



September 27, 2022

TO: Public Safety and Transportation Committee
FROM: Carl S. Goldsmith, Director of Public Works
SUBJECT: Preventing Vehicle Incursions

Due to recent events related to special events that have occurred outside of Lombard, the Village has evaluated the means of controlling access to special events that take place throughout the community. With many of these events taking place on Village right-of-way, there is potential for a vehicle incursion, like what occurred in Waukesha, Wisconsin on November 21, 2021.

The past efforts to secure a perimeter for special events, specifically those that occur along the St. Charles Road corridor, typically would utilize large Village vehicles to create a barrier. These vehicles are generally Public Works Snow Plows, which are excellent means to deter a vehicle incursion based upon their sheer size. The drawback to the use of these vehicles is that they are expensive to repair/replace in the event that one would be damaged or destroyed and given current supply chain issues, would require 12-18 months for replacement. Additionally, the Village has deployed snow plows to provide protection to retail shopping areas during the civil unrest/protests that occurred in 2020. The use of the vehicles in this manner is a significant concern due to the time and cost of replacing a vehicle if it were damaged. With these concerns in mind, staff has identified a more effective means of protecting closed events.

The Archer 1200 Mobile Barrier, manufactured by the Meridian Rapid Defense Group is unanchored and "Drop and Stop" system that can be easily deployed for special events. The Archer 1200 Barrier solution allows for pedestrian access and emergency vehicle access for every deployment option. The Archer 1200 Barrier is not a bollard which is permanently fixed. The systems ease of set-up and mobility makes it a primary security safety system for entry points, roadways and perimeters. The picture below is an example of the system deployed to protect a gathering in the roadway. This specific example is from the Rose Bowl Parade.



The Archer 1200 Vehicle Barrier system requires no heavy equipment for set-up and removal. The system allows for one-person deployment of an 8-barrier trailer kit in under 10 minutes. Unlike fixed bollards, the system is non-lethal to the driver and minimizes shrapnel spray. The system is 100% reusable after impact and has a lifetime warranty.

The system could be deployed for roadside safety checks conducted by the Lombard Police and will increase protection afforded to the participating personnel. Since the system is easy to tow with a medium duty pickup, the Police Department could utilize one of the Community Service Officer pick-ups to transport the system or rely on Public Works to assist with the setup. Due to the rapid response of the system, the units could also be deployed during emergencies such as severe weather damage cleanup, flooding or an incident that would need to restrict access to a road or neighborhood.



The Village has utilized the Archer 1200 Vehicle Barrier system for several events on a rental basis. In order to secure the St. Charles Road corridor, the Village has deployed 16 units. The Village has been fortunate that it has been able to secure the rental units; however, due to limited supply of rental units in the area, the Village cannot be assured that units will always be available for events. Staff has evaluated the cost of rental of the units versus the purchase of the Archer 1200 Mobile Barrier system. The rental cost per unit is \$240.00, which equates to \$3,840.00 per deployment for 16 barriers. The Village has identified at least 12 uses for the systems, which does not include any possible uses by the Lombard Park District or other community-based group. The events that have been identified as potential uses include:

- Lilac Time Arts and Craft Fair
- Spooktacular
- Cruise Nights
- Lombard Cycling Classic
- Lilac Parade (Wilson & Maple)
- Mutt Strut (Lombard Park District)
- Lombard Ale Fest
- Park Avenue Patio temporary roadway closure
- Community Viewing Parties on Park Avenue
- Lombard Farmers Market
- Lombard Police DUI Checkpoints
- Lombard Police Roadside Safety Checkpoints

The cost for acquisition of 16 units and a transport trailer \$146,094.52. A summary of the annual rental cost can be found below:



| | |
|------------------------------|-------------|
| Cost Per Deployment | \$ 3,840.00 |
| Annual Number of Deployments | 12 |
| Annual Rental Cost | \$46,080.00 |

At an annual cost of \$46,080.00 for rentals, the Village would have an ROI for the purchase of the Meridian Archer 1200 system of 3.17 years. Beyond the long-term cost savings, the Village could be

assured that the system would be available for any event that the system was deemed appropriate to deploy. If the Village were to continue to rent the system, there would be no way to guarantee availability for each event. The Village has sufficient room to store the system and available personnel to deploy the system.

The Meridian Archer 1200 system is available through General Services Administration (GSA) Contract Number 47QSWA19D001F. The attached proposal, dated May 2, 2022 reflects pricing through the GSA contract. While the contract expired on August 2, 2022, the vendor will honor the price beyond the expiration. The lead time for the delivery of a system is 60 days from date of issuance of a purchase order. The purchase of the system can be funded through a combination of Hotel/Motel Tax Funds and Police Department DUI Tech Fund.

The Police Department, Fire Department and Public Works Department support the acquisition of the Meridian Archer 1200 system as detailed on the attached proposal. Staff is seeking support from the Committee for the purchase of the Meridian system. Should the Committee recommend the acquisition of the system, the matter will be placed on the Village Board agenda for the October 20, 2022 meeting.

Quote

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 BFields@meridian-barrier.com



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 Village Of Lombard
 255 E Wilson Ave
 Lombard, IL 60148-3926

SHIP TO
 Robert LaMontagna
 Village Of Lombard
 255 E Wilson Ave
 Lombard, IL 60148-3926

| QUOTE # | DATE | EXPIRATION DATE |
|--------------|------------|-----------------|
| 05022022-VoL | 05/02/2022 | 08/02/2022 |

| PRODUCT | DESCRIPTION | QTY | RATE | AMOUNT |
|---|--|-----------------|-----------|-----------------------|
| 8 Barrier Trailer Kit - GSA | 8 Barrier Trailer Kit | 1 | 83,699.34 | 83,699.34 |
| Archer 1200 Barrier - GSA | Archer 1200 Anti-Vehicle Barrier | 8 | 6,513.75 | |
| Archer Hauler - GSA | Archer Hauler™ | 1 | 1,925.18 | |
| Archer Field Tow Bar - GSA | Archer Field Tow Bar | 2 | 574.18 | |
| Arrestor Cable (4ft) - GSA | Arrestor Cable™ (4ft) | 7 | 574.18 | |
| Arrestor Cable (10ft) - GSA | Arrestor Cable™ (10ft) | 2 | 670.68 | |
| Archer 8-Barrier Drop Deck Trailer - GSA | Archer 8-Barrier Drop Deck Trailer | 1 | 23,155.18 | |
| Archer 1200 Barrier - GSA | Archer 1200 Anti-Vehicle Barrier | 8 | 6,513.75 | 52,110.00T |
| Archer Hauler - GSA | Archer Hauler™ | 1 | 1,925.18 | 1,925.18T |
| In-Field Installation & Certified Training | In-Field Installation & Certified Training | 1 | 1,495.00 | 1,495.00T |
| Freight/Shipping | Freight/Shipping to customers location | 1 | 6,865.00 | 6,865.00T |
| PAYMENT TERMS: | | SUBTOTAL | | 146,094.52 |
| Due to high demand levels, your delivery date will be guaranteed with your 50% deposit so that your protection starts when you need it. | | TAX | | 0.00 |
| | | TOTAL | | USD 146,094.52 |

Accepted By

Accepted Date