



DATE: February 19, 2025

TO: Michael Dice, Director of Development Services

FROM: Jorge Chavez P.E., Engineer V Public Works/Traffic

A proposed two (2) amendments to modify the Corpus Christi Transportation Master Plan ("MobilityCC") - C3 Collector Street East of County Road 43 to Dead End & A2 Arterial Street between County Road 22 and Weber Road (FM 43)

Purpose:

The purpose of this item is to amend the Corpus Christi Transportation Master plan ("MobilityCC") by modifying a proposed C3 collector to down to a C1 collector, starting at County Road 43 moving east until the street dead ends (Oso Parkway) and an A2 Arterial down to a C1 collector between Country Road 22 and Weber Road (FM 43). The proposed amendments would reduce the dedicated right-of-way (ROW) from 75 feet to 60 feet and 100 feet to 60 feet respectively.

BACKGROUND AND FINDINGS:

The King's Lake West development will be located northeast of the intersection between County Road 43 and County Road 22, outside the city limits of City of Corpus Christi, Texas. The site is currently comprised of 110 acres of undeveloped land and is zoned as Residential (RS). The King's Lake West development will consist of 502 single family detached houses and is expected to be completed in 2028.

Pape-Dawson Consulting Engineers, LLC (Pape-Dawson Engineers) was retained to prepare a Traffic Impact Analysis (TIA) that would address impacts, mitigations measures, and proposed amendments to MobilityCC which would modify a C3 collector and an A2 arterial, identified as Mitford Castle Drive and County Road 43 respectively on the plat, both to C1 collectors.

The following are descriptions of both what a C3 collector and an A2 arterial roadway can include:

- C3 Collector can contain four (4) traffic lanes: two (2) travel lanes in each direction, curb and gutter, and sidewalk on both sides.
- A2 Arterial can contain four (4) to five (5) traffic lanes: two (2) travel lanes in each direction with a center turn lane or a divided median, curb and gutter, and sidewalk on

The developer is proposing an amendment that will modify the both the C3 collector and

A2 arterial to a C1 collector which will reduce the total amount of traffic lanes to two (2): one (1) travel lane in each direction, curb and gutter, and sidewalk on both sides.

ALTERNATIVES:

1. Denial of the proposed Corpus Christi Transportation Master plan ("MobilityCC") amendment which would require the developer to build a C3 Collector Street.

RECOMMENDATION:

City Staff recommends the following:

- County Road 22 (east/west) reduce from C3 collector to a C1 collector
- Country Road 43 (north/south) to remain an A2 Arterial

Each amendment is shown as follows:

CR 22/ Mitford Castle Drive (from the intersection at CR 43 to Oso Parkway) – This segment, approximately 1,210 feet, was originally identified as C3 (Primary Collector). The segment will be realigned and extended into the development, terminating at the intersection with Oso Parkway. This road will be constructed with curvature transition in the southwest of the development. The roadway, after transition, is approximately 110 feet north of the originally planned County Road 22 extension.

 With a C1 (Minor Residential Collector) design capacity of 3,000 vehicles per day (vpd), the C1 will be sufficient to serve the daily traffic of 2,840 vpd for the south of development (60% of 4,734 King's Lake West daily site trips).

CR 43 (from the intersection at CR 22 to boundary with Kaspian) – This segment, approximately 3,510 feet, was originally identified as A2 (Secondary Arterial). This segment will continue to north to Kaspian development, which will be built by Kaspian development.

 With a C1 design capacity of 3,000 vpd, the Collector will be sufficient to serve 2,391 vpd (25% of 4,734 King's Lake West daily site trips and 35 % of 3,451 Kaspian daily site trips) on the frontage for the development.

Therefore, Collector 1 (C1) design capacity is sufficient to serve the CR 22 and CR 43. Oso Parkway follows the roadway plan as P1. The other internal streets follow the roadway capacity per city code.

LIST OF SUPPORTING DOCUMENTS:

Presentation