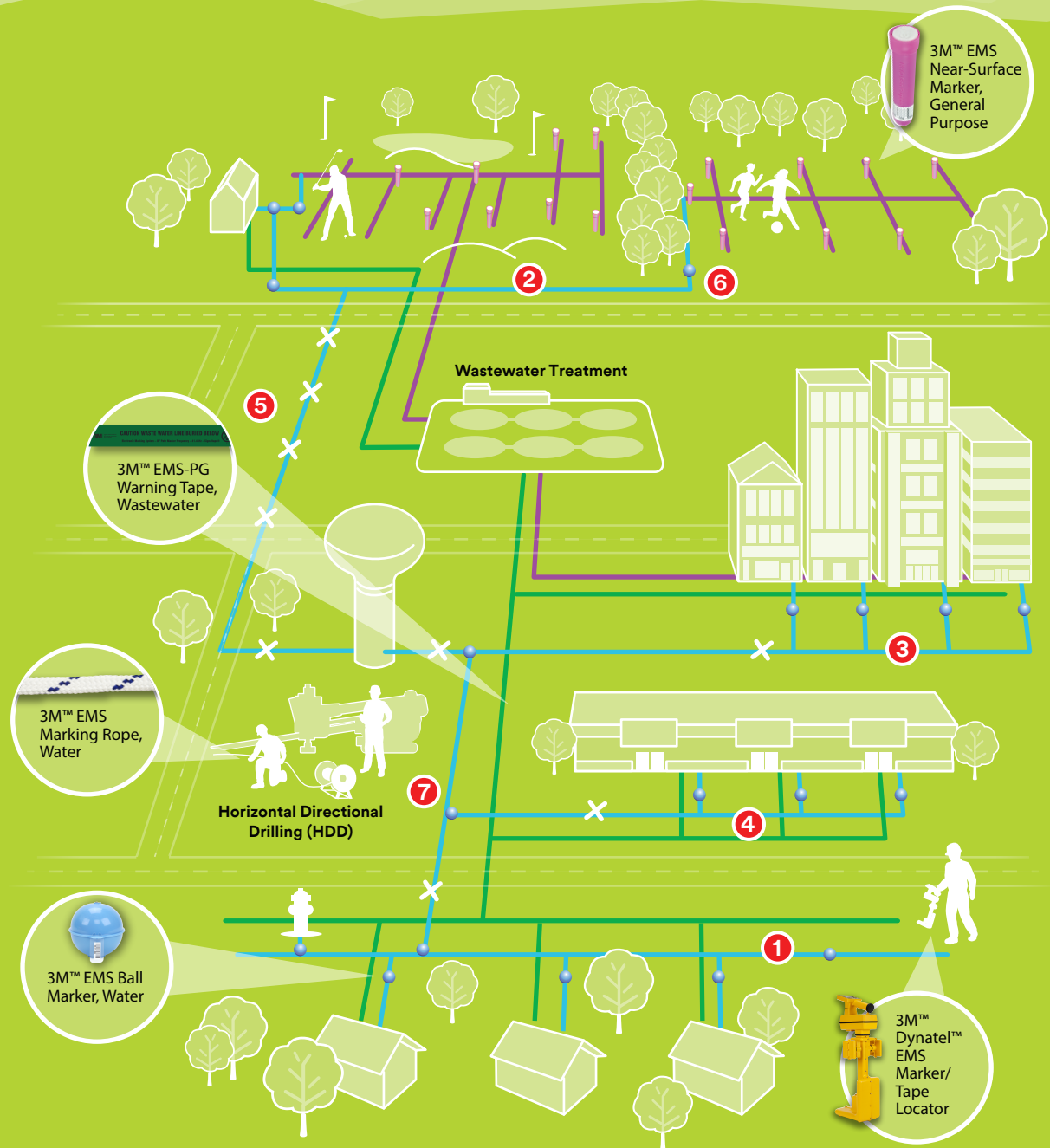


Locating and Marking Application Guide for Water Utilities



1

Main or Service Stubs

- High likelihood need to connect later or due to new construction
- Pinpoint location of connection point where a locator may not provide the needed level of accuracy
- Stubs often get knocked down or covered when their end is above ground

2

Main or Service Repair Locations

- Higher risk point for future failures, where to look first when there's an issue
- Easily able to identify and map
- Ease of identification using a marker and precise
- Positive location

3

Main to Service Connection

- Marker clearly defines the location of the facility
- If connection point and premise point can be identified, may improve ability to determine the path of the service line
- Provides a good starting point
- Poor locatability due to ungrounded tracer wire
- High risk point for excavation damage, often most vulnerable location for strikes

4

Shutoff Valve and Meter

- Not easily locatable and needs to be located quickly
- Sometimes paved over, covered with vegetation or snow pack
- Can serve as an aid with emergency response to shut off valves
- Change of direction can make them broadside to the path of the utility, making it vulnerable to being hit

5

All Joints, Fittings and Changes in Direction

- Logical point of failure (leak)
- Assists in path marking of critical assets

6

Ball and Near Surface Markers

- Depth of cover confirmation, location of conduit, location accuracy for future road work
- Deep dive markings on each side of road to confirm utility location after bore, find buried or sawed-off conduits
- Identify facility in high congestion, high traffic area
- Identify facility in area of future construction

7

Path Marking

- 3M EMS Caution Tape and Rope
- For use in open trench and HDD (Horizontal Directional Drilling) applications
- A maintenance free solution for marking and locating the path of underground plastic pipes and casing.

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