



## **Frequently Asked Questions and Answers**

### **Bowman Field Airport Area Safety Program**

#### **1. What is the proposed Bowman Field Airport Area Safety Program?**

The proposed Bowman Field Airport Area Safety Program has been designed to comply with new, more stringent FAA safety standards that are now in effect at Bowman Field to protect aircraft and surrounding neighborhoods **and** to minimize, as much as possible, the new standard's impact on our neighbors' trees.

Simply put, the new standards lower/flatten the airspace an aircraft must use when arriving or departing from an airport. The practical impact is that the airport now must manage the height of trees from wider areas of airspace surrounding it. **(See page 8)**

#### **2. When did you find out about these standards? Why are you just now telling us?**

We learned about these new standards about a year ago when we updated our FAA-required Airport Layout Plan for Bowman Field. As these were new standards, we asked for clarification from the FAA and it took time for them to confirm that the standards are required for Bowman Field. Then we worked with our airspace consultants to determine what the impacts might be on our neighbors, what the FAA would fund and develop a plan to supplement the FAA's funding.

#### **3. What if you don't shape/trim or remove the trees?**

Bowman Field is a reliever airport for Louisville International and an essential component of the community's airport system. If the necessary trees aren't shaped or removed, the operating utility of the airport would change—meaning that the type of aircraft that could use the airport would be limited and that could force businesses to leave the airfield and possibly our community.

#### **4. If you shape/trim and/or remove the trees, will that allow different and larger aircraft to use the airfield?**

No. The aircraft fleet mix currently using Bowman Field will not change because of this effort.

#### **5. Specifically, what areas will be impacted?**

The areas involved are off the four runway ends of the two runways at Bowman Field. Two of those involve Seneca Park and Big Spring Country Club. The other areas are south/southeast (off the end of Runway 33) and west (off the end of Runway 6) and impact parts of the Seneca Gardens and Kingsley neighborhoods. **(See map on page 9)**

#### **6. What is the FAA's deadline?**

The FAA has not given us a firm deadline, which is why we anticipate this to be a multi-year program (driven by available funding). We plan to start with the tallest, most critical trees. Once those trees have been addressed, we'll evaluate the areas closest to the airport runways.

## **7. Will the tree in my yard be shaped/trimmed or removed?**

At this time, we don't know. It will take a property-by-property review to determine which homeowners will be impacted. At this point, it is anticipated that preliminary survey work needed to submit to the FAA will be conducted in the spring of 2012. (Of course, we will send notices to our neighbors before we start this work.) As the program is not scheduled to be fully implemented until July 1, 2012, any tree shaping/removal won't take place until at least late fall of 2012 or early winter 2013 **and** after we meet with each neighbor whose trees will need to be shaped/trimmed or removed.

## **8. How tall are the trees that will need to be shaped/trimmed or removed?**

There isn't a specific height. It varies because it depends on the tree's distance from the runway and the elevation of an individual's property. **(See page 10 for a diagram of tree heights compared to typical residential homes.)**

## **9. Will homeowners have to pay to have their trees removed or shaped/trimmed?**

No. There will be no cost to the homeowner. To minimize the impact to our neighbors, the proposed safety program includes funding from the Airport Authority (supplementing FAA funds) so that the program will include the following:

- Avigation easement purchases
- Tree shaping/trimming or removal
- Two, low-canopy ornamental (such as Crabapples, Dogwoods and Redbuds) or deciduous trees (from a list compiled by a certified arborist for use in our region) for each tree removed
- Yard restoration
- Re-landscaping allowance up to \$2,500

## **10. What is an avigation easement?**

An easement is permission granted by a property owner. It gives someone other than the property owner a right related to the property. For example, when you bought your home, you may have discovered that the property included an easement allowing your water, electric or gas utility to run pipes or lines across your yard to your home.

An **avigation easement** is similar. When an avigation easement is purchased, the property owner grants the airport permission to shape/trim/remove trees that grow into restricted airspace over their property and for aircraft to fly above or near the property.

## **11. What happens if the replacement tree dies?**

Replacement trees will carry a two-year warranty and all new landscaping planting will carry a one-year warranty.

## Frequently Asked Questions and Answers From Our Neighbors

- 12.** What about trees that are below the acceptable threshold, but are expected to grow over the years (i.e. I have an oak in my yard that is only 20 feet tall now, but could easily exceed 60 feet at some time in the future). Will the LRAA have to go through a similar easement acquisition from me in the future or is it assumed to have been granted by the lack of a tree at present time?

Trees that do not penetrate the TERPS departure surface today, but grow into it in the future will need to be removed or trimmed when they grow too tall. Nothing is automatically granted or assumed. The Airport Authority must work with the property owner to obtain an easement and then coordinate trimming or removing any trees.

- 13.** There is a concern of a lack of diverse trees available for replacement of canopy trees. Many would like to see more than dogwoods and redbuds available to homeowners. Is LRAA willing to consider a larger variety of replacement trees, and can a list be made available in the near future? The City of Kingsley and its residents have invested quite a bit of money over the last decade to not only plant canopy trees, but insure that the tree inventory is not too heavy with any particular tree species, so if disease were to hit a particular species, overall tree loss within the city would be minimal.

The proposed program includes hiring an arborist to determine specific trees that will meet the height requirements and grow well in this geographical region. The Authority simply has used examples of trees (dogwoods and redbuds) to help people visualize what we mean when we say, "low-canopy trees."

- 14.** Has the FAA been made aware of this public meeting, and are they planning to attend? Several residents have raised the issue that if the LRAA is placing the blame on the shoulders of the FAA, they should have someone available (or at least invited to attend). Who is the local contact with the FAA should residents wish to speak or correspond with them?

The FAA was aware of both LRAA-initiated public workshops/informational briefings. The FAA did not attend either one. There is not a local FAA contact for airspace planning issues.

- 15.** Can you make a copy of the revised Bowman Field Airport Area Safety Plan available for public review? Electronic would be preferable.

The current Bowman Field Airport Area Safety Program plan is in draft form as it has not been formally presented to or adopted by the LRAA's Board of Directors. However, a **copy of the draft program is available on this web page via a separate link.**

- 16.** In the December 19<sup>th</sup> meeting, it was explained by LRAA representatives that the existing man-made structures were not subject to the new height requirements imposed by the FAA (utility poles and wires on Taylorsville Road, billboards, homes and even a hangar at Bowman Field are all protrude above the 40:1 ratio from runway #6). In the FAA code reference

**provided by the LRAA, there are no references that I can find that call for this only to apply to vegetation. Where specifically in the code does it mention that this only applies to vegetative obstacles, and that other obstacles are not subject to this code?**

The internal policies and practices of the FAA focus on vegetative growth when applied to existing conditions to meet new standards. The newly developed, draft airport layout plan for Bowman Field reflects this determination by the FAA.

**17. Is the LRAA confident in the starting points of the trapezoids defining the outline of the impact zone? Moving in either direction on the runway has a dramatic impact on the City of Kingsley and Seneca Gardens.**

The starting and ending points of the trapezoids are defined by specific measurements and parameters of the airfield; to move the trapezoids would require changes to these measurements. The trapezoids are representative of the TERPS departure surface based on these airfield measurements.

**18. Is the preferred method of tree obstruction abatement to “top trees” or remove them entirely?**

Whether to trim or remove a tree will be the focal point of the discussion between the property owner and the proposed program’s arborist. If the recommendation is to remove the tree, but the property owner wants to keep the tree, we will trim it. However, if the tree dies, then the property owner will be responsible for removing it and won’t be eligible for the 2:1 tree-replacement offer that is part of the proposed program.

**19. Can you provide a copy of the easement language?**

The aviation easement language has not yet been developed, as the program has not been implemented. However, a key component of the proposed program is for the yet-to-be-selected consultant team to develop the aviation easement document.

**20. Have there been any studies with regard to air quality in and around Bowman Field and its neighborhoods, particularly with regard to certain chemicals, like nitrogen oxide, lead and other emissions?**

An emissions inventory was completed for Bowman Field in 2007. The inventory covered criteria pollutants such as Particulate Matter, Sulfur Dioxide, Oxides of Nitrogen and Volatile Organic Compounds. The inventory was accomplished to provide input to Metro Louisville’s Air Pollution Control District for the update of the State Implementation Plan (SIP).

**21. How many homes have already been purchased by LRAA for aviation easement rights?**

The Authority has purchased aviation easements from property owners adjacent to the airport, but the purchase of an aviation easement is the purchase of airspace above the property and within the airspace surface; it does not include the purchase of the house. The Airport Authority does own some property between Pee Wee Reese Road and Drayton Avenue. The Authority also owns property along Taylorsville Road near Kent Road.

**22. Would changing the type of planes that fly into Bowman change the need for tree removal?**

No. The TERPS departure surface is a 40:1 slope starting from the departure end of runway. The type of aircraft that fly in and out of Bowman Field today will be the same type of aircraft that fly in and out of Bowman in the future.

**23. According to the FAA document you reference on your website, objects penetrating the airspace by less than 35 feet may not require action but would impact departure minimums (ceiling, visibility) climb gradients or departure procedures. Couldn't the implementation of new departure procedures preserve many of the trees?**

Any change in departure procedures would be handled by the FAA.

**24. Does the LRAA plan to move any air traffic from Louisville International to Bowman Field in the future?**

No.

**25. How would the type of aircraft that could use the airport change if the proposed advisory is not implemented?**

If the air space cannot be maintained, the FAA would pursue reducing the utility of the airport and instrument landing capabilities, nighttime operations, etc., would be impacted.

**26. If we do not meet FAA regulations will less or more jets fly into/out of Bowman?**

If the air space cannot be maintained, the FAA would pursue reducing the utility of the airport and instrument landing capabilities, night time operations, etc., would be impacted.

**27. Is there going to be a purchase of more air space easement? If yes, why if the activity of flights remain the same?**

Yes, there will be additional air space or aviation easement purchases for those properties affected by the TERPS departure surface. The need to purchase additional aviation easement is determined by the TERPS departure surface and not the type of aircraft utilizing the airfield.

**28. How long has the draft plan been in development?**

Once the Airport Authority learned of the new requirement to include the TERPS departure surface on the draft Airport Layout Plan, the Authority sought clarification from the FAA on TERPS implementation.

**29. Are we going to get a choice of trees that will grow to the maximum allowed for the particular residence? If 60 feet is max, we will be able to get trees that get to 50 feet?**

The choice of replacement trees will be determined by the program arborist and will include a number of low-canopy trees that can grow in this geographical region.

**30. Why aren't the full maps of the Orange – TERPS Departure Surface Boundaries and the Red – Part 77 Approach Surface Boundaries displayed on your FlyLouisville website?**

The orange areas represent “likely areas” where the height of trees may breach the TERPS departure surface. Since the surface can extend all the way out to 150-feet in height, the Authority wanted our focus to be with the property owners that may actually have an impact.

**31. Will or can topographical cut sections be provided?**

Survey and inventory data for the program has not been yet begun and will not be completed until later this summer.

**32. The handout from the last meeting had a graphic that identified a “new” take-off slope that starts with the “runway threshold”, as opposed to the Part 77 “departure end of the runway.” Please explain where the thresholds are located and whether it is possible to seek an alternative threshold to meet the TERPS activity.**

The Part 77 Approach Surface starts 200-feet from the physical end of pavement and extends at a 20:1 slope. The TERPS departure surface begins at the departure end of runway (not the physical end of pavement) and extends at a 40:1 slope. Neither of these two profiles represents the actual climb path of an aircraft. **(See page 8)**

**33. Are you going to have a professional surveyor establish the location, the MSL elevation (at ground), and the MSL elevation (at tree height) of each tree? This needs to be done to get precise, accurate information upon which to make decisions.**

Yes.

**34. Would changing the angle of departure or arrival so that it is steeper eliminate the need to trim or remove trees?**

Any change in departure procedures would be handled by the FAA.

**35. Has the LRAA made a decision on whether it will undertake an Environmental Assessment in order to comply with the National Environmental Policy Act?**

As the lead federal agency, the FAA will guide the LRAA on the environmental requirements for the program. It is not a decision that the LRAA makes. It is what the FAA will require of us and we will follow their lead under NEPA guidelines.

**36. When were the “new” FAA guidelines implemented? Where might these guidelines be found? Are they in the CFR? What number?**

Advisory Circular 150/5070-6B- Airport Master Plans identifies the requirement to include the TERPS departure surface on the Airport Layout Plan. **FAA TERPS documents are available on this web page via a separate link.**

**37. If Bowman does not accept federal funds, do these mandates apply?**

Yes, any airport operator that provides instrument-approach procedures under FAA standards will have to meet TERPS requirements.

**38. Will an arborist be used to determine what trees are healthy or damages and no longer viable trees? Will a certified arborist be on site during any pruning or removal?**

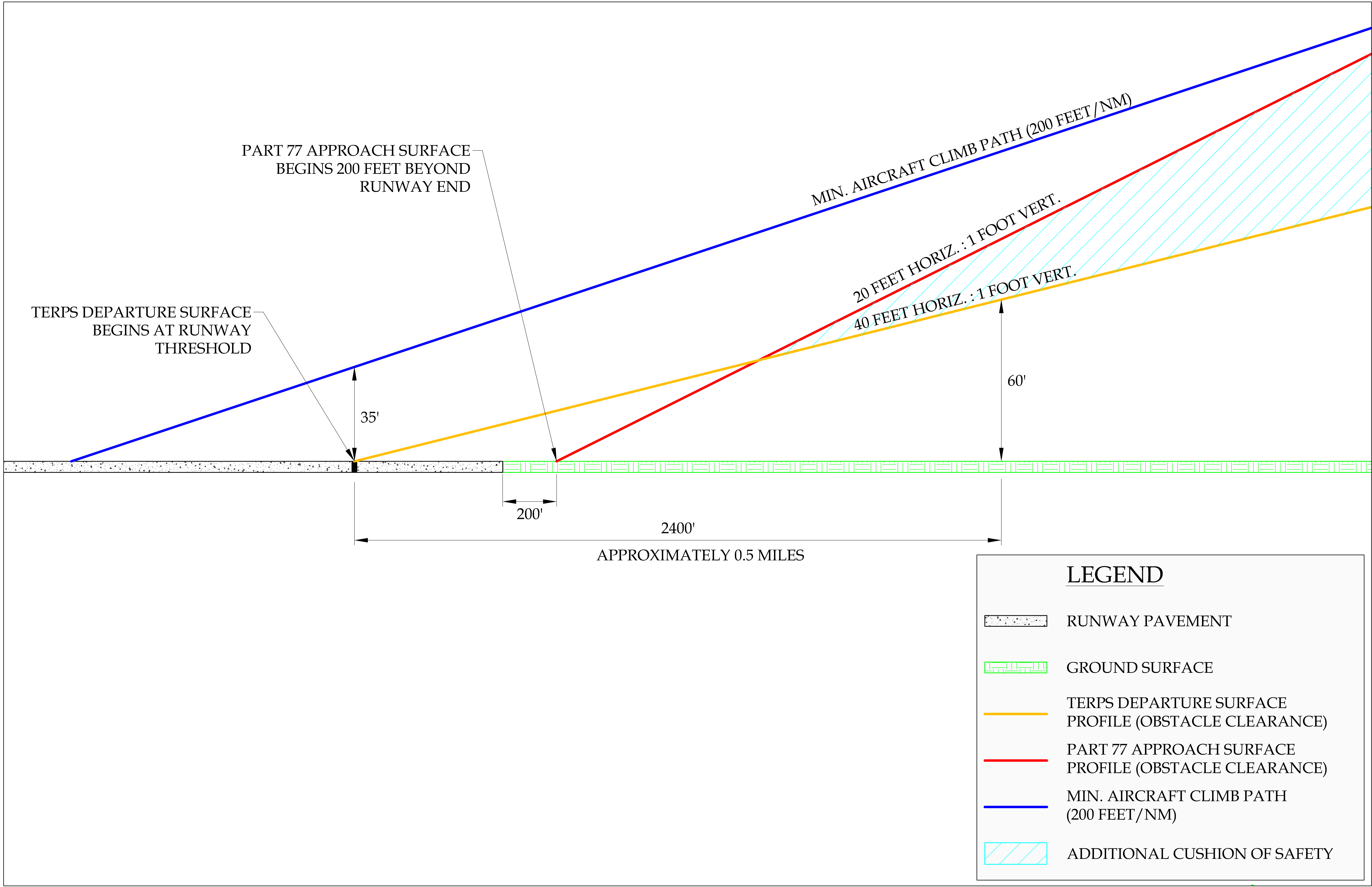
An arborist is part of the proposed program. We anticipate using the arborist to assist property owners with making informed decisions about whether to trim or remove trees that are now too tall under the FAA standards that are new to Bowman Field. Whether the arborist will remain on site during pruning or removal of an affected tree will be determined by the arborist at that time.

**39. In view of the fact that there is no deadline from the FAA, are these new “standards” recommendations or regulations?**

Maintenance of the TERPS departure surface is not a recommendation; it is a requirement. The FAA has not provided a deadline for compliance; however, the FAA is actively requiring compliance presently, which has already begun to impact Bowman Field.



# AIRSPACE SURFACES - TYPICAL PROFILE





# AIRSPACE SURFACES - BOWMAN FIELD





# TYPICAL NEIGHBORHOOD SECTION

