

ARTICLE XI

AIRPORT OVERLAY DISTRICT

- 11-101. AO, Airport Overlay District. This district is intended to promote the use and development of land in a manner that is compatible with the continued operation and utility of the Manhattan Municipal Airport so as to protect the public investment in, and benefit provided by the facility to the region. The district also protects the public health, safety, convenience, and general welfare of citizens who utilize the facility or live and work in the vicinity by preventing the creation or establishment of obstructions or incompatible land uses that are hazardous to the airport's operation or the public welfare.
- 11-102. Applicability. This Article is to be applied as an overlay district, to lands which are in the vicinity of the Manhattan Municipal Airport, in combination with an appropriate underlying zoning district. The district may also be used independently for the purpose of zoning the property of the Manhattan Municipal Airport.
- 11-103. Definitions. In addition to the definitions set forth in Article XVI, the following definitions shall apply specifically to this Article. In the event that there is a conflict between definitions in Article XVI and this Article, those in this Article shall control.
- (A) Airport: Manhattan Municipal Airport.
 - (B) Airport Elevation: The elevation in feet above sea level as identified on the Airport Layout Plan.
 - (C) Airport Zoning Commission: Manhattan Urban Area Planning Board.
 - (D) Approach Surface: A surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in Section 11-105 of this Article. In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.
 - (E) Approach, Transitional, Horizontal, and Conical Zones: These zones are set forth in Section 11-104 of this Article.
 - (F) Conical Surface: A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

- (G) Hazard to Air Navigation: An obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace.
- (H) Height: For the purpose of determining the height limits in all zones set forth in this Article and shown on the Official Manhattan Municipal Airport Zoning Map, the datum shall be mean sea level elevation unless otherwise specified.
- (I) Horizontal Surface: A horizontal plane 150 feet above the established airport elevation, the perimeter of which in plan coincides with the perimeter of the horizontal zone.
- (J) Larger Than Utility Runway: A runway that is constructed for and intended to be used by propeller driven aircraft of greater than 12,500 pounds maximum gross weight and jet powered aircraft.
- (K) Nonconforming Use: Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Article.
- (L) Nonprecision Instrument Runway: A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved or planned.
- (M) Obstruction: Any structure, growth or object, including a mobile object, which exceeds a limiting height set forth in Section 11-105 of this Article.
- (N) Overlay District: A zoning district that places additional restrictions and requirements upon land that is currently zoned.
- (O) Person: An individual, firm, partnership, corporation, company, association, joint stock association or government entity; includes a trustee, a receiver, and assignee, or a similar representative of any of them.
- (P) Precision Instrument Runway: A runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS) or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated on an approved airport layout plan or any other planning document.
- (Q) Primary Surface: A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; for military runways when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The width of the primary surface is set forth in Section 11-104 of this Article. The elevation of any point on the

primary surface is the same as the elevation of the nearest point on the runway centerline.

- (R) Runway: A defined area on an airport prepared for landing and take-off of aircraft along its length.
- (S) Structure: An object, including a mobile object, constructed or installed by man, including but without limitation, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.
- (T) Transitional Surfaces: These surfaces extend outward at ninety (90) degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which 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 ninety (90) degree angles to the extended runway centerline.
- (U) Tree: Any object of natural growth.
- (V) Utility Runway: A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.
- (W) Visual Runway: A runway intended solely for the operation of aircraft using visual approach procedures.

11-104. Airport Zones. In order to carry out the provisions of this Article, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces, and within the mapped boundaries of the Airport Noise Exposure Zone, as they apply to the Manhattan Municipal Airport. These zones constitute the Airport Overlay District. The boundaries and locations of such zones are identified on the Official Manhattan Municipal Airport Zoning Map and made a part hereof. Any area located in more than one (1) of the following zones, except the Airport Noise Exposure Zone, is considered to be only in the zone with the more restrictive height limitation. Any area may be located in the Airport Noise Exposure Zone in combination with any other zone. The various zones are hereby established and defined as follows:

- (A) Airport Noise Exposure Zone: The area contained within the boundaries of the Ldn 65 decibel noise contour.
- (B) Conical Zone: The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outward therefrom a

horizontal distance of 4,000 feet.

- (C) Horizontal Zone: The horizontal zone is established by swinging arcs of 10,000 feet radii from the center of each end of the primary surface of each larger than utility runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
- (D) Precision Instrument Runway Approach Zone: The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach expands outward uniformly to a width of 16,000 feet at a horizontal distance of 50,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
- (E) Runway Larger Than Utility Visual Approach Zone: The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 1,500 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
- (F) Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone: The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone extends outward uniformly to a width of 3,500 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
- (G) Transitional Zones: The transitional zones are the areas beneath the transitional surfaces.
- (H) Utility Runway Nonprecision Instrument Approach Zone: The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone extends outward uniformly to a width of 2,000 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
- (I) Utility Runway Visual Approach Zone: The inner edge of the approach zone coincides with the width of the primary surface and is 250 feet wide. The approach zone expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

- 11-105. Airport Zone Height Limitations. Except as otherwise provided in this Article, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow in any zone created by this Article to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:
- (A) Conical Zone: Slopes twenty (20) feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.
 - (B) Excepted Height Limitations: Nothing in this Article shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree to a maximum height of fifty (50) feet above the surface of the land, provided that the maximum structure height shall also not exceed the bulk regulations of the applicable underlying zoning district.
 - (C) Horizontal Zone: Established at 150 feet above the airport elevation.
 - (D) Precision Instrument Runway Approach Zone: Slopes fifty (50) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline; thence slopes upward forty (40) feet horizontally for each foot vertically to an additional horizontal distance of 40,000 feet along the extended runway centerline.
 - (E) Runway Larger Than Utility Visual Approach Zone: Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
 - (F) Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone: Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extending runway centerline.
 - (G) Transitional Zones: Slope seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation. In addition to the foregoing, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface. Where the precision instrument runway approach zone projects beyond the conical zone, there are established height

limits sloping seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending a horizontal distance of 5,000 feet measured at ninety (90) degree angles to the extended runway centerline.

- (H) Utility Runway Nonprecision Instrument Approach Zone: Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
- (I) Utility Runway Visual Approach Zone: Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.

11-106. Permitted Uses and Conditional Uses.

- (A) Where the AO District is used as an independent zoning district.
 - (1) Since the AO District, when used as an independent district, shall apply only to the property of the Manhattan Municipal Airport which is owned and operated by the City of Manhattan, permitted uses shall include any use that is compatible with the operation of the Airport and is approved by the Governing Body of the City, subject to the use limitations of this Article.
 - (2) There shall be no conditional uses.
- (B) Where the AO District is applied as an overlay district.
 - (1) Permitted uses shall consist of any permitted use allowed by the underlying zoning district, subject to the height limitations and use limitations of this Article as well as all restrictions of the underlying zoning district.
 - (2) Conditional uses shall consist of any conditional use allowed by the underlying zoning district, subject to the height limitations and use limitations of this Article as well as all restrictions of the underlying zoning district.

11-107. Use Limitations.

- (A) Notwithstanding any other provisions of these regulations, no use may be made of land or water within any zone established by this Article in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft; make it difficult for pilots to distinguish between airport lights and other lights; result in glare in the eyes of pilots using the airport; create bird strike hazards; impair visibility in the vicinity of the airport; or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.
- (B) The following land uses shall be prohibited from all land within the boundaries of the Airport Noise Exposure Zone:
 - (1) Residential uses.
 - (2) Manufactured Home Parks.
- (C) The following uses shall be conditional uses within the Airport Noise Exposure Zone, provided they are also listed as permitted or conditional uses in the underlying district:
 - (1) Hotels, lodging/boarding houses, bed and breakfast.
 - (2) Hospitals, nursing homes, retirement complexes.
 - (3) Schools.
 - (4) Churches, chapels, temples and synagogues.
 - (5) Auditoriums and concert halls.
- (D) As a condition of approval for conditional uses located in the Airport Noise Exposure Zone, the Board of Zoning Appeals shall require appropriate noise attenuation techniques in the design and construction of buildings for these uses.

11-108. Obstruction Marking and Lighting of Legally Nonconforming Structures. The owner of any legally nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the City of Manhattan to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction.

- 11-109. Removal of Abandoned or Destroyed Nonconforming Structures and Trees. Whenever a legally nonconforming structure or tree is abandoned or has been damaged or destroyed, by any means, to the extent of more than 50% of its value, the City may require its removal unless it is made to conform with the applicable height limitations of these regulations.
- 11-110. Airport Compatible Use Permits.
- (A) Future Uses: Except as specifically provided in subparagraphs 1, 2 and 3, hereunder, no structure shall be erected or otherwise established, and no existing use or structure shall be changed, altered, replaced, or repaired, and no tree shall be planted or replaced in any zone hereby created unless an Airport Compatible Use Permit shall have been applied for and granted. Each application for a permit shall indicate the purpose for which the permit is desired, and shall contain in complete form all information requested on the application to determine whether the resulting use, structure, or tree would conform to the regulations herein prescribed. No permit for a use inconsistent with the provisions of this Article shall be granted unless an exception has been approved in accordance with Article XIV, Part 6, Exceptions.
- (B) Circumstances when an Airport Compatible Use Permit is not required:
- (1) In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure having less than seventy-five (75) feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.
 - (2) In areas lying within the limits of the approach zones but at a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure having less than seventy-five (75) feet of vertical height above the ground, except when such tree or structure would extend above the height limit prescribed for such approach zones.
 - (3) In the areas lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure having less than seventy-five (75) feet of vertical height above the ground, except when such tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for such transition zones.

- (C) Nothing in this section shall be construed as permitting or intending to permit any construction, or alteration of any structure, or growth of any tree in excess of any of the height limitations established by these regulations.
- (D) Permits for Legally Nonconforming Structures and Trees: No permit shall be granted that would allow the establishment or creation of an obstruction, or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of these regulations or any amendments thereto, or than it is when the application for a permit is made.
- (E) Obstruction Marking and Lighting: Any permit granted may be so conditioned as to require the owner of the structure or tree in question to permit the City of Manhattan to install, operate, and maintain thereon such obstruction markings and lights as may be necessary.