

SPRINGVILLE CITY

PRESSURE IRRIGATION SYSTEM MASTER PLAN AND IMPACT FEE FACILITIES PLAN



2006 CONCLUSIONS/ RECOMMENDATIONS

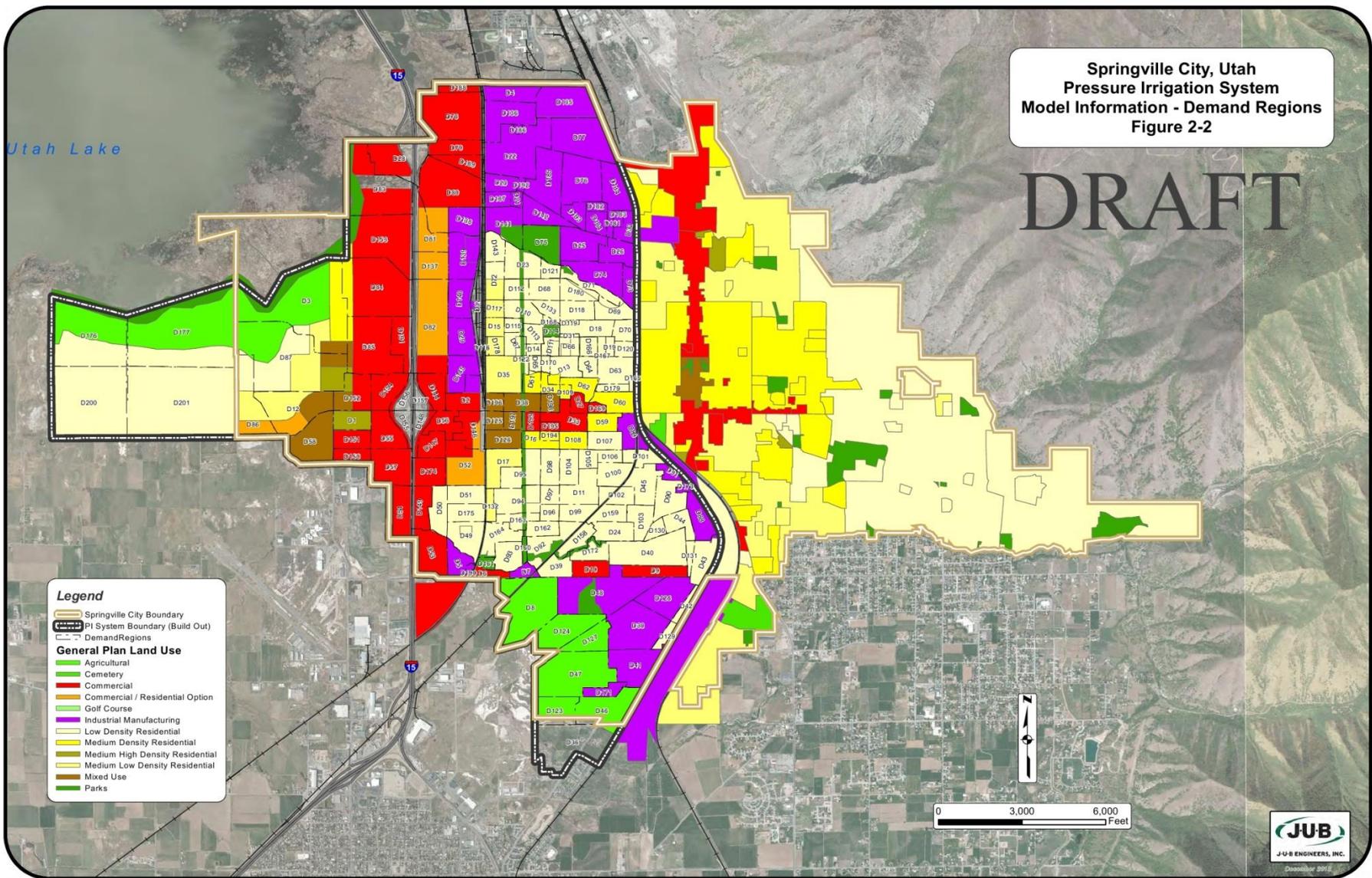
- PARTIAL SYSTEM
 - ULTIMATELY COUNCIL DECIDED TO PURSUE A PARTIAL SYSTEM
 - CITYWIDE SYSTEM ALWAYS CONSIDERED TO BE A FUTURE OPTION
 - 8 YEARS DOWN THE ROAD
- PARTIAL SYSTEM DEEMED MOST FEASIBLE
 - LOWEST OVERALL COST (COMPARED TO CITYWIDE OR NO PI SYSTEM)
 - WILL ALLEVIATE SIGNIFICANT DEMAND ON CW SYSTEM
 - (HAL STUDY ESTIMATED 26%-29% LESS DEMAND ON CW SYSTEM AT BUILD-OUT WITH PARTIAL SYSTEM)
 - PUSHES OFF CW INFRASTRUCTURE NEEDS
 - LESS TANK VOLUME
 - LESS WELLS

SCOPE OF MP & IFFP

- COMPUTER MODELING
 - BASED ON GENERAL PLAN LAND USE
 - BASED ON GROWTH RATE PROJECTIONS
 - CREATED PIPE NETWORK AND DEMAND REGIONS BASED ON LAND USE
 - PARAMETERS
 - MINIMUM 40 PSI
 - MAXIMUM VELOCITY OF 7 FT/SECOND (ALMOST ALL PIPES BELOW 5 FT/SECOND)
 - PROVIDE 4 GAL/MIN/IRRIGATED ACRE
- PREPARED MODEL MAPS

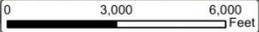
Springville City, Utah
 Pressure Irrigation System
 Model Information - Demand Regions
 Figure 2-2

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Legend

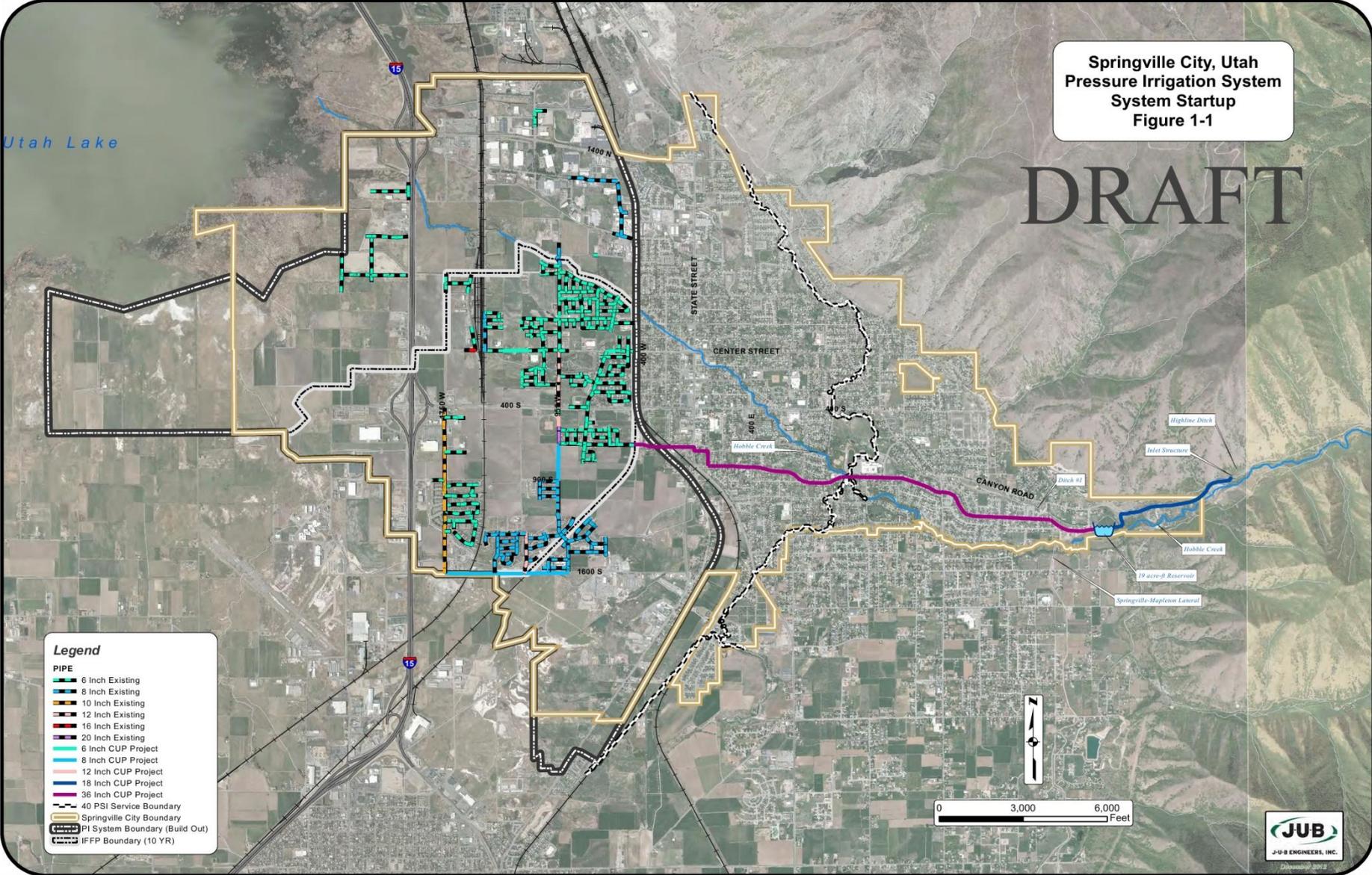
- Springville City Boundary
- PI System Boundary (Build Out)
- Demand Regions
- General Plan Land Use**
- Agricultural
- Cemetery
- Commercial
- Commercial / Residential Option
- Golf Course
- Industrial Manufacturing
- Low Density Residential
- Medium Density Residential
- Medium High Density Residential
- Medium Low Density Residential
- Mixed Use
- Parks



December 2013

Springville City, Utah
 Pressure Irrigation System
 System Startup
 Figure 1-1

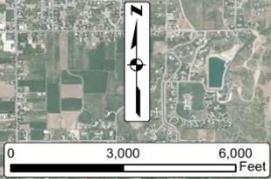
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PIPE

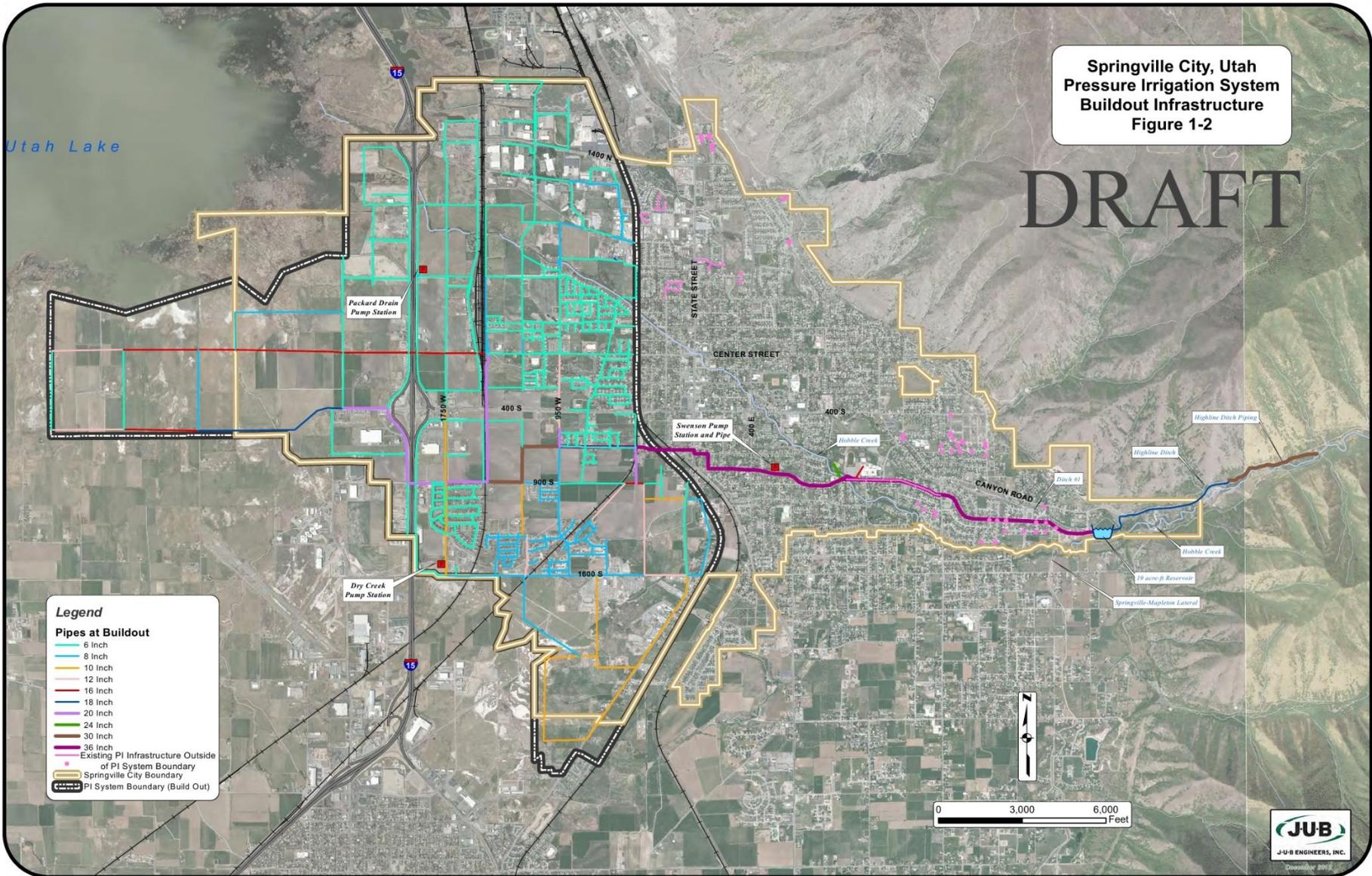
- 6 Inch Existing
- 8 Inch Existing
- 10 Inch Existing
- 12 Inch Existing
- 16 Inch Existing
- 20 Inch Existing
- 6 Inch CUP Project
- 8 Inch CUP Project
- 12 Inch CUP Project
- 18 Inch CUP Project
- 36 Inch CUP Project
- 40 PSI Service Boundary
- Springville City Boundary
- PI System Boundary (Build Out)
- IFFP Boundary (10 YR)



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Springville City, Utah
 Pressure Irrigation System
 Buildout Infrastructure
 Figure 1-2

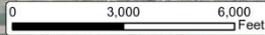
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Legend

Pipes at Buildout

- 6 inch
- 8 inch
- 10 inch
- 12 inch
- 16 inch
- 18 inch
- 20 inch
- 24 inch
- 30 inch
- 36 inch
- Existing PI Infrastructure Outside of PI System Boundary
- Springville City Boundary
- PI System Boundary (Build Out)





MP & IFFP

- MODEL & EVALUATE PARTIAL SYSTEM
 - PARTIAL SYSTEM DEFINED AS WEST FIELDS AREA
(PRIMARILY WEST OF 400 WEST)
 - STARTUP SYSTEM
 - SOURCES
 - HOBBLE CREEK THROUGH HIGHLINE DITCH (CURRENT CAPACITY)
 - MAPLETON/SPRINGVILLE LATERAL
 - PLANNED FOR EXPANDABLE SYSTEM
 - 40 PSI BOUNDARY (STILL NOT A FULL CITYWIDE SYSTEM)
 - PIPING SIZED ACCORDINGLY
 - POND SIZED FOR RECREATION & STORAGE

MP & IFFP (CONT)

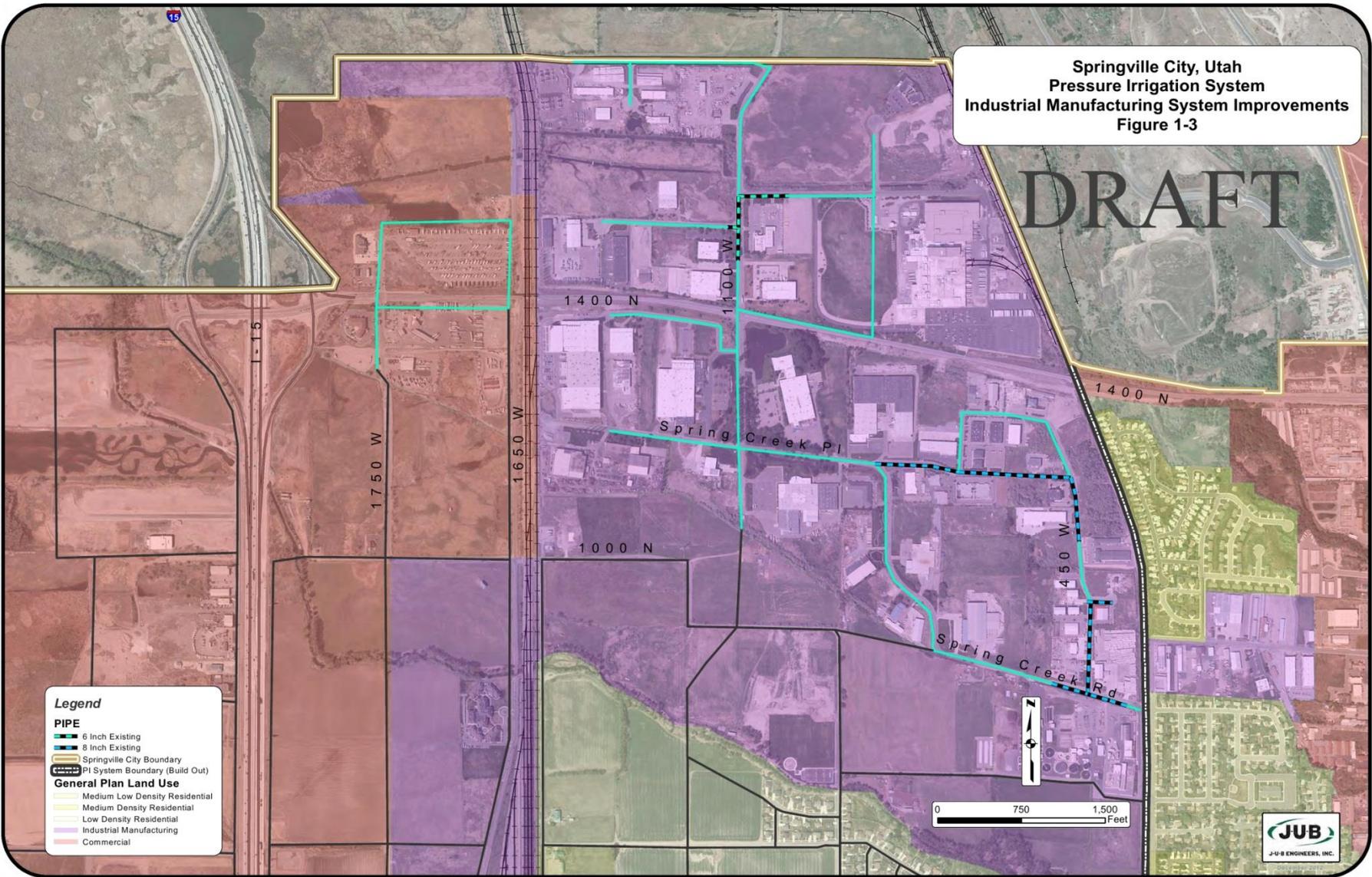
- BUILD-OUT SYSTEM
 - SOURCES
 - SWENSON DIVERSION (IFFP - 10 YR NEED)
 - CITY DIVERSION & HIGHLINE DITCH PIPING (IFFP - 10 YR NEED)
 - DRY CREEK, PACKARD DRAIN, OTHER EXISTING IRRIGATION DITCHES, DIVERSIONS & WELLS
 - RE-USE OF EFFLUENT FROM WWTP?
 - SUVMWA WATER
 - ADDITIONAL STRAWBERRY WATER THROUGH MAPLETON/SPRINGVILLE LATERAL

MP & IFFP (CONT)

- NECESSARY CAPITAL IMPROVEMENTS
 - INDUSTRIAL & COMMERCIAL AREA
 - NORTHEAST AREA OF WEST FIELDS SERVICE BOUNDARY
 - ALREADY DEVELOPED AREA
 - MOSTLY CITY INCURRED IMPROVEMENT COSTS
 - ESTIMATED COSTS \$1.32M
 - INDUSTRIAL AREA MAP (MP FIG. 1.3)

Springville City, Utah
 Pressure Irrigation System
 Industrial Manufacturing System Improvements
 Figure 1-3

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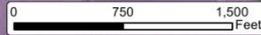
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PIPE

- 8 Inch Existing
- 6 Inch Existing
- Springville City Boundary
- PI System Boundary (Build Out)

General Plan Land Use

- Medium Low Density Residential
- Medium Density Residential
- Low Density Residential
- Industrial Manufacturing
- Commercial

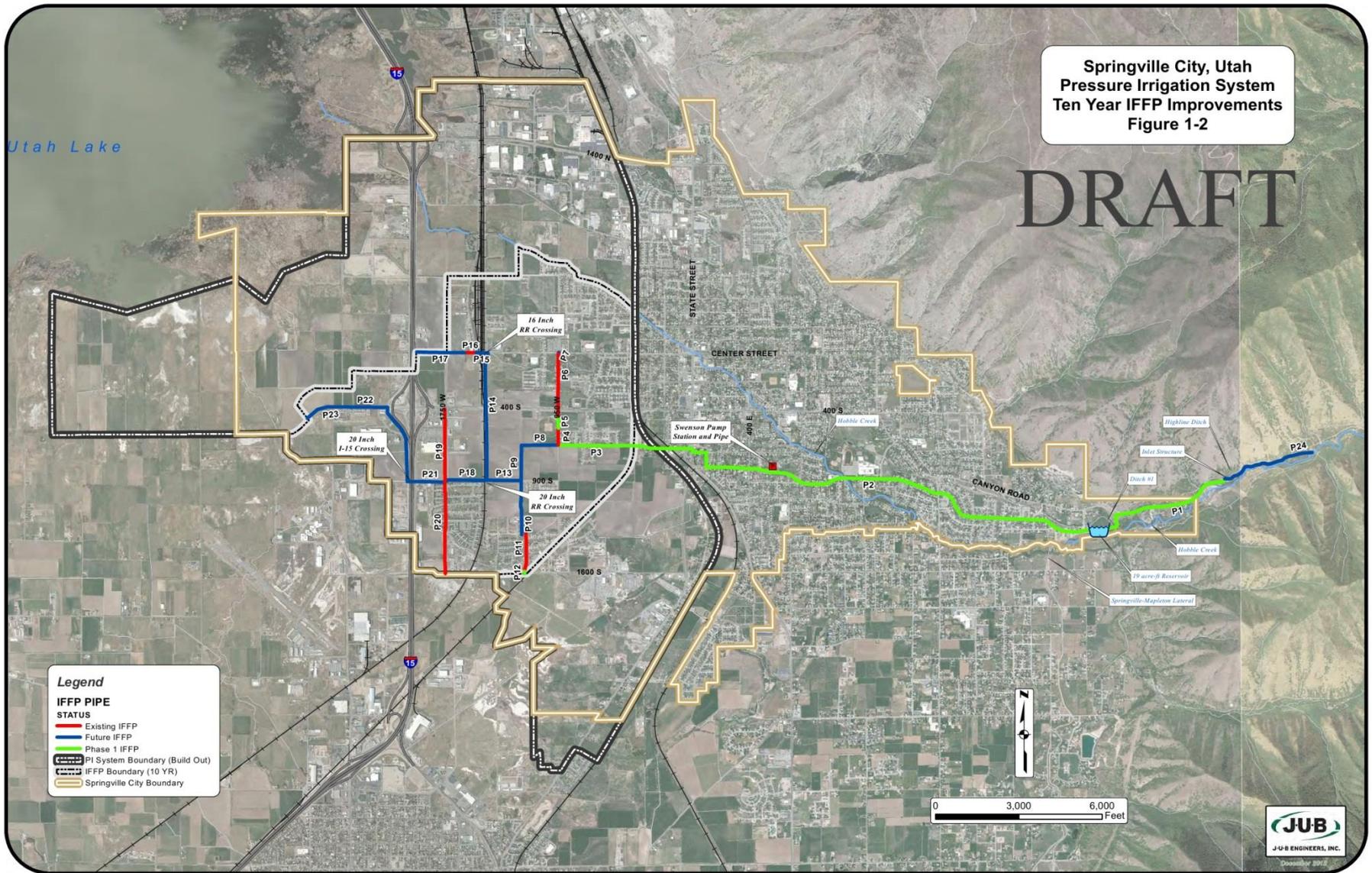


MP & IFFP (CONT)

- IMPACT FEE FACILITY PLAN (IFFP)
 - ADDRESSES 10 YEAR SCENARIO
 - 10 YEAR BOUNDARY (ESTIMATED)
 - 10 YEAR SOURCE IMPROVEMENTS
 - SWENSON DIVERSION
 - HIGHLINE DITCH PIPING
 - FUTURE IMPROVEMENTS RELATED TO GROWTH
 - LARGELY PAID BY IMPACT FEES (UPSIZING, PUMP STATIONS, ETC.) OR INSTALLED BY DEVELOPMENT
- 10 YEAR SYSTEM MAP (IFFP FIG. 1.2)

Springville City, Utah
 Pressure Irrigation System
 Ten Year IFFP Improvements
 Figure 1-2

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Legend

IFFP PIPE

STATUS

- Existing IFFP
- Future IFFP
- Phase 1 IFFP
- PI System Boundary (Build Out)
- IFFP Boundary (10 YR)
- Springville City Boundary

0 3,000 6,000
 Feet

N



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