

# GROUNDS MAINTENANCE AND PEST CONTROL SERVICES

### **FACILITIES MAINTENANCE SERVICES**

NASA Ames Research Center MOFFETT FIELD, CA 94035-1000



# LANDSCAPING AREAS

<ul><li>Moffett Field Total Area</li><li>Ames Research Center</li><li>Moffett Airfield Complex</li></ul>	1,840 acres 440 acres 1,400 acres
Moffett Field Total Improved Maintenance Areas:	576.9 acres
Moffett Field Total Level I & II Maintenance Areas:	73.8 acres
Moffett Field Total Level III Maintenance Areas:	491.7 acres
Moffett Field Total Other Maintenance Areas:  • (e.g. rock, bark, mulch, etc.)	11.5 acres
Moffett Field "No Maintenance" Areas:	363.9 acres
Moffett Field Total Maintenance Responsibility Area:	1,476.1 Acres



#### **GROUNDS MAINTENANCE**

#### **Contractor Is Responsible For:**

- mowing and trimming lawns
- debris removal from landscape and around buildings
- flail-mowing/dethatching turf, and turf renovation
- landscape damage repair
- weed abatement and growth inhibitors
- plant bed cultivation and mulching
- vegetation control in Level III areas
  - roadway shoulders and ditches
  - field mowing
- building and facility vegetation clearance
- · airfield lights and marker clearance
- paved surface crack clearance
- landscape irrigation maintenance and repair
- shrub pruning and ground cover renovation
- fertilization and liming
- tree pruning, general and annual cycle pruning
- tree and shrub removal and establishment
- insect and animal pest mitigation (IPM)



## LANDSCAPE MATERIALS AND EQUIPMENT

#### Contractor shall provide as required

- licenses and certifications
- vehicles
- spray application equipment
- mowers, tractors, power leaf blowers, edgers, saws, pruning equipment, hand tools
- hoses, sprinklers, safety and personal protective equipment
- fertilizers, chemical pesticides/herbicides
- fuels and lubricants
- lawn seed, replenishment plants, shrubs, trees
- replenishment soil, rock, mulch, wood chippings, sand, lime, etc.



# **INTEGRATED PEST MANAGEMENT (IPM)**

- IPM, including Integrated Vegetation Management (IVM), is a science-based pest management approach which uses information about the biology and habitat requirements of the pest to design an environmentally sound, proactive management program
- To the degree possible, pests and the conditions conducive to their presence, are reduced or removed using non-chemical methods wherever possible



#### IPM PROCEDURES

- <u>Identification</u>: identify pest and/or conditions conducive to infestations
- Monitoring: monitor pests and their numbers
- <u>Documentation</u>: report and record findings from sampling
- <u>Injury Level Determination</u>: determine nuisance level to humans
- <u>Action Level Determination</u>: determine action level based on pest population size from which injury level predictions can be derived
- Evaluation: system to determine the outcome of treatment actions



#### **GENERAL OBJECTIVE OF IPM**

To replace reactive pesticide applications with an effective and affordable Integrated Pest Management (IPM) monitoring system and management program that focuses on long-term pest prevention while reducing the use of toxic materials in the process



#### SPECIFIC IPM GOALS FOR NASA AMES

- Reduce Pesticide use at Moffett Field
- Use least-toxic chemical control methods
- Customize program to the pest and the site
- Includes Integrated Vegetation Management (IVM)
   which reduces the use of pesticides and herbicides in
   the grounds maintenance activities