGULATED BY THE FAA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLOSING ALL NECESSARY ZONES OF ACT IVELY ROADWAY AREAS AFTER NECESSARY ROADS AND THE CONTRACTOR MAY CLOSE, BLOCK, OR SHOEWIT IN THE ROADWAY AT THE ROADWAY BOUNDARY, SUCH EQUIPMENT SHALL BE PROPERLY MARKED WITH FLIGHTS AND OR PROPER SOURCE TO OPERATE THE ROADWAY. VEHICLES WITHOUT THE PROPER ROADWAY SIGNAGE WILL BE CLOSER TO THE ROADWAY.

4. THE CONTRACTOR SHALL NOT BEGIN WORK WITHIN ANY AIR OPERATIONS AREA UNLESS AND UNTIL 48 HOURS NOTICE FROM THE CONTRACTOR TO THE AIRPORT AND THE ENGINEER OF THE PROJECT.

5. THE CONTRACTOR SHALL NOT CLOSE AN OPERATIONS AREA UNTIL, SO AUTHORIZED BY THE ENGINEER AND THE CONTRACTOR, THE NECESSARY TEMPORARY CLOSED MARCHES AND BARRIERS ARE IN PLACE AS OUTLINED IN GENERAL PROVISIONS SECTION 70-57 AS DIRECTED BY THE ENGINEER.

6. WHEN WORKING WITHIN THE AIR OPERATIONS AREA (WHETHER CLOSED OR NOT), THE CONTRACTOR IS MAINTAIN COMMUNICATIONS BY TWO-WAY RADIO, MONITOR, OR APPROVED RADIO, WITH THE AIR TRAFFIC CONTROL TOWER ON GROUND CONTROL, FREQUENCY 124.95 MHz (TO BE NOTIFIED AT THE PRE-CONSTRUCTION CONFERENCE), CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND MAINTAINING THROUGHOUT CONSTRUCTION AT LEAST TWO RADIOS FOR EACH CREW THAT MAY BE OPERATING. CONTRACTOR SHALL FURNISH AT LEAST TWO RADIOS UPON COMPLETION OF THE PROJECT. EACH INDEPENDENTLY OPERATING CREW SHALL HAVE A SUPERVISOR MANAGE RESPONSIBILITY. CONTRACTOR WILL MAINTAIN AND OPERATE RADIO CONTACT WITH THE ACT AND THE CREW MEMBERS. THIS SUPERVISOR SHALL OPERATE EQUIPMENT OR OTHERWISE ENGAGED IN CONSTRUCTION ACTIVITIES THAT MIGHT PRECLUDE HIS/HER ABILITY TO CLOSURE THE FCC COMMUNICATIONS.

7. PRIOR TO MOVING ACROSS OR IN CLOSE PROXIMITY TO AN ACTIVE RUNWAY, TAXYWAY, OR APRON AREA, THE CONTRACTOR MUST ADVISE THE CONSTRUCTION SUPERVISOR WHO WILL THEN ISSUE THE APPROPRIATE ADVISORIES TO AIRCRAFT. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVING ALL ENSCAPES WITHIN THE ACA AS REQUIRED BY HAWAII WORK ORDERS. PRIOR TO BEGINNING ESCORTING OPERATIONS, CONTRACTOR SHALL OBTAIN APPROVAL FROM AIRPORT OPERATIONS FOR ALL PROPOSED ESCORTING OPERATIONS AND PROCEDURES.

8. ALL CONSTRUCTION VESSELS INCLUDING PERSONAL CASES MUST BE CLEANED FOR ACCESSES BY THE AIRPORT MANAGER AND RESIDENT ENGINEER.

9. A DAILY START-UP AND SHUT-DOWN CHECKLIST WILL BE JOINTLY PREPARED BY THE CONTRACTOR, RESIDENT ENGINEER, AND AIRPORT MANAGER WHICH WILL BE FOLLOWED THROUGHOUT THE PROJECT. THIS CHECKLIST WILL INCLUDE, BUT NOT BE LIMITED TO, 2-WAY RADIO, COMMUNICATIONS, BARRIERS, FLAGS, HAR LINES, AND ACCESS ROUTES.

10. EQUIPMENT AND MATERIALS SHALL NOT BE LEFT ON OR WITHIN 5 FEET OF THE ACTIVE RUNWAY EDGES NOR SHALL THEY BE LEFT WITHIN ACTIVE TAXYWAY OR ACTIVE APRON AREAS. PHASE 2 AND 3 RAMP AREAS DESIGNATED WITH THE RUNWAY 32 THRESHOLD DISPLACED.

11. NOTAM'S THE AIRPORT MANAGER WILL ISSUE THE NECESSARY NOTAM’S NOTICE TO TRAFFIC TO CLARIFY THE CONTINUITY OF SUMMER SUPPLIERS ALLOWED TO OPERATE WITHIN THE AREA. THE CONTRACTOR IS REQUESTED TO PROVIDE THE NECESSARY INFORMATION SUPPLIED BY THE CONTRACTOR. IT IS IMPORTANT THAT NOTAM’S BE KEPT CURRENT AND THAT THEY REFL ect THE ACTUAL CONDITIONS REGARDING CONSTRUCTION SITUATIONS. ACTUAL NOTAM’S WILL BE REVIEWED PERIODICALLY AND REVISED TO REFLECT THE CURRENT CONDITIONS. A MINIMUM 24 HOUR NOTICE IS REQUIRED IN ISSUING NOTAM'S.

12. INSTRUCTION, FRIEGENT INSPECTIONS WILL BE MADE BY THE AIRPORT OWNERS REPRESENTATIVE DURING CONSTRUCTION. THE CONTRACTOR IS REQUIRED TOstellen THE WORK TO INSURE THAT THE CONTRACTOR HAS ADEQUATE SAFETY MEASURES IN PLACE.

13. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS IN REGARD TO NOISE CONTROL, EROSION CONTROL, AND OPEN-AIR BURNING DURING CONSTRUCTION.

NOTES

1. INTENDED USE FOR THE FOLLOWING MARKINGS LIGHTING OF TEMPORARY HAZARDS WITHIN THE ACA.

2. INSTALL AT 12” CC SPACING ALONG FULL WIDTH OF PAVEMENT.

3. USE TYPE 2 AIRCRAFT BARRIERS IN AREA SUBJECT TO LTD BARRIERS.

4. BARRIERS SHALL BE EQUIPPED WITH ALTERNATING ORANGE AND WHITE 20”X30” FLIGHTS.

5. BARRIERS SHALL BE WATER-FILLED.

6. THE COST FOR SUPPLYING, MAINTAINING, AND REPOSITIONING BARRIERS AS NECESSARY FOR VARIOUS WORK PHASES, AND FOR TURNING OVER THE AIRPORT TO THE OWNER UNTIL COMPLETION OF CONSTRUCTION SHALL BE COVERED BY THE CONTRACT PRICE FOR "MAINTENANCE OF TRAFFIC."
1. Install barricades and lighted runway closure markers; coordinate with FAA for temporary deactivation of:
   - Runway 4-22 MLSR
   - Runway 4 Localizer
   - Runway 4 Glideslope Antenna
   - Runway 4-22 PAPI

2. Pavement Reconstruction: Runway 4 End to Runway 22 Designator, plus Taxiway A3
   - Remove 2 asphalt surface materials (77 calendar days)
   - Use for process to create 1,4-F-207 recycled asphalt aggregate base (18 calendar days)
   - Install new P-401 asphalt base course (7") (5 calendar days)
   - Install new P-401 asphalt surface course (4", 2-lifts) (10 calendar days)
   - Install temporary markings (3 calendar days)

3. Prepare runway for reconstructing with a temporary displaced threshold
   - Add runway designation numerals at 4 & 22 ends and mark runway 4-22 markings with a half application of paint
   - Install temporary outboard threshold markilngs and temporary threshold lighting for runway 22 end
   - Remove all Y/C lenses from runway edge lights within the temporary 1000' safety area & exchange them with the C/C from the zone immediately past the temporary outboard threshold to establish that area as the threshold. Upon completion of color shift, de-power lights in the 1000' safety area.
Key Work Items (Phase 2)

1. Install barricades and lighted runway closure markers; coordinate with FAA for continued deactivation of:
   - Runway 4/22
   - Runway 4 Localizer
   - Runway 4 Glaeslope Antenna
   - Runway 4-22 Par

2. Pavement Rehabilitation: Taxiway AA1 Intersection - Night Work (Phase 2A)
   - Remove 2.5" asphalt surface materials (1 calendar day)
   - Install temporary asphalt wedges with paper joint for temporary aircraft use after surface milling
   - Layout and install NEW-401 asphalt surface course, removing temporary asphalt wedges with paper joint
   - Before placing surface lift (20" total - 1 lift) (2 calendar days)
   - Install temporary markings on taxiway AS (1 calendar day)

3. Pavement Reconstruction: Runway 22 End and Along Taxiway AS (Phase 2B)
   - Remove 2.5" asphalt surface materials (1 calendar day)
   - Use for process to create 26" P-401 recycled aggregate base (5 calendar days)
   - Install new P-401 asphalt base course (2) (2 calendar days)
   - Install new P-401 asphalt surface course #2 (2 lifts) (3 calendar days)
   - Install temporary markings (2 calendar days)
PHASE 3 MARKINGS

1. PHASE 3A: INSTALL GROOVING ON RUNWAY SURFACE FROM PHASE 3A/3B BOUNDARY TO RUNWAY 4 END.
2. PHASE 3A: INSTALL GROOVING ON RUNWAY SURFACE FROM 22 END TO PHASE 3A/3B BOUNDARY.
3. PHASE 3A: INSTALLATION OF PERMANENT MARKINGS ON GROOVED SURFACES SHALL BE INSTALLED IN A SUBSEQUENT NIGHT WORK CLOSURE OF ALL WORK PERFORMED IN PHASE 3A.
4. PHASE 3A: REMOVE TEMPORARY DISPLACED THRESHOLD LIGHTING AND TEMPORARY OUTBOARD DISPLACED THRESHOLD MARKINGS.
5. PHASE 3A: INSTALL LOW LEVEL MARKINGS (TYP).
6. PHASE 3A: INSTALL LOW LEVEL MARKINGS (TYP).
7. PHASE 3A: INSTALL LOW LEVEL MARKINGS (TYP).
VINYL COATED FABRIC CHEVRON, YELLOW IN COLOR. (NOTE: CHEVRON AND OUTBOARD THRESHOLD BAR REMAIN EACH NIGHT.)

24" X 8" WHITE VINYL COATED FABRIC. OTHER MATERIALS MAY BE ACCEPTABLE WITH PRIOR APPROVAL OF THE ENGINEER. TIE SHEETS TOGETHER OR CLEAT AND ANCHOR TO THE GROUND WITH SPIKES OR OTHER SUITABLE METHODS ACCEPTABLE TO THE ENGINEER.

TEMPORARY OUTBOARD THRESHOLD MARKING AND LIGHTING NOTE:
WORK ASSOCIATED WITH TEMPORARY OUTBOARD MARKING AND LIGHTING OF THE DISPLACED THRESHOLD, AND FOR EXCHANGING LIGHT FIXTURE LENSES SHALL BE PAID UNDER THE LUMP SUM PRICE FOR M-101-4.1 MAINTENANCE OF TRAFFIC.

TEMPORARY MARKINGS FOR DISPLACED THRESHOLD LAYOUT

CHEVRON DETAIL
TEMPORARY THRESHOLD LIGHT LAYOUT AND CIRCUIT PLAN

L-862 HIGH INTENSITY RUNWAY THRESHOLD LIGHT WITH 210 WATT LAMP AND RED/GREEN GLOBE
SECONDARY TRANSFORMER LEAD TO LIGHTING FIXTURE
L-830-7 TRANSFORMER (200 WATT, 20A/6.6A) WITH PRIMARY AND SECONDARY LEADS
L-823 CONNECTOR (TYP)
1" EXTENSION RING

OBTAIN POWER FOR TEMPORARY LIGHTS WITH JUMPERS FROM THE NEAREST RUNWAY EDGE LIGHT BEYOND THE TEMPORARY RUNWAY END. DISCONNECT THE EDGE LIGHT CIRCUIT FOR THE CLOSED PORTION OF THE RUNWAY.

ALIGN 1ST OUTBOARD THRESHOLD LIGHT WITH STRAIGHT ALIGNMENT OF EDGE LIGHTS
EDGE LIGHTS BEYOND THIS POINT ARE TO BE TAKEN OUT OF SERVICE

TEMPORARY THRESHOLD LIGHT - PLAN

LIGHT BASE COVER WITH THRESHOLD LIGHT
SECONDARY LEAD TO LIGHT FIXTURE
PLASTIC BUSING TO PREVENT ABRASION OF WIRE INSULATION
CONDUIT CLAMP PLACED 12" FROM END OF CONDUIT AND 4" SPACING
1" RGS CONDUIT FASTENED TO EXIST. GROUND BETWEEN LIGHTS
FASTEN LIGHT BASE COVER TO GROUND WITH 20N NAILS AND WASHERS
FASTEN CABLE CLAMPS TO GROUND WITH 20N NAILS AND WASHERS

TEMPORARY THRESHOLD LIGHT - SECTION

WORK ASSOCIATED WITH TEMPORARY OUTBOARD MARKING AND LIGHTING OF THE DISPLACED THRESHOLD, AND FOR EXCHANGING LIGHT FIXTURE LENSES SHALL BE INCLUDED UNDER THE LUMP SUM PRICE FOR M-101-4.1 MAINTENANCE OF TRAFFIC.
TUSCALOOSA NATIONAL AIRPORT
RECONSTRUCT RUNWAY 4-22

DEMOLED AND INSTALL NEW L-867 BASE TO ADJUST RUNWAY EDGE LIGHT ELEVATION, (2 LOCATIONS ONLY)

LIMIT OF GRADING/TOPSOIL STRIPPING 12.5'

EXTENT OF NEW PAVEMENT LIMITS 22.0'

1. MILL TO 2" BELOW PROPOSED GRADE IN PREPARATION FOR FDR.
2. REMOVE FULL DEPTH PAVEMENT.
3. START TOPSOIL IN PROPOSED PAVEMENT WIDENING AREAS.
4. MILL TO 1/2" BELOW PROPOSED GRADE IN PREPARATION FOR OVERLAY. PRIOR TO OVERLAY, TACK COAT SHALL BE APPLIED TO MILLED P-603 SURFACES AT A RATE OF 0.06 TO 0.12 GAL/SY.

GENERAL NOTES

2. ALL PAVEMENT OUTSIDE THE LIMITS OF REMOVAL ARE TO BE PROTECTED.
3. ALL DUCT BANKS ARE TO BE PROTECTED.
4. ALL DRAINAGE INFRASTRUCTURE IS TO BE PROTECTED AND SPECIFIED INLET PROTECTION PLACED.

REFERENCES

1. MILL TO 2" BELOW PROPOSED GRADE IN PREPARATION FOR FDR.
2. REMOVE FULL DEPTH PAVEMENT.
3. START TOPSOIL IN PROPOSED PAVEMENT WIDENING AREAS.
4. MILL TO 1/2" BELOW PROPOSED GRADE IN PREPARATION FOR OVERLAY. PRIOR TO OVERLAY, TACK COAT SHALL BE APPLIED TO MILLED P-603 SURFACES AT A RATE OF 0.06 TO 0.12 GAL/SY.

NOT FOR CONSTRUCTION

ISSUED FOR BID

MB

30% DESIGN REVIEW MEETING 10/16/2019

60% DESIGN REVIEW MEETING 12/17/2019

95% DESIGN REVIEW MEETING 2/27/2020

ISSUED FOR BID 3/29/2020

3/27/2020 3:57 PM

FILE NAME:
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TOWER
GLIDESLOPE ANTENNA
ACCESS DRIVE

ELEVATED L-862 RUNWAY EDGE LIGHT TO REMAIN (TYP. ON THIS SHEET)

ELEVATED L-861T TAXIWAY A EDGE LIGHT TO REMAIN (TYP. ON THIS SHEET)

L-807 WINDCONE TO REMAIN
L-858 RDR SIGN TO REMAIN

MILL TO 7" BELOW PROPOSED GRADE IN PREPARATION FOR FDR.
MILL TO 2.0" BELOW PROPOSED GRADE IN PREPARATION FOR OVERLAY. PRIOR TO OVERLAY, TACK COAT SHALL BE APPLIED TO MILLED P-603 SURFACES AT A RATE OF 0.06 TO 0.12 GAL/SY.

2. ALL PAVEMENT OUTSIDE THE LIMIT OF REMOVAL ARE TO BE PROTECTED.
3. ALL DUCT BANKS ARE TO BE PROTECTED.
4. ALL DRAINAGE INFRASTRUCTURE IS TO BE PROTECTED AND SPECIFIED INLETS ARE TO HAVE INLET PROTECTION PLACED.

GENERAL NOTES

1. MILL TO 2" BELOW PROPOSED GRADE IN PREPARATION FOR FDR.
2. MILL TO 3/4" BELOW PROPOSED GRADE IN PREPARATION FOR ELEVATION TO RUNWAY. TACK COAT SHALL BE APPLIED TO MILLED P-603 SURFACES AT A RATE OF 0.06 TO 0.12 GAL/SY.

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TUSCALOOSA NATIONAL AIRPORT
RECONSTRUCT RUNWAY 4-22
100066795
CDD
JSH
DWS
CDD

1. 30% DESIGN REVIEW MEETING
2. 60% DESIGN REVIEW MEETING
3. 95% DESIGN REVIEW MEETING
4. ISSUED FOR BID

FBPR CERTIFICATE OF AUTHORIZATION NO. 24
WWW.ATKINSGLOBAL.COM
1. All electrical demolition items can be found on Sheet E-101.
2. All pavement outside the limits of removal are to be protected.
3. All duct banks are to be protected.
4. All drainage infrastructure is to be protected and specified inlets are to have inlet protection placed.
5. All surface notes shall be provided prior to beginning work in natural gas easement area, contact and line markings for Tuscaloosa County by calling (205) 361-0010.

Inches
**GENERAL NOTES**


2. ALL PAVEMENT OUTSIDE THE LIMITS OF REMOVAL ARE TO BE PROTECTED.

3. ALL DUCT BANKS ARE TO BE PROTECTED.

4. ALL DRAINAGE INFRASTRUCTURE IS TO BE PROTECTED AND SPECIFIED INLETS ARE TO HAVE INLET PROTECTION PLACED.

**MATERIALS**

- MILL TO 7" BELOW PROPOSED GRADE IN PREPARATION FOR FDR.
- MILL TO 2.0" BELOW PROPOSED GRADE IN PREPARATION FOR OVERLAY. PRIOR TO OVERLAY, TACK COAT SHALL BE APPLIED TO MILLED SURFACES AT A RATE OF 0.06 TO 0.12 GAL/SQY. PRIOR TO OVERLAY, TACK COAT SHALL BE APPLIED TO MILLED P-603 SURFACES AT A RATE OF 0.06 TO 0.12 GAL/SQY.

**PLOT DATE:** 3/27/2020 3:58 PM

**FILE NAME:** s:\0-TCL\100066795 runway 4-22 rehab design\DWG\C-101 Demolition Sheets_1.dwg
1. All electrical demolition items can be found on Sheet 4-22.
2. All pavement outside the limits of removal are to be protected.
3. All duct banks are to be protected.
4. All drained infrastructure is to be protected and specified inlets are to have inlet protection places.

MILL TO 7" BELOW PROPOSED GRADE IN PREPARATION FOR FDR.

MILL TO 2.0" BELOW PROPOSED GRADE IN PREPARATION FOR OVERLAY. PRIOR TO OVERLAY, TACK COAT SHALL BE APPLIED TO MILLED P-603 SURFACES AT A RATE OF 0.06 TO 0.11 GAL/SY. PRIOR TO OVERLAY, TACK COAT SHALL BE APPLIED TO MILLED P-603 SURFACES AT RATE OF 0.06 TO 0.12 GAL/SY.
1. All electrical demolition items can be found on Sheet E-101.
2. All pavement outside the limits of removal are to be protected.
3. All duct banks are to be protected.
4. All drainage infrastructure is to be protected and specified inlets are to have inlet protection placed.
1. PAVEMENT ELEVATIONS ARE PROVIDED ON SHEET C-100 WITH A 5' LONGITUDINAL SPACING
   AND 20' LATERAL SPACING GRID ALONG THE RUNWAY.
2. SCARIFY AND APPLY TOPSOIL AND SOD TO ACHIEVE 1.5' EDGE DROP FROM PAVEMENT TO TURF. 3% MAX SHOULDER SLOPE WITHIN FIRST 10 FEET OF TURF SHOULDER, AND 5% MAXIMUM SAFETY AREA BEYOND.

LEGEND

AREA OF SEEDING WITH MULCH

AREA OF SEEDING WITH MULCH

NOTE: ADDITIONAL AREAS OF PROPOSED SEEDING WITH MULCH ARE THE DISTURBED AREA RESULTING FROM THE RECONSTRUCTION OF TAXIWAY AS SHOWN ON SHEET C-100 AND THE TOPSOIL STOCKPILE AREA SHOWN ON SHEET C-101.

1. STA 10+00 RUNWAY 4 THRESHOLD
   2. CONTRACTORS REGISTERED SURVEYORS PERFORMING AS-BUILT SURVEY EFFORTS TO SET NEW PK NAIL AT THESE RUNWAY THRESHOLD COORDINATES.
GENERAL NOTES

1. PAVEMENT ELEVATION PLANS ARE PROVIDED (C-400 SERIES) WITH A 50' LONGITUDINAL SPACING BY 25' LATERAL SPACING GRID ALONG THE RUNWAY.

2. SCARIFY AND APPLY TOPSOIL AND SOD TO ACHIEVE 1.5" EDGE DROP FROM PAVEMENT TO TURF, 5% MAX SHOULDER SLOPE WITHIN FIRST 10 FEET OF TURF SHOULDER, AND 3% MAXIMUM SAFETY AREA BEYOND.

NOTE: ADDITIONAL AREAS OF PROPOSED SEEDING WITH MULCH ARE THE DISTURBED AREA RESULTING FROM THE RECONSTRUCTION OF TAXIWAY A5 SHOWN ON SHEET C-210 AND THE TOPSOIL STOCKPILE AREA SHOWN ON SHEET C-419.
1. PAVEMENT ELEVATION PLANS ARE PROVIDED (C-400 SERIES) WITH A 50' LONGITUDINAL SPACING BY 25' LATERAL SPACING GRID ALONG THE RUNWAY.

2. 48 HOURS NOTICE SHALL BE PROVIDED PRIOR TO BEGINNING WORK ON NATURAL GAS EASEMENT AREA. CONTACT SNG LINE PATROLLER FOR TUSCALOOSA COUNTY BY CALLING (205) 361-0010.

3. WITHIN 10 FEET OF NATURAL GAS PIPELINES, VIBRATORY ROLLER OPERATIONS SHALL BE CLOSER TO MONITORED. THE VIBRATION SHALL BE LIMITED TO A MAXIMUM ALLOWABLE CENTRIFUGAL FORCE OF 50,000 LBS. IN THESE AREAS.
STA 42+50 MATCHLINE C-203

STA 53+50 MATCHLINE C-205

NOTE: ADDITIONAL AREAS OF PROPOSED SEEDING WITH MULCH ARE THE DISTURBED AREA RESULTING FROM THE RECONSTRUCTION OF TAXIWAY A5 SHOWN ON SHEET C-210 AND THE TOPSOIL STOCKPILE AREA SHOWN ON SHEET C-458.
TAXIWAY B1
TAXIWAY A1
TWY A1 STA 0+00 = RW 4-22 STA 74+18.12
STA 75+00 RUNWAY 22 THRESHOLD
N: 1,172,625.94
E: 1,936,319.92
CONTRACTOR'S REGISTERED
SURVEYOR PERFORMING AS-BUILT
SURVEY EFFORTS TO SET NEW PK
NAIL AT THESE RUNWAY
THRESHOLD COORDINATES.
RUNWAY 22 PAPI
22
22

ABANDONED
GAS EASEMENT
18" SANITARY
SEWER
42" STORM
SEWER
EXISTING ELEC. DUCT BANKS
VERIFY COVER PRIOR
TO P-207
CONSTRUCTION
ABANDONED
GASLINE @
APPROXIMATE
30" DEPTH
42" RCP.
APPROXIMATE I.E UNDER
RUNWAY IS 148.6'

GENERAL NOTES
1. PAVEMENT ELEVATION PLANS ARE PROVIDED
(C-400 SERIES) WITH A 50' LONGITUDINAL SPACING
BY 25' LATERAL SPACING GRID ALONG THE
RUNWAY.
**GENERAL NOTES**

1. PAVEMENT ELEVATION PLANS ARE PROVIDED (C-400) WITH TAXIWAY SURFACE ELEVATIONS WITH A 25KX25 GRID SPACING.

2. APPLY SOD FOR ESTABLISHMENT OF STABLE TURF SHOULDER IN THE FIRST 10 FEET OF RE-GRADED SHOULDER AREA ADJACENT TO PAVEMENT.
GRADE BREAK STA = 0+00.00
ELEV = 164.187

LIMITS
14" P-207
3" BASE-1 LIFT
3 LIFTS:
7" P-401
4" SURFACE-2, 2" LIFTS

TWY A1 STA 0+00 =
-0.11%

RW 4-22
O/S 75'L
E:1936060.00
N:1172642.21
E:1936047.30
N:1172660.42
E:1935902.44

RAD. PNT. C5
C-417
STATION 1+76.50. SEE PAVEMENT ELEVATION SHEETS
E:1935978.32
N:1172697.71
N:1172686.02
E:1935891.79

EXISTING CONCRETE
AND
APPROXIMATE
152.97'

N:1172646.85
E:1935857.97
N:1172941.47
E:1936007.53
163.2

ELECTRICAL DUCT BANK
E:1935938.94
N:1172975.60
E:1935834.23

CURVE TABLE

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<tr>
<th>Curve #</th>
<th>GM</th>
<th>Radius (ft)</th>
<th>Date</th>
<th>Chord Direction</th>
<th>Chord Length</th>
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<td>C3</td>
<td>223.02</td>
<td>165.04</td>
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<td>179.18</td>
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<td>53.00</td>
<td>06.18</td>
<td>96° 22' 30&quot;E</td>
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GENERAL NOTES
1. PAVEMENT ELEVATION PLANS ARE PROVIDED (C-405) WITH TAXIWAY SURFACE ELEVATIONS WITH A 20 IN GRID SPACING.
NOTE: ALL MARKINGS ON THE RUNWAY SHALL BE WHITE REFLECTORIZED MARKINGS UNLESS OTHERWISE NOTED.
MATCH TAXIWAY LEAD-IN LINE TO EXISTING TAXIWAY MARKING (A2)
YELLOW REFLECTORIZED TAXIWAY LEAD-IN LINES, 6" WIDE (TYP. ON THIS SHEET)
PT
BREAK TAXIWAY LEAD-IN STRIPE AT RUNWAY EDGE STRIPE (TYP.)
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GENERAL NOTES:

1. ALL TAXIWAY CENTERLINE MARKINGS ARE 6" WIDE UNLESS OTHERWISE NOTED.
2. ALL MARKINGS SHALL BE OUTLINED WITH A BLACK BORDER THAT IS 6" WIDE OR GREATER ON ALL EDGES.
3. ALL MARKINGS, EXCEPT BLACK OUTLINES, SHALL HAVE REFLECTIVE MEDIA, ACCORDING TO THE SPECIFICATION SECTION P-620.

REF. PT. FOR HOLD POSITION MARKING

TERMINATE ENHANCED CENTERLINE MARKINGS WHERE NEXT PAIR OF DASHES WOULD BE WITHIN FIVE FOOT OFFSET OF INTERSECTING CENTERLINE.

REF. PT. FOR SIGN AT SIGN FACE

0' MIN. TO 10' MAX.

PAVEMENT EDGE
GENERAL NOTES:
1. ALL TAXIWAY CENTERLINE MARKINGS ARE 6" WIDE UNLESS OTHERWISE NOTED.
2. ALL MARKINGS SHALL BE OUTLINED WITH A BLACK BORDER THAT IS 6" WIDE OR GREATER ON ALL EDGES.
3. ALL MARKINGS, EXCEPT BLACK, SHALL HAVE REFLECTIVE MEDIA, ACCORDING TO THE SPECIFICATION SECTION P-620.

TAXIWAY A5 MARKING PLAN

GENERAL NOTES:
1. ALL TAXIWAY CENTERLINE MARKINGS ARE 6" WIDE UNLESS OTHERWISE NOTED.
2. ALL MARKINGS SHALL BE OUTLINED WITH A BLACK BORDER THAT IS 6" WIDE OR GREATER ON ALL EDGES.
3. ALL MARKINGS, EXCEPT BLACK, SHALL HAVE REFLECTIVE MEDIA, ACCORDING TO THE SPECIFICATION SECTION P-620.
**NOTES:**

1. Dimensions of markings (inches) on this drawing are nominal. The dashed lines provided on the drawing are 5 feet prior to the point of intersection, the taxiway centerline to be enhanced and 5 feet prior to the holding position marking. The taxiway centerline to be enhanced continues through a taxiway/taxiway intersection that is located 5 feet prior to the point of intersection.

2. The width of new taxiway centerlines shall match the width of the existing taxiway centerlines.

3. Where the taxiway centerline to be enhanced extends beyond the point of intersection, the taxiway centerline stopping will be extended to the point of intersection.

4. The width of new taxiway centerlines shall vary as shown on this drawing.

**SURFACE PAINTED HOLD POSITION SIGN DETAIL AND TABLE**

**NOTES:**

1. Refer to markings layout plans for inscription.

2. Refer to AC 150/5340-1L, Appendix I for painted sign character scaling.

3. The surface painted hold position sign shall consist of a white inscription on a red background and shall be outlined in black.
NOTES:

1. EXISTING CONDITIONS SHOWN ARE BASED ON BEST AVAILABLE INFORMATION AND REVIEW OF RECORD DRAWINGS. ACTUAL CONDITIONS MAY VARY. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS, INCLUDING JUNCTION STRUCTURE AND DUCT BANK CROSSINGS, PRIOR TO BEGINNING ANY DEMOLITION.

2. SHOULD INCONSISTENCIES BE IDENTIFIED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING 14 DAYS BEFORE BEGINNING DEMOLITION.

3. THE NUMBER OF FIXTURES AND OTHER EQUIPMENT MAY VARY FROM THAT SHOWN. THE CONTRACTOR SHALL VERIFY THE ACTUAL QUANTITIES AND SHALL REMOVE ALL EXISTING SYSTEMS TO REMAIN SHALL BE PROTECTED TOGETHER TO PROTECT INSULATION DURING INSTALLATION.

4. ALL EXISTING SYSTEMS TO REMAIN SHALL BE PROTECTED FROM DAMAGE. ANY DAMAGED CABLE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

5. CONTRACTOR SHALL REMOVE ALL EXISTING RW 4-22 AND TAXIWAY A CABLE FROM EXISTING CONDUITS OR DUCT BANKS AND SHALL REPLACE ANY DAMAGED CABLE TO REMAIN IN EACH CIRCUIT TO PROTECT INSULATION DURING INSTALLATION.

6. THE CONTRACTOR SHALL REMOVE ALL CABLE MADE OBSOLETE BY THE PROPOSED WORK.
NOTES:

1. CONTRACTOR SHALL INSTALL IDENTIFICATION MARKERS AT ALL LIGHT FIXTURES. THE MARKERS SHALL IDENTIFY THE LIGHTING CIRCUIT AND LIGHT FIXTURE NUMBER. CONTRACTOR SHALL COORDINATE THE CIRCUIT AND FIXTURE NUMBERING SYSTEM WITH OWNER PRIOR TO ORDERING AND INSTALLING THE MARKERS. THE CONTRACTOR SHALL PROVIDE "AS-BUILT DRAWINGS" TO THE AIRPORT MANAGER AND THE ENGINEER.

2. NEW L-867D BASE AS JUNCTION STRUCTURE/PULL-CAN.

3. PROPOSED L-867D BASE AS JUNCTION STRUCTURE/PULL-CAN.

4. NEW LIGHT-EDGE TAXIWAY LED LIGHT AND TRANSFORMER WITH NEW L-867B BASE.

5. SALVAGED L-861T TAXIWAY EDGE LIGHT AND BASE CAN TO REMAIN.

6. NEW OR RELOCATED L-861T TAXIWAY EDGE LIGHT AND TRANSFORMER WITH NEW L-867B BASE.

7. SALVAGED L-858 SIZE 2, 2-MOD SIGN AND TRANSFORMER WITH NEW LEGEND PANELS ON NEW FOUNDATION PAD WITH L-867-B BASE CAN.

8. PROPOSED L-867D BASE AS JUNCTION STRUCTURE/PULL-CAN.

9. INSTALL L-867D BASE CAN 5' FROM NEW END OF EXTENDED DUCT BANK WITH 2' PVC CONNECTION TO DUCT BANK.

10. NEW L-867B DUCT BASE LIGHT ON NEW L-867B BASE. ALL OTHER (11) PROPOSED LIGHT LOCATIONS SHALL BE SALVAGED L-861T EDGE LIGHT ON NEW L-867B BASE. NEW FIXTURES SHALL BE INCANDESCENT (NOT LED) TO MATCH SALVAGED LIGHTS.

11. PROTECT EXISTING DUCT BANKS AND EXTEND EACH DUCT BANK 3 FEET OUTSIDE THE LIMITS OF PAVEMENT. CAP UNUSED DUCTS, AND EXTEND DUCTS WITH CABLE TO NEW L-867D BASE CAN.

LEGEND

- NEW OR RELOCATED L-861T TAXIWAY EDGE LIGHT AND TRANSFORMER WITH NEW L-867B BASE.
- SALVAGED L-861T EDGE LIGHT AND BASE CAN TO REMAIN.
- PROPOSED L-867D BASE AS JUNCTION STRUCTURE/PULL-CAN.
- NEW LIGHT-EDGE TAXIWAY LED LIGHT AND BASE CAN TO REMAIN.
NOTES:
1. PERFORM LOCKOUT AND TAGOUT PROCEDURES ON CIRCUIT BREAKERS ASSOCIATED WITH CIRCUIT S-1 CUTOUT PRIOR TO WORK.

2. ALL NEW PORTIONS OF 5KV CIRCUITS SHALL BE DC MEGGER TESTED TO ENSURE XLPE INSULATION INTEGRITY USING A 1000V MEGGER. RESULTS SHALL BE DOCUMENTED AND SUBMITTED TO ENGINEER. BEFORE AND AFTER SPLICING NEW PORTIONS OF CIRCUIT ROUTE INTO EXISTING CIRCUITS, THE CIRCUIT SHALL BE DL MEGGER TESTED TO ENSURE INTEGRITY OF THE SPLICE.

3. CONCRETE ENCASED CONDUIT ACROSS DRIVEWAY ENTRANCE. BACKFILL TRENCH WITH CONCRETE TO WITHIN 2 IN OF DRIVEWAY SURFACE. IN PREPARATION FOR OVERLAY.

LEGEND
- NEW OR RELOCATED L-861T TAXIWAY EDGE LIGHT AND TRANSFORMER ON NEW FOUNDATION PAD WITH L-867B BASE CAN.
- SALVAGED L-861T EDGE LIGHT AND TRANSFORMER ON NEW FOUNDATION PAD WITH L-867B BASE CAN.
- EXISTING L-861T TAXIWAY EDGE LIGHT AND BASE CAN TO REMAIN.
- PROPOSED J-6000 BASE AS JUNCTION STRUCTURE/FULL CAN.
- EXISTING CONDUIT WITH NEW AIRFIELD LIGHTING CABLE (NUMBER OF TICK MARKS INDICATES NUMBER OF CONDUCTORS)
- PROPOSED CONDUIT WITH NEW AIRFIELD LIGHTING CABLE (NUMBER OF TICK MARKS INDICATES NUMBER OF CONDUCTORS)

1. PERFORM LOCKOUT AND TAGOUT PROCEDURES ON CIRCUIT BREAKERS ASSOCIATED WITH CIRCUIT S-1 CUTOUT PRIOR TO WORK.

2. ALL NEW PORTIONS OF 5KV CIRCUITS SHALL BE DC MEGGER TESTED TO ENSURE XLPE INSULATION INTEGRITY USING A 1000V MEGGER. RESULTS SHALL BE DOCUMENTED AND SUBMITTED TO ENGINEER. BEFORE AND AFTER SPLICING NEW PORTIONS OF CIRCUIT ROUTE INTO EXISTING CIRCUITS, THE CIRCUIT SHALL BE DL MEGGER TESTED TO ENSURE INTEGRITY OF THE SPLICE.

3. CONCRETE ENCASED CONDUIT ACROSS DRIVEWAY ENTRANCE. BACKFILL TRENCH WITH CONCRETE TO WITHIN 2 IN OF DRIVEWAY SURFACE. IN PREPARATION FOR OVERLAY.
1. The elevated edge lights shall be 14" high unless noted otherwise in the contract documents.

2. All base can installation techniques, methods, materials, etc., shall be submitted to the resident engineer for review and approval prior to the start of work.

3. Each ground rod shall measure 25" min. or less. Prior to connection to the ground system, additional ground rod sections shall be added to obtain the 25" min. value. At no additional cost to the designer.

4. Whenever more than two conduits enter or exit a L-867B base can, a L-867B base can shall be used. Conduits used exclusively for drains, the 0" stubout and the conduit from the L-867 base to the L-867B base shall be excluded from the count. The installation detail for the L-867B base can shall be used as a guide for the installation of the L-867B base can with the appropriate dimensions increased to accommodate to the larger base can.

5. Runway edge lights shall be installed 1" from the theoretical edge of the full strength pavement. Counterpoise shall be installed half the distance from the conduit to the theoretical edge of the full strength pavement. Counterpoise shall be kept 12" from base can.

6. The finished pavement surface shall be protected from foreign substances which could cause staining.

7. The base can for each conduit shall be kept 12" from base can. The conduit shall be kept 12" from the theoretical edge of the full strength pavement.

8. Concrete around base cans and duct/conduit shall be completely consolidated by mechanical means and shall be free of any voids.

9. When ever more than two conduits enter or exit a L-867B base can, a L-867D base can shall be used. Conduits used exclusively for drains, the 0" stubout and the conduit from the L-867 base to the L-867B base shall be excluded from the count. The installation detail for the L-867B base can shall be used as a guide for the installation of the L-867B base can with the appropriate dimensions increased to accommodate to the larger base can.

10. Immediately after the holes are augered, the base cans shall be installed and the P-610 placed so as to prevent water from entering the hole.

11. A L-864 cables shall be identified with an 18 gauge stainless steel tag with its respective circuit/loop number at all accessible locations. Attach to tag 3" from the L-864 connectors or mid-loop. If no connectors are required, the conductors shall be identified on each side of the connectors or loop.

12. L-863 connectors shall be installed on all cables, in each manhole, base can, or other accessible locations.

13. Precast or adjustable base cans shall not be used.
1. Connect counterpoise to ground rod. Do not connect counterpoise to base can.

2. The details shown in the plans provide the minimum requirements for sign installations. The contractor shall use standards applicable for the particular sign manufacturer, the bolts and nuts, and the bonding conductor. Etc. Shall be per sign manufacturer's recommendations and approved by the Engineer.

3. The sign shall withstand wind load (as per AC 150-5345-44, latest edition). Without change, the sign shall not break at the frangible point nor suffer permanent distortion. The sign manufacturer shall submit to the Engineer mounting methods and the calculations or test results supporting the above requirement. The signs shall be frangible, meeting the requirements of AC 150-5345-44, latest edition.

4. All signs shall be furnished with tethers. Tethers shall be 30’ stainless steel, 1/8” diameter wire with a formed eye on both sides. The tether eye shall be attached to the sign and base by being sandwiched between two stainless steel, T-shaped washers, with a 1/2” minimum stainless steel bolt. The bolts shall have enough thread length so that they do not loosen out before the covers are securely tightened. The tether shall be of sufficient length to have a minimum of 2’ of slack when attached between the sign and the sign base. The tethers and conducting connectors shall be of sufficient length to allow the frangible couplings to operate without restrictions and to allow the sign to be reconnected if the sign falls over. Provide 1 tether per sign leg and a minimum of 2 tethers per sign.

5. For location and orientation of signs and foundations, see layout plans. The location shown on the plans is the perpendicular distance from the detailed runway runway edge of full strength pavement. To the near side of the sign on the sign's longitudinal centerline (See plan view).

6. All signs shall be oriented such that the longitudinal centerline of the sign is perpendicular to the asphaltic taxilane/barrel centerline. Unless noted otherwise.

7. All counterpoise shall be located off the axis of full strength pavement (as shown on the plans) and aligned with the front edge of the front stripes of the hold position markings as shown on the plans, and aligned with the front edge of the front stripes of the hold position markings as shown on the plans.

8. All taxiway clearance signs shall be located off the axis of full strength runway and taxiway pavement (as shown on the plans) aligned with the point of tangency (PT) of the runway, point of curvature (PC) or as shown on the plans.

9. Vault areas for the LED flange plates shall be in the same plane, the anchor bolts shall be A-36 steel, hot dip galvanized when cast integrally with the concrete pad or stainless steel expansion anchors.

10. Using bonding connector and sign tether shall not be attached at the same anchor bolt. An approved method by the Contractor shall be used to connect the bonding conductor to the sign flange and base.

11. Runway hold position signs shall be in line with front edge of runway hold position markings, perpendicular to runway centerline.
<table>
<thead>
<tr>
<th>SIGN NO.</th>
<th>LEGEND-SIDE 1</th>
<th>LEGEND-SIDE 2</th>
<th>SIZE</th>
<th>STYLE</th>
<th>MODULES</th>
<th>CLASS</th>
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<tr>
<td>L8.5R</td>
<td>L-858R MANDATORY INSTRUCTION SIGN</td>
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**LEGEND:**

- **L**: L-858L LOCATION SIGN
- **Y**: L-858Y DIRECTION OR BOUNDARY SIGN
- **R**: L-858R MANDATORY INSTRUCTION SIGN
- **BLANK**: SIGN PANEL WITHOUT INSCRIPTION; BLANK PANEL

**END TOWARDS T/W OR R/W**

**SIDE 1**

**SIDE 2**

**NEW SIGN SCHEDULE**

**NEW CONCRETE PAD**

**FULL STRENGTH PAVEMENT**

**SALVAGED L-858(L) LED SIGN UNIT**

**SALVAGED BLANK PANELS**

**TYPICAL RUNWAY MANDATORY AND GUIDANCE SIGN LAYOUT**

**GRADING AND FILL DETAIL**

**NEW LEGEND PANELS SUPPLIED AND INSTALLED BY CONTRACTOR**
1. All basic can installation techniques, methods, materials, etc., shall be submitted to the Resident Engineer for review and approval prior to the start of work.

2. Each ground rod shall measure 25 OHMS or less, prior to installation of the pin/receptacle. Any ground rod that does not measure 25 OHMS or less shall be replaced with a new ground rod.

3. Any finished pavement surface shall be protected from foreign substances which could cause staining, e.g., concrete, oil, etc. The contractor shall immediately clean all spills and stains that occur on the finished pavement surface.

4. The base can cover mounting bolts shall extend through the base can and be secured to the ground rod with a minimum of 0.5". The bolts shall be at least 2" in length. The bolts shall be tightened to a minimum of 250 lbs.

5. Use sand to backfill this area. Removed earth may be used providing no rock or stone larger than 1/4" is present. Ballast shall comply with U.S. Federal Specifications.

6. All ground rods shall be introduced into the base can with a minimum of 10" above grade. The ground rod shall be attached to the base can using a minimum of 1/4" diameter cable tie.

7. All base cans shall be installed and the face plowed so as to prevent water from entering the base can.

8. All sky can conductors shall be marked with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

9. Attached each cable tie enough to hold in place without compromising housing, trim off excess cable tie.

10. Ground rods shall be installed not more than 25 feet apart.

11. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

12. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

13. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

14. Ground rods shall be installed not more than 25 feet apart.

15. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

16. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

17. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

18. Ground rods shall be installed not more than 25 feet apart.

19. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

20. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

21. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

22. Ground rods shall be installed not more than 25 feet apart.

23. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

24. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

25. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

26. Ground rods shall be installed not more than 25 feet apart.

27. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

28. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

29. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

30. Ground rods shall be installed not more than 25 feet apart.

31. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

32. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

33. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

34. Ground rods shall be installed not more than 25 feet apart.

35. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

36. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

37. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

38. Ground rods shall be installed not more than 25 feet apart.

39. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

40. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

41. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

42. Ground rods shall be installed not more than 25 feet apart.

43. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

44. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

45. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

46. Ground rods shall be installed not more than 25 feet apart.

47. The cable shall be thoroughly cleaned prior to the installation of the L-823 connector kit.

48. All L-824 cables shall be identified with an 18 gauge stainless steel tag. Each cable tie shall be turned over to the airport.

49. The cable shall be switched off to the appropriate power source by the manufacturer and approved by the Resident Engineer.

50. Ground rods shall be installed not more than 25 feet apart.
DUCT BANK NOTES:
1. The #6 AWG B.S.D.CU COUNTERPOISE SHALL BE CENTERED ON THE DUCT BANK.
2. The minimum distance between top of conduit in duct bank and counterpoise shall be 4" under pavement and 9" direct earth buried.
3. A plastic, detectable non-magnetic four inch (4") wide tape shall be installed eight inches (8") below grade around all portions of existing underground utilities exposed for any reason. The detectable tape shall be omitted where the underground utility is under asphalt/pavement tape shall be red for electrical and orange for communication warning.
4. Duct banks shall drain toward the electrical structures with the crown of the duct bank midway between manholes. The duct slope shall be 3" per 100' (3.35%).
5. All conduits, duct and duct banks under pavement shall be encased in P-610 concrete with not less than 3" of cover at top, bottom and sides.
6. Trenched areas shall be backfilled and compacted as shown. No separate payment shall be made for restoring grade.
7. The cable elevation shall be such that the top of the duct encasement is 20" minimum below finished grade in unpaved areas and 6" minimum below top of subgrade in paved areas.
8. Ground rods shall be installed at no more than 500' apart. Ground rods shall be installed in the duct bank at the same locations as the conduits. The ground rods shall be a minimum of 10' long and 3/4" in diameter.
9. All 1-4/6c, 801 cable used in aridified lighting circuits shall be 2" in pipe unless otherwise noted. All conductor wire shall be kept in pipe. Copper, silver, or other conductors unless otherwise noted.
10. All new and electrical structures shall have ground rods in addition to the requirements of placing ground rods along circuits no greater than 500' apart. The ground rods shall be a minimum of 10' long and 3/4" in diameter.
11. Backfill in unpaved areas shall be native material compacted per P-152.
12. For size and number of conduits and duct bank formation, see plans.
13. Appropriately sized duct spacers shall be used and spaced per manufacturer's requirements of every 10'.
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2 2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1 3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A. EXISTING TURF SHOULDER

B. SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES

C. EXISTING RUNWAY SURFACE

D. 2'-2" LIFTS P-401 ASPHALT SURFACE COURSE

E. 1'-3" LIFT P-401 ASPHALT BASE COURSE

F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TUBE SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHEET C-501 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1-3" LIFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE

14+50.00
15+00.00
15+50.00
16+00.00
16+50.00
17+00.00

Inches
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-601 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN PLACE FOR BASE
GRADING SECTION KEY NOTES:
A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1-1/2" LIFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE

EXISTING RUNWAY SURFACE
2-2" LIFTS P-401 ASPHALT SURFACE COURSE
1-1/2" LIFT P-401 ASPHALT BASE COURSE
14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT C-501 FOR CROSS SLOPES
C. EXISTING RUNWAY SURFACE
D. 2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1-3" LFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1-SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1'-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1'-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-601 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1'-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1-SHT G-001 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2'-2" LFTS P-401 ASPHALT SURFACE COURSE
E  1'-3" LFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1 SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE

TUSCALOOSA NATIONAL AIRPORT
RECONSTRUCT RUNWAY 4-22
100066795
CDD
JSH
DWS
CDD

0% DESIGN REVIEW MEETING
10/16/2019

30% DESIGN REVIEW MEETING
12/17/2019

95% DESIGN REVIEW MEETING
2/27/2020

ISSUED FOR BID
3/29/2020

NOT FOR CONSTRUCTION

FILE NAME:
S:\0-TCL\100066795 Runway 4-22 Rehab Design\DWG\C-601 Runway Cross Sections REV 1232019.dwg
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SECTIONS
C  EXISTING RUNWAY SURFACE
D  2.0" LIFTS P-401 ASPHALT SURFACE COURSE
E  1.5" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT 0-81 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE

(2) 12" Ø GASLINES 4'-6" BELOW EXISTING EDGES OF PAVEMENT

EXISTING TURF SHOULDER
SEE DETAIL 1, SHT 0-81 FOR CROSS-SLOPES
EXISTING RUNWAY SURFACE
2" LIFTS P-401 ASPHALT SURFACE COURSE
1-3" LIFT P-401 ASPHALT BASE COURSE
14" P-207 IN-PLACE FOR BASE

12" Ø GASLINES 4'-6" BELOW EXISTING EDGES OF PAVEMENT

EXISTING TURF SHOULDER
SEE DETAIL 1, SHT 0-81 FOR CROSS-SLOPES
EXISTING RUNWAY SURFACE
2" LIFTS P-401 ASPHALT SURFACE COURSE
1-3" LIFT P-401 ASPHALT BASE COURSE
14" P-207 IN-PLACE FOR BASE

EXISTING TURF SHOULDER
SEE DETAIL 1, SHT 0-81 FOR CROSS-SLOPES
EXISTING RUNWAY SURFACE
2" LIFTS P-401 ASPHALT SURFACE COURSE
1-3" LIFT P-401 ASPHALT BASE COURSE
14" P-207 IN-PLACE FOR BASE

EXISTING TURF SHOULDER
SEE DETAIL 1, SHT 0-81 FOR CROSS-SLOPES
EXISTING RUNWAY SURFACE
2" LIFTS P-401 ASPHALT SURFACE COURSE
1-3" LIFT P-401 ASPHALT BASE COURSE
14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 2" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1-1/2" LIFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER

B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES

C  EXISTING RUNWAY SURFACE

D  2'-2" LIFTS P-401 ASPHALT SURFACE COURSE

E  1'-3" LIFT P-401 ASPHALT BASE COURSE

F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1'-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT C-60/1 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 3-1/2' LITE P-401 ASPHALT SURFACE COURSE
E. 1'-0" LITE P-401 ASPHALT BASE COURSE.
F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT C-601 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 2-1/4" LFT P-401 ASPHALT SURFACE COURSE
E. 1-1/2" LFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE

EXISTING TURF SHOULDER
SEE DETAIL 1, SHT C-601 FOR CROSS-SLOPES
EXISTING RUNWAY SURFACE
2-1/4" LFT P-401 ASPHALT SURFACE COURSE
1-1/2" LFT P-401 ASPHALT BASE COURSE
14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

- **A**: Existing Turf Shoulder
- **B**: See detail 1, sht C-001 for cross-slopes
- **C**: Existing Runway Surface
- **D**: 2'-2" Lifts P-401 Asphalt Surface Course
- **E**: 1'-3" Lift P-401 Asphalt Base Course
- **F**: 14" P-207 In-Place for Base
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHEET C-601 FOR CROSS SLOPES
C  EXISTING RUNWAY SURFACE
D  2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1'-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A. EXISTING TURF SHOULDER
B. SEE DETAIL 1. SHT C-611 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1'-3" LIFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT D-61 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 3'-0" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1'-3" LIFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-601 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1' LIFT P-401 ASPHALT BASE COURSE
F  14' P-207 IN-PLACE FOR BASE

ISSUED FOR BID

30% DESIGN REVIEW MEETING
1  CDD 10/16/2019

60% DESIGN REVIEW MEETING
2  CDD 12/17/2019

95% DESIGN REVIEW MEETING
3  CDD 2/27/2020

ISSUED FOR BID
4  CDD 3/29/2020

C-627
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SH/T C-601 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A: EXISTING TURF SHOULDERS
B: SEE DETAIL, SHT C-601 FOR CROSS-SLOPES
C: EXISTING RUNWAY SURFACE
D: 2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E: 1'-3" LIFT P-401 ASPHALT BASE COURSE
F: 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1 SHT C-501 FOR CROSS SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFT P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 2-3/4" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1-3/4" LIFTS P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-601 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2-2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A. EXISTING TURF SHOULDER
B. SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C. EXISTING RUNWAY SURFACE
D. 2'-2" LIFTS P-401 ASPHALT SURFACE COURSE
E. 1'-3" LIFT P-401 ASPHALT BASE COURSE
F. 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A EXISTING TURF SHOULDER
B SEE DETAIL 1, SHT C-061 FOR CROSS-SLOPES
C EXISTING RUNWAY SURFACE
D 2" LIFTS P-401 ASPHALT SURFACE COURSE
E 1-3" LIFT P-401 ASPHALT BASE COURSE
F 14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER

B  SEE DETAIL 1, SHT C-001 FOR CROSS-SLOPES

C  EXISTING RUNWAY SURFACE

D  2'-0" LIFTS P-461 ASPHALT SURFACE COURSE

E  1'-0" LIFT P-461 ASPHALT BASE COURSE

F  14" P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  SEE DETAIL 1, SHT C-501 FOR CROSS-SLOPES
C  EXISTING RUNWAY SURFACE
D  2" LIFTS P-401 ASPHALT SURFACE COURSE
E  1-3" LIFT P-401 ASPHALT BASE COURSE
F  14" P-207 IN-PLACE FOR BASE

ISSUED FOR BID
30% DESIGN REVIEW MEETING 1 10/16/2019
60% DESIGN REVIEW MEETING 2 12/17/2019
95% DESIGN REVIEW MEETING 3 2/27/2020
ISSUED FOR BID 4 3/29/2020

TUSCALOOSA NATIONAL AIRPORT
RECONSTRUCT RUNWAY 4-22
100066795
CDD
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ISSUE
NO
APPR.
BY
REV.
NO
DATE
APPR.
BY

FBPR CERTIFICATE OF AUTHORIZATION NO.24
WWW.ATKINSGLOBAL.COM
GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER

B  SEE DETAIL 1, SHT C-601 FOR CROSS-SLOPES

C  EXISTING RUNWAY SURFACE

D  2'-2" lift P-401 ASPHALT SURFACE COURSE

E  1'-3" lift P-401 ASPHALT BASE COURSE

F  14' P-207 IN-PLACE FOR BASE
GRADING SECTION KEY NOTES:
A. EXISTING TURF SHOULDER
B. EXISTING TAXIWAY SURFACE
C. 2-½" LIFTS P-401 ASPHALT SURFACE COURSE
D. 1-½" LIFTS P-401 ASPHALT BASE COURSE
E. 14" P-207 IN PLACE FOR BASE

PLOT DATE: 3/27/2020 4:55 PM
FILE NAME: S:\0-TCL\100066795 Runway 4-22 Rehab Design\DWG\C-601 Runway Cross Sections REV 1232019.dwg
4+79.91

5+91.17

4+50.00

5+50.00

TIE TO EXISTING GRADE BEYOND (SECTION VIEW)

GRADING SECTION KEY NOTES:

A  EXISTING TURF SHOULDER
B  EXISTING TAXIWAY SURFACE
C  2-3/4" LIFTS P-401 ASPHALT SURFACE COURSE
D  1-5/8" LIFT P-401 ASPHALT BASE COURSE
E  14" P-207 IN-PLACE FOR BASE

TIE TO EXISTING GRADE BEYOND (SECTION VIEW)