

HOLBROOK FARMS AREA PLAN  
CULINARY WATER

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Introduction

Lehi City conducted a water model analysis of the region which included the Holbrook Farms properties. This document represents a water system analysis specific to the Holbrook Farms Area plan. For this analysis the following assumptions have been made:

1. Water source from connection to existing Lehi City water system on east side of the Jordan River
2. Future water source of Lehi City connection to CWP pipeline.
3. Lower tank water surface elevation of 4757
4. Upper tank water surface elevation of 5115

Design Criteria

|                            |   |
|----------------------------|---|
| Minimum Pipe Size          | 6"  |
| Pipe Roughness Coefficient | 130   |
| Maximum Pipe Velocity      | 5 feet per second   |
| Capita per Unit            | 3.8   |
| Average Flow               | 100 gallons per day per person                            |
| Peak Instantaneous Flow    | 400 gallons per day per person (Peaking Factor = 4)       |
| Peak Hourly Flow           | 0.8 GPM/ERU   |
| Storage                    | 400 gallons per day per connection ERU                    |
| Source                     | 800 gallons per day per connection or ERU                 |
| Minimum Pressure           | 50 psi at peak flow<br>50 psi at peak flow with fire flow |
| Interior Sprinklers        | 1500 GPM at J17 and J28 ("Big Box Commercial)             |

Summary of Results

|                  |   |
|------------------|---|
| Peak Hourly Flow | 2,138 gallons per minute  |
| Source Required  | 1,484.7 gallons per minute  |
| Storage Required |   |
| Upper Tank       | 329,200 gallons + 180,000 gallons fire storage = 509,200 gallons (1.56 ac-ft) |
| Lower Tank       | 739,805 gallons + 180,000 gallons fire storage = 919,805 gallons (2.82 ac-ft) |

Case 1: Peak Instantaneous (no fire flow)

|                  |                 |
|------------------|-----------------|
| Minimum Pressure | 71.02 psi @ J25 |
|------------------|-----------------|

Case 2: Peak Hourly + 1500 GPM Fire Flow for "Big Box" Commercial

|                  |  |
|------------------|--|
| Minimum Pressure | 67.89 psi @ J25<br>(1500 GPM at J17 and J28) |
|------------------|--|



HOLBROOK FARMS AREA PLAN  
CULINARY WATER

| Area                 | Land Use             | Approx. Acres | Units per acre (Density) | Estimated Units | Capita/Unit | No. Capita | Flow/Capita (gal/day) | Average Flow (gal/day) | Peak Factor | Peak Inst. Flow (gal/day) | Peak Inst. Flow (gal/min) | Peak Hourly Flow (0.8 gpm/Unit) | Storage Required (400 gal/Unit) | Storage Required (Ac-ft) | Source Required (800 gpd/Unit) | Source Required (gpm) |  |
|----------------------|----------------------|---------------|--------------------------|-----------------|-------------|------------|-----------------------|------------------------|-------------|---------------------------|---------------------------|---------------------------------|---------------------------------|--------------------------|--------------------------------|-----------------------|--|
| 1A                   | Flex Zone            | 55.00         | 2.73                     | 150             | 3.8         | 570        | 100                   | 57,000                 | 4           | 228,000                   | 158                       | 120                             | 60,000                          | 0.18                     | 120,000                        | 83.3                  |  |
| 1B                   | Flex Zone            | 82.18         | 3.65                     | 300             | 3.8         | 1,140      | 100                   | 114,000                | 4           | 456,000                   | 317                       | 240                             | 120,000                         | 0.37                     | 240,000                        | 166.7                 |  |
| 2                    | Commercial/Office    | 7.18          | 3.00                     | 21.5            | 19.0        | 409        | 20                    | 8,185                  | 4           | 32,741                    | 23                        | 17                              | 8,616                           | 0.03                     | 17,232                         | 12.0                  |  |
| 3                    | Residential Area     | 11.48         | 23.08                    | 265             | 3.8         | 1,007      | 100                   | 100,700                | 4           | 402,800                   | 280                       | 212                             | 106,000                         | 0.33                     | 212,000                        | 147.2                 |  |
| 4                    | Commercial/Office    | 28.82         | 3.00                     | 86.5            | 19.0        | 1,643      | 20                    | 32,855                 | 4           | 131,419                   | 91                        | 69                              | 34,584                          | 0.11                     | 69,168                         | 48.0                  |  |
| 5                    | Commercial/Office    | 6.19          | 3.50                     | 22              | 19.0        | 412        | 20                    | 8,233                  | 4           | 32,931                    | 23                        | 17                              | 8,666                           | 0.03                     | 17,332                         | 12.0                  |  |
| 6                    | Residential Area     | 24.33         | 12.00                    | 292             | 3.8         | 1,109      | 100                   | 110,945                | 4           | 443,779                   | 308                       | 234                             | 116,784                         | 0.36                     | 233,568                        | 162.2                 |  |
| 7                    | Residential Area     | 29.37         | 12.00                    | 352             | 3.8         | 1,339      | 100                   | 133,927                | 4           | 535,709                   | 372                       | 282                             | 140,976                         | 0.43                     | 281,952                        | 195.8                 |  |
| 8                    | Residential Area     | 11.98         | 7.11                     | 85              | 3.8         | 324        | 100                   | 32,368                 | 4           | 129,470                   | 90                        | 68                              | 34,071                          | 0.10                     | 68,142                         | 47.3                  |  |
| 9                    | Residential Area     | 30.04         | 7.11                     | 214             | 3.8         | 812        | 100                   | 81,162                 | 4           | 324,648                   | 225                       | 171                             | 85,434                          | 0.26                     | 170,868                        | 118.7                 |  |
| 10                   | Open Space           | 40.92         | -                        | -               | -           | -          | -                     | -                      | -           | -                         | -                         | -                               | -                               | -                        | -                              | -                     |  |
| 11                   | Residential Area     | 34.49         | 5.00                     | 172             | 3.8         | 655        | 100                   | 65,531                 | 4           | 262,124                   | 182                       | 138                             | 68,980                          | 0.21                     | 137,960                        | 95.8                  |  |
| 12                   | Residential Area     | 34.00         | 2.50                     | 85              | 3.8         | 323        | 100                   | 32,300                 | 4           | 129,200                   | 90                        | 68                              | 34,000                          | 0.10                     | 68,000                         | 47.2                  |  |
| 13                   | Commercial/Office    | 17.97         | 3.50                     | 63              | 19.0        | 1,195      | 20                    | 23,900                 | 4           | 95,600                    | 66                        | 50                              | 25,158                          | 0.08                     | 50,316                         | 34.9                  |  |
| 14                   | Commercial/Office    | 11.86         | 3.50                     | 42              | 19.0        | 789        | 20                    | 15,774                 | 4           | 63,095                    | 44                        | 33                              | 16,604                          | 0.05                     | 33,208                         | 23.1                  |  |
| 15                   | Commercial/Office    | 16.82         | 3.50                     | 59              | 3.8         | 224        | 100                   | 22,371                 | 4           | 89,482                    | 62                        | 47                              | 23,548                          | 0.07                     | 47,096                         | 32.7                  |  |
| 16a                  | Residential Area     | 33.88         | 3.00                     | 102             | 3.8         | 386        | 100                   | 38,623                 | 4           | 154,493                   | 107                       | 81                              | 40,656                          | 0.12                     | 81,312                         | 56.5                  |  |
| 16b                  | Residential Area     | 65.68         | 3.00                     | 197             | 3.8         | 749        | 100                   | 74,875                 | 4           | 299,501                   | 208                       | 158                             | 78,816                          | 0.24                     | 157,632                        | 109.5                 |  |
| 17                   | Commercial/Office    | 41.16         | 3.50                     | 144             | 19.0        | 2,737      | 20                    | 54,743                 | 4           | 218,971                   | 152                       | 115                             | 57,624                          | 0.18                     | 115,248                        | 80.0                  |  |
| 18                   | Residential Area     | 24.46         | 7.00                     | 171             | 3.8         | 651        | 100                   | 65,064                 | 4           | 260,254                   | 181                       | 137                             | 68,488                          | 0.21                     | 136,976                        | 95.1                  |  |
| 19                   | Open Space           | 28.19         | -                        | -               | -           | -          | -                     | -                      | -           | -                         | -                         | -                               | -                               | -                        | -                              | -                     |  |
| -                    | Neighborhood Open Sp | 18.93         | -                        | -               | -           | -          | -                     | -                      | -           | -                         | -                         | -                               | -                               | -                        | -                              | -                     |  |
| -                    | Trails               | 13.88         | -                        | -               | -           | -          | -                     | -                      | -           | -                         | -                         | -                               | -                               | -                        | -                              | -                     |  |
| -                    | Major Roads          | 27.38         | -                        | -               | -           | -          | -                     | -                      | -           | -                         | -                         | -                               | -                               | -                        | -                              | -                     |  |
| Totals               |                      | 696.19        |                          | 2,823           |             | 15,903     |                       | 1,015,555              |             | 4,062,219                 | 2,821                     | 2,138                           | 1,069,005                       | 3.28                     | 2,138,010                      | 1,484.7               |  |
| Total Approved ERU's |                      | 2,823.00      |                          |                 |             |            |                       |                        |             |                           |                           |                                 | Upper Tank                      | 329,200                  | 1.01                           |                       |  |
|                      |                      |               |                          |                 |             |            |                       |                        |             |                           |                           |                                 | Lower Tank                      | 739,805                  | 2.27                           |                       |  |

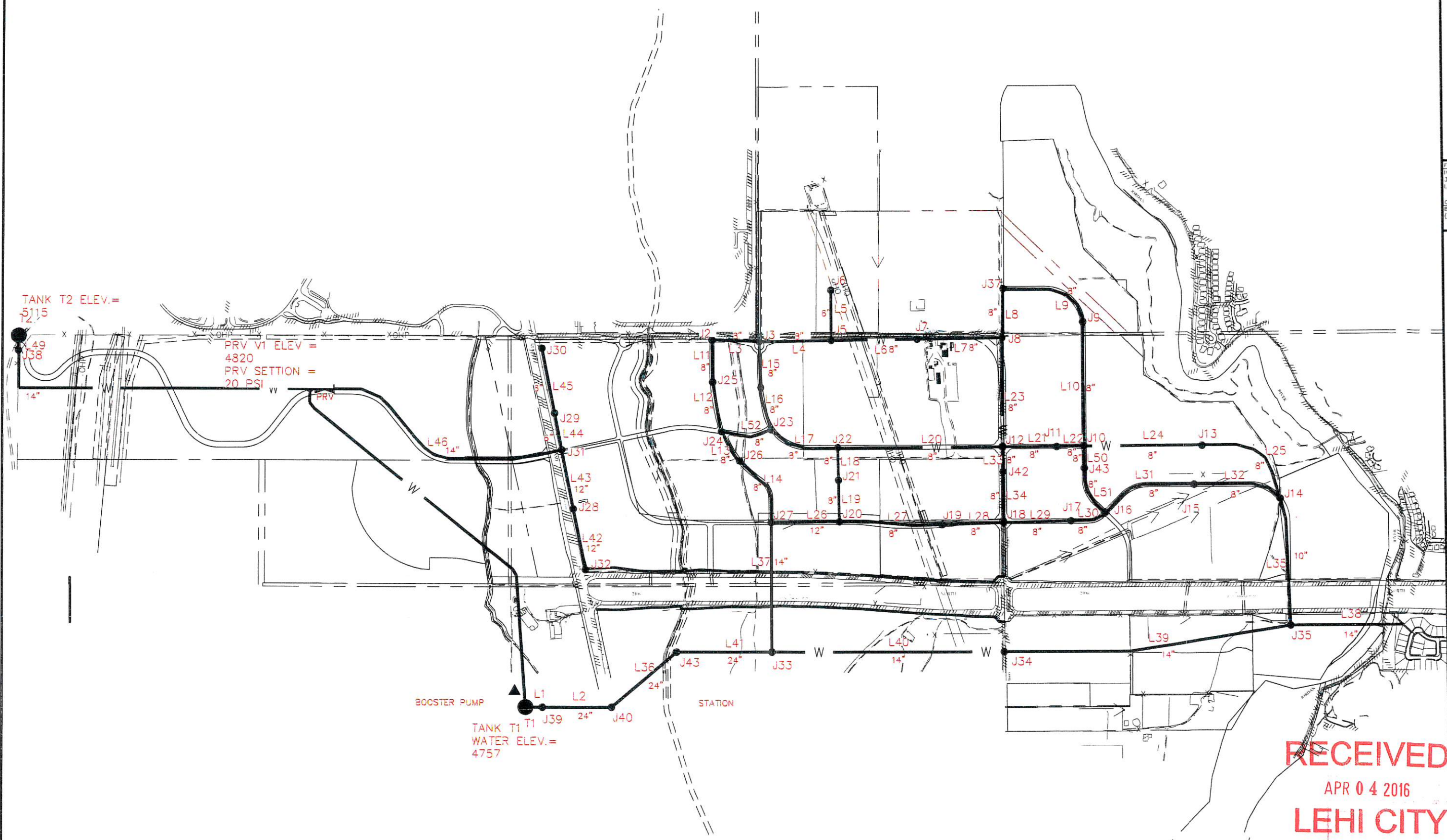
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APR 04 2016  
LEHI CITY

**JACKSON ENGINEERING**  
 3376 STONEHILL LANE  
 COTTONWOOD HEIGHTS, UTAH 84121  
 PHONE (801) 558-5293

FOR:  
 IVORY DEVELOPMENT  
 1340 NORTH CENTER STREET  
 LEHI, UTAH 84043

CONTACT:  
 BRAD MACKAY  
 (801) 331-6740

**HOLBROOK FARMS AREA PLAN  
 WATER SYSTEM ANALYSIS  
 CULINARY WATER SYSTEM  
 IVORY DEVELOPMENT**



TANK T2 ELEV. = 5115  
 J38  
 14"  
 PRV V1 ELEV = 4820  
 PRV SECTION = 20 PSI

BOOSTER PUMP  
 TANK T1 WATER ELEV. = 4757  
 J39  
 24"  
 J40

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ASSUMED WATER SOURCES:  
 CWP CONNECTION (CWP SYSTEM PRESSURE UNKNOWN)  
 EXISTING LEHI CITY SYSTEM EAST OF JORDAN RIVER

PEAK HOUR FLOW WITH 1500 GPM FIRE FLOW AT J17 AND J28  
 PEAK INSTANTANEOUS FLOW WITH NO FIRE FLOW

| NO. | DATE     | REVISION          | BY  |
|-----|----------|-------------------|-----|
| 2   | 11/23/15 | CITY COMMENT      | SLJ |
| 3   | 11/24/15 | CITY COMMENT      | SLJ |
| 4   | 1/27/16  | TANK NEW LOCATION | SLJ |
| 5   | 1/27/16  | TRUSS W CROSSING  | SLJ |
| 6   | 3/23/16  | CITY COMMENT      | SLJ |
| 7   | 3/25/16  | CITY COMMENT      | SLJ |

| PROJ. NO.  | DATE      |
|------------|-----------|
| 15.023.102 | 3/25/2016 |

| DRAWN BY | CHECKED BY |
|----------|------------|
| SLJ      | SLJ        |

| PROJECT MANAGER |
|-----------------|
| PROJECT MANAGER |

**EXHIBIT  
 W03**

HOLBROOK FARMS AREA PLAN  
 CULINARY WATER MODEL  
 PEAK HOUR WITH 1500 GPM FIRE FLOW @ J17 and J28

Node Report

| Node ID | Elevation ft | Demand GPM | Pressure psi            | Area | Land Use          |
|---------|--------------|------------|-------------------------|------|-------------------|
| J2      | 4586         | 0.00       | 68.67                   |      |                   |
| J3      | 4574         | 0.00       | 73.79                   |      |                   |
| J4      | 4574         | 68.00      | 74.04                   | 8    | Residential       |
| J5      | 4566         | 0.00       | 76.27                   |      |                   |
| J6      | 4566         | 138.00     | 76.03                   | 11   | Residential       |
| J7      | 4560         | 68.00      | 78.32                   | 12   | Residential       |
| J8      | 4546         | 81.00      | 84.17                   | 16a  | Residential       |
| J9      | 4535         | 158.00     | 88.72                   | 16b  | Residential       |
| J10     | 4529         | 0.00       | 91.35                   |      |                   |
| J11     | 4545         | 0.00       | 84.52                   |      |                   |
| J12     | 4542         | 0.00       | 85.93                   |      |                   |
| J13     | 4527         | 137.00     | 92.76                   |      |                   |
| J14     | 4522         | 0.00       | 97.29                   |      |                   |
| J15     | 4525         | 115.00     | 93.76                   | 17   | Commercial/Office |
| J16     | 4528         | 0.00       | 85.09                   |      |                   |
| J17     | 4532         | 1533.00    | 86.43                   | 14   | Commercial/Office |
| J18     | 4540         | 0.00       | 86.41                   |      |                   |
| J19     | 4546         | 50.00      | 86.27                   | 13   | Commercial/Office |
| J20     | 4554         | 0.00       | 86.36                   |      |                   |
| J21     | 4556         | 171.00     | 83.64                   | 9    | Residential       |
| J22     | 4558         | 0.00       | 81.63                   |      |                   |
| J23     | 4572         | 0.00       | 77.55                   |      |                   |
| J24     | 4584         | 0.00       | 70.23                   |      |                   |
| J25     | 4588         | 234.00     | 67.89                   | 6    | Residential       |
| J26     | 4582         | 282.00     | 71.96                   | 7    | Residential       |
| J27     | 4573         | 17.00      | 79.60                   | 5    | Commercial/Office |
| J28     | 4670         | 1569.00    | 77.52                   | 4    | Commercial/Office |
| J29     | 4670         | 212.00     | 77.69                   | 3    | Residential       |
| J30     | 4675         | 17.00      | 75.52                   | 2    | Commercial/Office |
| J31     | 4675         | 360.00     | 76.37                   | 1    | Flex Zone         |
| J32     | 4665         | 0.00       | 79.69                   |      |                   |
| J37     | 4545         | 0.00       | 84.50                   |      |                   |
| J38     | 5100         | 0.00       | 6.49                    |      |                   |
| J39     | 4752         | 0.00       | 4.33                    |      |                   |
| J40     | 4660         | 0.00       | 43.86                   |      |                   |
| J41     | 4820         | 0.00       | 20.00                   |      |                   |
| J1      | 4541         | 47.00      | 86.23                   | 15   | Residential       |
| J42     | 4529         | 72.00      | 91.10                   | 18   | Residential       |
| J43     | 4619         | 00.00      | 61.38                   |      |                   |
| Tank 1  | 4757         | -3,171.00  | Water Surface Elevation |      |                   |
| Tank 2  | 5115         | -2,158.00  | Water Surface Elevation |      |                   |

1500 GPM Fire Flow

1500 GPM Fire Flow

HOLBROOK FARMS AREA PLAN  
 CULINARY WATER MODEL  
 PEAK HOUR WITH 1500 GPM FIRE FLOW @ J17 J28

Pipe Report

| Link ID  | Diameter<br>in | Flow<br>GPM | Velocity<br>fps | Length<br>ft | Roughness | Status |
|----------|----------------|-------------|-----------------|--------------|-----------|--------|
| Pipe L1  | 24             | 3171.00     | 2.25            | 20           | 130       | Open   |
| Pipe L2  | 24             | 3171.00     | 2.25            | 1050         | 130       | Open   |
| Pipe L3  | 8              | 122.65      | 0.78            | 540          | 130       | Open   |
| Pipe L4  | 8              | 364.67      | 2.33            | 800          | 130       | Open   |
| Pipe L5  | 6              | 138.00      | 1.57            | 300          | 130       | Open   |
| Pipe L6  | 8              | 226.67      | 1.45            | 1100         | 130       | Open   |
| Pipe L7  | 8              | 158.67      | 1.01            | 800          | 130       | Open   |
| Pipe L8  | 8              | 112.19      | 0.72            | 515          | 130       | Open   |
| Pipe L9  | 8              | 112.19      | 0.72            | 1100         | 130       | Open   |
| Pipe L10 | 8              | 45.81       | 0.29            | 1380         | 130       | Open   |
| Pipe L11 | 8              | 122.65      | 0.78            | 500          | 130       | Open   |
| Pipe L12 | 8              | 356.65      | 2.28            | 520          | 130       | Open   |
| Pipe L13 | 8              | 496.73      | 3.17            | 400          | 130       | Open   |
| Pipe L14 | 8              | 778.73      | 4.97            | 750          | 130       | Open   |
| Pipe L15 | 8              | 242.02      | 1.54            | 450          | 130       | Open   |
| Pipe L16 | 8              | 310.02      | 1.98            | 450          | 130       | Open   |
| Pipe L17 | 8              | 169.94      | 1.08            | 820          | 130       | Open   |
| Pipe L18 | 8              | 578.01      | 3.69            | 400          | 130       | Open   |
| Pipe L19 | 8              | 749.01      | 4.78            | 400          | 130       | Open   |
| Pipe L20 | 8              | 408.07      | 2.60            | 1750         | 130       | Open   |
| Pipe L21 | 8              | 120.65      | 0.77            | 650          | 130       | Open   |
| Pipe L22 | 8              | 120.65      | 0.77            | 650          | 130       | Open   |
| Pipe L23 | 8              | 34.52       | 0.22            | 1200         | 130       | Open   |
| Pipe L24 | 8              | 297.08      | 1.90            | 650          | 130       | Open   |
| Pipe L25 | 8              | 434.08      | 2.77            | 1400         | 130       | Open   |
| Pipe L26 | 12             | 1398.47     | 3.97            | 720          | 130       | Open   |
| Pipe L27 | 8              | 649.46      | 4.15            | 1000         | 130       | Open   |
| Pipe L28 | 8              | 599.46      | 3.83            | 800          | 130       | Open   |
| Pipe L29 | 8              | 805.36      | 5.14            | 650          | 130       | Open   |
| Pipe L30 | 8              | 727.64      | 4.64            | 650          | 130       | Open   |
| Pipe L31 | 8              | 427.72      | 2.73            | 875          | 130       | Open   |
| Pipe L32 | 8              | 542.72      | 3.46            | 875          | 130       | Open   |
| Pipe L37 | 14             | 2,152.42    | 4.49            | 1200         | 130       | Open   |
| Pipe L36 | 24             | 3171.00     | 2.25            | 750          | 130       | Open   |
| Pipe L41 | 24             | 3171.00     | 2.25            | 1020         | 130       | Open   |
| Pipe L42 | 12             | 0.00        | 0.00            | 1600         | 130       | Open   |
| Pipe L43 | 12             | 1569.00     | 4.45            | 400          | 130       | Open   |
| Pipe L44 | 6              | 229.00      | 2.60            | 400          | 130       | Open   |
| Pipe L45 | 6              | 17.00       | 0.19            | 600          | 130       | Open   |
| Pipe L46 | 14             | 2158.00     | 4.50            | 3000         | 130       | Open   |
| Pipe L49 | 14             | 2158.00     | 4.50            | 5            | 130       | Open   |
| Pipe L33 | 8              | 252.90      | 1.61            | 200          | 130       | Open   |
| Pipe L34 | 8              | 205.90      | 1.31            | 600          | 130       | Open   |
| Pipe L50 | 8              | 371.92      | 2.37            | 200          | 130       | Open   |
| Pipe L51 | 8              | 299.92      | 1.91            | 600          | 130       | Open   |
| Pipe L52 | 8              | 140.08      | 0.89            | 550          | 130       | Open   |
| Valve VI | 14             | 2158.00     | 4.50            | #N/A         | 130       | Active |

Setting 20 psi



HOLBROOK FARMS AREA PLAN  
 CULINARY WATER MODEL  
 PEAK INSTANTANEOUS - NO FIRE FLOW

Node Report

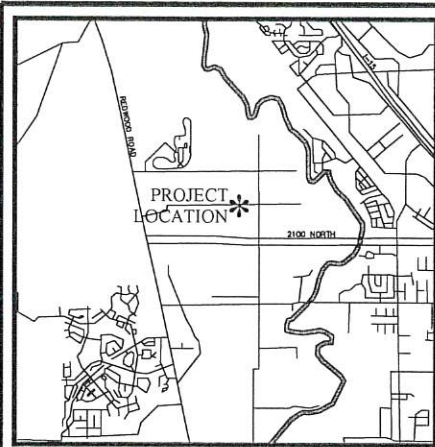
| Node ID | Elevation<br>ft | Demand<br>GPM | Pressure<br>psi         | Area | Land Use          |
|---------|-----------------|---------------|-------------------------|------|-------------------|
| J2      | 4586            | 0.00          | 71.90                   |      |                   |
| J3      | 4574            | 0.00          | 77.11                   |      |                   |
| J4      | 4574            | 90.00         | 77.24                   | 8    | Residential       |
| J5      | 4566            | 0.00          | 80.44                   |      |                   |
| J6      | 4566            | 182.00        | 80.03                   | 11   | Residential       |
| J7      | 4560            | 90.00         | 83.08                   | 12   | Residential       |
| J8      | 4546            | 107.00        | 89.33                   | 16a  | Residential       |
| J9      | 4535            | 208.00        | 94.10                   | 16b  | Residential       |
| J10     | 4529            | 0.00          | 97.38                   |      |                   |
| J11     | 4545            | 0.00          | 90.44                   |      |                   |
| J12     | 4542            | 0.00          | 91.74                   |      |                   |
| J13     | 4527            | 0.00          | 98.62                   |      |                   |
| J14     | 4522            | 0.00          | 101.59                  |      |                   |
| J15     | 4525            | 152.00        | 99.52                   | 17   | Commercial/Office |
| J16     | 4528            | 0.00          | 98.01                   |      |                   |
| J17     | 4532            | 44.00         | 96.28                   | 14   | Commercial/Office |
| J18     | 4540            | 0.00          | 92.86                   |      |                   |
| J19     | 4546            | 66.00         | 90.78                   | 13   | Commercial/Office |
| J20     | 4554            | 0.00          | 88.31                   |      |                   |
| J21     | 4556            | 225.00        | 86.30                   | 9    | Residential       |
| J22     | 4558            | 0.00          | 84.98                   |      |                   |
| J23     | 4572            | 0.00          | 78.39                   |      |                   |
| J24     | 4584            | 0.00          | 73.10                   |      |                   |
| J25     | 4588            | 308.00        | 71.02                   | 6    | Residential       |
| J26     | 4582            | 372.00        | 74.24                   | 7    | Residential       |
| J27     | 4573            | 23.00         | 80.73                   | 5    | Commercial/Office |
| J28     | 4670            | 91.00         | 83.79                   | 4    | Commercial/Office |
| J29     | 4670            | 280.00        | 82.39                   | 3    | Residential       |
| J30     | 4675            | 23.00         | 80.20                   | 2    | Commercial/Office |
| J31     | 4675            | 475.00        | 81.63                   | 1    | Flex Zone         |
| J32     | 4665            | 0.00          | 85.96                   |      |                   |
| J33     | 4573            | 0.00          | 81.47                   |      |                   |
| J34     | 4527            | 0.00          | 100.98                  |      |                   |
| J35     | 4520            | 0.00          | 103.50                  |      |                   |
| J36     | 4520            | 0.00          | 103.50                  |      |                   |
| J37     | 4545            | 0.00          | 89.77                   |      |                   |
| J38     | 5100            | 0.00          | 6.50                    |      |                   |
| J39     | 4752            | 0.00          | 4.33                    |      |                   |
| J40     | 4752            | 0.00          | 4.33                    |      |                   |
| J41     | 4820            | 0.00          | 20.00                   |      |                   |
| J1      | 4541            | 62.00         | 92.21                   | 15   | Residential       |
| J42     | 4529            | 181.00        | 97.38                   | 18   | Residential       |
| J43     | 4619            | 0.00          | 61.69                   |      |                   |
| J44     | 4660            | 0.00          | 44.04                   |      |                   |
| Tank 1  | 4757            | -2,110.00     | Water Surface Elevation |      |                   |
| Tank 2  | 5115            | -869.00       | Water Surface Elevation |      |                   |

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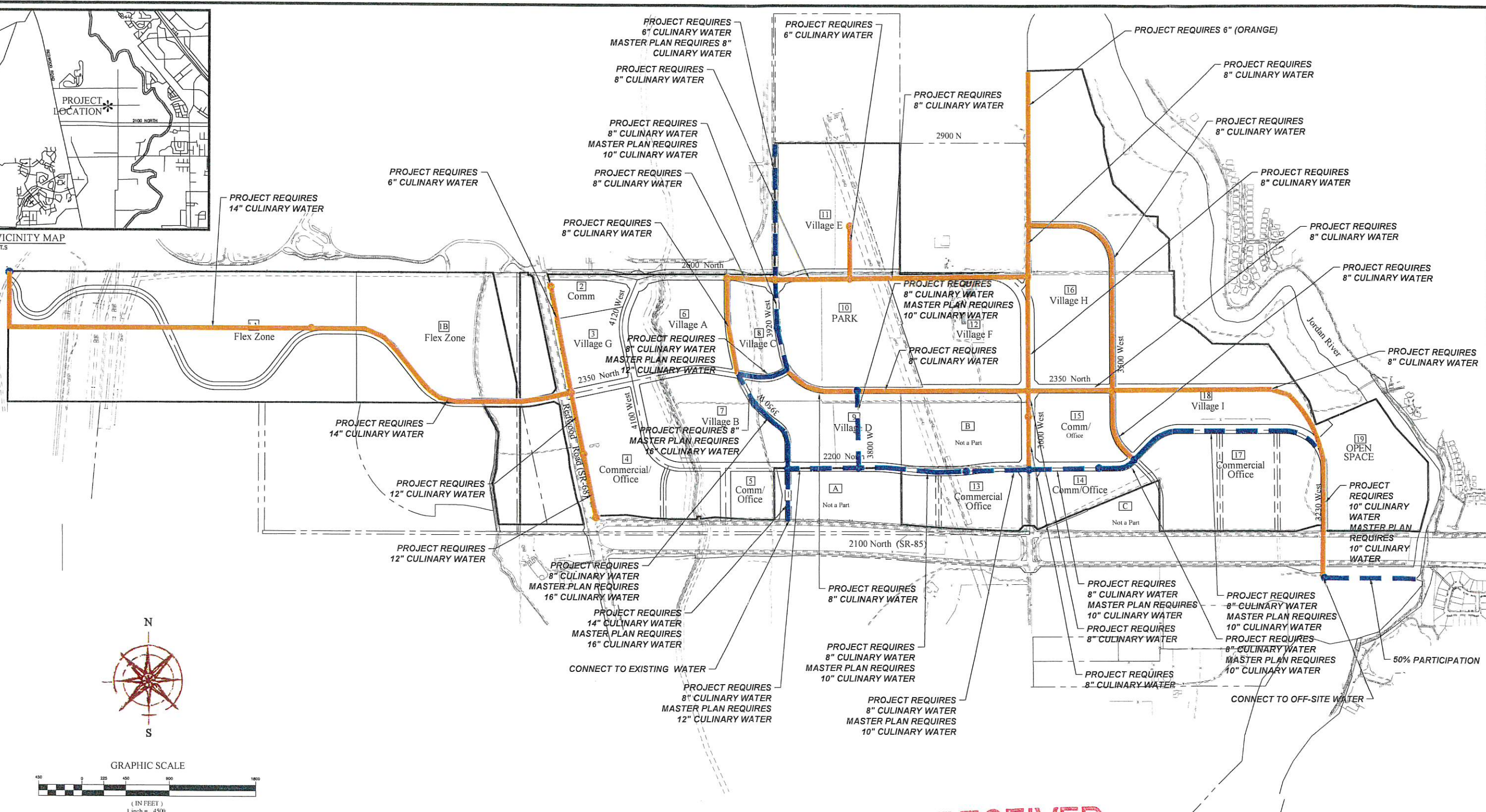
HOLBROOK FARMS AREA PLAN  
 CULINARY WATER MODEL  
 PEAK INSTANTANEOUS - NO FIRE FLOW

Pipe Report

| Link ID  | Diameter<br>in | Flow<br>GPM | Velocity<br>fps | Length<br>ft | Roughness | Status |
|----------|----------------|-------------|-----------------|--------------|-----------|--------|
| Pipe L1  | 24             | 2,110.00    | 1.50            | 20           | 130       | Open   |
| Pipe L2  | 24             | 2,110.00    | 1.50            | 1050         | 130       | Open   |
| Pipe L3  | 8              | 41.95       | 0.27            | 540          | 130       | Open   |
| Pipe L4  | 8              | 124.80      | 0.80            | 800          | 130       | Open   |
| Pipe L5  | 6              | 182.00      | 2.07            | 300          | 130       | Open   |
| Pipe L6  | 8              | 57.20       | 0.37            | 1100         | 130       | Open   |
| Pipe L7  | 8              | 147.20      | 0.94            | 800          | 130       | Open   |
| Pipe L8  | 8              | 14.53       | 0.09            | 515          | 130       | Open   |
| Pipe L9  | 8              | 14.53       | 0.09            | 1100         | 130       | Open   |
| Pipe L10 | 8              | 222.53      | 1.42            | 1380         | 130       | Open   |
| Pipe L11 | 8              | 41.95       | 0.27            | 500          | 130       | Open   |
| Pipe L12 | 8              | 266.05      | 1.70            | 520          | 130       | Open   |
| Pipe L13 | 8              | 266.05      | 1.70            | 400          | 130       | Open   |
| Pipe L14 | 8              | 638.50      | 4.07            | 750          | 130       | Open   |
| Pipe L15 | 8              | 166.75      | 1.06            | 450          | 130       | Open   |
| Pipe L16 | 8              | 256.75      | 1.64            | 450          | 130       | Open   |
| Pipe L17 | 8              | 256.75      | 1.64            | 820          | 130       | Open   |
| Pipe L18 | 8              | 350.81      | 2.24            | 400          | 130       | Open   |
| Pipe L19 | 8              | 575.81      | 3.68            | 400          | 130       | Open   |
| Pipe L20 | 8              | 94.07       | 0.60            | 1750         | 130       | Open   |
| Pipe L21 | 8              | 18.99       | 0.12            | 650          | 130       | Open   |
| Pipe L22 | 8              | 18.99       | 0.12            | 650          | 130       | Open   |
| Pipe L23 | 8              | 239.67      | 1.53            | 1200         | 130       | Open   |
| Pipe L24 | 8              | 242.48      | 1.55            | 650          | 130       | Open   |
| Pipe L25 | 8              | 242.48      | 1.55            | 1400         | 130       | Open   |
| Pipe L26 | 12             | 902.01      | 2.56            | 720          | 130       | Open   |
| Pipe L27 | 8              | 326.19      | 2.08            | 1000         | 130       | Open   |
| Pipe L28 | 8              | 260.19      | 1.66            | 800          | 130       | Open   |
| Pipe L29 | 8              | 71.59       | 0.46            | 650          | 130       | Open   |
| Pipe L30 | 8              | 27.59       | 0.18            | 650          | 130       | Open   |
| Pipe L31 | 8              | 152.46      | 0.97            | 875          | 130       | Open   |
| Pipe L32 | 8              | 304.46      | 1.50            | 750          | 130       | Open   |
| Pipe L36 | 24             | 2,110.00    | 0.00            | 1600         | 130       | Open   |
| Pipe L37 | 14             | 1,524.81    | 3.18            | 1200         | 130       | Open   |
| Pipe L41 | 24             | 2,110.00    | 1.50            | 1020         | 130       | Open   |
| Pipe L42 | 12             | 0.00        | 0.00            | 1600         | 130       | Open   |
| Pipe L43 | 12             | 91.01       | 0.26            | 400          | 130       | Open   |
| Pipe L44 | 6              | 303.00      | 3.44            | 400          | 130       | Open   |
| Pipe L45 | 6              | 23.00       | 0.26            | 600          | 130       | Open   |
| Pipe L46 | 14             | 869.01      | 1.81            | 3000         | 130       | Open   |
| Pipe L49 | 14             | 869.00      | 1.81            | 5            | 130       | Open   |
| Pipe L33 | 8              | 126.61      | 0.81            | 200          | 130       | Open   |
| Pipe L34 | 8              | 188.61      | 1.20            | 600          | 130       | Open   |
| Pipe L50 | 8              | 0.95        | 0.01            | 200          | 130       | Open   |
| Pipe L51 | 8              | 180.05      | 1.15            | 600          | 130       | Open   |
| Valve V1 | 14             | 1,315.00    | 3.73            | #N/A         | 130       | Active |



VICINITY MAP  
N.T.S.



- NOTES:
1. ADDITIONAL MODELING MAY BE REQUIRED IF THE COMMERCIAL LAND USES CHANGE.
  2. MINIMUM 8" WATER LINE MAY BE REQUIRED ON COMMERCIAL PROPERTIES WHERE HIGHER FIRE FLOWS MAY BE REQUIRED.

**RECEIVED**  
SEP 22 2016  
**LEHI CITY**

**LEGEND**  
PROJECT REQUIRED WATER   
LEHI MASTER PLAN WATER

**FOCUS**  
ENGINEERING AND SURVEYING, LLC  
32 WEST CENTER STREET  
MIDVALE, UTAH 84047 PH: (801) 352-0075  
www.focusutah.com

**Holbrook Farms**  
Lehi City  
**Culinary Water Master Plan VS. Project Plan**

|                    |               |
|--------------------|---------------|
| Scale: 1"=450'     | Drawn: TMR    |
| Date: 09/21/16     | Job #: 14-273 |
| Sheet: <b>W 08</b> |               |