



CITY COUNCIL MEMORANDUM

FROM: The Office of the City Manager **DATE:** February 24, 2025

SUBJECT: ZC25-0123, Ordinance No. 3895, Public hearing and consideration of a request from Wing Aviation LLC for a revised special use permit for a heliport/landing field at 6401 NE Loop 820, being 25.09 acres described as Lot 1R, Block 6, Tapp Addition.

PRESENTER: Clayton Husband, Principal Planner

SUMMARY:

Wing Aviation, LLC, is requesting a revised special use permit for a drone heliport/landing pad in the Walmart Supercenter parking lot at 6401 NE Loop 820. The site is located on the north side of NE Loop 820 between Rufe Snow Drive and Iron Horse Boulevard, at the northwest corner of Boulder Drive.

GENERAL DESCRIPTION:

Wing Aviation LLC, a subsidiary of Alphabet, Inc., currently operates drone delivery services from the front parking of the Walmart property at 6401 NE Loop 820. The company received approval from the Federal Aviation Administration (FAA) to operate unmanned aerial vehicles (UAVs, or drones) in the Dallas-Fort Worth Metroplex for the purpose of delivering packaged goods to customers. These services have been available through a prior partnership with Walgreens in Frisco and Little Elm since 2022, and operations began at two Walmart locations in Frisco and Lewisville in 2023. The operations at the Walmart locations in North Richland Hills began in April 2024. Wing's delivery operations have expanded to several other municipalities in North Texas over the course of the past year as well.

City Council approved a special use permit to allow a heliport/landing field on the site on February 26, 2024 (Ordinance 3842). Drone delivery service was not a specifically listed primary or accessory use in the zoning ordinance, but the activity is similar in nature to a heliport/landing field in terms of operational characteristics, service demands, occupancy loads, and similar features. The original application was processed in a similar manner to provide the opportunity to review the suitability of the use and ground operations and improvements at this location.

The standards associated with the special use permit approval consider the drone delivery service as a conditional use that expires on February 27, 2025. The operator submitted a revised special use permit application to request a continuation of the operation for three years.

The drone launch area on the site is 3,806 square feet in size, being approximately 30 feet by 127 feet in dimension, and covers 39 parking spaces. The operational area is fenced by a black vinyl-coated fence and includes a storage container to store the drones, a temporary 14kW generator, and take-off/landing pads for the drones. Wing Aviation indicates that permanent power will be supplied to the site within the next twelve months and the temporary generator removed.



WING OPERATIONAL AREA – 6401 NE LOOP 820

The storage container houses the drone aircraft and some of the associated equipment during operational downtimes. A storage container would not normally be permitted in the front of a building, and if it were located to the side or rear of the building it would be required to be screened with a masonry fence. Even with the loss of 29 parking spaces, the property still meets the minimum parking standards. Drive aisles in the parking lot are not blocked by the nest.

Wing Aviation's request under consideration is to revise the special use permit to allow a three-year extension of the drone delivery pilot program at this location. City staff plans to craft a permanent set of standards and policies for drone delivery surface operations, including landing pad locations and setbacks from residential properties, permanent versus temporary ground improvements, maximum number of drones/pads, and similar standards. These standards and policies would be limited to what a municipality can regulate, since FAA permits generally regulate airspace operations once a drone is airborne.

The proposed conditions of approval for this special use permit are attached. Applications for special use permits provide an opportunity to address modifications to specific site

development and building design standards for the site. These conditions are based on the applicant's proposed development of the property. These conditions may be modified throughout the public hearing process, but they are subject to final approval by City Council.

Noise & Residential Adjacency

In the C-2 (Commercial) zoning district, [Section 118-395\(10\)](#) stipulates that normal business activities conducted may not create a sound pressure level on the bounding property line that exceeds 65 decibels (dB) from 7:00 a.m. to 10:00 p.m. Last year, the Federal Aviation Administration (FAA) posted the [Draft Environmental Assessment for Wing Aviation, LLC Proposed Package Delivery Operations in Dallas-Fort Worth, Texas](#). The full report, which can be viewed at the link provided, describes the noise impact of Wing's "Hummingbird" model aircraft. Table 3.6-1 in the report (page 3-20) provides the extent of noise exposure for nest operations for the 65 dB noise level, which is 50 feet. The nearest property line to the nest is approximately 50 feet to the east, which is the Boulder Drive right-of-way. Across Boulder Drive is the Home Depot property, also zoned C-2 (Commercial).

The Hills at Iron Horse, an apartment community, is the nearest residential property to the proposed nest and is located 920 feet north of the site. The next closest is the Meadow Lakes neighborhood across NE Loop 820, located 1,100 feet away. The Development Review Committee does not believe that the proposed ground operations will have any negative impact on residential property.

General Operational Characteristics of Wing Drone Delivery

Below are topics of general interest from the attached summary provided by Wing Aviation.

- The Hummingbird model drone by Wing has a 4.9 foot wingspan and weighs 11.7 pounds. It can carry packages close to three (3) pounds in weight.
- Flight operations occur 9am-5pm, 7 days a week, weather permitting. There are no nighttime operations.
- The current model has a six-mile delivery radius. For this NRH Walmart Supercenter, that is generally north almost to Keller Parkway (FM 1709), east to Forest Ridge Drive in Bedford, south to I-30, and west to I-35W and Blue Mound Road.



- The drone cruises at 150 feet at about 65 mph. During delivery, it drops to about 20-25 feet and drops the package smoothly down to the surface on a tether.

LAND USE PLAN: This area is designated on the Land Use Plan as Urban Village. This category promotes sustainable, pedestrian-oriented, mixed-use development that provides the opportunity for many uses to coexist within a more compact area. Urban Villages encourage an efficient, compact land use pattern; support vibrant public spaces;



reduce the reliance on private automobiles; promote a more functional and attractive community using recognized principles of urban design; allow flexibility in land use; and prescribe a high level of detail in building design and form. Urban Villages can come in the form of vertical mixed use, where multiple uses share a single, multi-story building; or horizontal mixed use, where a diverse set of uses are placed within close, walkable proximity.

CURRENT ZONING: Most of the property is zoned C-2 (Commercial) and I-2 (Medium Industrial). The C-2 district is intended to provide for the development of retail and general business uses primarily to serve the community and region. Uses include a wide variety of business activities and may involve limited outside storage, service, or display. The C-2 district should be located away from low and medium density residential development and should be used as a buffer between retail and industrial uses. The district is also appropriate along business corridors as indicated on the land use plan.

The northwest corner of the property is zoned I-2 (Medium Industrial). This district is intended to permit a wide range of manufacturing, wholesale, and service type uses.

SURROUNDING ZONING | LAND USE:

DIRECTION	ZONING	LAND USE PLAN	EXISTING LAND USE
NORTH	R-7-MF (Multifamily)	Urban Village	Apartment complex (The Hills at Iron Horse)
WEST	C-2 (Commercial)	Urban Village	Retail store (Sam's Club)
SOUTH	PD (Planned Development)	Retail Commercial	Vacant
EAST	C-2 (Commercial)	Retail Commercial	Retail store (Home Depot)

PLAT STATUS: The property is platted as Lot 1R1, Block 6, Tapp Addition.

PUBLIC INPUT: Following posting of the public hearing signs on the subject property, the Planning & Zoning Division received emailed input regarding the zoning change request. A copy of all correspondence is included in the Public Input attachment. Any additional correspondence received after the publication of this report will be distributed to the City Council prior to the public hearings.

PLANNING AND ZONING COMMISSION: The Planning and Zoning Commission conducted a public hearing and considered this item at the February 6, 2025, meeting and voted 5-0 to recommend approval.

RECOMMENDATION:

Approve Ordinance No. 3895.