

## **50-18.2 Airport Overlay (A-O)**

The A-O district is intended to protect the lives and property of users of Duluth International Airport (DLH) and Sky Harbor Regional Airport from hazards and to protect the lives and property of residents living in the vicinity of the airports from risks and impacts of airport-related activities. The purpose of this district is also to prevent and, when possible, to minimize, reduce or remove hazards that interfere with the safe operation of the respective airports.

### **A. Purpose and authority.**

The council, pursuant to the provisions and authority of Minnesota Statutes Section 360.063, hereby finds and declares that:

1. The Duluth International Airport is an essential public facility;
2. An Airport Hazard endangers the lives and property of users of the Duluth International Airport, and property or occupants of land in its vicinity, and also if the obstructive type, in effect reduces the size of the area available for the landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of the Duluth International Airport and the public investment therein;
3. The creation or establishment of an Airport Hazard is a public nuisance and an injury to the region served by the Duluth International Airport;
4. For the protection of the public health, safety, order, convenience, prosperity and general welfare, and for the promotion of the most appropriate use of land, it is necessary to prevent the creation or establishment of Airport Hazards;
5. The prevention of these Airport Hazards and Aircraft Accidents should be accomplished, to the extent legally possible, by the exercise of the police power without compensation.

### **B. Definitions**

Definitions within this section shall be as defined by the Duluth International Airport Zoning Ordinance, created by the Duluth International Airport Joint Zoning Board, recorded in the St. Louis County Recorder's Office as Document Number 01432556, which is incorporated here to in its entirety by refence.

### **C. DLH Airspace Obstruction Zoning.**

1. **Boundary Limitation.** The airspace obstruction height zoning restrictions set forth in Section 50-18.2.C shall apply for a distance not to exceed one-and-one-half (1.5) miles beyond the perimeter of the Airport boundary; said boundary location and dimensions are indicated on the Airport Zoning Map.
2. **Airspace Zones.** Airspace Zones are established to regulate and protect aircraft from navigational hazards during landings and departures. In order to carry out the purposes of the Duluth International Airport Zoning Ordinance, the following Imaginary Airspace Zones are hereby established: Primary Zone, Horizontal Zone, Conical Zone, Approach Zone, Precision Instrument Approach Zone, and Transitional Zone, all whose locations and dimensions are indicated on the Airport Zoning Map.
3. **Height Restrictions.** Except as otherwise provided in Section 50-18.2, or except as necessary and incidental to airport operations, no structure or tree shall be constructed, altered, maintained, or allowed to grow so as to project above any of the Imaginary Airspace surfaces described in Section 50-18.2.C.2. Where an area is covered by more than one height limitation, the more restrictive limitations shall prevail.

#### **D. DLH Land Use Safety Zoning**

In order to carry out the purpose of Section 50-18.2, as set forth above, to restrict those uses which may be hazardous to the operational safety of aircraft operating to and from the Airport, and, furthermore, to limit population and building density in the runway approach areas, thereby creating sufficient open space to protect life and property in case of an accident, there are hereby created and established the following Safety Zones, which restrict land use:

1. Safety Zone 1: All land designated as Safety Zone 1 on the Airport Zoning Map;
2. Safety Zone 2: All land designated as Safety Zone 2 on the Airport Zoning Map;
3. Safety Zone 2.5: All land designated as Safety Zone 2.5 on the Airport Zoning Map;
4. Safety Zone 3: All land designated as Safety Zone 3 on the Airport Zoning Map.

The land use zoning restrictions set forth in Section 50-18.2.D and E shall apply for a distance not to exceed one mile beyond the perimeter of the airport boundary and in the portion of an Airport Hazard Area under the approach zone for a distance not exceeding one and one-half (1½) miles from the airport boundary; said land use zoning boundary location and dimensions are indicated on the Airport Zoning Map.

#### **E. DLH Use Restrictions**

Table 50-19.8, Permitted Use Table, lists land uses and indicates whether they are allowed by right or with a special use permit, or prohibited in each base zone district. In addition to 50-19.8, in order to restrict those uses which may be hazardous to the operational safety of aircraft operating to and from the Duluth International Airport, and furthermore to limit population and building density in the runway approach areas, thereby creating sufficient open space so as to protect life and property in case of accident, the following additional use restrictions are applied to the land use Safety Zones.

1. All Safety Zones. No use shall be made of any land in any of the Safety Zones which creates or causes interference with the operation of radio or electronic facilities on the airport or with radio or electronic communications between the airport and aircraft, makes it difficult for pilots to distinguish between airport lights and other lights, results in glare in the eyes of pilots using the airport, impairs visibility in the vicinity of the airport, or otherwise endangers the landing, taking off, or maneuvering of aircraft.
2. Safety Zone 1. Areas designated as Safety Zone 1 shall contain no buildings, temporary structures, exposed transmission lines, or other similar above-ground land use structural hazards, and shall be restricted to those uses which will not create, attract, or bring together an assembly of persons thereon. Permitted uses may include agricultural use, resource extraction use, horticulture, animal husbandry, raising of livestock, wildlife habitat, light outdoor recreation (non-spectator), cemeteries, and automobile parking, and as allowed in 50-19.8;
3. Safety Zone 2. The following classifications of building and structures as to use and occupancy according to the 2020 Minnesota State Building Code, or its successor, are prohibited: Group A Uses; Group E Uses; Group I-2 Uses; and Group R-1 Uses. Other uses not specifically prohibited by this section, and as allowed in 50-19.8, must be on a site whose area is at least two and one-half (2.5) acres. Each use shall not create, attract, or bring together a site population in excess of 20 persons per acre during the same time period; density as calculated pursuant to the 2020 Minnesota State Building Code, or its successor;
4. Safety Zone 2.5. The following classifications of building and structures as to use and occupancy are prohibited: Childcare or daycare centers; State licensed residential care facilities and housing with service establishments serving 7 or more persons; State licensed adult daycare facility serving 13 or more persons; State licensed group family daycare facility serving 13 or more children; public or private school; and public or private hospital;
5. Safety Zone 3: Areas designated as Safety Zone 3 are only subject to the restrictions set forth in Section 50-18.2.E.1, and as allowed in 50-19.8.

#### **F. DLH Airport Zoning Map**

The Airport Zoning Map, together with map and all notations, references, elevation, data, zone boundaries, and other information thereon, shall be referred to in this section are adopted in its entirety.

#### **G. DLH Existing Uses and Structures**

The regulations prescribed by Section 50-18.2 shall not be construed to require the removal, lowering, or other changes or alteration of any existing use, lot, structure, or tree or otherwise interfere with the continuance of any such use or structure, or tree after December 14, 2021.

#### **H. DLH Permits and Orders to Remove Use or Structure or Tree**

1. Permit Standards. Permit applications shall be made to the Land Use Supervisor pursuant to Sec. 50-37.13. . Copies of applications for permits shall be provided to the DAA.
2. Permit Required. The following structures or uses shall not be allowed in a Safety Zone 2 unless a Permit has first been approved pursuant to Sec. 50-37.13:
  1. Material expansion of an Existing Structure or Use. Permit required.
  2. New structures or uses. Permit required.
  3. Abandoned Non-Conforming Structure. Permit required for structure to be re-used, rebuilt or replaced.
  4. Substantially Damaged Non-Conforming Structure. Permit required to rebuild, repair, or replace.
  5. Material Change in Non-Conforming Use. Permit required before material change in use may occur.
3. Order to Remove Use, Structure, or Tree. Whether application is made for a Permit under this subdivision or not, the Land Use Supervisor may by appropriate action compel the owner of any Structure, use, or tree, at the owner's expense, to lower, remove, reconstruct, or equip the object as may be necessary to conform to the regulations of the Duluth International Airport Zoning Ordinance. If the owner of the Structure, use, or tree neglects or refuses to comply with the order for ten days after notice of the order, the Land Use Supervisor may take whatever lawful actions they deem necessary and appropriate to obtain compliance with the provisions of the Duluth International Airport Zoning Ordinance.

#### **I. DLH Variances**

Any person desiring to erect or increase the height of any structure, permit the growth of any tree, or use property in a way prohibited by this section, may apply for a variance as established in Section 9, 11, 12, and 14 of the Duluth International Airport Zoning Ordinance, created by the Duluth International Airport Joint Zoning Board, recorded in the St. Louis County Recorder's Office as Document Number 01432556.

#### **J. DLH Hazard Marking and Lighting**

The Land Use Supervisor or the Board of Adjustment for the Duluth International Airport Joint Airport Zoning Board (BOA) may condition any Permit or Variance granted so as to require the owner of the Structure or tree or use in question at their own expense, to install, operate, and maintain thereon such markers and lights as may be necessary to indicate to pilots the presence of an Airport Hazards.

#### K. DLH Airport Zoning Administrator

It shall be the duty of the Land Use Supervisor to enforce the regulations prescribed by this section. Permit applications shall be made to the Land Use Supervisor for that jurisdiction. Copies of Permit applications shall be provided to the DAA. Permit applications shall be promptly considered and granted or denied pursuant to the regulations by the Land Use Supervisor. Variance applications shall be made to both the Land Use Supervisor and the BOA. Copies of Variance applications shall be provided to the DAA.

#### L. DLH Limited Land Use Exemption For Aeronautical Purposes

The restrictions of this section or any other section of the UDC shall not control the use of land or the height of structures on land owned by the City of Duluth, the State of Minnesota, the Duluth Airport Authority, or the United States of America and used by the Duluth Airport Authority solely for aeronautical purposes.

#### M. General, Conflicts

Where there exists a conflict between any of the regulations or limitations prescribed in this section and any other regulations applicable to the same area, the more stringent limitation or regulation shall govern and prevail.

#### N. Sky Harbor Regional Airport, Safety Zones

For the Sky Harbor Regional Airport, the following land use safety zones are established:

1. Safety Zone A. All land in that portion of the approach zones of a runway, that extends outward from the end of primary surface a distance equal to  $\frac{2}{3}$  of the planned length of the runway, which distance is 2,230 feet for Sky Harbor Regional Airport runway 14-32;
2. Safety Zone B. All land in that portion of the approach zones of a runway that extends outward from Safety Zone A a distance equal to  $\frac{1}{3}$  of the planned length of the runway, which distance is 1,120 feet for Sky Harbor Regional Airport runway 14-32;
3. Safety Zone C. All that land that is enclosed within the perimeter of the horizontal zone and that is not included in Safety Zone A, Safety Zone B, or the exempted parcels referred to below.
4. Exemptions. Land uses that existed as of January 1, 1994, for Sky Harbor Regional Airport, and that were established residential neighborhoods in built-up urban areas on those dates, are subject to the height restrictions above, but are not subject to the additional restrictions in subsections 1 or 2 above. Land uses that came or come into existence after those dates, are treated as though they were or are not in a listed established residential neighborhood and are subject to the restrictions in subsections 1 or 2 above, as applicable based on the location of the property.

## O. Sky Harbor Regional Airport, Land Use Restriction

### 1. General.

No use shall be made of any land in any land use safety zone that creates or causes interference with the operations of radio or electronic facilities on the airport or with radio or electronic communications between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and other lights, results in glare in the eyes of pilots using the airport, impairs visibility in the vicinity of the airport or otherwise endangers the landing, taking off or maneuvering of aircraft;



### 2. Zone A.

Areas designated as Zone A shall contain no buildings, temporary structures, exposed transmission lines, or other similar above ground land use structural hazards, and shall be restricted to those uses that will not create, attract or bring together an assembly of more than 100 persons on the property. Permitted uses may include but are not limited to: agriculture (seasonal crops), horticulture, animal husbandry, raising of livestock, wildlife habitat, light outdoor recreation (non spectator), cemeteries and automobile parking;

### 3. Zone B.

Areas designated as Zone B shall be restricted in use as follows:

- (a) Each use shall be on a site of not less than three acres;
- (b) Each use shall not create, attract or bring together a site population that would exceed 15 times that of the site acreage. Compliance with this subsection shall be determined by multiplying the number of required parking spaces for each use on the site by the vehicle occupancy rates for each use on the site, as provided in Table 50-18.2.-1;

**TABLE 50-18.2-1: Vehicle Occupancy Rates**

Land Use	Vehicle Occupancy Rate
Industrial / Storage / Transportation	1.2
Educational	1.2
Health Care	1.7
Retail Store	1.5
Restaurant / Community and Cultural Facility / Recreational	2.0

**Example:** The site population for a 1,500 sq. ft. restaurant is calculated as follows: 15 (i.e., 1 parking space per 100 sq. ft.) X 2.0 (i.e., vehicle occupancy rate) = 30 people. Therefore, the site would need to be at least 2 acres in size to meet the 15 people / acre maximum site population limit.

- (c) Each site shall have no more than one building plot upon which any number of structures may be erected;

- (d) A building plot shall be a single, uniform and non-contrived area, whose shape is uncomplicated and whose area shall not exceed the following minimum ratios with respect to the total site area:

TABLE 50-18.2-2: Ratio of Site Area to Building Area		
Site area	Ratio of site area to building plot area	Building plot area (sq. ft)
3.00 – 3.99 acres	12:1	10,900
3:00 – 5.99 acres	10:1	17,400
6:00 – 9.99 acres	8:1	32,700
10:00 – 19.99 acres	6:1	72,600
20:00 acres or more	4:1	218,000

(e) The following uses are specifically prohibited in Zone B: churches, hospitals, schools, theaters, stadiums, hotels, motels, trailer courts, campgrounds and other places of frequent public or semi public assembly;

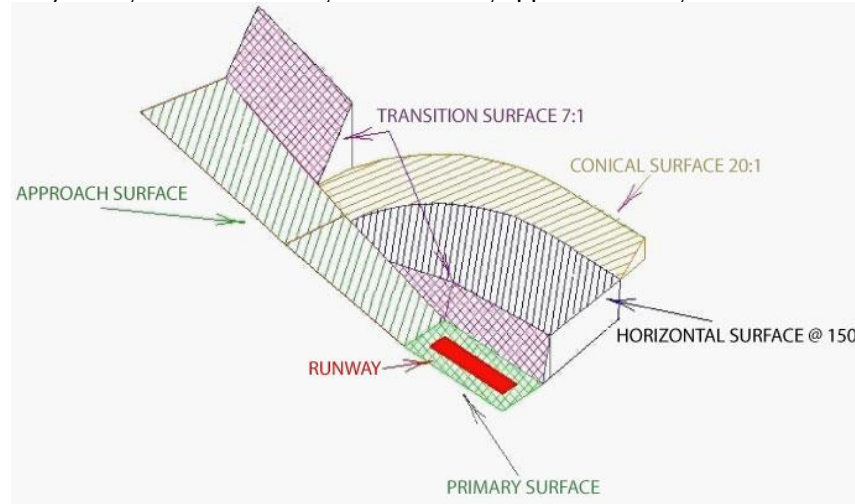
4. Zone C.

Zone C is subject only to height restrictions set forth in subsection D above and to the general restrictions contained in subsection 1 above;

P. Sky Harbor Regional Airport (DYT), Land Affected

1. Air space zones.

In order to carry out the purpose of this Section, the following air space zones are hereby established: primary zone, horizontal zone, conical zone, approach zone, and transitional zone;



2. Primary zone.

All land that lying directly under an imaginary primary surface longitudinally centered on a runway and (a) extending 200 feet beyond each end of Sky Harbor Regional Airport Runway 14-32 and (b) coinciding with each end of Runway 14-32. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is 500 feet for Sky Harbor Regional Airport Runway 14-32;

3. Horizontal zone.  
All land lying directly under an imaginary horizontal surface 150 feet above the established airport elevation, or a height of 760 feet above mean sea level for Sky Harbor Regional Airport, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is 6,000 feet for Sky Harbor Regional Airport Runway 14-32;
4. Conical zone.  
All land lying directly under an imaginary conical surface extending upward and outward from the periphery of the horizontal surface at a slope of 20:1 for a horizontal distance of 4,000 feet as measured radially outward from the periphery of the horizontal surface;
5. Approach zone.  
All land lying directly under a surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is applied to the end of a runway based on the type of approach available or planned for that runway.  
(a) The inner edge of the approach surface is the width as the primary surface and it expands uniformly to a width of: (i) 1,250 feet for that end of a utility runway with only visual approaches; (ii) 1,500 feet for that end of a runway other than a utility runway with only visual approaches; (iii) 2,000 feet for that end of a utility runway with a nonprecision instrument approach; (iv) 3,500 feet for that end of a nonprecision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile; (v) 4,000 feet from that end of a nonprecision instrument runway, other than utility, having a nonprecision instrument approach with visibility minimums as low as three-fourths statute mile; and (vi) 16,000 feet for precision instrument runways;  
(b) The approach surface extends for a horizontal distance of (i) 5,000 feet at a slope of 20:1 for all utility and visual runways; (ii) 10,000 feet at a slope of 34:1 for all nonprecision instrument runways other than utility, and (iii) 10,000 feet at a slope of 50:1 with an additional 40,000 feet at a slope of 40:1 for all precision instrument runways;  
(c) The outer width of an approach surface to an end runway will be that width prescribed in this subsection 5 for the most precise approach existing or planned for that runway end;
6. Transitional zone.  
All land lying directly under surfaces that extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7:1 from the sides of the primary surface and from the sides of the approach surfaces. Transitional surfaces for those portions of the precision approach surface that project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at right angles to the runway centerline;
7. Height restrictions.  
Except as necessary and incidental to airport operations, no structure or tree shall be constructed, altered, maintained or allowed to grow in any air space obstruction zone so as to project above any of the imaginary air space surfaces described in subsections 1 through 6. Where an area is covered by more than one height limitation, the more restrictive limitation shall apply;
8. Traverse ways.  
For the purpose of determining height limits in this Section 50-18.2, traverse ways shall be increased in height by 17 feet for interstate highways; 15 feet for all other public roadways; ten feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for private roads; 23 feet for railroads; and for waterways and all other traverse ways not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it;

Q. Sky Harbor **Regional** Airport, Variances

Variances to this section, as it applies to land on, near, or around the Sky Harbor Regional Airport, shall be administered as provided in 50-37.9.



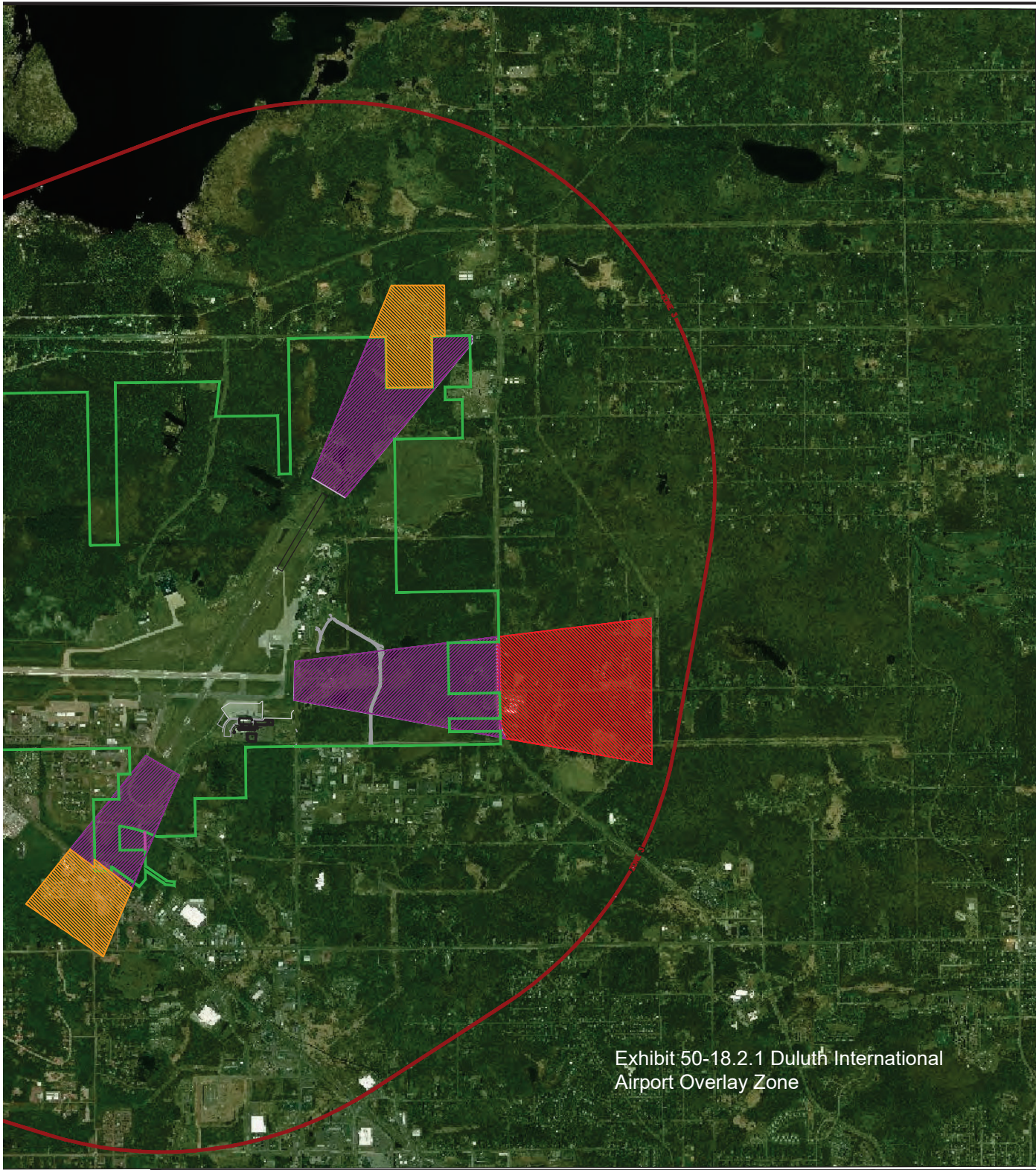







Exhibit 50-18.2.1 Duluth International Airport Overlay Zone



### ZONING LEGEND

AIRPORT PROPERTY BOUNDARY	
FUTURE AIRPORT PROPERTY	
ZONE 1	
ZONE 2	
ZONE 2.5	
ZONE 3	