



Bridging The Gap Between Engineers and Operators

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LVVWD Statistics As of Sept. 30, 2015

- 386,174 service points
- 4,560 miles of water lines
- 120,638 valves
- 37,861 public fire hydrants
- 929 million gallons of reservoir storage
- 63 pumping stations with 1.26M gallons per minute pumping capacity

LVVWD Statistics As of Sept. 30, 2015

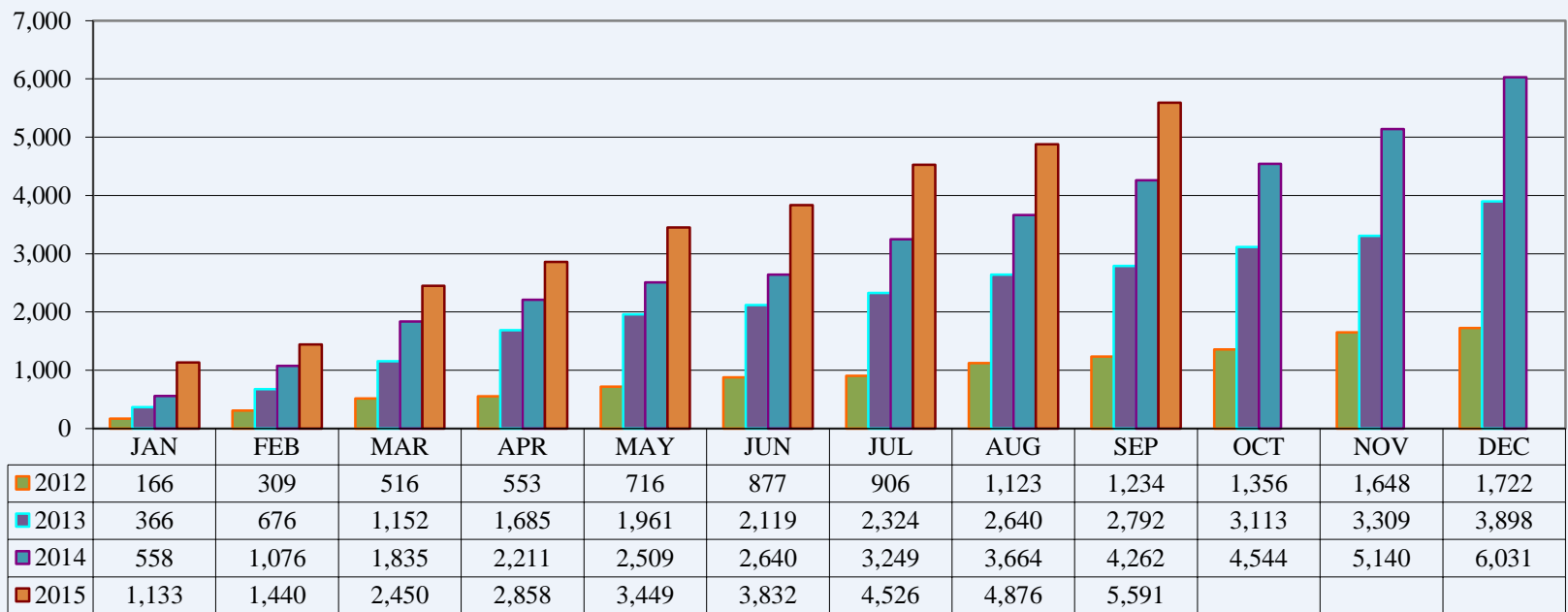
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LVVWD Service Area Grows

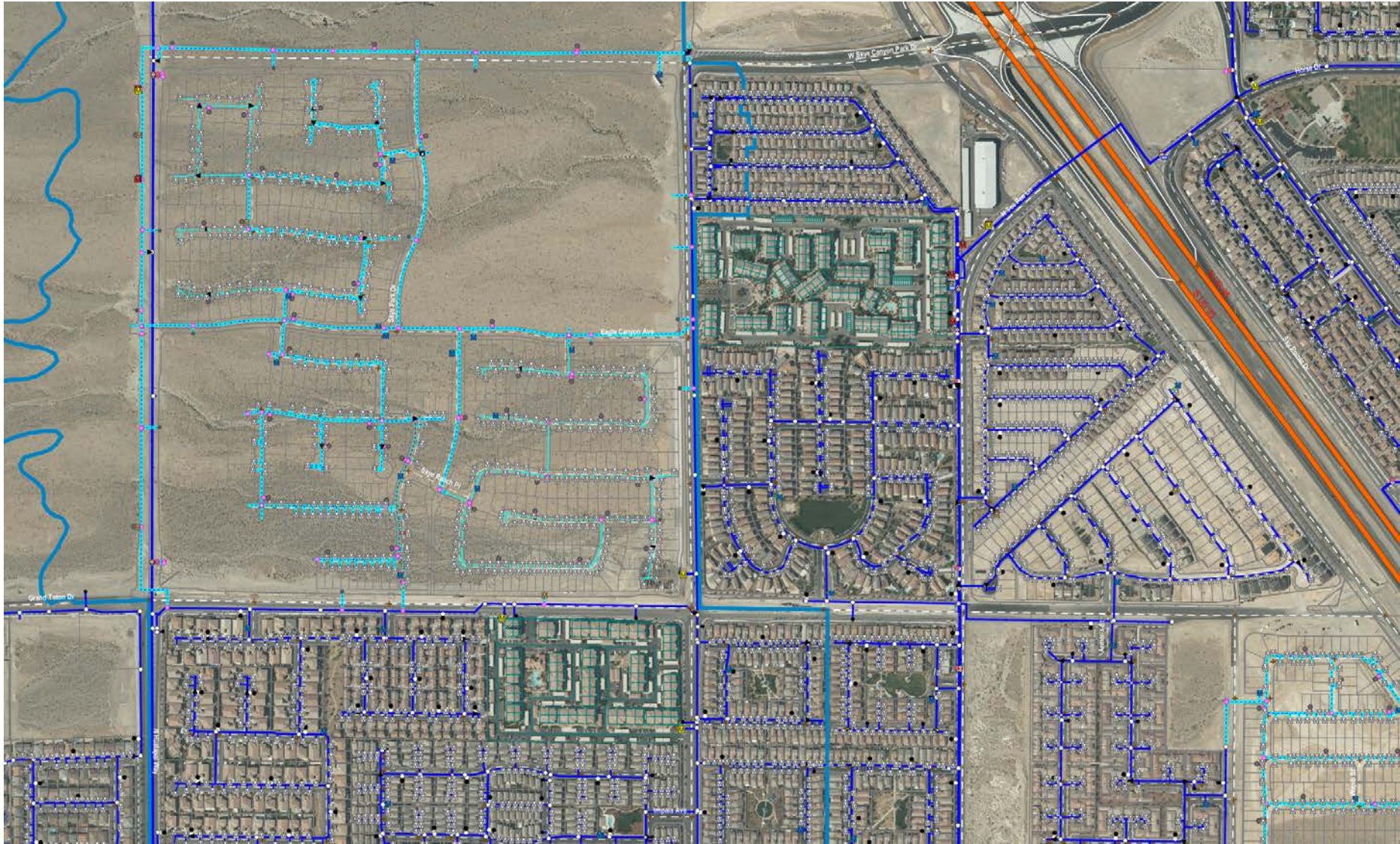
- Nearly doubling services each year

Engineering Services Division - New Service Points

Data is Cumulative



Engineering Services Role – New Development

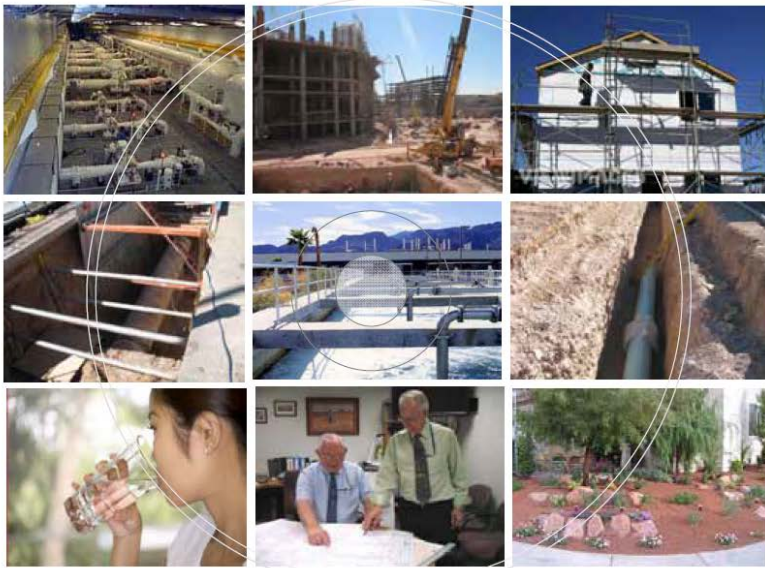


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Uniform Design and Construction Standards

UNIFORM DESIGN AND CONSTRUCTION STANDARDS For Potable Water Systems



3rd Edition - 2010



UDACS Sections

- Definitions section
- Design section
- Construction section
- Standard plates
- Reference tables

Engineers Know It All

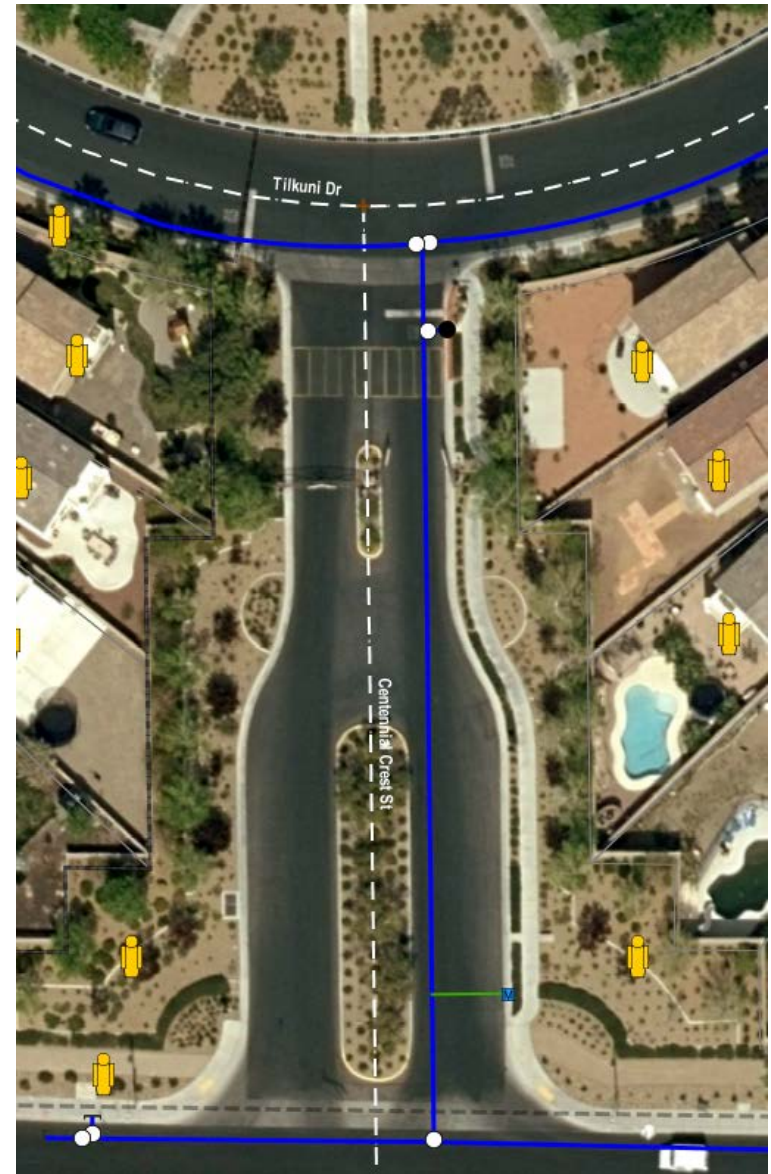
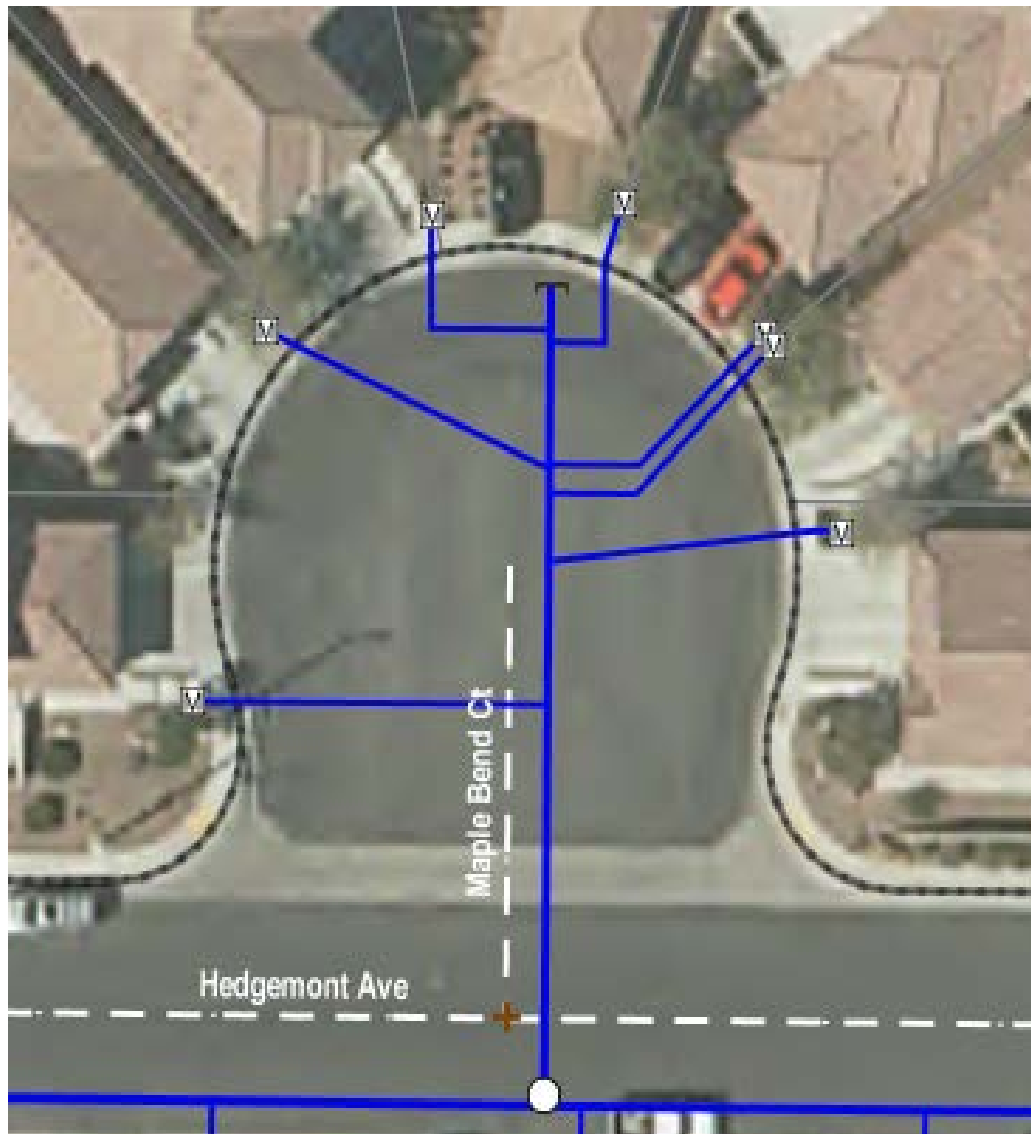
If it works on paper and the calculations are good, then the design must be right!

“How do they expect us to construct this?”

“How do they expect us to maintain this?”

“What are those engineers thinking?”

Engineers Don't Know It All



After Feedback From Operations

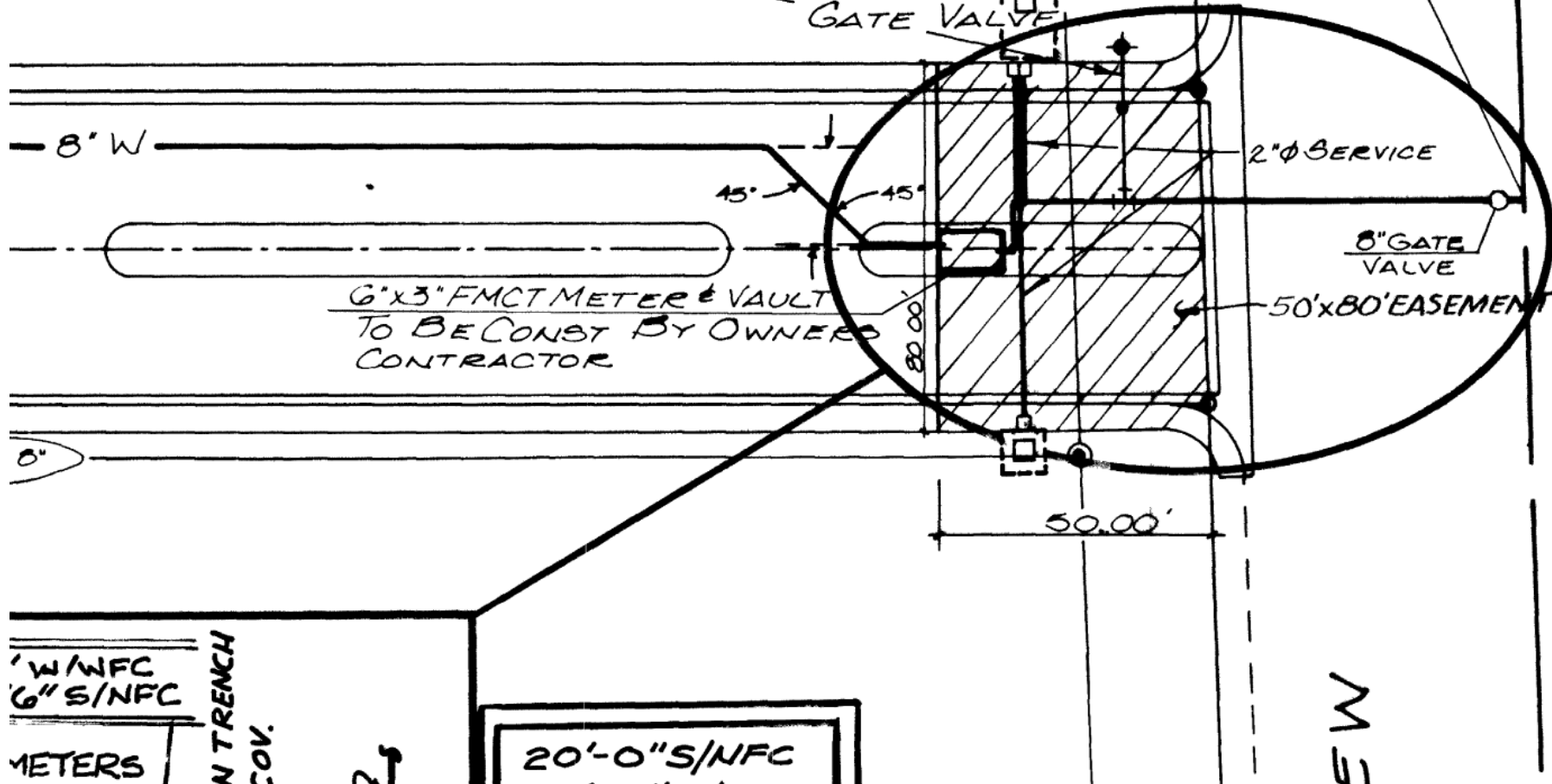


It Looked Good On Paper

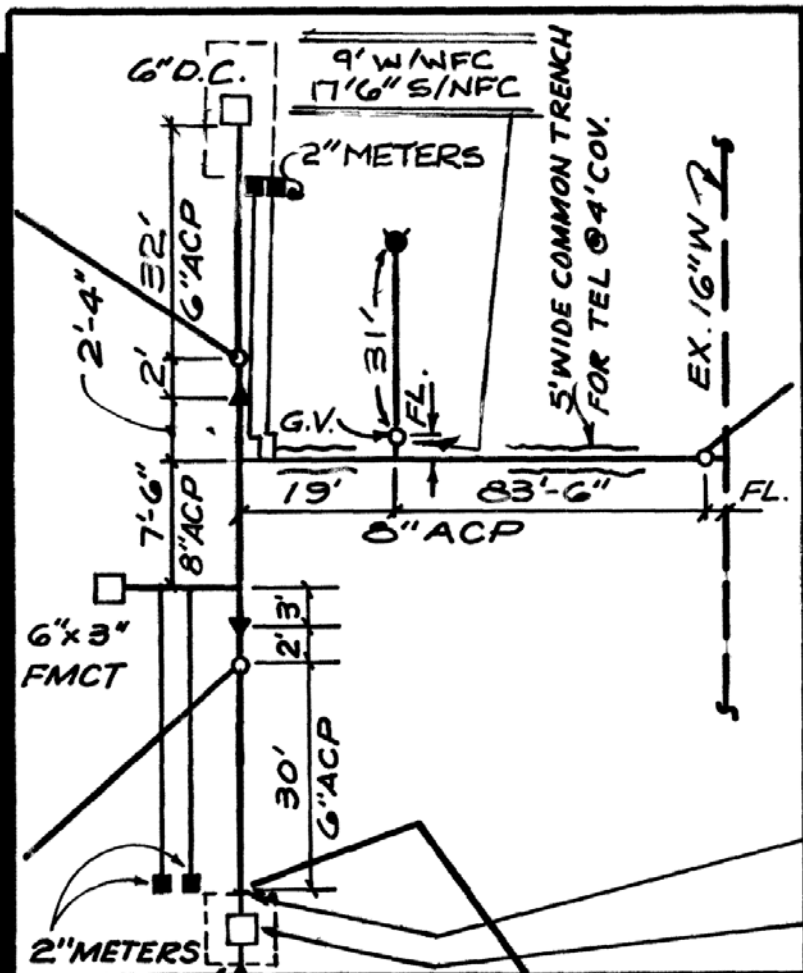
CALL BEFORE YOU DIG - 1-800-227-2600

TYP FIRE HYDRANT
ASSEMBLY W/ GATE VALVE

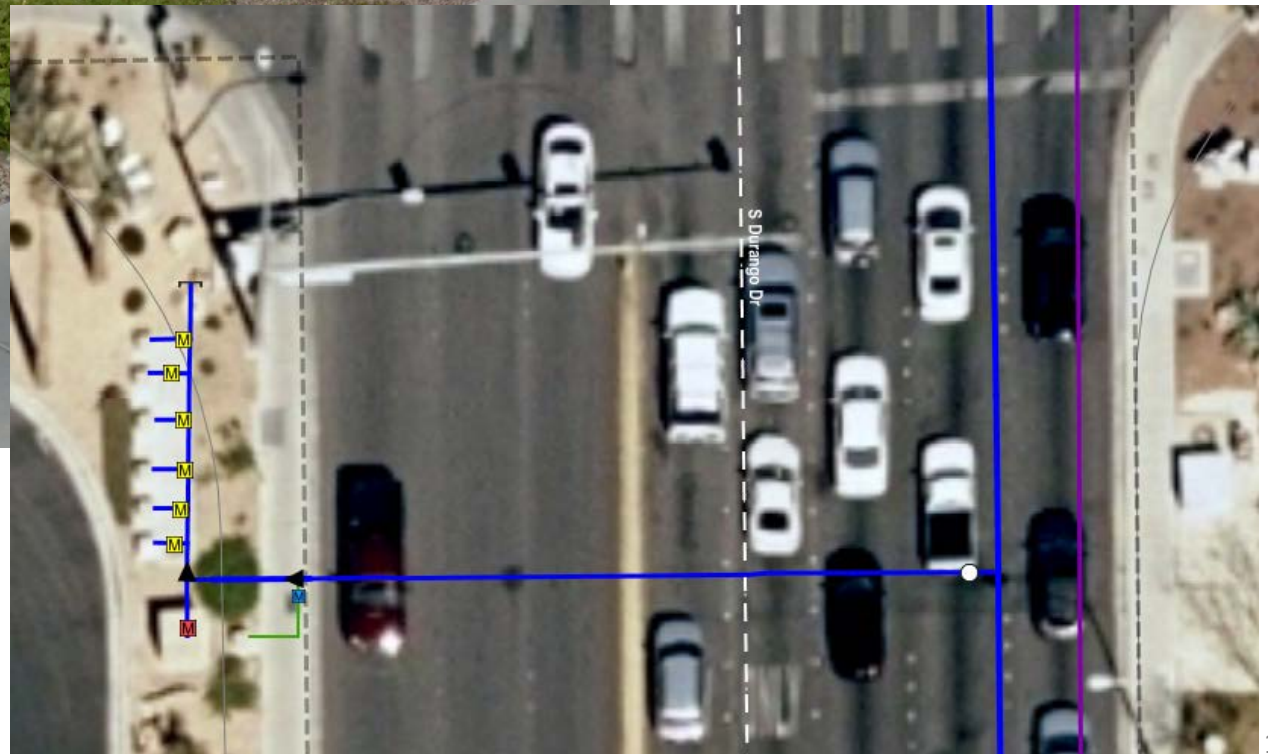
CONTRACTOR TO WET TAP TO
EXIST 16" ACP MAIN W/ 8"
ACP WATERLINE AND
GATE VALVE



Where Do You Think The Leak Is?



Bank Services On Major Roadways



Large Meter Change Out – Space Required



Access Issues – Design vs. Access Needs



Separation Requirements



Valve Access For 24" Main



Landscape Access Issues



A Picture Is Worth A Thousand Words

- Ride along with the field to understand their role
- Defend your requirements for access
- Demand to review ALL plans in a development set
- Photos say it all when you need to justify requirements
- Encourage the field to send photos of their work – good, bad or ugly
- Use the photos for in-house maintenance engineering design purposes
- Design a better product for the longevity of your system

Bridge the gap between engineers and operators

Questions?