



Excelsior Fire District

Proudly Serving the Communities of:

Deephaven – Excelsior – Greenwood – Shorewood – Tonka Bay

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Shorewood, MN. 55331

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Excelsior Fire District Aerial 11 Key Questions

1. Water Capacity
 - a. Current Truck – 600 gallons
 - b. Looking for at least 400-500 gallon tank
 - c. Hydrants vs. no hydrants

2. Pump Size and Capacity
 - a. Current Truck 1500 gpm
 - b. Looking for 1500 gpm
 - c. Needed for Master Stream Operations
 - d. Engines 1250 gpm

3. Maneuver in the Streets
 - a. Current Truck Single Axle
 - b. Looking for Single Axle
 - c. Length – turning radius, crimp angle

4. Regional Aerial Device Availability and Use
 - a. Long Lake – No Aerial Device
 - b. Wayzata – 100 Platform Aerial Device
 - c. Mound – 78 foot Stick Aerial Device
 - d. Maple Plain – 100 foot Stick Aerial Device
 - e. Minnetonka – Multiple Aerial Devices and lengths – Platform and Stick
 - f. Chanhassen – 100 foot Platform Aerial Device
 - g. Chaska – 100 foot Platform Aerial Device
 - h. Hopkins – 100 Foot Platform Device
 - i. Eden Prairie – 100 foot Platform Aerial device and 78 foot Aerial stick device
 - j. St. Louis Park – 78 foot Aerial stick device
 - k. St. Boni – No Aerial Device
 - l. Victoria – No Aerial Device

5. Size of the Ladder

- a. Current Ladder – 65 feet
- b. Devices today
 - i. 75 feet
 - ii. 78 feet
 - iii. 79 feet
 - iv. 107 feet
- c. Key Factor – Reach

6. Key usage

- a. Firefighter Safety
 - i. A firefighter working over a fire in today's building construction is much safer working from an aerial device than from a 35 foot ladder and a roof ladder. The reason is that the aerial device provides the necessary elevation without relying on the support of the structure itself which may be compromised.
 - ii. Light at top of ladder can be used to light up scene from the top.
- b. Fire Suppression
 - i. Elevated Master Stream – having an elevated master stream device that can work from above a structure to help suppress a fire is important and beneficial. The reason is that you can get at the seat of the fire from above a fire that is “through the roof” that cannot be done from the ground level. An example was the 165 Lakeview fire in Tonka Bay where the elevated master stream was able to extinguish the fire when ground operations could not, resulting in saving half the house and belongings.
 - ii. In large apartment or commercial building without stand pipes, Aerial can be raised into a window and used as a stand pipe for internal operations. This was the case at the Hans Hardware fire in Excelsior a number of years ago.
 - iii. Exposure protection – having an aerial device that can provide a “water curtain” to a neighboring home or business to minimize exposure damage as a result of a structure fire is effective and beneficial. With increasing land values, lots are becoming smaller and communities are doing more P.U.D.'s with cluster housing which will increase the potential for greater aerial use for exposure protection.
 - iv. Greater reach from an elevated master stream.