

Chapter 6 – Airport Layout Plan

The ALP represents a group of drawings that serve as the primary tool to guide growth at the airport throughout the 20-year planning period and beyond. The ALP set was reduced from its full-size of 22" x 34" to be incorporated in this chapter for easy reference. The drawings in this ALP set include:

- Title Sheet,
- Airport Data Sheet,
- Existing Conditions Drawing,
- Airport Layout Drawing,
- Basing Area Plan – North,
- Basing Area Plan – Clairmont Ramp/North Central,
- Basing Area Plan – Central,
- Basing Area Plan – Southwest,
- Basing Area Plan – East 1,
- Basing Area Plan – East 2,
- Airport Airspace Drawings (3 Sheets),
- Inner Portion of Approach Surface Drawings (6 Sheets),
- Runway Departure Surface Drawing (3 Sheets)
- Off Airport Land Use Drawing,
- Exhibit "A" Airport Property Inventory Map, A
- Obstruction Tables (35 Sheets).

6.1 Title Sheet

This sheet serves as the ALP Drawing Set cover sheet and provides information to include the official airport name, airport owner, associated city and state and the party responsible for preparing the ALP set. An index of drawings, graphic representations of the airport location and the airport vicinity are also presented on the title sheet. Approval blocks are provided for the Airport Sponsor and GDOT. Reference **Drawing 1** in the ALP Drawing Set which follows this chapter.

6.2 Airport Data Sheet

The Airport Data Table provides basic airport data and key planning criteria for initial and ultimate timeframes. This table includes airport elevation, airport reference point, airport reference code, NAVAIDS, design aircraft and taxiway lighting. The table provides the mean maximum temperature of the hottest year for the airport site, which is utilized in runway length analysis. The table also includes designated roles within the state and federal aviation systems.

The Runway Data Table provides details related to the initial and ultimate runway and associated facilities. The table includes runway length/width, wind coverages, runway design code, critical aircraft, true bearing, effective gradient, runway lighting, pavement strength, and surface composition. The table also provides FAA design criteria for each runway based upon planned instrument approaches and weather minimums, including approach slopes, runway design code, approach reference code, departure and reference code. The table provides dimensions of safety elements, including RSA, OFA, OFZ, and RPZ.

The Declared Distance Table provides information pertaining to specific lengths of runway that are published for aircraft operations, specifically when taking off or landing.

Two wind roses are presented to demonstrate crosswind coverages of each runway end in All-Weather and IFR conditions. Ten years of weather data is collected from a weather station located at PDK for period of 2008-2017.

A reduced scale version of the Airport Layout Drawing is provided at the end of this chapter (reference **Drawing 2**).

6.3 Existing Conditions

The Existing Conditions Drawing is a graphical representation, to scale, of the current conditions of existing airport facilities at DeKalb Peachtree Airport. This drawing is similar to the Airport Layout Drawing however it does not depict proposed improvements. The intent of this drawing is to provide a less cluttered depiction of existing facilities than that of the ALP.

6.4 Airport Layout Drawing

The Airport Layout Plan Drawing (ALP) depicts all existing and planned future airport facility developments as proposed within the 20-year Airport Master Plan. To facilitate the review of planned facility improvements, separate ALPs depict existing/future and ultimate conditions respectively. Only the Future ALP is accepted, conditionally approved and retained on-file by the GDOT for future (i.e. FAA) funding authorization and/or participation. The ALP provides informational and dimensional data to demonstrate conformance with current and applicable FAA airport design standards as prescribed in FAA AC 150/5300-13A, *Airport Design*. Denoted or depicted ALP information includes, but is not limited to: runways, taxiways, airfield lighting, visual and electronic navigational aids, terminal facilities, hangars, other non-aviation or support buildings, aircraft parking areas, automobile and truck parking, and airport access elements, as well as general, aerial photogrammetric mapping and geodetic survey source notes.

A reduced scale version of the Airport Layout Drawing is provided at the end of this chapter (reference **Drawing 4**).

6.5 Basing Area Plans (North, Clairmont/North Central, Central, Southwest, Eastside)

The basing area plans also known as terminal area plans provide greater details of the existing and proposed basing areas at a scale of 1"=100'. Due to the location of facilities, the basing area plan is separated into "North," "Clairmont/North Central", "Central", "Southwest," and "Eastside" drawings. The Northside Terminal Area Plan depicts the proposed t-hangar basing area, one of the three FBO's located at the airport, adjacent corporate hangars and helicopter basing area. Clairmont/North Central Terminal Area Plan depicts the proposed main airport terminal area, existing and proposed county t-hangars, additional FBO facilities, proposed new Administration Building and proposed tie-down area. The Southwest and Eastside Terminal Area Plan depicts the basing area for future aeronautical development. Elevations are based upon typical building heights for the size of hangars shown. Refer to **Drawings 5, 6, 7, 8, 9 and 10** in the ALP Drawing Set provided at the end of this chapter.

6.6 Airport Airspace Drawings

These three sheets incorporate a graphic representation of the imaginary surfaces surrounding the airport as described within 14 CFR Part 77, Safe, Efficient Use, and Preservation of Navigable Airspace. The imaginary surfaces are established in relation to the airport elevation, the runway ends, runway end elevations, and define those areas where the height of objects should be regulated for the safe operation of aircraft. Imaginary surfaces include the following: Approach Surface, Transitional Surface, Horizontal Surface and Conical Surface. The size of each imaginary surface is based on the runway category and type of existing, or planned approach, whichever is the most demanding. Elevations of the Part 77 surfaces described in the drawing are based upon an airport elevation of 998.4 ft AMSL.

Obstruction data for these drawings were taken from the FAA Digital Obstacle File (DOF) and the FAA OE/AAA database. In some cases, obstruction data were verified using aerial survey obtained during the creation of the ALP; however, the majority of obstructions are from the FAA databases. Each obstruction is identified in the Obstruction Data Table. The table also includes the following: location (lat/long), type, city, height AGL, height AMSL, existing obstruction lighting, markings, FAA Aeronautical Study Number, amount of penetration, source of data and proposed action. Several obstructions noted in the table will need to be evaluated by the FAA to determine if the obstruction requires lighting, marking, lowering or removal. Refer to **Drawings 11, 12, and 13** in the ALP Drawing Set provided at the end of this chapter.

6.7 Inner Portion of the Approach Drawings

The Inner Portion of the Approach Drawings depict natural and man-made features in the vicinity of and along the inner approach path to each runway end. The large-scale plan and profile views facilitate the identification of potential obstructions that lie within areas that should be free of objects that may preclude safe aircraft operations. The purpose of the drawing is also to identify land where acquisition or easements may be required. Obstructions identified in these drawings were obtained from an aeronautical survey that was captured on May 26, 2019 and the field survey was conducted from June 10, 2019 to June 14, 2019. In the future, additional field surveys at regularly scheduled intervals should be conducted to ensure clear approaches.

Each drawing identifies the boundaries of 14 CFR Part 77 Approach Surfaces, Threshold Siting Surfaces (as defined in Table 3-4 of FAA AC 150/5300-13) and the associated slopes related to each surface. The dimensions of these surfaces are dependent upon the type of instrument approaches planned to each runway end and the visibility minimums planned for that approach.

The Obstruction Data Tables identify each obstruction by number, type of obstruction, top elevation of the object, amount of penetration and proposed action. In the plan view, obstructions are identified using symbols representing the type of surface that is penetrated (Part 77 or Threshold Siting). Trees that will likely grow into the surfaces in the future are also identified. While all existing and future obstructions should be removed if possible, Threshold Siting penetrations are critical because not removing these penetrations may result in a displaced landing threshold. In the future, additional field surveys should be performed at regularly scheduled intervals to ensure clear approach and departure surfaces.

The drawings also provide the boundaries of the initial and ultimate runway protection zones. The dimensions of the RPZs are based upon the lowest visibility minimums of the planned instrument approaches and the approach category of the critical aircraft. The RPZ function is to enhance the

protection of people and property on the ground. Where practical, airport owners should own the property under the runway approach and departure areas to at least the limits of the RPZ. It is desirable to clear the entire RPZ of all above ground objects. Where this is impractical, airport owners, at a minimum, should maintain the RPZ clear of all facilities supporting incompatible land activities. See FAA Memorandum, *Interim Guidance on Land Uses Within a Runway Protection Zone*, dated 9/27/2012, for guidance on incompatible activities.

Separate drawings are provided for each runway end. Refer to Drawings **14, 15, 16, 17, 18** and **19** in the ALP Drawing Set provided at the end of this chapter.

6.8 Departure Surface Drawing

The Runway Departure Surface Drawings consists of large-scale plan views of departure surfaces for all runway ends at PDK. The Departure Surface Drawing depicts the ground contours along the extended runway centerline plus any significant natural or non-natural objects located along the extended runway centerline and also provides a top elevation for those objects. Commonly shown objects include buildings, roads, ditches, and trees. Surface penetration and disposition information is included in the associated obstruction data tables.

Separate drawings are provided for each runway end. Refer to Drawings **20, 21** and **22** in the ALP Drawing Set provided at the end of this chapter.

6.9 Land Use Drawing

The land use drawing depicts existing land uses for off-airport property in the vicinity of the airport and proposed land uses within the airport property. The purpose of this plan is to provide land use compatibility guidance for municipalities within the vicinity of the airport in order to ensure compatibility with projected airport operations. Where conflicts are apparent and an incompatibility exists, mitigation measures are recommended.

The drawing includes airport noise contours produced in a separate noise study in 2016. The noise contours are expressed Day-Night Average Sound Level (DNL) metric. DNL is a 24-hour logarithmic average sound level expressed in decibels on the A-weighted scale, a scale which simulates human sound perception. An annual average of DNL is used by the FAA to describe airport noise exposures. Nighttime operations, those occurring between the hours of 10:00 p.m. and 7:00 a.m., are attributed a 10-decibel penalty (twice as loud) within the DNL calculation. The cumulative noise exposure levels at all reference points are then used to plot noise exposure contours for selected DNL values and superimposed onto a base map.

The FAA provides guidelines for evaluating various land uses inside aircraft noise exposure areas. These guidelines are reproduced here in **Table 6-1**. Land use compatibility of various activities is keyed to DNL values. The guidelines reflect the statistical variability of the responses of large groups of people to noise. Therefore, any particular noise level might not accurately assess one individual's perception of an actual noise environment. As **Table 6-1** describes, all land uses are considered compatible with noise levels of less than 65 DNL. Residential, mobile home, and transient lodging uses are discouraged from 65 DNL and higher. Other noise sensitive uses such as hospitals, nursing homes, and churches are also discouraged in 65 DNL or greater. In certain cases, these uses may be permitted if the habitable structure is designed with, or contains, adequate measures to achieve reduction of outdoor noise levels



(soundproofing). Land uses that are less sensitive to noise levels, such as commercial use, are considered compatible with noise levels of 70 DNL without soundproofing and up to 80 DNL with soundproofing.

Reference **Drawing 23** of the ALP Drawing Set provided at the end of this chapter.

DRAFT



Table 6-1: FAA Land Use Compatibility Guidelines

Land Use	Yearly day-night average sound level (DNL) in decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
RESIDENTIAL						
Residential, other than mobile homes and transient lodgings	Y	N ¹	N ¹	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N ¹	N ¹	N ¹	N	N
PUBLIC USE						
Schools	Y	N ¹	N ¹	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y ²	Y ³	Y ⁴	N
Parking	Y	Y	Y ²	Y ³	Y ⁴	N
COMMERCIAL USE						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, hardware and farm equipment	Y	Y	Y ²	Y ³	Y ⁴	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y ²	Y ³	Y ⁴	N
Communication	Y	Y	25	30	N	N
MANUFACTURING AND PRODUCTION						



Manufacturing, general	Y	Y	Y ²	Y ³	Y ⁴	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y ⁶	Y ⁷	Y ⁸	Y ⁸	Y ⁸
Livestock farming and breeding	Y	Y ⁶	Y ⁷	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
RECREATIONAL						
Outdoor sports arenas and spectator sports	Y	Y ⁵	Y ⁵	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

Legend:

Y (Yes) – Land use and related structures compatible without restrictions

N (No) – Land use and related structures are not compatible and should be prohibited

NLR – Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.

25, 30, 35 – Land use and related structures generally compatible; measures to achieve NLR of 25, 30, 35 db must be incorporated into design and construction of structure.

Notes:

1. When the community determines that residential or school uses must be allowed, measures to achieve an outdoor to indoor NLR of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. The use of NLR criteria will not, however, eliminate outdoor noise problems.
2. Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low
3. Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
4. Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
5. Land use is compatible provided special sound reinforcement systems are installed.
6. Residential buildings require an NLR of 25 dB.
7. Residential buildings require an NLR of 30 dB.
8. Residential buildings are not permitted

Source: 14 CFR Part 150

6.10 Exhibit “A” Property Inventory Map

Often referred to as “Exhibit A,” the airport property map documents the current and future airport boundary in a graphical and tabular form. It serves as a record of property transactions for grant evaluation purposes and to analyze future aeronautical use of land acquired with federal funds.

The drawing depicts the planned initial and ultimate boundary lines overlaid onto current and future airport facilities. Data tables provide a parcel numbering system, grantor, proposed property interest (fee simple, easement), type of conveyance, date of acquisition and purpose of acquisition. The tables also provide the deedbook and page that the transaction is recording at the courthouse and FAA grant number (if applicable). Any existing or future easements encumbered on the property should be recorded on this drawing. As land is acquired, the drawing should be updated frequently. An up-to-date Exhibit A is normally required to be attached to future FAA grant agreements. Reference **Drawing 24** of the drawing set provided at the end of this chapter.



DRAFT

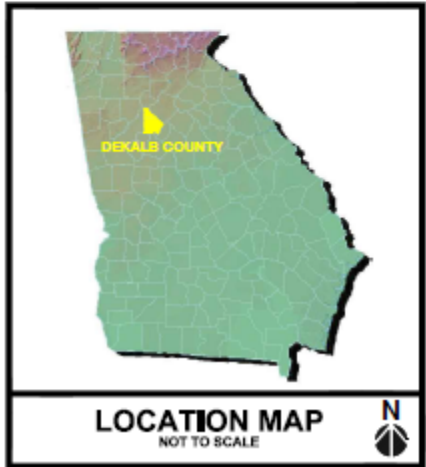
Figure 6-1: Tile Sheet

DEKALB PEACHTREE AIRPORT ATLANTA, GEORGIA

AIRPORT LAYOUT PLAN



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

PREPARED FOR:
 DEKALB COUNTY BOARD OF COMMISSIONERS
 DEKALB COUNTY GEORGIA



JUNE 2021

PREPARED BY:
Michael Baker
 INTERNATIONAL

INDEX OF SHEETS		
DRAWING NO.	DESCRIPTION	REV. DATE
1	TITLE SHEET	JUNE 2021
2	AIRPORT DATA SHEET	JUNE 2021
3	EXISTING CONDITIONS DRAWING	JUNE 2021
4	AIRPORT LAYOUT DRAWING	JUNE 2021
5	BALEND AREA PLAN - NORTH	JUNE 2021
6	BALEND AREA PLAN - CLAYMONT RAMP - NORTH CENTRAL	JUNE 2021
7	BALEND AREA PLAN - CENTRAL	JUNE 2021
8	BALEND AREA PLAN - SOUTHWEST	JUNE 2021
9	BALEND AREA PLAN - EAST 1	JUNE 2021
10	BALEND AREA PLAN - EAST 2	JUNE 2021
11	AIRPORT AIRSPACE DRAWING (1 OF 3)	JUNE 2021
12	AIRPORT AIRSPACE DRAWING (2 OF 3)	JUNE 2021
13	AIRPORT AIRSPACE DRAWING (3 OF 3)	JUNE 2021
14	INNER PORTION OF APPROACH SURFACE DRAWING RUNWAY 3L	JUNE 2021
15	INNER PORTION OF APPROACH SURFACE DRAWING RUNWAY 25R	JUNE 2021
16	INNER PORTION OF APPROACH SURFACE DRAWING RUNWAY 3R	JUNE 2021
17	INNER PORTION OF APPROACH SURFACE DRAWING RUNWAY 25L	JUNE 2021
18	INNER PORTION OF APPROACH SURFACE DRAWING RUNWAY 18	JUNE 2021
19	INNER PORTION OF APPROACH SURFACE DRAWING RUNWAY 34	JUNE 2021
20	RUNWAY DEPARTURE SURFACE DRAWING RUNWAY 3L/25R	JUNE 2021
21	RUNWAY DEPARTURE SURFACE DRAWING RUNWAY 3R/25L	JUNE 2021
22	RUNWAY DEPARTURE SURFACE DRAWING RUNWAY 18/34	JUNE 2021
23	OFF-AIRPORT LAND USE DRAWING	JUNE 2021
24	AIRPORT PROPERTY MAP - SHEET A	JUNE 2021
25 - 28	OBSTRUCTION TABLES - RUNWAY 3L - 25R	JUNE 2021
29 - 47	OBSTRUCTION TABLES - RUNWAY 3R - 25L	JUNE 2021
48 - 66	OBSTRUCTION TABLES - RUNWAY 18 - 34	JUNE 2021

AIRPORT SPONSOR APPROVAL

THE AIRPORT DRAWING(S) APPROVED BY:

(SIGNATURE) _____ DATE _____

NAME: _____

TITLE: _____

GEORGIA DEPARTMENT OF TRANSPORTATION APPROVAL

THE AIRPORT DRAWING(S) APPROVED BY:

(SIGNATURE) _____ DATE _____

NAME: _____

TITLE: _____

THE PREPARATION OF THIS DOCUMENT WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 905 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS REPORT BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.



Figure 6-2: Airport Data Sheet

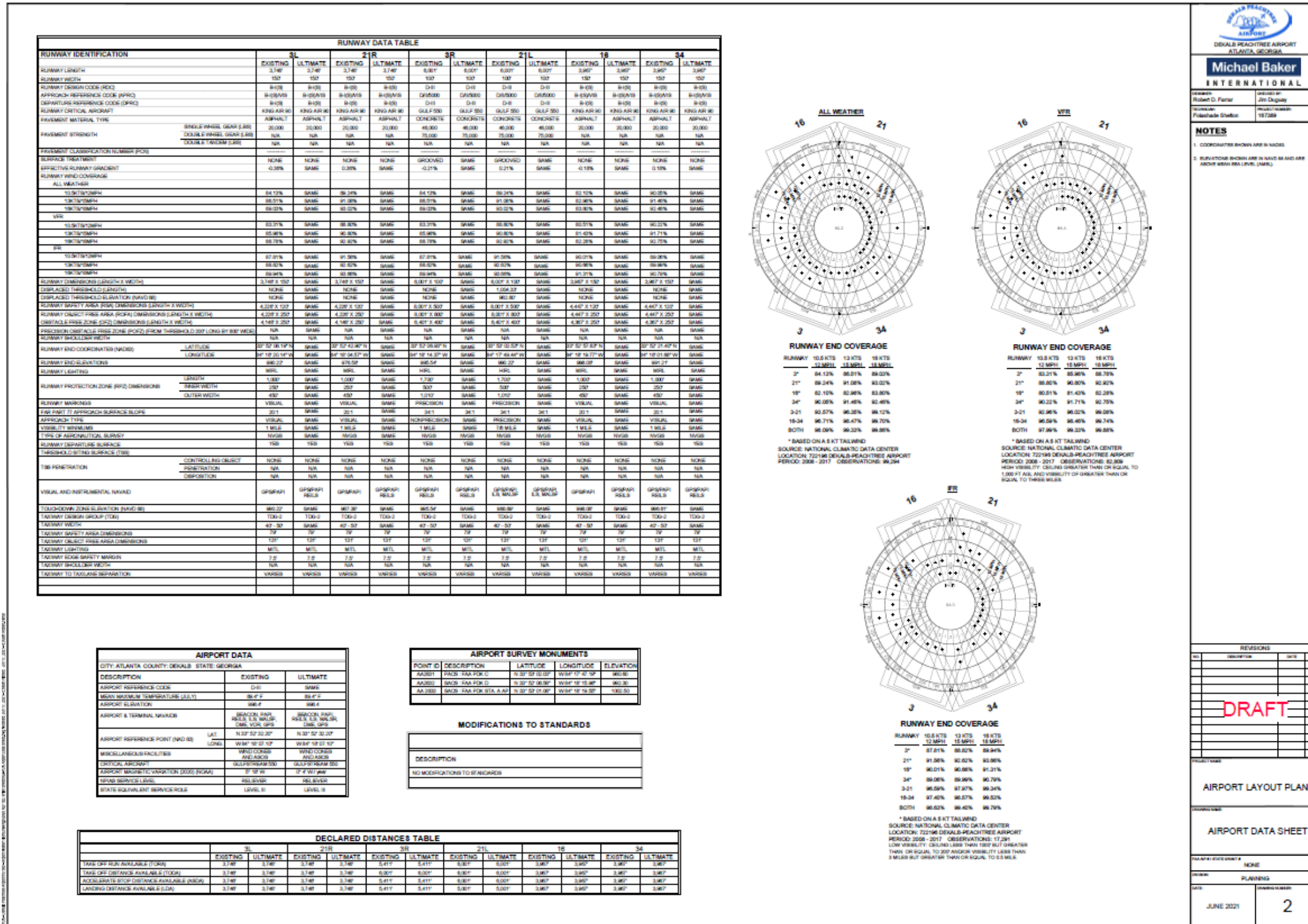


Figure 6-3: Existing Condition Drawing

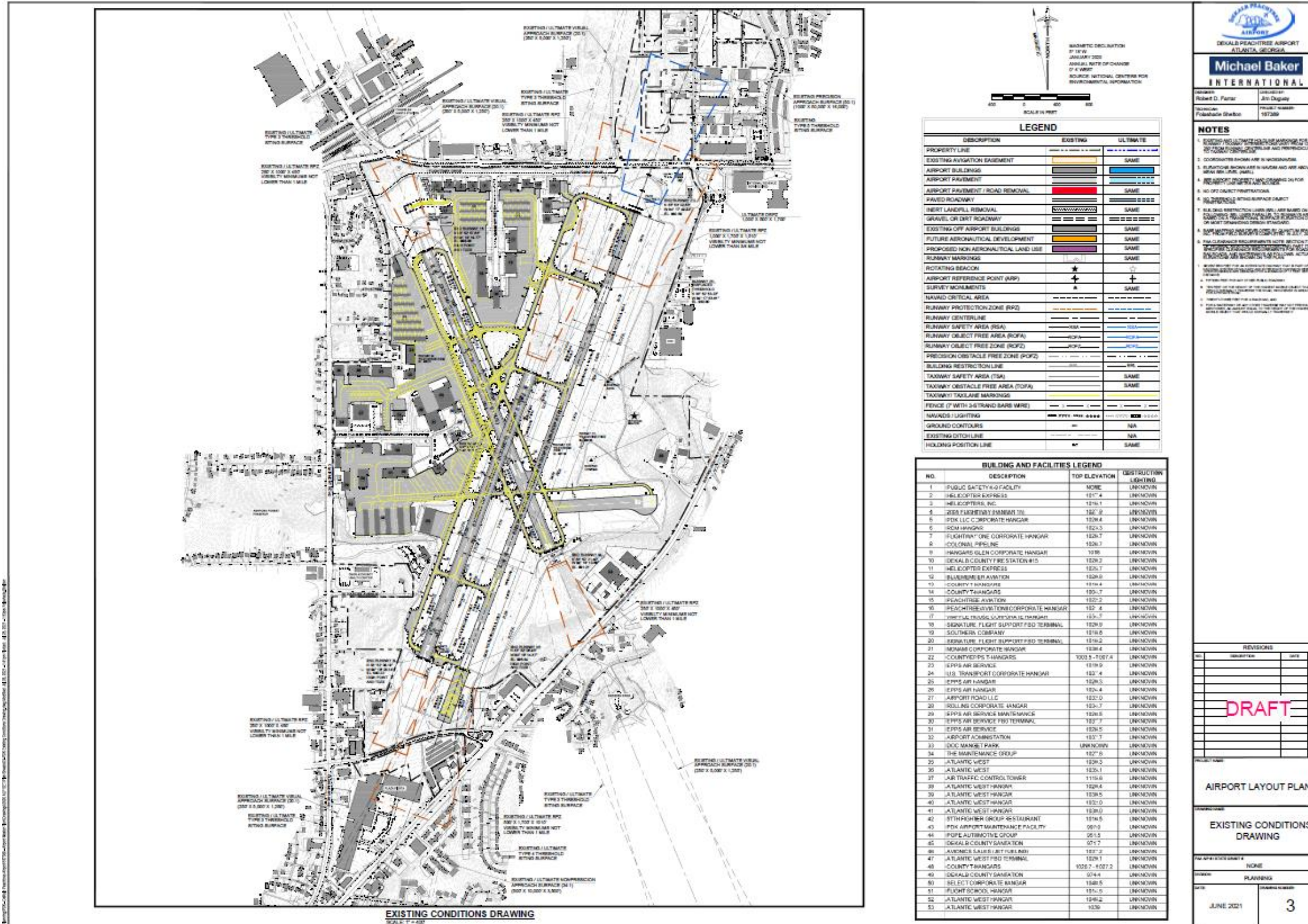


Figure 6-4: Airport Layout Drawing

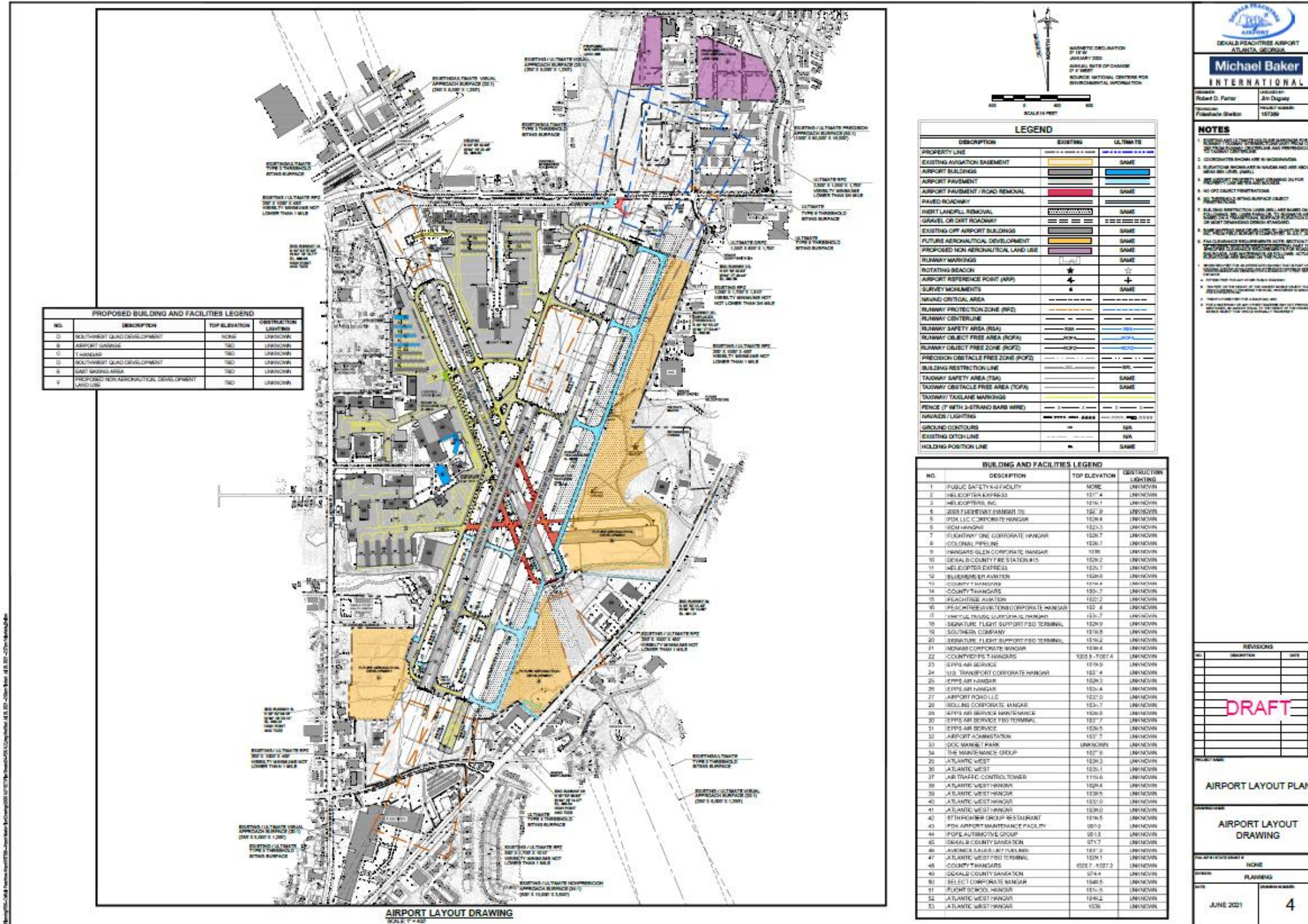


Figure 6-5: Basing Area Plan - North

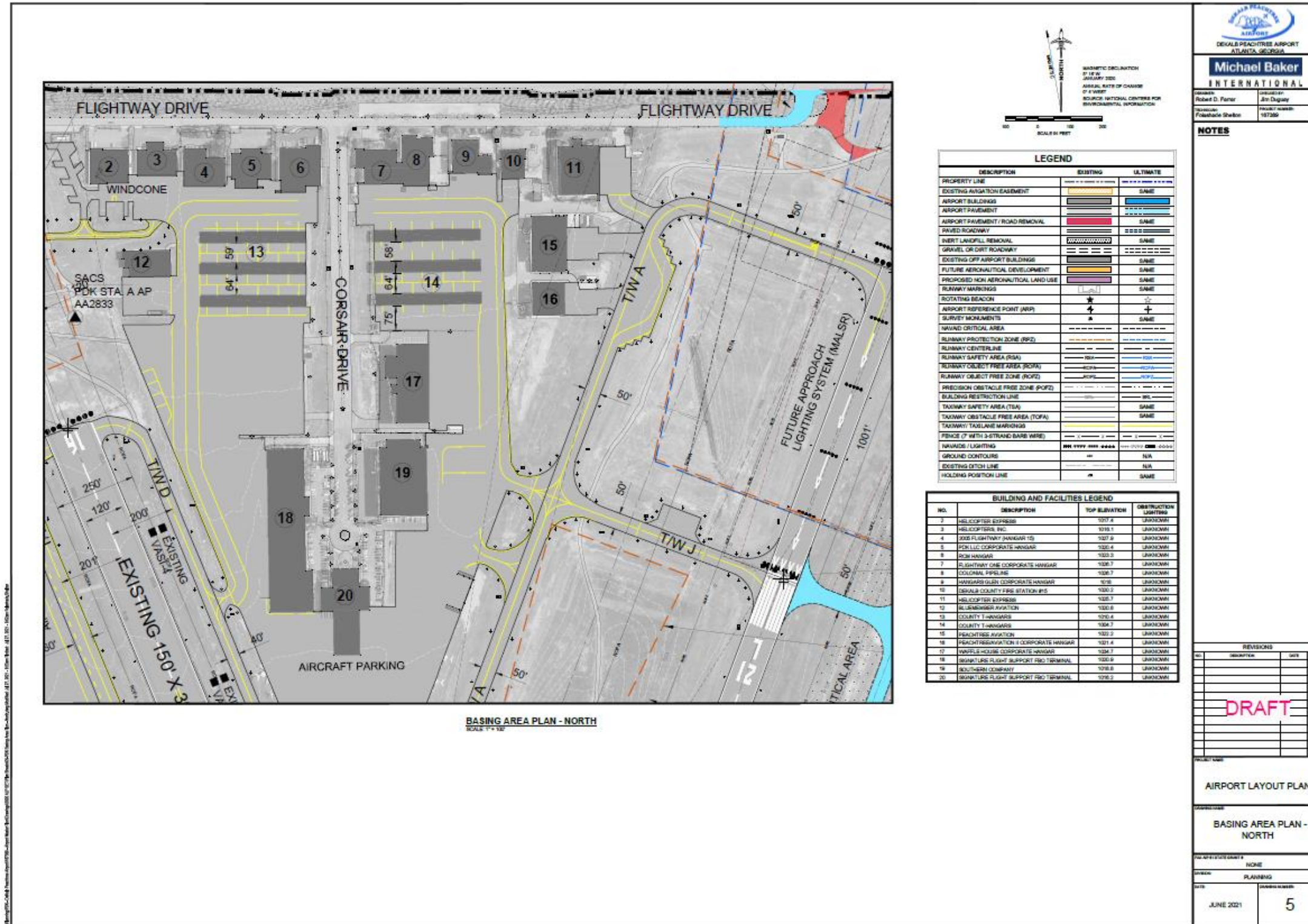


Figure 6-6: Basing Area Plan – Clairmont / North Central

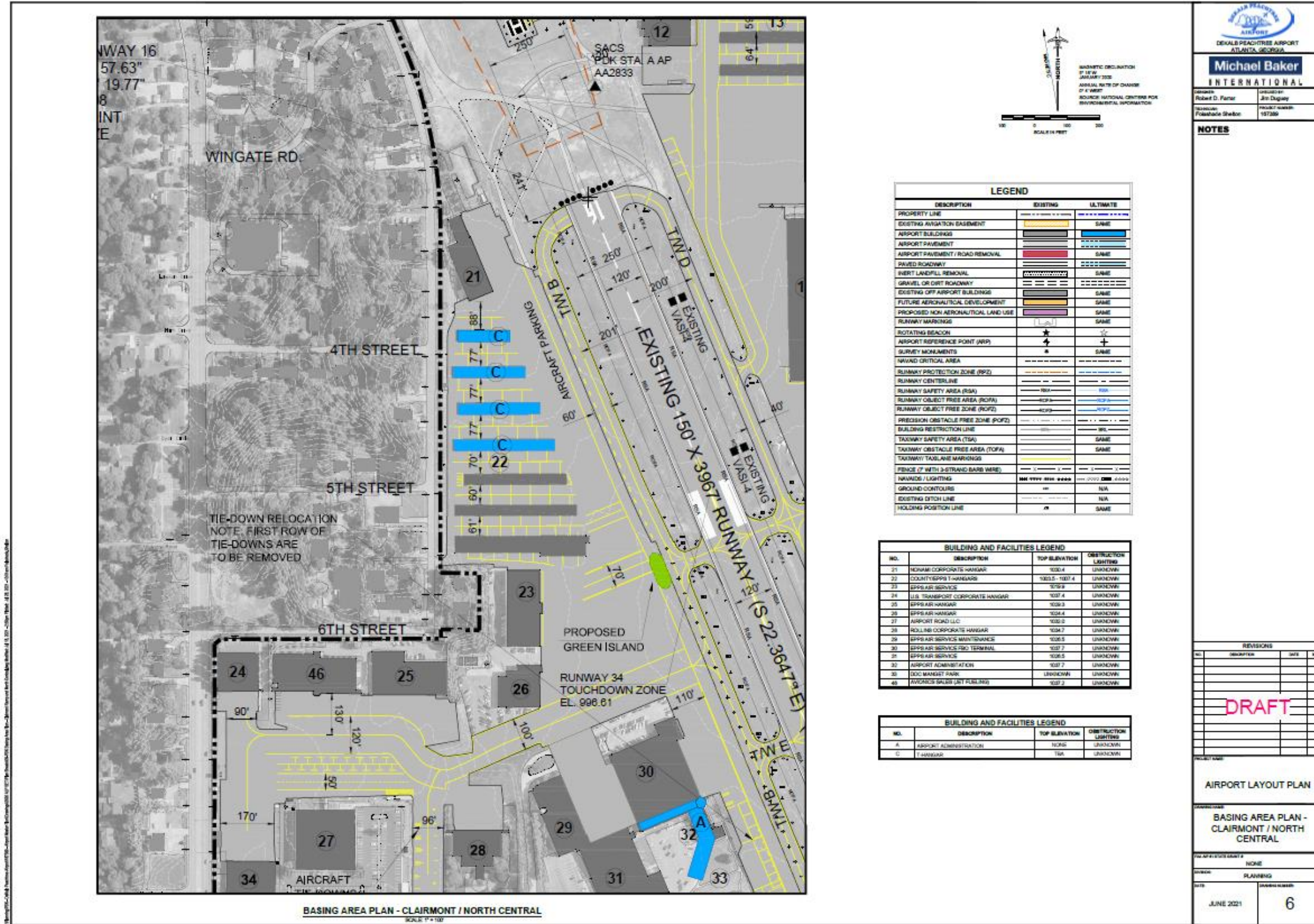


Figure 6-7: Basing Area Plan - Central

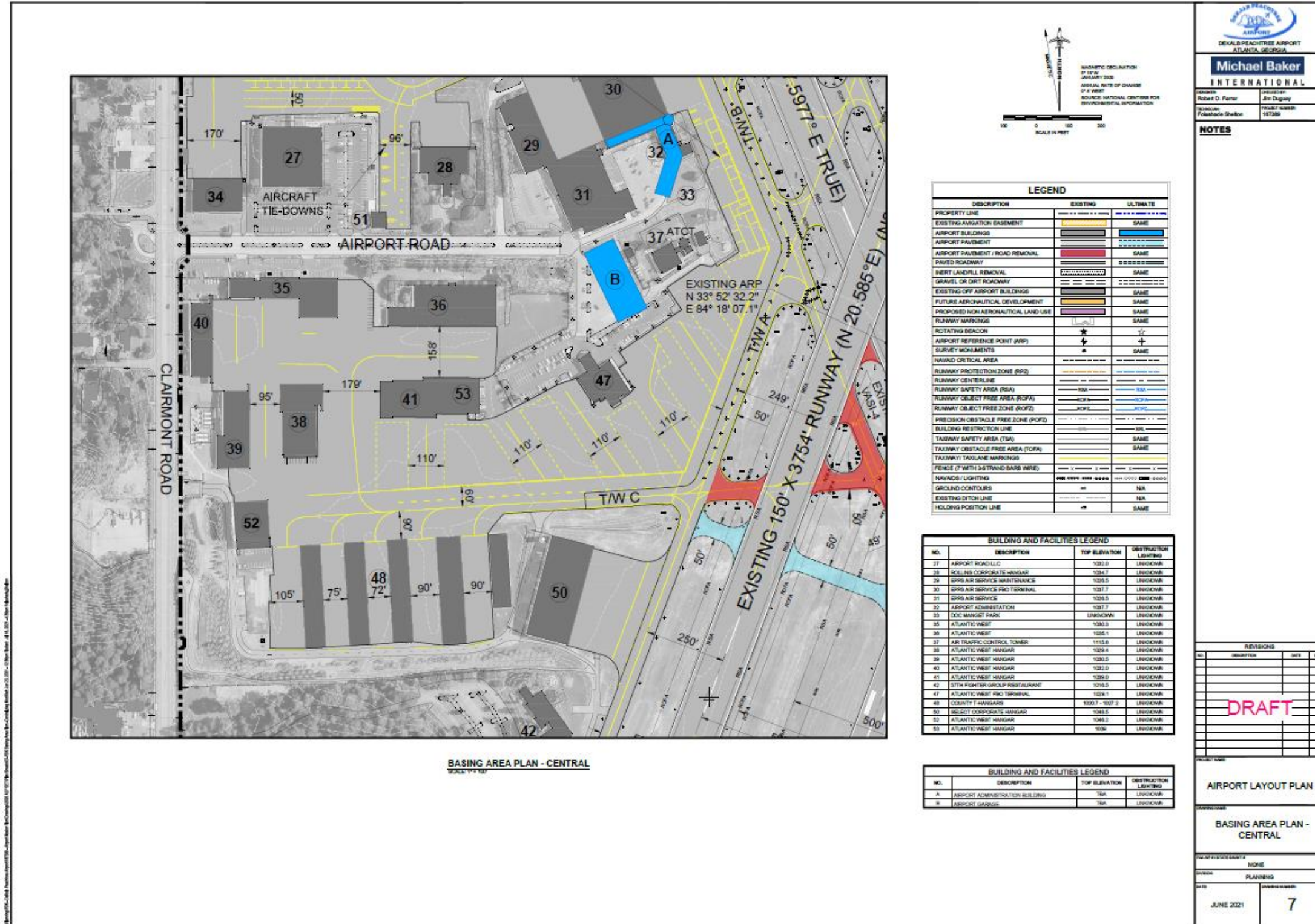


Figure 6-8: Basing Area Plan - Southwest

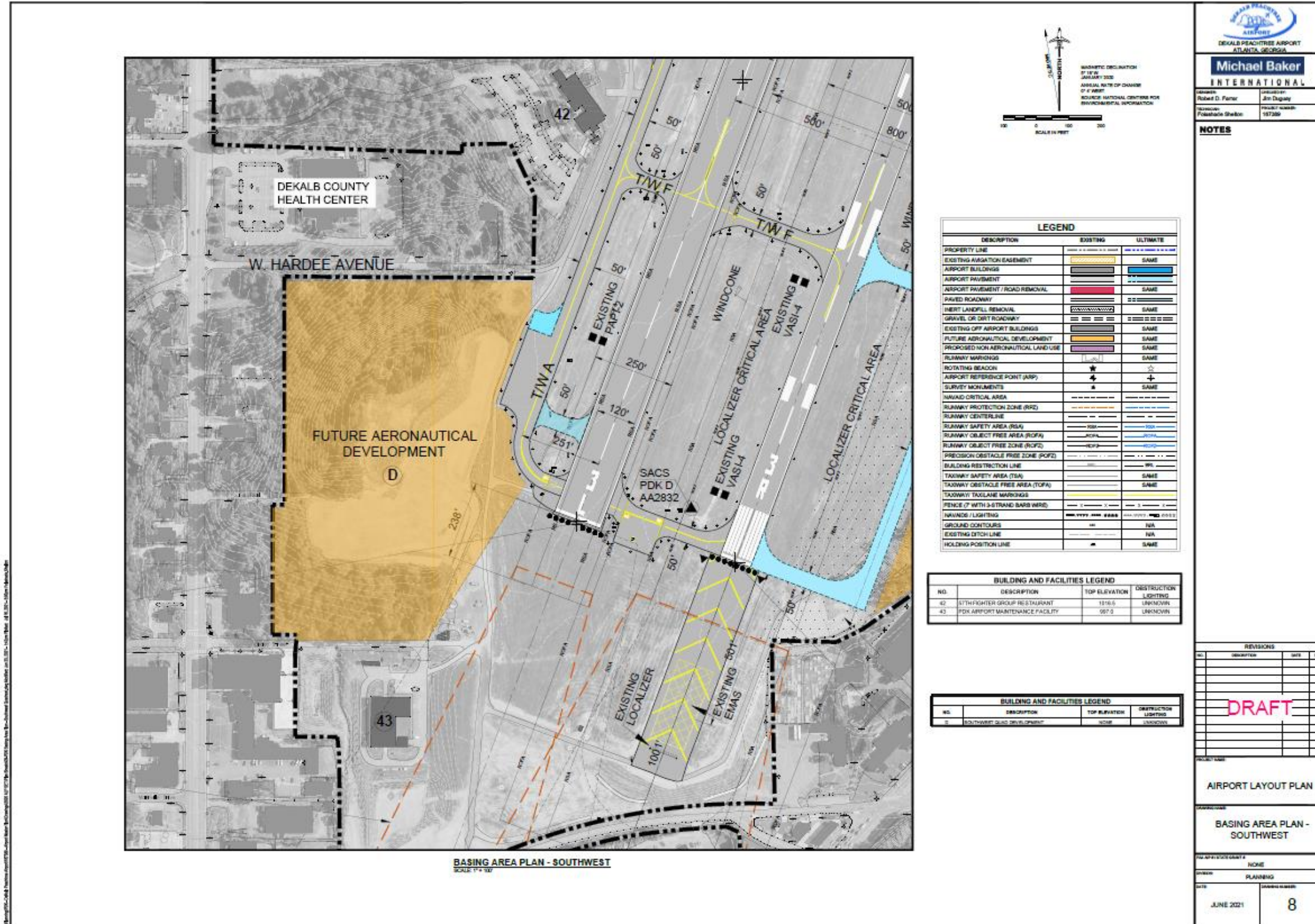


Figure 6-9: Basing Area Plan - East

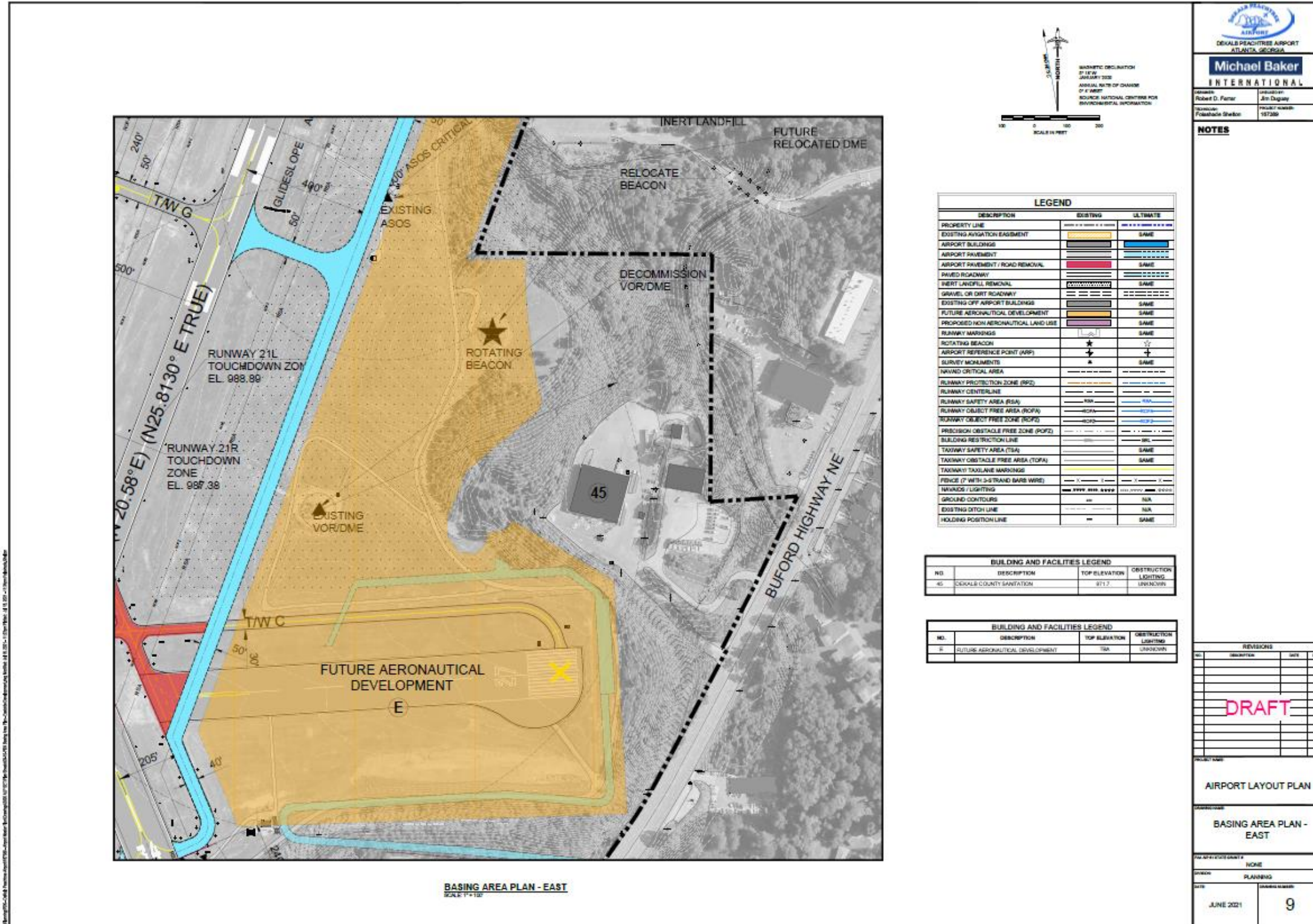


Figure 6-10: Basing Area Plan - East

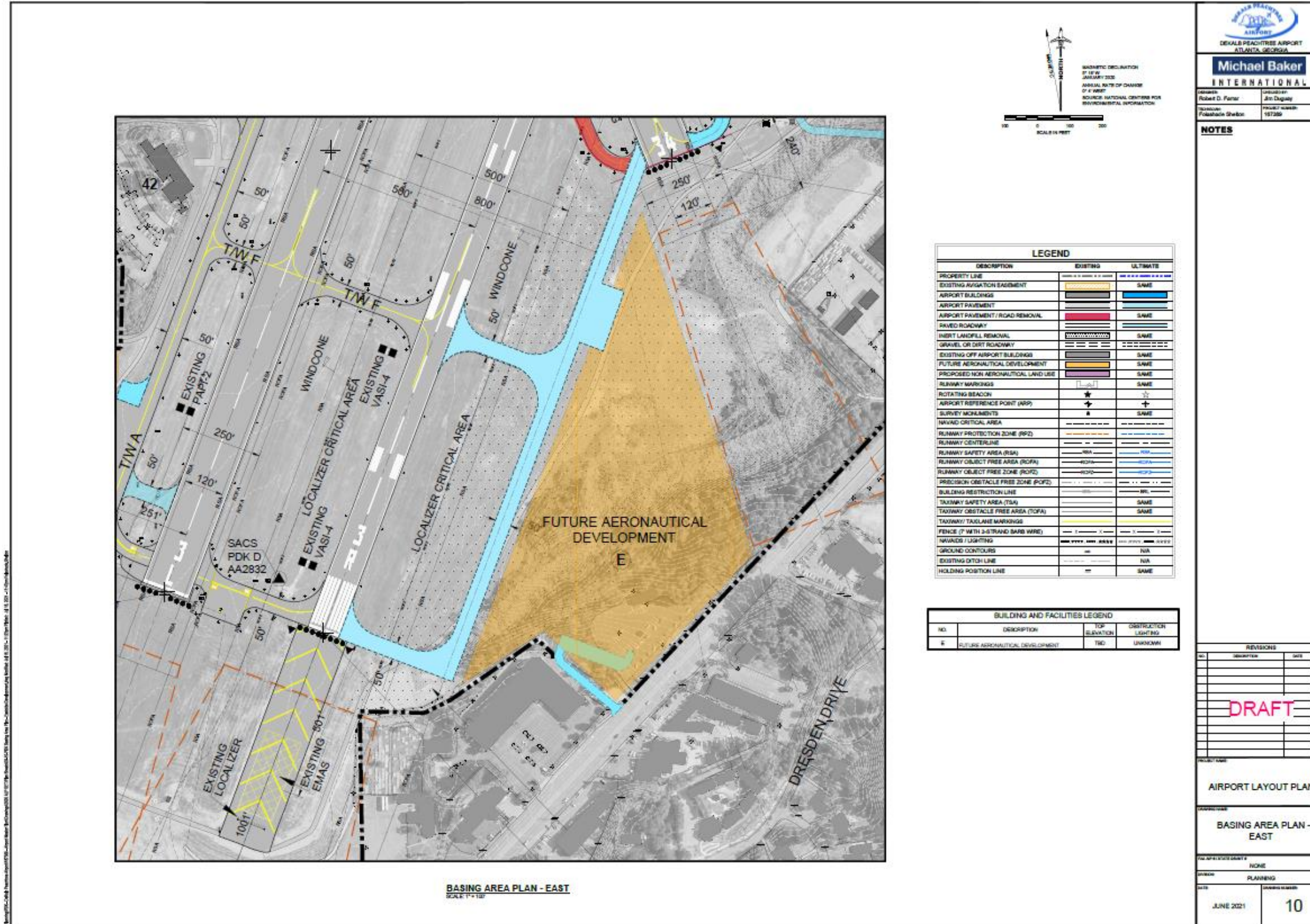


Figure 6-11: Airport Airspace Drawing (1 of 3)

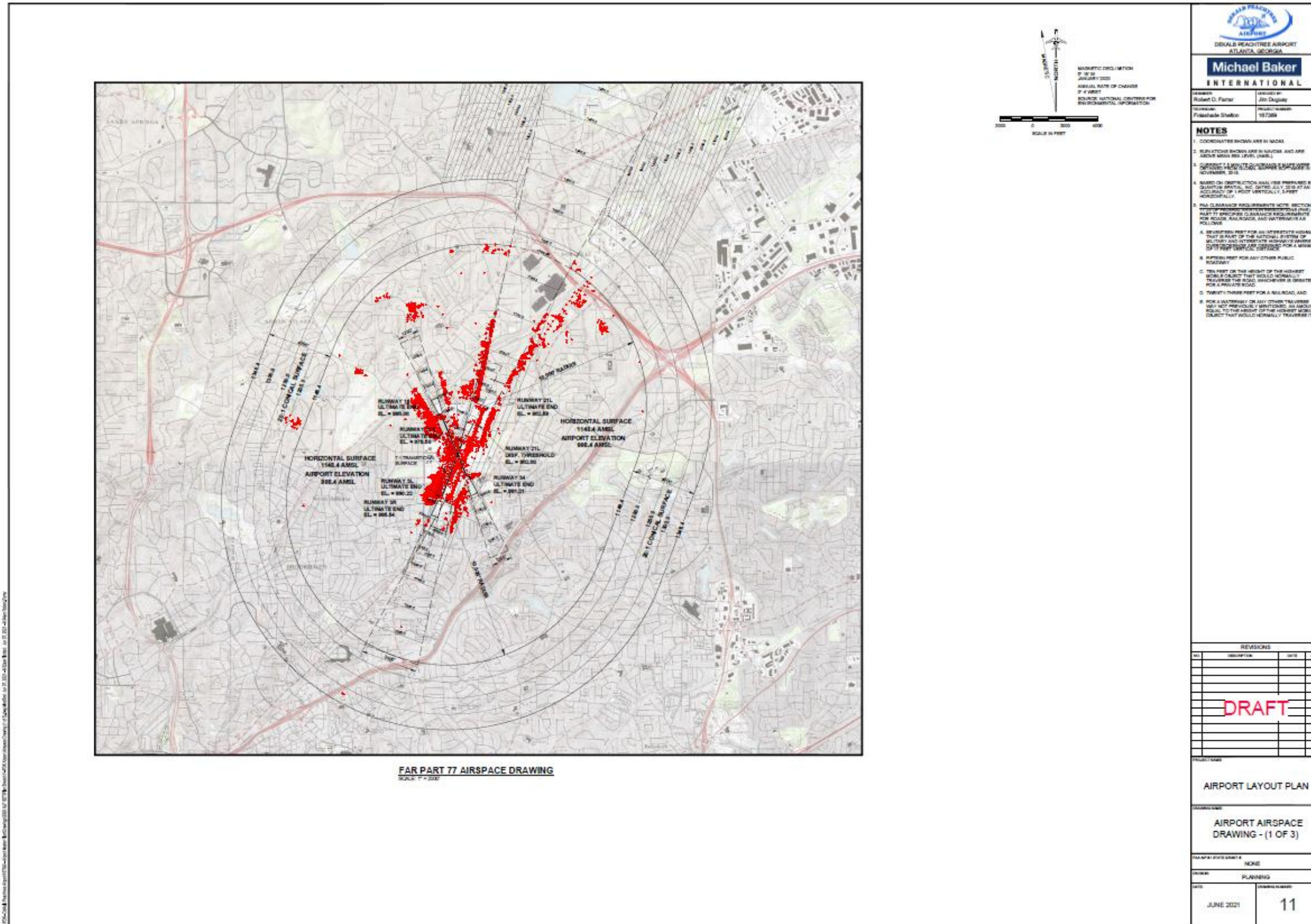


Figure 6-12: Airport Airspace Drawing (2 of 3)

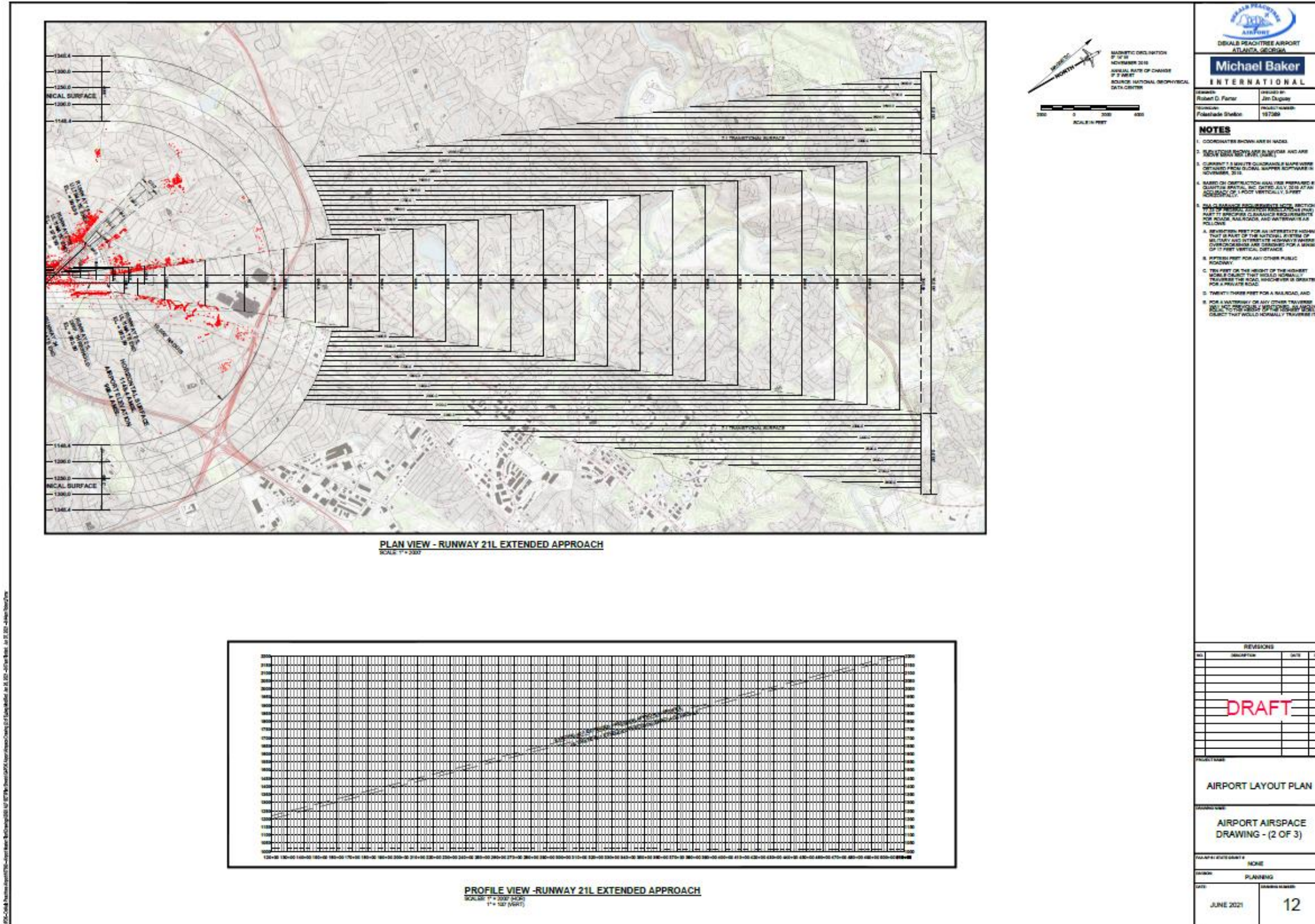
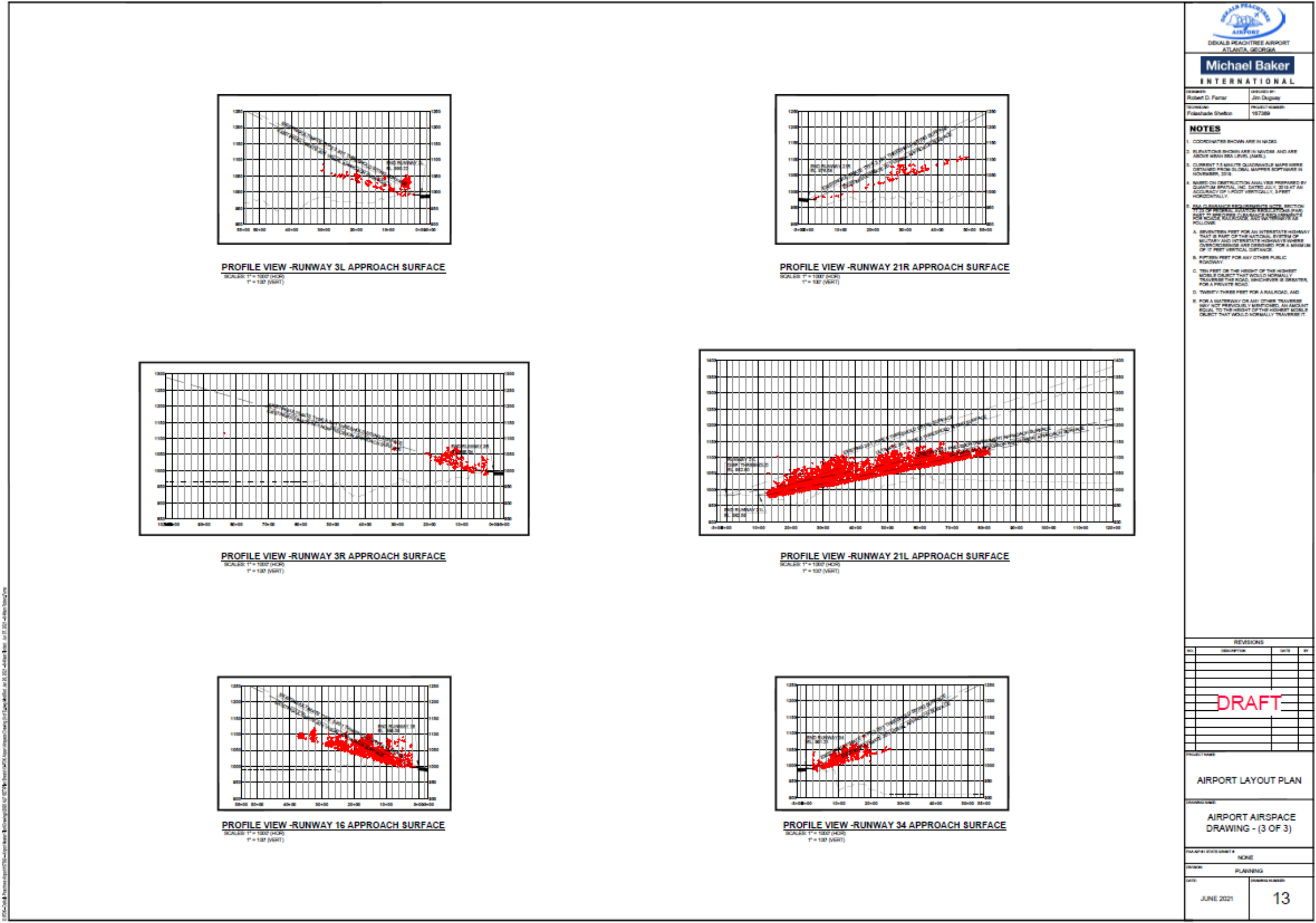


Figure 6-13: Airport Airspace Drawing (3 of 3)



DEKALB PEACHTREE AIRPORT
ATLANTA, GEORGIA

Michael Baker
INTERNATIONAL

DESIGNED BY Richard D. Farmer	DRAWN BY Joni Dugan
TITLE Airport Airspace	PROJECT NUMBER 16789

NOTES

1. COORDINATES SHOWN ARE IN NAD83.
2. ELEVATIONS SHOWN ARE IN METERS AND ARE MEAN SEA LEVEL (MSL).
3. CURRENT 1:2.5 MINUTE QUADRANGLE MAPS WERE OBTAINED FROM NATIONAL MAPPER SOFTWARE IN NOVEMBER, 2018.
4. SALES ON OBSTRUCTION ANALYSIS PREPARED BY QUANTUM SPATIAL, INC. DATED JULY 9, 2018 AT AN ACCURACY OF ABOUT VERTICALLY, 3 FEET HORIZONTALLY.
5. ALL OBSTRUCTION REQUIREMENTS FROM SECTION 107 OF FEDERAL AVIATION REGULATIONS (FAR) PART 77 OF TITLE 14, CHAPTER I, SUBCHAPTER G, FOLLOW.
6. AIRPORTS MUST FOR ALL INTERSTATE HIGHWAY THAT IS PART OF THE NATIONAL SYSTEM OF HIGHWAYS AND INTERSTATE HIGHWAYS UNDER CONSTRUCTION AND FOR A MINIMUM OF 10 FEET VERTICAL CLEARANCE.
7. AIRPORTS MUST FOR ANY OTHER PUBLIC HIGHWAY.
8. THE HEIGHT OF THE HEIGHT OF THE HIGHEST MOBILE OBJECT THAT WOULD NORMALLY TRAVERSE THE ROAD, BRIDGE OR OVERPASS, FOR A PRIVATE ROAD.
9. THIRTY-THREE FEET FOR A RAILROAD, AND
10. FOR A HIGHWAY OR ANY OTHER TRAVELWAY NOT PREVIOUSLY MENTIONED, AN AMOUNT EQUAL TO THE HEIGHT OF THE HIGHEST MOBILE OBJECT THAT WOULD NORMALLY TRAVERSE IT.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

DRAFT

PROJECT NAME AIRPORT LAYOUT PLAN	
DRAWING NAME AIRPORT AIRSPACE DRAWING - (3 OF 3)	
DRAWING SCALE NONE	
DRAWING TYPE PLANNING	
DATE JUNE 2021	DRAWING NUMBER 13

Figure 6-14: Inner Portion of Approach Surface Drawing - Runway 3L

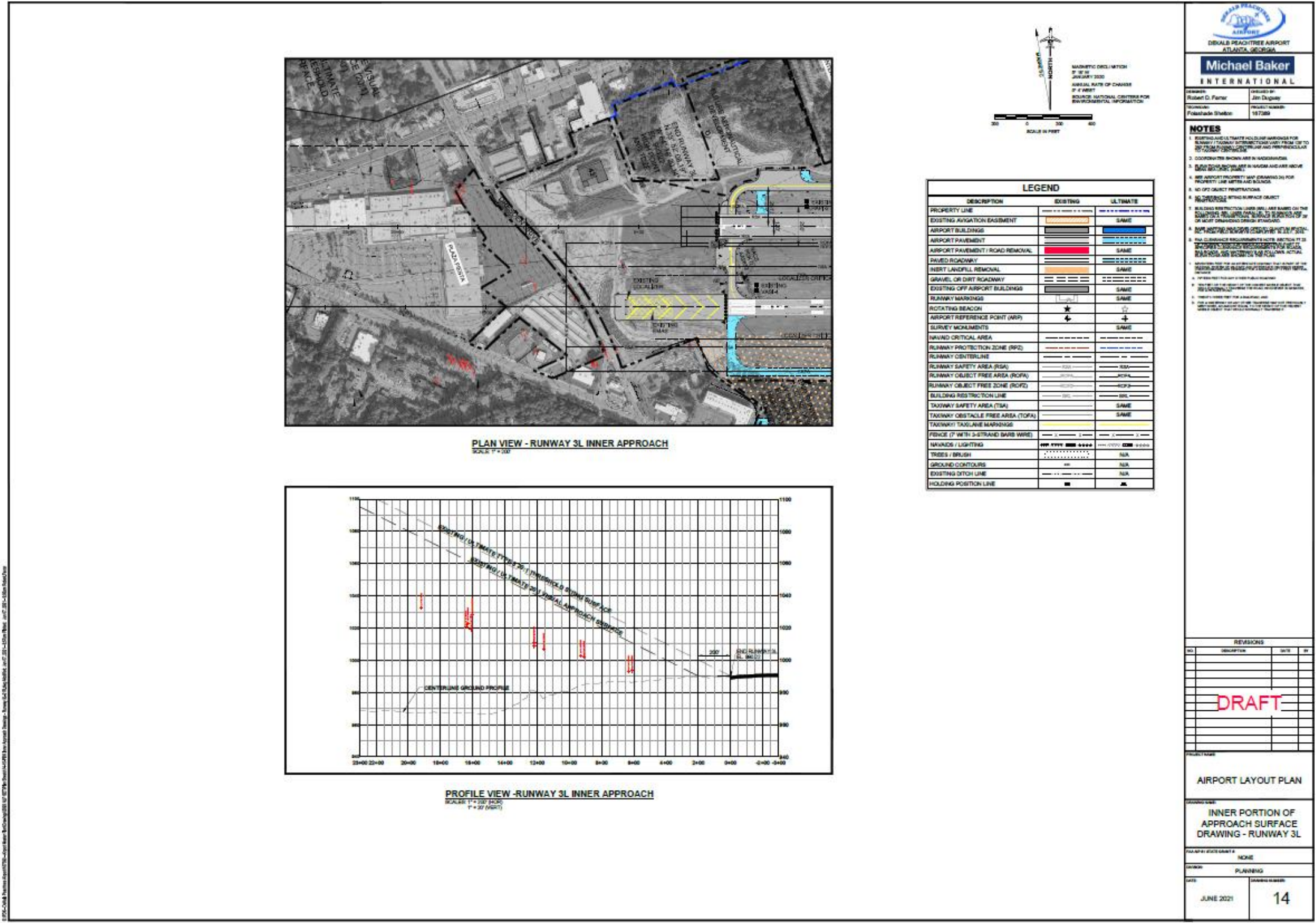


Figure 6-15: Inner Portion of Approach Surface Drawing - Runway 21R

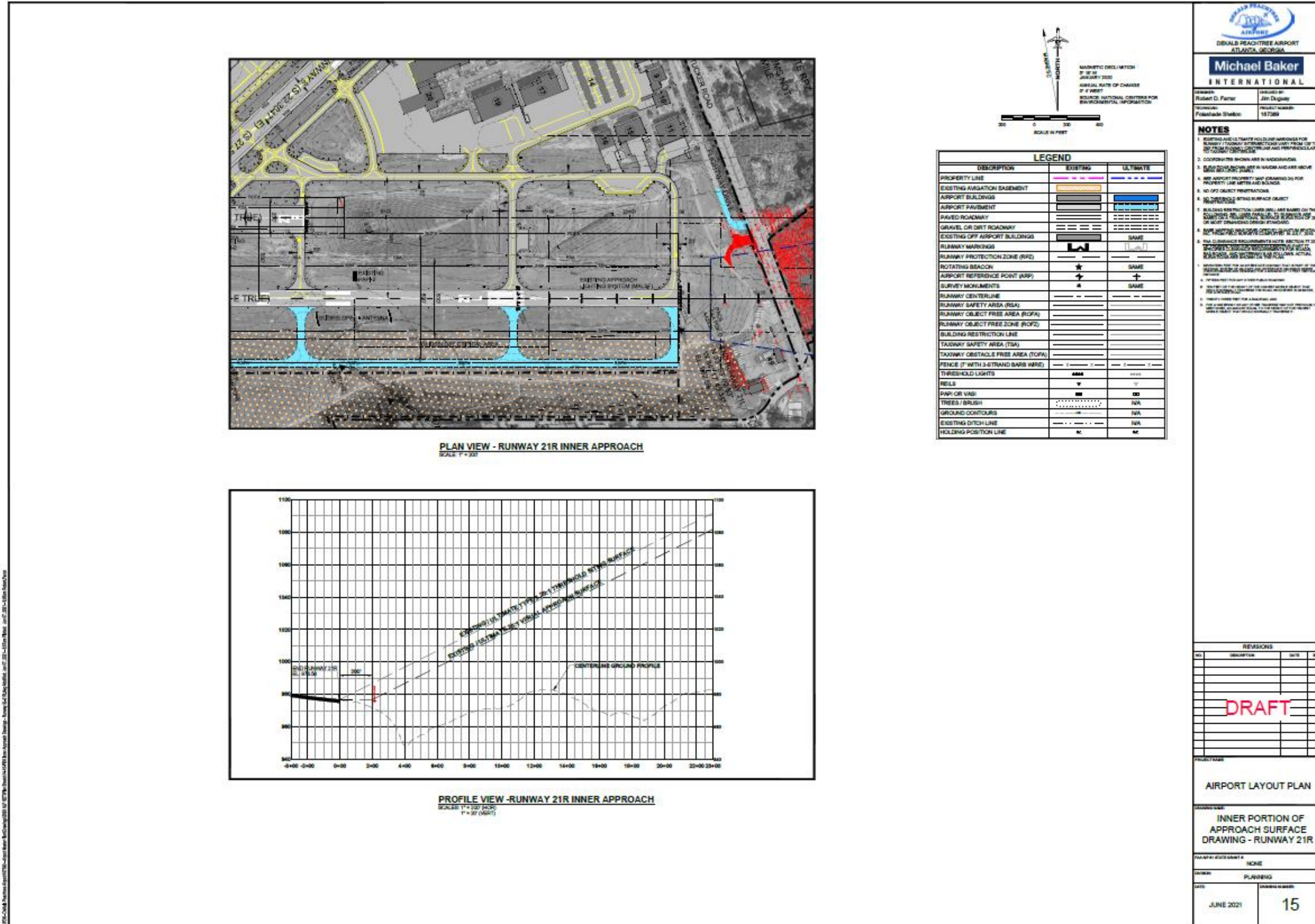


Figure 6-16: Inner Portion of Approach Surface Drawing - Runway 3R

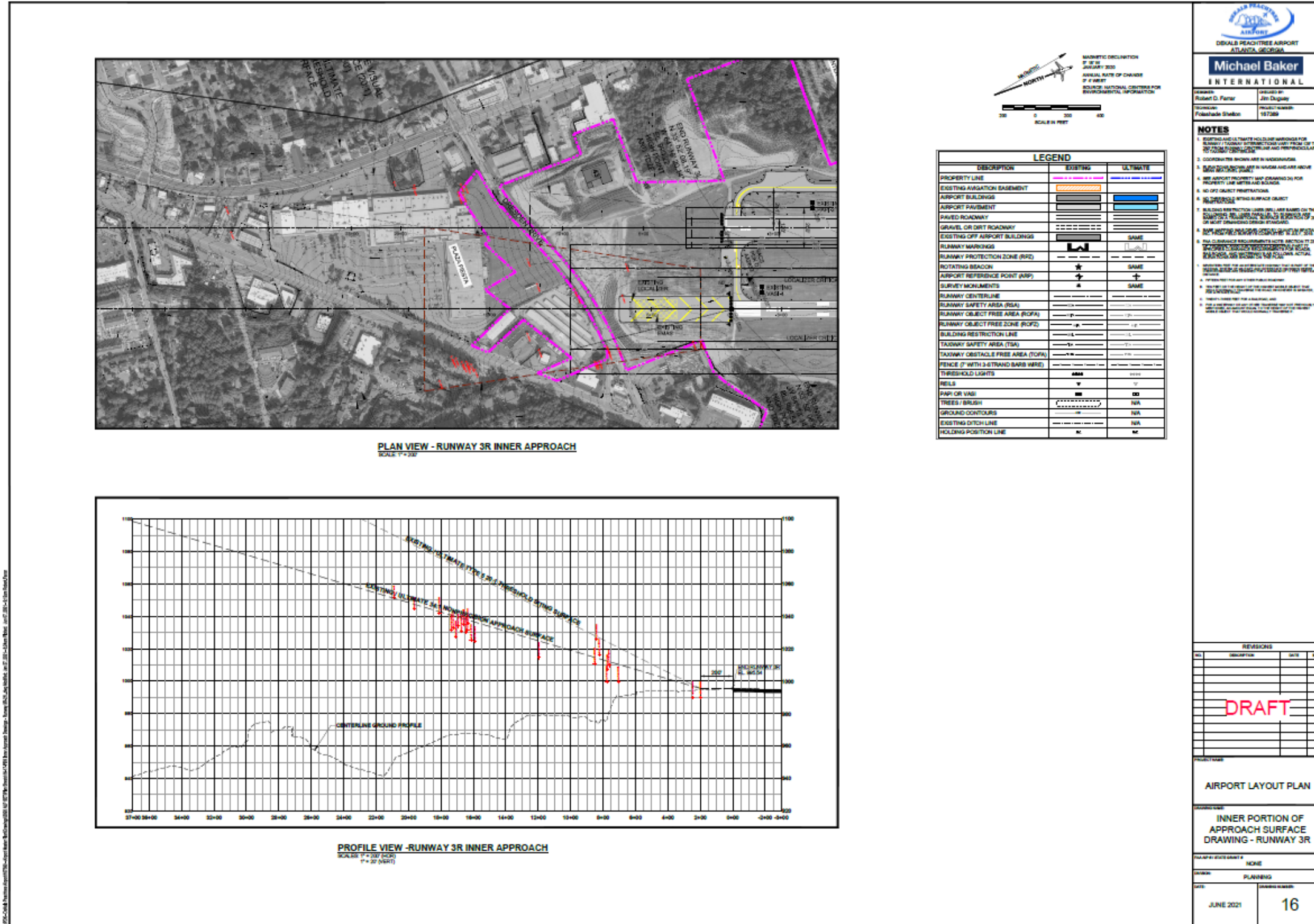


Figure 6-17: Inner Portion of Approach Surface Drawing - Runway 21L

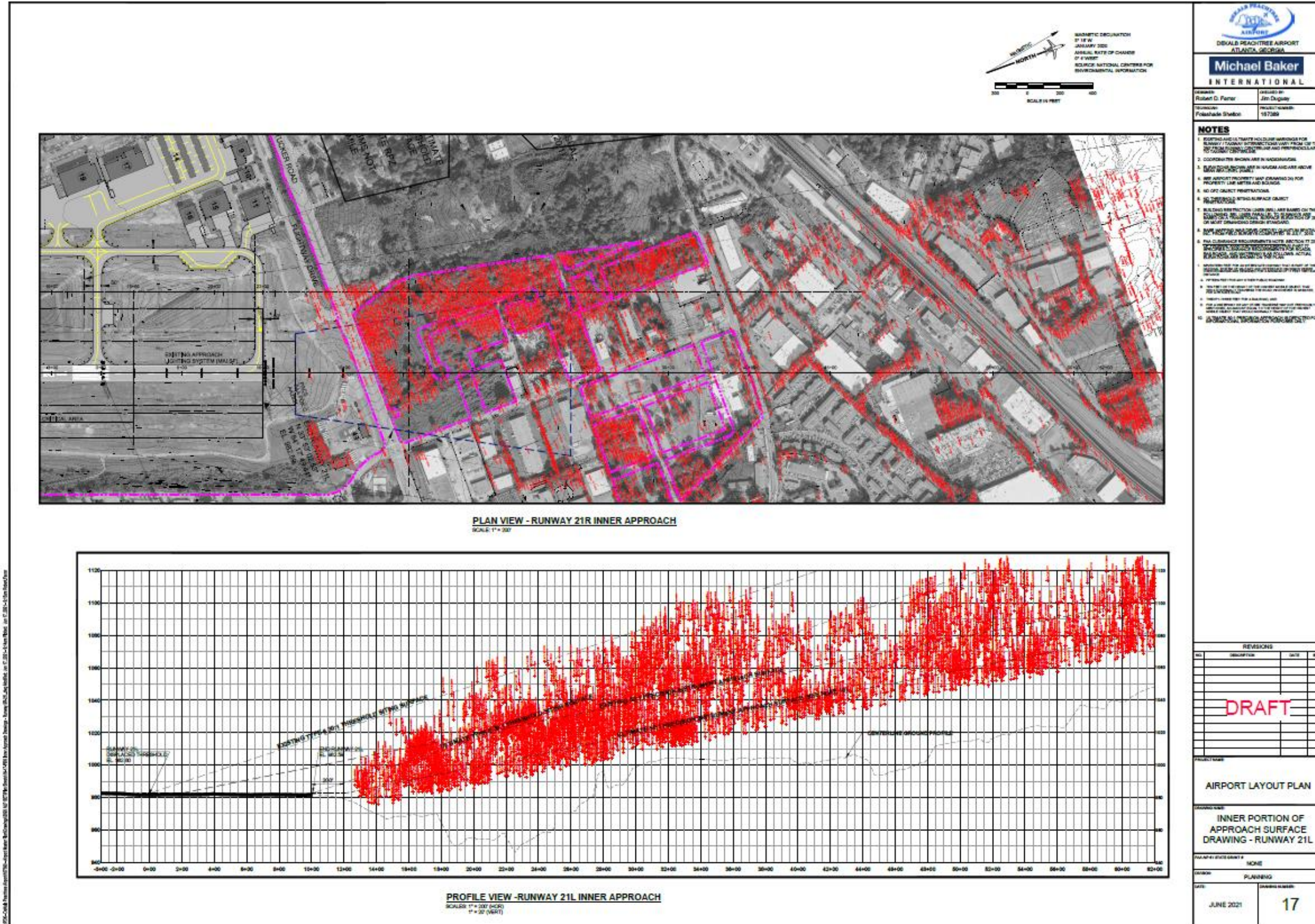


Figure 6-18: Inner Portion of Approach Surface Drawing - Runway 16

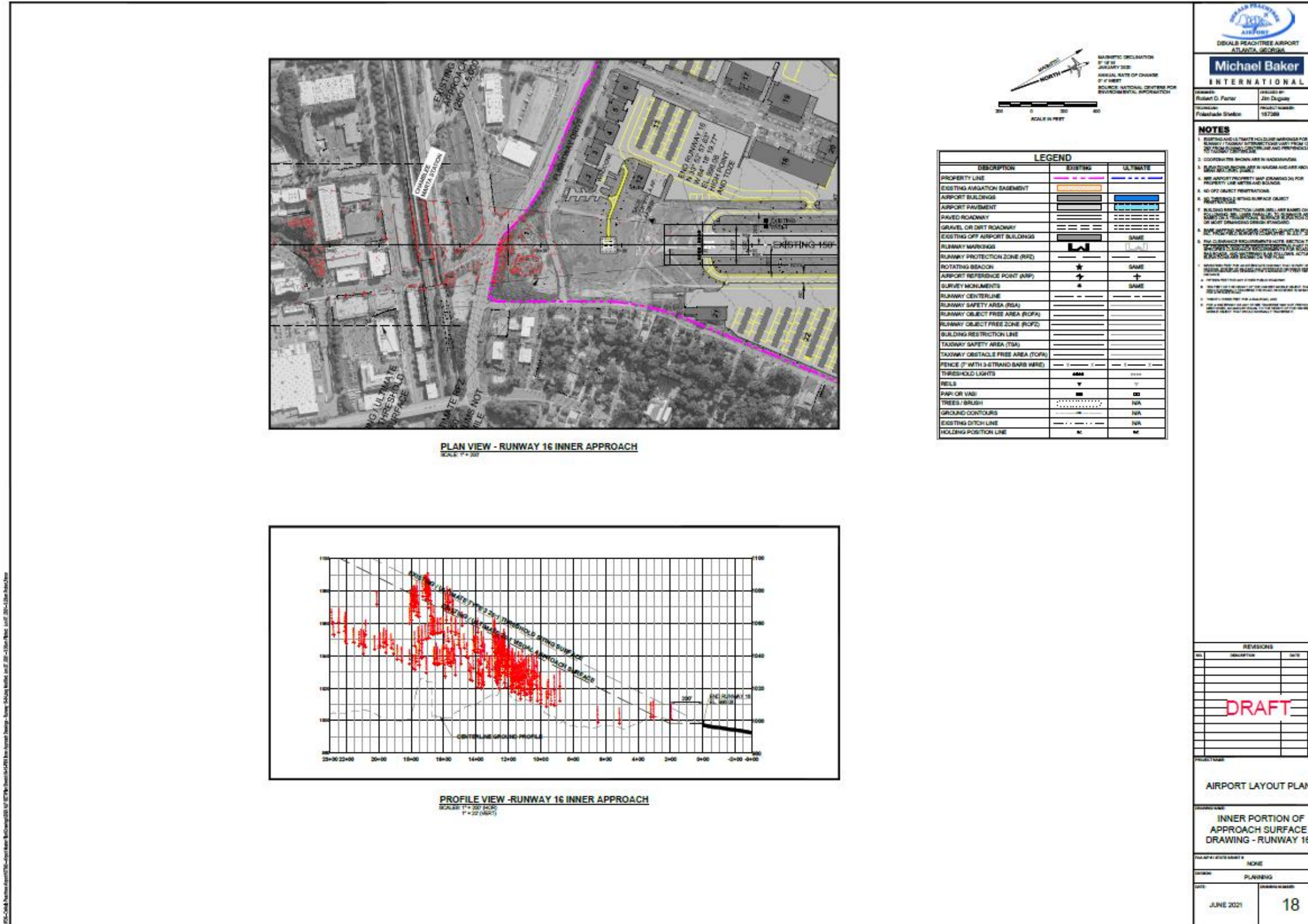


Figure 6-19: Inner Portion of Approach Surface Drawing - Runway 34

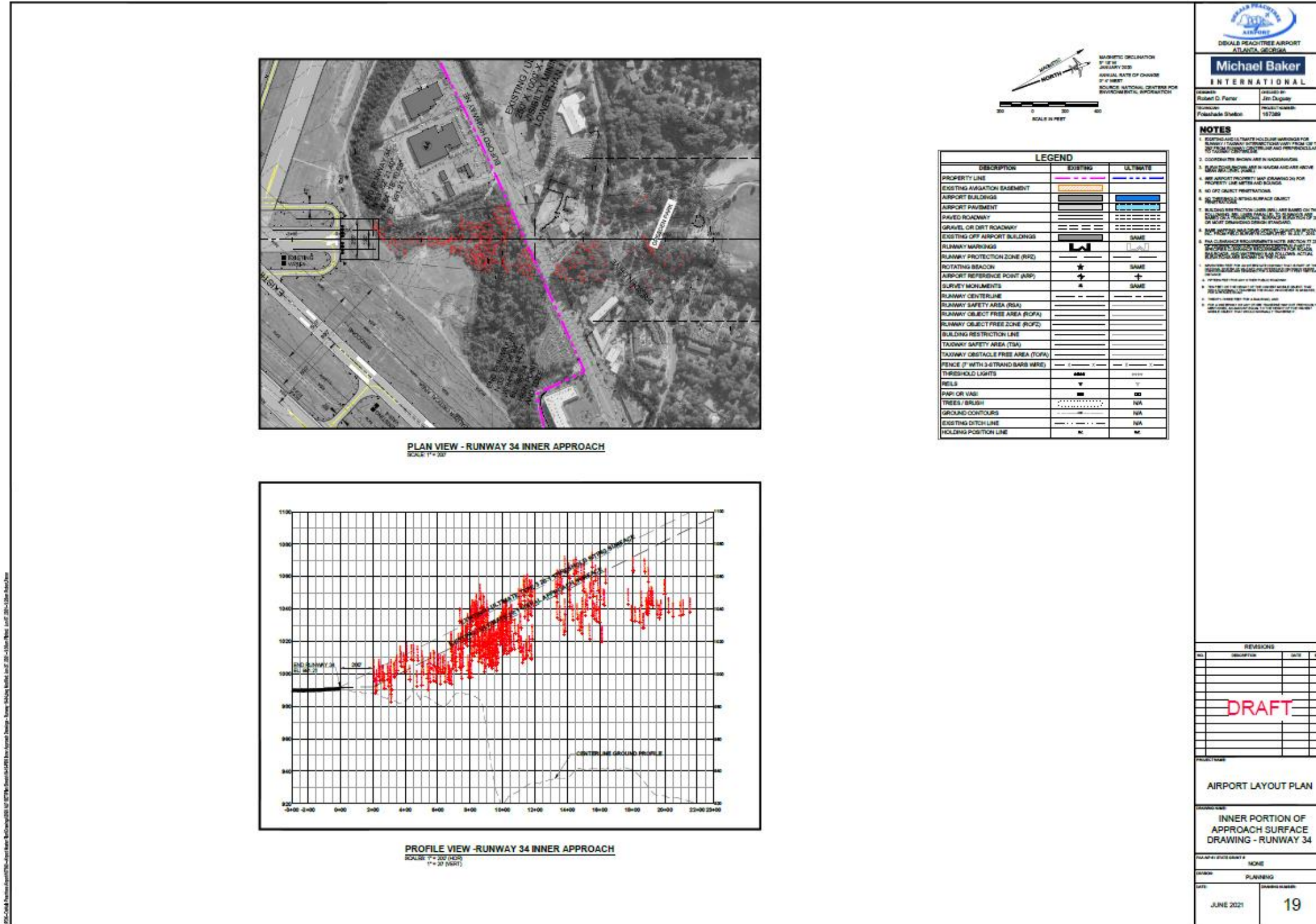


Figure 6-20: Runway Departure Surface Drawing - Runway 3L - 21R

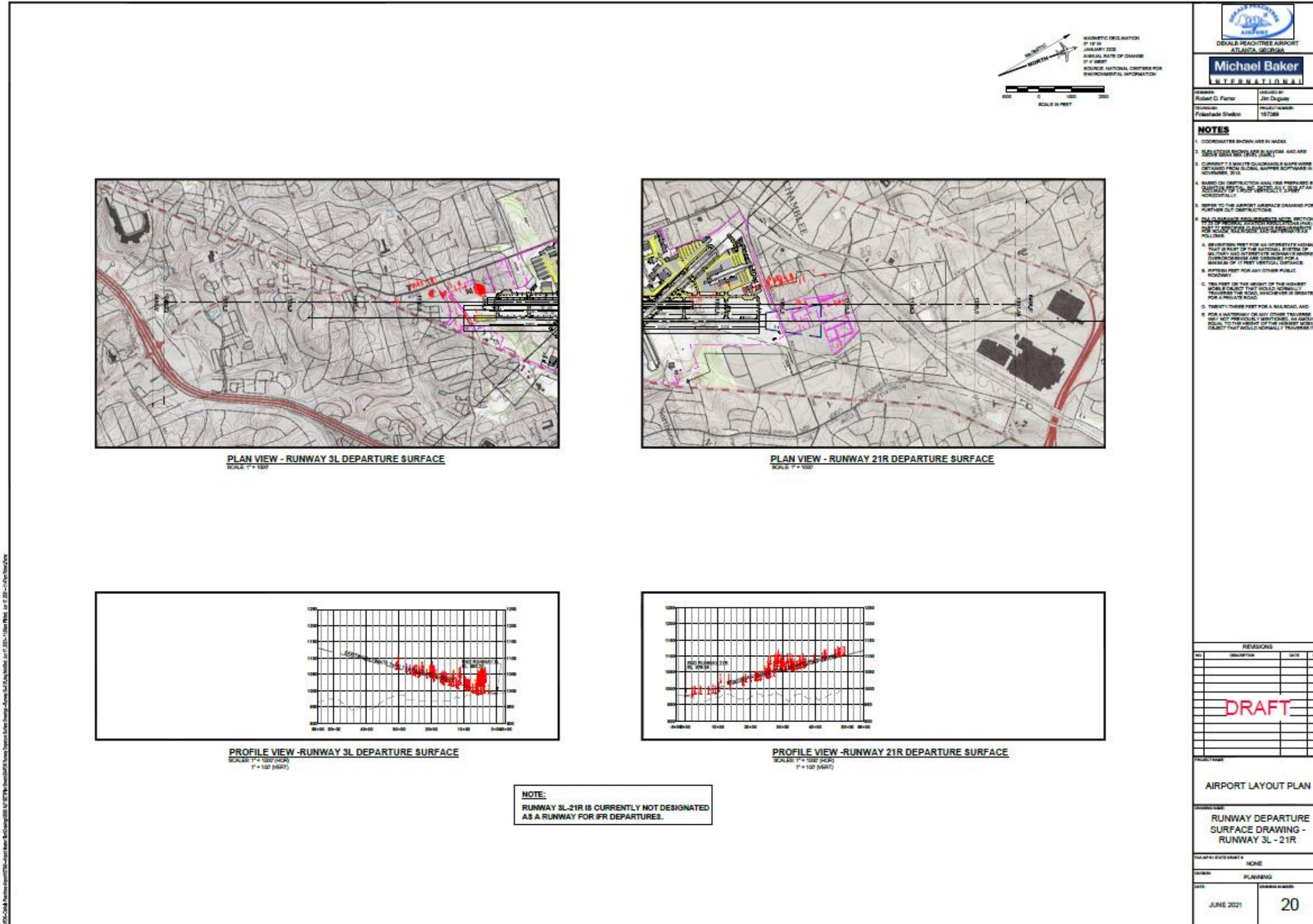


Figure 6-21: Runway Departure Surface Drawing - Runway 3R- 21L

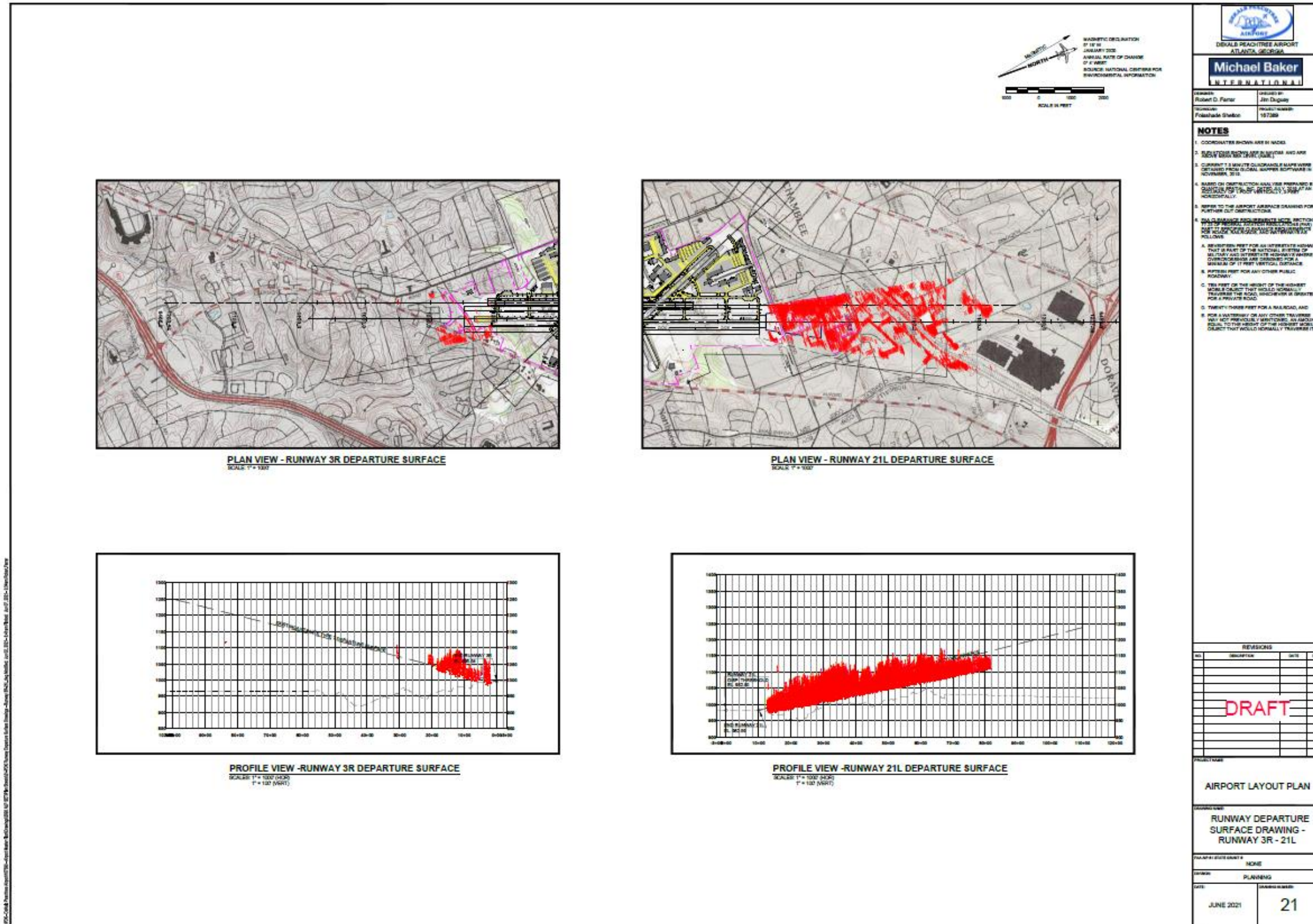


Figure 6-22: Runway Departure Surface Drawing - Runway 16-34

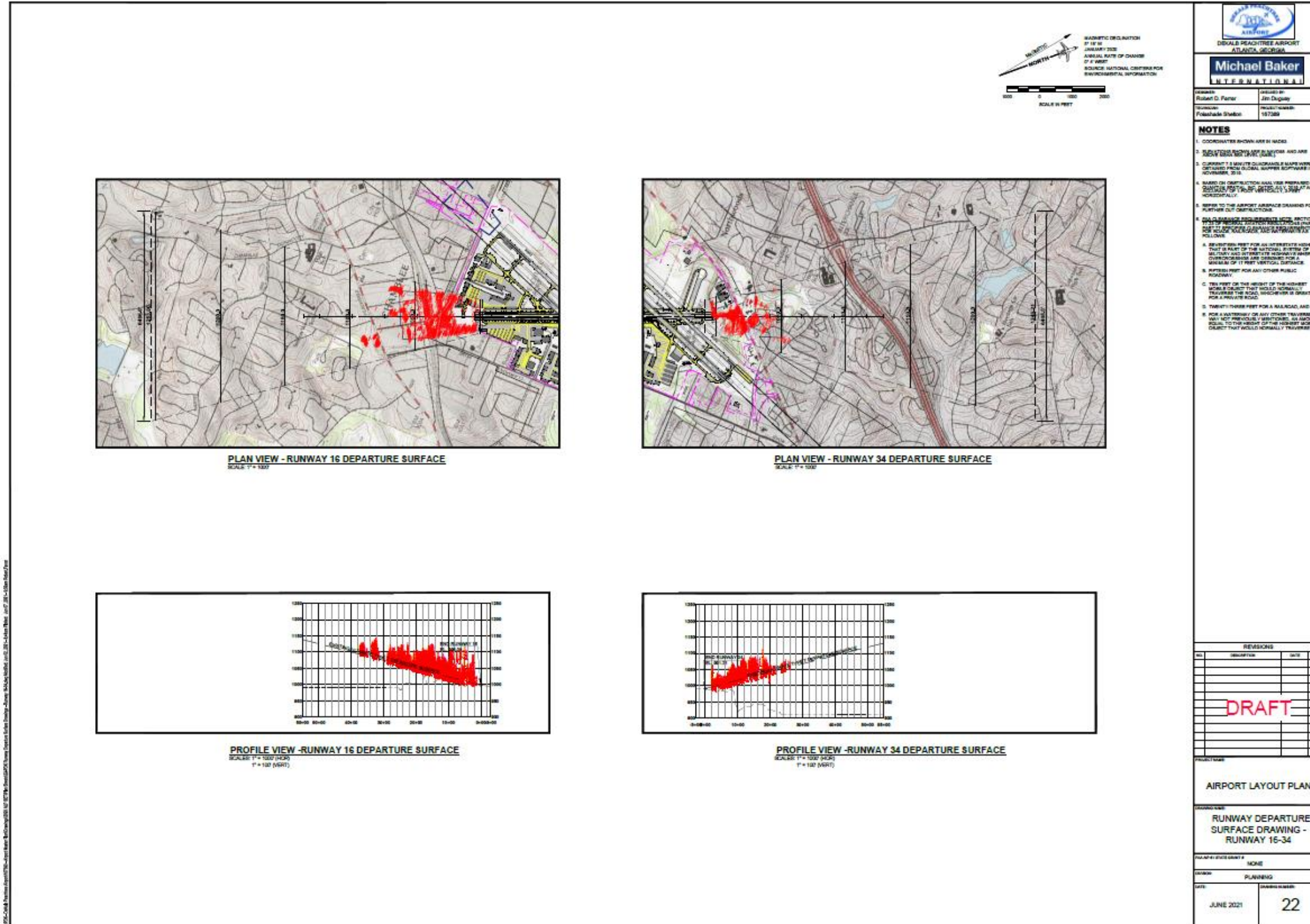


Figure 6-23: Off-Airport Land Use

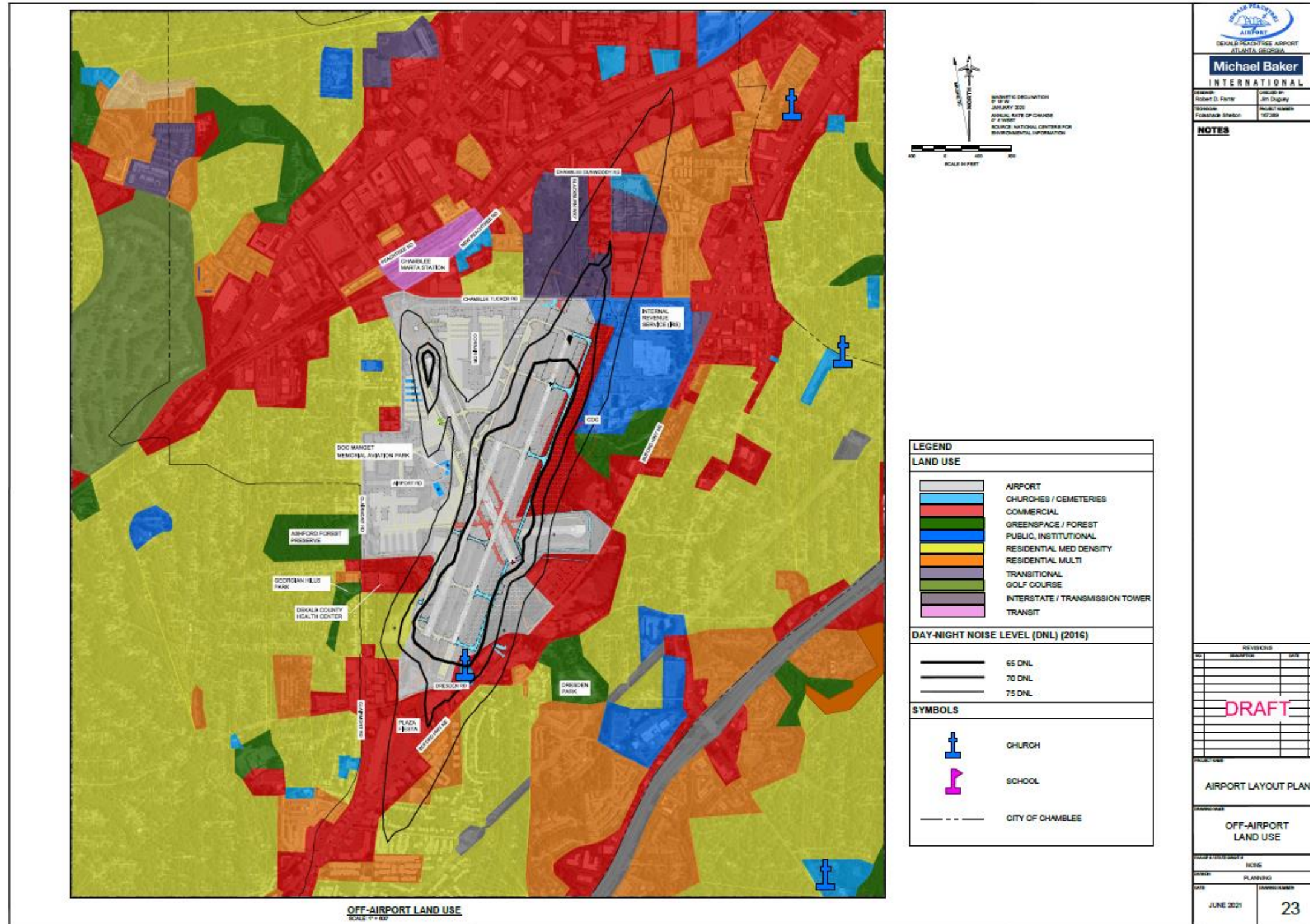


Figure 6-24: Airport Property Map

