



ARAPAHOE COUNTY

## WAIVER PER PURCHASING POLICIES

WAIVER OF SOLICITATION       WAIVER OF QUOTE   
 SELECT SOURCE       FOR INFORMATION ONLY

**DESCRIPTION OF PROJECT:** The Denver Police Department is requesting the purchase of this specific asset to be utilized by the Denver Police Bomb Squad, Denver Police SWAT team and regional partners throughout the Colorado North Central Region for Homeland Security as needed. Robotic platforms perform a fundamental role in support of improvised explosive device mitigation and render safe procedures, tactical law enforcement missions, hazardous materials operations, search and rescue, surveillance and detection, and critical infrastructure protection.

**NAME OF THE VENDOR:** Boston Dynamics robot from RAdECo, Inc.

**JUSTIFICATION (How were they selected, Why requesting to waive purchasing policy process):** The Denver Police Bomb Squad has extensively researched these types of new technology and have participated in a number of product demonstrations by Bomb Dog Robot vendors. Denver Police Bomb Squad members have been able to operate all of the available types of bomb dog robots on the market and have determined that the Boston Dynamics Spot bomb robot dog is the optimal product for our requirements. Our justifications are as follows:

- At this time, the equipment being requested (bomb robot) is available through one vendor (RadeCo Inc.) who is a distributor for the manufacturer (Boston Dynamics).
- The Boston Dynamics product clearly outperformed the other vendor's products during physical demonstrations attended by Denver Police bomb squad members. Specifically, the Boston Dynamics product:
  - Met all of the requirements and specifications identified by our Agency and Regional partners. These specifications are identified in detailed within Appendix 1 of this memo. Key performance measures included robot speed, agility, camera and lighting capabilities, over-all size and weight, and the capability for interchangeable batteries.
  - The Boston Dynamics product most easily met our expectations for overall ease in handling of the asset, how quickly and easily it was able to get up when it was turned over and its ability to have other weight placed on it.
  - Has the ability to add an "arm" that allows the user to "manually or semi-autonomously grasp, lift, carry, place, and drag a wide variety of objects, including valve handles, door knobs, tools, etc." The arm will allow us to open doors, pick, place push or drag objects with the push of a button or swipe of a screen. Other vendor products do not have this option.

The proposed specialized equipment (bomb robot) will be used by the bomb squad's certified public safety bomb technicians for rendering safe (IEDs) improvised explosive devices. There remains a constant concern at both the Federal and State level concerning the threat of terrorism within the United

States. Remotely controlled robotic platforms used by regional bomb squads provides an invaluable asset to safely mitigate and combat this threat.

The equipment will have the following capabilities, at a minimum:

- Quickly climb stairs with “AI” at a rate of 1.5 meters per second or greater at a 30 degree incline
- Be able to step up a minimum of 10 inches
- Lighting –
  - Ability to add additional lighting
  - Minimum of 200 lux / 100 lumen per LED
  - Minimum of 4 LEDs
  - Arm must have an LED
- Operate in a low light / dark environment.
- Batteries
  - Must be hot-swappable (not lose internal data when batteries are being changed out)
  - Spare batteries must be able to charge faster than the expected run-time
- Stream and record video and audio
- Weight should be less than 75lbs without payload and no more than 110lbs with external cameras and arm
- IR Camera
  - Arm must have camera
  - Thermal camera attached
  - Cameras facing all directions
  - Ability to create a 360 degree image
- Ability to program and save functions.
- Open doors with “AI”
- Move on an uneven surface
- All-weather – minimum rating of IP68
- Two-way communications
- Carry 20+ pounds.
- Ability to add additional sensors (CBRN)
- Mesh network radio system
- Deployable in under ten minutes
- Picatinny rails
- Responsive Customer support (24/7/365)
- Proven Track Record with current USA Police Department(s)
- EOD ARM
- Ability to get up quickly and right itself in most situations without outside assistance

**PRICE:** \$289,550.00

**ANNUAL MAINTENANCE:** To be maintained by  
Denver Police Department

FIXED ASSET Yes  No

FIXED ASSET #

**COST CENTER #** 2970900810

**G/L #** 54394

**IO #** S2301.4.1

Justin Kovales [Signature] 303-768-8734  
Requestor Name, Signature & Telephone Number

8/29/2024  
Date

[Signature]  
Elected Official/Department Head

8/29/2024  
Date

[Signature]  
Purchasing Manager (not to exceed \$100,000)

8/29/2024  
Date

Comments: \_\_\_\_\_

Waiver approved, BoCC Reso #180600. Requestor to proceed with PO Yes  No   
Requestor to schedule BoCC Drop In & Create Board Summary Report Yes  No

\_\_\_\_\_  
Todd Weaver, Director of Finance

\_\_\_\_\_  
Date

\_\_\_\_\_  
BOCC, Chair

\_\_\_\_\_  
Date

**Per BoCC Resolution #180600 of 10/6/18, Purchasing Manager has authorization for sole approval up to \$100,000 plus exemptions to Contract Extensions**