CIOGS SURVEILLANCE TECHNOLOGY PROCESS OUTLINE

1. The Community Input Over Government Surveillance ordinance, Article V, Division 12 Sections 17-5-451- 17-5-459 of the Detroit Municipal Code ("CIOGS") requires:

a. City Council approval be obtained prior to the acquisition by the City of any new surveillance technology.

b. City Council approval if it determines that the benefits of the surveillance technology outweigh its costs, that the proposal will safeguard civil rights and civil liberties, and that the use and deployment of the surveillance technology will not be based upon discriminatory or viewpoint based factors or have a disparate impact on any community or group.

b. Preparation by the requesting department of a Surveillance Technology Specification Report (the "Report").

c. Making the Report publicly available.

d. A public hearing held by the City Council and a decision made to approve the acquisition, with specific findings, by the City Council.

2. Surveillance Technology Specification Report. The Report must be made available to the public, at a designated page on the City's website at least 14 days prior to holding any of the hearings or meetings required under CIOGS. The Report must be made available to the public for as long as the related surveillance technology remains in use by, or in the possession of, the City department.

The Report must be a publicly-released report, written by the requesting City department and include, at a minimum, the following:

a. *Description.* Information describing the surveillance technology and its capabilities;

The Detroit Fire Department is seeking UAV technology that can offer a wide range of services ranging from search and rescue to providing overhead and tactical views of a fire scene. The UAV technology will assist Firefighters to collect vital information about on-going fires with the primary goal of providing situational awareness in the event of a fire

The Skydio X2E drone is a UAS solution for aerial situational awareness to assess and identify fire hot spots that may not be visible to the naked eye, for fire scene reconstruction to aid in investigations, as well as search and rescue operations. The X2E is powered by an AI-driven autonomous flight engine that enables unparalleled 360° obstacle avoidance, autonomous tracking, GPS-denied navigation, and complete workflow automation. Built for first responders, the Skydio X2E is designed and assembled in the USA and is compliant with high standards set by the National Defense Authorization Act (NDAA). Skydio drones are trusted by the US government and the Department of Defense to perform mission critical work in the most challenging environments.

The Skydio X2E includes field-tested artificial intelligence building upon Skydio 2/2+'s groundbreaking technology foundation, 4K 12 megapixel color camera, 320x256 resolution FLIR Boson thermal camera, GPS night flight capability, up to 35 min flight time, up to 3 mile range, and rucksack portability.

b. *Purpose.* Any specific purpose the surveillance technology is intended to advance;

Fire Operations
The Skydio X2E can provide incident commanders with a real time overhead view at large and complex fire scenes to ensure safe, efficient operations and identify potential hazards. Skydio

drones can also provide a "birds-eye view" during search and rescue missions, active fires, mass casualty incidents and also assist with search efforts along waterways. The aerial perspective provided by the Skydio X2E drone can be used by incident commanders to more efficiently direct resources and personnel to areas where it is most needed, saving valuable time when operating in an emergency.

Large Areas

The Skydio X2E can help increase public safety by allowing field personnel to monitor scenes of fires and quickly gain situational awareness when seconds matter. The cutting edge autonomy and artificial intelligence onboard the Skydio drone allows operators to simply tap on a point of interest on the control screen, which directs the drone to fly to that location and transmit high resolution video back to the controller's screen, making even distant and minute details visible in just seconds.

Fire Scene Reconstruction

The Skydio X2E has the capacity to assist with fire investigations by leveraging the Skydio's autonomous data capture modes to quickly and efficiently capture data from fire scenes to assist in scene reconstruction and documentation.

Live Streaming to Command Post

The Skydio X2E will provide a means of monitoring and tracking the progress of large scale emergency events and identify potential threats at such events via live streaming back to the Command Post or other locations as determined by the Fire Department.

c. *Deployment*. If the surveillance technology will not be uniformly deployed or targeted throughout the City, the factors that will be used to determine where the technology is deployed or targeted;

The Detroit Fire Department will deploy Skydio UAS technology when there is an emergency situation as described above, in order to keep the community, its residents, and the first responders safe. Additionally, Skydio drones can be used to gain real time situational awareness by viewing the live video and thermal feed on the controller without recording any images. The operator can choose whether or not to capture photos and record video, based on the specific needs of the situation and guided by the standard operating procedures established by the Detroit Fire Department. Unlike other forms of fixed and static surveillance technology that remain present 24/7, Skydio UAS will be deployed on a limited basis for the duration of an incident, project or mission.

d. *Fiscal impact*. The fiscal impact of the surveillance technology;

The Detroit Fire Department has received grant money that is set to expire on May 31, 2023. This technology deployment will be using grant funds to make this purchase. Additionally, by using Skydio Drones to do an autonomous collection of photos of a fire scene, the Detroit Fire Department can drastically reduce the man hours that it would normally take them to collect all the evidence and photos needed to reconstruct a fire scene for fire investigations or conduct a search and rescue. Leveraging Skydio's drones for real time situational awareness at an emergency can help incident commanders more efficiently deploy personnel and resources and mitigate the emergency more effectively, thereby potentially realizing cost savings in equipment and duty time hours.

e. *Civil rights and liberties impacts*. An assessment identifying with specificity:
i. Any potential adverse impacts the surveillance technology, if deployed, might have on civil rights and civil liberties; and

Skydio has years of experience ensuring that advanced technology integrations protect civil liberties while promoting public safety. Skydio has a deep bench of employees with experience building and leading technology programs in public safety agencies. Skydio understands that civil liberties should be at the center of any technology integration. Skydio brings unrivaled expertise to the task of supporting Detroit Fire in building out an effective drone program capable of earning--and sustaining--the public trust.

Skydio is an industry leader in promoting the responsible use of drones. In 2020, Skydio became the first (and still the only) drone company to release a set of ethical and policy principles to govern our work. Known as the Skydio Engagement and Responsible Use Principles (SERUP), those principles outline our core values of accountability, transparency, and the protection of privacy and civil liberties. They also delineate our commitment to proactively promote best practices on the responsible use of our products with our customers.

Consistent with that commitment, Skydio worked with DRONERESPONDERS, the world's largest association of public safety agencies dedicated to the use of drones, to develop a set of responsible use principles specific to public safety--the Five C's. That document provides clear, easy-to-implement guidance to public safety agencies developing or expanding drone programs arranged around five core principles. The principles begin with Community Engagement and Transparency, providing best practices to help agencies engage in an ongoing conversation with the communities they serve. On the core issue of Civil Liberties and Privacy, the principles provide a range of recommendations designed to help agencies to implement best-in-class protections.

The Five C's: Principles for the Responsible Use of Drones by Public Safety Agencies

Skydio's experience in this topic is more than academic. Fritz Reber, Skydio's head of public safety integration, formerly served as a Captain at the Chula Vista Police Department, and stood up the Department's world-leading DFR program. Brendan Groves, Skydio's VP of Regulatory & Policy Affairs, formerly oversaw the US Department of Justice's drone program, laying the foundation for a nationwide expansion of the program and working with Chiefs of Police across the country to develop their own programs. No other drone company offers the same level of in-house experience.

Spurred by our commitment to responsible use, Skydio is developing a range of technical features designed to automate transparency, accountability, and the protection of privacy and civil liberties for public safety agencies. We are building a suite of tools to support agencies and communities focused on transparency (e.g., enabling automated reporting of flights) and accountability and privacy (e.g., ensuring that authorized pilots conduct authorized flights and activities).

Skydio will support the Detroit Fire Department in constructing a UAS program that is built to last by placing privacy and civil liberties at the center. While Detroit Fire will be in the lead, Skydio will provide critical, proactive assistance to program managers. Among other areas, Skydio can advise Detroit Fire in developing operational policies and procedures that incorporate best-in-class practices on responsible use, drawing on the 5 C's and our employees' expertise. We would advise and support Detroit Fire's engagements with civil society stakeholders--a critical part of expanding any public safety drone program. Skydio will also help to shape and explain the technology used to implement the UAS program in a manner consistent with privacy and civil liberties. The end result will be a UAS program that earns--and keeps--the support of the local community.

f. *Authorized use.* A complete description of the purpose and intended uses of the surveillance technology, including any uses that will be expressly prohibited;

Skydio UAS will be operated by trained and supervised employees and agents of Detroit Fire for the express purpose of enhancing public safety and resolving and recording critical incidents within the community. At no time will the technology be intended for use by unauthorized personnel for reasons outside of service to public safety. Activities such as random patrol, targeting specific individuals, groups, or areas, or any use case that isn't related to the mission and values of Detroit Fire and the community it serves. A key aspect to UAS that distinguishes it from other forms of surveillance technology is the limited use during and shortly after the critical incident. It's not a static fixed device that remains in place 24/7.

g. *Data collection.*
i. What types of surveillance data will be collected, captured, recorded, intercepted, or retained by the surveillance technology;

The operator has ultimate control over whether or not to record photos or videos with the Skydio drone's main payload cameras. For flight safety and warranty purposes, Skydio drones collect and retain GPS position data (when available), telemetry data and low resolution video of the entire flight. This data is recorded and retained onboard the drone and can be deleted by the operator or another authorized individual based on the agency's SOP.

ii. What surveillance data may be inadvertently collected during the authorized uses of the surveillance technology and the measures that will be taken to minimize the inadvertent collection of the data;

The operator has ultimate control over whether or not to record photos or videos with the Skydio drone's main payload cameras. Minimizing the chance of inadvertent data capture can be achieved through a combination of thorough training of the operators and a well established set of standard operating procedures.

iii. How inadvertently collected surveillance data will be expeditiously identified and deleted;

The drone operator or other authorized person can access all recorded media stored on Skydio drones and can review the images and video via the Skydio Enterprise Controller or by accessing the SD card on any standard desktop/laptop computer. The authorized person can then choose

to retain or delete that media according to Detroit Fire Department's established policies and procedures.

h. *Data protection*. The safeguards will be used to protect surveillance data from unauthorized access, including encryption and access control mechanisms;

Video transmitted from Skydio drones wirelessly to the Skydio Enterprise Controller are encrypted to AES128 standards. This ensures that the data cannot be intercepted or decrypted by unauthorized individuals. The enterprise controller can also be set to require a password to gain access, thereby adding additional security to the data and preventing unauthorized access.

i. *Data retention*. Insofar as the privacy of the public can be severely compromised by the long-term storage of mass surveillance data, the regulations and procedures that govern the retention of surveillance data, including those governing:

The operator flying the Skydio drone has complete control on whether or not to record video or capture photos with the drone. If the operator decides to capture photos or record video, that data is stored in a removable memory card onboard the drone. Once the drone lands, the operator can remove the memory card and access the data using any standard laptop or desktop computer. The data can be managed from there based on the agency's data retention policies. The data on the SD cards can then be uploaded to Detroit Fire's evidence collection database or stored on the SD card. The data can be retained as long or as short of a period as Detroit Fire determines.

i. The limited time period, if any, surveillance data will be retained. Such information shall include a statement explaining why the designated retention period is no greater than that which is absolutely necessary to achieve the specific purpose or purposes enumerated in the Surveillance Technology Specification Report; The City of Detroit Fire Department will store data and retain information that matches the requirements set forth by the State of Michigan.

ii. The specific conditions that must be met to retain surveillance data beyond the retention period identified pursuant to Subsection i above; The specific conditions to keep any data beyond the retention period only if an identified incident occurs upon data review.

iii. The process utilized to regularly delete surveillance data after the retention period stated in Subsection i has elapsed and the auditing procedures that will be implemented to ensure data is not improperly retained; The Detroit Fire Department will comply with the State of Michigan General Retention Schedule #18 Fire/Ambulance Departments.

j. *Surveillance data sharing*. If a City department is seeking authorization to share access to surveillance technology or surveillance data with any other governmental agencies, departments, bureaus, divisions or units, or non-governmental persons or entities in the absence of a judicial warrant or other legal mandate, the City department shall detail: Comply with the City of Detroit Freedom of Information Act. All request will be approved and reviewed by our Law Department, prior to releasing any information.

i. Which governmental agencies, departments, bureaus, divisions or units, or non-governmental persons or entities will be approved: All request will be approved and reviewed by our Law Department, prior to releasing any information.

ii. For surveillance technology sharing to the governmental agency, department, bureau, division or unit, or non-governmental person or entity; All request will be approved and reviewed by our Law Department, prior to releasing any information.

iii. For surveillance technology sharing from the governmental agency, department, bureau, division or unit, or non-governmental person or entity; All request will be approved and reviewed by our Law Department, prior to releasing any information.

iv. For surveillance data sharing to the governmental agency, department, bureau, division or unit, or non-governmental person or entity; All request will be approved and reviewed by our Law Department, prior to releasing any information.

v. Where applicable, the type of information of surveillance data that may be disclosed to the governmental agency, department, bureau, division or unit, or non-governmental person or entity; and

vi. Where applicable, any safeguards or restrictions that will be imposed on the surveillance technology or data receiving governmental agency, department, bureau, division or unit, or non-governmental person or entity regarding the use or dissemination of the provided surveillance technology or data; All request will be approved and reviewed by our Law Department, prior to releasing any information.

k. *Demands for access to surveillance data*. What legal standard must be met by government entities or third parties seeking or demanding access to surveillance data; All request will be approved and reviewed by our Law Department, prior to releasing any information.

l. *Auditing and oversight*. What mechanisms will be implemented to ensure the Surveillance Technology Specification Report is followed, including what independent persons or entities will be given oversight authority, if and how regular audits will be conducted, and, in the case of the Police Department, how the Board of Police Commissioners will be involved in the auditing and oversight process; The Detroit Fire Department will comply with the Drone laws in the United States of America defined by 49USC 44809.

m. *Training*. Would specialized training be required in connection with the use of the surveillance technology; and

Skydio Academy

Skydio drones, powered by AI-driven autonomy, deliver a new paradigm for safer and simpler operations. As the world-leader in flight autonomy, Skydio employs industry-experts and works with enterprises, public sector, and first responders on their journey to autonomous operations.

Skydio Academy packages extensive drone expertise into a training curriculum that is:

- Concise: Training for autonomous drones that is simple as the drone itself
- Convenient: Self-paced or live, remote or in person. Multiple options to fit your needs
- Comprehensive: Solution-oriented training that spans hardware and software to enable entire workflows

Skydio Academy Certificates
Uplevel your drone expertise and establish credibility among your peers with validation from the industry-leaders in autonomous flight. Skydio Academy Certifications show your commitment to safety, autonomy, and your mission.

Skydio Professional Operator (SPO)
Certifies foundational knowledge about Skydio aircraft, preflight, launch, flight skills, landing, postflight, maintenance, and troubleshooting.

Skydio Expert Operator (SEO)
Complements the SPO certification with practical flight lessons out in the flight to develop real-life skills on the safe and efficient operation of Skydio aircraft and software. As an SEO, you will be ready to take flight with complete confidence.

Flexible Training Options
With online virtual instructors and in-person hands-on training sessions available, choose the training program that works best including:

- Self-paced Online
- Instructor-led Online
- Blended Training (Self-paced Online + In-person)
- Instructor-led In-person

n. *Complaints.* What procedures will allow members of the public to register complaints or concerns, or submit questions about the deployment or use of a specific surveillance technology, and how the City department will ensure each question and complaint is responded to in a timely manner. All complaints for the Detroit Fire Department should be submitted directly to our Fire Adminstration Division at 313-596-2900, and the concerns will be addressed in a timely manner.