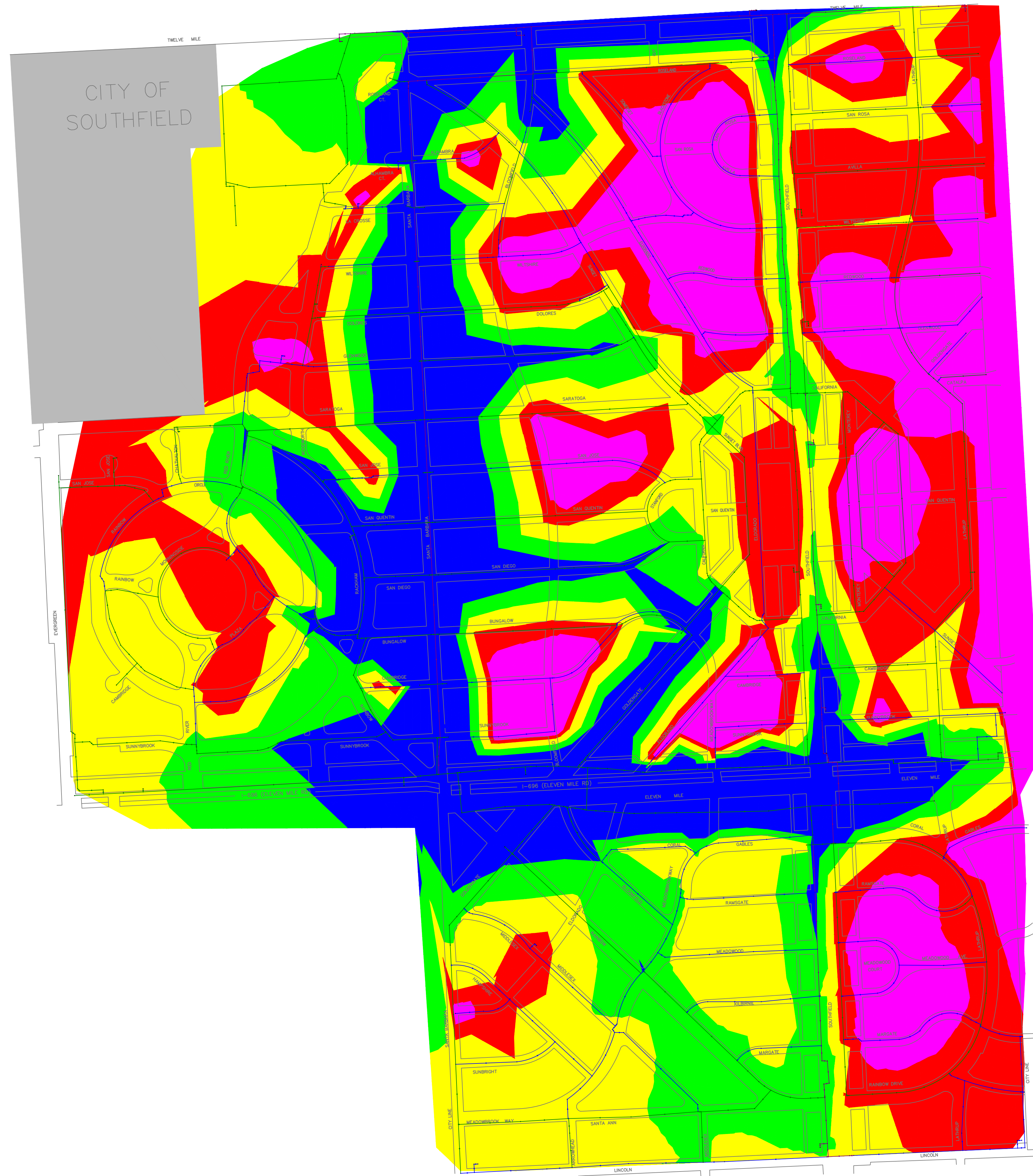


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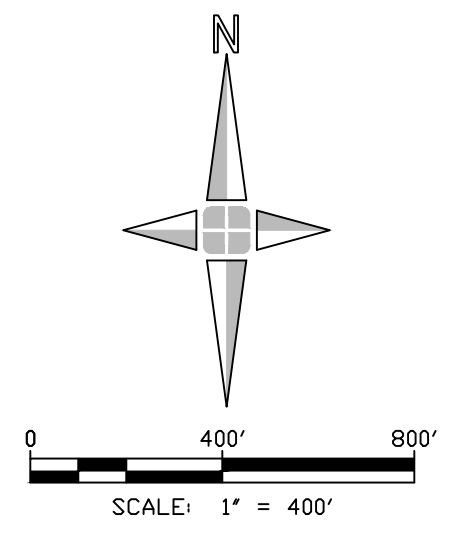


DIAMETER LEGEND

- 6" PIPE
- 8" PIPE
- 12" PIPE

FIREFLOW LEGEND

- < 750 gpm
- 750 gpm - 1000 gpm
- 1000 gpm - 1500 gpm
- 1500 gpm - 2000 gpm
- OVER 2000 gpm



SCENARIO 2025a - MODELED SYSTEM FLOWS WITH COMPLETED 2025 PROJECTS WITH BOTH METER PITS OPEN (11 AND 12 MILE)

- IN THIS SCENARIO, NEW WATER MAINS SOUTH OF 696 ARE BEING INSTALLED WITH 8" WATER MAINS.

- ALL THREE PROJECTS INCLUDE NEW WATER MAIN INSTALLATIONS TO INCREASE FLOW AND RELIABILITY BY CONSTRUCTING ADDITIONAL LOOPS IN THE SYSTEM.

- THE INSTALLATION OF THE NEW LOOPED WATER MAINS HAS LIMITED IMPROVEMENT IN THE SOUTHWEST QUADRANT BUT DID INCREASE FLOW ALONG LINCOLN WEST. THE SOUTHEAST QUADRANT HAD LIMITED IMPROVEMENTS AND INCREASED FLOW BY APPROXIMATELY 250 GPM FOR APPROXIMATELY 50% OF THE QUADRANT. THE OPENING OF THE 12 MILE METER HAD NO EFFECT ON THE AREA SOUTH OF 11 MILE.

- OPENING THE 12" METER AT 12 MILE RD AND SOUTHFIELD RD INCREASES AVAILABLE FIRE FLOWS ONLY IN THE IMMEDIATE SURROUNDING AREA OF THE 12 MILE RD, METERED CONNECTION, AND THE SYSTEM IS STILL NOT ABLE TO DELIVER RECOMMENDED FIRE FLOWS TO LARGE SECTIONS OF THE CITY.



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 Quality Control: J.P.K.



DATE:	ISSUE:

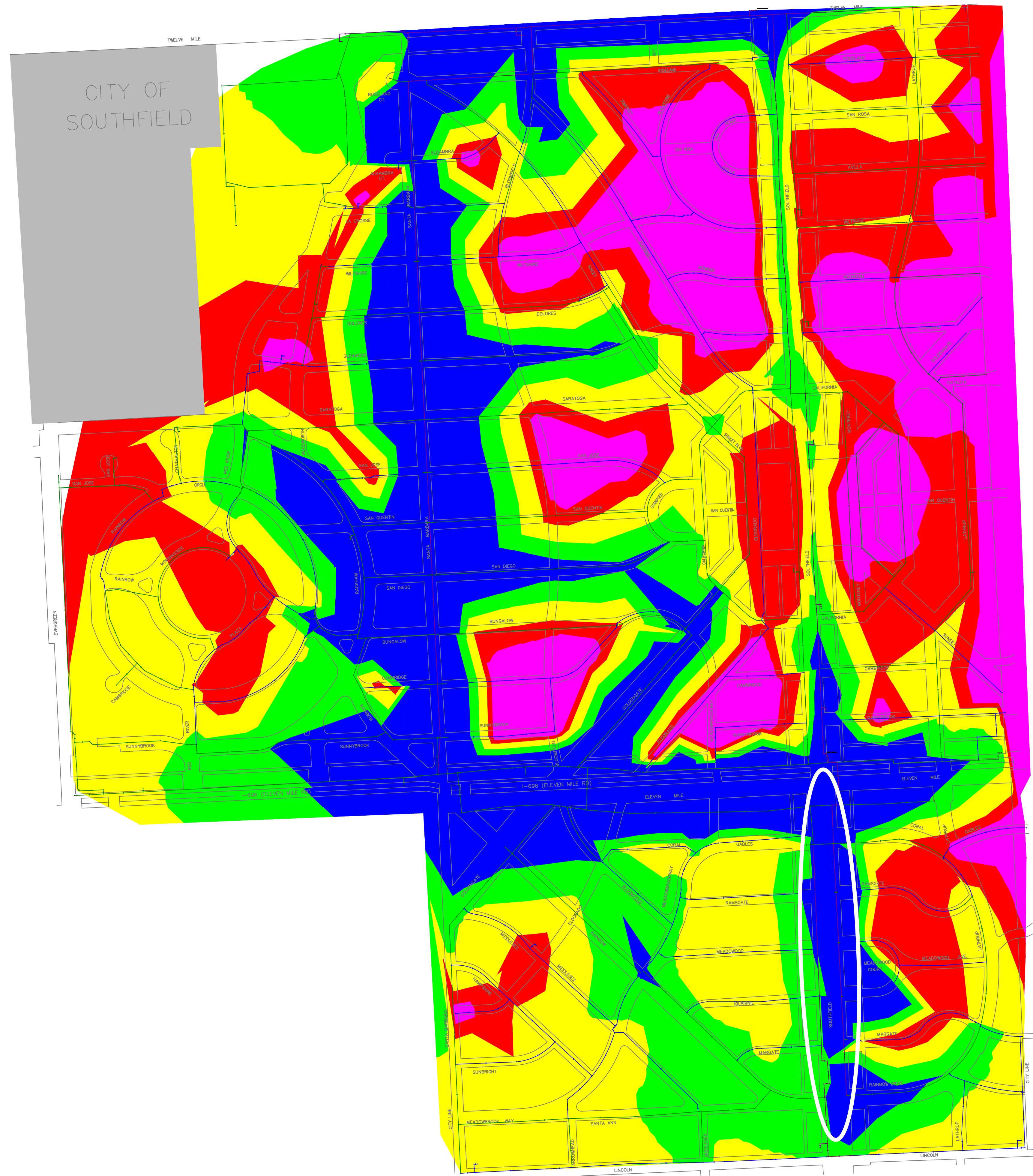
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 27400 SOUTHFIELD ROAD
 LATHRUP VILLAGE, MI 48076
 (248)557-2600

SCENARIO 2025a

LATHRUP VILLAGE WATER SYSTEM RELIABILITY STUDY
 CITY OF LATHRUP VILLAGE
 OAKLAND COUNTY
 MICHIGAN

Date: 08/2023
 Scale: 1" = 400'
 Sheet: 1 of 1
 Project: 16496.53
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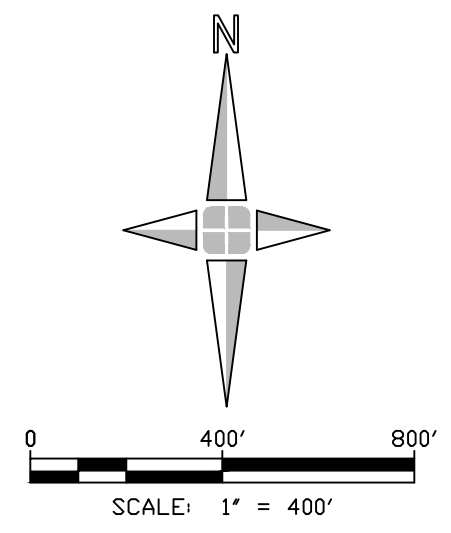


DIAMETER LEGEND

- 6" PIPE
- 8" PIPE
- 12" PIPE

FIREFLOW LEGEND

- < 750 gpm
- 750 gpm - 1000 gpm
- 1000 gpm - 1500 gpm
- 1500 gpm - 2000 gpm
- OVER 2000 gpm



SCENARIO 2026a - SOUTH SOUTHFIELD ROAD 8" WATER MAIN REPLACED (LINCOLN TO 11 MILE) WITH BOTH METER PITS OPEN (11 AND 12 MILE)

- IN THIS SCENARIO, THE 8" WATER MAIN ALONG SOUTHFIELD ROAD FROM 11 MILE TO LINCOLN WAS REPLACED WITH NEW 12" WATER MAIN. THIS IS ONE OF THE OLDEST WATER MAINS IN THE CITY, WHICH MEANS THAT IT IS MOST LIKELY CORRODED AND DOES NOT PROVIDE SUFFICIENT FLOW FOR THE SOUTH SIDE OF THE CITY.
- WITH THE PIPE REPLACEMENT ALONG SOUTHFIELD ROAD, FIRE FLOW HAS INCREASED SIGNIFICANTLY ALONG THE NEW WATER MAIN AND OUT INTO THE RESIDENTIAL DISTRICTS. AVAILABLE FIRE FLOW DOES DECLINE AS THE DISTANCE FROM SOUTHFIELD RD. INCREASES.
- THE INSTALLATION OF A NEW 12" WATER MAIN HAS SIGNIFICANT IMPROVEMENTS TO THE FLOWS IN THE SOUTHEAST DISTRICT. APPROXIMATELY 75% OF THE AREA HAS ACCEPTABLE FIRE FLOWS. THE LATHRUP BOULEVARD CORRIDOR FLOWS INCREASED BY 500 GPM. THE OPENING OF THE 12 MILE METER HAD NO EFFECT ON THE AREA SOUTH OF 11 MILE.
- OPENING THE 12" METER AT 12 MILE RD AND SOUTHFIELD RD INCREASES AVAILABLE FIRE FLOWS ONLY IN THE IMMEDIATE SURROUNDING AREA OF THE 12 MILE RD. METERED CONNECTION, AND THE SYSTEM IS STILL NOT ABLE TO DELIVER RECOMMENDED FIRE FLOWS TO LARGE SECTIONS OF THE CITY.



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SCENARIO 2026a

LATHRUP VILLAGE WATER SYSTEM RELIABILITY STUDY
 CITY OF LATHRUP VILLAGE
 OAKLAND COUNTY
 MICHIGAN

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