



0000009738

ORIGINAL

SALLQUIST & DRUMMOND, P.C.
ATTORNEYS AT LAW
TEMPE OFFICE
4500 S. LAKESHORE DRIVE
SUITE 339
TEMPE, ARIZONA 85282

JSDR

RICHARD L. SALLQUIST

PHONE (602) 224-9222
FACSIMILE (480) 345-0412
E-MAIL dick@sd-law.com

September 16, 2004

HAND DELIVERED

Jim Fisher, Executive Consultant
Arizona Corporation Commission
Utilities Division
1200 W. Washington
Phoenix, Arizona 85007

Arizona Corporation Commission

DOCKETED

SEP 16 2004

DOCKETED BY *CAK*

AZ CORP COMMISSION
DOCUMENT CONTROL

2004 SEP 16 P 2:06

RECEIVED

Re: Virgin Mountain Utilities Company; CC&N Application; Docket No. W-03551A-04-0325

Dear Mr. Fisher:

Your letter of May 21, 2004 requested certain additional items for the Sufficiency of the Subject Application. My letter to you of July 23 2004 indicated the Company, and its engineers, were working on the data and expected to have it available within 30 to 60 days.

Enclosed please find the "Engineer's Design Report" dated September 9, 2004 in response to your first inquiry. As indicated in the April 28, 2004 Application, the Company has not yet provided service, therefore your Item 2, the Water Use Data Sheet, is not available.

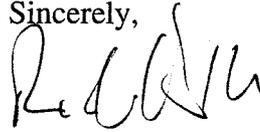
Your Item 3 regarding the construction costs and method of financing was set forth in the Application as a supporting documents for the Hook-Up Fee Tariff request, totals \$1,730,090, and is attached for your convenience. As indicated in Paragraph J to Attachment A of the Application, the Company proposes to finance the facilities in the Expansion Area with a combination of Off-Site Line Extension Agreements for developer-specific projects, On-Site Line Extension Agreements for the subdivisions within the Area, and the Proposed Hook-up Fees.

Your final Items, the Requests for Service, were provided under separate cover with the original Application, but duplicate copies are attached for your convenience.

James Fisher
September 16, 2004
Page 2

In the event we can provide additional information to complete the Sufficiency and expedite processing of this Application, please do not hesitate to contact the undersigned.

Sincerely,



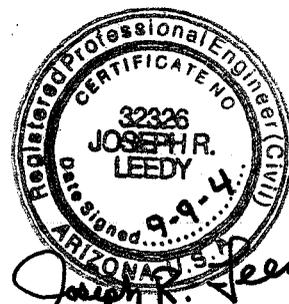
Richard L. Sallquist

Enclosures

cc: Docket Control (15 copies)
Del Smith
Lyn Farmer
Brian Bozzo
Tom Stoddard

VIRGIN MOUNTAIN UTILITIES COMPANY
PROPOSED SERVICE AREA EXPANSION

Engineer's Design Report



Mohave Engineering Associates Inc.
405 East Beale Street
Kingman, AZ 86401
(928) 753-2627

Job # 04-531

VIRGIN MOUNTAIN UTILITIES COMPANY
PROPOSED SERVICE AREA EXPANSION

Engineer's Design Report

INTRODUCTION

The existing water service area for Virgin Mountain Utilities Company is located in portions of Section 14 and 11, T39N, R16W, G. & S.R.M., Mohave County Arizona. **Exhibit 1** shows the existing service area. The proposed expansion of the water service area includes all of Section 15, T39N, R16W. The expansion area is located adjacent and east of the existing service area and it includes 399 existing \pm 1-acres lots in Virgin River Ranches Valley View Addition and 160-acres of un-subdivided land. **Exhibit 2** shows the limits of the proposed service area expansion.

The Current CCN no lots are being served in the existing service area due to delays in subdividing the property. The proposed service area expansion will serve existing lots within the Virgin River Ranches Valley View Addition, located in Section 15, T39N, R15W.

This report will demonstrate that there is sufficient capacity, with the proposed improvements to serve the expanded service area.

EXISTING FACILITIES

EXISTING WELL

There is an existing well, submersible pump, 56,870 gallons of water storage, consisting of two 28,435-gallon water storage tank and miscellaneous yard piping located on in a portion of the NW1/4 of the NW1/4 of section 14, T39N, R16W.

The well and tank site is located in FEMA Flood Zone "C", an area of minimal flooding. The facility is graded to direct runoff around and away from the facility. The water system will be operated by Virgin Mountain Utilities Company.

The well (ADWR # 55-553309) was drilled in 1996. Virgin Mountain Utilities has obtained a letter of physical availability for 600 gpm from ADWR. Presently there is a 7.5-hp submersible pump with a capacity of 72 gpm.

The water quality data for the existing well will be submitted along with this report.

EXISTING TANK CAPACITY

The two existing tanks have a combined volume of 56,870 gallons. The required water storage capacity for the system is one days water consumption for all users within the system. The full day of water storage will allow repairs on the well without interrupting service. ADEQ requires that each person have 100 gallons per day and it is estimated there will be approximately 3.5 people per house, which equates to 350 gallons per lot per day.

PROPOSED FACILITIES

HYDRO-PNEUMATIC PRESSURE SYSTEM DESIGN

The booster pump system will consist of a series of 7.5-hp booster pumps and 110-gallon hydro-pneumatic tanks that can be connected in series and expanded as the system demand increases. The water storage tanks will then feed a series of 7.5-hp booster pumps with a capacity of 100 gpm @ 76 psi each. The 7.5-hp pumps will serve to meet the peak domestic demand and pressurize the hydro-pneumatic tanks and one additional pump will serve as backup. Additional pumps will be added as the demand increases. (See table below for phasing improvement requirements.)

The Hydro-Pneumatic Pressure System was designed using the U.S. Department of Health, Education and Welfare, Public Health Service Division of Indian Health Office of Environmental Health manual titled "HYDRO-PNEUMATIC PRESSURE SYSTEMS." The system was also designed in accordance with ADEQ regulations.

Table 3 of ADEQ Engineering Bulletin 10 shows that the peak instantaneous flow for the estimated 824 lots at full build-out is 685 gpm. The tanks will be set to operate between 85 psi and 55 psi. The efficiency of the tank can be determined using the following chart and knowing:

P_1 = high pressure setting = 85 psi,

P_2 = low pressure setting = 55 psi

$P_1/P_2 = (85 + 14.7)/(55 + 14.7) = 1.430$

Assuming V_1 at the High water line (HWL) = 40%

Efficiency (E) = $[(P_1/P_2)-1][100-V_1]$

E = 27%

$V_2 = V_1 - E = 13\%$ $V_2 > 5\%$ Ok

Required Tank Volume = $V_T = 15(Q_P)/(CE)$

V_T = Minimum Hydro-Pneumatic Tank Size

Q_P = Maximum Pump Capacity (peak instantaneous flow) = 685 gpm

E = Efficiency

C = Maximum Number of Cycles per Hour

$V_T = 15(685)/(6)(.27) = 6343$ Gallons

Fifty-eight 110-gallon hydro-pneumatic tanks with a capacity of 6380 gallons or an approved equal will be used.

The hydro-pneumatic system will be built in phases and the capacity will be increased as demand increases. Alternate systems such as variable frequency drives (VFD) can be used as an alternative to the hydro-pneumatic system.

The chart shown below shows the required pumping and hydro-pneumatic capacity for the proposed phasing.

WATER STORAGE TANK CAPACITY

The ADEQ requirement for average annual daily domestic flow for the proposed system is (100 gallons per person x 3.5 persons per lot = 350 gallons per lot per lot. Storage tank capacity will be increased to meet the requirements of each phase of construction. The table shown below shows the water storage requirements for each phase.

WELL PUMP

At full build-out the estimated 824 lots within the service area will require a well pump or pumps that can produce 350 gallons per lot with in a 24 hour period or 288,400 gallons. A well pump that can produce 300 gpm will need to pump approximately 16 hours per day to produce the required volume.

The chart shown below shows the required well pumping capacity for the proposed phasing.

A second well site located on lot 372 in Virgin River Ranches Valley View Addition, might be used as a backup or even an additional storage tank and booster pump location. If the well site is used water quality data will be provided later.

The table below shows the required well capacity for each phase of the water system.

FIRE FLOW

The existing and proposed service areas are not located within a fire district. No fire flow is proposed in the first three phase of the project. Phase 4 construction will include a fire booster pump, fire hydrant assemblies and additional water storage capacity to provide 2 hours of fire flow capacity at 500 gpm. A fill station at the water storage tank will be available for fire fighting purposes.

WATER DISTRIBUTION SYSTEM

Water distribution lines will be extended from the well site through each phase of the development. 10 inch water mains will be used along the north and south section lines and in other major roads where necessary to provide fire flow in phase 4 of the construction. 6 inch water mains will be used in all other streets. **Exhibits 3 – 6** show the proposed water line sizes and locations.

A hydraulic analysis was performed for the proposed water system improvements using a computer program called WaterCAD by Heastad Methods. **Exhibit 3** shows the WaterCAD calculations for

Phase - One. The calculations indicate that the proposed improvements for Phase - One meet ADEQ requirements for pressure and flow. Phase - One includes 125 lots in the expanded service area.

Exhibit 4 shows the WaterCAD calculations for Phase - Two. The calculations indicate that the proposed improvements for Phase - Two meet ADEQ requirements for pressure and flow. Phase - two includes a total of 160 lots (125 from phase - one and 35 in the existing service area).

Exhibit 5 shows the WaterCAD calculations for Phase - Three. The calculations indicate that the proposed improvements for Phase - Three meet ADEQ requirements for pressure and flow. Phase - three includes a total of 494 lots (399 lots in the expanded service area and 95 lots in the existing service area).

Exhibit 6 shows the WaterCAD calculations for Phase - Four. The calculations indicate that the proposed improvements for Phase - Four meet ADEQ requirements for pressure and flow. Phase - four includes 824 lots (529 lots in the expanded service area and 295 lots in the existing service area.) 500 gpm fire flow was also included in the analysis for Phase - Four.

REQUIRED FACILITY CAPACITY CHART

	TOTAL # OF LOTS	PROPOSED WELL CAPACITY	PROPOSED WATER STORAGE CAPACITY (gallons)	REQUIRED WATER STORAGE CAPACITY FOR A ONE DAY BACK- UP SUPPLY (# OF LOTS X 350 G/LOT)	BOOSTER PUMP CAPACITY WITH INSTANTA- NEOUS FLOW (GPM)
EXISTING WATER SYSTEM	0	72 GPM 103,680 GPD	56,870	0	0
PHASE - 1	125	72 GPM 103,670 GPD	56,870	43,750	188
PHASE - 2	160	72 GPM 103,670 GPD	56,870	56,000	219
PHASE - 3	494	350 GPM 504,000 GPD	200,000	172,900	454
PHASE - 4	824	350 GPM 504,000 GPD	350,000	348,400 288,400 plus 60,000 For Fire (500 gpm for 2-hours)	685 Plus 500 gpm for fire flow

PROJECT TIMING:

Estimated project timing for each phase of construction is shown below.

Phase – One construction will begin immediately and should be completed by January 2005.

Phase – Two construction will begin in March 2005 and will be completed by August 2005.

Phase – Three construction will begin in May of 2005 and will be completed by August 2009, **Five years from the date of this report, (494 lots will be served.)**

Phase – Four construction will begin in August 2009 and will be completed by August 2012. **At total build out 824 lots will be served.**

CONCLUSIONS:

It is the conclusion of this writer that the proposed water system is suitable and has the capacity to serve the proposed service area expansion.

EXHIBIT 1

EXISTING SERVICE AREA

TIC

2' OODIP w/GLO BC
1912
SFP ALONG SIDE

R2 N 89° 54' 25" E, 2638.10'
N 89° 54' 45" E, 2639.42'

RI S 89° 55' W, 5285.28'

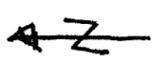
R2 N 89° 52' 53" E, 2645.26'
N 89° 53' 13" E, 2645.25'

2' OODIP w/GLO BC
1912
IN HAND HOL

R2 N 00° 10' 20" W, 2642.51'
N 00° 03' 14" E, 2637.73'

1318.86
1318.99
1319.12
1319.12
1319.12
1321.03'
1321.03'
1322.35'
1322.35'

R1 N 0° 01' W, 5280'
S 00° 00' 00" E, 2639.93'
R2 N 00° 03' 43" W, 2638.23'
R2 N 00° 03' 43" W, 2638.18'



1" = 600'

1' OODIP w/GLO BC
1912
UNDER CROSS BAR
OF FENCE SET 40d
NAIL: 0.33" WEST



EXISTING
SERVICE
AREA

1' OODIP w/GLO BC
1912

CORNER NOT FOUND OR SET
CALCULATED POSITION ONLY

CORNER NOT FOUND OR SET
CALCULATED POSITION ONLY

N 89° 55' 26" E, 2642.46'
R2 N 89° 55' 20" E, 2642.40'

R2 N 00° 03' 43" W, 2637.05'
S 00° 03' 39" E, 2637.05'

1' OODIP w/GLO BC
1912

CORNER NOT SEARCHED FOR
OR FOUND

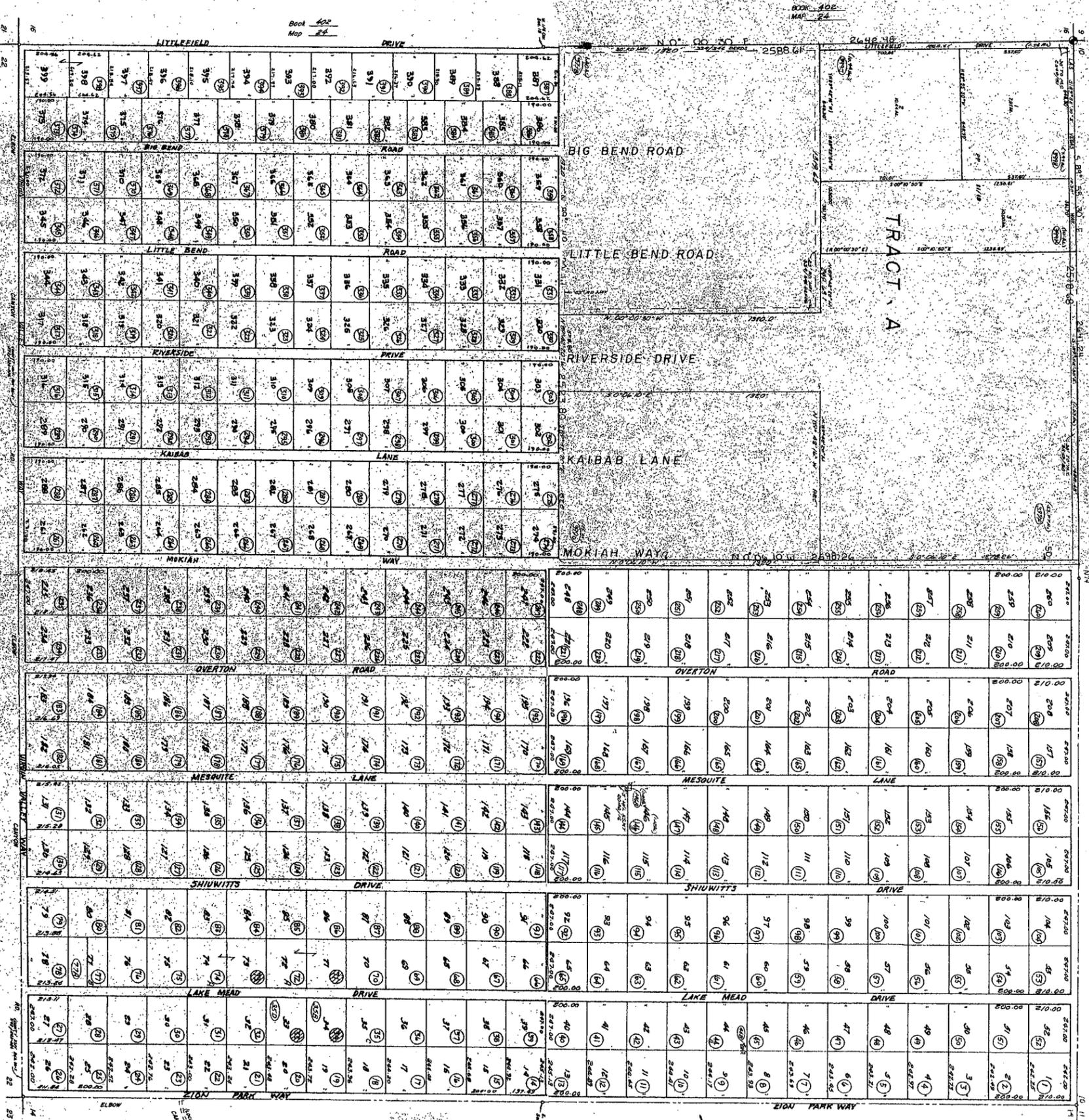
RI WEST, 5287.92'
S 89° 59' 10" W, 2639.67'
R2 N 89° 59' 15" E, 2639.54'

2' OODIP w/GLO BC
1912

SECTION 14, T 39 N, R 16 W

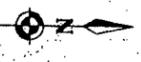
EXHIBIT 2

PROPOSED SERVICE AREA



PROPOSED SERVICE AREA

MOHAVE COUNTY ASSESSOR



SCALE 1" = 600'

39N-16W-15

Book 402 Map 23

Book 402 Map 24

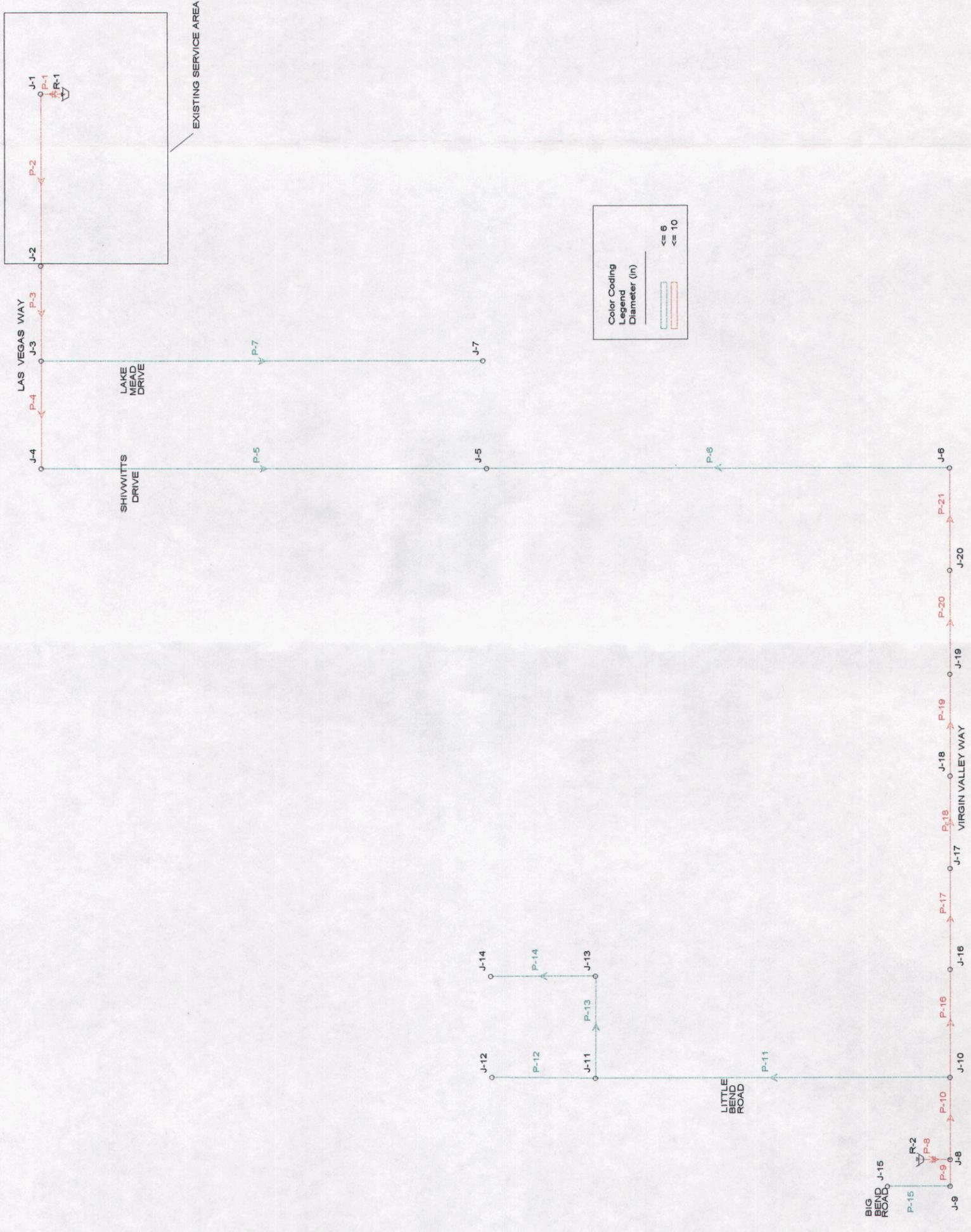
Book 402 Map 24

EXHIBIT 3

**PHASE - 1 HYDRAULIC
ANALYSIS**

Steady State Analysis

PHASE ONE



HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 5, Accuracy = 0.000273
Flow Supplied 107.00 gpm
Flow Demanded 107.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Emptying
P-1 Check Valve: Open
P-8 Check Valve: Open

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.33	82.74
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,091.32	81.00
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,091.32	82.30
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,091.30	65.86
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,091.31	39.92
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,091.28	64.56
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.34	54.20
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.34	54.64
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,091.33	52.90
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,091.26	68.87
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.26	76.65
J-13	1,937.00	Demand	2.00	Fixed	2.00	2,091.26	66.71
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,091.26	74.06
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.34	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.33	51.60
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.32	49.87
J-18	1,979.00	Demand	8.50	Fixed	8.50	2,091.32	48.57
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.32	46.84
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.31	45.54

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	45.18	2,091.35	2,091.35	0.17e-2	0.02
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	45.18	2,091.35	2,091.33	0.02	0.02
P-3	528.00	10	PVC	150.0	1.00	Open	Open	45.18	2,091.33	2,091.32	0.01	0.02
P-4	528.00	10	PVC	150.0	1.00	Open	Open	23.18	2,091.32	2,091.32	0.24e-2	0.46e-2
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	8.18	2,091.32	2,091.30	0.02	0.01
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	-6.82	2,091.30	2,091.31	0.02	0.01
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	11.00	2,091.32	2,091.28	0.04	0.01
P-8	150.00	10	PVC	150.0	1.00	Open	Open	61.82	2,091.35	2,091.34	0.01	0.03
P-9	128.00	10	PVC	150.0	1.00	Open	Open	0.00	2,091.34	2,091.34	0.00	0.00
P-10	400.00	10	PVC	150.0	1.00	Open	Open	61.82	2,091.34	2,091.33	0.01	0.03
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	17.50	2,091.33	2,091.26	0.07	0.03
P-12	570.00	6	PVC	150.0	1.00	Open	Open	0.00	2,091.26	2,091.26	0.00	0.00
P-13	528.00	6	PVC	150.0	1.00	Open	Open	6.50	2,091.26	2,091.26	0.27e-2	0.01
P-14	570.00	6	PVC	150.0	1.00	Open	Open	4.50	2,091.26	2,091.26	0.15e-2	0.26e-2
P-15	400.00	6	PVC	150.0	1.00	Open	Open	0.00	2,091.34	2,091.34	0.00	0.00
P-16	528.00	10	PVC	150.0	1.00	Open	Open	31.32	2,091.33	2,091.33	0.44e-2	0.01
P-17	528.00	10	PVC	150.0	1.00	Open	Open	31.32	2,091.33	2,091.32	0.44e-2	0.01
P-18	528.00	10	PVC	150.0	1.00	Open	Open	31.32	2,091.32	2,091.32	0.44e-2	0.01
P-19	528.00	10	PVC	150.0	1.00	Open	Open	22.82	2,091.32	2,091.32	0.24e-2	0.46e-2
P-20	528.00	10	PVC	150.0	1.00	Open	Open	22.82	2,091.32	2,091.31	0.24e-2	0.46e-2
P-21	528.00	10	PVC	150.0	1.00	Open	Open	22.82	2,091.31	2,091.31	0.24e-2	0.46e-2

Steady State Analysis Reservoir Report

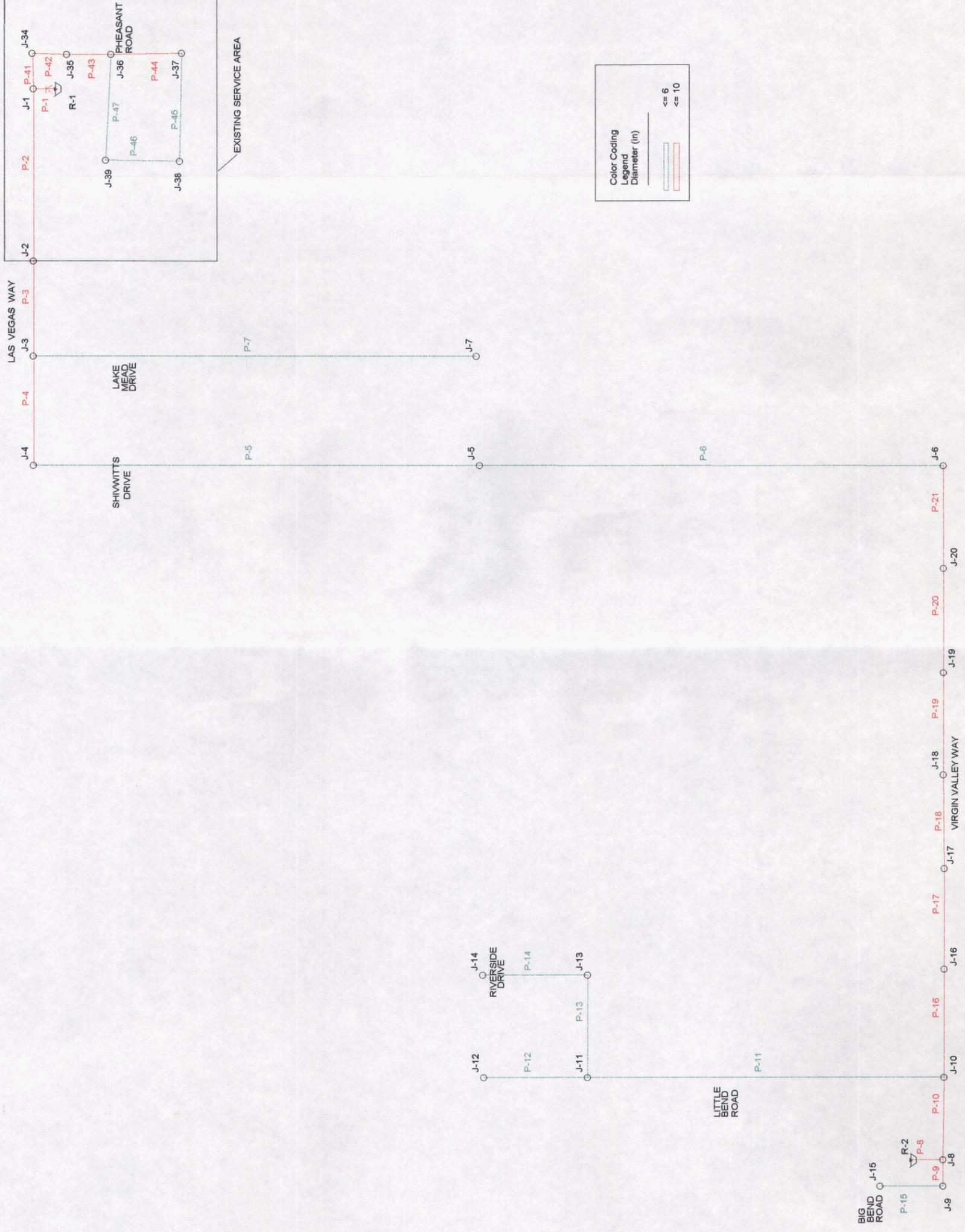
Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-45.18	2,091.35
R-2	2,091.35	-61.82	2,091.35

EXHIBIT 4

**PHASE - 2 HYDRAULIC
ANALYSIS**

Steady State Analysis

PHASE TWO



HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced	Trials = 5, Accuracy = 0.000498
Flow Supplied	137.00 gpm
Flow Demanded	137.00 gpm
Flow Stored	0.00 gpm
R-1	Reservoir: Emptying
R-2	Reservoir: Closed Or Stagnant
P-1	Check Valve: Open
P-8	Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.34	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.24	82.70
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,091.20	80.95
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,091.17	82.24
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,090.04	65.31
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,089.31	39.05
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,091.16	64.50
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,089.28	53.31
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,089.28	53.74
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,089.28	52.01
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,089.21	67.98
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,089.21	75.77
J-13	1,937.00	Demand	2.00	Fixed	2.00	2,089.21	65.82
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,089.21	73.17
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,089.28	58.07
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,089.29	50.72
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,089.29	48.99
J-18	1,979.00	Demand	8.50	Fixed	8.50	2,089.29	47.69
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,089.30	45.97
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,089.31	44.67
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.33	70.20
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.33	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.33	74.09
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.33	65.87
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,091.31	69.32
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,091.31	71.92

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.35	82.75
J-3	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-4	1,901.00	Demand	0.00	Fixed	0.00	2,091.35	82.31
J-5	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-6	1,999.00	Demand	0.00	Fixed	0.00	2,091.35	39.94
J-7	1,942.00	Demand	0.00	Fixed	0.00	2,091.35	64.58
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.35	54.21
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-10	1,969.00	Demand	0.00	Fixed	0.00	2,091.35	52.91
J-11	1,932.00	Demand	0.00	Fixed	0.00	2,091.35	68.91
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.35	76.69
J-13	1,937.00	Demand	0.00	Fixed	0.00	2,091.35	66.75
J-14	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.35	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.35	51.61
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.35	49.88
J-18	1,979.00	Demand	0.00	Fixed	0.00	2,091.35	48.58
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.35	46.85
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.35	45.56
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.35	70.21
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-38	1,931.00	Demand	0.00	Fixed	0.00	2,091.35	69.34
J-39	1,925.00	Demand	0.00	Fixed	0.00	2,091.35	71.94

STATIC
PRESSURE

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	137.00	2,091.35	2,091.34	0.01	0.18
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	107.00	2,091.34	2,091.24	0.09	0.08
P-3	528.00	10	PVC	150.0	1.00	Open	Open	107.00	2,091.24	2,091.20	0.04	0.08
P-4	528.00	10	PVC	150.0	1.00	Open	Open	85.00	2,091.20	2,091.17	0.03	0.05
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	70.00	2,091.17	2,090.04	1.13	0.43
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	55.00	2,090.04	2,089.31	0.72	0.27
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	11.00	2,091.20	2,091.16	0.04	0.01
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,089.28	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	0.00	2,089.28	2,089.28	0.00	0.00
P-10	400.00	10	PVC	150.0	1.00	Open	Open	-0.11e-2	2,089.28	2,089.28	0.00	0.00
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	17.50	2,089.28	2,089.21	0.07	0.03
P-12	570.00	6	PVC	150.0	1.00	Open	Open	0.00	2,089.21	2,089.21	0.00	0.00
P-13	528.00	6	PVC	150.0	1.00	Open	Open	6.50	2,089.21	2,089.21	0.29e-2	0.01
P-14	570.00	6	PVC	150.0	1.00	Open	Open	4.50	2,089.21	2,089.21	0.15e-2	0.26e-2
P-15	400.00	6	PVC	150.0	1.00	Open	Open	0.00	2,089.28	2,089.28	0.00	0.00
P-16	528.00	10	PVC	150.0	1.00	Open	Open	-30.50	2,089.28	2,089.29	0.42e-2	0.01
P-17	528.00	10	PVC	150.0	1.00	Open	Open	-30.50	2,089.29	2,089.29	0.42e-2	0.01
P-18	528.00	10	PVC	150.0	1.00	Open	Open	-30.50	2,089.29	2,089.29	0.42e-2	0.01
P-19	528.00	10	PVC	150.0	1.00	Open	Open	-39.00	2,089.29	2,089.30	0.01	0.01
P-20	528.00	10	PVC	150.0	1.00	Open	Open	-39.00	2,089.30	2,089.31	0.01	0.01
P-21	528.00	10	PVC	150.0	1.00	Open	Open	-39.00	2,089.31	2,089.31	0.01	0.01
P-41	150.00	10	PVC	150.0	1.00	Open	Open	30.00	2,091.34	2,091.33	0.15e-2	0.01
P-42	350.00	10	PVC	150.0	1.00	Open	Open	30.00	2,091.33	2,091.33	0.27e-2	0.01
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,091.33	2,091.33	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,091.33	2,091.33	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,091.33	2,091.31	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,091.31	2,091.31	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,091.31	2,091.33	0.02	0.03

Steady State Analysis Reservoir Report

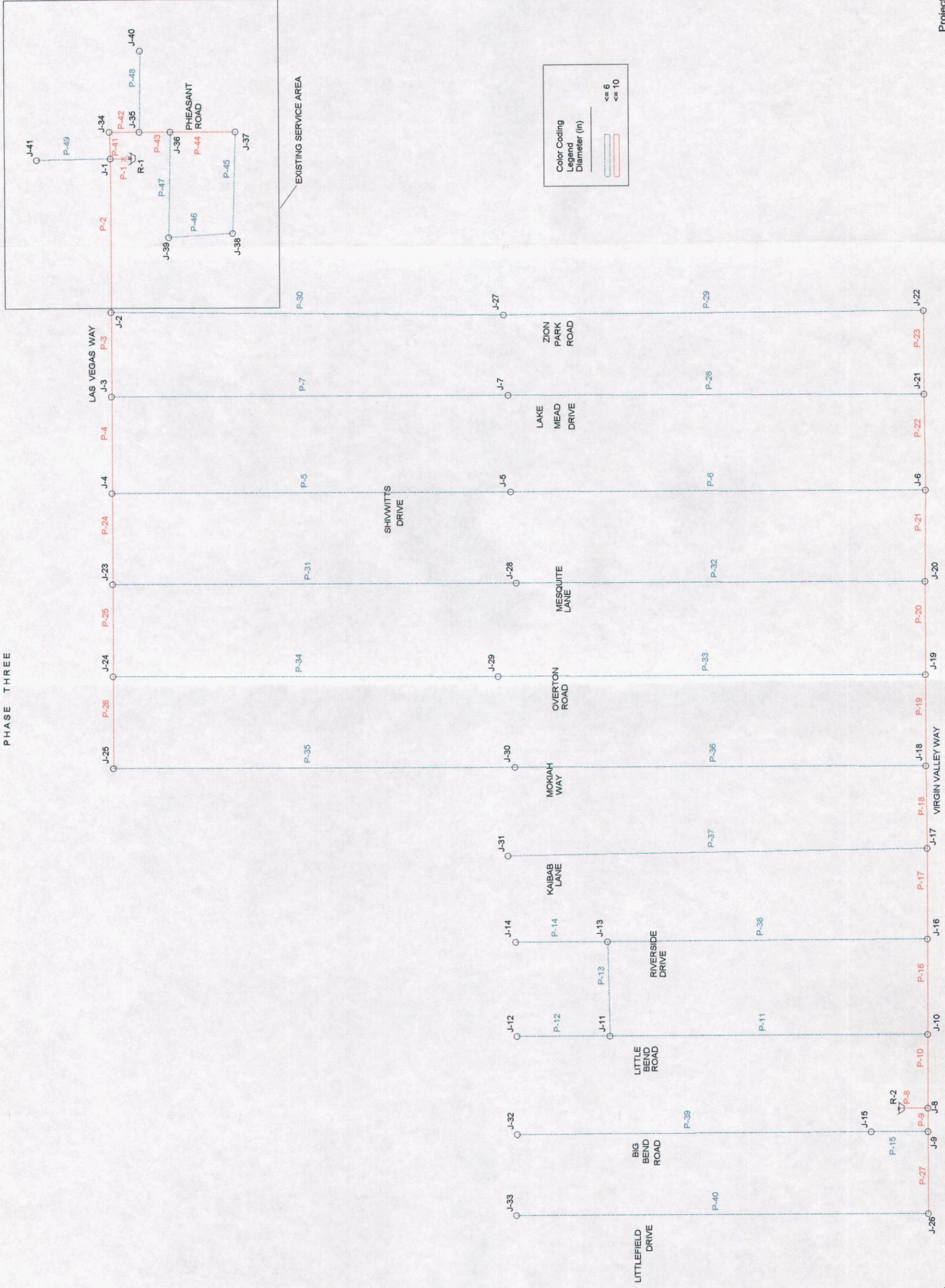
Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-137.00	2,091.35
R-2	2,091.35	0.00	2,091.35

EXHIBIT 5

PHASE - 3 HYDRAULIC ANALYSIS

Steady State Analysis

PHASE THREE



HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 5, Accuracy = 0.000151
Flow Supplied 421.00 gpm
Flow Demanded 421.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Closed Or Stagnant
P-1 Check Valve: Open
P-8 Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.23	69.72
J-2	1,900.00	Demand	11.00	Fixed	11.00	2,090.44	82.35
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,090.19	80.51
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,090.03	81.74
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,089.53	65.10
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,089.30	39.05
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,089.64	63.85
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,089.07	53.22
J-9	1,965.00	Demand	11.00	Fixed	11.00	2,089.06	53.65
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,089.08	51.93
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,089.04	67.91
J-12	1,914.00	Demand	5.00	Fixed	5.00	2,089.04	75.69
J-13	1,937.00	Demand	7.50	Fixed	7.50	2,089.04	65.75
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,089.04	73.10
J-15	1,955.00	Demand	11.00	Fixed	11.00	2,089.04	57.96
J-16	1,972.00	Demand	11.00	Fixed	11.00	2,089.10	50.64
J-17	1,976.00	Demand	11.00	Fixed	11.00	2,089.14	48.93
J-18	1,979.00	Demand	11.00	Fixed	11.00	2,089.21	47.66
J-19	1,983.00	Demand	11.00	Fixed	11.00	2,089.25	45.95
J-20	1,986.00	Demand	11.00	Fixed	11.00	2,089.28	44.66
J-21	1,993.00	Demand	11.00	Fixed	11.00	2,089.32	41.65
J-22	1,996.00	Demand	11.00	Fixed	11.00	2,089.32	40.35
J-23	1,898.00	Demand	11.00	Fixed	11.00	2,089.94	83.00
J-24	1,895.00	Demand	11.00	Fixed	11.00	2,089.90	84.28
J-25	1,892.00	Demand	11.00	Fixed	11.00	2,089.89	85.57
J-26	1,962.00	Demand	11.00	Fixed	11.00	2,089.06	54.95
J-27	1,946.00	Demand	11.00	Fixed	11.00	2,089.76	62.17
J-28	1,933.00	Demand	11.00	Fixed	11.00	2,089.52	67.68
J-29	1,926.00	Demand	11.00	Fixed	11.00	2,089.48	70.70
J-30	1,920.00	Demand	11.00	Fixed	11.00	2,089.45	73.28
J-31	1,915.00	Demand	11.00	Fixed	11.00	2,089.11	75.29
J-32	1,909.00	Demand	11.00	Fixed	11.00	2,089.01	77.84
J-33	1,904.00	Demand	11.00	Fixed	11.00	2,089.02	80.01
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,090.69	69.92
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,090.69	69.49
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,090.69	73.81
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,090.69	65.59
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,090.66	69.04
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,090.66	71.64
J-40	1,935.00	Demand	17.00	Fixed	17.00	2,090.66	67.31
J-41	1,920.00	Demand	34.00	Fixed	34.00	2,091.12	74.00

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.35	82.75
J-3	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-4	1,901.00	Demand	0.00	Fixed	0.00	2,091.35	82.31
J-5	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-6	1,999.00	Demand	0.00	Fixed	0.00	2,091.35	39.94
J-7	1,942.00	Demand	0.00	Fixed	0.00	2,091.35	64.58
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.35	54.21
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-10	1,969.00	Demand	0.00	Fixed	0.00	2,091.35	52.91
J-11	1,932.00	Demand	0.00	Fixed	0.00	2,091.35	68.91
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.35	76.69
J-13	1,937.00	Demand	0.00	Fixed	0.00	2,091.35	66.75
J-14	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.35	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.35	51.61
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.35	49.88
J-18	1,979.00	Demand	0.00	Fixed	0.00	2,091.35	48.58
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.35	46.85
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.35	45.56
J-21	1,993.00	Demand	0.00	Fixed	0.00	2,091.35	42.53
J-22	1,996.00	Demand	0.00	Fixed	0.00	2,091.35	41.23
J-23	1,898.00	Demand	0.00	Fixed	0.00	2,091.35	83.61
J-24	1,895.00	Demand	0.00	Fixed	0.00	2,091.35	84.91
J-25	1,892.00	Demand	0.00	Fixed	0.00	2,091.35	86.21
J-26	1,962.00	Demand	0.00	Fixed	0.00	2,091.35	55.94
J-27	1,946.00	Demand	0.00	Fixed	0.00	2,091.35	62.85
J-28	1,933.00	Demand	0.00	Fixed	0.00	2,091.35	68.48
J-29	1,926.00	Demand	0.00	Fixed	0.00	2,091.35	71.50
J-30	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-31	1,915.00	Demand	0.00	Fixed	0.00	2,091.35	76.26
J-32	1,909.00	Demand	0.00	Fixed	0.00	2,091.35	78.85
J-33	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.35	70.21
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-38	1,931.00	Demand	0.00	Fixed	0.00	2,091.35	69.34
J-39	1,925.00	Demand	0.00	Fixed	0.00	2,091.35	71.94
J-40	1,935.00	Demand	0.00	Fixed	0.00	2,091.35	67.61
J-41	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10

STATIC
PRESSURE

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	421.00	2,091.35	2,091.23	0.12	1.54
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	340.00	2,091.23	2,090.44	0.79	0.67
P-3	528.00	10	PVC	150.0	1.00	Open	Open	275.45	2,090.44	2,090.19	0.25	0.48
P-4	528.00	10	PVC	150.0	1.00	Open	Open	217.23	2,090.19	2,090.03	0.16	0.31
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	44.76	2,090.03	2,089.53	0.49	0.19
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	29.76	2,089.53	2,089.30	0.23	0.09
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	47.21	2,090.19	2,089.64	0.55	0.21
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,089.07	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	55.00	2,089.07	2,089.06	0.37e-2	0.03
P-10	400.00	10	PVC	150.0	1.00	Open	Open	-55.00	2,089.07	2,089.08	0.01	0.02
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	11.84	2,089.08	2,089.04	0.03	0.02
P-12	570.00	6	PVC	150.0	1.00	Open	Open	5.00	2,089.04	2,089.04	0.2e-2	0.34e-2
P-13	528.00	6	PVC	150.0	1.00	Open	Open	-4.16	2,089.04	2,089.04	0.12e-2	0.23e-2
P-14	570.00	6	PVC	150.0	1.00	Open	Open	4.50	2,089.04	2,089.04	0.15e-2	0.26e-2
P-15	400.00	6	PVC	150.0	1.00	Open	Open	22.00	2,089.06	2,089.04	0.02	0.05
P-16	528.00	10	PVC	150.0	1.00	Open	Open	-79.84	2,089.08	2,089.10	0.02	0.05
P-17	528.00	10	PVC	150.0	1.00	Open	Open	-107.00	2,089.10	2,089.14	0.04	0.08
P-18	528.00	10	PVC	150.0	1.00	Open	Open	-129.00	2,089.14	2,089.21	0.06	0.12
P-19	528.00	10	PVC	150.0	1.00	Open	Open	-108.96	2,089.21	2,089.25	0.04	0.08
P-20	528.00	10	PVC	150.0	1.00	Open	Open	-89.90	2,089.25	2,089.28	0.03	0.06
P-21	528.00	10	PVC	150.0	1.00	Open	Open	-70.53	2,089.28	2,089.30	0.02	0.04
P-22	528.00	10	PVC	150.0	1.00	Open	Open	-56.77	2,089.30	2,089.32	0.01	0.03
P-23	528.00	10	PVC	150.0	1.00	Open	Open	-31.55	2,089.32	2,089.32	0.44e-2	0.01
P-24	528.00	10	PVC	150.0	1.00	Open	Open	157.47	2,090.03	2,089.94	0.09	0.17
P-25	528.00	10	PVC	150.0	1.00	Open	Open	105.10	2,089.94	2,089.90	0.04	0.08
P-26	528.00	10	PVC	150.0	1.00	Open	Open	53.04	2,089.90	2,089.89	0.01	0.02
P-27	528.00	10	PVC	150.0	1.00	Open	Open	22.00	2,089.06	2,089.06	0.22e-2	0.42e-2
P-28	2,640.00	6	PVC	150.0	1.00	Open	Open	36.21	2,089.64	2,089.32	0.33	0.12
P-29	2,640.00	6	PVC	150.0	1.00	Open	Open	-42.55	2,089.32	2,089.76	0.44	0.17
P-30	2,640.00	6	PVC	150.0	1.00	Open	Open	-53.55	2,089.76	2,090.44	0.68	0.26
P-31	2,640.00	6	PVC	150.0	1.00	Open	Open	41.37	2,089.94	2,089.52	0.42	0.16
P-32	2,640.00	6	PVC	150.0	1.00	Open	Open	30.37	2,089.52	2,089.28	0.24	0.09
P-33	2,640.00	6	PVC	150.0	1.00	Open	Open	-30.06	2,089.25	2,089.48	0.23	0.09
P-34	2,640.00	6	PVC	150.0	1.00	Open	Open	-41.06	2,089.48	2,089.90	0.41	0.16
P-35	2,640.00	6	PVC	150.0	1.00	Open	Open	42.04	2,089.89	2,089.45	0.43	0.16
P-36	2,640.00	6	PVC	150.0	1.00	Open	Open	31.04	2,089.45	2,089.21	0.25	0.09
P-37	2,640.00	6	PVC	150.0	1.00	Open	Open	11.00	2,089.14	2,089.11	0.04	0.01
P-38	2,070.00	6	PVC	150.0	1.00	Open	Open	16.16	2,089.10	2,089.04	0.06	0.03
P-39	2,240.00	6	PVC	150.0	1.00	Open	Open	11.00	2,089.04	2,089.01	0.03	0.01
P-40	2,640.00	6	PVC	150.0	1.00	Open	Open	11.00	2,089.06	2,089.02	0.04	0.01
P-41	2,640.00	6	PVC	150.0	1.00	Open	Open	47.00	2,091.23	2,090.69	0.53	0.20
P-42	350.00	10	PVC	150.0	1.00	Open	Open	47.00	2,090.69	2,090.69	0.01	0.02
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,090.69	2,090.69	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,090.69	2,090.69	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,090.69	2,090.66	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,090.66	2,090.66	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,090.66	2,090.69	0.02	0.03
P-48	1,000.00	6	PVC	150.0	1.00	Open	Open	17.00	2,090.69	2,090.66	0.03	0.03
P-49	1,000.00	6	PVC	150.0	1.00	Open	Open	34.00	2,091.23	2,091.12	0.11	0.11

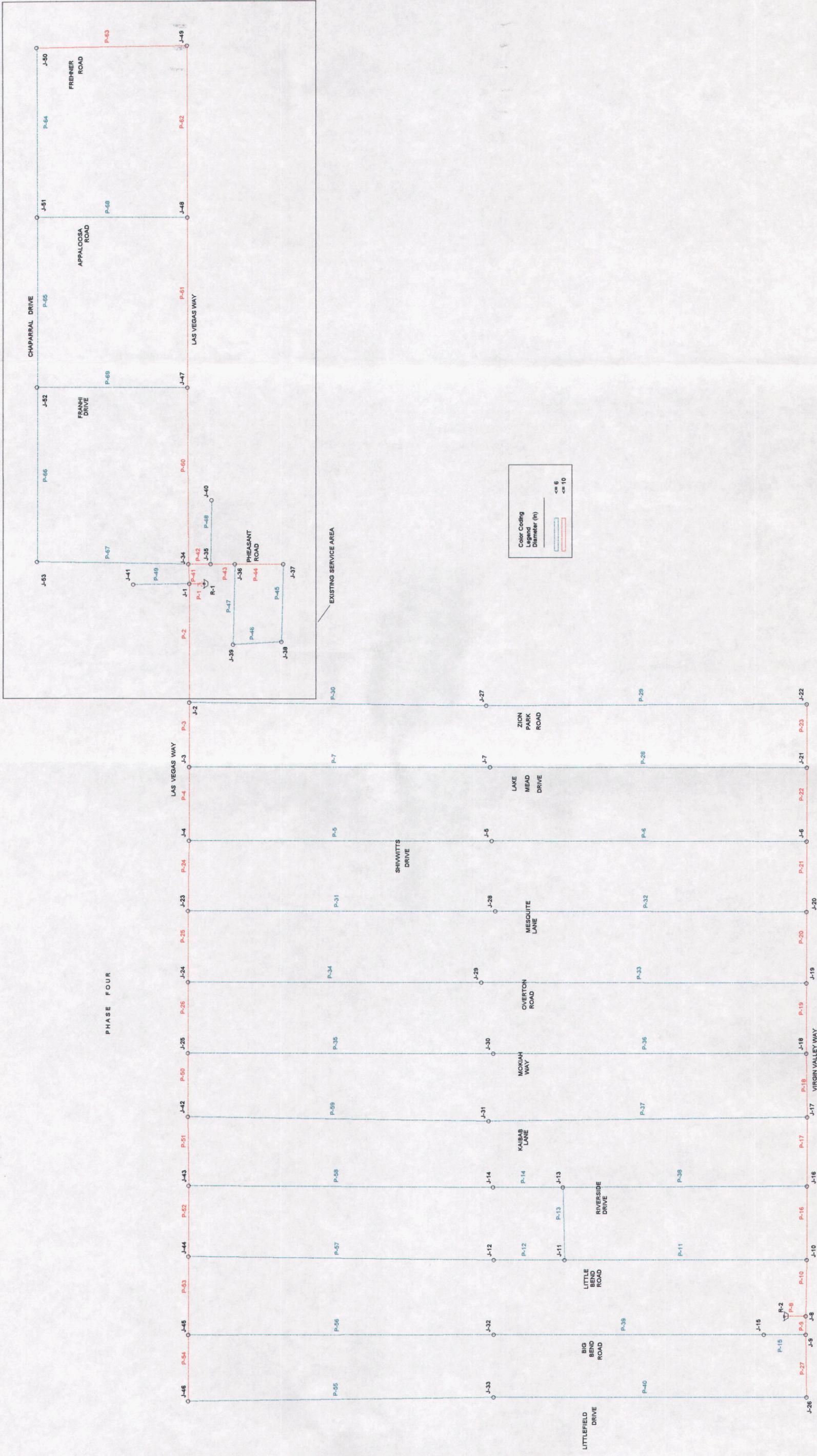
Steady State Analysis Reservoir Report

Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-421.00	2,091.35
R-2	2,091.35	0.00	2,091.35

EXHIBIT 6

PHASE - 4 HYDRAULIC ANALYSIS

Steady State Analysis



HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 6, Accuracy = 0.000057
Flow Supplied 701.00 gpm
Flow Demanded 701.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Closed Or Stagnant
P-1 Check Valve: Open
P-8 Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.03	69.63
J-2	1,900.00	Demand	11.00	Fixed	11.00	2,089.70	82.03
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,089.24	80.10
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,088.90	81.25
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,088.49	64.65
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,088.32	38.62
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,088.68	63.43
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,088.18	52.83
J-9	1,965.00	Demand	11.00	Fixed	11.00	2,088.17	53.26
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,088.18	51.54
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,088.18	67.54
J-12	1,914.00	Demand	5.00	Fixed	5.00	2,088.18	75.32
J-13	1,937.00	Demand	7.50	Fixed	7.50	2,088.18	65.38
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,088.19	72.73
J-15	1,955.00	Demand	11.00	Fixed	11.00	2,088.17	57.59
J-16	1,972.00	Demand	11.00	Fixed	11.00	2,088.20	50.25
J-17	1,976.00	Demand	11.00	Fixed	11.00	2,088.22	48.53
J-18	1,979.00	Demand	11.00	Fixed	11.00	2,088.24	47.24
J-19	1,983.00	Demand	11.00	Fixed	11.00	2,088.27	45.52
J-20	1,986.00	Demand	11.00	Fixed	11.00	2,088.30	44.24
J-21	1,993.00	Demand	11.00	Fixed	11.00	2,088.33	41.23
J-22	1,996.00	Demand	11.00	Fixed	11.00	2,088.34	39.93
J-23	1,898.00	Demand	11.00	Fixed	11.00	2,088.66	82.45
J-24	1,895.00	Demand	11.00	Fixed	11.00	2,088.49	83.67
J-25	1,892.00	Demand	11.00	Fixed	11.00	2,088.37	84.92
J-26	1,962.00	Demand	11.00	Fixed	11.00	2,088.17	54.56
J-27	1,946.00	Demand	11.00	Fixed	11.00	2,088.89	61.79
J-28	1,933.00	Demand	11.00	Fixed	11.00	2,088.41	67.21
J-29	1,926.00	Demand	11.00	Fixed	11.00	2,088.33	70.20
J-30	1,920.00	Demand	11.00	Fixed	11.00	2,088.27	72.76
J-31	1,915.00	Demand	11.00	Fixed	11.00	2,088.22	74.91
J-32	1,909.00	Demand	11.00	Fixed	11.00	2,088.16	77.48
J-33	1,904.00	Demand	11.00	Fixed	11.00	2,088.17	79.64
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,090.97	70.04
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,090.97	69.61
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,090.96	73.93
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,090.96	65.71
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,090.94	69.16
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,090.94	71.76
J-40	1,935.00	Demand	17.00	Fixed	17.00	2,090.93	67.43
J-41	1,920.00	Demand	34.00	Fixed	34.00	2,090.91	73.91
J-42	1,883.00	Demand	22.00	Fixed	22.00	2,088.28	88.77
J-43	1,874.00	Demand	22.00	Fixed	22.00	2,088.23	92.64
J-44	1,864.00	Demand	22.00	Fixed	22.00	2,088.20	96.95
J-45	1,855.00	Demand	22.00	Fixed	22.00	2,088.18	100.84
J-46	1,855.00	Demand	23.00	Fixed	23.00	2,088.18	100.83
J-47	1,930.00	Demand	24.00	Fixed	24.00	2,090.82	69.54
J-48	1,965.00	Demand	24.00	Fixed	24.00	2,090.76	54.38
J-49	2,000.00	Demand	24.00	Fixed	24.00	2,090.73	39.24
J-50	1,980.00	Demand	25.00	Fixed	25.00	2,090.73	47.88
J-51	1,960.00	Demand	24.00	Fixed	24.00	2,090.73	56.53
J-52	1,930.00	Demand	24.00	Fixed	24.00	2,090.75	69.52
J-53	1,890.00	Demand	24.00	Fixed	24.00	2,090.78	86.83

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.35	82.75
J-3	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-4	1,901.00	Demand	0.00	Fixed	0.00	2,091.35	82.31
J-5	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-6	1,999.00	Demand	0.00	Fixed	0.00	2,091.35	39.94
J-7	1,942.00	Demand	0.00	Fixed	0.00	2,091.35	64.58
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.35	54.21
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-10	1,969.00	Demand	0.00	Fixed	0.00	2,091.35	52.91
J-11	1,932.00	Demand	0.00	Fixed	0.00	2,091.35	68.91
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.35	76.69
J-13	1,937.00	Demand	0.00	Fixed	0.00	2,091.35	66.75
J-14	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.35	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.35	51.61
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.35	49.88
J-18	1,979.00	Demand	0.00	Fixed	0.00	2,091.35	48.58
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.35	46.85
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.35	45.56
J-21	1,993.00	Demand	0.00	Fixed	0.00	2,091.35	42.53
J-22	1,996.00	Demand	0.00	Fixed	0.00	2,091.35	41.23
J-23	1,898.00	Demand	0.00	Fixed	0.00	2,091.35	83.61
J-24	1,895.00	Demand	0.00	Fixed	0.00	2,091.35	84.91
J-25	1,892.00	Demand	0.00	Fixed	0.00	2,091.35	86.21
J-26	1,962.00	Demand	0.00	Fixed	0.00	2,091.35	55.94
J-27	1,946.00	Demand	0.00	Fixed	0.00	2,091.35	62.85
J-28	1,933.00	Demand	0.00	Fixed	0.00	2,091.35	68.48
J-29	1,926.00	Demand	0.00	Fixed	0.00	2,091.35	71.50
J-30	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-31	1,915.00	Demand	0.00	Fixed	0.00	2,091.35	76.26
J-32	1,909.00	Demand	0.00	Fixed	0.00	2,091.35	78.85
J-33	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.35	70.21
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-38	1,931.00	Demand	0.00	Fixed	0.00	2,091.35	69.34
J-39	1,925.00	Demand	0.00	Fixed	0.00	2,091.35	71.94
J-40	1,935.00	Demand	0.00	Fixed	0.00	2,091.35	67.61
J-41	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-42	1,883.00	Demand	0.00	Fixed	0.00	2,091.35	90.10
J-43	1,874.00	Demand	0.00	Fixed	0.00	2,091.35	93.99
J-44	1,864.00	Demand	0.00	Fixed	0.00	2,091.35	98.31
J-45	1,855.00	Demand	0.00	Fixed	0.00	2,091.35	102.21
J-46	1,855.00	Demand	0.00	Fixed	0.00	2,091.35	102.21
J-47	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-48	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-49	2,000.00	Demand	0.00	Fixed	0.00	2,091.35	39.50
J-50	1,980.00	Demand	0.00	Fixed	0.00	2,091.35	48.15
J-51	1,960.00	Demand	0.00	Fixed	0.00	2,091.35	56.80
J-52	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-53	1,890.00	Demand	0.00	Fixed	0.00	2,091.35	87.07

STATIC
PRESSURE

Steady State Analysis Pipe Report

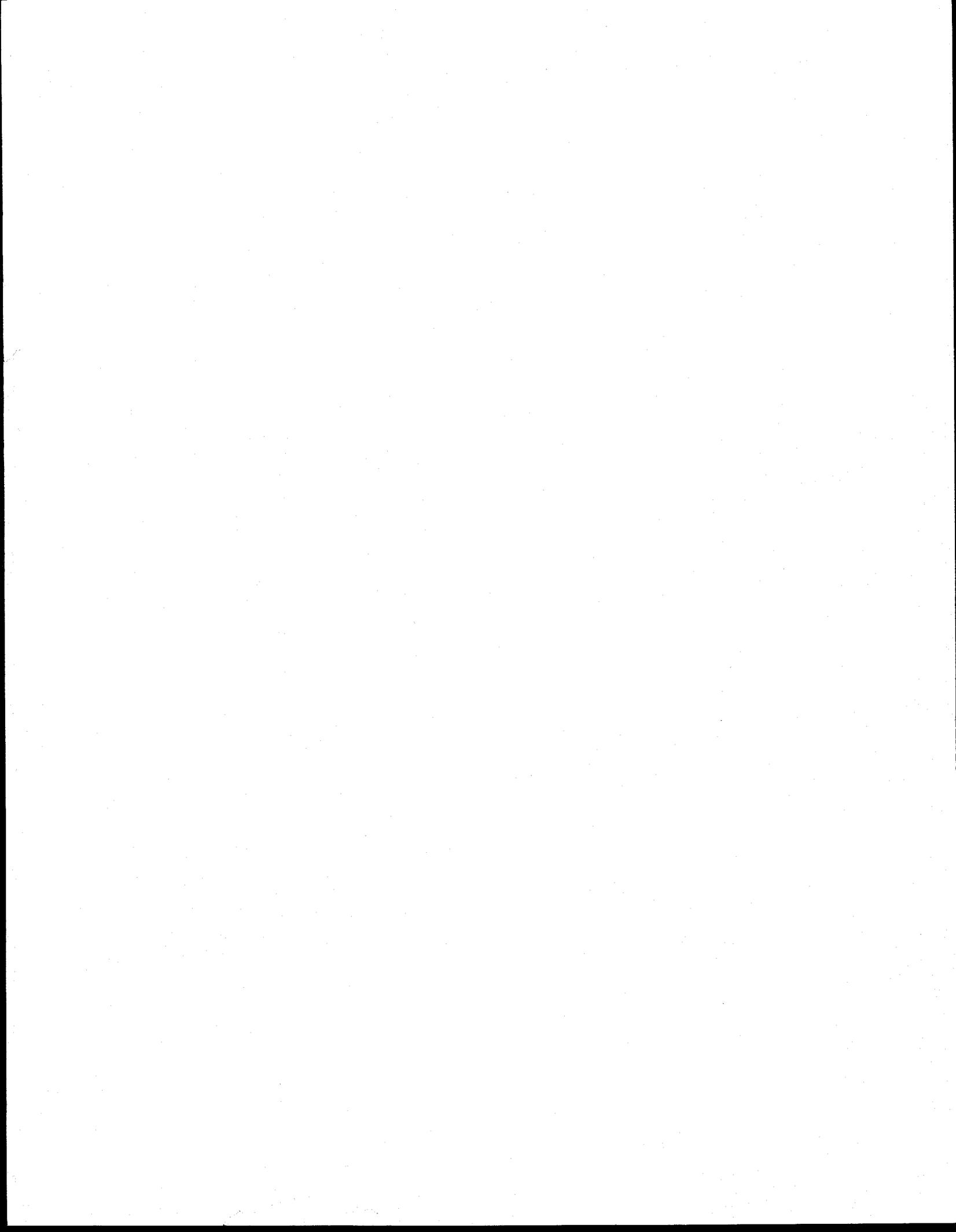
Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	701.00	2,091.35	2,091.03	0.32	4.06
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	451.00	2,091.03	2,089.70	1.33	1.14
P-3	528.00	10	PVC	150.0	1.00	Open	Open	381.18	2,089.70	2,089.24	0.46	0.87
P-4	528.00	10	PVC	150.0	1.00	Open	Open	322.24	2,089.24	2,088.90	0.34	0.64
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	40.43	2,088.90	2,088.49	0.41	0.16
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	25.43	2,088.49	2,088.32	0.17	0.07
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	47.95	2,089.24	2,088.68	0.56	0.21
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,088.18	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	40.95	2,088.18	2,088.17	0.2e-2	0.02
P-10	400.00	10	PVC	150.0	1.00	Open	Open	-40.95	2,088.18	2,088.18	0.01	0.01
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	2.52	2,088.18	2,088.18	0.2e-2	0.91e-3
P-12	570.00	6	PVC	150.0	1.00	Open	Open	-1.97	2,088.18	2,088.18	0.24e-3	0.43e-3
P-13	528.00	6	PVC	150.0	1.00	Open	Open	-6.51	2,088.18	2,088.18	0.29e-2	0.01
P-14	570.00	6	PVC	150.0	1.00	Open	Open	-7.02	2,088.18	2,088.19	0.34e-2	0.01
P-15	400.00	6	PVC	150.0	1.00	Open	Open	14.15	2,088.17	2,088.17	0.01	0.02
P-16	528.00	10	PVC	150.0	1.00	Open	Open	-56.46	2,088.18	2,088.20	0.01	0.02
P-17	528.00	10	PVC	150.0	1.00	Open	Open	-74.45	2,088.20	2,088.22	0.02	0.04
P-18	528.00	10	PVC	150.0	1.00	Open	Open	-82.10	2,088.22	2,088.24	0.03	0.05
P-19	528.00	10	PVC	150.0	1.00	Open	Open	-84.64	2,088.24	2,088.27	0.03	0.05
P-20	528.00	10	PVC	150.0	1.00	Open	Open	-81.64	2,088.27	2,088.30	0.03	0.05
P-21	528.00	10	PVC	150.0	1.00	Open	Open	-72.19	2,088.30	2,088.32	0.02	0.04
P-22	528.00	10	PVC	150.0	1.00	Open	Open	-62.76	2,088.32	2,088.33	0.02	0.03
P-23	528.00	10	PVC	150.0	1.00	Open	Open	-36.82	2,088.33	2,088.34	0.01	0.01
P-24	528.00	10	PVC	150.0	1.00	Open	Open	266.81	2,088.90	2,088.66	0.24	0.45
P-25	528.00	10	PVC	150.0	1.00	Open	Open	224.36	2,088.66	2,088.49	0.17	0.32
P-26	528.00	10	PVC	150.0	1.00	Open	Open	188.36	2,088.49	2,088.37	0.12	0.23
P-27	528.00	10	PVC	150.0	1.00	Open	Open	15.80	2,088.17	2,088.17	0.12e-2	0.23e-2
P-28	2,640.00	6	PVC	150.0	1.00	Open	Open	36.95	2,088.68	2,088.33	0.34	0.13
P-29	2,640.00	6	PVC	150.0	1.00	Open	Open	-47.82	2,088.34	2,088.89	0.55	0.21
P-30	2,640.00	6	PVC	150.0	1.00	Open	Open	-58.82	2,088.89	2,089.70	0.81	0.31
P-31	2,640.00	6	PVC	150.0	1.00	Open	Open	31.45	2,088.66	2,088.41	0.25	0.10
P-32	2,640.00	6	PVC	150.0	1.00	Open	Open	20.45	2,088.41	2,088.30	0.11	0.04
P-33	2,640.00	6	PVC	150.0	1.00	Open	Open	-14.00	2,088.27	2,088.33	0.06	0.02
P-34	2,640.00	6	PVC	150.0	1.00	Open	Open	-25.00	2,088.33	2,088.49	0.17	0.06
P-35	2,640.00	6	PVC	150.0	1.00	Open	Open	19.46	2,088.37	2,088.27	0.10	0.04
P-36	2,640.00	6	PVC	150.0	1.00	Open	Open	8.46	2,088.27	2,088.24	0.02	0.01
P-37	2,640.00	6	PVC	150.0	1.00	Open	Open	-3.35	2,088.22	2,088.22	0.39e-2	0.15e-2
P-38	2,070.00	6	PVC	150.0	1.00	Open	Open	6.99	2,088.20	2,088.18	0.01	0.01
P-39	2,240.00	6	PVC	150.0	1.00	Open	Open	3.15	2,088.17	2,088.16	0.29e-2	0.13e-2
P-40	2,640.00	6	PVC	150.0	1.00	Open	Open	4.80	2,088.17	2,088.17	0.01	0.3e-2
P-41	150.00	10	PVC	150.0	1.00	Open	Open	216.00	2,091.03	2,090.97	0.05	0.36
P-42	350.00	10	PVC	150.0	1.00	Open	Open	47.00	2,090.97	2,090.97	0.01	0.02
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,090.97	2,090.96	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,090.96	2,090.96	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,090.96	2,090.94	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,090.94	2,090.94	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,090.94	2,090.96	0.02	0.03
P-48	1,000.00	6	PVC	150.0	1.00	Open	Open	17.00	2,090.97	2,090.93	0.03	0.03
P-49	1,000.00	6	PVC	150.0	1.00	Open	Open	34.00	2,091.03	2,090.91	0.11	0.11
P-50	528.00	10	PVC	150.0	1.00	Open	Open	157.90	2,088.37	2,088.28	0.09	0.17
P-51	528.00	10	PVC	150.0	1.00	Open	Open	121.55	2,088.28	2,088.23	0.05	0.10
P-52	528.00	10	PVC	150.0	1.00	Open	Open	88.02	2,088.23	2,088.20	0.03	0.06
P-53	528.00	10	PVC	150.0	1.00	Open	Open	59.05	2,088.20	2,088.18	0.01	0.03

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-54	528.00	10	PVC	150.0	1.00	Open	Open	29.20	2,088.18	2,088.18	0.39e-2	0.01
P-55	2,640.00	6	PVC	150.0	2.00	Open	Open	6.20	2,088.18	2,088.17	0.01	0.47e-2
P-56	2,640.00	6	PVC	150.0	2.00	Open	Open	7.85	2,088.18	2,088.16	0.02	0.01
P-57	2,640.00	6	PVC	150.0	2.00	Open	Open	6.97	2,088.20	2,088.18	0.02	0.01
P-58	2,640.00	6	PVC	150.0	2.00	Open	Open	11.52	2,088.23	2,088.19	0.04	0.02
P-59	2,640.00	6	PVC	150.0	2.00	Open	Open	14.35	2,088.28	2,088.22	0.06	0.02
P-60	1,320.00	10	PVC	150.0	1.00	Open	Open	130.40	2,090.97	2,090.82	0.15	0.11
P-61	1,320.00	10	PVC	150.0	1.00	Open	Open	84.01	2,090.82	2,090.76	0.07	0.05
P-62	1,320.00	10	PVC	150.0	1.00	Open	Open	46.50	2,090.76	2,090.73	0.02	0.02
P-63	1,320.00	10	PVC	150.0	1.00	Open	Open	22.50	2,090.73	2,090.73	0.01	0.43e-2
P-64	1,320.00	6	PVC	150.0	1.00	Open	Open	-2.50	2,090.73	2,090.73	0.12e-2	0.92e-3
P-65	1,320.00	6	PVC	150.0	1.00	Open	Open	-12.99	2,090.73	2,090.75	0.02	0.02
P-66	1,320.00	6	PVC	150.0	1.00	Open	Open	-14.60	2,090.75	2,090.78	0.03	0.02
P-67	1,320.00	6	PVC	150.0	1.00	Open	Open	-38.60	2,090.78	2,090.97	0.19	0.14
P-68	1,320.00	6	PVC	150.0	1.00	Open	Open	13.51	2,090.76	2,090.73	0.03	0.02
P-69	1,320.00	6	PVC	150.0	1.00	Open	Open	22.38	2,090.82	2,090.75	0.07	0.05

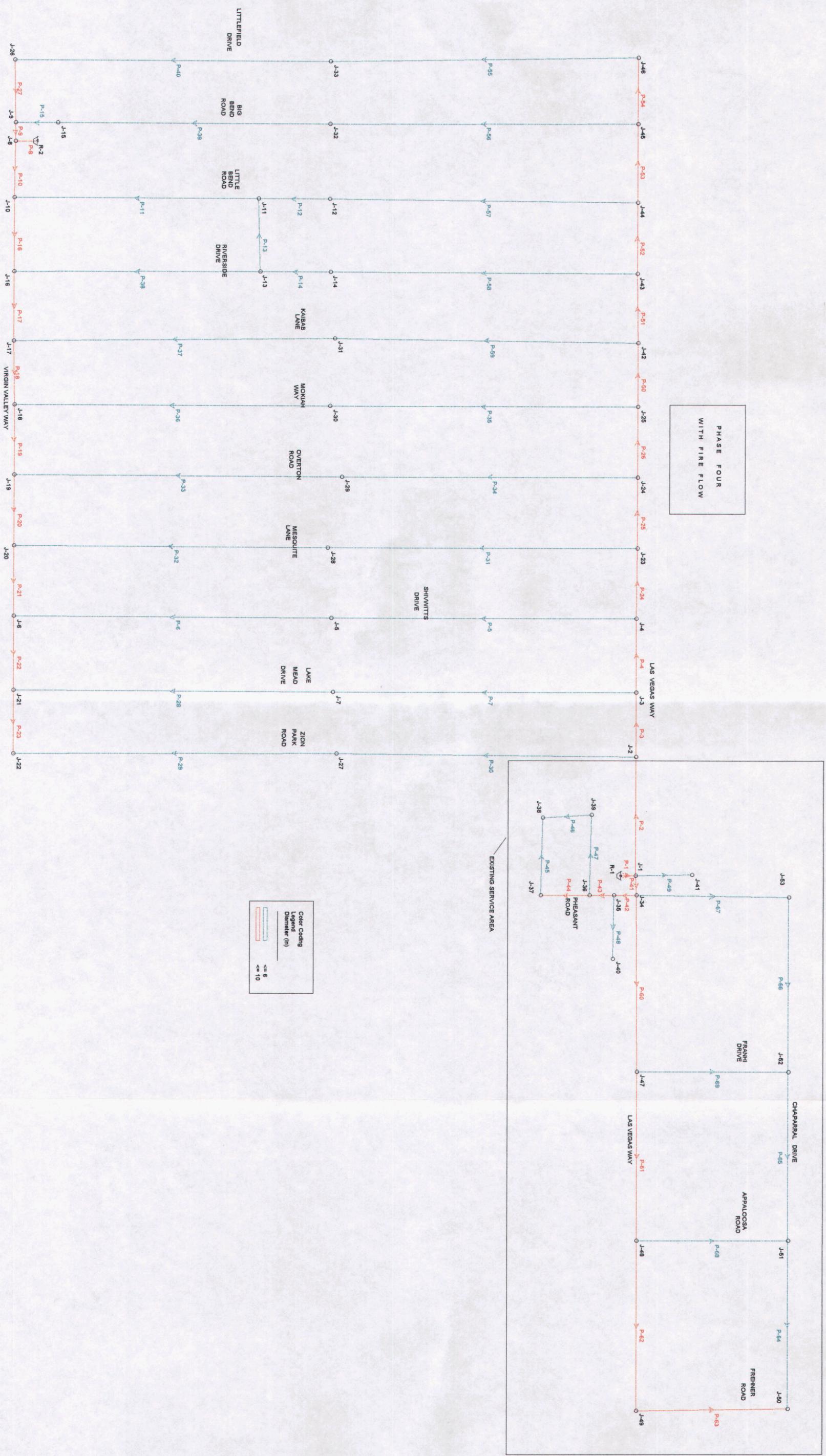
Steady State Analysis Reservoir Report

Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-701.00	2,091.35
R-2	2,091.35	0.00	2,091.35



Steady State Analysis

PHASE FOUR
WITH FIRE FLOW



HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 5, Accuracy = 0.000582
Flow Supplied 1,201.00 gpm
Flow Demanded 1,201.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Closed Or Stagnant
P-1 Check Valve: Open
P-8 Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,090.44	69.38
J-2	1,900.00	Demand	11.00	Fixed	11.00	2,085.14	80.06
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,083.31	77.54
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,081.99	78.27
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,079.87	60.92
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,078.31	34.29
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,080.41	59.85
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,078.66	48.72
J-9	1,965.00	Demand	11.00	Fixed	11.00	2,078.66	49.15
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,078.65	47.42
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,078.81	63.49
J-12	1,914.00	Demand	5.00	Fixed	5.00	2,078.88	71.30
J-13	1,937.00	Demand	7.50	Fixed	7.50	2,078.81	61.32
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,078.90	68.71
J-15	1,955.00	Demand	11.00	Fixed	11.00	2,078.67	53.48
J-16	1,972.00	Demand	11.00	Fixed	11.00	2,078.65	46.12
J-17	1,976.00	Demand	11.00	Fixed	11.00	2,078.64	44.38
J-18	1,979.00	Demand	11.00	Fixed	11.00	2,078.61	43.08
J-19	1,983.00	Demand	11.00	Fixed	11.00	2,078.56	41.32
J-20	1,986.00	Demand	11.00	Fixed	11.00	2,078.47	39.99
J-21	1,993.00	Demand	11.00	Fixed	11.00	2,078.04	36.77
J-22	1,996.00	Demand	511.00	Fixed	511.00	2,077.58	35.28
J-23	1,898.00	Demand	11.00	Fixed	11.00	2,081.05	79.16
J-24	1,895.00	Demand	11.00	Fixed	11.00	2,080.38	80.17
J-25	1,892.00	Demand	11.00	Fixed	11.00	2,079.91	81.26
J-26	1,962.00	Demand	11.00	Fixed	11.00	2,078.66	50.45
J-27	1,946.00	Demand	11.00	Fixed	11.00	2,081.07	58.41
J-28	1,933.00	Demand	11.00	Fixed	11.00	2,079.59	63.39
J-29	1,926.00	Demand	11.00	Fixed	11.00	2,079.33	66.30
J-30	1,920.00	Demand	11.00	Fixed	11.00	2,079.14	68.82
J-31	1,915.00	Demand	11.00	Fixed	11.00	2,079.00	70.92
J-32	1,909.00	Demand	11.00	Fixed	11.00	2,078.83	73.44
J-33	1,904.00	Demand	11.00	Fixed	11.00	2,078.84	75.61
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,090.39	69.79
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,090.38	69.35
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,090.38	73.68
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,090.38	65.46
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,090.36	68.91
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,090.36	71.51
J-40	1,935.00	Demand	17.00	Fixed	17.00	2,090.35	67.18
J-41	1,920.00	Demand	34.00	Fixed	34.00	2,090.33	73.66
J-42	1,883.00	Demand	22.00	Fixed	22.00	2,079.58	85.01
J-43	1,874.00	Demand	22.00	Fixed	22.00	2,079.37	88.81
J-44	1,864.00	Demand	22.00	Fixed	22.00	2,079.26	93.08
J-45	1,855.00	Demand	22.00	Fixed	22.00	2,079.20	96.95
J-46	1,855.00	Demand	23.00	Fixed	23.00	2,079.19	96.95
J-47	1,930.00	Demand	24.00	Fixed	24.00	2,090.24	69.29
J-48	1,965.00	Demand	24.00	Fixed	24.00	2,090.17	54.13
J-49	2,000.00	Demand	24.00	Fixed	24.00	2,090.15	38.98
J-50	1,980.00	Demand	25.00	Fixed	25.00	2,090.15	47.63
J-51	1,960.00	Demand	24.00	Fixed	24.00	2,090.15	56.28
J-52	1,930.00	Demand	24.00	Fixed	24.00	2,090.17	69.26
J-53	1,890.00	Demand	24.00	Fixed	24.00	2,090.20	86.57

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	1,201.00	2,091.35	2,090.44	0.91	11.35
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	951.00	2,090.44	2,085.14	5.31	4.54
P-3	528.00	10	PVC	150.0	1.00	Open	Open	799.16	2,085.14	2,083.31	1.82	3.46
P-4	528.00	10	PVC	150.0	1.00	Open	Open	671.88	2,083.31	2,081.99	1.32	2.50
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	98.19	2,081.99	2,079.87	2.12	0.80
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	83.19	2,079.87	2,078.31	1.56	0.59
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	116.28	2,083.31	2,080.41	2.90	1.10
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,078.66	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	-20.71	2,078.66	2,078.66	0.49e-3	0.38e-2
P-10	400.00	10	PVC	150.0	1.00	Open	Open	20.71	2,078.66	2,078.65	0.17e-2	0.43e-2
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	-26.94	2,078.65	2,078.81	0.16	0.07
P-12	570.00	6	PVC	150.0	1.00	Open	Open	-34.12	2,078.81	2,078.88	0.07	0.11
P-13	528.00	6	PVC	150.0	1.00	Open	Open	-3.82	2,078.81	2,078.81	0.98e-3	0.18e-2
P-14	570.00	6	PVC	150.0	1.00	Open	Open	-39.56	2,078.81	2,078.90	0.09	0.15
P-15	400.00	6	PVC	150.0	1.00	Open	Open	-16.40	2,078.66	2,078.67	0.01	0.03
P-16	528.00	10	PVC	150.0	1.00	Open	Open	34.65	2,078.65	2,078.65	0.01	0.01
P-17	528.00	10	PVC	150.0	1.00	Open	Open	51.88	2,078.65	2,078.64	0.01	0.02
P-18	528.00	10	PVC	150.0	1.00	Open	Open	78.97	2,078.64	2,078.61	0.02	0.05
P-19	528.00	10	PVC	150.0	1.00	Open	Open	114.49	2,078.61	2,078.56	0.05	0.09
P-20	528.00	10	PVC	150.0	1.00	Open	Open	160.55	2,078.56	2,078.47	0.09	0.17
P-21	528.00	10	PVC	150.0	1.00	Open	Open	219.69	2,078.47	2,078.31	0.16	0.31
P-22	528.00	10	PVC	150.0	1.00	Open	Open	286.88	2,078.31	2,078.04	0.27	0.51
P-23	528.00	10	PVC	150.0	1.00	Open	Open	381.16	2,078.04	2,077.58	0.46	0.87
P-24	528.00	10	PVC	150.0	1.00	Open	Open	558.69	2,081.99	2,081.05	0.94	1.77
P-25	528.00	10	PVC	150.0	1.00	Open	Open	466.55	2,081.05	2,080.38	0.67	1.27
P-26	528.00	10	PVC	150.0	1.00	Open	Open	387.49	2,080.38	2,079.91	0.47	0.90
P-27	528.00	10	PVC	150.0	1.00	Open	Open	-15.31	2,078.66	2,078.66	0.12e-2	0.23e-2
P-28	2,640.00	6	PVC	150.0	1.00	Open	Open	105.28	2,080.41	2,078.04	2.37	0.90
P-29	2,640.00	6	PVC	150.0	1.00	Open	Open	-129.84	2,077.58	2,081.07	3.50	1.32
P-30	2,640.00	6	PVC	150.0	1.00	Open	Open	-140.84	2,081.07	2,085.14	4.06	1.54
P-31	2,640.00	6	PVC	150.0	1.00	Open	Open	81.14	2,081.05	2,079.59	1.46	0.55
P-32	2,640.00	6	PVC	150.0	1.00	Open	Open	70.14	2,079.59	2,078.47	1.12	0.42
P-33	2,640.00	6	PVC	150.0	1.00	Open	Open	-57.06	2,078.56	2,079.33	0.76	0.29
P-34	2,640.00	6	PVC	150.0	1.00	Open	Open	-68.06	2,079.33	2,080.38	1.06	0.40
P-35	2,640.00	6	PVC	150.0	1.00	Open	Open	57.53	2,079.91	2,079.14	0.77	0.29
P-36	2,640.00	6	PVC	150.0	1.00	Open	Open	46.53	2,079.14	2,078.61	0.52	0.20
P-37	2,640.00	6	PVC	150.0	1.00	Open	Open	-38.08	2,078.64	2,079.00	0.36	0.14
P-38	2,070.00	6	PVC	150.0	1.00	Open	Open	-28.23	2,078.65	2,078.81	0.16	0.08
P-39	2,240.00	6	PVC	150.0	1.00	Open	Open	-27.40	2,078.67	2,078.83	0.17	0.07
P-40	2,640.00	6	PVC	150.0	1.00	Open	Open	-26.31	2,078.66	2,078.84	0.18	0.07
P-41	150.00	10	PVC	150.0	1.00	Open	Open	216.00	2,090.44	2,090.39	0.05	0.36
P-42	350.00	10	PVC	150.0	1.00	Open	Open	47.00	2,090.39	2,090.38	0.01	0.02
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,090.38	2,090.38	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,090.38	2,090.38	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,090.38	2,090.36	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,090.36	2,090.36	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,090.36	2,090.38	0.02	0.03
P-48	1,000.00	6	PVC	150.0	1.00	Open	Open	17.00	2,090.38	2,090.35	0.03	0.03
P-49	1,000.00	6	PVC	150.0	1.00	Open	Open	34.00	2,090.44	2,090.33	0.11	0.11
P-50	528.00	10	PVC	150.0	1.00	Open	Open	318.97	2,079.91	2,079.58	0.33	0.62
P-51	528.00	10	PVC	150.0	1.00	Open	Open	247.88	2,079.58	2,079.37	0.21	0.39
P-52	528.00	10	PVC	150.0	1.00	Open	Open	181.83	2,079.37	2,079.26	0.12	0.22
P-53	528.00	10	PVC	150.0	1.00	Open	Open	120.71	2,079.26	2,079.20	0.05	0.10

Project Title: Virgin River Ranches

c:\haestad\wtrc2\04-531-f.wcd

08/18/04 05:24:44 AM

Mohave Engineering Assoc Inc

© Haestad Methods, Inc. 37 Brookside Road Waterbury, CT 06708 USA (203) 755-1666

Project Engineer: Joseph R. Leedy, P.E.

WaterCAD v1.0 [035]

Page 1 of 2

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-54	528.00	10	PVC	150.0	1.00	Open	Open	60.31	2,079.20	2,079.19	0.01	0.03
P-55	2,640.00	6	PVC	150.0	2.00	Open	Open	37.31	2,079.19	2,078.84	0.35	0.13
P-56	2,640.00	6	PVC	150.0	2.00	Open	Open	38.40	2,079.20	2,078.83	0.37	0.14
P-57	2,640.00	6	PVC	150.0	2.00	Open	Open	39.12	2,079.26	2,078.88	0.38	0.14
P-58	2,640.00	6	PVC	150.0	2.00	Open	Open	44.06	2,079.37	2,078.90	0.48	0.18
P-59	2,640.00	6	PVC	150.0	2.00	Open	Open	49.08	2,079.58	2,079.00	0.58	0.22
P-60	1,320.00	10	PVC	150.0	1.00	Open	Open	130.39	2,090.39	2,090.24	0.15	0.11
P-61	1,320.00	10	PVC	150.0	1.00	Open	Open	84.01	2,090.24	2,090.17	0.07	0.05
P-62	1,320.00	10	PVC	150.0	1.00	Open	Open	46.48	2,090.17	2,090.15	0.02	0.02
P-63	1,320.00	10	PVC	150.0	1.00	Open	Open	22.48	2,090.15	2,090.15	0.01	0.43e-2
P-64	1,320.00	6	PVC	150.0	1.00	Open	Open	-2.52	2,090.15	2,090.15	0.98e-3	0.74e-3
P-65	1,320.00	6	PVC	150.0	1.00	Open	Open	-12.99	2,090.15	2,090.17	0.02	0.02
P-66	1,320.00	6	PVC	150.0	1.00	Open	Open	-14.61	2,090.17	2,090.20	0.03	0.02
P-67	1,320.00	6	PVC	150.0	1.00	Open	Open	-38.61	2,090.20	2,090.39	0.19	0.14
P-68	1,320.00	6	PVC	150.0	1.00	Open	Open	13.53	2,090.17	2,090.15	0.03	0.02
P-69	1,320.00	6	PVC	150.0	1.00	Open	Open	22.39	2,090.24	2,090.17	0.07	0.05

Steady State Analysis Reservoir Report

Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-1,201.00	2,091.35
R-2	2,091.35	0.00	2,091.35

Virgin Mountain Utilities Company
Hook Up Fee Computation
Certificate of Convenience and Necessity Expansion
Docket No.

Item	Quantity	Unit Price	Cost	Allocation	
				Section 15	System
6" PVC Transmission Main	52,800	\$ 14.00	\$ 739,200	\$ 739,200	\$ -
10" PVC Transmission Mains	15,840	\$ 21.00	\$ 332,640	\$ 332,640	\$ -
Well and Pumping Plant	1	\$ 350,000	\$ 350,000	\$ 233,100	\$ 116,550
Fire Hydrants	137	\$ 2,250	\$ 308,250	\$ 308,250	\$ -
			<u>\$ 1,730,090</u>	<u>\$ 1,613,190</u>	<u>\$ 116,550</u>
Total Units				500	
Backbone Cost per Unit				\$ 3,226	
Proposed Hook-Up Fee					
Percent of Cost			80%	\$ 2,581	
Say				<u>\$ 2,500</u>	

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

331, 332, 333, 334
402-23-303, 304, 305, 306, 307, 326, 327, 328, 329, 330

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.


Owner's Signature

12-11-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot 11

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well. We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Tom Stoddard Trust manager 7-24-03
Owner's Signature Date

Owner's Signature Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

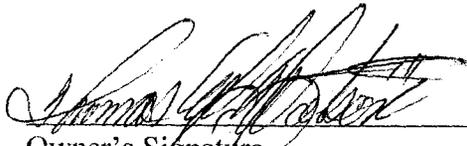
We (I) own property in Scenic Arizona described as:

lot 15 II (402-23-015)

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

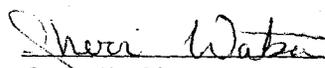
We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.



Owner's Signature

6-9-03

Date



Owner's Signature

6/9/03

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Mohave County: 08 402-23-017 2; Apache County: 01 211-25-108 8

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

James A. Majors
Owner's Signature

June 10, 2003

Date

Suzanne C. Majors
Owifer's Signature

June 10, 2003

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

TWN: 39 N RANG: 16 W SEC: 15 TRACT: LOT 16

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Karen Opperman
Owner's Signature

05-10-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot 21 ZIONS PWA

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Ruben Garcia
Owner's Signature

6-8-03
Date

Ruben Garcia
Owner's Signature

6-8-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot 22

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Ophelia Helmosillo
Owner's Signature

6-28-03
Date

Ophelia Helmosillo
Owner's Signature

6-28-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

08 402-23-035 B 2

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Brian Hearn
Owner's Signature

6-14-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

BRIAN HEANEY 402 23 035B

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Brian Heaney
Owner's Signature

10-18-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Donald D. Rawson Parcel 40223039

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Donald D. Rawson
Owner's Signature

10-18-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

402-23-040, -345 through -349, -360 through -372 (11 total)

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Joe Bowler, Trustee
Owner's Signature

7-7-2003
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

RE Tract N° 39N 16W Sec 15 Tract Virgin River Ranch
Valley View Add 10758

(please use Assessor's Parcel Number) and wish to have this property included in the area

served by the Virgin Mountain Utilities Water Co. We hereby request that your company

proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona

Department of Environmental Quality, Arizona Department of Environmental Water Resources,

and any other appropriate agencies necessary for the company to provide the requested service.

If service is provided to us (me) at some time in the future, the service would be provided under

the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona

Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your

company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to

provide service at any point in the future. It will allow service to be provided when it is mutually

advantageous for us (me) and the company.

Ronald A. Harris

Owner's Signature

6-7-03

Date

Layne Harrison

Owner's Signature

6-8-03

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Donald D. Rawson Parcel 40223070

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Donald D. Rawson
Owner's Signature

10-18-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

(Parcel I.D. 40223081) T11N-39N-R16W-5E-15 - Tract: Virgin River Ranches, Valley View Add. Lots

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Jerry Christensen
Owner's Signature

6-10-03
Date

Georgie Christensen
Owner's Signature

6-10-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

APN 402-23-087

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.


Owner's Signature PERRY FREED

6-10-03
Date

Owner's Signature

Date

APN 402-23-087
SECTION 15
TOWNSHIP 39N

RANGE 16W
LOT #87

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Parcel No. 40223097

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Melissa E. Emery
Owner's Signature
AKA - Melissa E. Saegart

6-26-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot # 104 3510 S. Shivwittk Dr Virgin
River Ranches

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service.

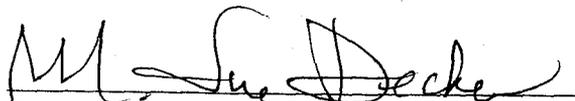
If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.


Owner's Signature

6-9-03
Date


Owner's Signature

6-9-03
Date

Yo soy (nosotros somos) dueño(s) de propiedad en Scenic Arizona descrito como:

402 23 109

(Haganos el favor de usar el numero de parcel de assessor de condado de majave por ejemplo 402-____ -____) y quiero (queremos) que uds incluyan esta propiedad en la area de servicio de la compania de agua; Virgin Mountain Utilities Water Company. Quiero (queremos) que uds. Procedan en obtener todos las aprobaciones de Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, y cualquiera otras agencias apropiadas para que proveer el Servicio suplicado. Si en el futuro reciba (recibamos) el servicio, el Servicio sera' proveido bajo las reglas, condiciones, tarifas autorizadas por el Arizona corporation Commission.

Entiendo (Entendemos) que por firmar esta suplica no me obligare' (nos obligaremos) a aceptar servicio de su compania en el futuro ni terminare' (terminaremos el uso de agua de un pozo privado. Tambien entiendo (entendemos) que por firmar esta suplica no obligara' la compania a extender lineas para proveer servicio en cualquiera tiempo en el futuro. Se permite que la compania pueda proveer servicio cuando es mutualmente provechoso para m' (nosotros) y la compania.


Firma de dueño

10-10-8-03
Fecha

Firma de dueño

Fecha

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

402-23-128 LITL

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Walt + PO

Owner's Signature

6-11-03

Date

Mari Thi Galt

Owner's Signature

6-11-03

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

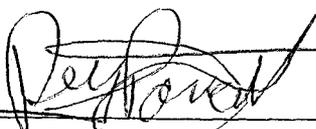
We (I) own property in Scenic Arizona described as:

~~we~~ [↑] Reynaldo and Josefina Ponce Parcel #40223140

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

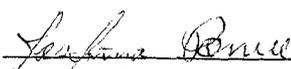
We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.



Owner's Signature

6-16-03

Date



Owner's Signature

6-16-03

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Parcel ID 08 BK 402-23-^{MP} 142 1 Parcel

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Carol A. Anderson
Owner's Signature

6-11-03
Date

Willie E. Helbrook
Owner's Signature

06-11-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot 157

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Maria G. Martinez
Owner's Signature

6-14-03
Date

Richard M. Martinez
Owner's Signature

6-14-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

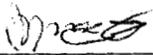
We (I) own property in Scenic Arizona described as:

40223234 and 40223183

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

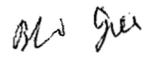
We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.



Owner's Signature

6-13-03

Date



Owner's Signature

6-13-03

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot 146b

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Terry Wynder
Owner's Signature

June 18/03
Date

Virginia Wynder
Owner's Signature

June 18/03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

402-23-192
402-23-193
HE

We (I) own property in Scenic Arizona described as:

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Lloyd A. Justice
Owner's Signature

6-11-03
Date

Sharon M. Justice
Owner's Signature

6/11/03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

402-23-204

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Richard A. Johnson
Owner's Signature

June 10, 2003
Date

Barbara L. Johnson
Owner's Signature

June 10, 2003
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Parcel # 402-23-210 Assessment # 0710

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Marian Zachariasen
Owner's Signature

6-11-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as: # 402 232 33

Virgin River Ranches, Valley View Addition Lot 233 (TWN 39N RNG 16W SEC: 15)

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Kenneth A. Ban
Owner's Signature

9 June 03
Date

Monica J. Ban
Owner's Signature

June 9, 2003
Date

Lot 244 - 245

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot 244-245

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

gordon [signature]
Owner's Signature

7 - 13 - 03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

402-23-253
402-13-024
402-13-025 #E

We (I) own property in Scenic Arizona described as:

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Joe M. Leone
Owner's Signature

6/13/03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Virgin River Ranches VLY View A Lot 257 SEC #5 39 N

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

William J. Regullas Trustee
Owner's Signature

June 11, 83
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Lot # 258

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

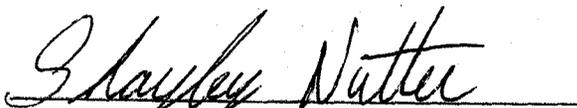
FAXED

We (I) understand that signing this request will not obligate us (me) to ~~accept service~~ from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.


Owner's Signature

7-10-3
Date


Owner's Signature

7/10/3
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

Parcel # 402-22-259 Assessment # 0759

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Wilburn Knutson

Owner's Signature

6-11-03

Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

40223260

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Evelyn M. Lucas
Owner's Signature

June 10, 2003
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

View A10T 265 Sec. 15 39N Parcel # 40923265

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Celestina Bernal
Owner's Signature

6-13-03
Date

Yolanda C Bernal
Owner's Signature

6-15-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

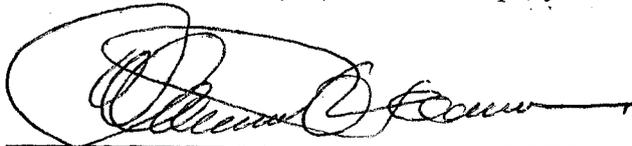
We (I) own property in Scenic Arizona described as:

08 402-23-289 5 / 08 402-23-290 7

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.



Owner's Signature

JUNE 12, 2003

Date



Owner's Signature

JUNE 12, 2003

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

08 402 23 313 1

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Larry Schroeder
Owner's Signature

7.7.03
Date

Shirley Schroeder
Owner's Signature

7.7.03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

40223314

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.



Owner's Signature

7-3-03

Date

7-3-03

Date

Owner's Signature

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

402-23-335
*E

We (I) own property in Scenic Arizona described as:

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Norge Vega ✓
Owner's Signature

6-9-03
Date

Laura Miller
Owner's Signature

6-9-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

402-23-340 ✓ 402-25-003

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Karl Christensen
Owner's Signature

6-14-03
Date

Patricia J. Christensen
Owner's Signature

6/14/03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

08 - 402 - 23 - 374

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.



Owner's Signature

June 13/03

Date



Owner's Signature

June 13/03

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

402-23-377
KE

We (I) own property in Scenic Arizona described as:

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Alay Periez
Owner's Signature

6/10/03
Date

Owner's Signature

Date

Attention: Tom.

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

402-23-389 & 402-23-393

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service.

If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Kristine Stokes-Eds
Owner's Signature

6-24-03
Date

Owner's Signature

Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

We (I) own property in Scenic Arizona described as:

40223395 & 40223396

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service. If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.

Ronald R. Chilton
Owner's Signature

06-11-03
Date

Marjorie J. Chilton
Owner's Signature

6-11-03
Date

Virgin Mt. Utilities Co.
P.O. Box 668
Beaver Dam, Arizona 86432
Contact Person: Tom Stoddard @ 1-928-347-5515

* 402-23-399Q (tract L)
~~399R~~
* 399M (tract A) ~~(sections)~~
& D KE just under 10 acres

We (I) own property in Scenic Arizona described as:

TRACTS A, B, & D within PARCEL 3 OF BOOK 11, PAGE 19 OF PARCEL PLATS — NW¼ of Sec. 11

(please use Assessor's Parcel Number) and wish to have this property included in the area serviced by the Virgin Mountain Utilities Water Co. We hereby request that your company proceed with obtaining all approvals from the Arizona Corporation Commission, Arizona

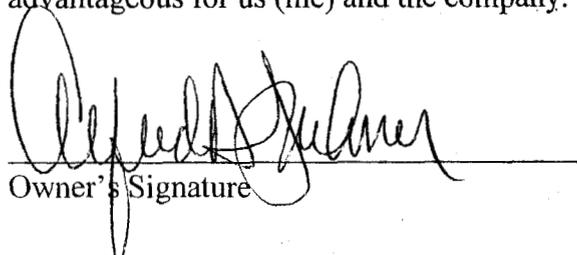
TOWNSHIP 39N
RANGE 16W
MOHAVE CO.
ARIZONA

Department of Environmental Quality, Arizona Department of Environmental Water Resources, and any other appropriate agencies necessary for the company to provide the requested service.

If service is provided to us (me) at some time in the future, the service would be provided under the rules and regulations, rates, charges, terms, and conditions as authorized by the Arizona Corporation Commission.

We (I) understand that signing this request will not obligate us (me) to accept service from your company at any time in the future or to terminate use of water from your privately owned well.

We (I) also understand that signing this request will not obligate the company to extend lines to provide service at any point in the future. It will allow service to be provided when it is mutually advantageous for us (me) and the company.


Owner's Signature

June 9, 2003
Date

Susan Fredner
Owner's Signature

6/9/03
Date