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# **Executive Summary**

The FAA conducted a feasibility study of five development areas at the request of the Kanas City, MO, City Planning Office. This study provides guidance on what would be reasonably expected to receive a favorable determation based on the current operations associated with Charles B. Wheeler Downtown Airport (MKC). It also provides guidance on what could possibly be achieved through collaboration with the airport, should operations be modified, and what would likely not be achievable.

The FAA broke the five areas into smaller grids to provide more detailed analysis and potentially increased heights for portions of the areas. For each grid area, this report provides three results: the maximum height that should be feasible based on the current airport configuration, pilotage, navigational and commination equipment, and airspace; the maximum height that analysis shows may be obtained if the city, airport, and air traffic control facility can agree and implement changes to operations or configurations; and the effects that would preclude any greater heights. This feasibility study generally found the following heights compatible with existing MKC operations by area:

West Bottoms. New obstructions up to a height of 810 feet AMSL appear to be compatible with the existing MKC operations. See grid areas of protentional allowable heights exceeding 810 feet AMSL.

River Market. New obstructions up to a height of 906 feet AMSL appear to be compatible with the existing MKC operations. See grid areas of protentional allowable heights exceeding 906 feet AMSL.

Berkely Riverfront. New obstructions up to a height of 906 feet AMSL appear to be compatible with existing MKC operations. See grid areas of protentional allowable heights exceeding 906 feet AMSL.

Downtown Loop. New obstructions up to a height of 906 feet AMSL appear to be compatible with the existing MKC operations. See grid areas of protentional allowable heights exceeding 906 feet AMSL.

Crossroads + Union Hill. New obstructions up to a height of 906 feet AMSL appears to be compatible with existing operations. See grid areas of protentional allowable heights exceeding 906 feet AMSL.

The heights that appeared achievable with collaboration between the city and MKC for changes to air operations, as well as heights that appear untenable, based on this analysis, are included in the report for each grid area.

This feasibility study is a limited aeronautical study based on very general information and does not replace requirements for individuals to file notice of proposed construction for structures meeting notice criteria under 14 CFR Part 77, or for the FAA to conduct further study and determine whether such structures would have significant adverse effect on the National Airspace System.

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## Introduction

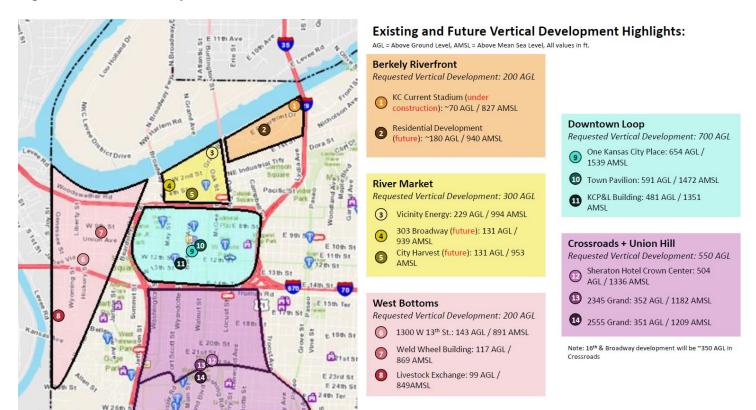
The Kanas City, MO, City Planning Office requested the Federal Aviation Administration (FAA) conduct a feasibility study for downtown development in five specific areas. The FAA objective is to provide a comprehensive analysis of how development in these areas would interact with the National Airspace System (NAS) and MKC.

The five development areas are Berkely Riverfront, River Market, West Bottoms, Downtown Loop, and Crossroads + Union Hill (Figure 1). The FAA segmented each area into grids to provide additional detail on heights that should not have adverse effect on the current navigable airspace.

This report outlines the high-level impacts to MKC airspace and procedures and provides mitigating height restrictions for each area, broken out into a grid. Detailed analysis for each area is contained in the appendixes.

This study is not a formal determination under 14 CFR Part 77 and is for city planning purposes only. It identifies anticipated impacts to MKC, based on desired building heights and should provide a baseline for future city planning decisions as well as possible discussion with the airport and air traffic facility.

Figure 1 – Five Feasibility Areas



## West Bottoms

The West Bottoms (WB) district is approximately 2 miles south of Charles B. Wheeler Downtown Airport (MKC), Kansas City, MO. Each of the 33 grids were evaluated for potential buildings up to 200 feet above ground level (AGL) (Appendix A, Figure 2). Results state the maximum building height above mean sea level (AMSL).

## **WB - 1**

- A building up to the height of 810 feet AMSL would not impact MKC operation.
- A building up to the height of 847 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 847 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

## WB - 2 & 3

- A building up to the height of 808 feet AMSL would not impact MKC operation.
- A building up to the height of 826 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 826 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### **WB-4**

- A building up to the height of 800 feet AMSL would not impact MKC operation.
- A building up to the height of 888 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 888 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

## WB - 5 / WB - 6

- A building up to the height of 830 feet AMSL would not impact MKC operation.
- A building up to the height of 867 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 867 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

- A building up to the height of 823 feet AMSL would not impact MKC operation.
- A building up to the height of 888 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 888 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### **WB-8**

- A building up to the height of 816 feet AMSL would not impact MKC operation.
- A building up to the height of 901 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 901 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### **WB-9**

- A building up to the height of 842 feet AMSL would not impact MKC operation.
- A building up to the height of 881 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 881 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### **WB - 10**

- A building up to the height of 836 feet AMSL would not impact MKC operation.
- A building up to the height of 836 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 873 feet AMSL would impact the Runway 03 visual approach landing aid. Typically, this would be unacceptable to the airport.

#### **WB - 11**

- A building up to the height of 833 feet AMSL would not impact MKC operation.
- A building up to the height of 926 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 926 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

- A building up to the height of 826 feet AMSL would not impact MKC operation.
- A building up to the height of 924 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 924 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### **WB - 13**

- A building up to the height of 853 feet AMSL would not impact MKC operation.
- A building up to the height of 895 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 895 feet AMSL would impact the Runway 03 visual approach landing aid and IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### WB - 14

- A building up to the height of 849 feet AMSL would not impact MKC operation.
- A building up to the height of 892 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 892 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

#### **WB - 15**

- A building up to the height of 849 feet AMSL would not impact MKC operation.
- A building up to the height of 879 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 879 feet AMSL would impact the Runway 01 visual approach landing aid and IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### WB - 16

- A building up to the height of 826 feet AMSL would not impact MKC operation.
- A building up to the height of 879 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 879 feet AMSL would impact the Runway 01 visual approach landing aid and IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

- A building up to the height of 884 feet AMSL would not impact MKC operation.
- A building up to 200 feet AGL impacts MKC operations. Building up to this height would require
  agreement between the airport and air traffic to change the aircraft flight patterns.

#### WB - 18

- A building up to the height of 870 feet AMSL would not impact MKC operation.
- A building up to the height of 892 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 892 feet AMSL would impact the Runway 01 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### WB - 19

- A building up to the height of 859 feet AMSL would not impact MKC operation.
- A building up to the height of 892 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 892 feet AMSL would impact the Runway 01 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

#### WB - 20

- A building up to the height of 879 feet AMSL would not impact MKC operation.
- A building up to the height of 902 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 902 feet AMSL would impact the Runway 01 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

#### WB - 21

- A building up to the height of 862 feet AMSL would not impact MKC operation.
- A building up to the height of 882 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 882 feet AMSL would impact the Runway 01 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

- A building up to the height of 907 feet AMSL would not impact MKC operation.
- A building up to 200 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### **WB - 23 / WB - 24**

- A building up to the height of 905 feet AMSL would not impact MKC operation.
- A building up to 200 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

## <u>WB - 25 / WB - 26 / WB - 27</u>

- A building up to the height of 928 feet AMSL would not impact MKC operation.
- A building up to 200 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### WB - 28 & 31

• A building up to 200 feet AGL should be approved.

#### WB - 29, 30, 32 & 33

- A building up to the height of 949 feet AMSL would not impact MKC operation.
- A building up to 200 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

## River Market

The River Market (RM) district is approximately 1 mile south of Charles B. Wheeler Downtown Airport (MKC), Kansas City, MO. Each of the 21 grids were evaluated for a potential building up to 300 feet above ground level (AGL) (Appendix A, Figure 3). Results state the maximum building height above mean sea level (AMSL).

#### RM - 1, 2, & 5

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to the height of 989 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 989 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### RM - 3 & 6

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to the height of 1016 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1016 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### RM – 4, 8, 11, 12, 15, 16, 17, 18, 19, 20, & 21

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to 300 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### RM - 7

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to the height of 1075 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1075 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### RM - 9

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to the height of 999 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 999 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

#### RM - 10

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to the height of 1054 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1054 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### RM - 13

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to the height of 1021 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1021 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

#### RM - 14

- A building up to the height of 906 feet AMSL would not impact MKC operation.
- A building up to the height of 1082 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1082 feet AMSL would impact the Runway 03 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

# Berkley Riverfront

The Berkley Riverfront (BR) district is approximately 1 mile southeast of Charles B. Wheeler Downtown Airport (MKC), Kansas City, MO. Each of the 21 grids were evaluated for a potential building up to 200 feet above ground level (AGL) (Appendix A, Figure 4). Results state the maximum building height above mean sea level (AMSL).

## BR-1 thru BR-21

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- Anything above 906 feet AMSL would impact impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

## Downtown Loop

The Downtown Loop (DL) district is approximately 1 mile south of Charles B. Wheeler Downtown Airport (MKC), Kansas City, MO. Each of the 34 grids were evaluated for a potential building up to 700 feet above ground level (AGL) (Appendix A, Figure 5). Results state the maximum building height above mean sea level (AMSL).

## DL - 1

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1025 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1025 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

### DL-2

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 989 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 989 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL-3

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1111 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1111 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1199 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1199 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL-5

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1185 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1185 feet AMSL would impact the Runway 19 and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

## DL-6

- A building up to the height of 914 feet AMSL, would not impact MKC operation.
- A building up to the height of 1377 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1377 feet AMSL would impact the Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

## DL - 7

- A building up to the height of 944 feet AMSL, would not impact MKC operation.
- A building up to the height of 1444 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1444 feet AMSL would impact the Runway 19 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

#### DL - 8

- A building up to the height of 986 feet AMSL, would not impact MKC operation.
- A building up to the height of 1444 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1444 feet AMSL would impact the Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL-9

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 989 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 989 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 10

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 989 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 989 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

## <u>DL – 11</u>

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1194 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1194 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

## <u>DL – 12</u>

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1197 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1197 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 13

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1197 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1197 feet AMSL would impact the Runway 19 and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

- A building up to the height of 931 feet AMSL, would not impact MKC operation.
- A building up to the height of 1382 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1382 feet AMSL would impact the Runway 19 and 21 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 15

- A building up to the height of 958 feet AMSL, would not impact MKC operation.
- A building up to the height of 1462 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1462 feet AMSL would impact the Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

## DL - 16

- A building up to the height of 1002 feet AMSL, would not impact MKC operation.
- A building up to the height of 1462 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1462 feet AMSL would impact the Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

## DL - 17

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 989 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 989 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 18

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 989 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 989 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1194 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1194 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL-20

- A building up to the height of 913 feet AMSL, would not impact MKC operation.
- A building up to the height of 1194 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1194 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 21

- A building up to the height of 934 feet AMSL, would not impact MKC operation.
- A building up to the height of 1197 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1197 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 22

- A building up to the height of 956 feet AMSL, would not impact MKC operation.
- A building up to the height of 1462 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1462 feet AMSL would impact the Runway 03 and 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 23

- A building up to the height of 982 feet AMSL, would not impact MKC operation.
- A building up to the height of 1462 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1462 feet AMSL would impact the Runway 19 IFR landing capability (RNAV (GPS)).
   Typically, this would be unacceptable to the airport.

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 1462 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1462 feet AMSL would impact the Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL-25

- A building up to the height of 906 feet AMSL, would not impact MKC operation.
- A building up to the height of 872 feet AMSL would impact MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 872 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

## DL - 26

- A building up to the height of 916 feet AMSL, would not impact MKC operation.
- A building up to the height of 1268 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1268 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

## DL - 27

- A building up to the height of 930 feet AMSL, would not impact MKC operation.
- A building up to the height of 1268 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1268 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 28

- A building up to the height of 948 feet AMSL, would not impact MKC operation.
- A building up to the height of 1455 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1455 feet AMSL would impact the Runway 03, 19, and 21 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

## <u>DL – 29</u>

- A building up to the height of 968 feet AMSL, would not impact MKC operation.
- A building up to the height of 1506 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1506 feet AMSL would impact the Runway 03 and 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 30

- A building up to the height of 989 feet AMSL, would not impact MKC operation.
- A building up to the height of 1506 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1506 feet AMSL would impact the Runway 03 and 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 31

- A building up to the height of 1012 feet AMSL, would not impact MKC operation.
- A building up to the height of 1504 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1504 feet AMSL would impact Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

## DL - 32

- A building up to the height of 1048 feet AMSL, would not impact MKC operation.
- A building up to the height of 1503 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1503 feet AMSL would impact Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### DL - 33

- A building up to the height of 993 feet AMSL, would not impact MKC operation.
- A building up to the height of 1424 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1424 feet AMSL would impact Runway 03 and 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

- A building up to the height of 1010 feet AMSL, would not impact MKC operation.
- A building up to the height of 1530 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1530 feet AMSL would impact Runway 19 IFR landing capability (RNAV (GPS)). Typically, this would be unacceptable to the airport.

## Crossroads + Union Hill

The Crossroads + Union Hill (CUH) district is approximately 2 miles south of Charles B. Wheeler Downtown Airport (MKC), Kansas City, MO. Each of the 28 grids were evaluated for a potential building up to 550 feet above ground level (AGL) (Appendix A, Figure 6). Results state the maximum building height above mean sea level (AMSL).

## <u>CUH - 1</u>

- A building up to the height of 1001 feet AMSL, would not impact MKC operation.
- A building up to the height of 1283 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1283 feet AMSL would impact the Runway 19 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

## **CUH - 2**

- A building up to the height of 1007 feet AMSL, would not impact MKC operation.
- A building up to the height of 1283 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1283 feet AMSL would impact the Runway 19 IFR landing capability (ILS and RNAV (GPS)). Typically, this would be unacceptable to the airport.

#### CUH - 3

- A building up to the height of 1032 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### <u>CUH - 4 & 8</u>

- A building up to the height of 1071 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

## CUH - 5, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, and 28

- A building up to the height of 1106 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### CUH - 6

- A building up to the height of 1039 feet AMSL, would not impact MKC operation.
- A building up to the height of 1302 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1302 feet AMSL would impact the Runway 19 IFR landing capability (ILS). Typically, this would be unacceptable to the airport.

#### **CUH – 7**

- A building up to the height of 1043 feet AMSL, would not impact MKC operation.
- A building up to the height of 1302 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1302 feet AMSL would impact the Runway 19 IFR landing capability (ILS). Typically, this would be unacceptable to the airport.

#### CUH - 9

- A building up to the height of 1103 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### **CUH – 11**

- A building up to the height of 1088 feet AMSL, would not impact MKC operation.
- A building up to the height of 1331 feet AMSL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.
- Anything above 1331 feet AMSL would impact the Runway 19 IFR landing capability (ILS). Typically, this would be unacceptable to the airport.

#### **CUH - 12**

- A building up to the height of 1096 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### **CUH – 24**

- A building up to the height of 1140 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

## **CUH - 26**

- A building up to the height of 1120 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

#### CUH - 27

- A building up to the height of 1130 feet AMSL, would not impact MKC operation.
- A building up to 550 feet AGL impacts MKC operations. Building up to this height would require agreement between the airport and air traffic to change the aircraft flight patterns.

# Summary

This feasibility study was accomplished as a limited aeronautical review based on general information supplied by the Kansas City, City Planning Office. As previously stated, the objective of this report was to provide comprehensive data analysis by identifying specific infrastructure needs of the downtown area of Kansas City and determine how they interact with the aviation operations at Charles B. Wheeler Downtown Airport (MKC).

Overall, the majority of requested heights negatively impact MKC operations. However, there are heights that could provide benefit to Kansas City while minimizing the impact to MKC. Because they would require changes in operations, achieving these heights will require collaboration between the city, MKC, and air traffic, and must not negatively affect any grant assurances. In addition to this process, it would also require circularization for public comment lasting approximately 90 to 120 days from the date that further study is requested before any subsequent determination would be effective. The circularization public comment period is initiated when an official filing results in Part 77 protected surface interactions.

Lastly, this report does not negate the requirement for filing notice and obtaining a determination for any proposed construction that meets criteria under 14 CFR Part 77. The results of a formal aeronautical study under the Obstruction Evaluation program cannot be predetermined, but by synchronizing City Planning with the results of this feasibility study, the City will maximize opportunities for success.

# Appendix A – Areas and Grids

Figure 2 – West Bottoms broken into grids.

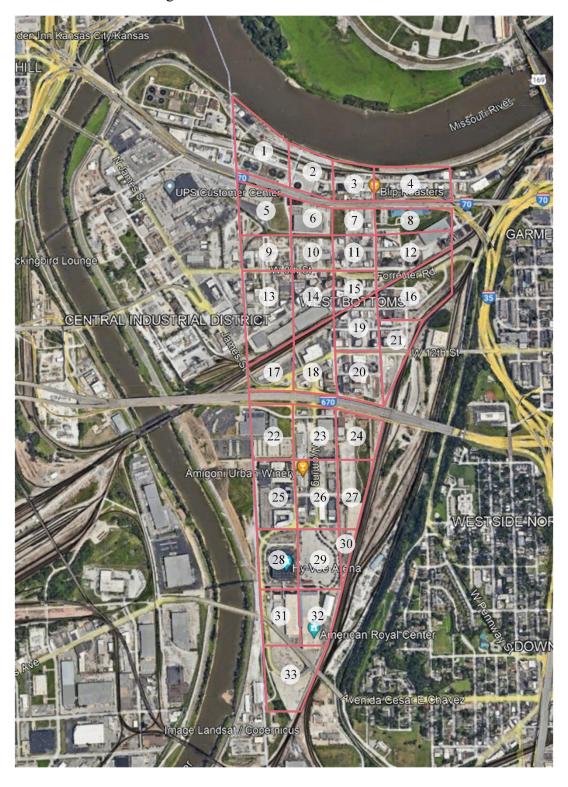


Figure 3 – River Market broken into grids.



Figure 4 – Berkely Riverfront broken into grids.



Figure 5 – Downtown Loop broken into grids.



 $Figure\ 6-Crossroads+Union\ Hill\ broken\ into\ grids.$ 



# Appendix B - West Bottoms Part 77 Report

Below are the specific details of the West Bottom area that are identified as exceeding the obstruction standards of 14 CFR Part 77, as applied to Charles B. Wheeler Downtown Airport (MKC):

## **WB - 1**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 810 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 21 40:1 departure surface 143 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; TIFTO SEVEN; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), No Effect Height (NEH) 810 AMSL (with or without a 2C survey). RACER SEVEN; ROYAL NINE; WILDCAT FIVE; RWY 21, 200-1 5/8 or departure NA (CG exceeds 500 feet per NM), NEH 810 AMSL (4D/2C).
- ILS or LOC RWY 3, Amdt 5A, obstacle penetrates Vertical Guidance Surface (VGS) 95 feet, S-ILS 3 DA NA, NEH 858 AMSL (with or without a 1A). Obstacle penetrates 20:1 Visual Area Surface 55 feet, increase visibility from RVR 4000 to RVR 5000, if not lighted, procedure NA at night and Circling to RWY 3 NA at night for all procedures, NEH 898 AMSL (4D/1A). At 858 AMSL, increase S-ILS 3 DA from 1012 to 1108, W/1A, from 1012 to 1060, NEH 831 AMSL (4D/1A).
- RNAV (GPS) RWY 3, Amdt 3A, obstacle penetrates Vertical Guidance Surface (VGS) 95 feet, LPV DA and LNAV/VNAV DA NA, NEH 858 AMSL (4D/1A). At 858 AMSL, increase LPV DA from 999 to 1111, W/1A, from 999 to 1063, NEH 834 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 795 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 847 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to plan to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested heights of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 808 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 21 40:1 departure surface 140 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; TIFTO SEVEN; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), No Effect Height (NEH) 808 AMSL (with or without a 2C survey).
- ILS or LOC RWY 3, Amdt 5A, increase S-ILS 3 DA from 1012 to 1253, W/1A, from 1012 to 1177, NEH 848 AMSL (4D/1A). Obstacle penetrates 20:1 Visual Area Surface 27 feet, increase visibility from RVR 4000 to RVR 5000, if not lighted, procedure NA at night and Circling to RWY 3 NA at night for all procedures, NEH 926 AMSL (4D/1A).
- RNAV (GPS) RWY 3, Amdt 3A, increase LPV DA from 999 to 1266, W/1A, from 999 to 1176, NEH 834 AMSL (4D/1A). Obstacle penetrates 20:1 Visual Area Surface 27 feet, increase LPV visibility from RVR 4000 to RVR 5000, if not lighted, procedure NA at night and circling to RWY 3 NA at night for all procedures, NEH 926 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 795 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 845 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested heights of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 808 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 145 feet, requiring TAKEOFF MINIMUMS AND
  (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER
  SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility
  from STD to 300-1 with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG
  exceeds 500 feet per NM), No Effect Height (NEH) 808 AMSL (with or without a 2C survey).
- ILS or LOC RWY 3, Amdt 5A, increase S-ILS 3 DA from 1012 to 1209, W/1A, from 1012 to 1056, NEH 826 AMSL (4D/1A).
- RNAV (GPS) RWY 3, Amdt 3A, increase LPV DA from 999 to 1202, W/1A, from 999 to 1055, NEH 928 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 791 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 888 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Transitional surface by 68 feet. At a height of 885 feet AMSL, the impact would be eliminated. If you desire to build higher than 885 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>WB - 4</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 800 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• Obstacle penetrates RWY 19 40:1 departure surface 153 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER

- SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), No Effect Height (NEH) 800 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED) Obstacle penetrates 20:1 Visual Area Surface 58 feet, if not lighted, circling to RWY 1 NA at night for all procedures, NEH 895 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 785 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 888 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Transitional surface by 95 feet. At a height of 858 feet AMSL, the impact would be eliminated. If you desire to build higher than 858 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

### <u>WB - 5</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 830 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 21 40:1 departure surface 123 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), With a 2C survey, 300-1 5/8 or STD with a climb gradient increase from 260 to 479 feet per NM to 1100, an increase from 1000, No Effect Height (NEH) 830 AMSL (with or without a 2C survey).
- ILS or LOC RWY 3, Amdt 5A, obstacle penetrates Vertical Guidance Surface (VGS) 62 feet, S-ILS 3 DA NA, NEH 891 AMSL (4D/1A). Obstacle penetrates 20:1 Visual Area Surface 7 feet, increase visibility from RVR 4000 to RVR 5000, if not lighted, procedure NA at night and Circling to RWY 3 NA at night for all procedures, NEH 946 AMSL (4D/1A). At 891 AMSL, increase S-ILS 3 DA from 1012 to 1156, W/1A, from 1012 to 1067, NEH 859 AMSL (4D/1A). Obstacle penetrates 34:1 Visual Area Surface 29 feet, however, published visibility is 3/4 SM or greater, No IFR Effect.
- RNAV (GPS) RWY 3, Amdt 3A, obstacle penetrates LPV and LNAV/VNAV Vertical Guidance Surface (VGS) 62 feet, LPV DA NA, LNAV/VNAV DA NA, NEH 891 AMSL (4D/1A). Obstacle

penetrates 20:1 Visual Area Surface 7 feet, if not lighted, procedure NA at night and Circling to RWY 3 NA at night for all procedures, NEH 946 AMSL (4D/1A). At 891 AMSL, increase LPV DA from 999 to 1156, W/1A, 999 to 1067, NEH 862 AMSL. Obstacle penetrates 20:1 Visual Area Surface 27 feet, increase LPV visibility from RVR 4000 to RVR 5000, if not lighted, procedure NA at night and Circling to RWY 3 NA at night for all procedures, NEH 926 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the Horizontal and Approach surfaces were exceeded. At the height of 813 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 867 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>WB - 6</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 827 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 126 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), No Effect Height (NEH) 827 AMSL (with or without a 2C survey).
- Obstacle penetrates RWY 21 40:1 departure surface 123 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), W/2C, 300-1 5/8 or STD with a climb gradient increase from 260 to 479 feet per NM to 1100, an increase from 1000, NEH 830 AMSL (4D/2C).
- ILS or LOC RWY 3, Amdt 5A, increase S-ILS 3 DA from 1012 to 1253, W/1A, from 1012 to 1151, NEH 852 AMSL (4D/1A). Obstacle penetrates 20:1 Visual Area Surface 20 feet, increase visibility from RVR 4000 to RVR 5000, if not lighted, procedure NA at night and Circling to RWY 3 NA at night for all procedures, NEH 933 AMSL (4D/1A).

• RNAV (GPS) RWY 3, Amdt 3A, increase LPV DA from 999 to 1266, W/1A, 999 to 1129, NEH 855 AMSL (4D/1A). Obstacle penetrates 20:1 Visual Area Surface 20 feet, if not lighted, procedure NA at night and Circling to RWY 3 NA at night for all procedures, NEH 933 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the Horizontal, Approach, and Transitional surfaces were all exceeded. At the height of 808 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 867 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **WB - 7**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 823 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 130 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), No Effect Height (NEH) 823 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates 20:1 Visual Area Surface 52 feet, if not lighted, Circling to RWY 1 NA at night for all procedures, NEH 901 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 888 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 01 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 913 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Approach surface RWY 01 by 65 feet. At a height of 888 feet AMSL, the impact would be eliminated. If you desire to build higher than 888 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>WB - 8</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 816 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 137 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), No Effect Height (NEH) 816 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates 20:1 Visual Area Surface 52 feet, if not lighted, Circling to RWY 1 NA at night for all procedures, NEH 901 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 885 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 01 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 909 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Approach surface RWY 01 by 65 feet. At a height of 888 feet AMSL, the impact would be eliminated. If you desire to build higher than 888 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 842 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 21 40:1 departure surface 111 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), W/2C, 300 1 5/8 or STD with a minimum climb gradient increase from 260 to 421 feet per NM to 1100, an increase from 1000, No Effect Height (NEH) 842 AMSL (with or without a 2C survey).
- ILS or LOC RWY 3, Amdt 5A, obstacle penetrates Vertical Guidance Surface (VGS) 36 feet, S-ILS 3 DA NA, NEH 917 AMSL (4D/1A). At 917 increase S-ILS 3 DA from 1012 to 1202, W/1A, from 1012 to 1113, NEH 881 AMSL (4D/1A).
- RNAV (GPS) RWY 3, Amdt 3A, LPV DA NA and LNAV/VNAV DA NA, NEH 917 AMSL (4D/1A).
   Obstacle penetrates 34:1 Visual Area Surface 70 feet, however, published visibility is 3/4 SM or greater,
   No IFR Effect. At 917 AMSL, increase LPV DA from 999 to 1202, W/1A, 999 to 1113, NEH 884
   AMSL.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 818 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 881 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **WB - 10**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 836 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 117 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), W/2C, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500, No Effect Height (NEH) 836 AMSL (with or without a 2C survey).
- Obstacle penetrates RWY 21 40:1 departure surface 111 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), W/2C, 300 1 5/8 or STD with a minimum climb gradient increase from 260 to 421 feet per NM to 1100, an increase from 1000, NEH 842 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 818 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 01 and Runway 03 might be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. It is possible that the site may be within the lateral limits of the visible light. A Flight Inspection would be necessary to determine if the VASIs must be baffled. At a height of 873 feet AMSL, this possible impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **WB - 11**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 833 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 120 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), With a 2C survey, increase ceiling and visibility from STD to 300-1 with a minimum climb gradient increase from 465 to 485 feet per NM to 2500, No Effect Height (NEH) 833 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates 20:1 Visual Area Surface 34 feet, if not lighted, Circling to RWY 1 NA at night for all procedures, NEH 919 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 897 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 01 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 926 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Approach surface for Runway 01 by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **WB - 12**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 826 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 127 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), No Effect Height (NEH) 826 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates 20:1 Visual Area Surface 34 feet, if not lighted, Circling to RWY 1 NA at night for all procedures, NEH 919 AMSL (4D/1A), Obstacle penetrates 34:1 Visual Area Surface 74 feet, NEH 879 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal and approach surfaces were exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 01 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 924 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>WB - 13</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 853 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 21 40:1 departure surface 100 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), With a 2C survey, 300 1 5/8 or STD with a minimum climb gradient increase from 260 to 381 feet per NM to 1100, an increase from 1000, No Effect Height (NEH) 853 AMSL (with or without a 2C survey).
- ILS or LOC RWY 3, Amdt 5A, increase S-ILS 3 DA from 1012 to 1253, W/1A, from 1012 to 1138, NEH 893 AMSL (4D/1A). /// RNAV (GPS) RWY 3, Amdt 3A, increase LPV DA from 999 to 1266, W/1A, 999 to 1094, NEH 896 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 836 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 03 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 895 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **WB - 14**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 849 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 104 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), With a 2C survey, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient 465 feet per NM to 2500, No Effect Height (NEH) 849 AMSL (with or without a 2C survey).
- Obstacle penetrates RWY 21 40:1 departure surface 100 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 21, 300-1 5/8 or departure NA (CG exceeds 500 feet per NM), With a 2C survey, 300 1 5/8 or STD with a minimum climb gradient increase from 260 to 381 feet per NM to 1100, an increase from 1000, No Effect Height (NEH) 853 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), Obstacle penetrates 34:1 Visual Area Surface 61 feet, NEH 892 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal, approach, and transitional surfaces were all exceeded. At the height of 859 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **WB - 15**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 849 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 104 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500 or departure NA (CG exceeds 500 feet per NM), With a 2C survey, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient 465 feet per NM to 2500, No Effect Height (NEH) 849 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), Obstacle penetrates 34:1 Visual Area Surface 74 feet, NEH 879 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal and approach surfaces were exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 01 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 947 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **WB - 16**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 826 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 127 feet, requiring TAKEOFF MINIMUMS AND
  (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER
  SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility
  from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500 or departure NA
  (CG exceeds 500 feet per NM), No Effect Height (NEH) 826 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates Vertical Guidance Surface (VGS) 27 feet, LPV DA NA and LNAV/VNAV DA NA, NEH 926 AMSL (4D/1A). Obstacle penetrates 34:1 Visual Area Surface 74 feet, NEH 879 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal and approach surfaces were exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Landing aid utilized by pilots as a visual guide on short final, Visual Approach Slope Indicator (VASI), for Runway 01 would be impacted. This navigational equipment is considered crucial, and any degradation of its function would be considered a significant adverse effect. At a height of 934 feet AMSL, this impact would be eliminated.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# **WB - 17**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 884 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• Obstacle penetrates RWY 19 40:1 departure surface 69 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility

- from STD to 300-1 1/8 or STD with a minimum climb gradient of 465 feet per NM to 2500, With a 2C survey, increase ceiling and visibility from STD to 300-1 1/8 or STD with a minimum climb gradient 465 feet per NM to 2500, No Effect Height (NEH) 884 AMSL (with or without a 2C survey).
- RACER7, ROYAL9, WILDCAT5, Obstacle penetrates RWY 21 40:1 departure surface 58 feet, 300 1 5/8 or STD with a minimum climb gradient increase from 260 to 356 feet per NM to 1100, an increase from 1000, W/2C, increase ceiling and visibility from 200 1 5/8 to 300 -1 5/8 or STD with a minimum climb gradient increase from 260 to 276 feet per NM to 1100, an increase from 1000, NEH 895 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>WB - 18</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 870 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 83 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500, With a 2C survey, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient 465 feet per NM to 2500, No Effect Height (NEH) 870 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), Obstacle penetrates 34:1 Visual Area Surface 61 feet, NEH 892 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120

knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **WB - 19**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 859 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 94 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient increase from 465 to 488 feet per NM to 2500, With a 2C survey, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient 465 feet per NM to 2500, No Effect Height (NEH) 859 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates Vertical Guidance Surface (VGS) 10 feet, LPV DA NA and LNAV/VNAV DA NA, NEH 943 AMSL (4D/1A). Obstacle penetrates 34:1 Visual Area Surface 51 feet, NEH 902 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **WB - 20**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 879 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 74 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient of 465 feet per NM to 2500, With 2C survey, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient 465 feet per NM to 2500, No Effect Height (NEH) 879 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates Vertical Guidance Surface (VGS) 10 feet, LPV DA NA and LNAV/VNAV DA NA, NEH 943 AMSL (4D/1A). Obstacle penetrates 34:1 Visual Area Surface 51 feet, NEH 902 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 46 feet. At a height of 907 feet AMSL, the impact would be eliminated. If you desire to build higher than 907 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# **WB - 21**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 862 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 91 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient increase from 465 to 474 feet per NM to 2500, With a 2C survey, increase ceiling and visibility from STD to 300-1 or STD with a minimum climb gradient 465 feet per NM to 2500, No Effect Height (NEH) 862 AMSL (with or without a 2C survey).
- PLAN ON FILE: RNAV (GPS) RWY 1 (PROPOSED), obstacle penetrates Vertical Guidance Surface (VGS) 27 feet, LPV DA NA and LNAV/VNAV DA NA, NEH 926 AMSL (4D/1A). Obstacle penetrates 34:1 Visual Area Surface 71 feet, NEH 882 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 47 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **WB - 22**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 907 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Obstacle penetrates RWY 19 40:1 departure surface 46 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 ¼ or STD with a minimum climb of 465 feet per NM to 2500, No Effect Height (NEH) 907 AMSL (with or without a 2C survey).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

#### WB - 23 / WB - 24

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 905 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

Obstacle penetrates RWY 19 40:1 departure surface 48 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 ¼ or STD with a minimum climb of 465 feet per NM to 2500, No Effect Height (NEH) 905 AMSL (with or without a 2C survey).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height

of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# WB - 25 / WB - 26

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 928 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• Obstacle penetrates RWY 19 40:1 departure surface 25 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 3/8 or STD with a minimum climb of 465 feet per NM to 2500, No Effect Height (NEH) 928 AMSL (with or without a 2C survey).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

## **WB - 28**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

#### **WB - 29**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 949 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

 Obstacle penetrates RWY 19 40:1 departure surface 4 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 % or STD with a minimum climb of 465 feet per NM to 2500, No Effect Height (NEH) 949 AMSL (with or without a 2C survey).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

## **WB - 30**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 953 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 949 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• Obstacle penetrates RWY 19 40:1 departure surface 4 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 % or STD with a minimum climb of 465 feet per NM to 2500, No Effect Height (NEH) 949 AMSL (with or without a 2C survey).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

## **WB - 31**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 953 AMSL, the horizontal surface was exceeded. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

## WB - 32 / WB - 33

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1005 feet AMSL, impacts would exist to both instrument approaches and departure procedures that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 992 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• At 1005 AMSL 4D, Obstacle penetrates RWY 19 40:1 departure surface 13 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES, AMDT 5; CHIEF EIGHT; LAKES FOUR; RACER SEVEN; ROYAL NINE; TIFTO SEVEN; WILDCAT FIVE; RWY 19, increase ceiling and visibility from STD to 300-1 1/8 or STD with a minimum climb of 465 feet per NM to 2500, No Effect Height (NEH) 992 AMSL (with or without a 2C survey).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested of 1005 AMSL, the horizontal surface was exceeded. At the height of 958 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# Appendix C – River Market Part 77 Report

Below are the specific details of the River Market area that are identified as exceeding the obstruction standards of 14 CFR Part 77, as applied to Charles B. Wheeler Downtown Airport (MKC):

# <u>RM - 1</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1100 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1400, No Effect Height 989
AMSL, With a 2C survey, from 1240 to 1360, NEH 990 AMSL. Increase CAT A circling MDA from
1380 to 1400, NEH 989 AMSL, W/2C, No IFR Effect.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 194 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 194 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>RM - 2</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1110 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1420, No Effect Height 989
AMSL, With a 2C survey, from 1240 to 1340, NEH 990 AMSL. Increase CAT A circling MDA from
1380 to 1400, NEH 989 AMSL, W/2C, No IFR Effect.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surfaces is exceeded by 204 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 204 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **RM - 3**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1100 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1016 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

 RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1400, No Effect Height 1016 AMSL, With a 2C survey, from 1240 to 1300, NEH 1051 AMSL. Increases CAT A circling MDA from 1380 to 1400, NEH 1016 AMSL, W/2C, No IFR Effect.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 204 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 204 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>RM - 4</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1090 feet AMSL, the horizontal surface was exceeded by 184 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 184 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **RM - 5**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1120 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1420, No Effect Height 989
AMSL, With a 2C survey, from 1240 to 1380, NEH 993 AMSL. Increases CAT A circling MDA from
1380 to 1420, NEH 989 AMSL, W/2C, No IFR Effect.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 214 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 214 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# **RM - 6**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1130 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1016 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

 RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1420, No Effect Height 1016 AMSL, With a 2C survey, from 1240 to 1320, NEH 1051 AMSL. Increases CAT A circling MDA from 1380 to 1420, NEH 1016 AMSL, W/2C, No IFR Effect.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 224 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 224 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>RM - 7</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1115 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1075 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1340, No Effect Height 1075 AMSL, With a 2C survey, from 1240 to 1260, NEH 1111 AMSL.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 209 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 209 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>RM - 8</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1100 feet AMSL, the horizontal surface was exceeded by 194 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 194 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **RM - 9**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1125 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 999 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1420, No Effect Height 999 AMSL, With a 2C survey, from 1240 to 1340, NEH 1034 AMSL. Increases CAT A circling MDA from 1380 to 1420, NEH 999 AMSL, W/2C, No IFR Effect.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 219 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 219 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>RM - 10</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1135 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1054 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1380, No Effect Height 1054 AMSL, With a 2C survey, from 1240 to 1300, NEH 1090 AMSL.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 229 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 229 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>RM - 11</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1125 feet AMSL, the horizontal surface was exceeded by 219 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 219 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **RM - 12**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1110 feet AMSL, the horizontal surface was exceeded by 204 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 204 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>RM - 13</u>

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1130 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1021 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1400, No Effect Height 1021 AMSL, With a 2C survey, from 1240 to 1320, NEH 1056 AMSL. Increases CAT A circling MDA from 1380 to 1400, NEH 1021 AMSL, W/2C, No IFR Effect.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 224 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 224 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **RM - 14**

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1140 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1082 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• RNAV (GPS) RWY 3, Amdt 3A, increases LNAV MDA from 1240 to 1360, No Effect Height 1082 AMSL, With a 2C survey, from 1240 to 1280, NEH 1117 AMSL.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height, the horizontal surface was exceeded by 234 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 234 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>RM - 15</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1125 feet AMSL, the horizontal surface was exceeded by 219 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 219 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **RM - 16**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1130 feet AMSL, the horizontal surface was exceeded by 224 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# <u>RM - 17</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1145 feet AMSL, the horizontal surface was exceeded by 239 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 239 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **RM - 18**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1130 feet AMSL, the horizontal surface was exceeded by 224 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 224 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **RM - 19**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1135 feet AMSL, the horizontal surface was exceeded by 229 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 229 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>RM - 20</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1135 feet AMSL, the horizontal surface was exceeded by 229 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 229 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>RM - 21</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 1138 feet AMSL, the horizontal surface was exceeded by 232 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 232 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# Appendix D – Berkley Riverfront Part 77 Report

Below are the specific details of the Berkley Riverfront area that are identified as exceeding the obstruction standards of 14 CFR Part 77, as applied to Charles B. Wheeler Downtown Airport (MKC):

## **BR - 1**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 960 feet AMSL, the horizontal surface was exceeded by 54 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 54 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **BR - 2**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 964 feet AMSL, the horizontal surface was exceeded by 58 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 58 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **BR - 3**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 966 feet AMSL, the horizontal surface was exceeded by 60 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# <u>BR - 4</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 968 feet AMSL, the horizontal surface was exceeded by 62 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 62 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>BR - 5</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 964 feet AMSL, the horizontal surface was exceeded by 58 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 58 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>BR - 6</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 960 feet AMSL, the horizontal surface was exceeded by 54 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 54 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **BR - 7**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 976 feet AMSL, the horizontal surface was exceeded by 70 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 70 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **BR - 8**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 963 feet AMSL, the horizontal surface was exceeded by 57 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 57 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>BR - 9</u>

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 960 feet AMSL, the horizontal surface was exceeded by 54 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 54 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **BR - 10**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 960 feet AMSL, the horizontal surface was exceeded by 54 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 54 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **BR - 11**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 970 feet AMSL, the horizontal surface was exceeded by 64 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 64 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **BR - 12**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 970 feet AMSL, the horizontal surface was exceeded by 64 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 64 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **BR - 13**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 964 feet AMSL, the horizontal surface was exceeded by 58 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 58 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **BR - 14**

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested height of 960 feet AMSL, the horizontal surface was exceeded by 54 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 54 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# Appendix E – Downtown Loop Part 77 Report

# DL - 1

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1025 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increase LNAV/VNAV DA from 1411 to 1780, NEH 1211 AMSL, W/1A, 1411 to 1694, NEH 1297 AMSL. Increases LNAV MDA from 1240 to 1880, With a 2C survey, 1240 to 1800, No Effect Height 1025 feet AMSL (with or without a 2C survey). Increase CAT A/B/C/D Circling MDA from 1380/1400/1460/1540 to 1880, W/2C, 1380/1400/1460/1540 to 1800, NEH 1025 AMSL (4D/2C).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1191 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV NA (changes missed approach flight path), NEH 1350 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1399 (missed approach), W/1A, 1300 to 1361 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520 (missed approach), W/2C, 1340 to 1460 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1520, W/2C, 1380/1400 to 1460, NEH 1462 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1660 (missed approach), W/2C, 1260 to 1620 (missed approach), NEH 1239 AMSL (4D/2C). Increase Circling CAT A/B/C/D MDA from 1380/1400/1460/1540 to 1660, W/2C, 1380/1400/1460/1540 to 1620, NEH 1239 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# DL - 2

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1747, NEH 1336 AMSL, W/1A, 1411 to 1661, NEH 1422 AMSL (4D/1A). Increase LNAV MDA from 1240 to 1860, NEH 989 AMSL, W/2C, 1240 to 1780, NEH 990 AMSL. Increase Cat A/B/C/D circling MDA from 1380/1400/1460/1540 to 1860, NEH 1293 AMSL, W/2C, 1380/1400/1460/1540 to 1780, NEH 1315 AMSL.
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1187 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV NA (changes missed approach flight path), NEH 1346 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1402 (missed approach), W/1A, 1300 to 1364 (missed approach), NEH 1486 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1458 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1520, W/2C, 1380/1400/1460 to 1480, NEH 1458 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1500 (missed approach), W/2C, 1260 to 1440 (missed approach), NEH 1257 AMSL (4D/2C). Increase Circling CAT A/B/C/D MDA from 1380/1400/1460/1540 to 1500, W/2C, 1380/1400 to 1440, NEH 1418 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# DL - 3

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1111 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increases LNAV/VNAV DA from 1411 to 1689, No Effect Height 1302 AMSL, With 1A survey, 1411 to 1604, NEH 1387 AMSL. Increase LNAV MDA from 1240 to 1800, W/2C, 1240 to 1720, NEH 1111 AMSL (with or without a 2C survey). Increase CAT A/B/C/D Circling MDA from 1380/1400/1460/1540 to 1800, W/2C, 1380/1400/1460/1540 to 1720, NEH 1111 AMSL (4D/2C).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1187 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV NA (changes missed approach flight path), NEH 1346 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1402 (missed approach), W/1A, 1300 to 1364 (missed approach), NEH 1486 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1458 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1520, W/2C, 1380/1400/1460 to 1480, NEH 1458 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1660 (missed approach), W/2C, 1260 to 1600 (missed approach), NEH 1257 AMSL (4D/2C). Increase Circling CAT A/B/C/D MDA from 1380/1400/1460/1540 to 1660, W/2C, 1380/1400/1460/1540 to 1600, NEH 1257 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# DL - 4

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1199 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increases LNAV/VNAV DA from 1411 to 1597, No Effect Height (NEH) 1394 feet AMSL, With a 1A survey (W/1A), 1411 to 1512, NEH 1432 AMSL. Increase LNAV MDA from 1240 to 1720, W/2C, 1240 to 1640, NEH 1199 AMSL (4D/2C). Increase CAT A/B/C/D Circling MDA from 1380/1400/1460/1540 to 1720, W/2C, 1380/1400/1460/1540 to 1640, NEH 1199 AMSL (4D/2C).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1184 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV NA (changes missed approach flight path), NEH 1342 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1404 (missed approach), W/1A, 1300 to 1366 (missed approach), NEH 1482 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1454 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400/1460 to 1480, NEH 1454 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1620 (missed approach), W/2C, 1260 to 1540 (missed approach), NEH 1300 AMSL (4D/2C). Increase Circling CAT A/B/C/D MDA from 1380/1400/1460/1540 to 1620, W/2C, 1380/1400/1460 to 1540, NEH 1300 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

# DL - 5

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1185 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1185 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV NA (changes missed approach flight path), NEH 1340 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1406 (missed approach), W/1A, 1300 to 1368 (missed approach), NEH 1479 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1451 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400/1460 to 1480, NEH 1451 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1580 (missed approach), W/2C, 1260 to 1520 (missed approach), NEH 1339 AMSL (4D/2C). Increase Circling CAT A/B/C/D MDA from 1380/1400/1460/1540 to 1580, W/2C, 1380/1400/1460 to 1520, NEH 1339 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 674 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## DL - 6

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1377 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1410 (missed approach), W/1A, 1300 to 1372 (missed approach), NEH 1474 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1446 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400/1460 to 1480, NEH 1446 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1540 (missed approach), W/2C, 1260 to 1480 (missed approach), NEH 1377 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400/1460 to 1480, NEH 1377 AMSL (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 666 feet. At a height of 914 feet AMSL, the impact would be eliminated. If you desire to build higher than 914 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 7

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1444 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1412 (missed approach), W/1A, 1300 to 1374 (missed approach), NEH 1471 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1444 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400/1460 to 1480, NEH 1444 (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 636 feet. At a height of 944 feet AMSL, the impact would be eliminated. If you desire to build higher than 944 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## DL - 8

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical

mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1444 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 19, AMDT 1, increases LNAV/VNAV DA from 1300 to 1412 (missed approach), With 1A survey (W/1A), 1300 to 1374 (missed approach), No Effect Height (NEH) 1471 AMSL with or without a 1A survey (4D/1A). Increase LNAV MDA from 1340 to 1540 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1444 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400/1460 to 1480, NEH 1444 (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 594 feet. At a height of 986 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# DL - 9

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1600 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted

prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1747, NEH 1336 AMSL, W/1A, 1411 to 1661, NEH 1422 AMSL (4D/1A). Increase LNAV MDA from 1240 to 1860, NEH 989 AMSL, W/2C, 1240 to 1780, NEH 990 AMSL. Increase Cat A/B/C/D circling MDA from 1380/1400/1460/1540 to 1860, NEH 1293 AMSL, W/2C, 1380/1400/1460/1540 to 1780, NEH 1315 AMSL.
- ILS or LOC RWY 19, Amdt 24, increase S-ILS 19 DA from 1004 to 1479 (missed approach), W/1A, 1004 to 1424, NEH 1227 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1397 (missed approach), W/1A, 1300 to 1359 (missed approach), NEH 1493 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520 (missed approach), W/2C, 1340 to 1460 (missed approach), NEH 1465 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1520, W/2C, 1380/1400 to 1460, NEH 1452 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1500 (missed approach), W/2C, 1260 to 1440 (missed approach), NEH 1418 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1500, W/2C, 1380/1400 to 1440, NEH 1418 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 674 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 10

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1660 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted

prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1747, NEH 1336 AMSL, W/1A, 1411 to 1661, NEH 1422 AMSL (4D/1A). Increase LNAV MDA from 1240 to 1860, NEH 989 AMSL, W/2C, 1240 to 1780, NEH 990 AMSL. Increase Cat A/B/C/D circling MDA from 1380/1400/1460/1540 to 1860, NEH 1293 AMSL, W/2C, 1380/1400/1460/1540 to 1780, NEH 1315 AMSL.
- ILS or LOC RWY 19, Amdt 24, increase S-ILS 19 DA from 1004 to 1479 (missed approach), W/1A, 1004 to 1424, NEH 1227 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1397 (missed approach), W/1A, 1300 to 1359 (missed approach), NEH 1493 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520 (missed approach), W/2C, 1340 to 1460 (missed approach), NEH 1465 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1520, W/2C, 1380/1400 to 1460, NEH 1452 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1500 (missed approach), W/2C, 1260 to 1440 (missed approach), NEH 1418 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1500, W/2C, 1380/1400 to 1440, NEH 1418 AMSL (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 694 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 694 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>DL – 11</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1600 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1194 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1636, W/1A, 1411 to 1550, NEH 1400 AMSL (4D/1A). Increase LNAV MDA from 1240 to 1760, NEH 1194 AMSL, W/2C, 1240 to 1660, NEH 1230 AMSL. Increase CAT A/B/C/D circling MDA from 1380/1400/1460/1540 to 1760, NEH 1194 AMSL, W/2C, from 1380/1440/1460/1540 to 1660, NEH 1230 AMSL.
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1199 AMSL (4D/1A).
- RNAV (GPS) RWY 19, Amdt 1, LPV DA NA (changes missed approach flight path), NEH 1382
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1424, W/1A, from 1300 to 1386, NEH 1523
   AMSL (4D/1A). Increase LNAV MDA from 1340 to 1560, W/2C, from 1340 to 1500, NEH 1495
   AMSL (4D/2C). Increase CAT A/B/C from 1380/1400/1460 to 1560, W/2C, from 1380/1400/1460 to
   1500, NEH 1495 AMSL (4D/2C).
- RNAV (GPS) RWY 21, Amdt 2, increase LNAV MDA from 1260 to 1640, W/2C, from 1260 to 1560, NEH 1357 AMSL (4D/2C). Increase CAT A/B/C/D circling MDA from 1380/1400/1460/1540 to 1640, NEH 1194 AMSL, W/2C, from 1380/1440/1460/1540 to 1560, NEH 1357 AMSL.
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 694 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 694 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# DL - 12

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1600 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1197 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1197 AMSL (4D/1A).
- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1576, W/1A, 1411 to 1527, NEH 1458 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV NA (changes missed approach flight path), NEH 1358 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1407 (missed approach), W/1A, 1300 to 1369 (missed approach), NEH 1499 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1471 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400 to 1480, NEH 1471 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1600 (missed approach), W/2C, 1260 to 1520 (missed approach), NEH 1345 AMSL (4D/2C). Increase Circling CAT A/B/C/D MDA from 1380/1400/1460/1540 to 1600, W/2C, 1380/1400/1460 to 1520, NEH 1345 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 694 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 694 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 13

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1600 feet AMSL, impacts would exist to instrument approaches

that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1197 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1197 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV NA (changes missed approach flight path), NEH 1357 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1428 (missed approach), W/1A, 1300 to 1390 (missed approach), NEH 1493 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1560 (missed approach), W/2C, 1340 to 1500 (missed approach), NEH 1465 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400 to 1480, NEH 1462 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1560 (missed approach), W/2C, 1260 to 1480 (missed approach), NEH 1382 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1560, W/2C, 1380/1400 to 1480, NEH 1382 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 694 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 694 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>DL - 14</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1625 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1382 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1446 (missed approach),
 W/1A, 1300 to 1408 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340

- to 1600 (missed approach), W/2C, 1340 to 1540 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1600, W/2C, 1380/1400 to 1540, NEH 1462 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1540 (missed approach), W/2C, 1260 to 1460 (missed approach), NEH 1382 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1560, W/2C, 1380/1400 to 1460, NEH 1382 AMSL (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 719 feet. At the height of 931 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 694 feet. At a height of 931 feet AMSL, the impact would be eliminated. If you desire to build higher than 931 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# DL - 15

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1650 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1462 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1448 (missed approach), W/1A, 1300 to 1410 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1600 (missed approach), W/2C, 1340 to 1540 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1600, W/2C, 1380/1400 to 1540, NEH 1462 (4D/2C).

Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
 MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 744 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 692 feet. At a height of 958 feet AMSL, the impact would be eliminated. If you desire to build higher than 958 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# **DL** – 16

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1630 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1462 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1435 (missed approach), W/1A, 1300 to 1397 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1580 (missed approach), W/2C, 1340 to 1520 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1580, W/2C, 1380/1400 to 1520, NEH 1462 (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 724 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 628 feet. At a height of 1002 feet AMSL, the impact would be eliminated. If you desire to build higher than 1002 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 17

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1650 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1735, NEH 1336 AMSL, W/1A, 1411 to 1649, NEH 1422 AMSL (4D/1A). Increase LNAV MDA from 1240 to 1840, NEH 989 AMSL, W/2C, 1240 to 1760, NEH 990 AMSL.
- ILS or LOC RWY 19, Amdt 24, increase S-ILS 19 DA from 1004 to 1479 (missed approach), W/1A, 1004 to 1424, NEH 1227 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1420 (missed approach), W/1A, 1300 to 1382 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1560 (missed approach), W/2C, 1340 to 1500 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1560, W/2C, 1380/1400 to 1500, NEH 1462 (4D/2C). RNAV (GPS) RWY 21, Amdt 2, increase LNAVMDA from 1260 to 1680 (missed approach), NEH 1293 AMSL, W/2C, 1260 to 1620, NEH 1315 AMSL. Increase Cat A/B/C/D circling MDA from 1380/1400/1460/1540 to 1680, NEH 1293 AMSL, W/2C, 1380/1400/1460/1540 to 1620, NEH 1315 AMSL.
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 744 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 744 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 18

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1650 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 989 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1735, NEH 1336 AMSL, W/1A, 1411 to 1649, NEH 1422 AMSL (4D/1A). Increase LNAV MDA from 1240 to 1840, NEH 989 AMSL, W/2C, 1240 to 1760, NEH 990 AMSL.
- ILS or LOC RWY 19, Amdt 24, increase S-ILS 19 DA from 1004 to 1479 (missed approach), W/1A, 1004 to 1424, NEH 1227 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV DA NA (changes missed approach flight path), NEH 1382
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1408 (missed approach), W/1A, 1300 to
   1370 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540 (missed approach), W/2C, 1340 to 1480 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT
   A/B/C MDA from 1380/1400/1460 to 1540, W/2C, 1380/1400 to 1480, NEH 1462 (4D/2C).
- RNAV (GPS) RWY 21, Amdt 2, increase LNAVMDA from 1260 to 1680 (missed approach), NEH 1293 AMSL, W/2C, 1260 to 1620, NEH 1315 AMSL. Increase Cat A/B/C/D circling MDA from 1380/1400/1460/1540 to 1680, NEH 1293 AMSL, W/2C, 1380/1400/1460/1540 to 1620, NEH 1315 AMSL.
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 744 feet. At the height of

906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 744 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>DL – 19</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1630 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1194 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1636, W/1A, 1411 to 1550, NEH 1400 AMSL (4D/1A). Increase LNAV MDA from 1240 to 1760, NEH 1194 AMSL, W/2C, 1240 to 1660, NEH 1230 AMSL. Increase CAT A/B/C/D circling MDA from 1380/1400/1460/1540 to 1760, NEH 1194 AMSL, W/2C, from 1380/1440/1460/1540 to 1660, NEH 1230 AMSL.
- RNAV (GPS) RWY 19, Amdt 1, LPV DA NA (changes missed approach flight path), NEH 1382
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1424, W/1A, from 1300 to 1386, NEH 1523
   AMSL (4D/1A). Increase LNAV MDA from 1340 to 1560, W/2C, from 1340 to 1500, NEH 1495
   AMSL (4D/2C). Increase CAT A/B/C from 1380/1400/1460 to 1560, W/2C, from 1380/1400/1460 to
   1500, NEH 1495 AMSL (4D/2C).
- RNAV (GPS) RWY 21, Amdt 2, increase LNAV MDA from 1260 to 1640, W/2C, from 1260 to 1560, NEH 1357 AMSL (4D/2C). Increase CAT A/B/C/D circling MDA from 1380/1400/1460/1540 to 1640, NEH 1194 AMSL, W/2C, from 1380/1440/1460/1540 to 1560, NEH 1357 AMSL.
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 724 feet. At the height of

906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Horizontal surface by 724 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# DL - 20

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1600 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1194 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1576, W/1A, 1411 to 1527, NEH 1458 AMSL (4D/1A).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1197 AMSL (4D/1A).
- RNAV (GPS) RWY 19, Amdt 1, LPV DA NA (changes missed approach flight path), NEH 1378
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1414, W/1A, from 1300 to 1375, NEH 1519
   AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540, W/2C, from 1340 to 1480, NEH 1491
   AMSL (4D/2C). Increase CAT A/B/C from 1380/1400/1460 to 1540, W/2C, from 1380/1400/1460 to 1480, NEH 1491 AMSL (4D/2C).
- RNAV (GPS) RWY 21, Amdt 2, increase LNAV MDA from 1260 to 1580, W/2C, from 1260 to 1500, NEH 1400 AMSL (4D/2C). Increase CAT A/B/C/D circling MDA from 1380/1400/1460/1540 to 1640, NEH 1194 AMSL, W/2C, from 1380/1440/1460/1540 to 1560, NEH 1400 AMSL.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 694 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 687 feet. At a height of 913 feet AMSL, the impact would be eliminated. If you desire to build higher than 913 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 21

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1600 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1197 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increase LNAV/VNAV DA from 1411 to 1497 (missed approach), W/1A, 1411 to 1449 (missed approach), NEH 1544 AMSL (4D/1A).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1197 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1415 (missed approach), W/1A, 1300 to 1377 (missed approach), NEH 1493 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1560 (missed approach), W/2C, 1340 to 1500 (missed approach), NEH 1465 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1560, W/2C, 1380/1400 to 1500, NEH 1452 (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1540 (missed approach), W/2C, 1260 to 1460 (missed approach), NEH 1382 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1560, W/2C, 1380/1400 to 1460, NEH 1382 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 694 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern

Conical surface by 666 feet. At a height of 934 feet AMSL, the impact would be eliminated. If you desire to build higher than 934 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# DL - 22

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1610 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1462 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increase LNAV/VNAV DA from 1411 to 1472 (missed approach), W/1A, 1411 to 1424 (missed approach), NEH 1592 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1433 (missed approach), W/1A, 1300 to 1395 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1580 (missed approach), W/2C, 1340 to 1520 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1580, W/2C, 1380/1400 to 1520, NEH 1462 (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 704 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 654 feet. At a height of 956 feet AMSL, the impact would be eliminated. If you desire to build higher than 956 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1615 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1462 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1433 (missed approach), W/1A, 1300 to 1395 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1580 (missed approach), W/2C, 1340 to 1520 (missed approach), NEH 1462 AMSL (4D/2C). Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1580, W/2C, 1380/1400 to 1520, NEH 1462 (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 709 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 633 feet. At a height of 982 feet AMSL, the impact would be eliminated. If you desire to build higher than 982 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## DL - 24

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical

mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1615 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1462 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1411 (missed approach), W/1A, 1300 to 1373 (missed approach), NEH 1490 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1500 (missed approach), NEH 1462 AMSL, W/2C, No IFR Effect. Increase Circling CAT A/B/C MDA from 1380/1400/1460 to 1540, NEH 1462 AMSL, W/2C, No IFR Effect.
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 709 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 594 feet. At a height of 1021 feet AMSL, the impact would be eliminated. If you desire to build higher than 1021 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 25

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1620 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 872 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- Obstacle penetrates RWY 19 40:1 departure surface 748 feet, requiring TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURE, AMDT 5, CHIEF EIGHT DEPARTURE, LAKES FOUR DEPARTURE, RACER SEVEN DEPARTURE, ROYAL NINE DEPARTURE, TIFTO SEVEN DEPARTURE, WILDCAT FIVE DEPARTURE, RWY 19, increases ceiling and visibility from Standard to 900-1 with a minimum climb gradient of 465 feet per NM to 2500 or departure not available (NA) (CG exceeds 500 feet per NM), NEH 872 AMSL (4D/2C).
- RNAV (GPS) RWY 3, AMDT 3A, increase LNAV/VNAV DA from 1411 to 1700, NEH 1331 AMSL, W/1A, 1411 to 1615, NEH 1354 AMSL. Increase LNAV MDA from 1240 to 1820, W/2C, 1240 to 1740, NEH 1139 AMSL (4D/2C). Increase CAT A/B/C/D Circling MDA from 1380/1400/1460/1540 to 1820, W/2C, 1380/1400/1460/1540 to 1740, NEH 1139 AMSL (4D/2C).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1248 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV DA NA (changes missed approach flight path), NEH 1407
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1387 (missed approach), W/1A, 1300 to
   1349 (missed approach), NEH 1548 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1500 (missed
   approach), W/2C, 1340 to 1440 (missed approach), NEH 1520 AMSL (4D/2C). Increase CAT A/B/C
   Circling MDA from 1380/1400/1460 to 1500, W/2C, 1380/1400 to 1440, NEH 1520 AMSL (4D/2C).
- RNAV (GPS) RWY 21, AMDT 2, increase LNAV MDA from 1260 to 1620 (missed approach), W/2C, 1260 to 1560 (missed approach), NEH 1333 AMSL (4D/2C). Increase CAT A/B/C/D Circling MDA from 1380/1400/1460/1540 to 1620, W/2C, 1380/1400/1460/1540 to 1560, NEH 1333 AMSL (4D/2C).
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 714 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 714 feet. At a height of 906 feet AMSL, the impact would be eliminated. If you desire to build higher than 906 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1630 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1268 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1606, W/1A, 1411 to 1557, NEH 1413 AMSL (4D/1A).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1268 AMSL (4D/1A).
- RNAV (GPS) RWY 19, Amdt 1, LPV DA NA (changes missed approach flight path), NEH 1402
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1411, W/1A, from 1300 to 1373, NEH 1543
   AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540, W/2C, from 1340 to 1480, NEH 1495
   AMSL (4D/2C). Increase CAT A/B/C from 1380/1400/1460 to 1540, W/2C, from 1380/1400/1460 to
   1480, NEH 1495 AMSL (4D/2C).
- RNAV (GPS) RWY 21, Amdt 2, increase LNAV MDA from 1260 to 1580, W/2C, from 1260 to 1500, NEH 1357 AMSL (4D/2C). Increase CAT A/B/C/D circling MDA from 1380/1400/1460/1540 to 1640, NEH 1194 AMSL, W/2C, from 1380/1440/1460/1540 to 1560, NEH 1357 AMSL.
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 724 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 714 feet. At a height of 916 feet AMSL, the impact would be eliminated. If you desire to build higher than 916 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1600 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1268 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1606, W/1A, 1411 to 1557, NEH 1413 AMSL (4D/1A).
- ILS OR LOC RWY 19, AMDT 24, S-ILS 19 NA (changes missed approach flight path), NEH 1268 AMSL (4D/1A).
- RNAV (GPS) RWY 19, Amdt 1, LPV DA NA (changes missed approach flight path), NEH 1399
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1400, W/1A, from 1300 to 1361, NEH 1539
   AMSL (4D/1A). Increase LNAV MDA from 1340 to 1540, W/2C, from 1340 to 1480, NEH 1495
   AMSL (4D/2C). Increase CAT A/B/C from 1380/1400/1460 to 1540, W/2C, from 1380/1400/1460 to 1480, NEH 1495 AMSL (4D/2C).
- RNAV (GPS) RWY 21, Amdt 2, increase LNAV MDA from 1260 to 1580, W/2C, from 1260 to 1500, NEH 1357 AMSL (4D/2C). Increase CAT A/B/C/D circling MDA from 1380/1400/1460/1540 to 1640, NEH 1194 AMSL, W/2C, from 1380/1440/1460/1540 to 1560, NEH 1357 AMSL.
- Kansas City ATCT/TRACON (MCI) Kansas City, MO. MCI\_MVA\_FUS3\_2022,
   MCI\_MVA\_FUS5\_2022, MVA, increase Sector N from 2600 to 2700, NEH 1649 AMSL. Air Traffic is responsible for MVA amendments and changes are NOT subject to NOTAM.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 694 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 670 feet. At a height of 930 feet AMSL, the impact would be eliminated. If you desire to build higher than 930 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1580 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1455 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, Amdt 3A, increase LNAV/VNAV DA from 1411 to 1552, W/1A, 1411 to 1504, NEH 1492 AMSL (4D/1A).
- RNAV (GPS) RWY 19, Amdt 1, LPV DA NA (changes missed approach flight path), NEH 1399
   AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1400, W/1A, from 1300 to 1361, NEH 1539
   AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520, W/2C, from 1340 to 1460, NEH 1512
   AMSL (4D/2C). Increase CAT A/B/C from 1380/1400/1460 to 1520, W/2C, increase CAT A/B circling
   MDA from 1380/1400 to 1460, NEH 1512 AMSL (4D/2C).
- RNAV (GPS) RWY 21, Amdt 2, increase LNAV MDA from 1260 to 1520, W/2C, from 1260 to 1440, NEH 1455 AMSL (4D/2C). Increase CAT A/B/C circling MDA from 1380/1400/1460 to 1520, NEH 1194 AMSL, W/2C, increase CAT A/B circling MDA from 1380/1400 to 1440, NEH 1455 AMSL.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 674 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 632 feet. At a height of 948 feet AMSL, the impact would be eliminated. If you desire to build higher than 948 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL-29

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1570 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1506 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increase LNAV/VNAV DA from 1411 to 1472 (missed approach), W/1A, 1411 to 1424 (missed approach), NEH 1592 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1390 (missed approach), W/1A, 1300 to 1352 (missed approach), NEH 1534 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1500 (missed approach), W/2C, 1340 to 1460 (missed approach), NEH 1506 AMSL (4D/2C). Increase CAT A/B/C Circling MDA from 1380/1400/1460 to 1500, W/2C, 1380/1400 to 1460, NEH 1506 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 664 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 602 feet. At a height of 968 feet AMSL, the impact would be eliminated. If you desire to build higher than 968 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 30

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical

mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1585 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1506 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increase LNAV/VNAV DA from 1411 to 1472 (missed approach), W/1A, 1411 to 1424 (missed approach), NEH 1592 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1390 (missed approach), W/1A, 1300 to 1352 (missed approach), NEH 1534 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1500 (missed approach), W/2C, 1340 to 1460 (missed approach), NEH 1506 AMSL (4D/2C). Increase CAT A/B/C Circling MDA from 1380/1400/1460 to 1500, W/2C, 1380/1400 to 1460, NEH 1506 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 679 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 596 feet. At a height of 989 feet AMSL, the impact would be eliminated. If you desire to build higher than 989 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 31

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1575 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1504 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1395 (missed approach), W/1A, 1300 to 1357 (missed approach), NEH 1532 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520 (missed approach), W/2C, 1340 to 1460 (missed approach), NEH 1504 AMSL (4D/2C). Increase CAT A/B/C Circling MDA from 1380/1400/1460 to 1520, W/2C, 1380/1400 to 1460, NEH 1504 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 669 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 563 feet. At a height of 1012 feet AMSL, the impact would be eliminated. If you desire to build higher than 1012 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 32

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1550 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1503 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1396 (missed approach), W/1A, 1300 to 1358 (missed approach), NEH 1529 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1520 (missed approach), W/2C, 1340 to 1460 (missed approach), NEH 1503 AMSL (4D/2C). Increase CAT A/B/C Circling MDA from 1380/1400/1460 to 1520, W/2C, 1380/1400 to 1460, NEH 1503 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 644 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 502 feet. At a height of 1048 feet AMSL, the impact would be eliminated. If you desire to build higher than 1048 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### DL - 33

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1555 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1424 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- RNAV (GPS) RWY 3, AMDT 3A, increase LNAV/VNAV DA from 1411 to 1504 (missed approach), W/1A, 1411 to 1456 (missed approach), NEH 1534 AMSL (4D/1A).
- RNAV (GPS) RWY 19, AMDT 1, LPV DA NA (changes missed approach flight path), NEH 1424 AMSL (4D/1A). Increase LNAV/VNAV DA from 1300 to 1363 (missed approach), W/1A, 1300 to 1325 (missed approach), NEH 1564 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1460 (missed approach), W/2C, 1340 to 1420 (missed approach), NEH 1536 AMSL (4D/2C). Increase CAT A/B Circling MDA from 1380/1400 to 1460, W/2C, 1380/1400 to 1420, NEH 1536 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 649 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 562 feet. At a height of 993 feet AMSL, the impact would be eliminated. If you desire to build higher than 993 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 201 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 500 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1550 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1530 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

RNAV (GPS) RWY 19, AMDT 1, increase LNAV/VNAV DA from 1300 to 1356 (missed approach), W/1A, 1300 to 1318 (missed approach), NEH 1558 AMSL (4D/1A). Increase LNAV MDA from 1340 to 1460 (missed approach), W/2C, 1340 to 1400 (missed approach), NEH 1530 AMSL (4D/2C). Increase Circling CAT A/B MDA from 1380/1400 to 1460, W/2C, 1380 to 1400, NEH 1530 AMSL (4D/2C).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 644 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 540 feet. At a height of 1010 feet AMSL, the impact would be eliminated. If you desire to build higher than 1010 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# Appendix F – Crossroads + Union Hill Part 77 Report

#### <u>CUH – 1</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1465 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1283 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- ILS or LOC RWY 19, Amdt 24, S-ILS DA NA (changes missed approach flight path), No Effect Height (NEH) 1283 feet AMSL (with or without a 1A survey (4D/1A)).
- RNAV (GPS) RWY 19, Amdt 1, LPV NA (changes missed approach flight path), NEH 1442 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 559 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 464 feet. At a height of 1001 feet AMSL, the impact would be eliminated. If you desire to build higher than 1001 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## CUH - 2

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical

mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1465 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1283 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

- ILS or LOC RWY 19, Amdt 24, S-ILS DA NA (changes missed approach flight path), NEH 1283 AMSL (4D/1A).
- RNAV (GPS) RWY 19, Amdt 1, LPV NA (changes missed approach flight path), NEH 1442 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 559 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 458 feet. At a height of 1007 feet AMSL, the impact would be eliminated. If you desire to build higher than 1007 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## CUH - 3

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern

Conical surface by 343 feet. At a height of 1032 feet AMSL, the impact would be eliminated. If you desire to build higher than 1032 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# CUH - 4

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 304 feet. At a height of 1071 feet AMSL, the impact would be eliminated. If you desire to build higher than 1071 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## CUH - 5

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120

knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern multiple climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### CUH - 6

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1450 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1450 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1302 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

• ILS or LOC RWY 19, Amdt 24, increase S-ILS 19 DA from 1004 to 1201, W/1A, from 1004 to 1147, NEH 1302 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 544 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern multiple climb/descent surfaces by 411 feet. At a height of 1039 feet AMSL, the impact would be eliminated. If you desire to build higher than 1039 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## CUH - 7

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1450 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than

3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1450 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1302 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

 ILS or LOC RWY 19, Amdt 24, increase S-ILS 19 DA from 1004 to 1201, W/1A, from 1004 to 1147, NEH 1302 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 544 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 407 feet. At a height of 1043 feet AMSL, the impact would be eliminated. If you desire to build higher than 1043 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## CUH - 8

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 304 feet. At a height of 1071 feet AMSL, the impact would be eliminated. If you desire to build higher than 1071 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>CUH - 9</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 272 feet. At a height of 1103 feet AMSL, the impact would be eliminated. If you desire to build higher than 1103 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>CUH – 10</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **CUH – 11**

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. Exceeds by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria): At the requested height of 1425 feet AMSL, impacts would exist to instrument approaches that would require further study and circularization to the public for comment. The outcome cannot be predicted prior to public circularization. At the height of 1331 feet AMSL, the 77.17(a)(3) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

 ILS or LOC RWY 19, Amdt 24, increase S-ILS 19 DA from 1004 to 1149, W/1A, from 1004 to 1095, NEH 1331 AMSL (4D/1A).

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 519 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 337 feet. At a height of 1088 feet AMSL, the impact would be eliminated. If you desire to build higher than 1088 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## <u>CUH – 12</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL,

the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern Conical surface by 279 feet. At a height of 1096 feet AMSL, the impact would be eliminated. If you desire to build higher than 1096 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>CUH – 13</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# **CUH – 14**

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>CUH – 15</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 448 feet. At the height of 927 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### <u>CUH – 16</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical

mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: At the requested, the horizontal surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern multiple climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **CUH - 17**

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 469 feet. At the height of 906 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

## **CUH - 18**

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1375 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 445 feet. At the height of 930 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 269 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# **CUH - 19**

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1450 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 425 feet. At the height of 1035 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 344 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you

desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# CUH - 20

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1440 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 415 feet. At the height of 1025 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 334 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### **CUH – 21**

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1440 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 426 feet. At the height of 1014 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 334 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>CUH – 22</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1360 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 401 feet. At the height of 959 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 254 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### CUH - 23

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1380 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 417 feet. At the height of 963 feet AMSL, the

77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 274 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>CUH – 24</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1490 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 419 feet. At the height of 1071 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91-120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 254 feet. At a height of 1140 feet AMSL, the impact would be eliminated. If you desire to build higher than 1140 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>CUH – 25</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1450 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 425 feet. At the height of 1025 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 344 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# **CUH – 26**

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1470 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 445 feet. At the height of 1025 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 350 feet. At a height of 1120 feet AMSL, the impact would be eliminated. If you desire to build higher than 1120 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

#### <u>CUH – 27</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1480 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical

mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 419 feet. At the height of 1071 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 350 feet. At a height of 1130 feet AMSL, the impact would be eliminated. If you desire to build higher than 1130 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.

# <u>CUH – 28</u>

Section 77.17 (a)(1) A height of 499 feet AGL at the site of the object. At the requested height of 1450 feet AMSL, exceeds this surface by 51 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17 (a)(2) A height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile from the airport up to a maximum of 499 feet. Exceeds by 350 feet and is presumed a hazard until further analysis reveals it is not.

Section 77.17(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.19, 77.21, or 77.23: The conical surface is exceeded by 367 feet. At the height of 1083 feet AMSL, the 77.17(a)(5) impacts would be mitigated and no longer require circularization, further study, nor a public comment period.

This area would lie within portions of the traffic pattern airspace for all runways for category (CAT) A/B/C aircraft. Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots. The requested height exceeds the visual traffic pattern climb/descent surfaces by 344 feet. At a height of 1106 feet AMSL, the impact would be eliminated. If you desire to build higher than 1106 feet AMSL, the city will need to coordinate with the airport to adjust the traffic pattern.