



Chatham Municipal Airport

Obstruction Removal/Easements
Workshop

September 21, 2022



Workshop Overview

- Airport Master Plan
- Obstruction Analysis
- FAA Requirements
- Avigation Easements
- Environmental Review/Permitting
- Tree Clearing
- Questions/Answers



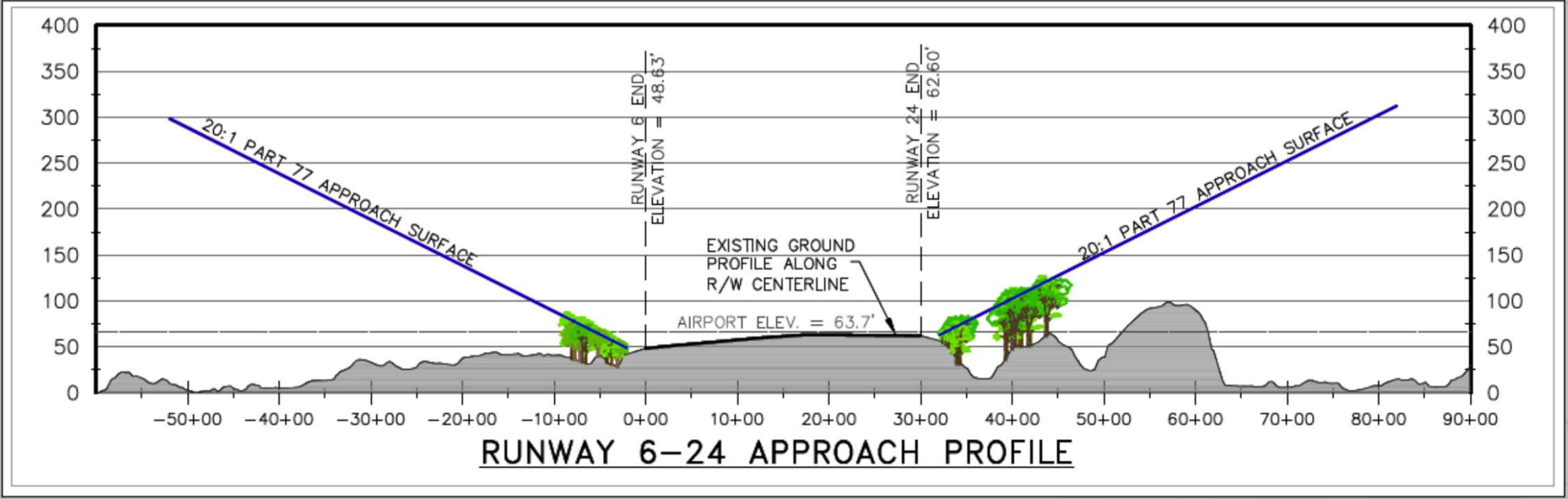
Airport Master Plan

- In 2018, Chatham Municipal Airport was awarded an FAA grant to update its Airport Master Plan and Airport Layout Plan.
- A current, FAA approved Airport Layout Plan, depicting both existing facilities and planned developed for an airport is a prerequisite for issuance of funding for capital future improvements.
- The 2018 Airport Master Plan reviewed the adequacy of various airfield facilities, including the Airport's approaches, based on physical condition, compliance with FAA safety standards, and anticipated demand.
- In addition to the Master Plan, an update to the Airport's Stormwater Pollution Prevention Plan (SPPP), Spill Prevention, Control and Countermeasures (SPCC) plan, and a Wildlife Hazard Management Plan were completed.

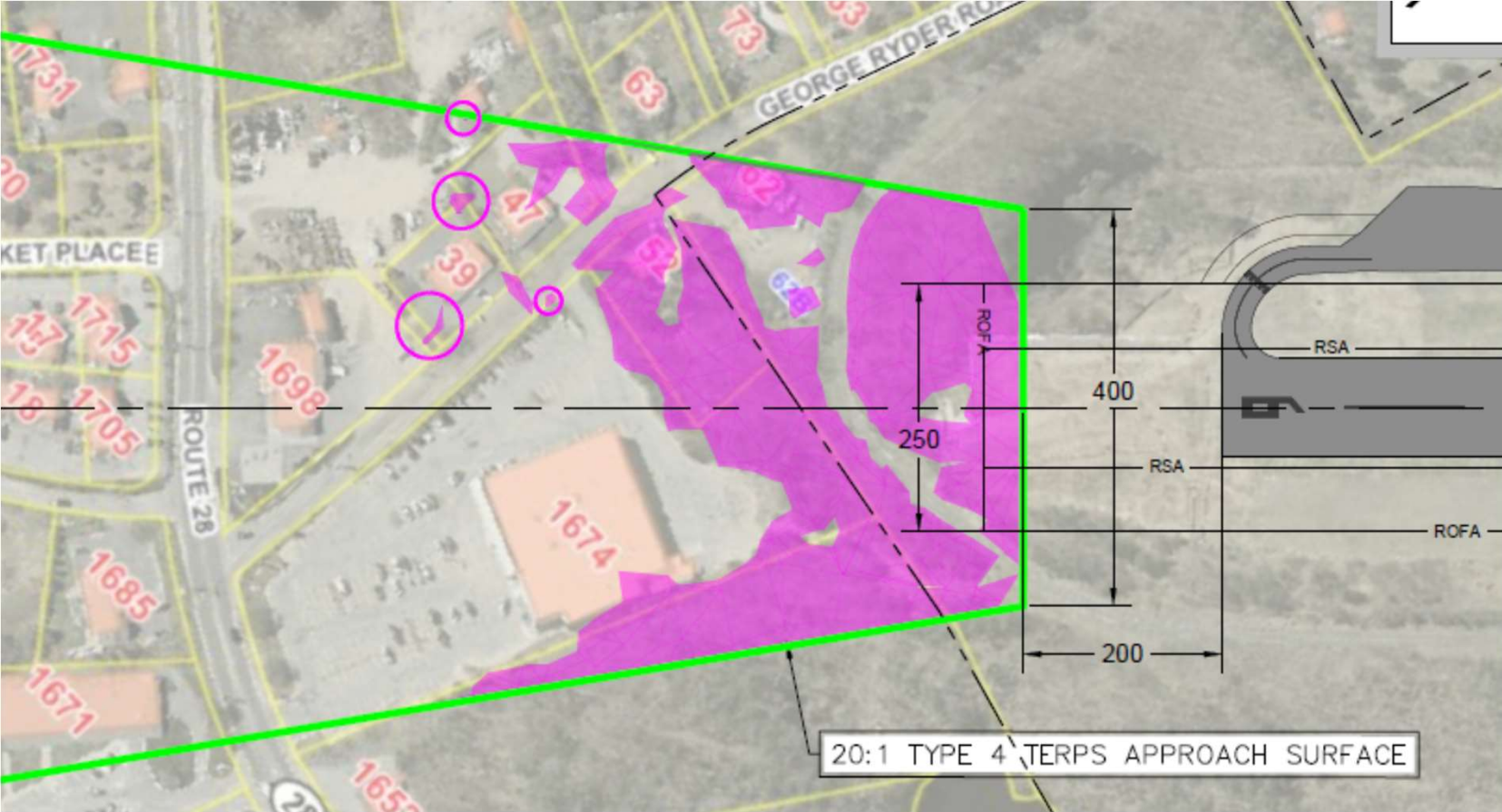
Obstruction Analysis

- The 2018 Master Plan Update included aerial mapping of the Airport's Runway 06-24 Approach Surfaces.
- The purpose of the aerial mapping was to identify all obstructions and near obstructions (within 10 feet of each surface), and identify the type of obstruction (i.e., tree, building, pole, etc.).
- Obstructions to the Airport's Runway 06-24 Approach Surfaces were further evaluated as part of the 2020 Environmental Assessment project.
- The obstruction analysis identified obstructions (trees) on 8 off-airport parcels in the Runway 06 end, and 12 off-airport parcels in the Runway 24 end.

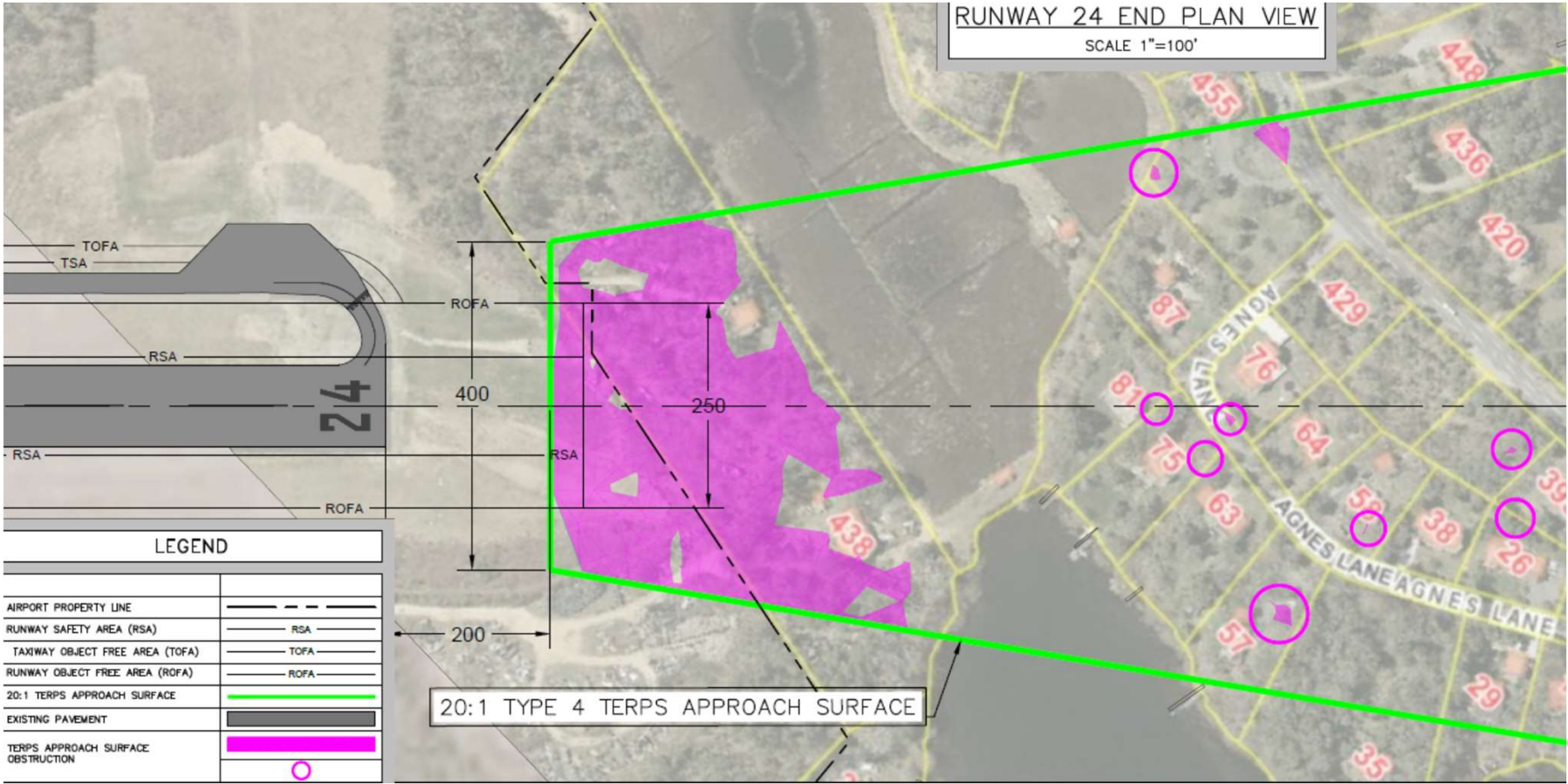
Obstruction Analysis



Obstruction Analysis



Obstruction Analysis



FAA Requirements

The FAA's primary goal is enhancing airport safety for airport users and the public. Obstructions to an airport's approach surface represents one of the highest safety concerns of the FAA. Airport safety is enforced through various regulations, advisory documents, and grant assurances.

- FAA Grant Assurances
- Grant Assurance #19- Operation and Maintenance:
- Grant Assurance #20- Hazard Removal and Mitigation:

Avigation Easements

- What is an avigation easement?
 - “An avigation easement is a conveyance of airspace over another property for use by the airport. The owner of an easement-encumbered property (i.e., servient property) has restricted use of their property subject to the airport sponsor’s easement (i.e., dominant property) for overflight and other applicable restrictions on the use and development of the servient parcel.”
 - “Avigation easements are typically acquired for airspace requirements as indicated on the airport layout plan, including the approach project zone (APZ) layout.”
 - In the case of Chatham Municipal Airport, avigation easements would be acquired to remove existing tree penetrations to the Airport’s approach surfaces, prevent future tree growth into the approach surfaces, and grant rights of ingress/egress onto the land to exercise the rights acquired.

Source: FAA AC 150/5100-17

Avigation Easements: How Airports Purchase Airspace Rights

- What is the process for acquiring (i.e., purchasing) an avigation easement?
 - Survey
 - Appraisal
 - Review Appraisal
 - Just Compensation
 - Negotiations

Environmental Review/Permitting

- Environmental Assessment: In 2020, the Airport completed an Environmental Assessment in accordance with the National Environmental Policy Act. Projects explored as part of the Environmental Assessment included easement acquisitions for the removal of airspace obstructions, vegetative and manmade obstruction removal in approaches and primary surface.
- The Wetlands Protection Act regulations (310 CMR 10.00) administer the Massachusetts Wetlands Protection Act, which controls vegetation management plan activities in and near wetlands. An airport vegetation removal project may be included in the Limited Project provision (310 CMR 10.53(3)(n)) if it meets the following criteria:
 - The project is undertaken to comply with Federal or State regulations, advisories or orders regarding navigable airspace which must remain free of obstructions;
 - The need for compliance with State and Federal regulations, advisories or orders regarding navigable or other airspace which must remain free of obstruction is certified by MassDOT Aeronautics.
- The MA Wetland Protection Act allows for vegetation management at airports as a Limited Project Status, but requires that vegetation management must be done with careful design and precautions to minimize adverse effects on wetlands. In 2020, the Airport prepared a Vegetation Management plan specifically for this purpose.
- Projects within jurisdictional wetlands would require the filing of a notice of intent with the Chatham Conservation Commission.
- Cape Cod Commission coordination with jurisdictional areas TBD.

Tree Clearing

- When FAA funds are expended to complete tree clearing projects, the work must be put out to bid.
- Gale provides full-time, onsite resident engineering to oversee tree clearing. Gale will observe the work being completed in accordance with the plans and specifications, including restoration efforts on off-airport property.
- Restoration efforts typically include:
 - Removal of cut trees, and debris
 - Grinding of stumps below grade
 - Loam/seeding of areas to match existing lawn areas
 - Trees cut within forested areas are restored to match the existing forested condition

Next Steps

- Meet with Town Personnel to discuss recent discussions with property owners.
- Capital Improvement Program meeting with the FAA and MassDOT to discuss funding and programming of aviation easements, permitting and tree clearing.

Questions and Comments

