Atlanta Regional Airport
Falcon Field

ADDENDUM NO. 2
TO
BID AND CONTRACT DOCUMENTS

ATLANTA REGIONAL AIRPORT – FALCON FIELD
PEACHTREE CITY, GEORGIA
TERMINAL APRON EXPANSION

GDOT BID No. T008663

TO: **ALL PROSPECTIVE OFFERORS**

DATE: **Friday, April 5, 2024**

This Addendum forms a part of the Bidding and Contract Documents and modifies the original documents as noted below. Acknowledge receipt of this Addendum in the space provided in the Bid Form (Page B-7). Failure to do so may subject a bidder to disqualification.

This Addendum consists of One Hundred Sixty-Six (166) pages which includes Pre-bid Sign-in Sheet; Plan Holders list; Revised Bid Schedule; Revised Bid Form; Revised Contract; Revised General Provision-Section 80; Revised Section 01300; New Specification (GDOT-439); Geotechnical Report; Revised Plan Sheets: C-1, SQ-1, PSPL-1, PSPP-1, DP-1, DD-1, JL-1, JD-2, and ECD-4; and Responses to Questions Submitted to the Engineer.

PRE-BID CONFERENCE MEETING

Date: March 26, 2024 at 10:00am

Sign-in Sheet is attached to this Addendum No. 2 and consists of 2 pages.

BID FORMS

A. Bidders are to disregard original Bid Form and Bid Schedule included and replace with revised Bid Form and Bid Schedule issued in this Addendum No. 2. Ensure to acknowledge addendum on page Addendum No. 2 – B-7.

B. Note that project will be contract in one phase. Bidders are to disregard original Contract and replace with revised Contract issued in this Addendum No. 2.

C. Liquidated Damages have been updated to reflect new construction duration. Bidders are to disregard original GP-80 included in bid documents and replace with revised GP-80 issued in this Addendum No. 2.

D. Submittal language has been updated to reflect one phase of construction. Bidders are to disregard original 01300 included in bid documents and replace with revised 01300 issued in this Addendum No. 2.

SPECIFICATIONS / CLARIFICATIONS

A. The use of a transit mix will be allowed. Bidders are to disregard previous GDOT-430 specification and replace with new GDOT-439 provided in this Addendum No. 2.

RESPONSES TO QUESTIONS:

Question: Is the sewer live where we must remove and replace the sanitary sewer manhole?

Answer: Yes, it is a live sanitary sewer.

Question: If live sewer; will it require pumping while work is going on?

Answer: Yes

Question: Will owner take care of removing power from the transformer?

Answer: Power disconnection from transformer may not be needed.

Question: What is the anticipated NTP for the project?

Answer: Anticipated NTP is mid-May to Early June

Question: What safety classes are required for the contractor's personnel and what is the duration of the training?

Answer: Safety requirements to be discussed during pre-construction meeting.

Question: What permits, other than an NOI, will be required for this project?

Answer: Refer to Permitting section on sheet GN-1.

Question: What constitutes adequate quality control testing?

Answer: All construction materials and activities shall meet testing requirements described in technical specifications.

Question: What construction materials are required to be tested?

Answer: All construction materials and activities shall meet testing requirements described in technical specifications.

Question: Is a driveway permit required for the project since no driveways are being constructed for this project?

Answer: No driveway permit is required.

Question: What fees associated with utility installation is the contractor required to pay for?

Answer: Contractor to contact utility owners to determine and pay for necessary fees.

Question: Will as-built information of the existing utilities be provided to assist the Contractor with locating and protecting them?

Answer: See existing conditions plan, EX-1 for information gathered by survey and SUE. Contractor to field verify utilities.

Question: What materials can the Contractor place in the Contractor Waste Area?

Answer: Excess earthwork material.

Question: Can dowels in construction joints be inserted into the concrete while it's being placed in lieu of drilling?

Answer: No. Dowels must be drilled.

Question: Can the welded wire fabric required for the reinforced slabs be placed into the wet concrete or does it need to be supported in place prior to beginning concrete placement?

Answer: No. WWF must be supported prior to concrete placement.

Question: What are the details of the tie bars that are to be used in place of the smooth dowel bars?

Answer: Use deformed dowel bars instead of smooth dowel bars where indicated on sheet JL-1. Refer to JD-2 for dowel bar schedule.

Question: Were any soil samples taken of the site? If so, can the Geotech report be provided?

Answer: Geotech conducted and report to be included in Addendum.

Question: Can the Contractor provide a Utility Contractor License or GDOT prequalification in lieu of a General Contractor's License?

Answer: Refer to Section 20-02 QUALIFICATION OF BIDDERS.

Question: Is there a DBE participation goal on this project?

Answer: No DBE participation goal is required.

Question: There is a Pay Item for Embankment in Place but not a Pay Item for the Unclassified Excavation cut off the project (either 4,350 or 5,100 CY). Where is the Bidder supposed to price the Unclassified Excavation? Is there anywhere on the Airport property that the net cut can be stockpiled?

Answer: Refer to Spec P-152 section 152-4.1, "Embankment in place payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item including obtaining, excavating, hauling, stockpiling, placing in layers, compacting, drying, disking, watering, mixing, sloping, and other operations for construction of embankments." Refer to sheet PSPL-1 for waste area.

Question: GDOT Spec 430 requires the concrete to be mixed in a central mix plant. The size of this project does not justify setting up of a central mix plant. Can this requirement be

waived, so we can use a batch plant. Usually, ready mix companies have just batch plants in their facilities.

Answer: GDOT Spec 439 shall be used in lieu of GDOT Spec 430 to allow the use of a transit mix.

Question: Drawing JL-1 shows that half of the apron expansion is an additive bid. We were under the impression that the entire apron expansion was part of the base bid. Please clarify.

Answer: There is no additive bid, and that text should be removed from the sheet. There is only a base bid for concrete pavement, and an alternate bid for asphalt pavement.

Question: If phase 2 of the project is as additive bid, the schedule of values should be modified. Quantities on the base bid should be separate from the ones in the additive.

Answer: Project to be constructed all at once. No phases.

Question: Legend on drawing JL-1 shows joint types A, C, F and E. However, the layout just indicates the location of joints type A. Could you clarify where the joints type C, F and E are located.

Answer: JL-1 shall be updated to clarify joint type locations.

Question: For how long can we close taxiway B to install the 30" RCP that crosses underneath this taxiway.

Answer: Taxiway "B" north of Taxiway "A" shall be closed for duration of project.

Question: Are there any work hour restrictions on this project?

Answer: Contractor shall work typical daytime hours/sun-up to sun-down (0700-2000).

Question: Do we need to remove and replace the entire sanitary manhole at N:1221330.23 - E:2174089.45? Can we just remove and replace the top?

Answer: Contractor to remove and replace the entire sanitary manhole to be aircraft rated for 75k lb. load.

Question: What kind of headwall for Structure A1.1 shall be installed? Will it be Straight wall, U type wing or 45 Wings?

Answer: Contractor shall install 45° wings.

Question: According to drawings JL-1, all the slabs on the perimeter of the apron require tie bars. Could you clarify the type (smooth or deformed), dimensions (diameter and length) and the spacing of the tie bars. We could not find that information on any of the drawings.

Answer: Please use deformed dowel bars instead of smooth dowel bars where indicated on sheet JL-1. Refer to dowel bar schedule sheet JD-2.

Question: The demolition drawings (DP-1) indicate the removal of a section of the existing chain-link fence. Upon reviewing both the drawings and the schedule of items, we couldn't find any indication of plans for reinstalling the fence. Could you please confirm if the designer's intent is solely to remove the fence without including its replacement in the project scope?

Answer: The intent is to remove the fence without replacing it.

Question: Please confirm as discussed during the pre-bid conference that Ready Mix produced concrete is acceptable.

Answer: GDOT Spec 439 shall be used in lieu of GDOT Spec 430 to allow the use of a transit mix.

Question: Please confirm that since the concrete is being delivered in Ready Mix trucks, there will be no additional mechanical spreading device

Answer: Means and methods to be determined by contractor.

Question: Please confirm that “grooving” mentioned in the specs is actually GDOT tining, unless burlap drag finish is acceptable

Answer: No grooving of concrete. GDOT Spec 439 shall be used in lieu of GDOT Spec 430 to allow the use of a transit mix.

Question: Are we casting in numbered stations every 500 ft? This is typical for highways not airports

Answer: No, we are not casting in numbered stations.

Question: Since this is a ramp, please confirm that the required PI is 12, when measured on a 0.2 blanking band.

Answer: GDOT Spec 439 includes a required PI of 7 when measured on a 0.2 blanking band.

Question: Since concrete is being performed under GDOT specs, is the engineer going to take cylinder samples and break them for results?

Answer: The engineer will take cylinder samples.

Question: If concrete testing is done by the Engineer reps, are they also going to take additional samples for early breaks?

Answer: Engineer to take additional samples for early breaks.

Question: If concrete testing is done by the Subcontractor, do we need a QC lab onsite with a breaker?

Answer: Concrete is to be tested by Engineer.

Question: Please supply size and spacing of tie bars, both in transverse joints and in longitudinal joints

Answer: Refer to dowel bar schedule, sheet JD-2.

THIS CONCLUDES ADDENDUM NO. 2 IN ITS ENTIRETY.

This Addendum is being transmitted ***electronically on the Georgia Procurement website and via email*** to all plan holders. If you have any questions, please direct them to; Chris Bachmann, P.E., Project Manager, Michael Baker International, Inc. at Christopher.Bachmann@mbakerintl.com.

SIGN-IN SHEET

Pre-Bid Conference (Bid T008663)
Tuesday, March 26, 2024 at 10:00 A.M.

Atlanta Regional Airport; Peachtree City, Georgia
Terminal Apron Expansion

Name: K. KEITH LONG	**Company:** PITTMAN CONSTRUCTION	
Email: klong@pittman-construction.com		
Office Ph: 770.922.8660	**Cell Ph:** 470.717.1912	**Fax:**
Name: CHRIS GREENWAY	**Company:** BALDWIN PAVING	
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Office Ph:	**Cell Ph:** 404-822-5630	**Fax:**
Name: Cristhian Moreno	**Company:** Precision 2000, Inc.	
Email: cmoreno@precision2k.com		
Office Ph: 770 5706095	**Cell Ph:** 770 5706095	**Fax:** NA
Name: Kris Knies	**Company:** Independence Excavating	
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Office Ph:	**Cell Ph:** 717-579-9641	**Fax:** NA
Name: Bill Barratt	**Company:** Rigid Pavement Construction	
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Name: Cierra Brown	**Company:** Rigid Pavement	
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Office Ph: (517) 938 5156	**Cell Ph:** 517 745 5161	**Fax:** 517 938 8219
Name: Mike Ghetu	**Company:** C.W. Matthews	
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Name: DUSTIN JOHNSON	**Company:** CW MATTHEWS	
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Name: JEFF LAMMES	**Company:** Lammes Construction Group	
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Office Ph:	**Cell Ph:** 770 560 5195	**Fax:**
Name: John Lee	**Company:** Helix Grading and Utility	
Email: John@helixllc.us		
Office Ph:	**Cell Ph:** (6) 972-2888	**Fax:**
Name: Kevin KPOV	**Company:** International Waste Services	
Email: Alvin.IntlWaste@Gmail.com		
Office Ph: 404-662-3799	**Cell Ph:** 678-519-8000	**Fax:**
Name: Lew Walker	**Company:** GDOT	
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Name: Chris Bachmann	**Company:** MBI	
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Name: Charles Adeogun	**Company:** MBI	
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Office Ph:	**Cell Ph:**	**Fax:**
Name: Hope M. & Mike M.	**Company:** Atlanta Regional Airport	
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ONLINE:

JOHN WHITE ER SNELL

JDWHITE@ERSNELL.COM

770-985-0600

PLAN HOLDERS LIST

Project Name Peachtree City Airport - Falcon Field
Terminal Apron Expansion

Project No. 198108

Bid Date:
April 15th, 2024 at 2:00pm

Date Issued	Firm Name & Address of Recipient (Legal Address of Firm - Street Address)	Name of Individual Recipient & Telephone Number of Firm
12-Mar-24	Atlanta Regional Airport - Falcon Field 7 Falcon Drive Peachtree City, Georgia 30269	Hope Macaluso Tele: 770-487-2225
12-Mar-24	Michael Baker International, Inc. 420 Technology Parkway, Suite 150 Norcross, Georgia 30092	Office Copy Tele: 770-263-9118 Fax: 770-263-9145
14-Mar-24	Kiewit Infrastructure South Co. 450 Dividend Drive Peachtree City, GA 30269	John Zelenka Tele: 770-487-2300 ext. 2316
14-Mar-24	P2K - Civil Construction Contractors 2214 Lawson Way Atlanta, GA, 30341	Oscar Sanabria Tele: 471-568-4407
14-Mar-24	ER Snell 1785 Oak Rd Snellville, GA 30078	Kelley Pollard Tele: 770-985-0600
14-Mar-24	CW Matthews Contracting Co., Inc. 1600 Kenview Dr. Marietta, GA 30061	Mike Kleuckling Tele: 770-422-7520 ext. 1254
14-Mar-24	Baldwin Paving 1014 Kenmill Drive, N.W. Marietta, GA 30060	Kim Blackburn Tele: 770-425-9191
14-Mar-24	Helix Grading & Utility, LLC 30 Industrial Dr Zebulon, GA 30295	Christie O'Neil Tele: 470-491-4500
14-Mar-24	The Corbett Group, LLC 13201 Veterans Memorial Hwy Douglasville, GA 30134	Siema Cox 770-947-2672
14-Mar-24	CMES, Inc. 3900 Steve Reynolds Blvd. Norcross, GA 30093	David M. Culpepper Tele: (770) 355-7472
14-Mar-24	Independence Excavating, Inc. 5720 E. Schaaf Rd. Independence, OH 44131	Scott Evans Tele: 440-488-4428
15-Mar-24	Summit Construction & Development 2108 Bentley Dr. Stone Mountain, GA 30087	Ajay Naidu Tele: 770-413-0093
19-Mar-24	Interstate Sealant & Concrete, Inc S40W24211 Rockwood Way Waukesha, WI 53189	Sean Leppert Tele: 262-522-3312
20-Mar-24	McCoy Grading, Inc. 450 Callaway Road Greenville, GA 30222	Kim Sinclair Tele: 706-672-2690
20-Mar-24	Rigid Pavement Construction 9486 S. Meridian Road Clarklake, MI 49234	Tyler Barratt Tele: 517-888-1186
21-Mar-24	Astra Group LLC. 1611 Perry Blvd NW Atlanta, GA 30318	Kyle Wright Tele: 770-992-9300 x 8297
21-Mar-24	Winter Construction 5616 Peachtree Road Chamblee, GA 30341	Matt Reid Tele: 404-965-3309
25-Mar-24	Lammes construction Inc. 652 Sunflower Dr., Canton, GA 30114	Jeff Lammes Tele: 770-560-5195
25-Mar-24	JHC Corporation 15 Fresh Bru Dr Newnan, GA 30263	Melissa Guy Tele: 770-487-3258
26-Mar-24	International Waste Services 3379 Peachtree Rd, Ne, Ste 555 Atlanta, GA 30326	Alvin Williams Tele: 404-662-3799
28-Mar-24	Gosalia Concrete Constructors, Inc. 4607 N 56th Street Tampa, FL 33610	Miresh Shukla Tele: 813-443-0984
2-Apr-24	Summers Concrete Contracting, Inc. 5538 Coppage Road Hahira, GA 31632	Bradley L. Mullis Tele: (229) 794-1023
2-Apr-24	Blount Construction 1730 Sands Pl, Marietta, GA 30067	Brad Tanner Tele: 678.492.0730

BID FORM

(Failure to furnish all requested data will be cause for considering Bidder non-responsive and may render this Bid invalid on that basis.)

BID FOR: **Atlanta Regional Airport – Falcon Field**
Bid Number: T008663
Terminal Apron Expansion

SUBMITTED TO: Hope Macaluso
Airport Terminal Building
7 Falcon Drive
Peachtree City, GA 30269

SUBMITTED BY: _____
Bidder's Name

_____
Address

_____
City, State and Zip Code

_____
Telephone and Fax Numbers

1. The undersigned, hereinafter called Bidder, in compliance with the "Notice to Bidders," accepting all of the terms and conditions of the "Instructions to Bidders," including without limitation those dealing with the disposition of Bid Security; proposes and agrees, if awarded the Contract, to enter into an Agreement with the Owner in the form of Agreement included in the Contract Documents, to furnish all materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary to complete the work to be performed under this Contract within the Contract Time indicated in this Bid, in full and complete accordance with the shown, noted, described and reasonably intended requirements of the Contract Documents, to the full and entire satisfaction of the Owner, for the amounts contained in the Bid Schedules.

2. This Bid for the work will remain open for One Hundred Twenty (120) days after the day of Bid opening. If awarded a contract, Bidder will sign the Agreement and submit the Contract Security and other documents required by the Contract Documents within 10 days after the date indicated in Owner's Notice of Award.

3. In submitting this Bid, Bidder represents that:

(a) Bidder has become thoroughly familiar with the terms and conditions of the proposed Contract Documents accepting the same as sufficient to indicate and convey understanding of all the conditions and requirements under the Contract which will be executed for the Work.

(b) Bidder has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as Bidder deems necessary.

(c) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.

(d) No member of the Board of Commissioners or other officers or employees of said Owner is interested directly or indirectly in the Bid or in any portion of the Bid nor in the Contract or any part of the Contract which may be awarded the undersigned on the basis of such Bid.

(e) This bid is based upon prevailing wages in **Peachtree City/Fayette County, Georgia** and in no case are wages less than those determined by the Secretary of Labor, a schedule of which is contained in the Specifications.

(f) It is a condition of this Bid and any subsequent contract entered into pursuant to this Bid, and it shall be made a condition of each subcontract entered into pursuant to the prime contract that the Contractor and any Subcontractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsatisfactory, hazardous, or dangerous to his health or safety, as determined under Construction Safety and Health Standards, Title 29, CFR, Part 1518 36FR7340, promulgated by the U.S. Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act, 82, Statt. 96; that it is a further condition of this Bid that he shall be solely responsible for the enforcement of such Construction and Health Standards, and that he definitely understands that the Owner and his authorized representatives will not assume any liability resulting from his failure to police and enforce all such standards.

(g) The description under each bid item, being briefly stated, implies, although it does not mention, all incidentals and that the prices stated are intended to cover all such work, materials and incidentals as constitute Bidder's obligations as described in the Specifications, and any details not specifically mentioned, but evidently included in the Contract shall be compensated for in the item which most logically includes it.

4. Contract Time: Bidder agrees that:

(a) The time allowed for Substantial Completion is:

Base Bid: ***Ninety (90) consecutive calendar days*** from the date of Notice-to-Proceed.

Alternate Bid: ***Seventy Five (75) consecutive calendar days*** from the date of Notice-to-Proceed.

(b) He will commence work with an adequate force and equipment at the time stated in the Notice to Proceed and complete all work in the number of days stipulated from the date stated in said notice.

(c) The quantities of work listed in the Bid Schedule are approximate and are assumed solely for comparison of Bids. Compensation will be based upon the unit price bid and actual quantities of work performed in accordance with the Contract Documents.

5. Bid Schedules: See attached Page B-4.1 through B-4.17.

(a) Bids shall include all sales tax and other applicable taxes and fees.

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BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount

BID SCHEDULE SUMMARY

TOTAL - BASE BID = $ _____

TOTAL - ALTERNATE BID = $ _____

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
1	C-105	MOBILIZATION	1	L. SUM	$	$
		_____ Dollars _____ Cents				
2	C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	L. SUM	$	$
		_____ Dollars _____ Cents				
3	P-101-1	REMOVE FENCE	560	LIN. FT.	$	$
		_____ Dollars _____ Cents				
4	P-101-2	REMOVE TAXIWAY EDGE LIGHT, INCLUDING BASE AND TRANSFORMER	2	EACH	$	$
		_____ Dollars _____ Cents				
5	P-101-3	REMOVE EXISTING PIPE (ALL SIZES)	125	LIN. FT.	$	$
		_____ Dollars _____ Cents				
6	P-101-4	ABANDON PIPE IN PLACE, FLOWABLE FILL	485	LIN. FT.	$	$
		_____ Dollars _____ Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
7	P-101-5	REMOVE DRAINAGE STRUCTURE	2	EACH	$	$
		Dollars Cents				
8	P-101-6	REMOVE SANITARY SEWER MANHOLE	1	EACH	$	$
		Dollars Cents				
9	P-101-7	REMOVE TOP AND FILL DRAINAGE STRUCTURE	2	EACH	$	$
		Dollars Cents				
10	P-101-8	REMOVE EXPOSED CABLE	455	LIN. FT.	$	$
		Dollars Cents				
11	P-101-9	RELOCATE EXISTING CONDUIT 2 FT BELOW GRADE	625	LIN. FT.	$	$
		Dollars Cents				
12	P-101-11	REMOVE CONCRETE DITCH	47	SQ. YD.	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
13	P-101-12	REMOVE MISCELLANEOUS CONCRETE AND DEBRIS	1	L. SUM	$	$
		Dollars Cents				
14	P-152-1	EMBANKMENT IN-PLACE	1,200	CU. YD.	$	$
		Dollars Cents				
15	P-152-2	SCARIFIED SUBGRADE PREPARATION (12 INCH)	13,080	SQ. YD.	$	$
		Dollars Cents				
16	P-209-1	CRUSHED AGGREGATE BASE COURSE	2,180	CU. YD.	$	$
		Dollars Cents				
17	P-620-1	PERMANENT PAVEMENT MARKING, YELLOW (TYPE III), WITH REFLECTIVE MEDIA (TYPE III BEADS) INCLUDE MICROBICIDE	645	SQ. FT	$	$
		Dollars Cents				
18	P-620-2	PAVEMENT MARKING, BLACK (TYPE III) INCLUDE MICROBICIDE	850	SQ. FT	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
19	D-701-1	STORM SEWER, CLASS III RCP, 18 INCH DIAMETER	15	LIN. FT.	$	$
		Dollars Cents				
20	D-701-2	STORM SEWER, CLASS III RCP, 30 INCH DIAMETER	404	LIN. FT.	$	$
		Dollars Cents				
21	D-751-1	MANHOLE	1	EACH	$	$
		Dollars Cents				
22	D-751-2	OUTLET CONTROL STRUCTURE	2	EACH	$	$
		Dollars Cents				
23	D-751-3	AIRCRAFT RATED MANHOLE	1	EACH	$	$
		Dollars Cents				
24	D-752-1	CONCRETE HEADWALL - 18 INCH	1	EACH	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
25	D-752-2	CONCRETE HEADWALL - 30 INCH	1	EACH	$	$
		Dollars Cents				
26	D-754-1	CONCRETE V-DITCH	40	LIN. FT.	$	$
		Dollars Cents				
27	GDOT 439-1	NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, CLASS HES, 10 IN THICK	12,220	SQ. YD.	$	$
		Dollars Cents				
28	GDOT 439-2	REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, CLASS HES, 10 IN THICK	860	SQ. YD.	$	$
		Dollars Cents				
29	GDOT 461-1	SEALING JOINTS AND CRACKS, TYPE C	19,640	LIN. FT.	$	$
		Dollars Cents				
30	GDOT-163-1	CONSTRUCT, MAINTAIN, AND REMOVE CONSTRUCTION EXIT	1	EACH	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
31	GDOT-163-2	CONSTRUCT, MAINTAIN, AND REMOVE TEMPORARY SEDIMENT TRAP	1	EACH	$	$
		Dollars Cents				
32	GDOT-163-3	CONSTRUCT, MAINTAIN, AND REMOVE INLET SEDIMENT TRAP	4	EACH	$	$
		Dollars Cents				
33	GDOT-163-4	CONSTRUCT, MAINTAIN, AND REMOVE EROSION CONTROL BLANKET/MATTING	16,400	SQ. YD.	$	$
		Dollars Cents				
34	GDOT-163-5	CONSTRUCT, MAINTAIN, AND REMOVE DIVERSION CHANNEL	400	LIN. FT.	$	$
		Dollars Cents				
35	GDOT-163-6	INSTALL AND MAINTAIN PERFORATED HALF-ROUND PIPE WITH STONE FILTER	1	EACH	$	$
		Dollars Cents				
36	GDOT-163-7	PERMEABLE SOIL FOR DRY ENHANCED SWALES	215	CU. YD.	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
37	GDOT-167-1	WATER QUALITY INSPECTIONS	2	MONTH	$	$
		Dollars Cents				
38	GDOT-167-2	WATER QUALITY MONITORING AND SAMPLING	2	EACH	$	$
		Dollars Cents				
39	GDOT-171-1	INSTALL AND MAINTAIN TEMPORARY SILT FENCE, TYPE C	620	LIN. FT.	$	$
		Dollars Cents				
40	GDOT-603-1	STONE DUMPED RIP RAP, TYPE 3, 16 INCH DEPTH	5	SQ. YD.	$	$
		Dollars Cents				
41	T-901-1	TEMPORARY SEEDING	2	ACRE	$	$
		Dollars Cents				
42	T-901-2	PERMANENT SEEDING	2	ACRE	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
BASE BID						
43	T-904-1	SODDING	2,500	SQ. YD.	$	$
		Dollars				
		Cents				
44	T-908-1	MULCHING	10,400	SQ. YD.	$	$
		Dollars				
		Cents				
		TOTAL - BASE BID =				$

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
1	C-105	MOBILIZATION	1	L. SUM	$	$
		_____ Dollars _____ Cents				
2	C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	1	L. SUM	$	$
		_____ Dollars _____ Cents				
3	P-101-1	REMOVE FENCE	560	LIN. FT.	$	$
		_____ Dollars _____ Cents				
4	P-101-2	REMOVE TAXIWAY EDGE LIGHT, INCLUDING BASE AND TRANSFORMER	2	EACH	$	$
		_____ Dollars _____ Cents				
5	P-101-3	REMOVE EXISTING PIPE (ALL SIZES)	125	LIN. FT.	$	$
		_____ Dollars _____ Cents				
6	P-101-4	ABANDON PIPE IN PLACE, FLOWABLE FILL	485	LIN. FT.	$	$
		_____ Dollars _____ Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
7	P-101-5	REMOVE DRAINAGE STRUCTURE _____ Dollars _____ Cents	2	EACH	$	$
8	P-101-6	REMOVE SANITARY SEWER MANHOLE _____ Dollars _____ Cents	1	EACH	$	$
9	P-101-7	REMOVE TOP AND FILL DRAINAGE STRUCTURE _____ Dollars _____ Cents	2	EACH	$	$
10	P-101-8	REMOVE EXPOSED CABLE _____ Dollars _____ Cents	455	LIN. FT.	$	$
11	P-101-9	RELOCATE EXISTING CONDUIT 2 FT BELOW GRADE _____ Dollars _____ Cents	625	LIN. FT.	$	$
12	P-101-10	MILL BITUMINOUS PAVEMENT, 2-INCH DEPTH, INCLUDING MILL TIES _____ Dollars _____ Cents	205	SQ. YD.	$	$

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
13	P-101-11	REMOVE CONCRETE DITCH _____ Dollars _____ Cents	47	SQ. YD.	$ _____	$ _____
14	P-101-12	REMOVE MISCELLANEOUS CONCRETE AND DEBRIS _____ Dollars _____ Cents	1	L. SUM	$ _____	$ _____
15	P-152-1	EMBANKMENT IN-PLACE _____ Dollars _____ Cents	1,200	CU. YD.	$ _____	$ _____
16	P-152-2	SCARIFIED SUBGRADE PREPARATION (12 INCH) _____ Dollars _____ Cents	13,070	SQ. YD.	$ _____	$ _____
17	P-209-1	CRUSHED AGGREGATE BASE COURSE _____ Dollars _____ Cents	1,155	CU. YD.	$ _____	$ _____
18	P-620-1	PERMANENT PAVEMENT MARKING, YELLOW (TYPE III), WITH REFLECTIVE MEDIA (TYPE III BEADS) INCLUDE MICROBICIDE _____ Dollars _____ Cents	645	SQ. FT	$ _____	$ _____

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
19	P-620-2	PAVEMENT MARKING, BLACK (TYPE III) INCLUDE MICROBICIDE	850	SQ. FT	$	$
		Dollars Cents				
20	D-701-1	STORM SEWER, CLASS III RCP, 18 INCH DIAMETER	15	LIN. FT.	$	$
		Dollars Cents				
21	D-701-2	STORM SEWER, CLASS III RCP, 30 INCH DIAMETER	404	LIN. FT.	$	$
		Dollars Cents				
22	D-751-1	MANHOLE	1	EACH	$	$
		Dollars Cents				
23	D-751-2	OUTLET CONTROL STRUCTURE	2	EACH	$	$
		Dollars Cents				
24	D-751-3	AIRCRAFT RATED MANHOLE	1	EACH	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
25	D-752-1	CONCRETE HEADWALL - 18 INCH	1	EACH	$	$
		Dollars Cents				
26	D-752-2	CONCRETE HEADWALL - 30 INCH	1	EACH	$	$
		Dollars Cents				
27	D-754-1	CONCRETE V-DITCH	40	LIN. FT.	$	$
		Dollars Cents				
28	GDOT 402-1	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	1,460	TON	$	$
		Dollars Cents				
29	GDOT 402-2	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	2,880	TON	$	$
		Dollars Cents				
30	GDOT 413-1	TACK COAT	1,310	GAL.	$	$
		Dollars Cents				

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
31	GDOT-163-1	CONSTRUCT, MAINTAIN, AND REMOVE CONSTRUCTION EXIT Dollars Cents	1	EACH	$	$
32	GDOT-163-2	CONSTRUCT, MAINTAIN, AND REMOVE TEMPORARY SEDIMENT TRAP Dollars Cents	1	EACH	$	$
33	GDOT-163-3	CONSTRUCT, MAINTAIN, AND REMOVE INLET SEDIMENT TRAP Dollars Cents	4	EACH	$	$
34	GDOT-163-4	CONSTRUCT, MAINTAIN, AND REMOVE EROSION CONTROL BLANKET/MATTING Dollars Cents	16,400	SQ. YD.	$	$
35	GDOT-163-5	CONSTRUCT, MAINTAIN, AND REMOVE DIVERSION CHANNEL Dollars Cents	400	LIN. FT.	$	$
36	GDOT-163-6	INSTALL AND MAINTAIN PERFORATED HALF-ROUND PIPE WITH STONE FILTER Dollars Cents	1	EACH	$	$

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
37	GDOT-163-7	PERMEABLE SOIL FOR DRY ENHANCED SWALES _____ Dollars _____ Cents	215	CU. YD.	$ _____	$ _____
38	GDOT-167-1	WATER QUALITY INSPECTIONS _____ Dollars _____ Cents	2	MONTH	$ _____	$ _____
39	GDOT-167-2	WATER QUALITY MONITORING AND SAMPLING _____ Dollars _____ Cents	2	EACH	$ _____	$ _____
40	GDOT-171-1	INSTALL AND MAINTAIN TEMPORARY SILT FENCE, TYPE C _____ Dollars _____ Cents	620	LIN. FT.	$ _____	$ _____
41	GDOT-603-1	STONE DUMPED RIP RAP, TYPE 3, 16 INCH DEPTH _____ Dollars _____ Cents	5	SQ. YD.	$ _____	$ _____
42	T-901-1	TEMPORARY SEEDING _____ Dollars _____ Cents	2	ACRE	$ _____	$ _____

BID SCHEDULE

ATLANTA REGIONAL AIRPORT - FALCON FIELD
TERMINAL APRON EXPANSION

GDOT PID T008663, FAYETTE COUNTY

Item No.	Spec. No.	Item Description / (Write Unit Price in Words)	Estimated Quantity	Unit	Unit Price	Amount
ALTERNATE BID						
43	T-901-2	PERMANENT SEEDING	2	ACRE	$	$
		_____ Dollars _____ Cents				
44	T-904-1	SODDING	2,500	SQ. YD.	$	$
		_____ Dollars _____ Cents				
45	T-908-1	MULCHING	10,400	SQ. YD.	$	$
		_____ Dollars _____ Cents				
		TOTAL - ALTERNATE BID =			$	

PRELIMINARY CONTRACTOR PROJECT SCHEDULE

All bidders are required to complete and submit with their bids the following Preliminary Contractor Project Schedule. This schedule will be used strictly as an anticipatory pre-construction scheduling and estimating tool. This preliminary schedule is non-binding and in no instance will negate the contract time specified in the bid and contract documents. Failure to complete this form or blatantly misrepresenting information on this form may be grounds for rejection of bid.

Estimated number of work hours per weekday: _____ hours

Estimated number of work hours per weekend: _____ hours

ANTICIPATED WORKDAYS HOURS					
WORK ITEM	**WEEKDAYS**	**HRS**	**WEEKEND**	**HRS**	**TOTAL DAYS**
Mobilization	days		days		days
Clearing / Grubbing	days		days		days
Stormwater Installation	days		days		days
Grading / Drainage	days		days		days
Paving	days		days		days
Grassing	days		days		days
Final Clean-Up / De-Mobilization	days		days		days
Base Bid: *90 Calendar Days >*			**SUM OF DAYS**		**_____days**
Alternate Bid: *75 Calendar Days >*					

6. Execution of Contract: Bidder agrees that:

   (a) In case of failure on his part to execute the said Contract and Bonds within 10 days after the date indicated in the "Notice of Award", the bid bond accompanying this

Bid, and the money payable thereon, shall be paid to the Owner as liquidated damages for such failure; otherwise, the Bid Bond accompanying this Bid shall be returned to the undersigned.

7. Bid Documentation: The following documents are attached to and made a part of this Bid:

(a) Completed Bid Form (pages B-1 to B-8).

(b) Bid Schedule (pages B-4.1 to B-4.17).

(c) Preliminary Contractor Project Schedule (page B-5).

(d) Required Bid Security in the form of a Bid Bond payable to the order of the Peachtree City Airport Authority (pages B-9 and B-10).

(e) Form of Non-Collusion Affidavit (page B-11).

(f) EEO Report Statement (page B-12).

(g) Certification of Non-Segregated Facilities (page B-13).

(h) Performance of Work by Subcontractors (page B-14).

(i) Certification Regarding Foreign Participation (pages B-15 to B-16).

(j) Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion (page B-17).

(k) Certification of Eligibility – Davis Bacon Act (page B-18).

(l) Buy American Certification (page B-19).

(m) Bidder Qualification Questionnaire (pages B-20 to B-23).

(n) Georgia's Sexual Harassment Prevention Policy (pages B-24 to B-25).

(o) Texting while Driving Order (page B-26).

(p) Tax Delinquency and Felony Convictions Certificate of Offeror (page B-27).

(q) Sealed Bid Label – Must be attached to cover of Sealed Bid (page B-28).

8. Name and business address (mailing and street) of Bidder to which all formal Notices shall be sent:

_____

_____

_____

9. The terms used in this Bid which are defined in the General Provisions of the Construction Contract included as a part of the Contract Documents have the meanings assigned to them in the General Provisions.

10. Bidder hereby acknowledges receipt of the following addenda:

Addendum No.	Dated
_____	_____
_____	_____
_____	_____

11. The Bidder shall state on the line below, if a corporation, the name of state in which incorporated and the date of said corporation.

_____

(signatures on next page)

Signed this _____ day of _____, 20__.

_____
Contractor

By: _____
(Signature of individual, partner or officer signing the Bid)

(SEAL)

_____
General Contractor's License Number

(Seal required if Bidder is a corporation.)

NOTE: If Contractor is a Corporation, Secretary should attest seal. Seal is required if Bidder is a Corporation.

If Contractor is a Partnership, all partners shall execute Bid (add spaces as required).

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____ _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto the **Peachtree City Airport Authority,** OWNER, in the penalty sum of _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed, this _____ day of _____, 20__.

The conditions of the above obligation is such that whereas the Principal has submitted to the Peachtree City Airport Authority certain BID, attached hereto and hereby made a part hereof to enter into a Contract in writing for the construction of the **Terminal Apron Expansion.**

NOW THEREFORE,

(a) If said Bid shall be rejected, or in the alternate,

(b) If said Bid shall be accepted and the Principal shall execute and deliver a Contract in the Form of Agreement attached hereto (properly completed in accordance with said Bid) and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that obligations of said Surety and its Bonds shall be in no way impaired or affected by any extension of the time within which the Owner may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____(L.S.)
Principal

_____
Surety

By:_____

(SEAL)

(1) Date of Bond must be same date as Bid.

(2) Bond must be signed or countersigned by Surety's proper Georgia Resident Agent. Date of Power-of-Attorney shall be same date as date of Bond.

(3) If a Partnership, all partners shall execute Bond.

FORM OF NON-COLLUSION AFFIDAVIT
(This Affidavit is Part of Bid)

STATE OF _____)
) SS.
COUNTY OF _____)

_____being first duly sworn, deposes and says that he is _____(Sole owner, partner, president, secretary, etc.) of the party making the foregoing BID that such BID is genuine and not collusive or sham; that said BIDDER has not colluded, conspired, connived, or agreed, directly or indirectly, with any BIDDER or person, to put in a sham BID, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the Bid Price of affiant or any other BIDDER, or to fix any overhead, profit or cost element of said Bid Price, or of that of any other BIDDER, or to secure any advantage against OWNER any person interested in the proposed Contract; and that all statements in said Proposal or Bid are true; and further, that such BIDDER has not, directly or indirectly submitted this BID, or the contents thereof, or divulged information or date relative thereto to any association or to any member or agent thereof.

_____
(Bidder)

Sworn to and subscribed before me this

_____ day of _____, 20___.

_____
Notary Public in and for

_____ County _____

My Commission expires _____, 20___.

(SEAL)

EQUAL OPPORTUNITY REPORT STATEMENT
AS REQUIRED BY 41 CFR 60-1.7(b)

(This Report is Part of the Bid)

The Bidder (Proposer) shall complete the following statement by checking the appropriate blanks. Failure to complete these blanks may be grounds for rejection of bid:

1. The Bidder (Proposer) has _____ has not _____ developed and has on file at each establishment affirmative action programs pursuant to 41 CFR 60-1.40 and 41 CFR 60-2.

2. The Bidder (Proposer) has _____ has not _____ participated in any previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Order 11246, as amended.

3. The Bidder (Proposer) has _____ has not _____ filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).

4. The Bidder (Proposer) does _____ does not _____ employ fifty (50) or more employees.

NAME OF BIDDER: _____

BY: _____

TITLE: _____

DATE: _____

CERTIFICATION OF NON-SEGREGATED FACILITIES
AS REQUIRED BY 41 CFR PART 60-1.8

This section applies to all construction contracts greater than $10,000:

The federally assisted construction Contractor certifies that he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction Contractor certifies that he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction Contractor agrees that a breach of this certification is a violation of the equal opportunity clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment area, transportation, and housing facilities provided for employees which are segregated by explicit directives or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally assisted construction Contractor agrees that (except where he has obtained identical certifications from proposed Subcontractors for specific time periods) he will obtain identical certifications from proposed Subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the equal opportunity clause and that he will retain such certifications in his files.

Certification - The information above is true and complete to the best of my knowledge and belief. (Please type)

_____
Name and Title of Signer

_____ _____
Signature Date

_____ _____
Company Address

Note: The penalty for making false statements in an offer are prescribed in 18 U.S.C. 1001.

PERFORMANCE OF WORK BY SUBCONTRACTORS

The BIDDER hereby states that he proposes, if awarded the Contract, to use the following subcontractors on this project: List below all proposed subcontractors and trade specialties. (List only one subcontractor for each item.) (If NONE, then state NONE.)

Terminal Apron Expansion

NAME OF SUBCONTRACTOR	ADDRESS (COUNTY, STATE)	TYPE OF WORK SUBCONTRACTED	SUBCONTRACT VALUE
			$
			$
			$
			$
			$
			$
			$
			$
			$

Estimated Total Cost of Items that BIDDER states will be performed by Subcontractor(s): $_____

CERTIFICATION REGARDING FOREIGN PARTICIPATION
AS REQUIRED BY 49 CFR PART 30

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

a. is not owned or controlled by one or more citizens or nationals of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

b. has not knowingly entered into any contract or subcontract for this project with a contractor that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on the said list for use on the project, the Federal Aviation Administration may direct, through the sponsor, cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. This contractor may relay upon the certification of a prospective subcontractor unless it has knowledge of the certification of erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that his certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide immediate written notice to the contractor, if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct, through the sponsor, cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United State of America and the making of a false, fictitious, fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

_____ _____

Signature of Contractor Title

CERTIFICATION REGARDING DEBARMENT, SUSPENSION INELIGIBILITY, AND VOLUNTARY EXCLUSION

AS REQUIRED BY 49 CFR PART 29

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offer/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation of this solicitation/proposal.

_____ _____

Signature of Contractor Title

CERTIFICATION OF ELIGIBILITY – DAVIS BACON ACT
AS REQUIRED BY 29 CFR PART 5

By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

Compliance with Davis Bacon Act, all rulings and interpretations of the Davis Bacon Act contained in 29 CFR Part 5 are herein incorporated in this Contract.

The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

_____ _____

Signature of Contractor Title

BUY AMERICAN CERTIFICATION - STEEL AND MANUFACTURED PRODUCTS FOR CONSTRUCTION CONTRACTS (JAN 1991) AS REQUIRED BY TITLE 49 U.S.C., CHAPTER 501

(a) The Contractor certifies that only domestic steel and manufactured products will be used by the Contractor, subcontractors, materialmen, and suppliers in the performance of this contract, as defined in (b) below.

(b) The following terms apply to this clause:

1. Steel and manufactured products. As used in this clause, steel and manufactured products include (1) those produced in the United States or (2) a manufactured product produced in the United States, if the costs of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States.

2. Components. As used in this clause, components means those articles, materials, and supplies incorporated directly into steel and manufactured products.

3. Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

_____ _____

Signature of Contractor Title

BIDDER QUALIFICATION QUESTIONNAIRE

Submitted by:_____
Name of Bidder

General Contractor's License #_____

( ) An Individual
( ) A Partnership
( ) A Corporation

Federal Identification #_____

Principal Office Address:_____

_____

_____

(1) How many years has your organization been in business as a contractor under your present name?

_____

(2) How many years experience in construction work has your organization had as a general contractor?

_____

As a Subcontractor?

_____

(3) List below the requested information concerning projects your organization has completed in the last five (5) years for the type of work required in this project. (Use additional sheets if necessary)

Project Title	Contract Amount	Required Completion Date	Actual Completion Date	Name/Address/Tel of Owner

Project Title	Contract Amount	Required Completion Date	Actual Completion Date	Name/Address/Tel of Owner

(4) Have you ever failed to complete any work awarded to you? If so, where and why?

(5) Has any officer or partner of your organization ever been an officer or partner of some other organization that failed to complete a construction contract? If so, state name of individual, name of other organization, and reason therefore.

(6) Has any officer or partner of your organization ever failed to complete a construction contract handled in his own name? If so, state name of individual, name of owner and reason therefor.

(7) Give below any information which would indicate the size and capacity of your organization, including number of employees, equipment owned by your organization, etc., which are available for utilization on this Contract.

(8) What is your bonding capacity?_____

_____

(9) What amount of your bonding capacity has been used as of the date of this bid?

_____

_____

_____

(10) How many applications for performance and payment bonds have you made in the last three (3) years?

_____

_____

(11) How many of these applications were not approved?_____

_____

_____

(12) Have any claims been filed against your surety bond company in the last five (5) years? If so, describe the nature of the claims and give the names of the surety companies, dates of each claim, identifying numbers of each claim, amounts of each claim, and the status of each claim. (Use additional sheets if necessary.)

_____

_____

_____

_____

(13) Has your company been in disputes or litigation in the last five (5) years over construction projects which are completed or still pending for completion? If so, describe the nature of the disputes or litigation and state the Owner's Name, Address, Telephone, and amount of disputes or litigation. (Use additional sheets if necessary.)

_____

****

I, the undersigned, do hereby declare that the foregoing statements are true and correct, all as of the date hereinafter set forth, and that those examining this document have my permission to contact any or all of those parties listed in this questionnaire. Incorrect or misleading statements in this questionnaire shall be grounds for a determination of nonresponsibility with respect to such contractor.

****

(SIGNATURE OF BIDDER)

(TYPE OR PRINT COMPANY NAME)

(TYPE OR PRINT ADDRESS)

CERTIFICATION OF COMPLIANCE WITH THE STATE OF GEORGIA'S SEXUAL HARASSMENT PREVENTION POLICY

The State of Georgia promotes respect and dignity and does not tolerate sexual harassment in the workplace. The State is committed to providing a workplace and environment free from sexual harassment for its employees and for all persons who interact with state government. All State of Georgia employees are expected and required to interact with all persons including other employees, SPONSOR, contractors, and customers in a professional manner that contributes to a respectful work environment free from sexual harassment. Furthermore, the State of Georgia maintains an expectation that SPONSOR, its contractors and their employees and subcontractors will interact with entities of the State of Georgia, their customers, and other contractors of the State in a professional manner that contributes to a respectful work environment free from sexual harassment.

Pursuant to the State of Georgia's Statewide Sexual Harassment Prevention Policy (the "Policy"), SPONSOR and all contractors who are regularly on State premises or who regularly interact with State personnel must complete sexual harassment prevention training on an annual basis.

SPONSOR, including its employees and subcontractors, who have violated the Policy, including but not limited to engaging in sexual harassment and/or retaliation may be subject to appropriate corrective action. Such action may include, but is not limited to, notification to the employer, removal from State premises, restricted access to State premises and/or personnel, termination of contract, and/or other corrective action(s) deemed necessary by the State.

(i) If SPONSOR is an individual who is regularly on State premises or who will regularly interact with State personnel, SPONSOR certifies that:

(a) SPONSOR has received, reviewed, and agreed to comply with the State of Georgia's Statewide Sexual Harassment Prevention Policy located at http://doas.ga.gov/human-resources-administration/board-rules-policy-and-compliance/jointly-issued-statewide-policies/sexual-harassment-prevention-policy;

(b) SPONSOR has completed sexual harassment prevention training in the last year; or will complete the Georgia Department of Administrative Services' sexual harassment prevention training located at http://doas.ga.gov/human-resources-administration/sexual-harassment-prevention/hr- professionals/employee-training (scroll down to section for entities without a LMS section) or this direct link https://www.youtube.com/embed/NjVt0DDnc2s?rel=0

(c) Upon request by the State, SPONSOR will provide documentation substantiating the completion of sexual harassment training.

(ii) If SPONSOR has employees and subcontractors that are regularly on State premises or who will regularly interact with State personnel, SPONSOR certifies that:

(a) SPONSOR will ensure that such employees and subcontractors have received, reviewed, and agreed to comply with the State of Georgia's Statewide Sexual Harassment Prevention Policy located at http://doas.ga.gov/human-resources-administration/board-rules-policy-and-compliance/jointly-issued-statewide-policies/sexual-harassment-prevention-policy;

(b) SPONSOR has provided sexual harassment prevention training in the last year to such employees and subcontractors and will continue to do so on an annual basis; or SPONSOR will ensure that such employees and subcontractors complete the Georgia Department of Administrative Services' sexual harassment prevention training located at http://doas.ga.gov/human-resources-administration/sexual-harassment-prevention/hr-professionals/employee-training (scroll down to section for entities without a LMS section) or this direct link https://www.youtube.com/embed/NjVt0DDnc2s?rel=0 prior to accessing State premises and prior to interacting with State employees; and on an annual basis thereafter; and

(c) Upon request of the State of the Georgia Department of Transportation, SPONSOR will provide documentation substantiating such employees and subcontractors' acknowledgment of the State of Georgia's Statewide Sexual Harassment Prevention Policy and annual completion of sexual harassment prevention training.

Signature: _____

Name: _____

Position: _____

Company:_____

TEXTING WHEN DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding $3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

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CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (✔) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

1) The applicant represents that it is ( ) is not ( ) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

2) The applicant represents that it is ( ) is not ( ) is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions

Felony conviction: Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

SEALED BID LABEL

SEALED BID ENCLOSED

DELIVER TO:
Attn. Hope Macaluso
Atlanta Regional Airport – Falcon Field
Airport Terminal Building
7 Falcon Drive
Peachtree City, GA 30269

_____

SEALED BID # T008663 **DATE: April 15, 2024**

BIDS MUST BE RECEIVED BEFORE 2:00 PM

DESCRIPTION: Terminal Apron Expansion

VENDOR: _____

LABEL *MUST* BE ATTACHED TO OUTSIDE OF BID PACKAGE

CONTRACT FORM

THIS AGREEMENT is dated as of the ___day of_____ in the year 20__ by and between **Peachtree City Airport Authority** (hereinafter called OWNER) and _____, **a Corporation** (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The scope of this project is for the construction of the Terminal Apron Expansion at Atlanta Regional Airport – Falcon Field. General activities include grading, drainage, utility adjustments, concrete paving, erosion control measures, and pavement markings.

Article 2. ENGINEER.

The Project has been designed by:

Michael Baker International, Inc.
420 Technology Parkway, Suite 150
Peachtree Corners, GA 30092
(770) 263-9118

who is hereinafter called ENGINEER and who is to act as OWNER'S representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

7Article 3. CONTRACT TIME.

3.1 The Work for the project's **Base Bid** will be completed and ready for final payment in accordance with the General Provisions within ***Ninety (90) consecutive calendar days*** from the date of Notice-to-Proceed with the option of an **alternate bid** including ***Seventy Five (75) consecutive calendar days.***

3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a

penalty) that CONTRACTOR shall pay OWNER the amount specified in General Provisions Section SC-80-8. It is mutually agreed by and between the Parties hereto that time shall be an essential part to this Contract and that in case of the failure on the part of the Contractor to complete this Contract within the time specified and agreed upon, the County will be damaged thereby; and the amount of said damages, inclusive of expenses for inspection, superintendence and necessary traveling expenses, being difficult if not impossible of definite ascertainment and proof, it is hereby agreed that the amount of such damages shall be the appropriate sum set forth below in the Schedule of Liquidated damages as liquidated damages for every calendar day's delay in finishing the work in excess of the number of calendar days prescribed; and the Contractor hereby agrees that said sum shall be deducted from monies due the Contractor under the Contract or if no money is due the Contractor, the Contractor hereby agrees to pay to the County as liquidated damages, and not by way of penalty, such total sum as shall be due for such delay, computed aforesaid.

3.3 CONTRACTOR understands and hereby expressly agrees that in addition to or in lieu of liquidated damages specified in Article 3.2 above, to pay the OWNER the actual costs to OWNER for any inspector or inspectors necessarily employed by OWNER on the Work and the actual costs to OWNER for the ENGINEER's observation of construction and project representative services including all travel and subsistence expenses after the date specified for completion until the Work is completed and ready for final payment.

3.4 Further, the CONTRACTOR agrees that the sums to be paid the OWNER in accordance with Articles 3.1 and 3.2 above may be deducted from the sum due the CONTRACTOR for work performed as provided in the General Conditions.

Article 4. CONTRACT PRICE.

4.1 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents in current funds as follows:
(here insert a lump sum, unit prices or both, if necessary, attach exhibits and list them in Article 7.)

Article 5. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1 Progress Payments. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, on or about the 15th day of each month during construction as provided below. All progress payments will be on the basis of the progress of the Work based on the number of units completed as determined by ENGINEER.

5.1.1 As long as the gross value of completed work is less than 50% of the total contract amount, or if the CONTRACTOR is not maintaining his construction schedule to the

satisfaction of the ENGINEER, the OWNER shall retain 10% of the gross value of the completed work as indicated by the current estimate certified by the ENGINEER for payment.

After the gross value of completed work becomes equal to 50% of the total contract amount, the CONTRACTOR may request that the retainage be reduced to 5%. This reduction will not be considered if the CONTRACTOR is not maintaining the construction schedule or progressing with the work to the satisfaction of the ENGINEER. If the CONTRACTOR subsequently falls behind schedule or fails to progress with the work to the satisfaction of the ENGINEER, the retainage may again be increased to 10%. Should there be an interim period between final acceptance and final payment, the amount retained may be further reduced at the discretion and recommendation of the ENGINEER.

The Contractor shall submit an Application for Payment on the 30th of each month. The Contractor will provide with the Payment Application, a line-item breakdown of all previous costs to date plus the amount being applied for. The Owner will make payments to the Contractor within a reasonable period of time after receipt of the Payment Application equal to the value of the Completed Work and Stored Work as of the corresponding Monthly Billing Date, to the extent approved by Owner and Architect, and after deducting (a) all previous payments, (b) current retainage (to a maximum of 10 percent of each progress payment; provided, however, that, when 50 percent of the contract value including change orders and other additions to the Contract value provided for by the Contract Documents is due and the manner of completion of the Contract Work and its progress are reasonably satisfactory to the Owner's authorized Contract Representative, the Owner shall withhold no more retainage. If, after discontinuing the retention, the Owner's authorized Contract Representative determines that the Work is unsatisfactory or has fallen behind schedule, retention may be resumed at the previous level.), (c) all charges or back charges for services, materials, equipment, or other items furnished or otherwise chargeable to Contractor, and (d) withheld payments if the Owner determines there is unsatisfactory job progress, defective work, disputed work, actual or potential third party claims, failure to make timely payments for labor and materials, damage to other entities connected with the project or reasonable evidence that the contract cannot be completed for the balance of the contract price. Payments that are not unreasonably delayed will bear no interest penalties. The terms of this paragraph and the entire Contract Documents are intended to supersede all provisions of the Prompt Pay Act, O.C.G.A. § 13-11-1 through 13-11-11

5.2 Final Payment. Upon final completion and acceptance of the Work, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER.

Article 6. CONTRACTOR'S REPRESENTATIONS.

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following

representations:

6.1 CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

6.2 CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies which pertain to the subsurface or physical conditions at or contiguous to the site or otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, explorations, tests, reports studies or similar information or data are or will be required by CONTRACTOR for such purposes.

6.3 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents.

6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

6.5 CONTRACTOR has given ENGINEER written notice of all conflicts, error or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

Article 7. CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

7.1 This Agreement (pages C-1 to C-6 , inclusive).

7.2 Performance, Payment and other Bonds, identified as Exhibits _____ and consisting of ___ pages.

7.3 General and Supplementary Conditions.

7.4 Technical Specifications as listed in the table of contents of the Project Manual.

7.5 Drawings, consisting of sheets numbered C-1 through GS-1, inclusive with each sheet bearing the following general title:

Terminal Apron Expansion

7.6 Addenda numbers ___ to ___, inclusive.

7.7 CONTRACTOR's Bid (pages ____ to ____, inclusive) marked Exhibit ____.

7.8 Documentation submitted by CONTRACTOR prior to Notice Award (pages ____ to ____, inclusive).

7.9 The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to the General Conditions.

There are no Contract Documents other than those listed in this Article 7. The Contract Documents may only be amended, modified or supplemented as provided in the General Conditions.

Article 8. MISCELLANEOUS.

8.1 Terms used in the Agreement that are defined in the General Conditions will have the meanings indicated in the General Conditions.

8.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically, but without limitation, monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

8.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, the OWNER and CONTRACTOR have executed this Agreement and all portions of the Contract Documents in triplicate, each of which shall be deemed an original. The OWNER, CONTRACTOR and ENGINEER shall receive an original Agreement for their records.

ATTEST:

OWNER:

PEACHTREE CITY AIRPORT AUTHORITY

_____
Secretary or Notary Public

By: _____
Authorized Official

(SEAL)

ATTEST:

CONTRACTOR:

_____
Secretary or Notary Public

By:_____
Authorized Official

_____
Title

APPROVED AS TO FORM

_____
Peachtree City Attorney's Office

SECTION 80

EXECUTION AND PROGRESS

80-01 SUBLETTING OF CONTRACT. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Resident Project Representative (RPR).

The Contractor shall perform, with his organization, an amount of work equal to at least 25 percent of the total contract cost.

Should the Contractor elect to assign their contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

The Contractor shall provide copies of all subcontracts to the RPR 14 days prior to being utilized on the project. As a minimum, the information shall include the following:

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications.
- Minority/ non-minority status.

80-02 NOTICE TO PROCEED - NTP. The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within 10 days of the NTP date. The Contractor shall notify the RPR at least 24 hours in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

80-03 EXECUTION AND PROGRESS. Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance at least 10 days prior to the start of work. The Contractor's progress schedule, once accepted by the RPR, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The RPR will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient

materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the RPR's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the RPR at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

The project schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), or other format, or as otherwise specified. It shall include information on the sequence of work activities, milestone dates, and activity duration. The schedule shall show all work items identified in the project proposal for each work area and shall include the project start date and end date.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

80-04 LIMITATION OF OPERATIONS. The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the airport.

When the work requires the Contractor to conduct their operations within an AOA of the airport, the work shall be coordinated with airport operations (through the RPR) at least 48 hours prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the RPR and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, paragraph *70-08, Construction Safety and Phasing Plan (CSPP).*

When the contract work requires the Contractor to work within an AOA of the airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the Construction Safety Phasing Plan (CSPP) cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently.

The Contractor shall be required to conform to safety standards contained in AC 150/5370-2G, Operational Safety on Airports During Construction and the approved CSPP.

80-04.1 OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION. All Contractors' operations shall be conducted in accordance with the approved project Construction Safety and Phasing Plan (CSPP) and the Safety Plan Compliance Document (SPCD) and the provisions set forth within the current version of AC 150/5370-2G, Operational Safety on Airports During Construction. The CSPP included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a SPCD that details how it proposes to comply with the requirements presented within the CSPP.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the CSPP and SPCD and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved CSPP and SPCD unless approved in writing by the Owner. The necessary coordination actions to review Contractor proposed modifications to an approved CSPP or approved SPCD can require a significant amount of time.

80-05 CHARACTER OF WORKERS, METHODS, AND EQUIPMENT. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.

Should the Contractor fail to remove such person or persons or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall not cause injury to previously completed work, adjacent property, or existing airport facilities due to its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the RPR. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the RPR to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the RPR determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality or take such other corrective action as the RPR may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this paragraph.

80-06 TEMPORARY SUSPENSION OF THE WORK. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract. In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

If it becomes necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME. The number of calendar or working days allowed for completion of the work shall be stated in the proposal and contract and shall be known as the Contract Time.

If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

Contract time based on calendar days. Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, and non-workdays. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

80-08 FAILURE TO COMPLETE ON TIME For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, Determination and Extension of Contract Time) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

Schedule	Liquidated Damages Cost	Allowed Construction Time
Base Bid	$1,000 per calendar day	***Ninety (90) Days***
Alternate Bid	$1,000 per calendar day	***Seventy Five (75) Days***

The maximum construction time allowed for all schedule options total ***Ninety (90)*** calendar days for base bid with the option of ***Seventy Five (75) days*** for an alternate bid. Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a wavier on the part of the Owner of any of its rights under the contract.

80-09 DEFAULT AND TERMINATION OF CONTRACT. The Contractor shall be considered in default of their contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or

b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or

c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or

d. Discontinues the execution of the work, or

e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or

f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or

g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or

h. Makes an assignment for the benefit of creditors, or

i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Owner consider the Contractor in default of the contract for any reason above, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or

all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the RPR will be required for the completion of said contract in an acceptable manner.
All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the

contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 TERMINATION FOR NATIONAL EMERGENCIES. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the RPR.
Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 WORK AREA, STORAGE AREA AND SEQUENCE OF OPERATIONS. The Contractor shall obtain approval from the RPR prior to beginning any work in all areas of the airport. No operating runway, taxiway, or air operations area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate work in accordance with the approved CSPP and SPCD.

END OF SECTION 80

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01 SUBMITTALS BY CONTRACTOR:

A. Construction Progress Schedule.

B. Certifications as specified in the various sections.

C. Shop Drawings and Project Data as specified in the various sections.

D. Miscellaneous:

1. Equipment Manuals.
2. Weekly Payroll.
3. EEO Reports.
4. Safety Plan.
5. Security Plan.
6. Warranties and Bonds.
7. QC Plan.
8. Other(s) as required.

1.02 PROGRESS SCHEDULE:

A. Bar-Chart Schedule: Submit a CPM type bar-chart schedule 7 calendar days prior to the preconstruction conference date established for the work. On the schedule, indicate a time bar for each major category or unit of work to be performed at the site, properly sequenced and coordinated with other elements of work. Show completion of the work sufficiently in advance of the date established for substantial completion of work.

B. Phasing: Arrange schedule with notations to show how sequence of work is affected by requirements for phased completion, limitations of continued utilization, non-interruptible services, use prior to substantial completion, site restrictions, apron and taxiway closures, provisions for future work, seasonal

variations, environmental control, and similar provisions of total project. Phase I schedule is required at the preconstruction meeting. Refer to other sections of Division 1 and other contract documents for requirements.

C. Distribution: Following the initial submittal to and response by the Engineer, print and distribute progress schedules to the Engineer (3 copies), Owner, separate contractors, principal subcontractors and suppliers or fabricators, and others with a need-to-know schedule-compliance requirement. Post copies in the project meeting room and temporary field office. When revisions are made, distribute updated issues to the same entities and post updated issues in the same locations. Delete entities from distribution when they have completed their assigned work and are no longer involved in the performance of scheduled work.

D. Update: Contractor shall update the schedule monthly for duration of construction.

1.03 SHOP DRAWINGS AND PRODUCT DATA:

A. Scope: Submit certifications and product data for all products to be incorporated in the work.

B. Shop Drawings Will:

1. Be original drawings, prepared by the Contractor, subcontractor, supplier, or distributor, which illustrate some portion of the work; showing fabrication, layout, setting or erection details.

2. Be prepared by a qualified detailer.

3. Identify details by reference to sheet and detail numbers shown on Contract Drawings.

4. Be sheet size 22 in. X 34 in.

C. Product Data Will:

1. Include manufacturer's standard schematic drawings. The Contractor will:

a. Modify drawings to delete information which is not applicable to project.

b. Supplement standard information to provide additional information applicable to project.

2. Include manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data. The Contractor will:

   a. Clearly mark each document to identify pertinent materials or products.

   b. Show dimensions and clearances required.

   c. Show performance characteristics and capacities.

D. The Contractor Will:

1. Be responsible for all submittals.

2. Review shop drawings and product data prior to submission.

3. Verify:

   a. Field measurements.

   b. Field construction criteria.

4. Coordinate each submittal with the requirements of the work and of the Contract Documents.

5. Notify the Engineer of deviations in submittals from requirements of the Contract Documents.

6. Begin no work which requires submittals until the return of submittals with the Engineer's stamp and initials or signature indicating review.

7. After the Engineer's review, distribute copies.

E. Contractor's Responsibilities:

1. Contractor's responsibility for errors and omissions in submittals is not relieved by the Engineer's review of submittals.

2. Contractor's responsibility for deviations in submittals from requirements of the Contract Documents is not relieved by the Engineer's review of submittal, unless the Engineer gives written

   acceptance of specific deviations.

F. Submission Requirements Include:

1. The product data and shop drawings shall be submitted in sufficient time to allow discussion and correction prior to beginning the work. Work shall not be performed, nor materials ordered prior to the review of the drawings except at the Contractor's risk.

2. Submit documents of all product data and shop drawings after which one copy will be returned for correction or marked reviewed as noted. Any drawings returned for correction must be resubmitted with same number of copies as required above.

3. All submittals must be accompanied by a transmittal letter, in duplicate, containing:

    a. Date.

    b. Project title and number.

    c. Contractor's name and address.

    d. The number of each shop drawing and product data submitted.

    e. Notification of deviations from Contract Documents.

    f. Other pertinent data.

4. Submittals shall include the following, as applicable:

    a. Date and revision dates.

    b. Project title and number.

    c. The names of:

        (1) Engineer.

        (2) Contractor.

        (3) Subcontractor.

        (4) Supplier.

        (5) Manufacturer.

        (6) Separate detailer when pertinent.

d. Identification of product or material.

e. Relation to adjacent structure or materials.

f. Field dimensions, clearly identified as such.

g. Specification item or section number.

h. Applicable standards, such as ASTM number or Federal Specification.

i. A blank space for the Engineer's stamp.

j. Identification of deviations from the Contract Documents.

k. Contractor's stamp, initialed or signed, certifying Contractor's review of submittal, verification of field measurements, and compliance with Contract Documents.

G. Resubmission Requirements Include:

1. Revision of initial drawings as required and resubmittal as specified for initial submittal.

2. An indication on the drawings of any changes which have been made, other than those requested by the Engineer.

3. On product data resubmittals, include new data as required for initial submittal.

H. Distribution to Others:

After review and approval, the Contractor will distribute shop drawings and product data which carry the Engineer's stamp to others as may be required.

I. Shop Drawings and Product Data:

1. Submit notarized certifications cosigned by manufacturer/supplier and Contractor for:

a. Pavement sub-base, base, surfacing and related materials.

b. Grass seed.

c. Pavement marking paint.

d. All other products as required by the drawings, specifications, and Engineer.

2. Submit product data for:

a. Concrete and asphalt mix designs.

b. All other products as required by the drawings, specifications, and Engineer.

1.04 MISCELLANEOUS:

A. Weekly Payrolls:

1. In accordance with Section 90 of the General Provisions submit certified weekly payrolls for prime contractor and all subcontractors working at project site.

2. Submit payrolls no later than 7 calendar days after pay period. Payrolls will be considered current if received within 10 calendar days after last workday of payroll work week. A work week is the seven-day period between midnight Sunday and midnight the following Sunday.

3. The Contractor is responsible for submission of payrolls by his subcontractors.

4. Submit a typed summary sheet with each payroll submission listing by week when contractor and each subcontractor worked at site.

5. A payroll submission is only required for weeks when Contractor or subcontractor is actually working at the site.

C. EEO Reports:

1. Contractor shall submit Monthly Employment Utilization Report and Annual EEO-1 Report to the appropriate Federal Labor Area Office in accordance with Section 90 of the General Provisions. Submit copy of submittal to Owner for his records.

2. Prime Contractor shall ensure that all his first-tier subcontractors submit these reports and shall submit a sworn statement to Owner

monthly certifying that all subcontractor reports have been submitted as required.

D. Security Plan:

At preconstruction conference submit for approval, proposed security plan describing specifically how security will be maintained at each access point and work area by Contractor's forces.

E. Warranties and Bonds:

Submit as specified in Section 01740.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

END OF SECTION 01300

SECTION 439

PORTLAND CEMENTCONCRETE PAVEMENT (SPECIAL)

439.1 GENERAL DESCRIPTION

A. This work includes constructing pavement composed of Portland cement concrete, with or without reinforcement as specified, on a prepared subgrade or subbase course.

Follow the requirements of these Specifications and conform with the lines, grades, thickness, and typical cross-sections shown on the Plans or established by the Engineer

439.1.1 DEFINITIONS

A. General Provisions 101 through 150.

439.1.2 RELATED REFERENCES

A. Standard Specifications

1. Section 152—Field Laboratory Building

2. Section 430—Portland Cement Concrete Pavement

3. Section 431—Grind Concrete Pavement

4. Section 461—Sealing Roadway and Bridge Joints and Cracks

5. Section 500—Concrete Structures

6. Section 800—Coarse Aggregate

7. Section 801—Fine Aggregate

8. Section 830—Portland Cement

9. Section 831—Admixtures

10. Section 832—Curing Agents

11. Section 833—Joint Fillers and Sealers

12. Section 833—Joint Fillers and Sealers

13. Section 853—Reinforcement and Tensioning Steel

14. Section 880—Water

15. Section 886—Epoxy Resin Adhesives

B. Referenced Documents

1. AASHTO T 126

2. AASHTO T 22

3. AASHTO T 23

4. ASTM C 94, Requirements for Uniformity GDT 26

5. GDT 27

6. GDT 28

7. GDT 32

8. GDT 72

9. GDT 78

10. SOP 34

439.1.3 SUBMITTALS

A. Profilograph Certification

Before paving, ensure that the profilograph and operator are certified by the Office of Materials and Research in accordance with Standard Operating Procedure No.34, Certification of Contractor Personnel and Equipment for Smoothness Testing of Portland Cement Concrete Pavement with the Rainhart Profilograph. Certification includes a mechanical check of the profilograph functions and a written examination by the operator.

Request certification in writing to the Office of Materials and Research at least two weeks before it is needed.

B. Report Form

Refer to Subsection 439.3.06.L, *Smoothness Testing* for report form and submittal requirements.

C. Concrete Design

Submit for approval a concrete design prepared by a testing laboratory approved by the Office of Materials and Research. The Contractor will transmit the design to the Engineer for approval at least 35 days before use.

Or, submit for approval concrete mix proportions with commonly used materials without preparation by a laboratory. The Office of Materials and Research may approve proportions based upon the past performance of the material combination.

439.2 MATERIALS

A. Ensure materials meet the requirements of the following Specifications:

Material	Section
Portland cement	830.2.01
Portland Pozzolan cement	830.2.03
Water	880.2.01
Fine Aggregate, Size No. 10	801.2.02
Coarse Aggregate, Class A or B Crushed Stone or Gravel, Sizes as Specified	800.2.01
Steel Bars for Reinforcement	853.2.01
Steel Wire for Concrete Reinforcement	853.2.06
Welded Steel Wire Fabric for Concrete Reinforcement	853.2.07
Dowel Bars and Bar Coatings	853.2.08
Curing Agents	832
Air Entraining Admixtures	831.2.01
Fly Ash and Slag	831.2.03
Joint Fillers and Sealers	833
Low Modulus Silicone Sealant for Roadway Construction Joints	833.2.06
Epoxy Adhesive for Repairing Cracks	886.2.01
Chemical Admixtures	831.2.02

B. Fly Ash

Fly ash may be used as a concrete additive to promote workability and plasticity. Use it as a partial replacement for Portland cement in concrete, but follow these limits:

1. Do not replace the cement quantity more than 15 percent by weight.

2. Replace cement with fly ash at the rate of 1.25 to 2.0 lbs. (1.25 to 2.0 kg) of fly ash to 1 lb. (1.0 kg) of cement.

3. Ensure that the fly ash mix conforms to Subsection 430.3.06, *Quality Acceptance.*

4. Do not use Type IP cement in fly ash mixes.

C. Granulated Iron Blast-Furnace Slag

If high early strengths are not desired, use granulated slag as a partial replacement for Portland cement in concrete. Follow these limits:

1. Replace the quantity of cement 50 percent or less by weight if the 5-day forecast of the National Weather Service expects temperatures higher than 60 °F (15 °C).
   - **a.** If the 5-day expected low temperature is less than 60 °F (15 °C) but not less than 40 °F (4 °C), replace the quantity of cement 30 percent or less by weight.
   - **b.** If the 5-day expected low temperature is less than 40 °F (4 °C); do not use granulated slag.
2. Replace cement with slag at the rate of 1 lb. (1.0 kg) of slag to 1 lb. (1.0 kg) of cement.
3. Ensure that the granulated slag mix conforms to Subsection 430.3.06, *Quality Acceptance.*
4. Do not use Type IP cement or fly ash in slag mixes.

D. Composition of Concrete

Design the concrete mix to conform to the following requirements:

1. Coarse Aggregate

Use coarse aggregate size No. 467, 67, or 57 for plain Portland Cement concrete pavement. Use size No. 67 or 57 coarse aggregate for continuous reinforced concrete pavement.

Separate size No. 467 or 456 in individual stockpiles of size No. 4 and size No. 67. Blend according to approved mix proportions.

2. Fine Aggregate

Use fine aggregate that meets the requirements for size No. 10.

When using two sizes or sources of fine aggregate to produce the proper gradation, blend according to the approved design proportions.

439.2.1 DELIVERY, STORAGE, AND HANDLING

A. Store fine aggregate from different sources in different stockpiles.

439.3 CONSTRUCTION REQUIREMENTS

439.3.1 PERSONNEL

A. Certified Operator

Before paving, have the Office of Materials and Research certify a profilograph equipment operator. Certification includes a written examination by the operator.

439.3.2 EQUIPMENT

A. Equipment Requirements

Provide equipment and tools to perform the work. Provide equipment that allows the paver to operate at a constant production rate and minimizes starting and stopping. The Engineer may limit the production rate or batch size if equipment does not keep pace with the other operations or causes poor workmanship.

B. Ramp Screeds and Hand Finishing Tools

Ramp screeds and hand finishing tools may be used instead of conventional mainline paving equipment.

C. Scales

Before use, the Engineer will inspect and approve the scales to weigh concrete materials and the devices to measure water. Tolerances are ± 1.0 percent throughout the operating range. Measure admixtures to ± 3.0 percent.

D. Protective Equipment

Provide materials to protect the concrete edges and surface against rain, including:

- Standard metal forms or wood planks to protect the pavement edges
- Covering material such as burlap or cotton mats, curing paper, or plastic sheeting material to protect the pavement surface.

E. Auxiliary Vibrator

Keep one auxiliary vibrator available in case of mechanical malfunctions.

F. Texturing Equipment

Ensure that the tines on the equipment:

- Are the same size and length and are rectangular shaped
- Have approximately 0.5 in (13 mm) of space between them
- Are between 1/16 in and 1/8 in (2 mm and 3 mm) wide

439.3.3 PREPARATION

A. Prepare the Roadbed

Prepare the roadbed as required by the Plans and Specifications before placing concrete pavement.

B. Observe Condition of Subgrade and Subbase

Check the subgrade and subbase as follows:

1. Prepare the full width of the subgrade and subbase according to the Plans and Specifications.

2. Ensure that the surface immediately under the concrete pavement allows proper pavement thickness and yield.

3. Trim high areas to the proper elevation.

4. Ensure that the subbase can support paving equipment without rutting or bogging.

439.3.4 FABRICATION

A. General Provisions 101 through 150.

439.3.5 CONSTRUCTION

A. Set Forms

Set the forms as follows:

1. Compact the foundation under the forms true to grade. Set the form so that it firmly contacts the foundation for the entire length at the specified grade.

2. Prevent the forms from settling or springing under the finishing machine.

3. Clean and oil the forms before placing the concrete.

B. Place Concrete

After depositing the concrete on the grade, avoid rehandling it. Unload and place it as follows:

1. Unload the concrete into an approved spreading device and mechanically spread it on the grade.

2. Place the concrete continuously between transverse joints without using intermediate bulkheads.

3. Perform any necessary hand spreading of concrete with shovels, not rakes.

NOTE: Do not allow personnel to walk in freshly mixed concrete with shoes coated with dirt or other materials.

4. Thoroughly consolidate the concrete on both sides of joint assemblies.

5. Ensure that vibration does not cause puddling or grout accumulation on the surface.

For construction or expansion joints, do not use grout that accumulates ahead of the paver.

6. Deposit concrete near the formed joints. Do not dump or discharge concrete on a joint assembly unless the concrete is centered on the joint assembly.

7. Keep reinforcing steel free of dirt, oil, paint, mill scale, and loose or thick rust that could impair the bond of the steel to the concrete.

C. Consolidate and Finish

Ensure that the sequence of operations is continuous from placement to final finish.

1. Consolidation

Perform vibration for the full width and depth of the pavement as follows:

a. Do not allow the vibrators to misalign load transfer devices or contact forms or the foundation.

b. Ensure that the operating frequency is within these ranges.
Use spud vibrators with an operating frequency of at least 7,000 vibrations per minute. Use tube vibrators with an operating frequency of at least 5,000 vibrations per minute.

Use surface pan vibrators with an operating frequency of at least 3,500 vibrations per minute.

c. Use hand-held vibrators if needed.

Ensure that the operating frequency is at least 4,500 vibrations minute. The intensity shall be sufficient to affect the mass of concrete having a 1 in. (25 mm) slump through a radius of at least 18 in. (450 mm).

d. Obtain uniform consolidation and density throughout the pavement.

If the pavement is not uniform, stop the operation and provide methods or equipment that will produce pavement that conforms to the Specifications.

e. Keep a standby vibratory unit available in case a primary unit malfunctions.

2. Finishing

After striking off and consolidating the concrete, follow these steps:

a. The concrete may be smoothed and trued using a hand float.

b. Ensure that the surface within 6 in. (150 mm) of the pavement edge shows no more than a ¼ in. (6 mm) deviation in 10 ft. (3 m) when

tested with a 10 ft. (3 m) straightedge in both transverse and longitudinal directions.

c. Ensure that mainline riding surface produces a profile index value of less than 7 in./ mile (100 mm/km) on each travel lane.

D. Protection from Rain

Protect the unhardened concrete from rain. See Subsection 439.3.02.D, *Protective Equipment.*

When rain is imminent, stop paving operations and place forms against the sides of the pavement. Cover the surface of the unhardened concrete with the protective covering.

E. Remove Forms

Remove forms from in-place concrete after it has set for at least 12 hours, unless otherwise provided.

1. Remove forms carefully to avoid damaging the pavement.

2. After removing the forms, immediately cure the sides of the slab using the same method used to cure the pavement surface.

3. Remove and replace major honeycombed areas.

F. Work at Night

Provide adequate lighting for work performed at night. If lighting will not be provided at night, stop the concreting operation in time to finish and saw during daylight hours

G. Provide Joints

Ensure that joints are designed, configured, and located as shown on the Plans or required by the Specifications.

1. At the Engineer's discretion, remove and replace plain concrete pavement that cracks during construction with no additional cost to the Department.

2. When chipping out random cracks for sealing, use nonrigid epoxy that meets Subsection 886.2.01 on cracks that are not under expansion-contraction influence.

3. Seal continuous cracks under movement with sealant that meets Subsection 833.2.06.

4. When removing and replacing a pavement section, replace an area at least 6 ft. (1.8 m) long and the full width of the lane.

a. Saw to vertical face the sections to be removed and replace the concrete as a construction joint with dowels.

b. Use deformed bars as dowels in the saw-cut construction joint. Use the size specified for contraction joints in the Plans.

c. Thoroughly clean the drilled holes of contaminants and set the dowels into the hardened concrete face of the existing pavement with a Type VIII epoxy bonding compound. See Section 886 for epoxy bonding compound requirements.

d. For contraction joints, undamaged and properly positioned dowels may be used in existing construction or slab replacement areas. Coat the protruding dowel portions with a thin film of heavy grease.

e. When both sides of an existing construction or contraction joint require slab replacements, slabs may be replaced continuously from saw-cut construction joint to saw-cut construction joint. Use dowels specified for contraction joints.

f. Before placing concrete, uniformly apply a thin coat of heavy grease to epoxy-coated dowels.

g. When placing slabs continuously across transverse contraction joint locations, use saw-cuts to provide planes of weakness according to the requirements of this Specification and the GDOT construction standard for contraction joints.

h. Seal the joints according to the Plans.

H. Determine Types of Joints

1. Longitudinal Joints

Longitudinal joints shall contain unpainted and uncoated deformed steel bars that are the size and length specified on the Plans.

Place the bars perpendicular to the joint using a mechanical device, or rigidly secure the bars in place with supports.

2. Longitudinal Formed Joints

Construct longitudinal formed joints while the concrete is in a plastic state.

Use methods and equipment that locates the joint reinforcement properly without disrupting it during construction.

3. Longitudinal Sawed Joints

Cut longitudinal sawed joints with a mechanical saw within three days after the concrete is placed and before traffic or equipment enters the pavement.

4. Transverse Joints

Transverse joints consist of construction joints, contraction joints, or expansion

joints constructed at required locations.

a. Construct transverse joints in partial width or adjoining lanes to abut the same joint of adjacent lanes unless otherwise specified on the Plans.

b. Ensure that transverse joints in plain Portland Cement concrete requiring load transfer devices contain either plastic-coated or epoxy-coated dowels.

c. Before placing concrete, secure dowel bars in place with supporting assemblies.

d. Secure the assemblies in position on the subbase to keep the dowels from moving during concrete placement.

e. Place dowel bars to a vertical and horizontal tolerance of ± 1 in. (± 25 mm) of the Plan position. Do not misalign the dowel bar more than 3/8 in. per foot (10 mm per 300 mm) in the horizontal or vertical plane.

f. Remove and replace dowel assemblies displaced from the Plan position more than the tolerances in Subsection 430.3.05.J, *Provide Joints.*

g. When using epoxy-coated dowels, coat the entire surface with a thin film of heavy waterproof grease.

h. Ensure accurate positioning of transverse sawed joints by marking the position of dowel bar assembly locations.

5. Construction Joints

Construct transverse construction joints when interrupting concreting operations for more than one hour.

NOTE: Do not construct transverse construction joints within 10 ft. (3 m) of an expansion joint, contraction joint, or transverse plane of weakness.

a. Move an unanticipated construction joint back to the last Plan joint and remove and dispose of excess concrete.

b. Form construction joints by securing in place a removable bulkhead or header board.

1) Place the board so that it conforms to the full cross section of the pavement. Secure it flush with the subbase and parallel to the normal transverse joints.

2) Slot or drill the board to allow placement of reinforcement as required by the Plans.

NOTE: Do not use the roll of laitance and grout that forms in front of the paver adjacent to transverse construction joints.

c. Consolidate to full width and depth concrete adjacent to transverse construction joints with mechanical hand-type spud vibrators. Keep one auxiliary vibrator available in case of mechanical malfunctions.

d. Before applying the final finish to the concrete, stringline and correct variations of the concrete surface within 30 ft. (9 m) on either side of the transverse construction joints. Provide equipment and tools such as:

Work bridges

Personnel String lines

Straightedges

Lighting

e. While the concrete is in a plastic condition, stringline the surface longitudinally and correct surface deviations greater than 1/8 in. in 15 ft. (3 mm in 4.6 m) in any direction.

f. When using Plain Portland cement concrete pavement, place dowel bars in construction joints. Cast half the length of each dowel bar in the concrete during each phase of joint construction.

g. After the concrete has hardened, dismantle the bulkhead supporting the dowels. Do not disturb the dowels.

h. When using epoxy coated dowels, coat the protruding half of each dowel bar with a thin film of heavy waterproof grease before resuming joint construction. Grease coating is not required on plastic coated dowels.

6. Contraction Joints

Create planes of weakness in plain Portland cement concrete pavement by cutting joints in the pavement surface. Create the planes according to the Plans and as follows:

a. Saw transverse contraction joints before the pavement cracks. Begin sawing when the concrete has hardened enough to prevent surface raveling, usually 4 hours after placement but no more than 24 hours.

b. Continue sawing day and night regardless of weather conditions.

7. Expansion Joints

Transverse expansion joints are required at locations shown on the Plans.

a. Form expansion joints by securing a removable bulkhead that conforms to the full cross section of the pavement. Use bulkheads that can construct a vertical expansion wall without offsets, indentations, or burrs.

b. Use expansion joint filler required by the Plans.

c. Furnish and install preformed joint filler in lengths equal to the pavement width or the width of one lane. Do not use damaged or repaired joint fillers.

d. Position the expansion joint filler vertically in the joint and at the proper grade. Use an installing bar or other device to secure the expansion joint filler at the proper grade and alignment.

I. Seal the Joints

Clean and seal the joints according to Section 461 and the Plans.

Immediately after completing the curing period, fill in the joints with joint sealing material before opening the pavement to traffic.

J. Cure the Concrete

Immediately after finishing the concrete, cure the entire surface when the concrete will not mar. Use one or more of these methods:

1. Impervious Membrane Method

To use this method:

a. Spray the entire surface of the pavement with white pigmented curing compound immediately after finishing the surface and before the concrete has set.

If the pavement is cured initially with cotton mats, burlap, or cotton fabric, apply the compound after removing the mats.

NOTE: Do not apply curing compound during rain.

b. Use mechanical sprayers to apply curing compound under pressure at a minimum rate of 1 gal per 150 ft.² (1 L per 3.5 m²).

Use fully atomizing spraying equipment that is equipped with a tank agitator.

c. Thoroughly mix the curing compound immediately before use.

d. During application, use a mechanical device to stir the compound continuously.

e. If required, use a hand sprayer to spray odd widths, odd shapes, and concrete surfaces exposed by removing forms.

f. Do not apply curing compound to the inside faces of joints to be sealed.

g. If the membrane film becomes damaged within the curing period, repair the damaged portions immediately with additional compound.

2. White Polyethylene Sheeting

To use this method:

a. Cover the top surface and sides of the pavement with polyethylene sheeting. Lap the units at least 18 in (450 mm).

b. Place the sheeting and weigh it down so that it contacts the surface.

c. Extend the sheeting beyond the edges of the slab at least twice the thickness of the pavement.

d. Unless otherwise specified, maintain the covering in place for 72 hours after placing the concrete.

3. Burlap, Cotton Fabric, or Other Methods

Contractors may cure the pavement surface with burlap, cotton fabrics, or other materials if the section remains wet for the duration specified by the Engineer.

4. Cold Weather Curing

To use this method:

a. Remove and replace concrete that freezes before the initial set time at no additional cost to the Department.

b. Use polyethylene or canvas to protect concrete that has set but is exposed to freezing temperatures within 24 hours of placement. Ensure that the internal concrete temperature is above freezing for at least 24 hours after placing the concrete.

c. Obtain approval from the Engineer to use other protection methods such as hay, straw, or grass, or to change the duration of the protection.

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K. Open Pavement to Traffic

Wait to open the pavement slab to traffic, except for joint sawing vehicles, until the concrete is 14 days old unless representative compressive tests show that the slab has a compressive strength of 2,500 psi (15 MPa).

Prevent pavement slab stress by constructing a ramp of compacted earth or other material to move on and off the pavement. Do not allow equipment that exceeds legal load limits on the pavement.

Protect the pavement against traffic from the public, employees, and agents.

1. Erect and maintain barricades. Employ watchmen to block traffic from the newly constructed pavement for the period required in this Specification.

2. Arrange the barriers away from public traffic on lanes remaining open.

3. Maintain signs that clearly indicate the lanes open to public traffic.

4. If traffic must go across the pavement, construct crossings satisfactory to the Engineer to bridge over the concrete. Construct the crossing without additional compensation.

5. Repair or replace pavement damaged by traffic or other causes before Final Acceptance without additional compensation. Make repairs to the Engineer's satisfaction.

439.3.6 QUALITY ACCEPTANCE

A. The typical section sheet in the Plans specifies concrete classifications for specific uses.

This Specification establishes minimum requirements for these concrete classifications for concrete design approval, concrete mix design proportions, batching control responsibilities, and acceptance of hardened concrete based upon compressive strength development.

Produce Portland cement concrete by combining proportions of approved materials in batches according to the construction methods specified in this Specification.

Mix concrete produced in a stationary central mix plant for at least 60 seconds after the materials enter the drum. Mix time may be reduced if the representative tests show that the concrete meets requirements of ASTM C 94, Requirements for Uniformity. Never mix less than 50 seconds.

B. Transit Mixed Concrete

Ensure that transit mixed concrete meets the requirements of Subsection 500.3.04.E.3, *Transit-Mixed Concrete.*

C. Mix Design Criteria

Proportion concrete mix designs using the following requirements:

	Minimum Cement per Cubic Yard Concrete (CWT)	Maximum Water- Cement Ratio (lbs./lb.)	Design Air Content Range (%)	Minimum Compressive Strength at 28 Days (psi)
Class 3	5.64	0.53	4.0 to 5.5	3,000
Class HES	6.58	0.47	4.0 to 5.5	3,500

	Minimum Cement per Cubic Meter Concrete (kg)	Maximum Water- Cement Ratio (kg/kg)	Design Air Content Range (%)	Minimum Compressive Strength at 28 Days (MPa)
Class 3	335	0.53	4.0 to 5.5	20
Class HES	390	0.47	4.0 to 5.5	25

D. Compressive Strength

Prepare and test at least 6 cylinders according to AASHTO T 126 and T 22 to ensure that the demonstrated laboratory compressive strength at 28 days for Class 3 concrete is at least 4,000 psi (30 MPa), and the minimum laboratory compressive strength for Class HES concrete is 3,000 psi (20 MPa) at 72 hours.

E. Field Adjustments on Concrete Mixes

Determine the aggregate surface moisture and apply free moisture corrections to the approved mix design. The Engineer will verify that the corrections are made properly.

Adjustment may be made to the approved proportions of the fine and coarse aggregate and water provided:

1. The cement factor is not decreased.
2. The water-cement ratio is not increased.
3. Adjustments produce concrete proportions according to this Specification.
4. The Engineer is notified before use.

F. Concrete Mix Tolerances

Ensure that concrete consistency and air content is maintained within the following limits:

1. Consistency

Immediately before placement, use GDT 27 to determine concrete slump. Do not use concrete for Portland cement concrete pavement with a slump value greater than 3.5 in. (90 mm).

2. Air Content

Immediately before placement, use GDT 26, GDT 28, or GDT 32 to determine the air content of the concrete. Concrete will not be accepted that has an air content outside of the following limits:

Lower acceptance limit	3.0%
Upper acceptance limit	6.5%

G. Concrete Strength Acceptance

1. Class 3

Portland cement concrete pavement strength will be accepted based on compressive strength development at 28 days. The compressive strength value shall be at least 3,000 psi (20 MPa).

a. Fabricate and cure specimens for field acceptance according to AASHTO T 23.

b. After curing, the OMR will test the cylinders according to AASHTO T 22. The test frequency is outlined in the Department's Sampling and Testing information.

2. Class HES

High early concrete strength pavement may be accepted based on compressive strength development at 72 hours. The compressive strength value shall be at least 3,000 psi (20 MPa).

When concrete is defective based on the 72-hour strength test and the concrete is retained for acceptability judgment, acceptance will be based on test results conducted at 28 days. The acceptance strength value shall be at least 3,500 psi (25 MPa).

a. Cure specimens fabricated for 72-hour strength for 72 hours under conditions that are similar to those under which the pavement will be cured.

b. Cure specimens fabricated for 28-day evaluation per AASHTO T 23.

c. Test all specimens per AASHTO T 22.

H. Depth Measurement

The Engineer will designate pavement areas to be examined for depth measurement compliance with the Plan and Specifications.

Remove and replace areas deficient more than 1/4 in. (6 mm). The Engineer may require a reduction in payment. Correct deficiencies in slab depth as directed by the Engineer.

I. Final Finish

Ensure that the final finish produces a pavement surface that is true to grade, uniform, and free of irregular, rough, or porous areas.

Produce the final surface finish using mechanical or hand-operated equipment to groove the plastic concrete. Use texturing equipment with rectangular-shaped spring steel tines.

J. Texture Depth Testing

Test the pavement surface to determine the texture depth by using GDT 72 at locations selected by the Engineer.

Transversely saw-groove areas that have a surface texture depth less than 0.02 in. (0.5mm). Ensure that the areas meet the average depth requirement of 0.04 in. (0.9 mm) or greater. Saw-groove the areas to meet these dimensions:

1. Width—1/8 in. (3 mm)
2. Depth—3/16 in. (5 mm)
3. Spacing—3/4 in. center-to-center (19 mm)

K. Smoothness Profile

Include in the Contract Unit Bid Price the cost to furnish and operate a Rainhart (Model 860) Profilograph to measure pavement profile deviations.

Measure and correct pavement profile deviations as follows:

1. Ensure that the mainline riding surface produces a profile index value no greater than 7 in./mile (100 mm/ km) on each travel lane. Conduct tests according to GDT 78.

   Determine a profile index value for each tracing in each ¼ mile (0.5 km) segment.
2. Correct individual bumps or depressions that exceed the blanking band by more than 0.2 in. (5 mm) at no additional expense to the Department.
3. Suspend paving operations if a profile index value exceeds 7 in./mile (100 mm/km) per lane for any segment. Take corrective action approved by the Engineer.
4. Test ramps, acceleration lanes, and deceleration lanes using GDT 78 to ensure that the average profile index value does not exceed 12 in./mile (200 mm/km) for the entire section length.
5. Correct individual bumps or depressions that exceed 0.2 in (5 mm) from the blanking band at no additional expense to the Department.
6. Take pavement profiles 4 ft. (1.2 m) from and parallel to the new pavement edges for pavements greater than 16 ft. (4.8 m) wide and up to 24 ft. (7.2 m) wide. Test pavement 6 to 16 ft. (1.8 to 4.8 m) wide parallel to and at the center line of the pavement section.
7. Begin the 0.25 mile (0.5 km) record segments at the first day's placement and continue until project completion, except as noted in this Specification.

   Combine pavement sections less than 650 ft. (200 m) approaching a bridge with the previous 0.25 mile (0.5 km) segment to determine the profile index.

8. Calculate as separate record segment sections 650 ft. (200 m) or greater approaching a bridge and sections at Project limits.

9. Determine a separate profile index value according to GDT 78 for the 100 ft. (30 m) of roadway approaching each end of a bridge, up to and including the joint with the approach slab.

Average the profile index from the right and left wheelpaths for each 100 ft. (30 m) segment for each lane for each approach. Ensure that the average profile index value is no greater than 30 in./mile (500 mm/ km).

10. Notify the Engineer before profile testing. The Engineer will verify the results by randomly selecting at least 1 out of every 10 consecutive record segment profiles to compute the profile index and to compare with Contractor results.

L. Pavement Tolerances

For Projects that include weigh-in-motion truck scales, follow these pavement tolerances:

1. Ensure that the Rainhart Profilograph readings do not exceed 5 in/mile (80 mm/km) in the 600 ft. (180 m) approach to the scales and the 200 ft. (60 m) beyond the scales.

2. Ensure that the rolling straightedge measurements show no deviation greater than 1/16 in. (2 mm) within 10 ft. (3 m).

M. Smoothness Testing

Perform smoothness testing as follows:

1. Perform and evaluate profiles from the first day of placement before continuing paving.

When the test run is complete and evaluated, the Engineer may require equipment adjustments to improve smoothness before paving continues.

2. Complete the report form furnished by the Engineer, and attach it to each day's profilograph tracings. Include the following information in each trace:

- **a.** Project number
- **b.** Beginning and ending station numbers
- **c.** 500 ft. (150 m) paving stations
- **d.** Traffic direction
- **e.** Lane number
- **f.** Date paved and tested
- **g.** Construction joint locations

3. Have the certified profilograph operator obtain and evaluate traces to be submitted to the Engineer. Provide results no later than the end of the second work day following placement.

4. For mainline pavement, correct 0.25 mile (0.5 km) segments that do not meet the profile index requirement by using one of these methods:

a. Grind the entire lane surface of the 0.25 mile (0.5 km) segment to a profile index value no greater than 7 in./mile (100 mm/km). Use equipment that meets the requirements in Section 431.

b. Grind roughness in small segment areas no more than 50 ft. (15 m) of full lane width to produce a profile index value no greater than 7 in./mile (100 mm/km).

If more than 50 ft. (15 m) of grinding is required, grind the complete 0.25 mile (0.5 km) segment according to Method a, above.

5. Correct ramps and acceleration and deceleration lanes that do not meet the profile index requirement to a profile index no greater than 12 in./mile (200 mm/km). Prevent individual bumps from exceeding 0.2 in. (5 mm) from the blanking band. Use equipment specified in Section 431.

6. Correct 100 ft. (30 m) bridge approach sections that do not meet the profile index requirement.

a. Grind according to Section 431.

b. Use a bump grinder to correct bumps with a baseline of 5 ft. (1.5 m) or less.

c. Grind the full lane width even when grinding individual bumps.

d. Retest pavement segments containing corrective slab replacements for Final Acceptance.

7. Correct segments that do not meet the profile index criteria of this Specification at no additional expense to the Department. Retest segments after correction with the Rainhart Profilograph as specified.

8. The Engineer may conduct profilograph tests at any time to verify Contractor results. The Department may test record segments if the Engineer determines that the Contractor test results are inaccurate. If this occurs, see Subsection 439.5.01, *Adjustments.*

N. Acceptance

Pavement smoothness will accepted when:

1. The Engineer determines that the work was satisfactorily performed according to the Specifications.

2. The completed pavement, including corrective Work, meets the applicable profile index value requirements.

439.3.7 CONTRACTOR WARRANTY AND MAINTENANCE

A. General Provisions 101 through 150.

439.4 MEASUREMENT

A. Portland cement concrete pavement (special) complete, in-place and accepted, is measured by the square yard (meter).

439.4.1 LIMITS

A. General Provisions 101 through 150.

439.5 PAYMENT

A. Concrete pavement completed and accepted will be paid for at the full Contract Unit Price per square yard (meter).

Payment is full compensation for furnishing and placing materials, reinforcements, dowels, joint materials, supplies, and incidentals to complete the work.

B. Payment will be made under:

GDOT 439-1	Non-Reinforced Portland cement concrete pavement, Class HES, 10 in thick	Per square yard
GDOT 439-2	Reinforced Portland cement concrete pavement, Class HES, 10 in thick	Per square yard

439.5.1 ADJUSTMENTS

A. Profilograph Tests

If based on the Department's profilograph tests, the Engineer determines that the Contractor profilograph test results are inaccurate, the Contractor will be charged for profilograph testing at $500 for each trace mile ($250 for each trace kilometer) with a minimum charge of $500.

END OF ITEM GDOT 439

SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING REPORT

FFC Atlanta Regional Airport Terminal Apron Expansion

Peachtree City, Fayette County, Georgia

PREPARED FOR:

MICHAEL BAKER INTERNATIONAL
420 Technology Parkway
Suite 150
Norcross, Georgia 30092

NOVA Project Number: 10103-2023095

December 21, 2023

NOVA
PROFESSIONAL | PRACTICAL | PROVEN

December 21, 2023

MICHAEL BAKER INTERNATIONAL
420 Technology Parkway
Suite 150
Norcross, Georgia 30092

Attention: Mr. Charles A. Adeogun, P.E.
Senior Project Manager - Aviation

Subject: Subsurface Exploration and Geotechnical Engineering Report
FFC – Atlanta Regional Airport Terminal Apron Expansion
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095

Dear Mr. Adeogun,

NOVA Engineering and Environmental, LLC (NOVA) has completed the authorized Geotechnical Engineering Report for the proposed Atlanta Regional Airport Terminal Apron Expansion in Peachtree City, Fayette County, Georgia. The work was performed in general accordance with NOVA Proposal Numbers 003-20238970 dated April 6, 2023. This report briefly discusses our understanding of the project at the time of the subsurface exploration, describes the geotechnical consulting services provided by NOVA, and presents our findings, conclusions, and recommendations.

We appreciate your selection of NOVA and the opportunity to be of service on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
NOVA Engineering and Environmental, LLC

Casey J. Sanders
Project Engineer

Marc D. Johnston, P.E.
Regional Manager/ Principal
GA P.E. License 027809

Copies Submitted: Addressee (electronic)

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APPENDICES

1.0 INTRODUCTION

1.1 PROJECT INFORMATION

Our understanding of the requirements of the project is based on email correspondence with Mr. Charles A. Adeogun, P.E. of Michael Bakeer International, on April 4, 2023, and our experience with similar projects. We were furnished with the Airport Layout Plan (17 of 21), prepared by WK Dickson, dated May 2022. The proposed project will include an exploration of the subsurface conditions in order to provide recommendations to expand the existing Terminal Apron pavements for additional aircraft parking and future terminal ramp expansion at the Atlanta Regional Airport – Falcon Field in Peachtree City, Georgia.

1.2 SCOPE OF SERVICES

Michael Baker International engaged NOVA to provide geotechnical engineering consulting services for Terminal Apron Expansion project at the Atlanta Regional Airport. This report briefly discusses our understanding of the project, describes our exploratory procedures, and presents our findings, conclusions, and recommendations.

The primary objective of this study was to perform a geotechnical exploration along planned area of development and to assess these findings as they relate to geotechnical aspects of the planned pavement for additional aircraft parking and future terminal ramp expansion. The authorized geotechnical engineering services included a site reconnaissance, a soil test boring and sampling program, engineering evaluation of the field and laboratory data, and the preparation of this report.

The services were performed as outlined in our proposal numbers 003-20238970 dated April 6, 2023, and in general accordance with industry standards.

As authorized per the above referenced proposal, the completed geotechnical report was to include:

- A description of the site, field and laboratory testing, and general soil conditions encountered, with a Boring Location Plan and individual Boring Records.
- A discussion of geology for the subject area based upon readily available information.
- A discussion of subsurface conditions encountered including potential earthwork-related issues indicated by the exploration, such as materials that would require difficult excavation techniques, unsuitable or deleterious soils, unstable soils, and shallow groundwater table.
- Suitability of on-site soils for re-use as structural fill and backfill, including the

criteria for suitable fill materials and the soil compaction requirements for foundations, structural fill, and pavements.

- Recommendations for controlling groundwater and/or run-off during construction and the need for permanent dewatering systems based on the anticipated post construction groundwater levels.
- Pavement design and preparation recommendations based on provided or assumed information.
- Recommended quality control measures (i.e. sampling, testing, and inspection requirements) for site grading and foundation construction.
- Recommendations for additional geotechnical evaluation, if appropriate.

The assessment of the presence of wetlands, floodplains, or water classified as State Waters of Georgia was beyond the scope of this study. Additionally, the assessment of site environmental conditions, including the detection of pollutants in the soil, rock, or groundwater, at the site was also beyond the scope of this geotechnical study. If desired by the client, NOVA can provide these services.

2.0 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The Subject Property is located at Falcon Field Atlanta Regional Airport (FFC), address 7 Falcon Drive, Peachtree City, Georgia 30269. According to the Fayette County Geographic Information System (GIS) database, the Subject Property measures approximately 214.97 acres and contains one (1) tax parcel identified by Parcel Number 0615 011.

A Site Location Map depicting the location of the Subject Property is included in Appendix A (Figure 1).

The proposed area for the Terminal Apron expansion is located to the south and east of the existing Terminal Apron. The area is currently relatively flat with low grasses and weeds.

3.0 FIELD AND LABORATORY PROCEDURES

3.1 FIELD EXPLORATION

Boring locations were established in the field by NOVA personnel using the provided site plans and a handheld GPS unit. Ground surface elevations listed on the boring logs were interpolated from available online topographic data. Consequently, referenced boring locations and elevations are approximate. If increased accuracy is desired by the client, NOVA recommends that the boring locations and elevations be surveyed. The approximate locations are shown on Figure 3 of Appendix A.

Our field exploration was conducted on November 17, 2023, and included:

- Eight (8) soil test borings, including two (2) pavement cores, were drilled to a depth up to 15 feet below the existing ground surface.

Soil Test Borings: The soil test borings were performed using the guidelines of ASTM Designation D-1586, "Penetration Test and Split-Barrel Sampling of Soils". A hollow-stem auger was used to advance the borings. At regular intervals, soil samples were obtained with a standard 1.4-inch I.D., 2.0-inch O.D., split-tube sampler. The sampler was first seated six inches and then driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot is designated the "Penetration Resistance". The penetration resistance, when properly interpreted, is an index to the soil strength and density. Representative portions of the soil samples, obtained from the sampler, were placed in glass jars, and transported to our laboratory for further evaluation and laboratory testing.

Test Boring Records in Appendix B show the standard penetration test (SPT) resistances, or “N-values”, and present the soil conditions encountered in the borings. These records represent our interpretation of the subsurface conditions based on the field exploration data, visual examination of the split-barrel samples, laboratory test data, and generally accepted geotechnical engineering practices. The stratification lines and depth designations represent approximate boundaries between various subsurface strata. Actual transitions between materials may be gradual.

Groundwater: The groundwater levels reported on the Test Boring Records represent measurements made at the completion of the soil test borings. The soil test borings were subsequently backfilled with the soil cuttings and patched with quick-setting concrete.

Dynamic Cone Penetrometer: Soil consistency was measured with a portable dynamic cone penetrometer (DCP) at 4 boring locations in general accordance with ASTM D6951 to estimate the in-situ California Bearing Ratio (CBR) and bearing capacity of the near-

surface soil subgrades. Plots of the DCP test data collected are attached to this report in Appendix B. The estimated in-situ CBR values are summarized in the table below.

Boring Number	Estimated CBR
B-3	6
B-5	9
B-7	10
B-8	8

3.2 LABORATORY TESTING

A laboratory testing program was conducted to characterize materials at the site using split-barrel samples and two (2) bulk samples recovered from the site. The laboratory test data are presented in Appendix C and summarized in the table below. Selected test data are presented on the Boring Logs attached in Appendix B. The specific tests are briefly described below.

It should be noted that all soil samples would be properly disposed of 30 days following the submittal of this NOVA subsurface exploration report unless you request otherwise.

3.2.1 Soil Classification

Soil classification provides a general guide to the engineering properties of various soil types and enable the engineer to apply experience to current problems. In our explorations, samples obtained during drilling operations are observed in our laboratory and visually classified by an engineer. The soils are classified according to consistency (based on number of blows from standard penetration tests), color, and texture. These classification descriptions are included on our "Test Boring Logs". The classification system discussed above is primarily qualitative; laboratory testing is generally performed for detailed soil classification.

3.2.2 Moisture Content

The moisture content is the ratio expressed as a percentage of the weight of water in a mass of soil to the weight of the solid particles. This test was conducted in general accordance with ASTM D 2216. A total of ten (10) moisture content tests were performed during this exploration. The results are shown on the Boring Logs in Appendix B and in the table below.

3.2.3 Atterberg Limits

The Atterberg Limits are different descriptions of the moisture content of fine-grained soils as it transitions between a solid to a liquid-state. For classification purposes the two primary Atterberg Limits used are the plastic limit (PL) and the liquid limit (LL). The plastic index (PI) is also calculated for soil classification.

The plastic limit (PL) is the moisture content at which a soil transitions from being in a semisolid state to a plastic state. The liquid limit (LL) is defined as the moisture content at which a soil transitions from a plastic state to a liquid state. Two (2) tests were performed in this study in accordance with ASTM D4318. The results are provided in Appendix C and in the table below.

3.2.1 Sieve Analysis

The sieve analysis consists of passing a soil sample through a series of standard sieve openings. The percentage of soil, by weight, passing the individual sieves is then recorded and generally presented in a graphical format. The percentage of fines passing through the No. 200 sieve is generally considered to represent the amount of silt and clay of the tested soil sample. The sieve analysis test was conducted in general accordance with ASTM Designation D 1140. A total of two (2) sieve analysis tests were performed in this study. The results are provided in Appendix C and in the table below.

3.2.2 Proctor Test

Two (2) Modified Proctor compaction tests were performed in general accordance with ASTM D 1557 – Standard Test Methods for Laboratory Compaction of Soil Using Modified Effort to determine the relationship between the soils' maximum dry unit weight and various moisture contents for use in controlling fill placement. The results are provided in Appendix C and in the table below.

3.2.3 CBR Test

Two (2) California Bearing Ratio (CBR) tests were performed in accordance with (ASTM D 1883 – Standard Test Method for CBR (California Bearing Ratio) to determine strength and deflection characteristics of soil correlated with pavement performance to establish design curves for pavement thickness. The results are provided in Appendix C and in the table below.

Bulk Sample	Sample Depth (ft)	Percent Passing Size 200 Sieve (%)	Optimum Moisture Content (%)	Maximum Dry Density (pcf)	Liquid Limit (LL)	Plastic Limit (PL)	*CBR (%)	USCS Classification
B-7	0-5	50.0	19.1	111.7	49	38	46.7	ML
B-8	0-5	70.4	17.6	110.7	71	45	8.1	MH

*CBR specimen remolded to minimum 95% of MDD (ASTM D 1557)

Boring Number	Depth (ft)	Natural Mosture Content (%)
B-1	1 – 2 ½	31.3
B-1	3 ½ - 5	39.3
B-2	1 – 2 ½	53.2
B-2	3 ½ - 5	20.2
B-3	1 – 2 ½	26.8
B-3	3 ½ - 5	42.3
B-5	1 – 2 ½	49.4
B-5	3 ½ - 5	49.3
B-7	3 ½ - 5	45.1
B-8	3 ½ - 5	22.0

4.0 SUBSURFACE CONDITIONS

4.1 GEOLOGY

The site is located in the Piedmont Geologic Region, a broad northeasterly trending province underlain by crystalline rocks up to 600 million years old. The Piedmont is bounded on the northwest by the Blue Ridge Range of the Appalachian Mountains, and on the southeast by the leading edge of Coastal Plain sediments, commonly referred to as the "Fall Line". Numerous episodes of crystal deformation have produced varying degrees of metamorphism, folding and shearing in the underlying rock. The resulting metamorphic rock types in this area of the Piedmont are predominantly a series of Precambrian age schists and gneisses, with scattered granitic or quartzite intrusions.

According to the "Geology of the Georgia – State Map of 1976", the site is underlain by Blue Ridge and Piedmont Crystalline Rocks: Mica Shist/ Gneiss/ Amphibolite (pms3a).

Residual soils in the region are primarily the product of in-situ chemical decomposition of the parent rock. The extent of the weathering is influenced by the mineral composition of the rock and defects such as fissures, faults and fractures. The residual profile can generally be divided into three zones:

- An upper zone near the ground surface consisting of sandy clays and sandy silts which have undergone the most advanced weathering,

- An intermediate zone of less weathered micaceous sandy silts and silty fine sands, frequently described as "saprolite", whose mineralogy, texture and banded appearance reflects the structure of the original rock, and

- A transitional zone between soil and rock termed partially weathered rock (PWR). Partially weathered rock is defined locally by standard penetration resistances exceeding 100 blows per foot.

The boundaries between zones of soil, partially weathered rock, and bedrock are erratic and poorly defined. Weathering is often more advanced next to fractures and joints that transmit water, and in mineral bands that are more susceptible to decomposition. Boulders and rock lenses are sometimes encountered within the overlying PWR or soil matrix. Consequently, significant fluctuations in depths to materials requiring difficult excavation techniques may occur over short horizontal distances.

4.2 SOIL AND ROCK CONDITIONS

The following paragraphs provide generalized descriptions of the subsurface profiles and soil conditions encountered by the borings conducted during this study.

The Test Boring Records in Appendix B should be reviewed to provide more detailed descriptions of the subsurface conditions encountered at each boring location. These records represent our interpretation of the subsurface conditions based on the field logs and visual observations of samples by an engineer. The lines designating the interface between various strata on the Boring Logs represent the approximate interface locations and elevation. The actual transition between strata may be gradual. Groundwater levels shown on the Boring Logs represent the conditions at the time of drilling. It should be understood that soil conditions may vary between boring locations.

4.2.1 Surface Materials

Asphalt: Asphalt pavement was encountered at two (2) soil test borings with thickness ranging from approximately 2¼ to 7 inches. The asphalt pavement was underlain by graded aggregate base (GAB) with thickness ranging from approximately 6 to 6½ inches.

Topsoil: Topsoil was encountered at six (6) soil test borings and measured approximately 2 to 3 inches in thickness. Please note that topsoil thickness are frequently erratic and thicker zones of topsoil should be anticipated.

4.2.2 Residual Soils

Residual soils were encountered in all boring locations beneath the surface. The residuum generally consisted of sandy SILT and silty SAND. Standard penetration resistance values ranged from 3 to 40 bpf.

4.2.3 Partially Weathered Rock

Partially weathered rock (PWR) is a transitional material between soil and the underlying parent rock that is defined locally as materials that exhibit a standard penetration resistance exceeding 100 bpf. PWR was not encountered in any of the borings during this exploration.

4.2.4 Auger Refusal Materials

Auger refusal materials are any very hard or very dense material, frequently boulders or the upper surface of bedrock, which cannot be penetrated by a power auger. Auger refusal materials were not encountered in any of the borings during this exploration.

4.3 GROUNDWATER CONDITIONS

4.3.1 General

Groundwater in the Piedmont typically occurs as an unconfined or semi-confined aquifer condition. Recharge is provided by the infiltration of rainfall and surface water through the soil overburden. More permeable zones in the soil matrix, as well as fractures, joints and discontinuities in the underlying bedrock can affect groundwater conditions. The groundwater table in the Ridge and Valley is expected to be a subdued replica of the original surface topography.

Groundwater levels vary with changes in season and rainfall, construction activity, surface water runoff, and other site-specific factors. Groundwater levels in the Peachtree City area are typically lowest in the late summer-early fall and highest in the late winter-early spring, with annual groundwater fluctuations of 4 to 8 feet; consequently, the water table may vary at times.

4.3.2 Soil Test Boring Groundwater Conditions

Groundwater was not encountered in any of the borings at the time of drilling.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on our understanding of the proposed construction, site observations, our evaluation and interpretation of the field and laboratory data obtained during this exploration, our experience with similar subsurface conditions, and generally accepted geotechnical engineering principles and practices.

Subsurface conditions in unexplored locations or at other times may vary from those encountered at specific boring locations. If such variations are noted during construction, or if project development plans are changed, we request the opportunity to review the changes and amend our recommendations, if necessary.

As previously noted, boring locations were established by utilizing a handheld GPS device and estimating distances and angles from site landmarks. If increased accuracy is desired by the client, we recommend that the boring locations and elevations be surveyed.

5.1 SITE PREPARATION

5.1.1 General

Prior to proceeding with construction, all slabs, foundations, pavements, vegetation, root systems, topsoil, and other deleterious non-soil materials should be stripped from proposed construction areas. Clean topsoil may be stockpiled and subsequently re-used in landscaped areas. Debris-laden materials should be excavated, transported, and disposed of off-site in accordance with appropriate solid waste rules and regulations. All existing utility locations should be reviewed to assess their impact on the proposed construction and relocated/grouted in-place as appropriate.

After clearing and stripping, areas which are at grade or will receive fill should be carefully evaluated by a NOVA geotechnical engineer. The engineer will require proofrolling of the subgrade with multiple passes of a 20 to 30 ton loaded truck, or other vehicle of similar size and weight.

The purpose of the proofrolling is to locate soft, weak, or excessively wet fill or residual soils present at the time of construction. Unstable materials observed during the evaluation and proof-rolling operations should be undercut and replaced with structural fill or stabilized in-place by scarifying and re-densifying.

If low consistency and/or debris laden fill materials are encountered during construction, typical recommendations would include undercutting and backfilling with structural fill and/or stabilizing in-place with fabric, stone,

and/or other remedial techniques. Actual remedial recommendations can best be determined by the geotechnical engineer in the field at the time of construction.

The site should be graded during construction such that positive drainage is maintained away from the construction areas, to prevent ponding of storm water on the site during and shortly following significant rain events. The construction areas should also be sealed and crowned with a smooth roller to minimize ponding water from storm events at the end of each day of work.

Based on the natural moisture contents measured during our exploration, most of the existing subgrade soils are well above the optimum moisture content. These wet subgrade soils will likely be unstable and will quickly degrade under construction traffic. Aeration, drying and re-compaction of the existing soil subgrades should be anticipated during construction.

The subgrade soils encountered within the proposed apron expansion area are difficult to dry during cooler periods. If construction is performed during the wet season, chemical treatment of the soil subgrade with lime or cement may be required.

5.1.2 Difficult Excavation

None of the borings encountered dense soil, PWR or rock above planned finished grades. However, as previously discussed, the weathering process at this site is erratic and variations in the partially weathered rock or rock profile can occur in small lateral distances. Therefore, it is possible that dense soil, PWR and/or rock may be encountered in areas between the boring locations.

5.2 FILL PLACEMENT

5.2.1 Fill Suitability

Fill materials should be low plasticity soil (Plasticity Index less than 30), free of non-soil materials and rock fragments larger than 3 inches in any one dimension. Based on visual examination and our laboratory testing, the existing soils encountered during this exploration generally appear suitable for re-use as structural fill. Prior to construction, bulk samples of the proposed fill materials should be laboratory-tested to confirm their suitability.

All materials to be used for backfill or compacted fill construction should be evaluated and, if necessary, tested by NOVA prior to placement to determine if they are suitable for the intended use. In general, based upon the boring

results, the near surface soils such as those encountered in the borings can be used as a structural fill as well as general subgrade fill and backfill, provided that the fill material is free of rubble, clay, rock, roots and organics. Any off-site materials used as fill should be approved by NOVA prior to acquisition.

Organic and/or debris-laden material is not suitable for re-use as structural fill. Topsoil, mulch, and similar organic materials can be wasted in architectural areas. Debris-laden materials should be excavated, transported, and disposed of off-site in accordance with appropriate solid waste rules and regulations.

5.2.2 Soil Compaction

Fill should be placed in thin, horizontal loose lifts (maximum 8-inch) and compacted to at least 95 percent of the modified Proctor maximum dry density (ASTM D 1557). The upper 12 inches of soil beneath pavements should be compacted to at least 98 percent. In confined areas, such as utility trenches or behind retaining walls, portable compaction equipment and thinner fill lifts (3 to 4 inches) may be necessary. Fill materials used in structural areas should have a target maximum dry density of at least 100 pounds per cubic foot (pcf). If lighter weight fill materials are used, the NOVA geotechnical engineer should be consulted to assess the impact on design recommendations.

Soil moisture content should be maintained within 2 percent of the optimum moisture content. We recommend that the grading contractor have equipment on site during earthwork for both drying and wetting fill soils. Moisture control may be difficult during rainy weather.

Filling operations should be observed by a NOVA soils technician, who can confirm suitability of material used and uniformity and appropriateness of compaction efforts. They can also document compliance with the specifications by performing field density tests using nuclear, or sand cone testing methods (D 6938, or D 1556, respectively). One test per 400 cubic yards and every 2 feet of placed fill is recommended, with test locations well distributed throughout the fill mass. When filling in small areas, at least one test per day per area should be performed.

5.3 GROUNDWATER CONTROL AND DRAINAGE

5.3.1 General

Groundwater was not encountered at any of the borings at the time of drilling. Therefore, we do not anticipate that significant amounts of groundwater will be encountered during shallow grading operations.

As previously noted, groundwater levels are subject to seasonal, climatic, and other variations and may be different at other times and locations. The extent and nature of any dewatering required during construction will be dependent on the actual groundwater conditions prevalent at the time of construction and the effectiveness of construction drainage to prevent run-off into open excavations.

5.4 PAVEMENT DESIGN RECOMMENDATIONS

5.4.1 General

The site subgrade soils are highly weather sensitive and will be susceptible to loss of strength and density if exposed to freeze/ thaw and/or wetting/drying cycles. Consequently, immediately prior to base stone placement all pavement subgrades should be properly prepared and evaluated by the geotechnical engineer including a proofroll to document stability of the subgrade and identify any weak or loose areas that may require remediation. All pavement subgrades, which may be exposed, must be properly graded to allow drainage and prevent ponding of water on the pavement subgrade which would reduce its support capabilities.

Based on the field data collected during this study, pavement subgrade soils are anticipated to consist primarily of sandy SILT, and silty SAND. The laboratory CBR sample consisted of a composite bulk sample collected from the subgrade soils at various borings as described in Section 3 of this report, which were remolded to 95 percent of their modified Proctor (ASTM D1557) maximum dry density and soaked in accordance with ASTM requirements prior to penetration. Based on the laboratory test results, we recommend a **CBR value of 8** be utilized for design of the flexible pavement sections. The upper 1 foot of subgrade should be compacted to a minimum of 98 percent of the modified Proctor (ASTM D 1557) maximum dry density.

Please note the above CBR value is based upon a properly prepared and compacted subgrade as previously recommended. The existing in-place CBR value of the pavement subgrade soils may not necessarily be represented by this value. The current in-place CBR value of pavement subgrade soils may be lower due to the elevated moisture contents and inconsistent relative densities.

We recommend graded aggregate base material to be used as pavement base be compacted to a minimum of 100 percent of the maximum dry density as determined by the modified Proctor compaction test (ASTM D 1557, Method C). The crushed stone should conform to applicable sections of the FAA and State of

Georgia Department of Transportation Standard Specifications for Road and Bridge Construction. All asphalt material and paving operations should meet applicable specifications of the Asphalt Institute, FAA and Georgia Department of Transportation. A NOVA technician should observe placement and perform density testing of the base course material and asphalt paving operations.

6.0 CONSTRUCTION OBSERVATIONS

6.1 SUBGRADE

Once site grading is completed, the subgrade may be exposed to adverse construction activities and weather conditions. The subgrade should be well-drained to prevent the accumulation of water. If the exposed subgrade becomes saturated or frozen, the NOVA geotechnical engineer should be consulted.

A final subgrade evaluation should be performed by the NOVA geotechnical engineer immediately prior to pavements or slab-on-grade placement. If practical, proofrolling may be used to re-densify the surface and to detect any soil which has become excessively wet or otherwise loosened.

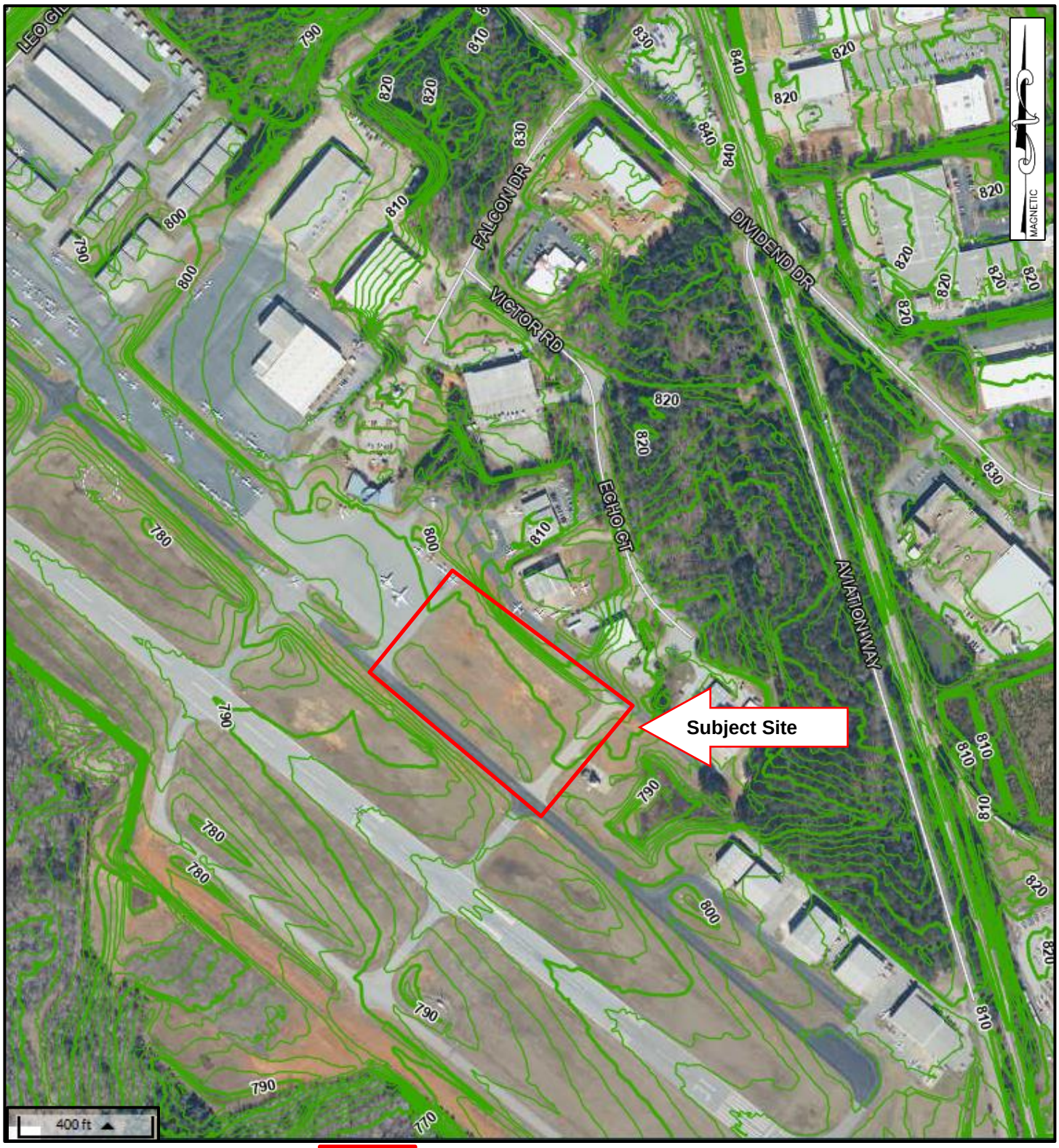
APPENDIX A
Figures and Maps

Approximate Property Boundary

FIGURE 1
SITE LOCATION
Source: Fayette County qpublic 2018 site map
Scale: Graphic as shown above

NOVA
PROFESSIONAL | PRACTICAL | PROVEN

MICHAEL BAKER INTERNATIONAL
FFC Atlanta Regional Airport Terminal Apron Expansion
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095

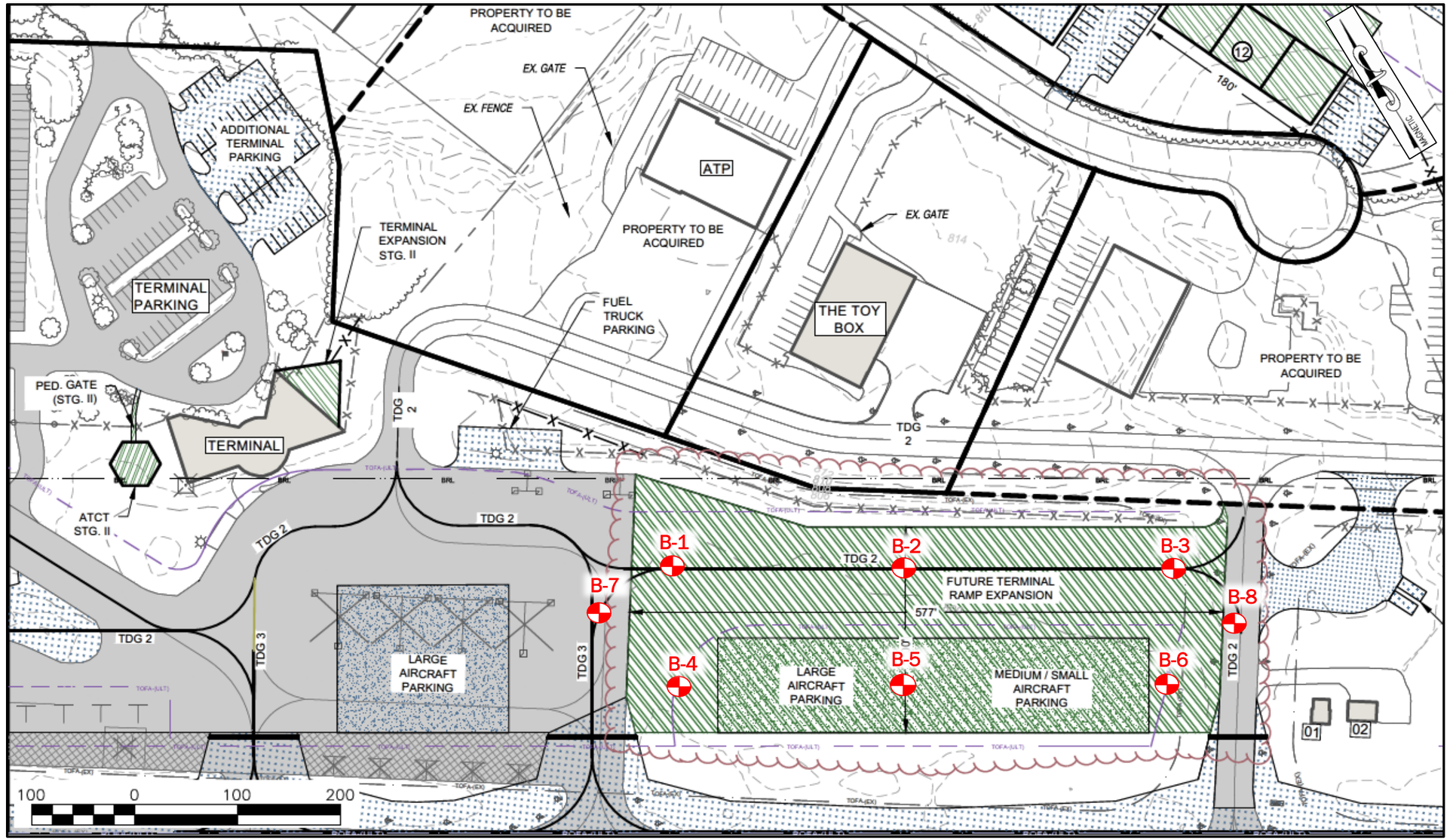


Approximate Property Boundary

FIGURE 2
TOPOGRAPHIC MAP
Source: Fayette County qpublic 2018 topo map
Scale: Graphic as shown above

NOVA
PROFESSIONAL | PRACTICAL | PROVEN

MICHAEL BAKER INTERNATIONAL
FFC Atlanta Regional Airport Terminal Apron Expansion
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095

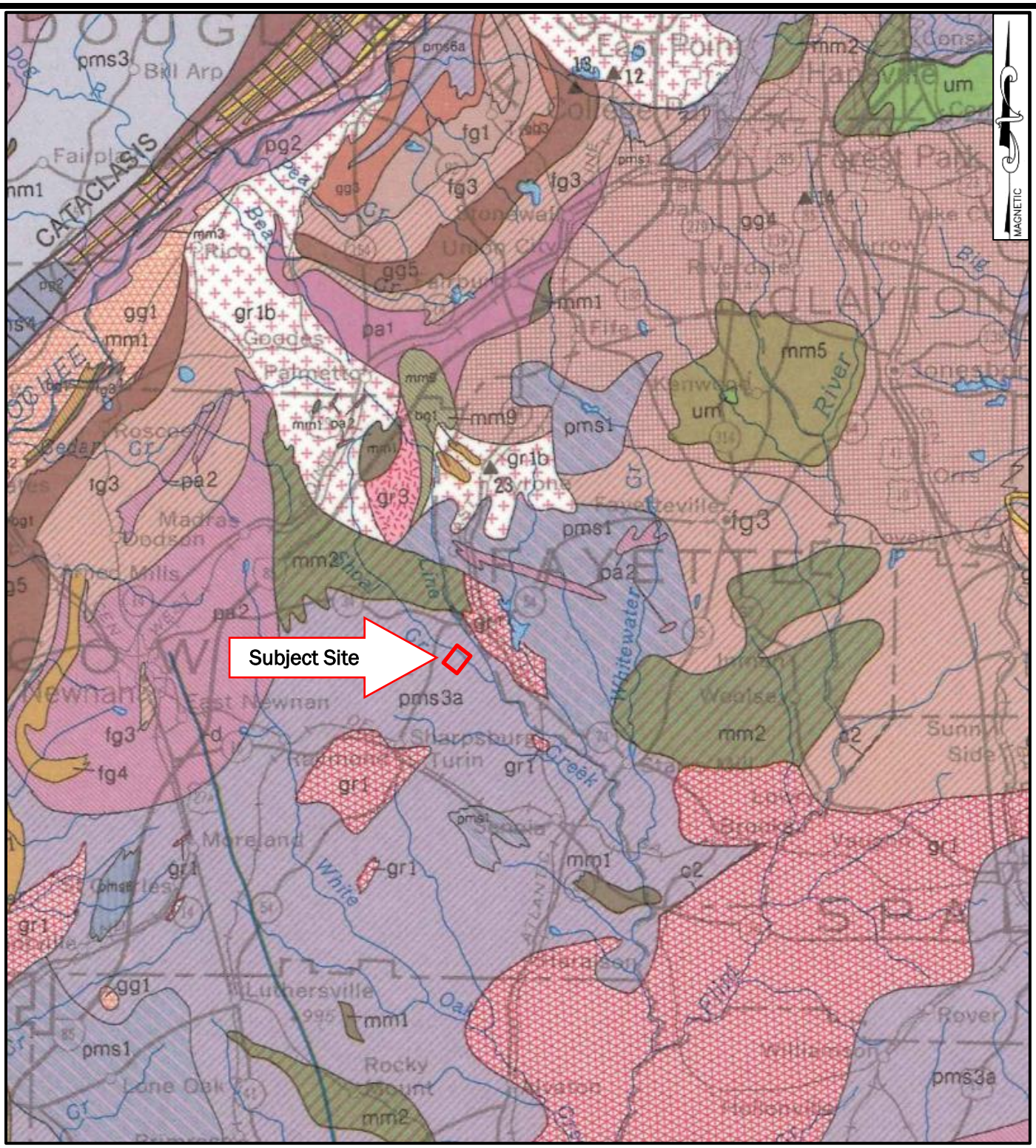


APPROXIMATE LOCATION OF NOVA PAVEMENT CORES AND SPT BORINGS

FIGURE 3
BORING LOCATION PLAN
SCALE: Graphic
SOURCE: Airport Layout Plan 17 of 21, prepared by WK Dickson, dated May 2022

NOVA
PROFESSIONAL | PRACTICAL | PROVEN

Michael Baker International
FFC Atlanta Regional Airport Terminal Apron Expansion
Peachtree City, Fayette County, Georgia
NOVA Proposal Number 10103-2023095



Blue Ridge and Piedmont Crystalline Rocks: Mica Schist/ Gneiss/ Amphibolite **(pms3a).**

FIGURE 4
REGIONAL GEOLOGY
SOURCE: Geology of Georgia State Map – 1976
SCALE: NTS

NOVA
PROFESSIONAL | PRACTICAL | PROVEN

MICHAEL BAKER INTERNATIONAL
FFC Atlanta Regional Airport Terminal Apron Expansion
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095

APPENDIX B
Subsurface Data

KEY TO SYMBOLS AND CLASSIFICATIONS

DRILLING SYMBOLS

	Split Spoon Sample
	Undisturbed Sample (UD)
	Auger Only
	Standard Penetration Resistance(ASTM D1586−67)
	Water Table at least 24 Hours after Drilling
	Water Table 1 Hour or less after Drilling
100/2”	Number of Blows (100) to Drive the Spoon a Number of Inches (2)
NX, NQ	Core Barrel Sizes: 2⅛− and 2−Inch Diameter Rock Core, Respectively
REC	Percentage of Rock Core Recovered
RQD	Rock Quality Designation − Percentage of Recovered Core Segments 4 or more Inches Long
	Loss of Drilling Water
MC	Moisture Content Test Performed
N/E	Not Encountered
N/M	Not Measured
C	Caving

CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

	Number of Blows, “N”	Approximate Relative Density
	0 − 4	Very Loose
	5 − 10	Loose
SANDS	11 − 30	Medium Dense
	31 − 50	Dense
	Over 50	Very Dense

	Number of Blows, “N”	Approximate Consistency
	0 − 2	Very Soft
	3 − 4	Soft
SILTS	5 − 8	Firm
and	9 − 15	Stiff
CLAYS	16 − 30	Very Stiff
	31 − 50	Hard
	Over 50	Very Hard

DRILLING PROCEDURES

Soil sampling and standard penetration testing performed in accordance with ASTM D1586−67. The standard penetration resistance is the number of blows of a 140 pound hammer falling 30 inches to drive a 2−inch O.D., 1⅜−inch I.D. split spoon sampler one foot. Core drilling performed in accordance with ASTM D2113−08. The undisturbed sampling procedure is described by ASTM D1587−08 (2012). Unless other arrangements are made, NOVA will dispose of all soil and rock samples remaining at the time of report submission.

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SOIL CLASSIFICATION CHART

COARSE GRAINED SOILS	**GRAVELS**	Clean Gravel less than 5% fines	GW	Well graded gravel
			GP	Poorly graded gravel
		Gravels with Fines more than 12% fines	GM	Silty gravel
			GC	Clayey gravel
	SANDS	Clean Sand less than 5% fines	SW	Well graded sand
			SP	Poorly graded sand
		Sands with Fines more than 12% fines	SM	Silty sand
			SC	Clayey sand
FINE GRAINED SOILS	**SILTS AND CLAYS** Liquid Limit less than 50	Inorganic	CL	Lean clay
			ML	Silt
		Organic	OL	Organic clay and silt
	SILTS AND CLAYS Liquid Limit 50 or more	Inorganic	CH	Fat clay
			MH	Elastic silt
		Organic	OH	Organic clay and silt
HIGHLY ORGANIC SOILS		Organic matter, dark color, organic odor	PT	Peat

PARTICLE SIZE IDENTIFICATION

GRAVELS	Coarse	¾ inch to 3 inches
	Fine	No. 4 to ¾ inch
SANDS	Coarse	No. 10 to No. 4
	Medium	No. 40 to No. 10
	Fine	No. 200 to No. 40
SILTS AND CLAYS		Passing No. 200

STRATA SYMBOLS

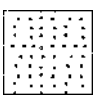

Paving


Gravel / Graded Aggregate Base

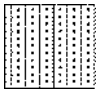

Fill

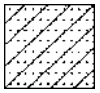

Topsoil


Alluvium


Poorly Graded Sand - SP

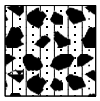

Well Graded Sand - SW

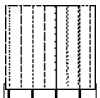

Silty Sand - SM

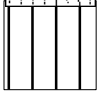

Clayey Sand - SC


Poorly graded silty, clayey sand - SM/SC


Clayey Sand and Gravel - SC/GC

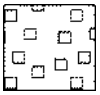

Silty Sand and Gravel - SM/GM


Silt - ML


Elastic Silt - MH


Low Plasticity Clay - CL


High Plasticity Clay - CH


Partially Weathered Rock (PWR)


Rock

NOVA

NOVA

TEST BORING RECORD B-1

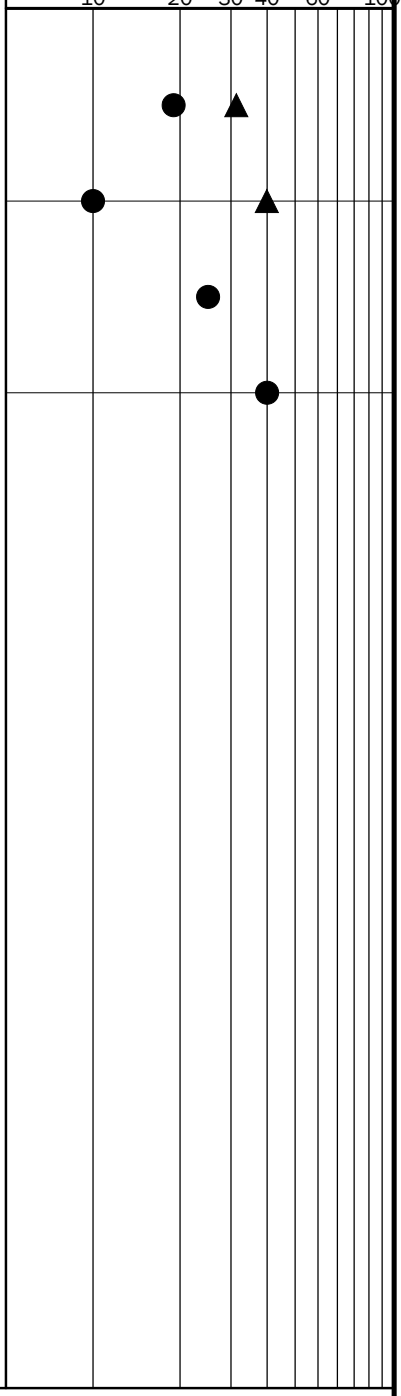
PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.357526°N, -84.568732°W | ELEVATION: 804 ft-MSL
DRILLER: Betts Environmental | LOGGED BY: CJS
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 7.5'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0		TOPSOIL: 2 inches				
		RESIDUUM: Very stiff to stiff tan orange brown medium to fine sandy SILT				19
5	800					
		Medium dense tan orange brown silty medium to fine SAND				10
		Dense tan orange brown silty medium to fine SAND				25
10	795					40
		Boring Terminated at 10 ft.				
15	790					
20	785					
25	780					
30	775					
35	770					

Graphic Depiction

BLOW COUNT
NATURAL MOISTURE
PLASTIC LIMIT — LIQUID LIMIT

10 20 30 40 60 100



This information pertains only to this boring and should not be interpreted as being indicative of the site.

NOVA

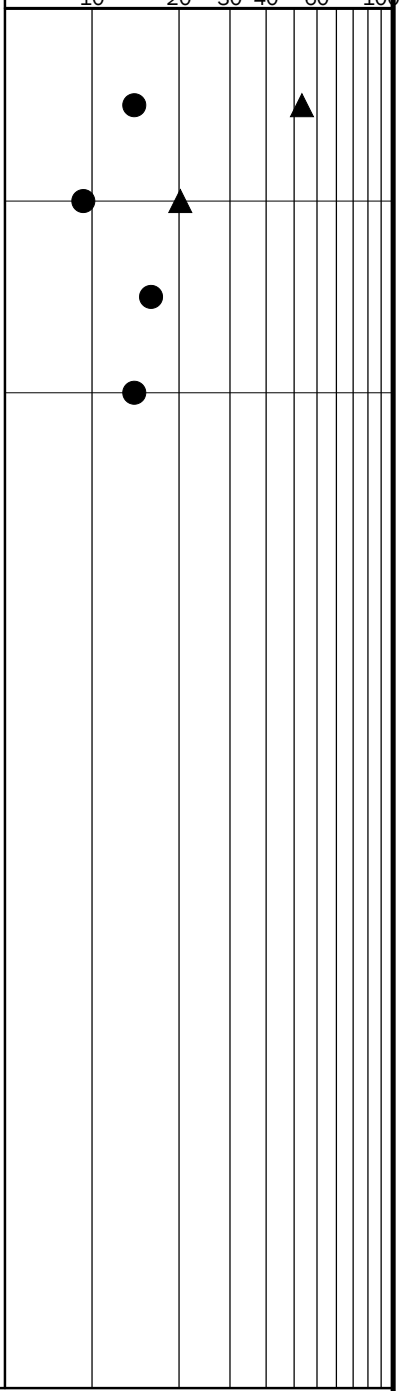
TEST BORING RECORD B-2

PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.357162°N, -84.568194°W | ELEVATION: 803 ft-MSL
DRILLER: Betts Environmental | LOGGED BY: CJS
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 5'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0						
		TOPSOIL: 2 inches				
	800	RESIDUUM: Stiff orange tan brown slightly micaceous medium to fine sandy SILT				14
5						9
	795	Medium dense orange tan brown slightly micaceous silty medium to fine SAND				16
10						14
		Boring Terminated at 10 ft.				
	790					
15						
	785					
20						
	780					
25						
	775					
30						
	770					
35						

Graphic Depiction

BLOW COUNT
NATURAL MOISTURE
PLASTIC LIMIT — LIQUID LIMIT
10 20 30 40 60 100



This information pertains only to this boring and should not be interpreted as being indicative of the site.

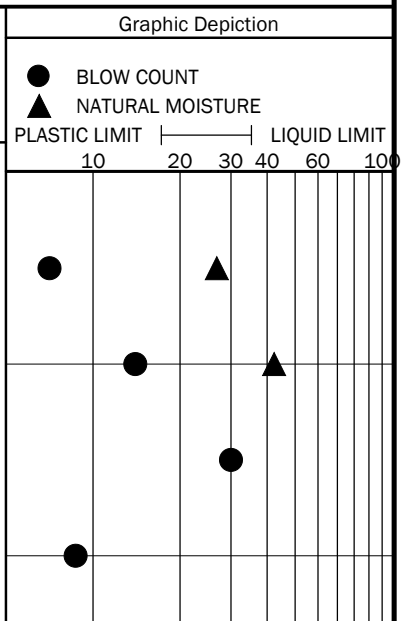
NOVA

TEST BORING RECORD B-3

PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.356698°N, -84.567499°W | ELEVATION: 804 ft-MSL
DRILLER: Betts Environmental | LOGGED BY: CJS
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 4.75'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0		TOPSOIL: 2 inches				
		RESIDUUM: Firm brown tan slightly micaceous medium to fine sandy SILT				5
5	800	Loose to medium dense orange brown silty coarse to fine SAND with rock fragments				14
						30
10	795	Boring Terminated at 10 ft.				8
15	790					
20	785					
25	780					
30	775					
35	770					

Graphic Depiction



This information pertains only to this boring and should not be interpreted as being indicative of the site.

NOVA

TEST BORING RECORD B-4

PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.357285°N, -84.568969°W | ELEVATION: 801 ft-MSL
DRILLER: Betts Environmental | LOGGED BY:
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 8'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0	800	TOPSOIL: 2 inches RESIDUUM: Firm to stiff orange brown slightly micaceous medium to fine sandy SILT				5
5	795					5
						9
10	790	Boring Terminated at 10 ft.				12
15	785					
20	780					
25	775					
30	770					
35						

Graphic Depiction

● BLOW COUNT
▲ NATURAL MOISTURE
PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT

10 20 30 40 60 100

This information pertains only to this boring and should not be interpreted as being indicative of the site.

NOVA

TEST BORING RECORD B-5

PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.356917°N, -84.568426°W | ELEVATION: 803 ft-MSL
DRILLER: Betts Environmental | LOGGED BY: CJS
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 5'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0		TOPSOIL: 2 inches				
	800	RESIDUUM: Soft to firm orange brown slightly micaceous medium to fine sandy SILT with some clay				5
5						7
	795					5
10						3
	790					
15		Boring Terminated at 15 ft.				3
	785					
20						
	780					
25						
	775					
30						
	770					
35						

Graphic Depiction

● BLOW COUNT
▲ NATURAL MOISTURE
PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT
10 20 30 40 60 100

This information pertains only to this boring and should not be interpreted as being indicative of the site.

NOVA

TEST BORING RECORD B-6

PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.356451°N, -84.567749°W | ELEVATION: 802 ft-MSL
DRILLER: Betts Environmental | LOGGED BY:
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 2.5'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0						
		TOPSOIL: 3 inches				
	800	RESIDUUM: Firm orange brown medium to fine sandy SILT				8
5						6
	795	Loose white orange brown silty medium to fine SAND				6
10						8
	790	Boring Terminated at 10 ft.				
15						
	785					
20						
	780					
25						
	775					
30						
	770					
35						

Graphic Depiction

● BLOW COUNT
▲ NATURAL MOISTURE
PLASTIC LIMIT ⊢——⊣ LIQUID LIMIT
10 20 30 40 60 100

This information pertains only to this boring and should not be interpreted as being indicative of the site.

NOVA

TEST BORING RECORD B-7

PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.357557°N, -84.569023°W | ELEVATION: 801 ft-MSL
DRILLER: Betts Environmental | LOGGED BY: CJS
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 6.5'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0	800	ASPHALT: 7 inches GRADED AGGREGATE BASE (GAB): 6 1/2 inches RESIDUUM: Very stiff orange brown medium to fine sandy SILT				18
5	795	Firm to stiff orange brown medium to fine sandy SILT				12
10	790	Medium dense orange brown silty medium to fine SAND				9
		Boring Terminated at 10 ft.				13
15	785					
20	780					
25	775					
30	770					
35						

Graphic Depiction

BLOW COUNT
NATURAL MOISTURE
PLASTIC LIMIT — LIQUID LIMIT

10 20 30 40 60 100

This information pertains only to this boring and should not be interpreted as being indicative of the site.

NOVA

TEST BORING RECORD B-8

PROJECT: FFC Atlanta Regional Airport Terminal | PROJECT NO.: 10103-2023095
CLIENT: Michael Baker International
PROJECT LOCATION: Peachtree City, Georgia
LOCATION: 33.356492°N, -84.567491°W | ELEVATION: 804 ft-MSL
DRILLER: Betts Environmental | LOGGED BY: CJS
DRILLING METHOD: Hollow-Stem Auger | DATE: 11/17/2023
DEPTH TO - WATER> INITIAL: NE | AFTER 24 HOURS: NA | CAVING> 5'

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	N-Value
0		ASPHALT: 2 1/4 inches				
		GRADED AGGREGATE BASE (GAB): 6 inches				
		RESIDUUM: Loose to medium dense red orange medium to fine sandy SILT				11
5	800					7
		Loose orange tan silty medium to fine SAND				5
10	795	Boring Terminated at 10 ft.				7
15	790					
20	785					
25	780					
30	775					
35	770					

Graphic Depiction

BLOW COUNT
NATURAL MOISTURE
PLASTIC LIMIT — LIQUID LIMIT

10 20 30 40 60 100

This information pertains only to this boring and should not be interpreted as being indicative of the site.

DCP TEST DATA

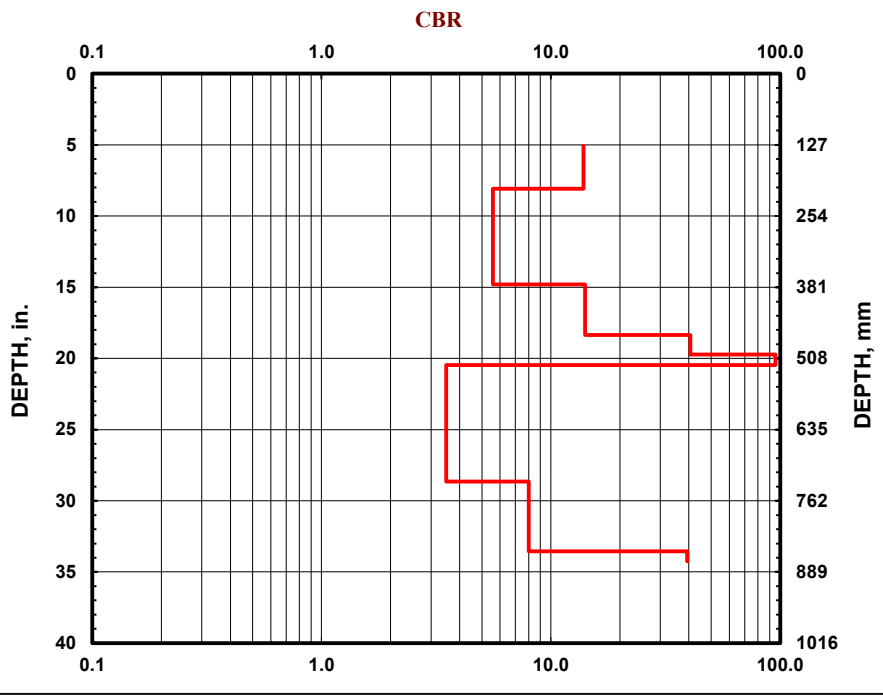
Project: *FFC Atlanta Regional Airport Terminal Apro* **Date:** 17-Nov-23

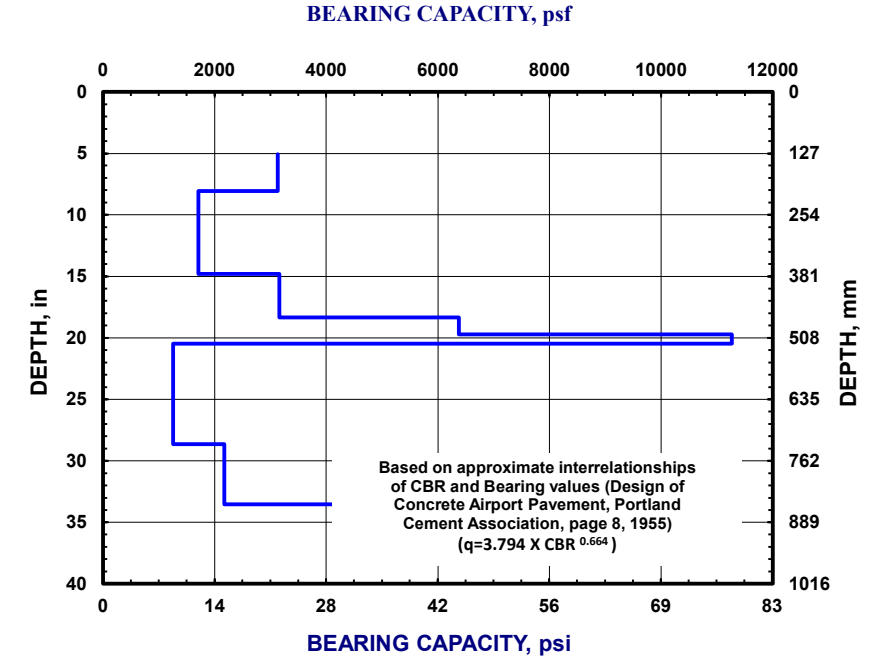
Location: B-3 **Soil Type(s):** Type in the soil type

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	129	1
5	205	1
5	376	1
6	466	1
6	501	1
7	520	1
4	728	1
5	852	1
3	870	1





DCP TEST DATA

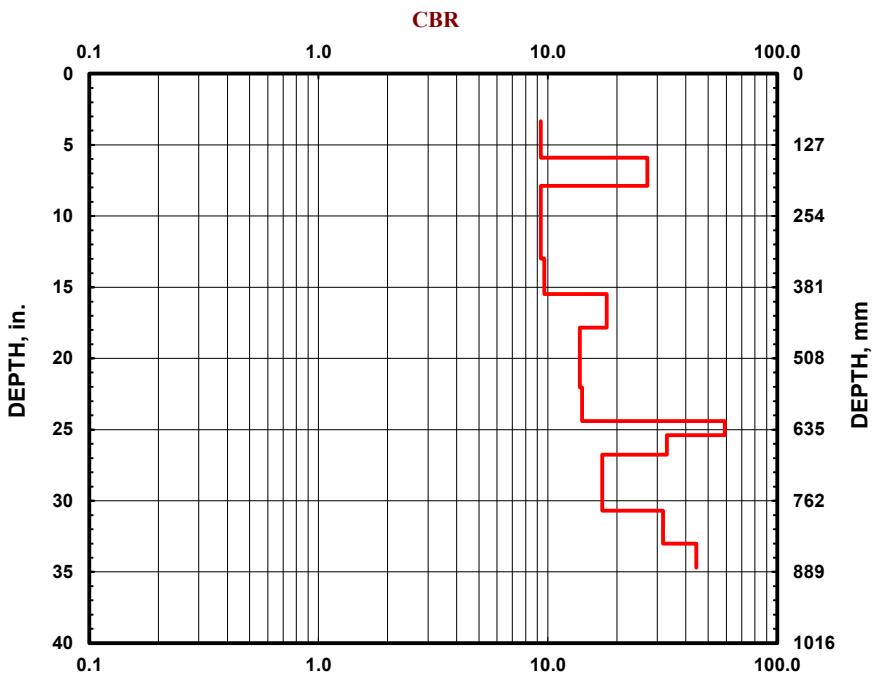
Project: *FFC Atlanta Regional Airport Terminal Apro* **Date:** 17-Nov-23

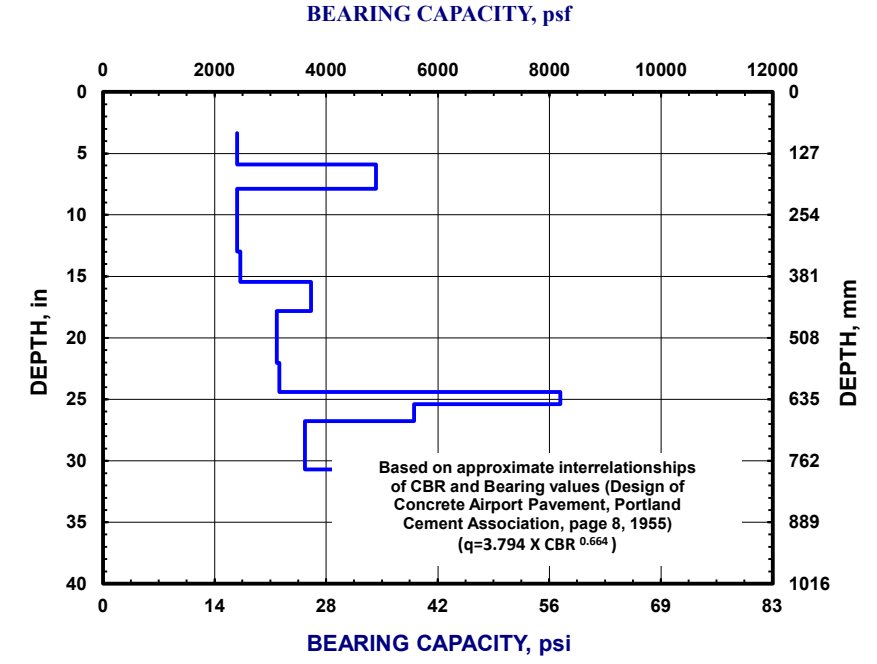
Location: B-5 **Soil Type(s):** Type in the soil type

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	85	1
3	150	1
6	200	1
6	330	1
3	393	1
5	453	1
7	560	1
4	620	1
6	645	1
5	680	1
8	780	1
8	838	1
8	881	1





DCP TEST DATA

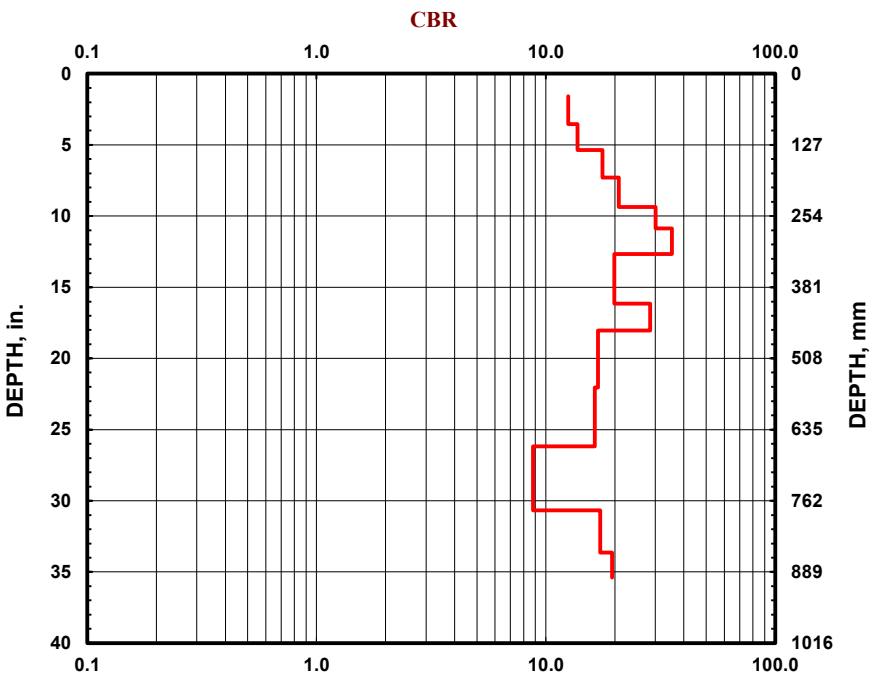
Project: *FFC Atlanta Regional Airport Terminal Apro* **Date:** 17-Nov-23

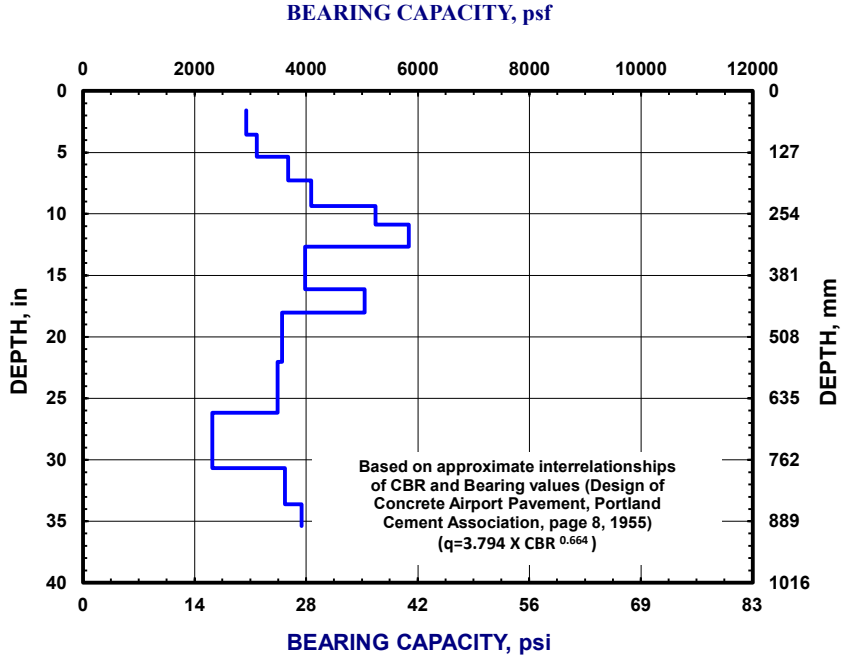
Location: B-7 **Soil Type(s):** Type in the soil type

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	40	1
3	90	1
3	136	1
4	185	1
5	238	1
5	276	1
7	322	1
8	410	1
6	458	1
8	560	1
8	665	1
5	779	1
6	854	1
4	899	1





DCP TEST DATA

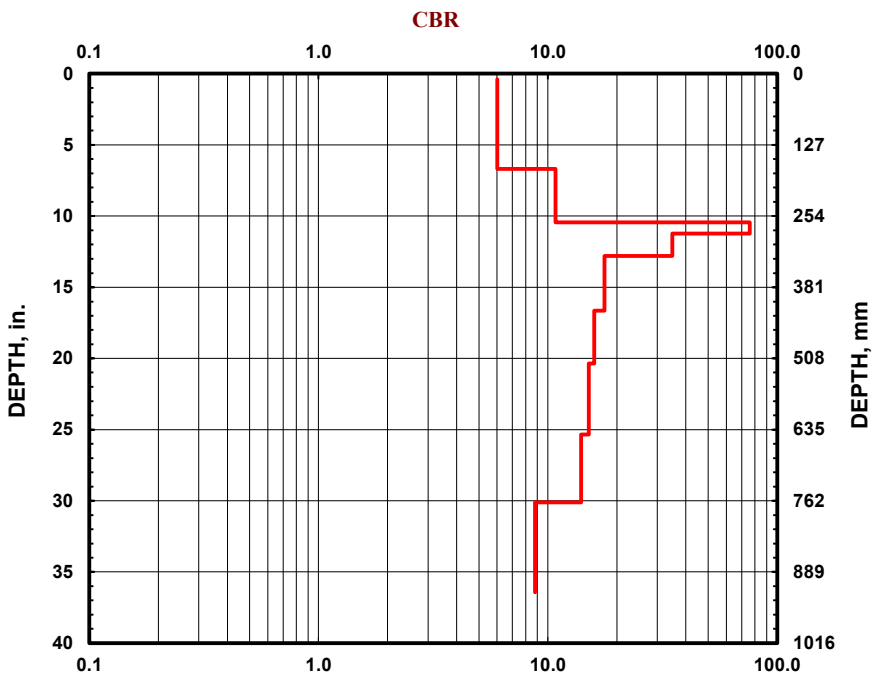
Project: *FFC Atlanta Regional Airport Terminal Apro* **Date:** 17-Nov-23

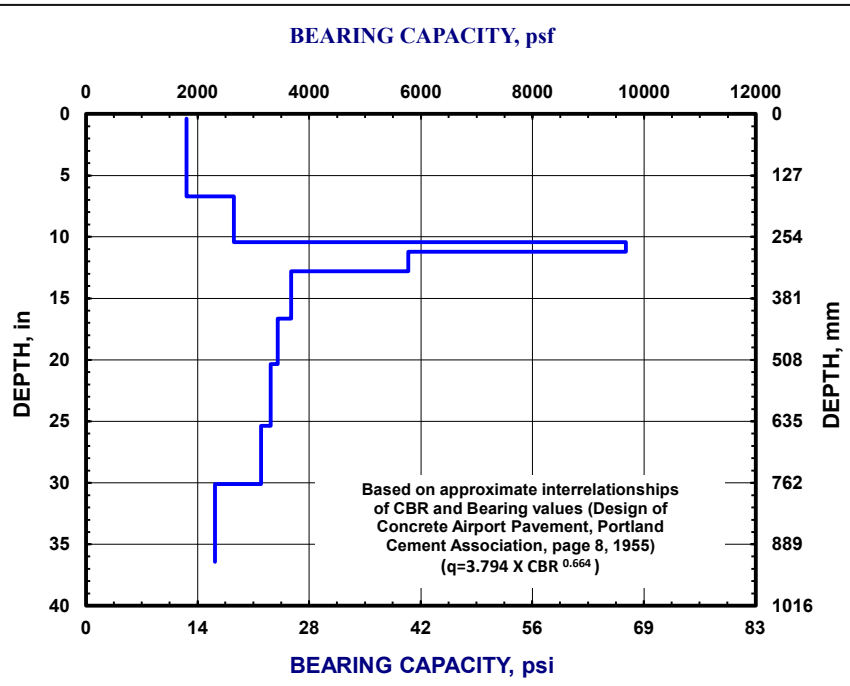
Location: B-8 **Soil Type(s):** Type in the soil type

Hammer
- ○ 10.1 lbs.
- ◉ 17.6 lbs.
- ○ Both hammers used

Soil Type
- ○ CH
- ○ CL
- ◉ All other soils

No. of Blows	Accumulative Penetration (mm)	Type of Hammer
0	10	1
5	170	1
5	265	1
6	285	1
6	325	1
8	423	1
7	517	1
9	644	1
8	765	1
7	925	1





APPENDIX C
Laboratory Reports

TIMELY ENGINEERING SOIL TESTS, LLC

1874 Forge Street Tucker, GA 30084
Phone: 770-938-8233
Fax: 770-923-8973
Web: www.test-llc.com

Tested By	IH
Date	12/05/23
Checked By	

ASTM D 1883/AASHTO T193
Standard Test Method for CBR (California Bearing Ratio) of Laboratory Compacted Soils

Client Pr. #	10103-2023095	Lab. PR. #	2304A-33-1
Pr. Name	FFC Atlanta Regional Airport	S. Type	Remold
Sample ID	48145/B-7	Depth/Elev.	0-5'
Location	-	Add. Info	-

Proctor Method Description

	T180	D1557	Other
Compaction Procedure		x	

Max Dry Density, pcf	111.7
Optimum Moisture Content, %	19.1

CBR Method Description & Test Data

Point #	1
Specified Moisture Cont., %	19.1
Specified % Compaction	95.0
Number of Layers	5
Number of Blows per layer	NA
Mold ID	116
Height of Sample before Soaking, in	4.583
Volume of Sample, ft^3	0.07510
Mass of Mold, g	6953
Mass of Wet Soil & Mold, g	11260.0
Mass of Wet Soil, g	4307
Wet Density, pcf	126.4
Dry Density before Soaking, pcf	106.1
Dial Gage Reading before Soaking, in	0.348
Dial Gage Reading after Soaking, in	0.360
Swell of Sample, in	0.012
Swell of Sample, %	0.3
Height of Sample after Soaking, in	4.595
Dry Density after Soaking, pcf	105.8
Mass of Sample & Mold after Soaking, g	11393.0
% Compaction	95.0

Mass of material before separation on 3/4" sieve, g	NA
Mass of material retained on 3/4" sieve, g	NA
Mass of +3/4" material replaced by (+#4 to -3/4") portion, g	NA
Replaced Portion,%	NA

Penetration Piston ID	123	Dial Gage ID	1098	
Rammer Type (Effort)	MOD	Manual		
Height of Drop, in	18			
Mass of Rammer, kg	4.54			
Condition of Sample	Soaked			
Soaking Duration	96 hr			
Surcharge Load	10	lb	4.54	kg
Surcharge Press., psi	0.35			
Penetration Rate, in/min		0.05		
Balance ID	598/1090	Load Cell ID	11	
Oven ID	496/758	Dial Gage ID	450	
Penetration Machine ID	10	Rammer ID	19	

Material was compacted at around optimum moisture content of Provided Modified Proctor

Moisture Content

	Point 1		
	Before Comp.	After Comp.	After Soaking*
Mass of Wet Sample and Tare, g	524.6	495.4	927.0
Mass of Dry Sample and Tare, g	461.3	437.9	795.6
Mass of Tare, g	128.6	138.7	222.1
Moisture Content, %	19.0	19.2	22.9
Average Moisture Content, %	19.1		

* Portion of sample used for determination of moisture content after soaking and penetration:

Top 1 inch	Av. Representative
YES	NO

Load - Penetration Data

Point 1		
Penetration, in	Load, lb	Stress, psi
0.000	4	0.0
0.0250	112	36.1
0.0500	473	156.6
0.0750	943	313.6
0.1000	1217	405.1
0.1250	1403	467.2
0.1500	1530	509.7
0.1750	1642	547.1
0.2000	1727	575.5
0.3000	1985	661.6
0.4000	2171	723.7
0.5000	2352	784.2

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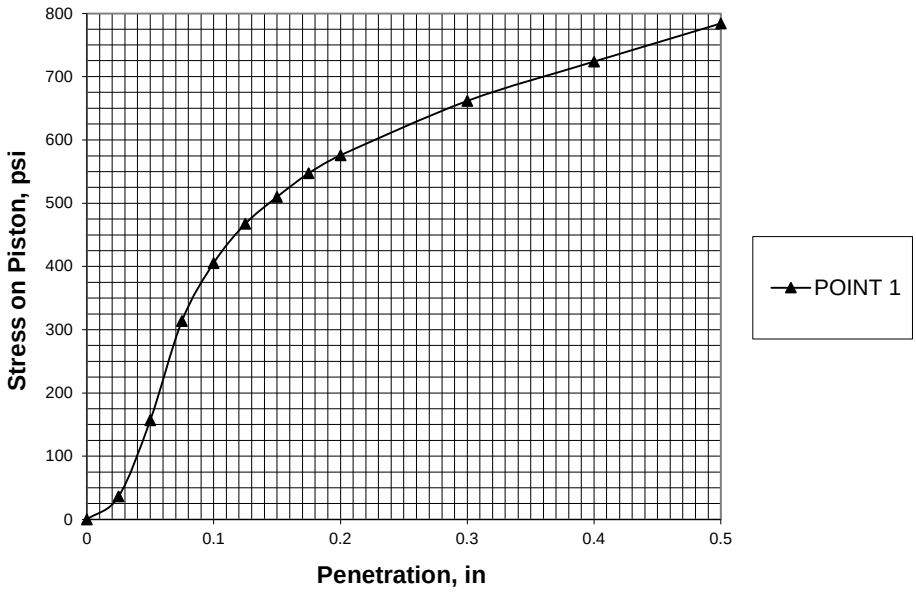
Date	12/05/23
Checked By	

ASTM D 1883/AASHTO T193

Standard Test Method for CBR (California Bearing Ratio) of Laboratory Compacted Soils

Client Pr. #	10103-2023095	Lab. PR. #	2304A-33-1
Pr. Name	FFC Atlanta Regional Airport	S. Type	Remold
Sample ID	48145/B-7	Depth/Elev.	0-5'
Location	-	Add. Info	-

LOAD-PENETRATION CURVE



	Corrected Penetration, in	Corrected Stress, psi	Bearing Ratio, %
Point 1	0.1	467.2	46.7
	0.2	599.8	40.0

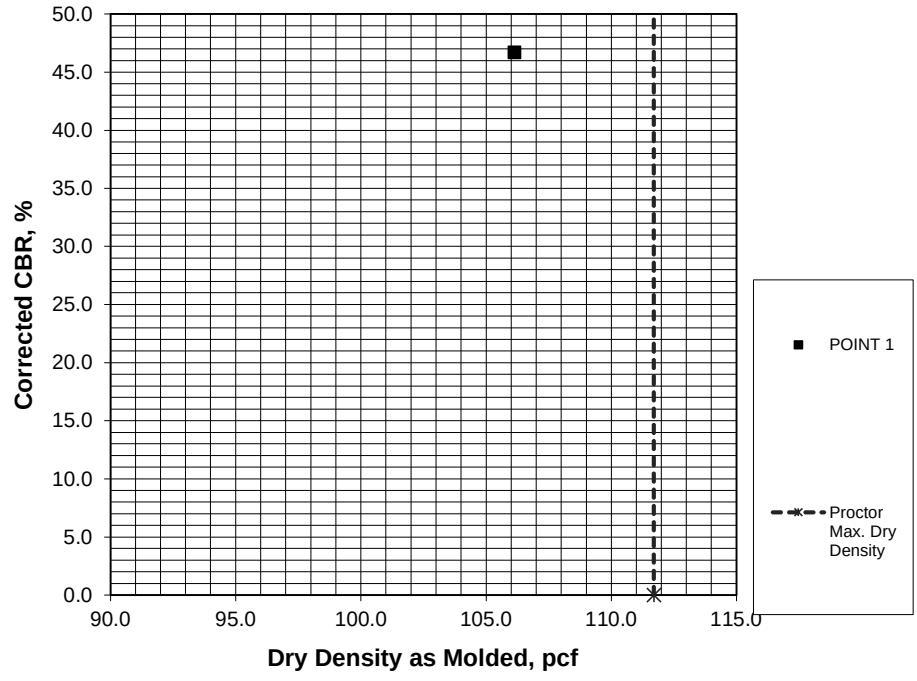
DESCRIPTION

NA

USCS (ASTM D2487;2488)

NA

DRY DENSITY vs. CBR



Point #	Dry Density, pcf	Corrected CBR, %	Number of Blows per Layer
1	106.1	46.7	NA

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Tested By	IH
Date	12/05/23
Checked By	

ASTM D 1883/AASHTO T193
Standard Test Method for CBR (California Bearing Ratio) of Laboratory Compacted Soils

Client Pr. #	10103-2023095	Lab. PR. #	2304A-33-1
Pr. Name	FFC Atlanta Regional Airport	S. Type	Remold
Sample ID	48146/B-8	Depth/Elev.	0-5'
Location	B-8	Add. Info	-

Proctor Method Description

	T180	D1557	Other
Compaction Procedure		x	

Max Dry Density, pcf	110.7
Optimum Moisture Content, %	17.6

CBR Method Description & Test Data

Point #	1
Specified Moisture Cont., %	17.6
Specified % Compaction	95.0
Number of Layers	5
Number of Blows per layer	NA
Mold ID	117
Height of Sample before Soaking, in	4.582
Volume of Sample, ft^3	0.07510
Mass of Mold, g	6991
Mass of Wet Soil & Mold, g	11202.0
Mass of Wet Soil, g	4211
Wet Density, pcf	123.6
Dry Density before Soaking, pcf	105.2
Dial Gage Reading before Soaking, in	0.333
Dial Gage Reading after Soaking, in	0.526
Swell of Sample, in	0.193
Swell of Sample, %	4.2
Height of Sample after Soaking, in	4.775
Dry Density after Soaking, pcf	101.0
Mass of Sample & Mold after Soaking, g	11475.0
% Compaction	95.0

Mass of material before separation on 3/4" sieve, g	NA
Mass of material retained on 3/4" sieve, g	NA
Mass of +3/4" material replaced by (+#4 to -3/4") portion, g	NA
Replaced Portion,%	NA

Penetration Piston ID	123	Dial Gage ID	1098	
Rammer Type (Effort)	MOD	Manual		
Height of Drop, in	18			
Mass of Rammer, kg	4.54			
Condition of Sample	Soaked			
Soaking Duration	96 hr			
Surcharge Load	10	lb	4.54	kg
Surcharge Press., psi	0.35			
Penetration Rate, in/min		0.05		
Balance ID	598/1090	Load Cell ID	11	
Oven ID	496/758	Dial Gage ID	450	
Penetration Machine ID	10	Rammer ID	19	

Material was compacted at around optimum moisture content of Provided Modified Proctor

Moisture Content

	Point 1		
	Before Comp.	After Comp.	After Soaking*
Mass of Wet Sample and Tare, g	510.6	476.2	1111.9
Mass of Dry Sample and Tare, g	454.2	426.0	907.8
Mass of Tare, g	133.2	139.0	203.7
Moisture Content, %	17.6	17.5	29.0
Average Moisture Content, %	17.5		

* Portion of sample used for determination of moisture content after soaking and penetration:

Top 1 inch	Av. Representative
YES	NO

Load - Penetration Data

Point 1		
Penetration, in	Load, lb	Stress, psi
0.000	4	0.0
0.0250	45	13.7
0.0500	80	25.4
0.0750	123	39.7
0.1000	169	55.1
0.1250	229	75.1
0.1500	285	93.8
0.1750	330	108.9
0.2000	367	121.2
0.3000	478	158.3
0.4000	563	186.7
0.5000	647	214.8

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Web: www.test-llc.com

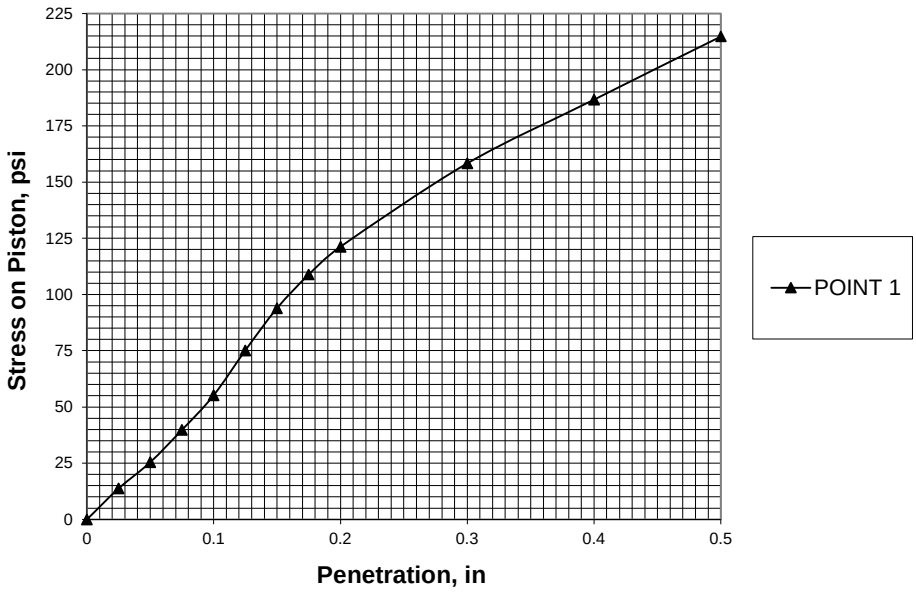
Tested By	IH
Date	12/05/23
Checked By	

ASTM D 1883/AASHTO T193

Standard Test Method for CBR (California Bearing Ratio) of Laboratory Compacted Soils

Client Pr. #	10103-2023095	Lab. PR. #	2304A-33-1
Pr. Name	FFC Atlanta Regional Airport	S. Type	Remold
Sample ID	48146/B-8	Depth/Elev.	0-5'
Location	B-8	Add. Info	-

LOAD-PENETRATION CURVE



	Corrected Penetration, in	Corrected Stress, psi	Bearing Ratio, %
Point 1	0.1	55.1	5.5
	0.2	121.2	8.1

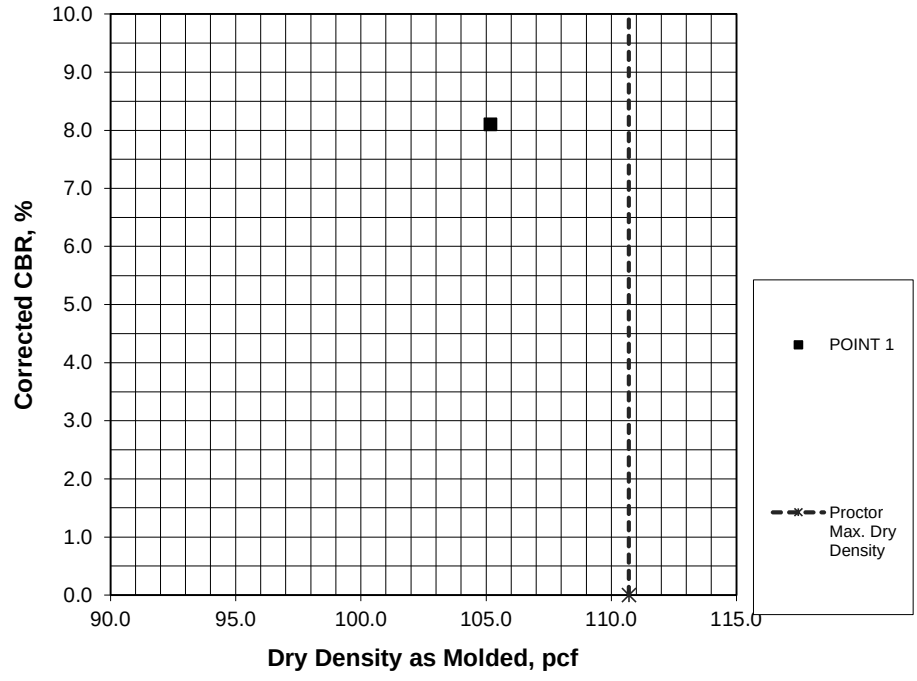
DESCRIPTION

NA

USCS (ASTM D2487;2488)

NA

DRY DENSITY vs. CBR

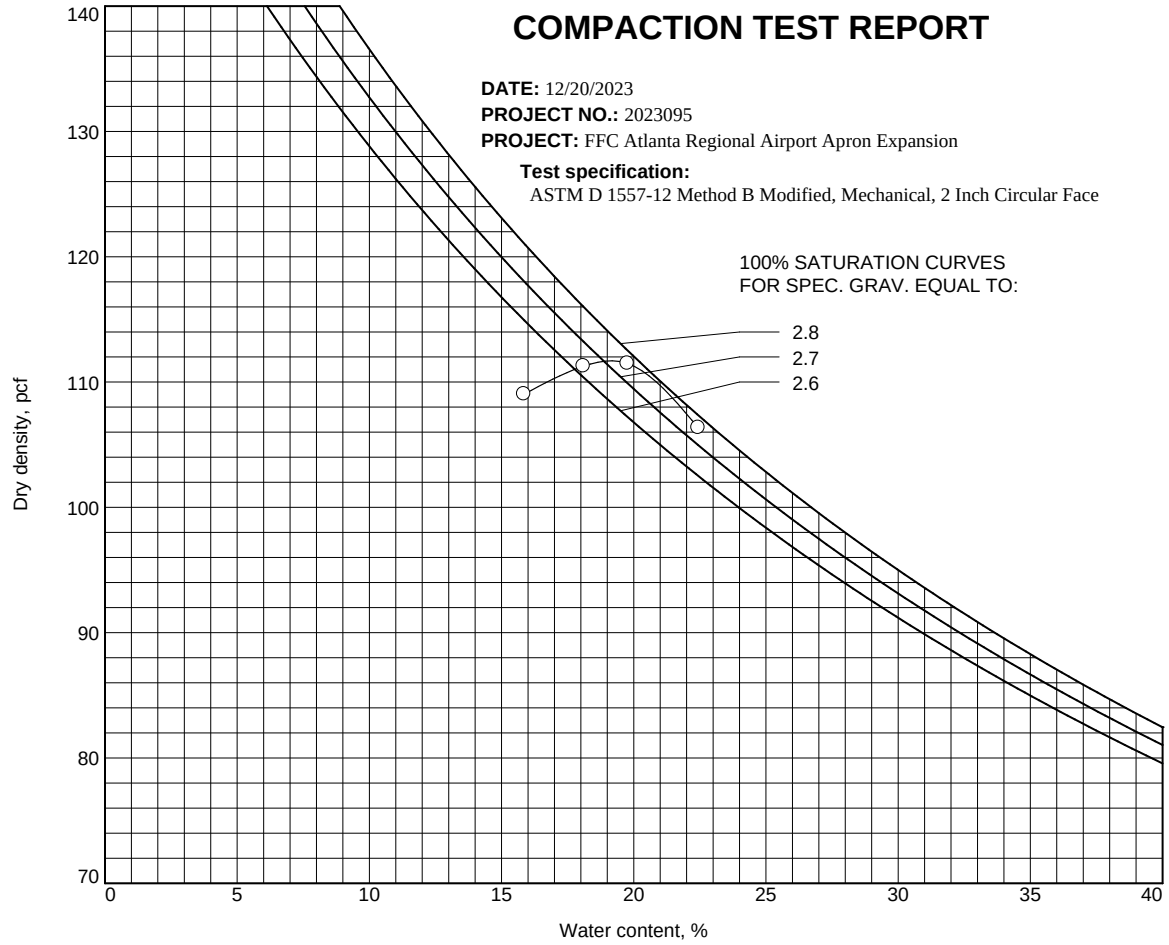


Point #	Dry Density, pcf	Corrected CBR, %	Number of Blows per Layer
1	105.2	8.1	NA

COMPACTION TEST REPORT

DATE: 12/20/2023
PROJECT NO.: 2023095
PROJECT: FFC Atlanta Regional Airport Apron Expansion

Test specification:
ASTM D 1557-12 Method B Modified, Mechanical, 2 Inch Circular Face

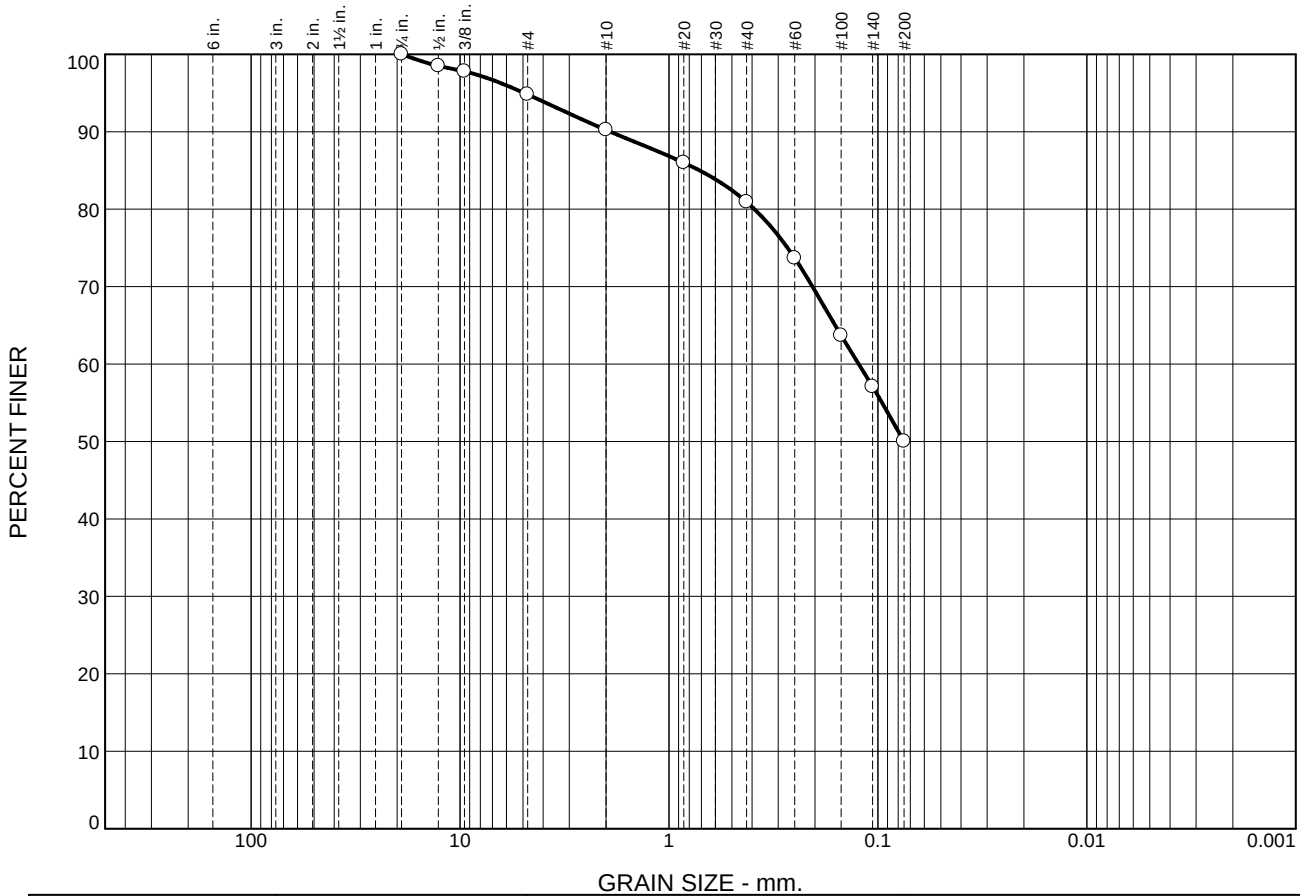


	Sample No.	Elev. or Depth	Material Description	Specific Gravity	LL	PL	Oversize	% < #200
○	B-7	0-5'	Brown sandy SILT		49	38	%>3/8 in.=2.2	50.0

Sample No.	B-7			
Natural water content, percent				
Optimum water content, percent	19.1			
Max dry density, pcf	111.7			

Remarks: B-7	**Project:** FFC Atlanta Regional Airport Apron Expansion	**Project No.:** 2023095
	Location:	
	Source: B-7	
	Nova Engineering & Environmental	
Figure	**Norcross, GA**	

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	5.2	4.6	9.3	30.9	50.0	

SOIL DATA

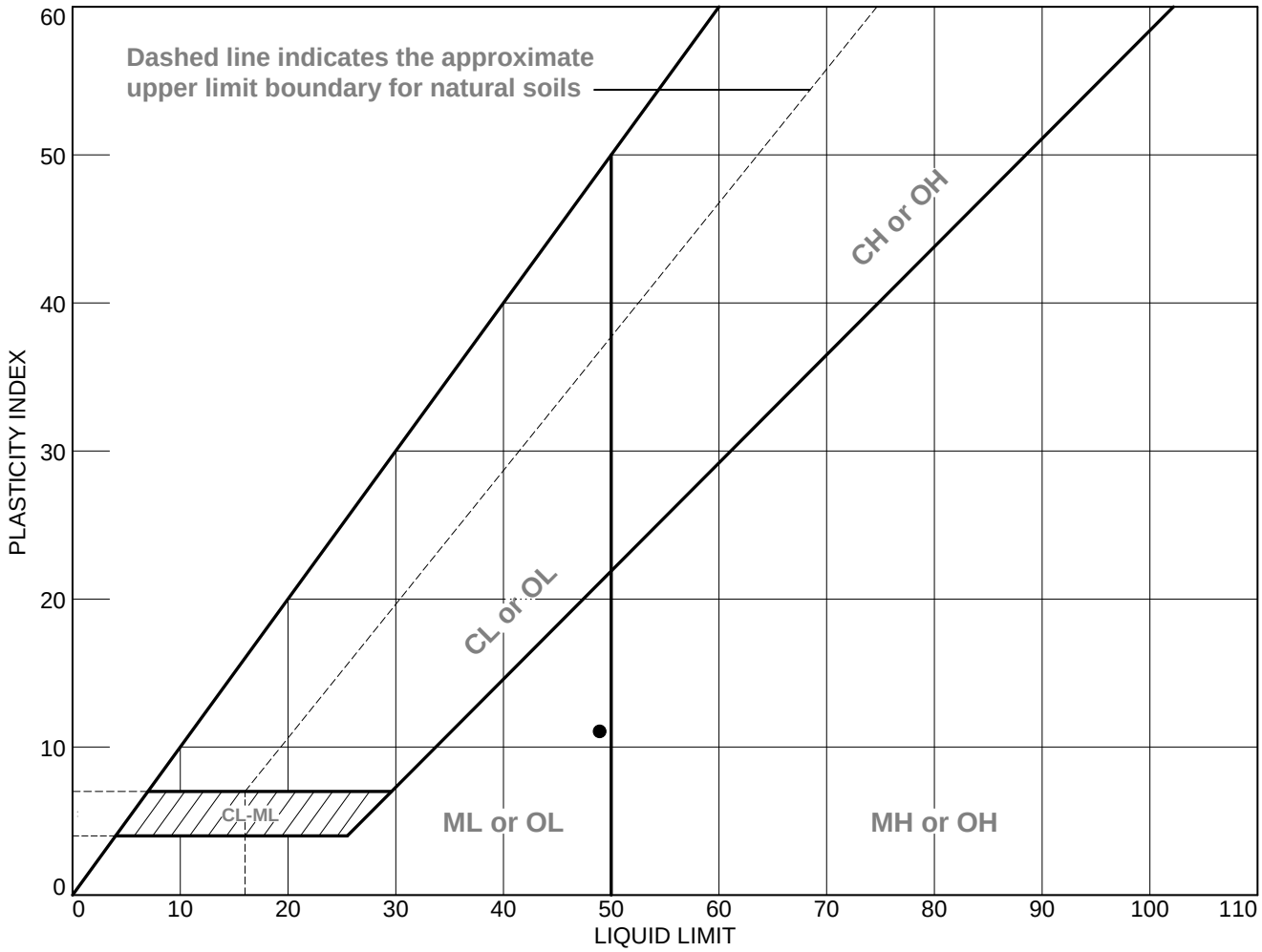
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	AASHTO
○	B-7	B-7	0-5'	Brown sandy SILT	A-7-5(4)

Nova Engineering & Environmental
Norcross, GA

Client: Michael Baker International
Project: FFC Atlanta Regional Airport Apron Expansion

Project No.: 2023095 **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-7	B-7	0-5'		38	49	11	ML

Nova Engineering & Environmental
Norcross, GA

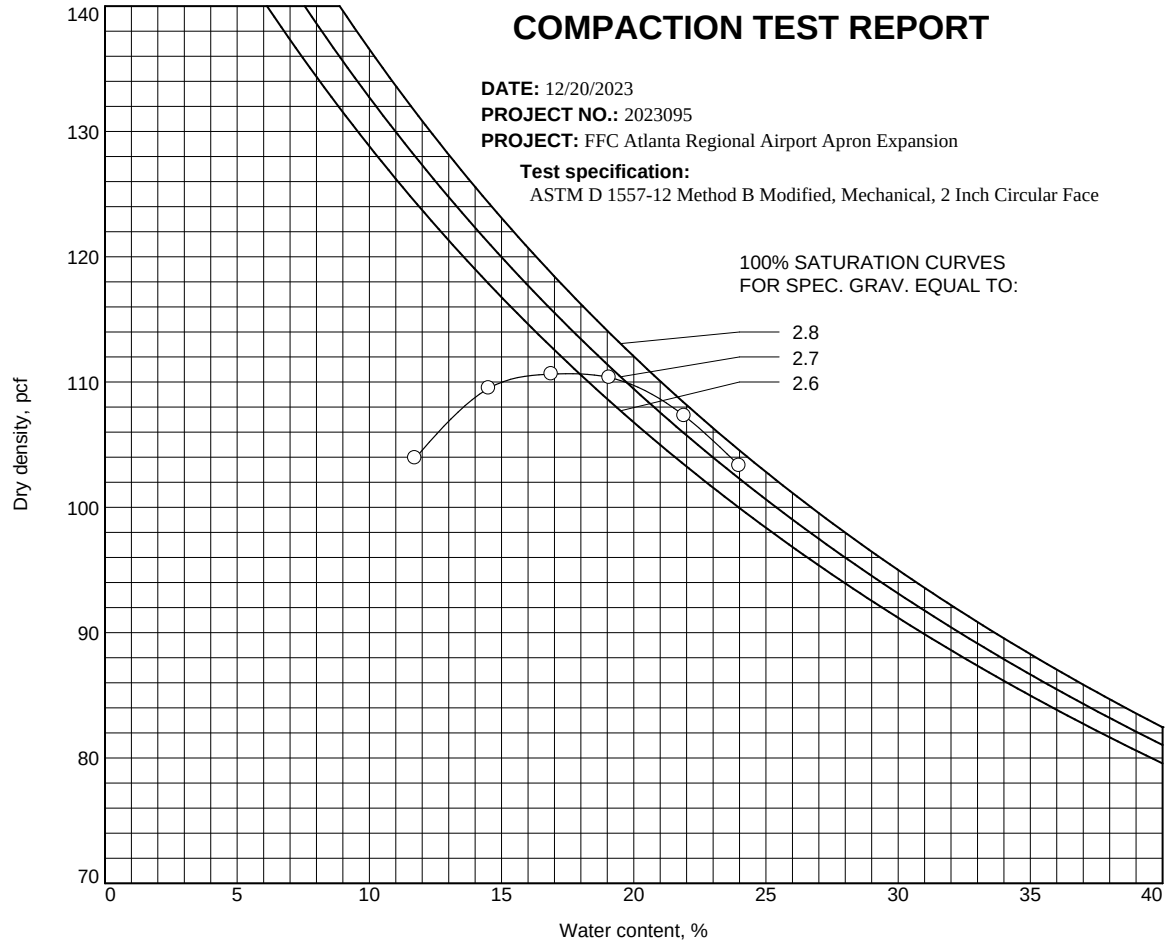
Client: Michael Baker International
Project: FFC Atlanta Regional Airport Apron Expansion

Project No.: 2023095 **Figure**

COMPACTION TEST REPORT

DATE: 12/20/2023
PROJECT NO.: 2023095
PROJECT: FFC Atlanta Regional Airport Apron Expansion

Test specification:
ASTM D 1557-12 Method B Modified, Mechanical, 2 Inch Circular Face

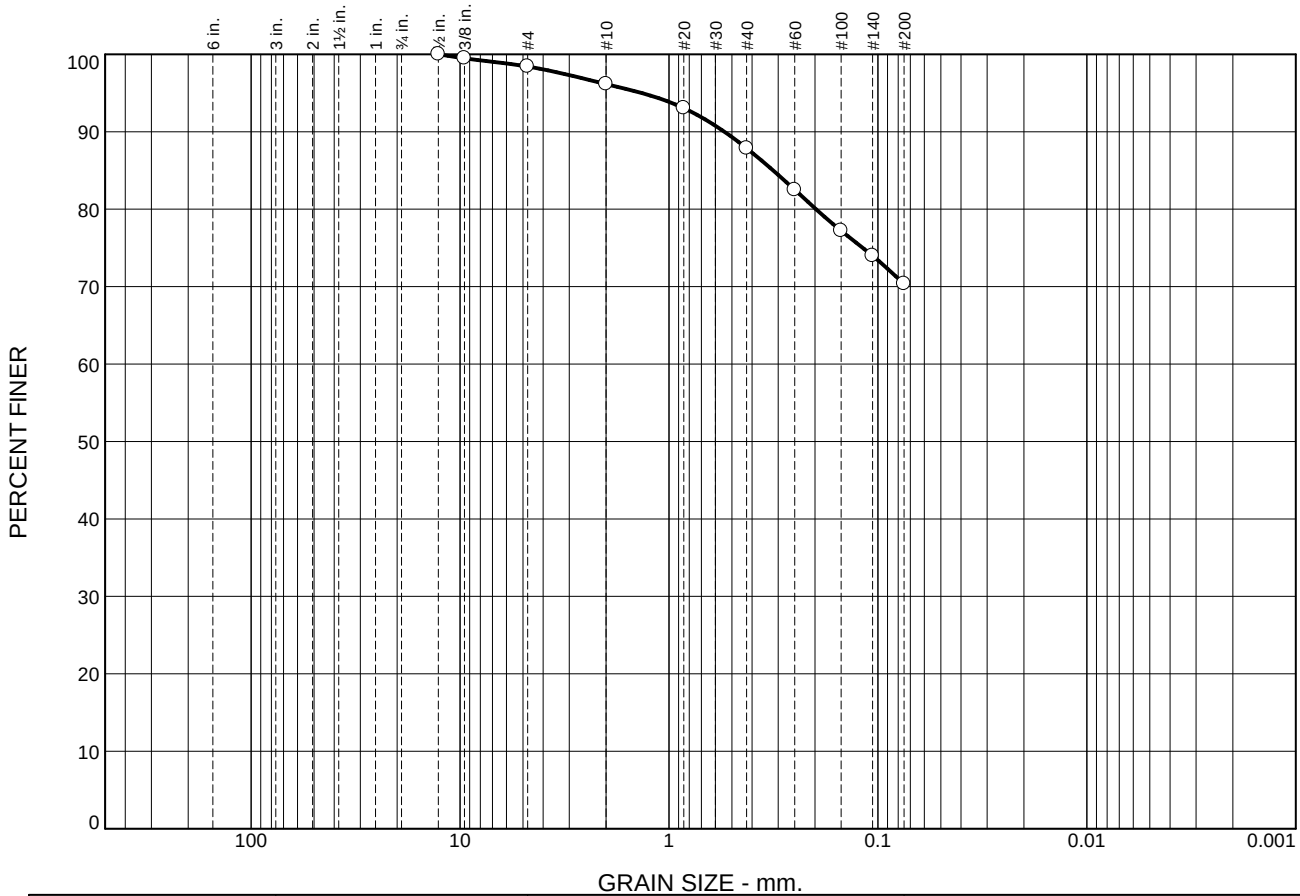


	Sample No.	Elev. or Depth	Material Description	Specific Gravity	LL	PL	Oversize	% < #200
○	B-8	0-5'	Red brown elastic sandy SILT		71	45	%>3/8 in.=0.5	70.4

Sample No.	B-8			
Natural water content, percent				
Optimum water content, percent	17.6			
Max dry density, pcf	110.7			

Remarks: B-8	Project: FFC Atlanta Regional Airport Apron Expansion	Project No.: 2023095
	Location:	
	Source: B-8	
	Nova Engineering & Environmental	
Figure	**Norcross, GA**	

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0.0	0.0	1.6	2.2	8.3	17.5	70.4	

SOIL DATA

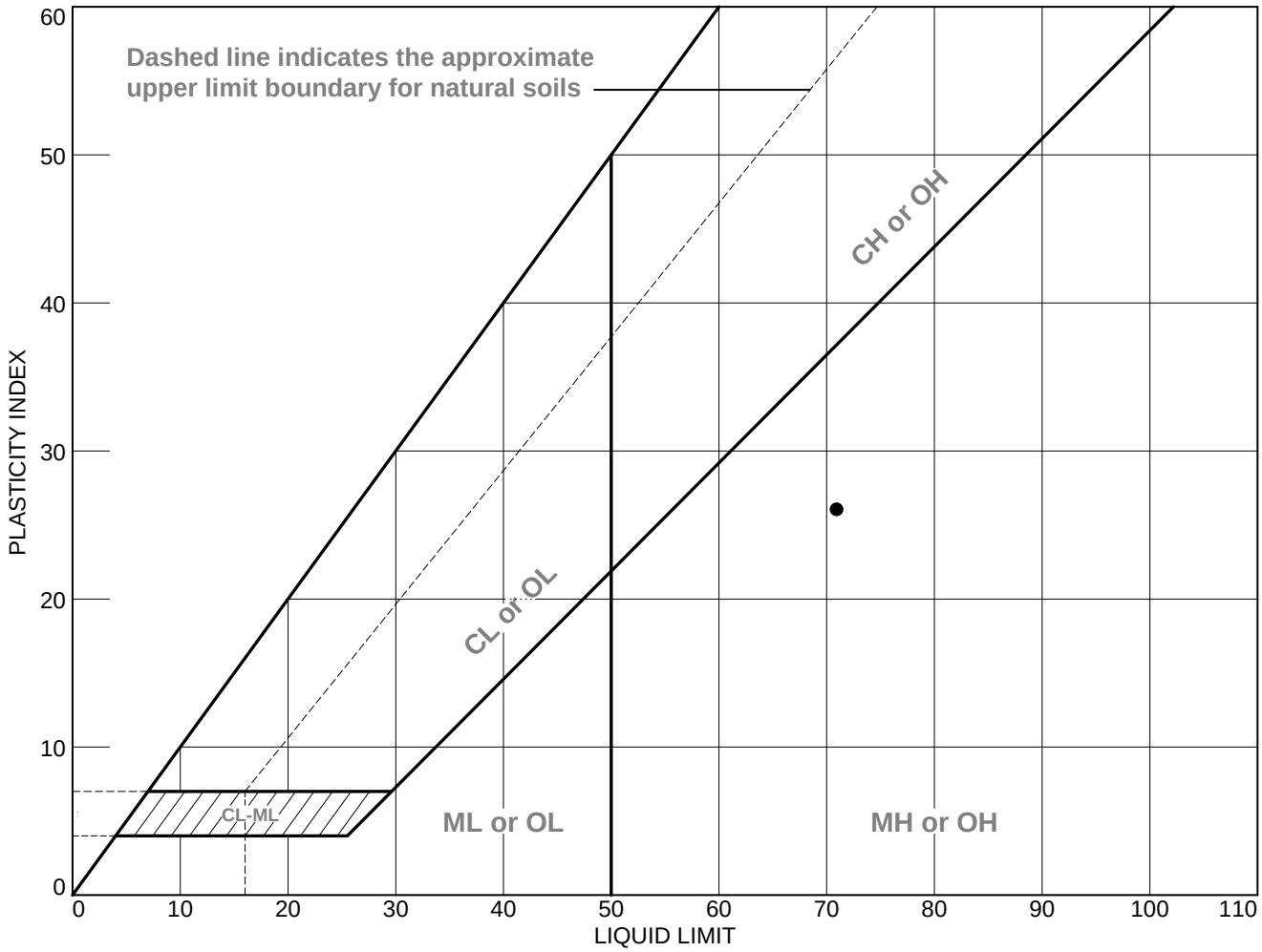
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	AASHTO
○	B-8	B-8	0-5'	Red brown elastic sandy SILT	A-7-5(21)

Nova Engineering & Environmental
Norcross, GA

Client: Michael Baker International
Project: FFC Atlanta Regional Airport Apron Expansion

Project No.: 2023095 **Figure**

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-8	B-8	0-5'		45	71	26	MH

Nova Engineering & Environmental
Norcross, GA

Client: Michael Baker International
Project: FFC Atlanta Regional Airport Apron Expansion

Project No.: 2023095 **Figure**

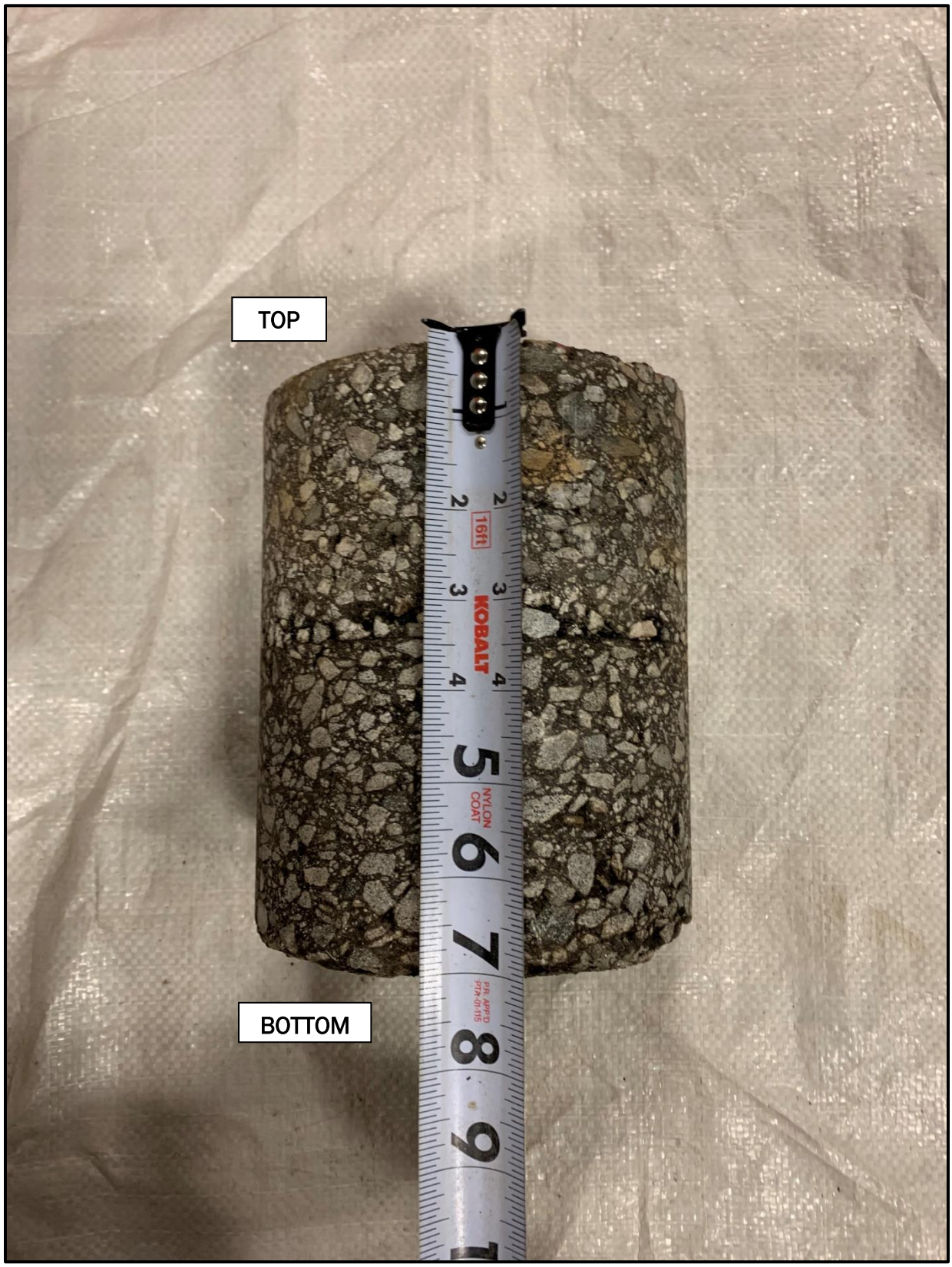
NOVA

Moisture Content (D2216-mass)

Project Name	FFC Atlanta Regional Airport	Date	11/27/2023
Project Number	10103-2023095	Lab Number	6434/6455

Sample Name	B-1	B-1	B-2	B-2	B-3	B-3	B-5	B-5	B-7	B-8
Depth	1-2.5'	3.5-5'	1-2.5'	3.5-5'	1-2.5'	3.5-5'	1-2.5'	3.5-5'	3.5-5'	3.5-5'
Tare #	M10	M9	M12	B2	M21	M2	M5	M14	35	20
WWS&T	243.8	269.0	221.7	282.7	247.4	207.8	198.2	200.6	714.7	625.0
WDS&T	187.7	194.7	147.6	236.7	196.9	148.5	135.4	137.1	609.0	569.6
WT	8.4	8.4	8.4	8.9	8.2	8.3	8.3	8.3	374.5	318.2
Wwater	56.1	74.3	74.1	46.0	50.5	59.3	62.8	63.5	105.7	55.4
WDS	179.3	186.3	139.2	227.8	188.7	140.2	127.1	128.8	234.5	251.4
Moisture	31.3%	39.9%	53.2%	20.2%	26.8%	42.3%	49.4%	49.3%	45.1%	22.0%

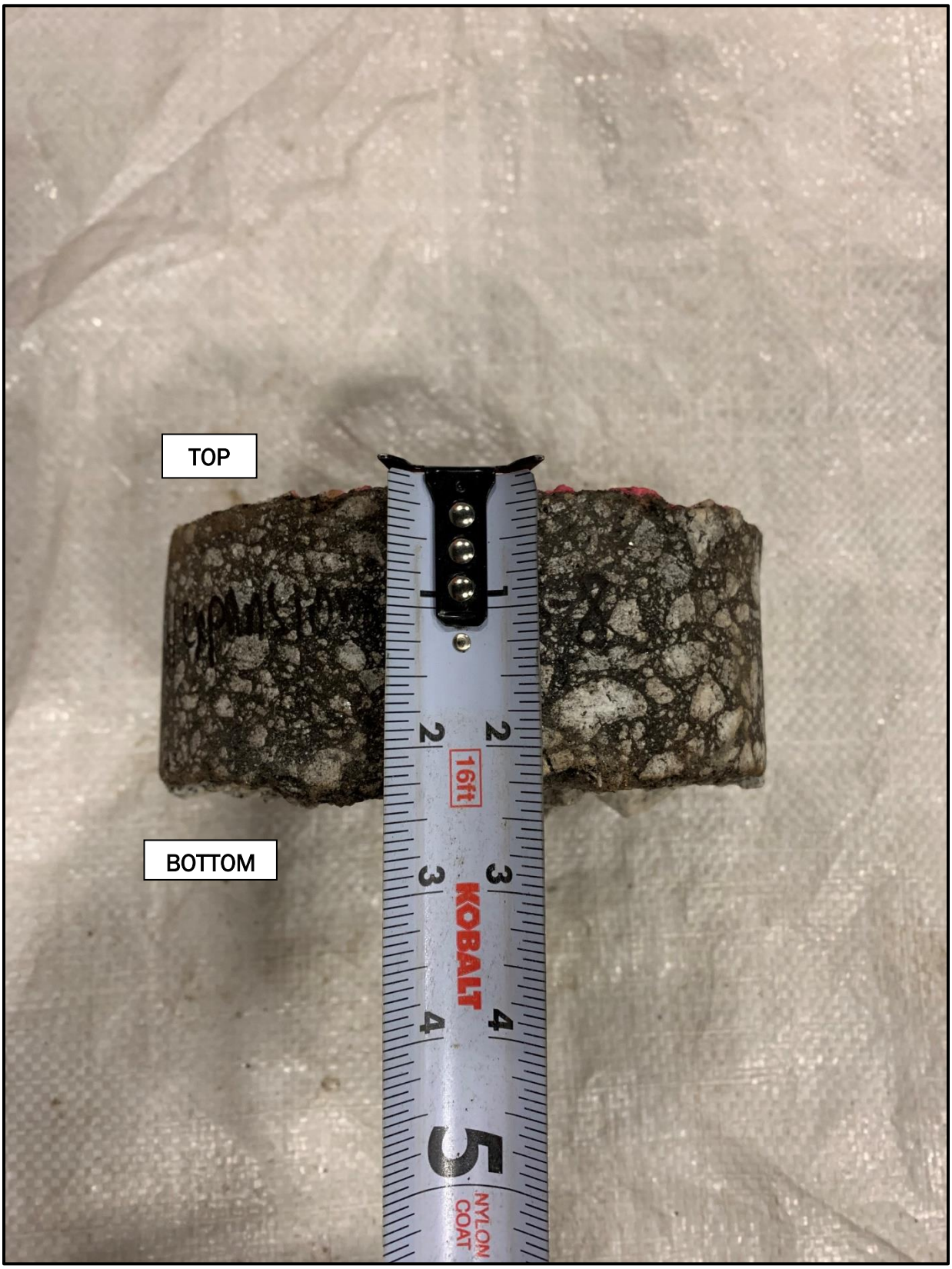
APPENDIX D
Core Photograph Log



B-7 ASPHALT CORE PHOTOGRAPH
7” Asphalt
6 ½” Graded Aggregate Base
(approximate thicknesses)

NOVA
PROFESSIONAL | PRACTICAL | PROVEN

MICHAEL BAKER INTERNATIONAL
FFC Atlanta Regional Airport Terminal Apron Expansion
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095



B-8 ASPHALT CORE PHOTOGRAPH
2 ¼" Asphalt
6" Graded Aggregate Base
(approximate thicknesses)

NOVA
PROFESSIONAL | PRACTICAL | PROVEN

MICHAEL BAKER INTERNATIONAL
FFC Atlanta Regional Airport Terminal Apron Expansion
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095

APPENDIX E
Qualifications of Recommendations

QUALIFICATIONS OF RECOMMENDATIONS

The findings, conclusions, and recommendations presented in this report represent our professional opinions concerning subsurface conditions at the site. The opinions presented are relative to the dates of our site work and should not be relied on to represent conditions at later dates or at locations not explored. The opinions included herein are based on information provided to us, the data obtained at specific locations during the study and our past experience. If additional information becomes available that might impact our geotechnical opinions, it will be necessary for NOVA to review the information, reassess the potential concerns, and re-evaluate our conclusions and recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is the possibility that conditions between borings will differ from those encountered at specific boring locations, that conditions are not as anticipated by the designers and/or the contractors, or that either natural events or the construction process have altered the subsurface conditions. These variations are an inherent risk associated with subsurface conditions in this region and the approximate methods used to obtain the data. These variations may not be apparent until construction.

The professional opinions presented in this geotechnical report are not final. Field observations and foundation installation monitoring by the geotechnical engineer, as well as soil density testing and other quality assurance functions associated with site earthwork and foundation construction, are an extension of this report. Therefore, NOVA should be retained by the owner to observe all earthwork and foundation construction to document that the conditions anticipated in this study actually exist, and to finalize or amend our conclusions and recommendations. NOVA is not responsible or liable for the conclusions and recommendations presented in this report if NOVA does not perform these observations and testing services.

This report is intended for the sole use of CLIENT only. The scope of work performed during this study was developed for purposes specifically intended by CLIENT and may not satisfy other users' requirements. Use of this report or the findings, conclusions or recommendations by others will be at the sole risk of the user. NOVA is not responsible or liable for the interpretation by others of the data in this report, nor their conclusions, recommendations, or opinions.

Our professional services have been performed, our findings obtained, our conclusions derived, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices in the State of Georgia. This warranty is in lieu of all other statements or warranties, either expressed or implied.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for information purposes only.* To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration. Confront the risk of moisture infiltration*** by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org

January 18, 2024

MICHAEL BAKER INTERNATIONAL
420 Technology Parkway
Suite 150
Norcross, Georgia 30092

Attention: Mr. Charles A. Adeogun, P.E.
Senior Project Manager – Aviation

Subject: Report of Infiltration Testing
FFC – ATLANTA REGIONAL AIRPORT APRON EXPANSION
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095

Dear Mr. Adeogun:

NOVA Engineering and Environmental, LLC (NOVA) is pleased to provide this summary of infiltration testing for the above-referenced project.

NOVA was authorized to perform four (4) percolation tests across the subject site at the approximate locations shown on the attached Infiltration Testing Location Plans in order to determine the infiltration rate at specified dephts. The tests were completed at approximately six (6) to eight (8) feet below existing grade based on the information we were provided. The tests were performed in general accordance with the procedures described in the US Public Health Service's "Manual of Septic Tank Practice", Publication No. 526, 1969. Percolation rate data from this procedure were converted into infiltration rates via the Porchet Method.

Based on the results of our field testing, the measured percolation and calculated infiltration rates at the testing locations are shown below:

Infiltration Test Location	Depth of Test Below Existing Grade (feet)	Visual Description of the Soil Encountered at the Depth Tested	Percolation Rate (min./in.)	Infiltration Rate (in./hour)
I-1	6	Gray-orange and brown micaceous sandy SITL	14.98	1.24
I-2	7	Orange brown slightly micaceous sandy SILT	0.74	0.03
I-3	6	Gray-white slightly micaceous sandy SILT	2.98	0.22

Infiltration Test Location	Depth of Test Below Existing Grade (feet)	Visual Description of the Soil Encountered at the Depth Tested	Percolation Rate (min./in.)	Infiltration Rate (in./hour)
I-4	8	Orange-red sandy SILT	3.02	0.17

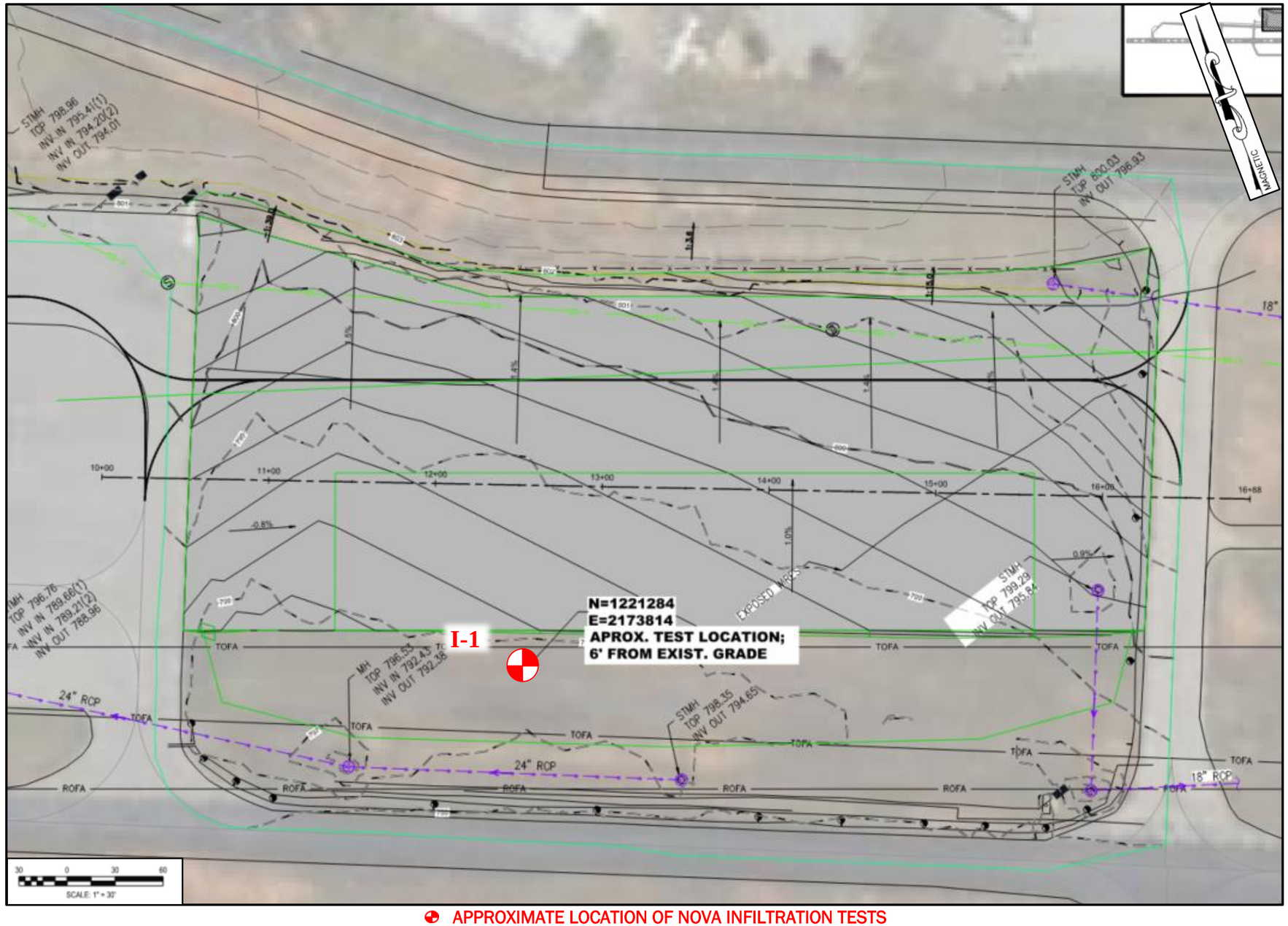
It should be noted that infiltration rates may vary across the site or at other elevations based on the consistency and the classification of the soils encountered.

We appreciate your selection of NOVA and the opportunity to be of service on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
NOVA Engineering and Environmental, LLC
Georgia Engineering License No. PEF005170

Dante Blyden
Project Engineer

Marc D, Johnston, P.E.
Principal Engineer



APPROXIMATE LOCATION OF NOVA INFILTRATION TESTS

Figure 1
INFILTRATION TESTING LOCATION PLAN
SCALE: See graphic above
SOURCE: Infiltration Test location plan prepared by Michael Baker International dated January 2023.

NOVA
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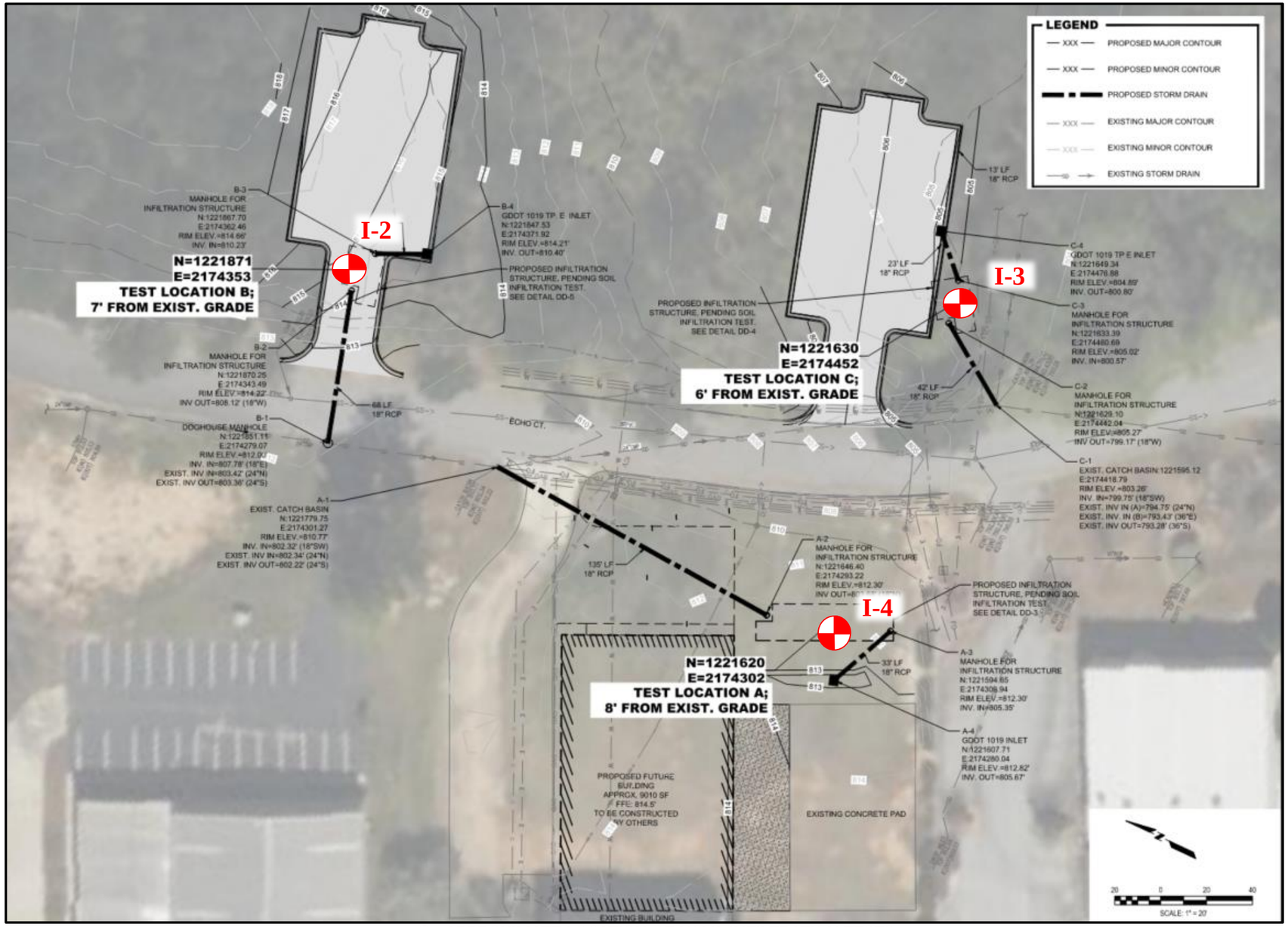
FFC – Atlanta Regional Airport Apron Expansion Infiltration
Michael Baker International
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095



APPROXIMATE LOCATION OF NOVA INFILTRATION TESTS

Figure 2
INFILTRATION TESTING LOCATION PLAN
SCALE: See graphic above
SOURCE: Grading and Drainage plan prepared by Michael Baker Internal dated December 2023.

NOVA
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FFC – Atlanta Regional Airport Apron Expansion Infiltration
Michael Baker International
Peachtree City, Fayette County, Georgia
NOVA Project Number 10103-2023095

100% CONSTRUCTION PLANS

FOR

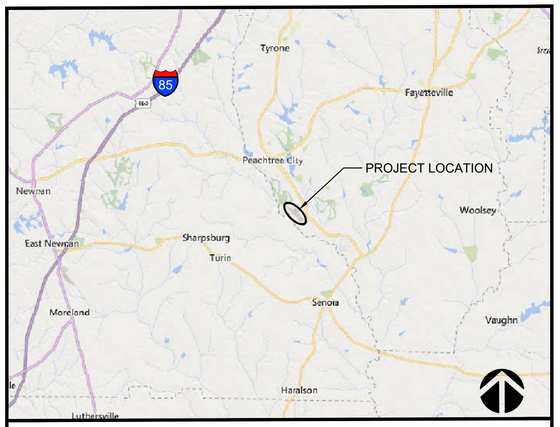
TERMINAL APRON EXPANSION

GDOT PID: T008663, FAYETTE

AT

ATLANTA REGIONAL AIRPORT - FALCON FIELD

ISSUED FOR ADDENDUM NO. 2 (2)



7 FALCON DRIVE
PEACHTREE CITY, GA 30269
(770) 487-2225

Atlanta Regional Airport
Falcon Field

SHEET TITLE	DWG. No.
COVER SHEET	C-1
GENERAL NOTES	GN-1
SUMMARY OF QUANTITIES	SQ-1
PROJECT SAFETY AND PHASING PLAN NOTES	PSPN-1
PROJECT SAFETY AND PHASING PLAN LAYOUT	PSPL-1
(2) PROJECT SAFETY AND PHASING PLAN PHASE NO. 1	PSPP-1
PROJECT SAFETY AND PHASING PLAN DETAILS	PSPD-1
SITE BENCHMARK DATA	BM-1
EXISTING CONDITIONS PLAN	EX-1
DEMOLITION PLAN	DP-1
STAKING PLAN	ST-1
TYPICAL SECTIONS	TS-1
GRADING AND DRAINAGE PLAN	GD-1
DRAINAGE DETAILS	DD-1 TO DD-7
CROSS SECTIONS	XS-1
PIPE PROFILES	PP-1
JOINT LAYOUT PLAN	JL-1
JOINT ELEVATION PLAN	JE-1
JOINT DETAILS	JD-1 TO JD-2
MARKING PLAN	MP-1
MARKING DETAILS	MD-1
EROSION AND SEDIMENT CONTROL PLAN COVER	EC-1
EROSION AND SEDIMENT CONTROL GENERAL NOTES	ECGN-1 TO ECGN-7
EROSION AND SEDIMENT CONTROL PLAN - PROJECT LAYOUT	ECPL-1
PRE-DEVELOPMENT BASIN MAP	BASIN-1
POST-DEVELOPMENT BASIN MAP	BASIN-2
WATER QUALITY SAMPLING PLAN AND NOTES	WQSP-1 TO WQSP-2
EROSION AND SEDIMENT CONTROL PLAN - INITIAL PLAN	IEC
EROSION AND SEDIMENT CONTROL PLAN - GRADING PLAN	GEC
EROSION AND SEDIMENT CONTROL PLAN - FINAL PLAN	FEC
EROSION AND SEDIMENT CONTROL PLAN - DETAILS	ECD-1 TO ECD-4
GRASSING NOTES AND GRASSING SCHEDULE	GS-1

NOTE:

ALL MATERIALS USED SHALL BE IN ACCORDANCE WITH GEORGIA DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS, 2021 EDITION UNLESS MODIFIED BY SPECIAL PROVISION, EXCEPT FOR ELECTRICAL ITEMS OF WORK WHICH SHALL BE IN ACCORDANCE WITH APPLICABLE FAA SPECIFICATIONS.

GEORGIA REGISTERED No. PE046596 PROFESSIONAL ENGINEER Christopher Bachmann 3-7-24

CHRIS BACHMANN, P.E.
420 TECHNOLOGY PARKWAY, SUITE 150
NORCROSS, GA 30092
(678) 263-9118

PREPARED FOR

PEACHTREE CITY AIRPORT AUTHORITY

MARCH, 2024

Michael Baker INTERNATIONAL

SET NO. _____

SUMMARY OF QUANTITIES

BASE BID

ITEM NO	SPEC NO.	ITEM DESCRIPTION	UNIT	PLAN
1	C-105	MOBILIZATION	L. SUM	1
2	C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	L. SUM	1
3	P-101-1	REMOVE FENCE	LIN. FT.	560
4	P-101-2	REMOVE TAXIWAY EDGE LIGHT, INCLUDING BASE AND TRANSFORMER	EACH	2
5	P-101-3	REMOVE EXISTING PIPE (ALL SIZES)	LIN. FT.	125
6	P-101-4	ABANDON PIPE IN PLACE, FLOWABLE FILL	LIN. FT.	485
7	P-101-5	REMOVE DRAINAGE STRUCTURE	EACH	2
8	P-101-6	REMOVE SANITARY SEWER MANHOLE	EACH	1
9	P-101-7	REMOVE TOP AND FILL DRAINAGE STRUCTURE	EACH	2
10	P-101-8	REMOVE EXPOSED CABLE	LIN. FT.	455
11	P-101-9	RELOCATE EXISTING CONDUIT 2 FT BELOW GRADE	LIN. FT.	625
12	P-101-11	REMOVE CONCRETE DITCH	SQ. YD.	47
13	P-101-12	REMOVE MISCELLANEOUS CONCRETE AND DEBRIS	L. SUM	1
14	P-152-1	EMBANKMENT IN-PLACE	CU. YD.	1,200
15	P-152-2	SCARIFIED SUBGRADE PREPARATION (12 INCH)	SQ. YD.	13,080
16	P-209-1	CRUSHED AGGREGATE BASE COURSE	CU. YD.	2,180
17	P-620-1	PERMANENT PAVEMENT MARKING, YELLOW (TYPE III), WITH REFLECTIVE MEDIA (TYPE III BEADS) INCLUDE MICROBICIDE	SQ. FT	645
18	P-620-2	PAVEMENT MARKING, BLACK (TYPE III) INCLUDE MICROBICIDE	SQ. FT	850
19	D-701-1	STORM SEWER, CLASS III RCP, 18 INCH DIAMETER	LIN. FT.	15
20	D-701-2	STORM SEWER, CLASS III RCP, 30 INCH DIAMETER	LIN. FT.	404
21	D-751-1	MANHOLE	EACH	1
22	D-751-2	OUTLET CONTROL STRUCTURE	EACH	2
23	D-751-3	AIRCRAFT RATED MANHOLE	EACH	1
24	D-752-1	CONCRETE HEADWALL - 18 INCH	EACH	1
25	D-752-2	CONCRETE HEADWALL - 30 INCH	EACH	1
26	D-754-1	CONCRETE V-DITCH	LIN. FT.	40
27	GDOT 439-1	NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, CLASS HES, 10 IN THICK	SQ. YD.	12,220
28	GDOT 439-2	REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, CLASS HES, 10 IN THICK	SQ. YD.	860
29	GDOT 461-1	SEALING JOINTS AND CRACKS, TYPE C	LIN. FT.	19,640
30	GDOT-163-1	CONSTRUCT, MAINTAIN, AND REMOVE CONSTRUCTION EXIT	EACH	1
31	GDOT-163-2	CONSTRUCT, MAINTAIN, AND REMOVE TEMPORARY SEDIMENT TRAP	EACH	1
32	GDOT-163-3	CONSTRUCT, MAINTAIN, AND REMOVE INLET SEDIMENT TRAP	EACH	4
33	GDOT-163-4	CONSTRUCT, MAINTAIN, AND REMOVE EROSION CONTROL BLANKET/MATTING	SQ. YD.	16,400
34	GDOT-163-5	CONSTRUCT, MAINTAIN, AND REMOVE DIVERSION CHANNEL	LIN. FT.	400
35	GDOT-163-6	INSTALL AND MAINTAIN PERFORATED HALF-ROUND PIPE WITH STONE FILTER	EACH	1
36	GDOT-163-7	PERMEABLE SOIL FOR DRY ENHANCED SWALES	CU. YD.	215
37	GDOT-167-1	WATER QUALITY INSPECTIONS	MONTH	2
38	GDOT-167-2	WATER QUALITY MONITORING AND SAMPLING	EACH	2
39	GDOT-171-1	INSTALL AND MAINTAIN TEMPORARY SILT FENCE, TYPE C	LIN. FT.	620
40	GDOT-603-1	STONE DUMPED RIP RAP, TYPE 3, 16 INCH DEPTH	SQ. YD.	5
41	T-901-1	TEMPORARY SEEDING	ACRE	2
42	T-901-2	PERMANENT SEEDING	ACRE	2
43	T-904-1	SODDING	SQ. YD.	2,500
44	T-908-1	MULCHING	SQ. YD.	10,400

ALTERNATE BID

ITEM NO	SPEC NO.	ITEM DESCRIPTION	UNIT	PLAN
1	C-105	MOBILIZATION	L. SUM	1
2	C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	L. SUM	1
3	P-101-1	REMOVE FENCE	LIN. FT.	560
4	P-101-2	REMOVE TAXIWAY EDGE LIGHT, INCLUDING BASE AND TRANSFORMER	EACH	2
5	P-101-3	REMOVE EXISTING PIPE (ALL SIZES)	LIN. FT.	125
6	P-101-4	ABANDON PIPE IN PLACE, FLOWABLE FILL	LIN. FT.	485
7	P-101-5	REMOVE DRAINAGE STRUCTURE	EACH	2
8	P-101-6	REMOVE SANITARY SEWER MANHOLE	EACH	1
9	P-101-7	REMOVE TOP AND FILL DRAINAGE STRUCTURE	EACH	2
10	P-101-8	REMOVE EXPOSED CABLE	LIN. FT.	455
11	P-101-9	RELOCATE EXISTING CONDUIT 2 FT BELOW GRADE	LIN. FT.	625
12	P-101-10	MILL BITUMINOUS PAVEMENT, 2-INCH DEPTH, INCLUDING MILL TIES	SQ. YD.	205
13	P-101-11	REMOVE CONCRETE DITCH	SQ. YD.	47
14	P-101-12	REMOVE MISCELLANEOUS CONCRETE AND DEBRIS	L. SUM	1
15	P-152-1	EMBANKMENT IN-PLACE	CU. YD.	1,200
16	P-152-2	SCARIFIED SUBGRADE PREPARATION (12 INCH)	SQ. YD.	13,070
17	P-209-1	CRUSHED AGGREGATE BASE COURSE	CU. YD.	1,155
18	P-620-1	PERMANENT PAVEMENT MARKING, YELLOW (TYPE III), WITH REFLECTIVE MEDIA (TYPE III BEADS) INCLUDE MICROBICIDE	SQ. FT	645
19	P-620-2	PAVEMENT MARKING, BLACK (TYPE III) INCLUDE MICROBICIDE	SQ. FT	850
20	D-701-1	STORM SEWER, CLASS III RCP, 18 INCH DIAMETER	LIN. FT.	15
21	D-701-2	STORM SEWER, CLASS III RCP, 30 INCH DIAMETER	LIN. FT.	404
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26	D-752-2	CONCRETE HEADWALL - 30 INCH	EACH	1
27	D-754-1	CONCRETE V-DITCH	LIN. FT.	40
28	GDOT 402-1	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	TON	1,460
29	GDOT 402-2	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	TON	2,880
30	GDOT 413-1	TACK COAT	GAL.	1,310
31	GDOT-163-1	CONSTRUCT, MAINTAIN, AND REMOVE CONSTRUCTION EXIT	EACH	1
32	GDOT-163-2	CONSTRUCT, MAINTAIN, AND REMOVE TEMPORARY SEDIMENT TRAP	EACH	1
33	GDOT-163-3	CONSTRUCT, MAINTAIN, AND REMOVE INLET SEDIMENT TRAP	EACH	4
34	GDOT-163-4	CONSTRUCT, MAINTAIN, AND REMOVE EROSION CONTROL BLANKET/MATTING	SQ. YD.	16,400
35	GDOT-163-5	CONSTRUCT, MAINTAIN, AND REMOVE DIVERSION CHANNEL	LIN. FT.	400
36	GDOT-163-6	INSTALL AND MAINTAIN PERFORATED HALF-ROUND PIPE WITH STONE FILTER	EACH	1
37	GDOT-163-7	PERMEABLE SOIL FOR DRY ENHANCED SWALES	CU. YD.	215
38	GDOT-167-1	WATER QUALITY INSPECTIONS	MONTH	2
39	GDOT-167-2	WATER QUALITY MONITORING AND SAMPLING	EACH	2
40	GDOT-171-1	INSTALL AND MAINTAIN TEMPORARY SILT FENCE, TYPE C	LIN. FT.	620
41	GDOT-603-1	STONE DUMPED RIP RAP, TYPE 3, 16 INCH DEPTH	SQ. YD.	5
42	T-901-1	TEMPORARY SEEDING	ACRE	2
43	T-901-2	PERMANENT SEEDING	ACRE	2
44	T-904-1	SODDING	SQ. YD.	2,500
45	T-908-1	MULCHING	SQ. YD.	10,400

Atlanta Regional Airport
Falcon Field

ATLANTA REGIONAL AIRPORT FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer: CRB
Technician: CRB
Checked by: CAA
Project Number: 198108
Notes:

GEORGIA REGISTERED No. PE046596 PROFESSIONAL 3-7-24 ENGINEER Christopher Bachmann

REVISIONS

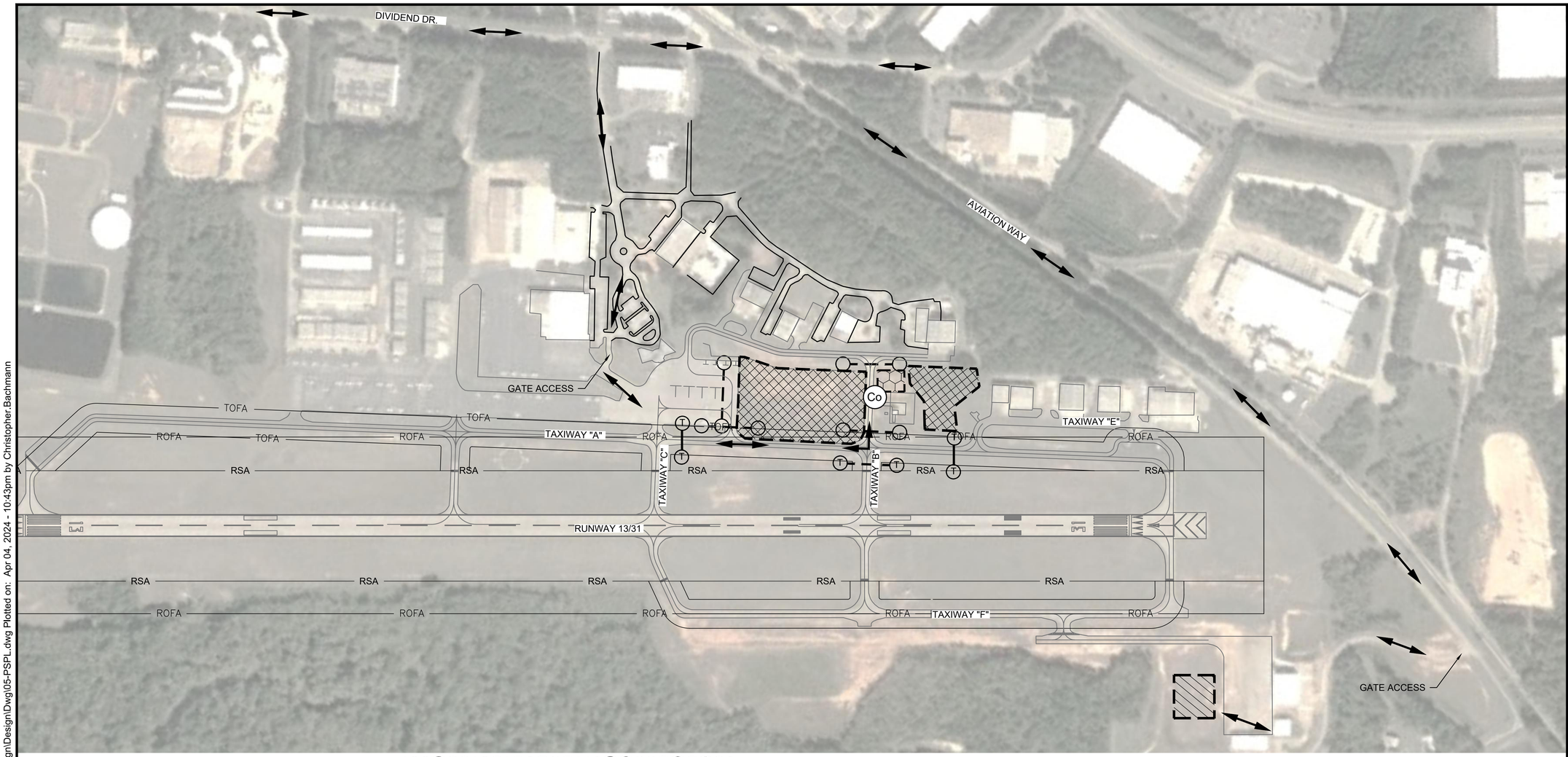
No.	Description	Date	By
1	ADDENDUM NO. 2	04/05/24	CRB

Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
SUMMARY OF QUANTITIES

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

Date: **MARCH, 2024**
Sheet Number: 3 of 50
Scale: **N.T.S.**
Drawing Number: **SQ-1**



Y:\Airports\FFC Peachtree City Falcon Field\198108 - Terminal Apron Expansion - Design\Design\Dwg\05-PSPL.dwg Plotted on: Apr 04, 2024 - 10:43pm by Christopher.Bachmann

LEGEND

- CONSTRUCTION LIMITS
- STAGING AREA
- CONTRACTOR WASTE AREA
- HAUL ROUTE
- Co — CONSTRUCTION EXIT
- LOW PROFILE AIRFIELD BARRICADE
- T — T — TEMPORARY LOW PROFILE BARRICADE
- RSA — RUNWAY SAFETY AREA
- ROFA — RUNWAY OBJECT FREE AREA
- TOFA — TAXIWAY OBJECT FREE AREA

PHASING NOTES

- CONTRACT TIME - BASE BID: 90 CALENDAR DAYS
  ALTERNATE BID: 75 CALENDAR DAYS
- ACTIVITIES - GRADING AND DRAINAGE
  UTILITY ADJUSTMENTS
  CONCRETE PAVING
  ALTERNATE ASPHALT PAVING
  ALTERNATE MILL AND OVERLAY
  PAVEMENT MARKING
  EROSION CONTROL
- CLOSURES - EAST TERMINAL APRON TAXILANE;
  TAXIWAY "A" BETWEEN T/W "C" AND T/W "B"
  TEMPORARILY DURING GRADING W/IN TOFA;
  TAXIWAY "B" NORTH OF R/W 13-31 TEMPORARILY
  DURING GRADING W/IN TOFA;
  TAXIWAY "B" NORTH OF TAXIWAY "A"
- WORK HOURS - CONTRACTOR WORK HOURS SHALL BE DURING THE DAY, APPROXIMATELY 0700 - 2000.

2

AIRFIELD OPERATIONS NOTE:

CONSTRUCTION WITHIN THE TAXIWAY "A" OBJECT FREE AREA IS PERMITTED PROVIDED EQUIPMENT IS REMOVED FROM AREA AT THE END OF WORK DAY. MATERIAL SHOULD NOT BE STOCKPILED IF NOT NECESSARY. IF NECESSARY, SUBMITTAL OF A 7460-1 FORM AND JUSTIFICATION APPROVAL FROM THE APPROPRIATE FAA AIRPORTS REGIONAL OR DISTRICT OFFICE ARE REQUIRED.

NOTES

1. THE CONTRACTOR SHALL COORDINATE WITH THE AIRPORT AND ENGINEER FOR SCHEDULING WORK SO ALL PROPER NOTIFICATIONS INCLUDING NOTAMS MAY BE ISSUED PER THE SPECIFICATIONS.
2. BARRICADES FOR TEMPORARY TAXIWAY/TAXILANE CLOSURES SHALL BE SET PRIOR TO BEGINNING WORK WITHIN THE TAXIWAY SAFETY AREA AND REMOVED UPON COMPLETION OF THE DAY OR THE ACTIVITY.
3. NO WORK CAN BE PERFORMED WITHIN THE RUNWAY SAFETY AREAS WHILE THE PAVEMENT IS OPEN TO AIRCRAFT OPERATIONS.
4. LIQUIDATED DAMAGES IN THE AMOUNT OF $1000.00 PER CALENDAR DAY (OR PORTION THEREOF) WILL BE ASSESSED FOR FAILURE TO RE-OPEN THE RUNWAY AT THE TIME THE AIRPORT PROVIDES FOR THE DAY OR THE ACTIVITY.

Atlanta Regional Airport
Falcon Field

ATLANTA REGIONAL AIRPORT FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer:	CRB
Technician:	CRB
Checked by:	CAA
Project Number:	198108

GEORGIA REGISTERED No. PE046596 PROFESSIONAL ENGINEER Christopher Bachmann 4-1-24

Notes:

1. CONTRACTOR'S WORK MAY BE RESTRICTED IN CERTAIN AREAS AT VARIOUS TIMES TO BE DETERMINED BY THE ENGINEER.
2. ALL WORK AREAS ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENGINEER AS TO THE ACTUAL LIMITS AND BARRICADE LOCATIONS TO ALLOW MAXIMUM UTILIZATION OF WORK AREA WHILE ALLOWING FOR CONTINUED AIRPORT OPERATIONS.
3. REFER TO THE SAFETY PLAN DETAILS FOR CONSTRUCTION EXIT DETAIL.
4. CONTRACTOR SHALL CONFIRM THE CONDITION OF ROADS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO PRIVATE ROADS USED FOR THE HAUL ROUTE, CAUSED BY CONTRACTOR'S OPERATIONS, SHALL BE REPAIRED BY THE CONTRACTOR. COST OF THIS REPAIR SHALL BE INCIDENTAL TO MOBILIZATION.

250 0 250 500
SCALE: 1" = 250'

REVISIONS

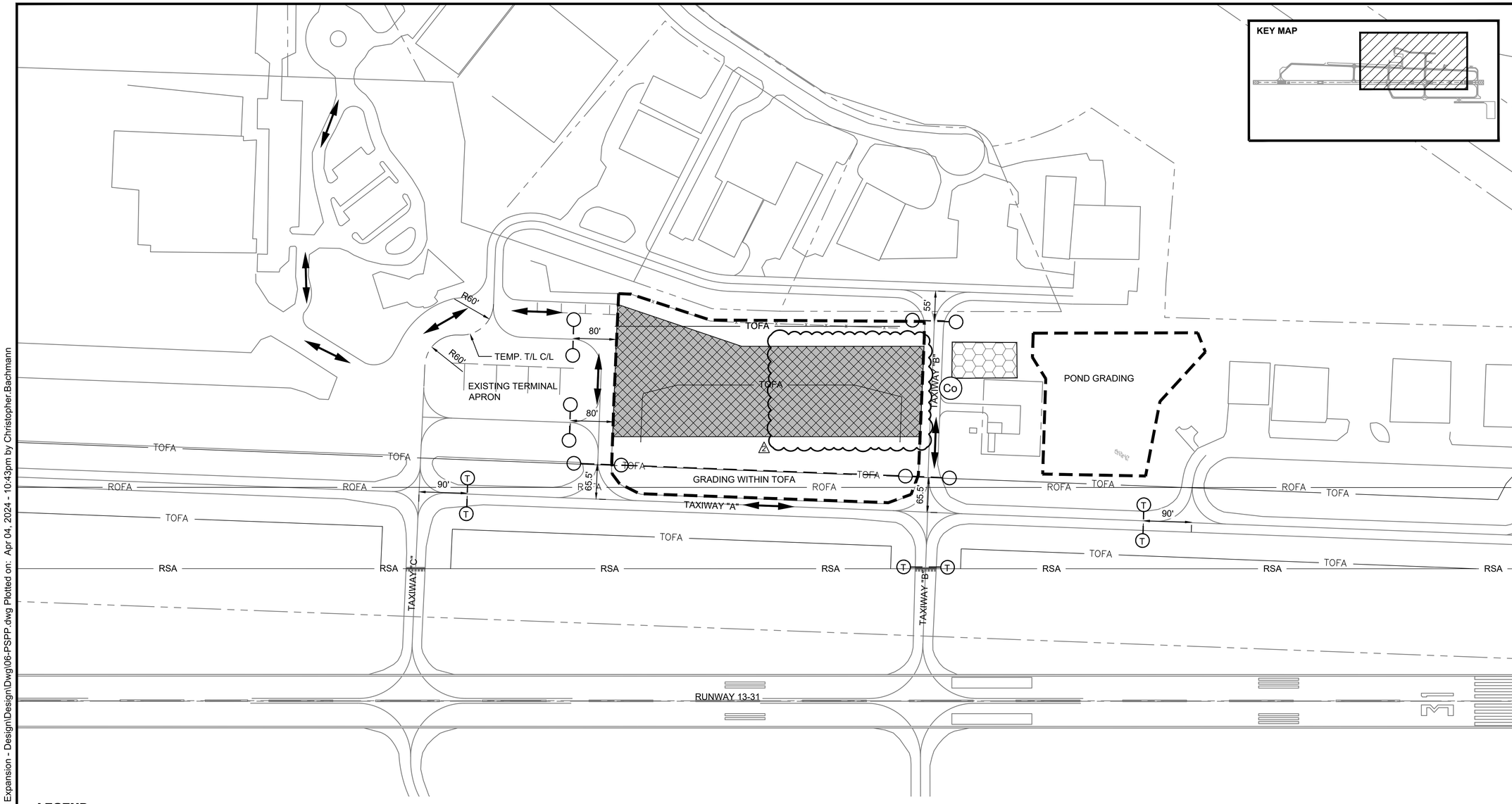
No.	Description	Date	By
2	ADDENDUM NO. 2	04/05/24	CRB

Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
PROJECT SAFETY AND PHASING PLAN LAYOUT

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

Date: MARCH, 2024	Sheet Number: 5 of 50
Scale: 1"=250'	Drawing Number: PSPL-1



LEGEND

- PAVEMENT LIMITS
- PHASE WORK LIMITS
- CONTRACTOR'S STAGING AREA
- RSA — RUNWAY SAFETY AREA
- ROFA — RUNWAY OBJECT FREE AREA
- TOFA — TAXIWAY OBJECT FREE AREA
- HAUL ROUTE
- Co — CONSTRUCTION EXIT
- LOW PROFILE AIRFIELD BARRICADE
- T — T — TEMPORARY LOW PROFILE AIRFIELD BARRICADES

CONTRACTOR'S PHASING PLAN:

CONTRACTOR SHALL SUBMIT DETAILED PHASING PLAN PRIOR TO THE PRE-CONSTRUCTION MEETING FOR APPROVAL BY THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION. THE PHASING PLAN SHALL ADDRESS REQUIRED CLOSURES NECESSARY FOR EACH PHASE OF THE WORK.
CONTRACTOR SHALL PHASE WORK TO MINIMIZE CLOSURES TO THE TAXIWAY. BARRICADES SHALL BE PLACED AT EDGE OF TAXIWAY OFA AS SHOWN ON PLANS. CONTRACTOR'S PHASING PLAN SHALL INCLUDE A DETAILED LAYOUT OF WHERE BARRICADES WILL BE PLACED FOR APPROVAL BY THE ENGINEER AND OWNER PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PHASE THE PROJECT SCHEDULE SO THAT IF WEATHER CAUSES DELAYS, THE AIRPORT CAN BE RE-OPENED TO AIR TRAFFIC UNTIL CONSTRUCTION OPERATIONS RESUME. IF CONTRACTOR DOES NOT PHASE THE PROJECT TO ALLOW AIRPORT TO RE-OPEN, CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING TEMPORARY MEASURES REQUIRED TO RE-OPEN THE TAXIWAY AT NO ADDITIONAL COST TO THE OWNER.

WORK AREA:

- 90 CALENDAR DAYS (BASE BID); 75 CALENDAR DAYS (ALTERNATE BID).
- WORK INCLUDES CLEARING, UTILITY AND STORM DEMO, STRIPPING, EROSION BMP'S, GRADING, DRAINAGE, CONCRETE PAVING (BASE BID), ASPHALT PAVING (ALTERNATE BID), MILL AND OVERLAY (ALTERNATE BID) AND PAVEMENT STRIPING.
- EAST TAXILANE ON EXISTING TERMINAL APRON CLOSED;
  T/W "B" NORTH OF TW "A" CLOSED;
  T/W "B" NORTH OF R/W 13-31 CLOSED DURING GRADING WITHIN TOFA;
  T/W "A" CLOSED FROM T/W "C" TO T/W "B" DURING GRADING WORK WITHIN TOFA

AIRFIELD OPERATIONS NOTE:

TAXIWAYS MUST BE CLOSED TO ACCOMPLISH ANY WORK WITHIN THE TAXIWAY SAFETY AREAS. PORTIONS OF TAXIWAY CONNECTORS MAY BE CLOSED, PROVIDED ACCESS IS MAINTAINED AROUND THE CLOSED SECTIONS AS TO NOT IMPEDE AIRPORT OPERATIONS.

Atlanta Regional Airport
Falcon Field

ATLANTA REGIONAL AIRPORT
FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer: **CRB**
Technician: **CRB**
Checked by: **CAA**
Project Number: **198108**

GEORGIA REGISTERED No. PE046596 PROFESSIONAL ENGINEER 5-7-24 Christopher Bachmann

Notes:
REFER TO PSPN-1 AND PSPD-1 FOR ADDITIONAL PHASING NOTES AND DETAILS.

100 0 100 200
SCALE: 1" = 100'

REVISIONS

No.	Description	Date	By
2	ADDENDUM NO. 2	04/05/24	CRB

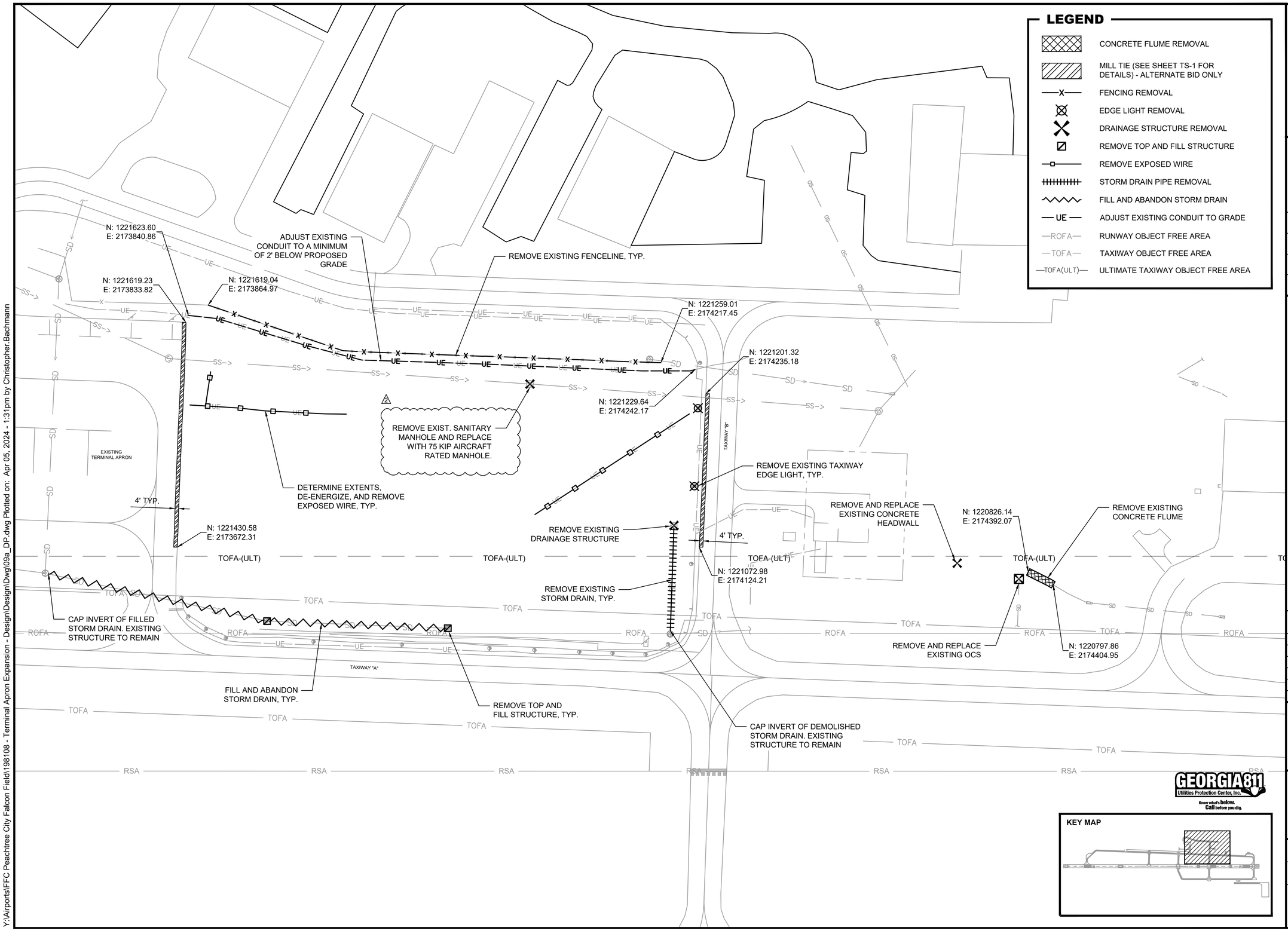
Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
PROJECT SAFETY AND PHASING PLAN PHASE 1

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

Date: **MARCH, 2024**
Sheet Number: 6 of 50
Scale: **1"=100'**
Drawing Number: **PSPP-1**

Y:\Airports\FFC Peachtree City Falcon Field\198108 - Terminal Apron Expansion - Design\Design\Dwg\06-PSPP.dwg Plotted on: Apr 04, 2024 - 10:43pm by Christopher.Bachmann



LEGEND

- CONCRETE FLUME REMOVAL
- MILL TIE (SEE SHEET TS-1 FOR DETAILS) - ALTERNATE BID ONLY
- FENCING REMOVAL
- EDGE LIGHT REMOVAL
- DRAINAGE STRUCTURE REMOVAL
- REMOVE TOP AND FILL STRUCTURE
- REMOVE EXPOSED WIRE
- STORM DRAIN PIPE REMOVAL
- FILL AND ABANDON STORM DRAIN
- UE — ADJUST EXISTING CONDUIT TO GRADE
- ROFA — RUNWAY OBJECT FREE AREA
- TOFA — TAXIWAY OBJECT FREE AREA
- TOFA(ULT) — ULTIMATE TAXIWAY OBJECT FREE AREA

GEORGIA811 Utilities Protection Center, Inc. Know what's below. Call before you dig.

KEY MAP

Atlanta Regional Airport Falcon Field

ATLANTA REGIONAL AIRPORT FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer: **HMW**
Technician: **HMW**
Checked by: **CAA**
Project Number: **198108**

GEORGIA REGISTERED No. PE046596 PROFESSIONAL ENGINEER Christopher Bachmann 5-7-24

Notes:

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PERFORM AN EXISTING CONDITION FIELD SURVEY IN ACCORDANCE WITH THE SPECIFICATIONS AND PLANS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITY COMPANIES AND FAA TO IDENTIFY AND LOCATE ANY UNDERGROUND UTILITIES AND/OR CABLE WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL ASSIST UTILITY COMPANY IN EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. ANY UTILITIES DAMAGED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST TO THE OWNER.

30 0 30 60
SCALE: 1" = 30'

REVISIONS

No.	Description	Date	By
2	ADDENDUM NO. 2	04/05/24	CRB

Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
DEMOLITION PLAN

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

Date: **MARCH, 2024**
Sheet Number: 11 of 50
Scale: **1"=50'**
Drawing Number: **DP-1**

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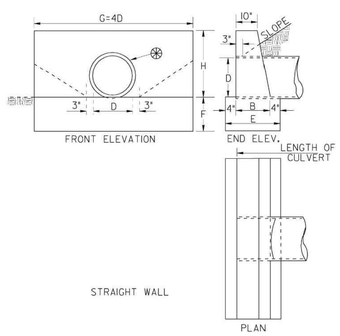
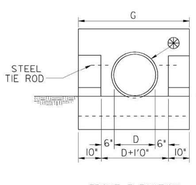


FRONT ELEVATION

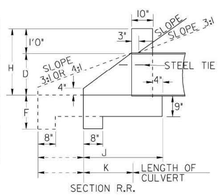
END ELEV.

STRAIGHT WALL

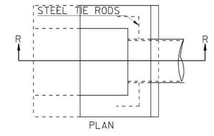
PLAN



FRONT ELEVATION

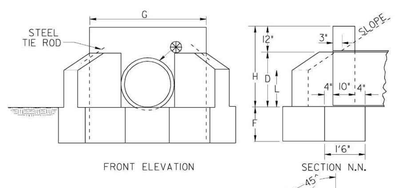


SECTION R.R.



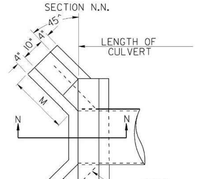
U TYPE WING

PLAN



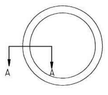
FRONT ELEVATION

SECTION N.N.

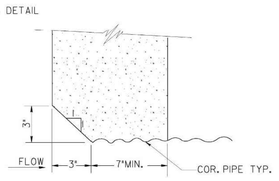


45° WINGS

PLAN



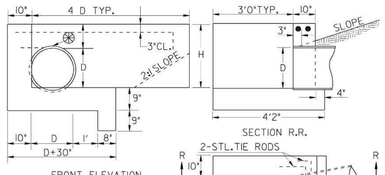
FRONT VIEW



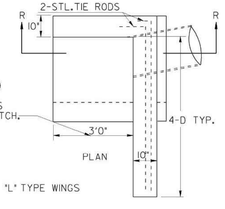
SECTION 'A-A'

DIMENSIONS							QUANTITIES ONE STRAIGHT ENDWALL				CONC. IN WALL & FOOT PLUS ADD. PIPE LINE
OPENING		WALL			FOOTING		CLASS "B" CONCRETE				
D	AREA SQ. FT.	G	H	B	E	F	CUBIC FEET WALL	CUBIC FEET FOOT	TOTAL CU. FT.	TOTAL CU.YD.	CU.YD.
12"	0.8	4'0"	2'0"	1'2"	1'10"	1'0"	7.2	7.3	14.5	0.54	0.25
15"	1.2	5'0"	2'3"	1'2"	1'10"	1'2"	9.8	10.7	20.6	0.76	0.36
18"	1.8	6'0"	2'6"	1'3"	1'11"	1'3"	13.6	14.4	28.0	1.04	0.48
24"	3.1	8'0"	3'0"	1'4"	2'0"	1'4"	22.3	21.3	43.6	1.62	0.74
30"	4.9	10'0"	3'6"	1'6"	2'2"	1'6"	34.7	32.5	67.2	2.49	1.13
36"	7.1	12'0"	4'0"	1'8"	2'4"	1'8"	50.5	46.7	97.2	3.60	1.62
42"	9.6	14'0"	4'6"	1'10"	2'6"	2'0"	70.3	70.0	140.3	5.20	2.13
48"	12.6	16'0"	5'0"	2'1"	2'8"	2'0"	96.3	88.0	184.9	6.85	2.58
54"	16.0	18'0"	5'6"	2'4"	3'0"	2'0"	129.4	108.0	237.4	8.79	3.07
60"	19.6	20'0"	6'0"	2'6"	3'2"	2'0"	164.6	126.7	291.3	10.79	3.53

FOR EACH ADDITIONAL PIPE LINE, ADD TO G: OD+ID OR 3 FEET, WHICHEVER IS SMALLER)



FRONT ELEVATION



PLAN

CONCRETE ENDWALLS WITH 'L' TYPE WINGS

NOTE: THE 3'-0" DIMENSION IS BASED ON DITCH SECTION 1' DEEP. VARY ACCORDING TO DITCH SECTION SO AS TO KEY 1'0" INTO BACK SLOPE OF DITCH.

NOTE: THESE QUANTITIES WILL VARY ACCORDING TO DITCH SECTION AND ARE TO BE USED FOR ESTIMATING PURPOSES ONLY. PAYMENT TO BE MADE ACCORDING TO QUANTITIES MEASURED AS ACTUALLY PLACED.

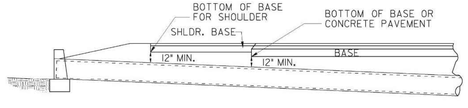
DIMENSIONS					QUANTITIES ONE "L" ENDWALL	
D	AREA SQ.FT.	H MIN.	4D TYP.	D+30 TYP.	CU. YD. CONC.	STEEL TIE RODS
15"	1.2	2'3"	5'0"	3'9"	1.08	2-¾"DIA.x5'0"
18"	1.8	2'6"	6'0"	4'0"	1.24	2-¾"DIA.x6'0"
24"	3.1	3'0"	8'0"	4'6"	1.59	2-¾"DIA.x8'0"
30"	4.9	3'6"	10'0"	5'0"	2.00	2-¾"DIA.x10'0"
36"	7.1	4'0"	12'0"	5'6"	2.46	2-¾"DIA.x12'0"
42"	9.6	4'6"	14'0"	6'0"	2.98	2-¾"DIA.x14'0"
48"	12.6	5'0"	16'0"	6'6"	3.53	2-¾"DIA.x16'0"
54"	16.0	5'6"	18'0"	7'0"	4.13	2-¾"DIA.x18'0"
60"	19.6	6'0"	20'0"	7'6"	4.85	2-¾"DIA.x20'0"

3:1 FILL SLOPES

DIMENSIONS							QUANTITIES ONE "U" ENDWALL				
OPENING		WALL			FOOTING		CLASS "B" CONCRETE				STEEL TIE RODS
D	AREA SQ.FT	G	H	K	F	J	CUBIC FEET WALL	CUBIC FEET FOOT	TOTAL CU.FT.	TOTAL CU.YD.	
2:1 FILL SLOPES											
12"	0.8	3'8"	2'0"	1'0"	1'3"	2'2"	6.6	7.3	13.9	0.52	NONE
15"	1.2	3'11"	2'3"	1'5"	1'3"	2'7"	8.3	9.1	17.4	0.64	NONE
18"	1.8	4'2"	2'6"	1'9"	1'3"	2'11"	9.9	10.7	20.6	0.76	NONE
24"	3.1	4'8"	3'0"	2'6"	1'6"	3'8"	13.9	15.5	29.4	1.09	2-¾"DIA.x2'0"
30"	4.9	5'2"	3'6"	3'3"	1'6"	4'5"	18.7	20.0	38.7	1.43	2-¾"DIA.x2'0"
36"	7.1	5'8"	4'0"	4'0"	1'9"	5'2"	21.2	26.2	50.4	1.87	2-¾"DIA.x2'0"
42"	9.6	6'2"	4'6"	4'9"	2'0"	5'11"	30.3	33.2	63.5	2.35	2-¾"DIA.x2'6"
48"	12.6	6'8"	5'0"	5'6"	2'0"	6'8"	37.3	39.6	76.9	2.85	2-¾"DIA.x3'0"
54"	16.0	7'2"	5'6"	6'3"	2'0"	7'5"	44.2	45.9	90.1	3.33	2-¾"DIA.x3'6"
60"	19.6	7'8"	6'0"	7'0"	2'0"	8'2"	51.1	49.1	100.2	3.71	2-¾"DIA.x4'0"
3:1 FILL SLOPES											
12"	0.8	3'8"	2'0"	2'0"	1'3"	3'2"	7.7	9.9	17.6	0.65	NONE
15"	1.2	3'11"	2'3"	2'9"	1'3"	3'11"	10.0	12.8	22.8	0.84	NONE
18"	1.8	4'2"	2'6"	3'6"	1'3"	4'8"	12.5	16.0	28.5	1.06	NONE
24"	3.1	4'8"	3'0"	5'0"	1'6"	6'2"	18.8	24.0	42.8	1.58	2-¾"DIA.x2'0"
30"	4.9	5'2"	3'6"	6'6"	1'6"	7'8"	26.3	32.3	58.6	2.17	2-¾"DIA.x2'0"
36"	7.1	5'8"	4'0"	8'0"	1'9"	9'2"	35.1	42.8	77.9	2.89	2-¾"DIA.x2'0"
42"	9.6	6'2"	4'6"	9'6"	2'0"	10'8"	45.4	54.5	99.9	3.70	2-¾"DIA.x2'6"
48"	12.6	6'8"	5'0"	11'0"	2'0"	12'2"	56.9	66.5	123.4	4.57	2-¾"DIA.x3'0"
54"	16.0	7'2"	5'6"	12'6"	2'0"	13'8"	66.7	79.5	146.2	5.41	2-¾"DIA.x3'6"
60"	19.6	7'8"	6'0"	13'4"	2'0"	17'2"	81.0	87.9	168.9	6.25	2-¾"DIA.x4'0"
4:1 FILL SLOPES											
12"	0.8	3'8"	2'0"	2'8"	1'3"	3'10"	8.4	11.8	20.2	0.75	NONE
15"	1.2	3'11"	2'3"	3'8"	1'3"	4'10"	11.2	15.5	26.6	0.98	NONE
18"	1.8	4'2"	2'6"	4'8"	1'3"	5'10"	14.3	19.6	33.9	1.26	NONE
24"	3.1	4'8"	3'0"	6'8"	1'6"	7'10"	22.0	29.8	51.8	1.92	2-¾"DIA.x2'0"
30"	4.9	5'2"	3'6"	8'8"	1'6"	9'10"	31.3	40.7	72.0	2.67	2-¾"DIA.x2'0"
36"	7.1	5'8"	4'0"	10'8"	1'9"	11'10"	42.5	54.1	96.6	3.58	2-¾"DIA.x2'0"
42"	9.6	6'2"	4'6"	12'8"	2'0"	13'10"	55.4	69.2	124.6	4.61	2-¾"DIA.x2'6"
48"	12.6	6'8"	5'0"	14'8"	2'0"	15'10"	70.0	84.8	154.8	5.73	2-¾"DIA.x3'0"
54"	16.0	7'2"	5'6"	16'8"	2'0"	17'10"	86.4	101.9	188.3	6.97	2-¾"DIA.x3'6"
60"	19.6	7'8"	6'0"	18'8"	2'0"	19'10"	104.7	120.5	225.2	8.34	2-¾"DIA.x4'0"

NOTE: QUANTITIES OF CONCRETE ARE BASED ON INSIDE DIAMETER OF PIPE. NO DEDUCTIONS SHALL BE MADE FOR SHELL THICKNESS OR SKEW OF PIPE IN COMPUTING PAY QUANTITIES.

SECTION SHOWING MINIMUM COVER OVER CULVERTS



NOTE: GRADE GENERALLY TO FOLLOW SLOPE OF STREAM.

DIMENSIONS							QUANTITIES ONE ENDWALL WITH 45°WING WALLS							
OPENING		WALL			FOOTING			CLASS "B" CONCRETE					STEEL TIE RODS
D	AREA SQ. FT.	H	G	L	M	F		CUBIC FEET WALL	CUBIC FEET FOOT	TOTAL CU.FT.	TOTAL CU.YD.		
2:1 SLOPES													
18"	1.8	2'6"	3'10"	1'2"	1'7"	1'3"		9.3	10.7	20.0	0.74		NONE
24"	3.1	3'0"	4'4"	1'5"	2'1"	1'4"		13.1	14.4	27.5	1.02		2-¾"DIA.x2'0"
30"	4.9	3'6"	4'10"	1'9"	2'5"	1'6"		17.4	18.8	36.7	1.34		2-¾"DIA.x2'0"
36"	7.1	4'0"	5'4"	2'0"	2'11"	1'8"		22.6	24.6	47.2	1.75		2-¾"DIA.x3'0"
42"	9.6	4'6"	5'10"	2'3"	3'6"	2'0"		29.1	34.6	63.7	2.36		2-¾"DIA.x3'0"
48"	12.6	5'0"	6'4"	2'6"	4'0"	2'0"		35.9	39.1	75.0	2.78		2-¾"DIA.x3'0"
54"	16.0	5'6"	6'10"	2'9"	4'6¼"	2'0"		42.9	46.6	89.5	3.31		2-¾"DIA.x3'0"
60"	19.6	6'0"	7'4"	3'0"	5'0½"	2'0"		51.1	102.9	3.81			2-¾"DIA.x3'0"
3:1 SLOPES													
18"	1.8	2'6"	3'10"	1'2"	1'9"	1'3"		10.7	14.5	25.2	0.93		NONE
24"	3.1	3'0"	4'4"	1'5"	2'10"	1'4"		16.6	17.8	34.4	1.27		2-¾"DIA.x2'0"
30"	4.9	3'6"	4'10"	1'9"	3'6"	1'6"		22.9	24.4	47.3	1.71		2-¾"DIA.x2'0"
36"	7.1	4'0"	5'4"	2'1"	4'3"	1'8"		30.2	32.0	62.2	2.30		2-¾"DIA.x3'0"
42"	9.6	4'6"	5'10"	2'5"	4'11"	2'0"		38.8	44.0	82.8	3.07		2-¾"DIA.x3'0"
48"	12.6	5'0"	6'4"	2'8"	5'6"	2'0"		47.5	48.6	96.1	3.56		2-¾"DIA.x3'0"
54"	16.0	5'6"	6'10"	3'2"	6'1"	2'0"		57.0	53.4	110.4	4.09		2-¾"DIA.x3'0"
60"	19.6	6'0"	7'4"	3'6"	6'9"	2'0"		68.5	59.1	127.6	4.73		2-¾"DIA.x3'0"

METHOD OF EXTENDING PIPE AND RETAINING EXISTING HEADWALL

CONCRETE WITHIN THE HATCHED AREA TO BE REMOVED BY CHIPPING OR IN A MANNER APPROVED BY THE ENGINEER, FORMING A RECESS NO LESS THAN 1" LARGER THAN THE OUTSIDE DIMENSION OF THE PIPE.

NOTE TO DESIGNER

THIS STANDARD IS LIMITED FOR USE ONLY AT SPECIAL CONDITIONS, OTHERWISE, SEE CURRENT STANDARDS 1120 & 1125.

HEADWALLS ARE NOT TO BE PLACED INSIDE THE CLEAR ZONE.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
PIPE CULVERT
CONCRETE HEADWALL

NO SCALE — REV. & REDR. AUG. 1999

DESIGNED / TRACED / CHECKED — BY

(SUBMITTED) STATE ROAD & AIRPORT DESIGN ENGINEER

(APPROVED) CHIEF ENGINEER

DATE — REVISION

NUMBER 1001-B

Atlanta Regional Airport
Falcon Field

ATLANTA REGIONAL AIRPORT
FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer: **SMS**
Technician: **SMS**
Checked by: **CAA**
Project Number: **198108**

GEORGIA REGISTERED No. PE046596 PROFESSIONAL 5-7-99 ENGINEER Christopher Bachmann

Notes:

2 CONTRACTOR SHALL USE 45-DEGREE HEADWALL

REVISIONS

No.	Description	Date	By
2	ADDENDUM NO. 2	04/05/24	CRB

Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
DRAINAGE DETAILS

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

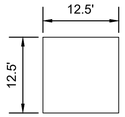
Date: **MARCH, 2024**
Sheet Number: 15 of 50
Scale: **N.T.S.**
Drawing Number: **DD-1**

9/9/2005 10:51:31 AM \\GDOT-DSNI\GDPLOT\DCF\gs_tiff_output_opt_gbarnett_M:\ANGEL_DESIGN_SERVICES\CORRECTED ENGLISH-METRIC STANDARDS\1001B.prf

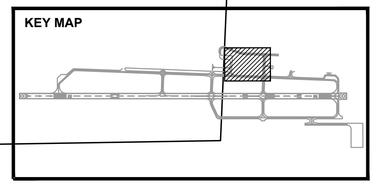
LEGEND

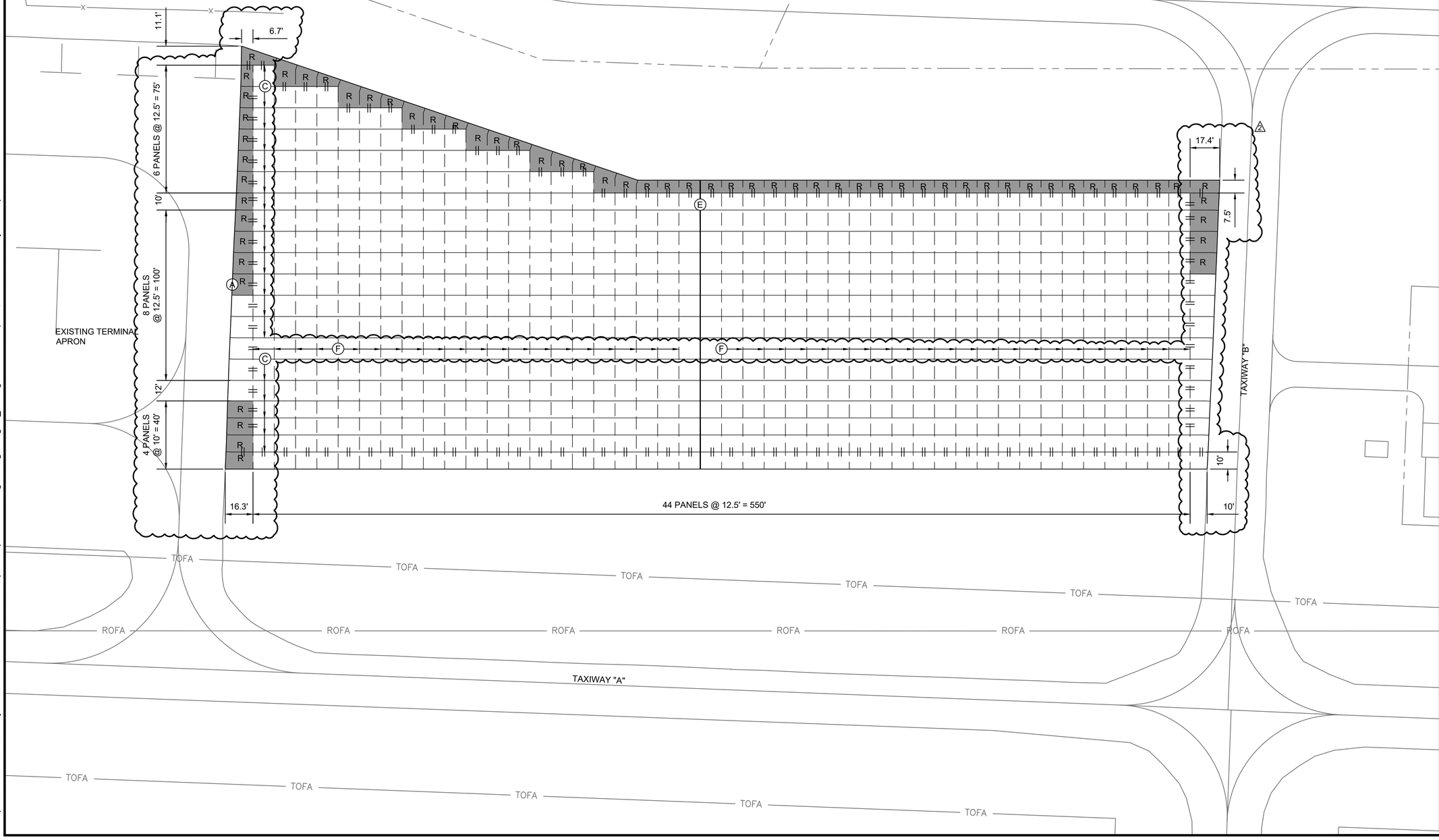
- (A) CONRETE/ASPHALT JOINT
- (C) DOWELED CONSTRUCTION JOINT
- (F) DOWELED CONTRACTION JOINT
- DEFORMED DOWEL BAR REQUIRED IN PLACE OF SMOOTH DOWEL BAR (2)
- (E) EXPANSION JOINT, NO THICKENED EDGE
- R REINFORCED CONCRETE PAVEMENT SLABS

TYPICAL SLAB DIMENSIONS



KEY MAP





Atlanta Regional Airport
Falcon Field

ATLANTA REGIONAL AIRPORT FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer:	CRB
Technician:	CRB
Checked by:	CAA
Project Number:	198108

GEORGIA REGISTERED No. PE046596 PROFESSIONAL ENGINEER 5-7-24 Christopher Bachmann

Notes:

1. SEE STAKING PLANS FOR ADDITIONAL LIMITS OF PAVEMENT.
2. SEE JOINT DETAILS, SHEET JD-1 TO JD-2.
3. CONTRACTOR MAY SUBMIT PLANS TO CHANGE JOINT TYPE WITH PERMISSION OF ENGINEER. PERMISSION MUST BE RECEIVED BEFORE ANY CHANGES ARE CONSTRUCTED.

30 0 30 60
SCALE: 1" = 30'

REVISIONS

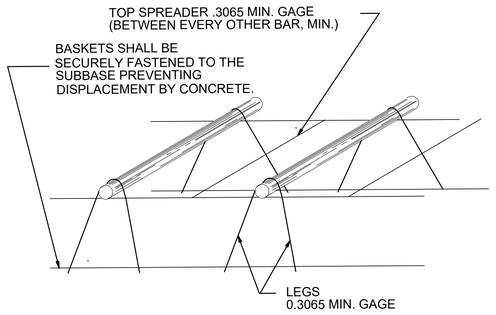
No.	Description	Date	By
2	ADDENDUM NO. 2	04/05/24	CRB

Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
JOINT LAYOUT PLAN

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

Date:	Sheet Number:
MARCH, 2024	24 of 50
Scale: 1"=30'	Drawing Number: JL-1

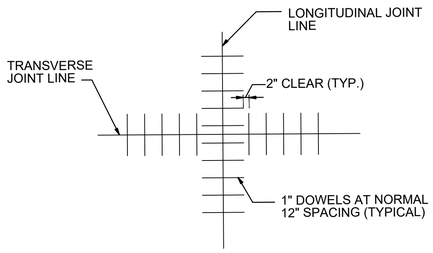


TYPICAL DOWEL BAR BASKET

N.T.S.

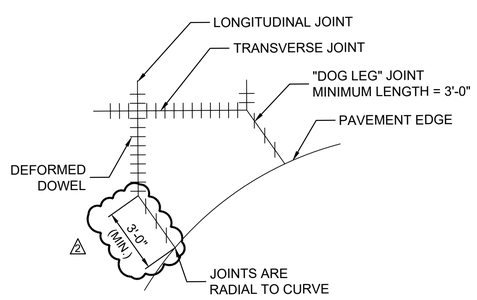
NOTES:

1. WIRE USED IN BASKETS SHALL CONFORM TO ASTM-A82 COLD DRAWN WIRE.
2. DOWEL BAR ATTACHMENT MAY BE FABRICATED BY ARC OR RESISTANCE TYPE WELDING.
3. WIRE FRAME MEMBERS SHALL BE RESISTANCE WELDED EXCEPT FOR SPREADER WIRES WHICH MAYBE ARC WELDED.
4. TOP SPREADER SHALL BE CUT PRIOR TO POURING CONCRETE.
5. HALF OF EACH DOWEL SHALL BE PAINTED AND OILED PRIOR TO POURING CONCRETE. THE PAINTED ENDS SHALL BE ALTERNATING IN THE BASEKTS.



DOWEL SPACING AT JOINT CORNERS

N.T.S.



SKEWED DOWEL INSTALLATION

N.T.S.

DOWEL BAR SCHEDULE			
Thickness of slab (T)	Diameter (D)	Length	Spacing
6 to 7 in.	3/4 in.	18 in.	12 in.
8 to 12 in.	1 in.	19 in.	12 in.
13 to 16 in.	1-1/4 in. (1)	20 in.	15 in.
17 to 20 in.	1-1/2 in. (1)	20 in.	18 in.
21 to 24 in.	2 in. (1)	24 in.	18 in.

NOTE:

1. ALL DOWEL BARS SHALL BE INCIDENTAL TO PAY ITEM GDOT-439.
2. DOWELS NOTED MAY BE A SOLID BAR OR HIGH-STRENGTH STEEL PIPE. PIPE DOWELS SHALL BE PLUGGED ON EACH END WITH A TIGHT FITTING PLASTIC CUP OR WITH BITUMINOUS OR MORTAR MIX.
3. DEFORMED DOWEL BAR SHALL BE USED IN PLACE OF SMOOTH DOWEL BAR WHERE LOCATED ON PLAN JL-1 ADHERING TO DOWEL BAR SCHEDULE. (2)

NOTES FOR DOWEL AND BAR HOLE DRILLING AND INSTALLATION:

1. DRILLING AND INSTALLATION METHOD SHALL BE CAPABLE OF MAINTAINING DRILL HOLES AND EMBEDDED BARS: (A) PARALLEL TO THE CONCRETE AND (B) NORMAL TO THE JOINT LINE, WITHIN 1/4" AT THE END OF THE DOWEL OR TIE BAR EXCEPT WHERE SPECIFIED OTHERWISE. DRILL HOLES SHALL BE ACCURATELY LAID OUT SO THAT THE MAXIMUM DEVIATION DOES NOT EXCEED 1". DRILL HOLE DIAMETER TO BE APPROXIMATELY 1/8" CLEAR OF BAR ALL AROUND.
2. AFTER THE DRILLING IS COMPLETE AND PRIOR TO INSTALLATION OF THE DOWEL OR TIE BARS, THE HOLES SHALL BE THOROUGHLY CLEANED TO REMOVE DRILLING DUST, CONCRETE CHIPS, AND ANY MATERIAL DETRIMENTAL TO BONDING.
3. EPOXY GEL SHALL BE APPLIED TO THE DOWEL AND SUFFICIENT GEL INJECTED IN THE BACK OF THE TIE BAR HOLE BY A MECHANICAL MIXING/PUMP DEVICE SO THAT A SLIGHT AMOUNT OF GEL WILL BE FORCED OUT WHEN THE DOWEL OR TIE BAR IS INSERTED AND TAPPED TO THE CORRECT POSITION. IT WILL BE NECESSARY TO TWIST THE BAR BACK AND FORTH SEVERAL TIMES TO ELIMINATE THE AIR ENTRAPPED IN THE HOLE. SMALL WEDGES MAY BE USED TO SUPPORT THE DOWEL OR TIE BAR IN CORRECT ALIGNMENT UNTIL THE GEL HARDENS.
4. THE CONTRACTOR MUST USE CAUTION DURING DRILLING AND/OR DOWEL INSTALLATION SO THAT THE LIGHT BASES AND CONDUIT ARE NOT DAMAGED.
5. THE DOWEL BAR REMAINING EXPOSED SHALL BE PAINTED AND OILED PRIOR TO PLACING NEW CONCRETE SLAB.

Atlanta Regional Airport
Falcon Field

ATLANTA REGIONAL AIRPORT
FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer: XXX
Technician: XXX
Checked by: CAA
Project Number: 198108

GEORGIA REGISTERED No. PE046596 PROFESSIONAL ENGINEER 5-7-24 Christopher Bachmann

Notes:

REVISIONS

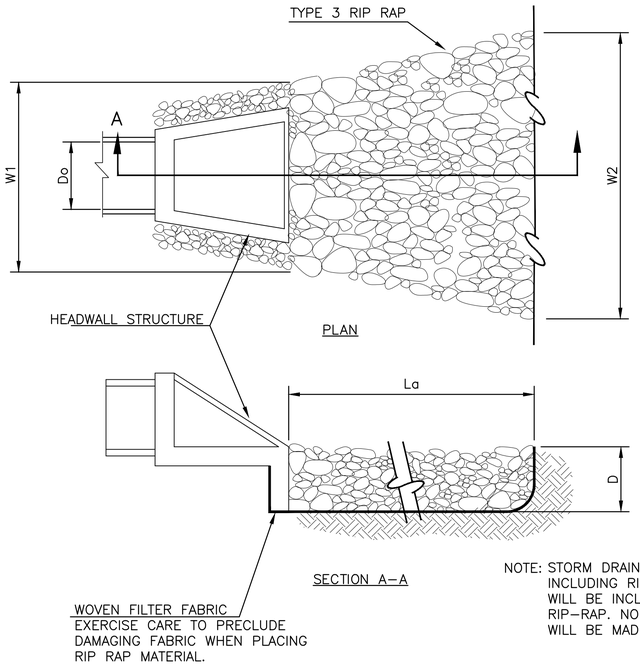
No.	Description	Date	By
2	ADDENDUM NO. 2	04/05/24	CRB

Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
JOINT DETAILS

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

Date: **MARCH, 2024**
Sheet Number: 27 of 50
Scale: **N.T.S.**
Drawing Number: **JD-2**



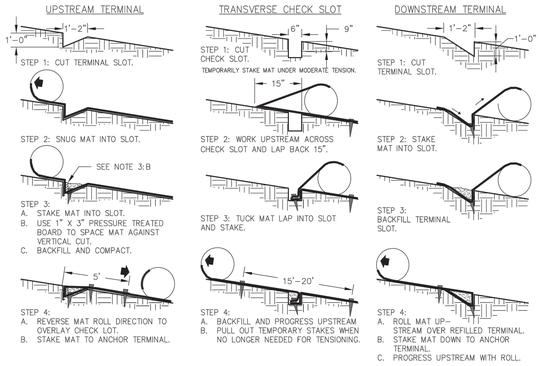
NOTE: STORM DRAIN OUTLET PROTECTION, INCLUDING RIPRAP & FILTER FABRIC, WILL BE INCLUDED IN ITEM GDOT–603 RIP–RAP. NO SEPERATE PAYMENT WILL BE MADE FOR THESE ITEMS.

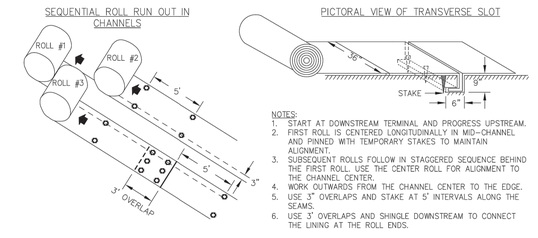
OUTLET I.D.	D_0 (IN)	Q_{25} (CFS)	V (FPS)	L_a (FT.)	W_1 (FT.)	W_2 (FT.)	d_{50} (FT.)	D (FT.)	Min/Max Tailwater	Weight (TONS)
A1.1	30	26	8.78	16	7.5	9	0.6	1.35	MAX	7.97
EX	18	5	5.64	10	4.5	6	0.6	1.35	MAX	3.04

St STORM DRAIN OUTLET PROTECTION

TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

BLANKET AND MATTING CROSS-SECTIONS





NOTES:
1. START AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
2. FIRST ROLL IS CENTERED LONGITUDINALLY IN MID–CHANNEL AND PINNED WITH TEMPORARY STAKES TO MAINTAIN ALIGNMENT.
3. SUBSEQUENT ROLLS FOLLOW IN STAGGERED SEQUENCE BEHIND THE FIRST ROLL. USE THE CENTER ROLL FOR ALIGNMENT TO THE CHANNEL CENTER.
4. WORK OUTWARDS FROM THE CHANNEL CENTER TO THE EDGE.
5. USE 3" OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE SEAMS.
6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE LINING AT THE ROLL ENDS.

Figure 6-10.1 - Typical Installation Guidelines for Matting and Blankets

Ss SLOPE STABILIZATION

Atlanta Regional Airport
Falcon Field

ATLANTA REGIONAL AIRPORT FALCON FIELD
PEACHTREE CITY, GEORGIA

Michael Baker INTERNATIONAL

Designer: **RKK**
Technician: **RKK**
Checked by: **CAA**
Project Number: **198108**

GEORGIA REGISTERED No. 025338 PROFESSIONAL ENGINEER ROBERT K. KIRK 3-7-24

Notes:

REVISIONS

No.	Description	Date	By
2	ADDENDUM NO. 2	04/05/24	CRB

Project Name:
TERMINAL APRON EXPANSION

Drawing Name:
EROSION AND SEDIMENT CONTROL DETAILS

PROJECT NUMBER:
GDOT PID: T008663, FAYETTE

Date: **MARCH, 2024**
Sheet Number: 49 of 50
Scale: **N.T.S.**
Drawing Number: **ECD-4**