

APPENDIX F

IDEQ Correspondence and Rules Interpretation



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 NORTH HILTON • BOISE, IDAHO 83706 • (208) 373-0502

JAMES E. RISCH, GOVERNOR
TONI HARDESTY, DIRECTOR

TSCPE-237/2006

October 23, 2006

Mr. James M. Rees, P.E.
MTC, Inc.
707 N. 27th Street
Boise, Idaho 83702-3113

RE: Rule Interpretation Changes Affecting July 27, 2006 Comments
Eagle Water System (*Eagle, Ada County*)

Dear Mr. Rees:

Please be advised that DEQ has recently changed our interpretation of the Idaho Rules for Public Drinking Water Systems regarding pumping redundancy and fire flow requirements. Attached is a memorandum setting forth those changes.

DEQ provided you comments regarding the Eagle Water Company Preliminary Engineering Report in a letter from Diane Bacongus to Robert DeShazo dated July 27, 2006. The above rule interpretation changes affect several of the comments in that letter. Eagle Water Company should, therefore, adjust your pending responses to the July 27 letter to take into account these changed interpretations.

Please contact me with any questions at 373-0514, or via e-mail at peter.bair@deq.idaho.gov if you have any questions in this regard.

Sincerely,

Peter S. Bair, P.E.
Technical I Engineer

PSB:slt

Attachment: Burnell memo of October 10, 2006 entitled "Drinking Water Rule Interpretation - Pumping Redundancy and Fire Flow"

C: Tiffany Floyd, Acting Regional Engineering Manager, DEQ Boise Regional Office
Mike Stambulis, P.E., DEQ Technical Services
Monty Marchus, P.E., DEQ Boise Regional Office
Todd Crutcher, E.I.T., DEQ Boise Regional Office
Robert DeShazo, Eagle Water Company, 172 W. State Street, Eagle Idaho 83616
BRO Source File 2
TSCPE Reading File



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 NORTH HILTON • BOISE, ID 83706-1255 • (208) 373-0502

JAMES E. RISCH, GOVERNOR
TONI HARDESTY, DIRECTOR

MEMORANDUM

TO: Kirby Cole, Lewiston Regional Office Administrator
Mark Dietrick, Pocatello Regional Office Administrator
Gwen Fransen, Coeur d'Alene Regional Office Administrator
Doug Howard, Twin Falls Regional Office Administrator
Jim Johnston, Idaho Falls Regional Office Administrator
Jon Sandoval, Boise Regional Office Administrator

FROM: *Burg 10/6/06*
Barry Burhell, Water Quality Division Administrator

SUBJECT: Drinking Water Rule Interpretation—Pumping Redundancy and Fire Flow

DATE: October 10, 2006

Proposal: The proposed phase 2 drinking water facility standards rule has sections that address pumping redundancy and fire flow. The proposed rule language, as modified in response to public comments during August, separates fire flow requirements from the more general requirement that public water systems be designed with pumping capabilities sufficient to provide peak demands with the largest pump out of service. This memo directs DEQ engineers performing plan and specification reviews for public water systems to use the framework agreed upon in the proposed rule before it becomes final in the spring of 2007.

Current Rule Interpretation: The most literal reading of Recommended Standards for Waterworks (“Ten States”) would require that public water systems be designed with sufficient pumping capacity to supply peak day demand plus fire flow where provided. Any pumping facility within the water system would need to have sufficient redundancy to provide this peak day demand plus fire flow when the largest pump is out of service. DEQ has not been consistent in application and interpretation of this requirement. Most offices have not held to the most literal reading of Ten States. This is understandable by the fact that Ten States makes an assumption that all systems will be designed with storage in the amount of average daily demand. In Idaho, many systems do not install storage and depend upon pumping to supply all of their needs. The challenge of providing fire flow differs substantially between systems that have storage and those that depend on pumping alone.

New Proposed Facility Standards Rule: The proposed rule only requires pumping redundancy for domestic flows. Fire flows are now treated separately in the proposed rule. Public water system owners are allowed to reduce or eliminate redundancy for fire flow systems, if local fire authorities certify that the water system’s fire fighting capabilities are compatible with the water demand of existing and planned fire fighting equipment and fire fighting practices in the area served by the system. The system may be designed to provide slightly lower total flows during a fire event, taking into account the drop in distribution pressure that will occur when fire flow is provided. The proposed rule provides definitions for the terms that refer to design flows and uses these key terms in a consistent manner throughout sections that deal with redundancy criteria.

As a condition for DEQ approval of fire flow designs that do not incorporate full redundancy, the proposed rule language includes a requirement that existing or potential customers be informed of the system’s firefighting capabilities and the acceptance of these capabilities by the local fire authority. Although there was some

opposition to this provision, this requirement is consistent with similar language negotiated for the proposed rule section dealing with standby power. In both situations, the operative principle is that systems that obtain approval for a reduction in reliability or redundancy should be willing to inform customers of this fact. This notification does not need to be stated in negative terms, because the system design is in compliance with regulation. In this interim time, prior to the proposed rule becoming effective, DEQ will waive the notice requirement so long as the system complies with Section 501.17(b)(i), as quoted in the Attachment to this memo. Once the proposed rule becomes effective, the notice requirement must be met as part of the plan review.

Summary: The framework provided in the proposed rule is consistent with past practices in Idaho and allows for system designs that provide a reasonable level of redundancy. The proposed rule establishes a standard for redundancy that is consistent with Ten States and then provides for departures from that standard when doing so is acceptable to the local fire authority and does not compromise the ability of the water system to reliably meet domestic flows. Standardizing around this approach will help to improve consistency in the way these requirements are implemented around the state.

BNB:jt

Attachment

Summary of Proposed Facility Standards Rule Language Dealing with Pumping Redundancy and Fire Flows

1. The terms used to describe design flows in the rule are average day demand, peak hour demand, maximum day demand, and fire flow capacity. These terms may be assigned slightly different meanings in various engineering references. Because these terms are of key importance in interpreting the rule requirements, they are defined as follows.

Average Day Demand. The volume of water used by a system on an average day based on a one (1) year period.

Peak Hour Demand. The highest hourly flow, excluding fire flow, a water system or distribution system pressure zone is likely to experience in the design year.

Maximum Day Demand. The average rate of consumption for the twenty-four (24) hour period in which total consumption is the largest for the design year.

Fire Flow Capacity. The water system capacity, in addition to maximum day demand, that is available for fire fighting purposes within the water system or distribution system pressure zone. Adequacy of the water system fire flow capacity is determined by the local fire authority.

2. The above terms are then used throughout those sections of the rule that deal with redundancy requirements. The pertinent sections are shown below. Highlighting is used to emphasize the key terms. These excerpts may be viewed in context by accessing a copy of the proposed rule through DEQ's website at http://www.deq.idaho.gov/rules/drinking_water/58_0108_0602_proposed.cfm or by calling Tom John at 373-0191.

513. FACILITY AND DESIGN STANDARDS - NUMBER OF GROUND WATER SOURCES REQUIRED. New community water systems served by ground water and constructed after July 1, 1985, or existing community water systems served by ground water that are substantially modified after July, 2002, shall have a minimum of two (2) sources if they are intended to serve more than twenty-five (25) homes or equivalent. Under normal operating conditions, with any source out of service, the remaining source or sources shall be capable of providing either the peak hour demand of the system or maximum day demand plus equalization storage. See section 501.17 for general design requirements concerning fire flow capacity. for the purpose of section 513 only, the department shall consider a system to be "substantially modified" when there is a combined increase of twenty-five percent (25%) or more above the system's existing configuration in the following factors:

541.02. Pumping Units. At least two (2) pumping units shall be provided for raw water and surface source pumps. Pumps using seals containing mercury shall not be used in public drinking water system facilities. With any pump out of service, the remaining pump or pumps shall be capable of providing the peak hour demand or maximum day demand plus equalization storage. See Section 501.17 for general design requirements concerning fire flow capacity. The pumping units shall meet the following requirements: [Remaining language from this subsection is not listed because it does not deal with redundancy]

541.04. c. Each booster pumping station shall contain not less than two (2) pumps with capacities such that peak hour demand, or maximum day demand plus equalization storage, can be satisfied with the largest pump out of service. See Section 501.17 for general design requirements concerning fire flow capacity.

Page 2—Pumping Redundancy and Fire Flows

544.01. **Sizing.** Storage facilities shall have sufficient capacity, as determined from engineering studies that consider peak flows, fire flow capacity, and analysis of the need for various components of finished storage as defined under the term "Components of Finished Water Storage" in Section 003. The requirement for storage may be reduced when the source and treatment facilities have sufficient capacity with standby power to supply peak demand of the system.

3. Finally, a new provision in General Design Considerations (Section 501) to address the requirements and exceptions that apply to fire flow capacity.

501.17. Redundant Fire Flow Capacity.

a. Public water systems that provide fire flow shall be designed to provide maximum day demand plus fire flow instead of peak hour demand plus fire flow. This allowance is made because distribution pressures can be expected to fall during a fire event and overall demand would be less than peak hour. Pumping systems supporting fire flow capacity must be designed so that fire flow may be provided with the largest pump out of service.

b. The requirement for redundant pumping capacity specified in 501.17.a. may be reduced to the extent that storage is provided in sufficient quantity to meet some or all of fire flow demands. Where storage is not provided, the requirement for fire flow pumping redundancy may be reduced or eliminated if the following conditions are met:

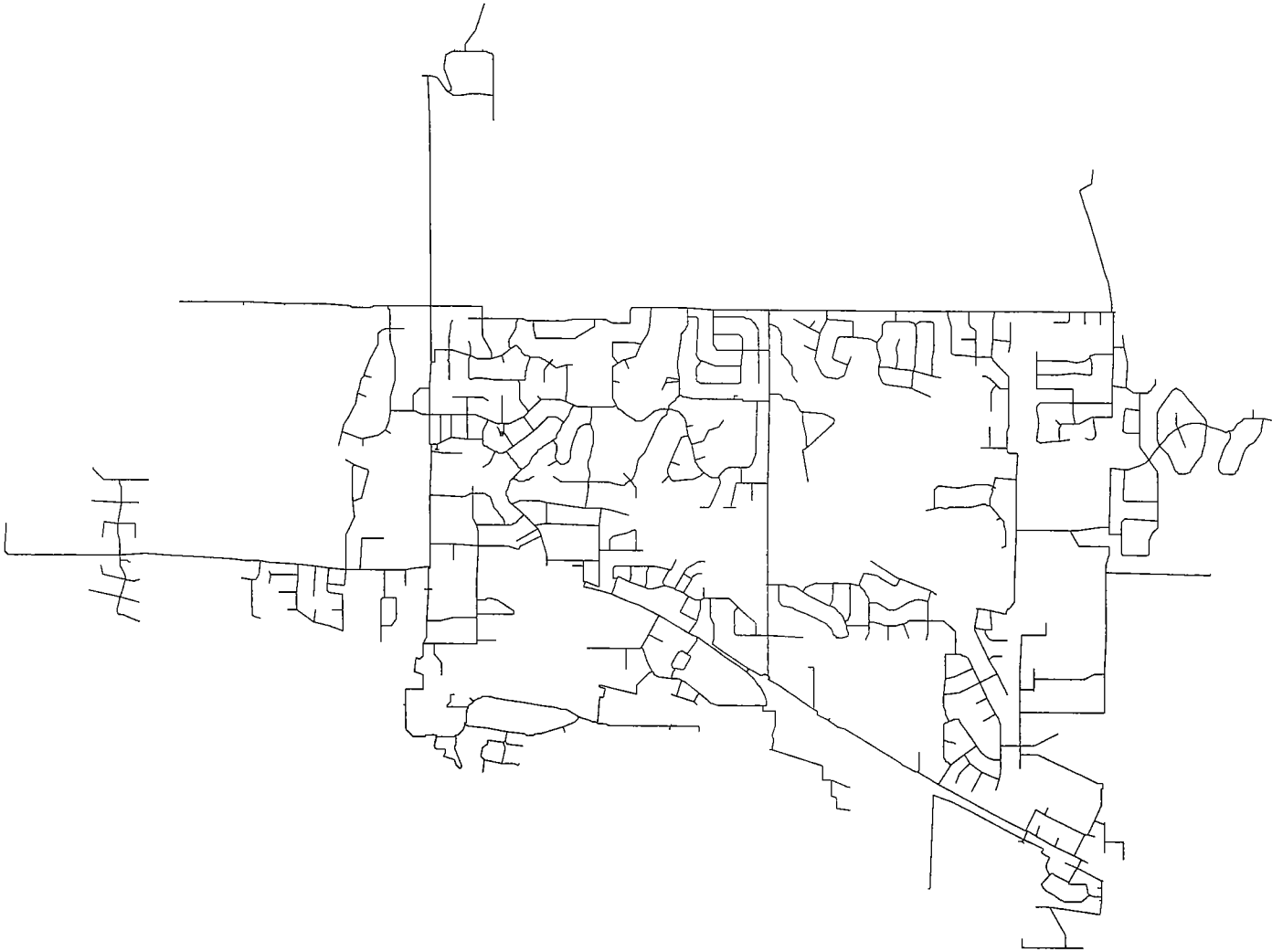
i. The local fire authority states in writing that the fire flow capacity of the system is acceptable and is compatible with the water demand of existing and planned fire fighting equipment and fire fighting practices in the area served by the system.

ii. In a manner appropriate to the system type and situation, positive notification is provided to customers that describes the design of the system's fire fighting capability and explains how it differs from the requirements of 501.17.a. The notice shall indicate that the local fire authority has provided written acceptance of the system's fire flow capacity.

APPENDIX G

Modeling Output

2006 Scenario w/ Approved Developments



Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-1	false	4.28	0.00	N/A	N/A	N/A	N/A	N/A
J-2	false	9.81	0.00	N/A	N/A	N/A	N/A	N/A
J-3	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-4	true	1.36	1,500.00	1,501.36	79.56	J-416	20.00	3,422.02
J-5	true	2.51	1,500.00	1,502.51	78.68	J-416	20.00	3,327.50
J-6	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-7	false	1.06	0.00	N/A	N/A	N/A	N/A	N/A
J-8	true	94.85	1,500.00	1,594.85	79.50	J-416	20.00	3,280.27
J-9	false	5.50	0.00	N/A	N/A	N/A	N/A	N/A
J-10	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-11	true	0.01	1,500.00	1,500.01	78.61	J-416	20.00	3,259.79
J-12	true	9.76	1,500.00	1,509.76	79.27	J-416	20.00	3,272.41
J-13	true	15.09	1,500.00	1,515.09	78.44	J-416	20.00	3,276.74
J-14	true	4.44	1,500.00	1,504.44	80.23	J-416	20.00	3,270.77
J-15	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-16	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-17	true	6.21	1,500.00	1,506.21	80.27	J-416	20.00	3,246.66
J-18	true	1.78	1,500.00	1,501.78	80.15	J-416	20.00	3,244.73
J-19	false	8.61	0.00	N/A	N/A	N/A	N/A	N/A
J-20	true	5.56	1,500.00	1,505.56	77.29	J-416	20.00	3,238.35
J-21	true	0.00	1,500.00	1,500.00	78.18	J-416	20.00	3,223.87
J-22	true	7.24	1,500.00	1,507.24	78.97	J-416	20.00	3,227.88
J-23	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-24	true	5.46	1,500.00	1,505.46	79.53	J-416	20.00	3,221.46
J-25	true	0.00	1,500.00	1,500.00	77.65	J-416	20.00	3,224.73
J-26	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-27	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-28	true	14.20	1,500.00	1,514.20	78.04	J-416	20.00	3,228.95
J-29	true	12.43	1,500.00	1,512.43	79.94	J-416	20.00	3,237.77
J-30	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-31	false	4.17	0.00	N/A	N/A	N/A	N/A	N/A
J-32	true	11.54	1,500.00	1,511.54	67.30	J-416	20.01	3,234.88
J-33	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-34	true	3.55	1,500.00	1,503.55	59.49	J-416	20.00	3,035.33
J-35	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-36	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-37	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-38	true	3.55	1,500.00	1,503.55	60.77	J-416	20.00	3,242.15
J-39	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-40	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-41	false	3.56	0.00	N/A	N/A	N/A	N/A	N/A
J-42	true	0.00	1,500.00	1,500.00	67.01	J-416	20.00	3,203.78
J-43	true	9.05	1,500.00	1,509.05	70.53	J-416	20.00	3,173.73
J-44	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-45	true	2.66	1,500.00	1,502.66	63.68	J-416	20.00	3,242.36
J-46	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-47	true	4.44	1,500.00	1,504.44	49.22	J-416	20.00	2,249.98
J-48	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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01/17/07 11:49:10 AM Bentley Systems, Inc. Haestad Methods Solution Center Watertown, CT 06795 USA +1-203-755-1666

Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-49	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-50	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-51	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-52	true	8.88	1,500.00	1,508.88	24.01	J-416	44.70	1,569.38
J-53	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-54	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-55	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-56	true	6.21	1,500.00	1,506.21	58.65	J-416	20.00	3,205.46
J-57	true	19.53	1,500.00	1,519.53	56.99	J-416	20.00	3,177.84
J-58	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-59	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-60	true	2.57	1,500.00	1,502.57	44.87	J-416	33.46	2,274.69
J-61	true	9.76	1,500.00	1,509.76	59.79	J-416	20.00	3,170.30
J-62	false	9.79	0.00	N/A	N/A	N/A	N/A	N/A
J-63	true	9.79	1,500.00	1,509.79	63.37	J-416	20.01	3,239.27
J-64	false	5.34	0.00	N/A	N/A	N/A	N/A	N/A
J-65	true	12.43	1,500.00	1,512.43	58.73	J-416	21.94	2,950.18
J-66	true	14.20	1,500.00	1,514.20	47.73	J-416	20.00	2,291.70
J-67	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-68	true	26.63	1,500.00	1,526.63	59.28	J-416	20.00	3,156.04
J-69	true	21.30	1,500.00	1,521.30	66.13	J-416	20.00	3,177.60
J-70	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-71	true	17.75	1,500.00	1,517.75	43.64	J-72	20.00	2,049.87
J-72	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-73	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-74	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-75	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-76	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-77	true	3.55	1,500.00	1,503.55	51.77	J-416	20.00	2,895.44
J-78	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-79	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-80	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-81	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-83	true	10.65	1,500.00	1,510.65	50.60	J-416	24.32	2,857.33
J-84	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-85	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-86	true	11.54	1,500.00	1,511.54	48.49	J-587	21.69	2,693.99
J-87	false	7.98	0.00	N/A	N/A	N/A	N/A	N/A
J-88	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-89	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-90	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-91	true	7.10	1,500.00	1,507.10	48.42	J-587	22.44	2,540.81
J-92	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-93	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-94	true	3.56	1,500.00	1,503.56	36.15	J-917	20.00	1,845.24
J-95	false	13.31	0.00	N/A	N/A	N/A	N/A	N/A
J-96	false	3.38	0.00	N/A	N/A	N/A	N/A	N/A
J-97	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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01/17/07 11:49:10 AM Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

+1-203-755-1666

Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-98	false	2.65	0.00	N/A	N/A	N/A	N/A	N/A
J-99	false	3.56	0.00	N/A	N/A	N/A	N/A	N/A
J-100	true	4.18	1,500.00	1,504.18	31.20	J-101	20.00	1,725.72
J-101	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-102	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-103	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-104	true	0.00	1,500.00	1,500.00	47.46	J-917	21.73	2,350.79
J-105	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-106	false	9.77	0.00	N/A	N/A	N/A	N/A	N/A
J-107	false	10.33	0.00	N/A	N/A	N/A	N/A	N/A
J-108	true	7.10	1,500.00	1,507.10	48.48	J-587	20.86	2,515.44
J-109	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-110	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-111	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-112	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-113	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-114	true	5.33	1,500.00	1,505.33	48.79	J-587	22.18	2,651.63
J-115	true	4.44	1,500.00	1,504.44	70.11	J-416	20.00	3,084.28
J-116	true	5.33	1,500.00	1,505.33	50.93	J-587	20.00	2,834.97
J-117	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-118	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-119	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-120	true	7.10	1,500.00	1,507.10	49.97	J-587	20.00	2,651.50
J-121	true	7.10	1,500.00	1,507.10	48.38	J-587	20.02	2,531.50
J-122	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-123	true	12.43	1,500.00	1,512.43	37.38	J-125	20.66	1,991.73
J-124	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-125	true	14.20	1,500.00	1,514.20	23.27	J-126	21.08	1,564.99
J-126	false	2.67	0.00	N/A	N/A	N/A	N/A	N/A
J-127	true	0.00	1,500.00	1,500.00	59.75	J-416	20.00	3,309.29
J-128	true	1.76	1,500.00	1,501.76	39.32	J-917	20.02	2,050.45
J-131	false	2.68	0.00	N/A	N/A	N/A	N/A	N/A
J-132	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-133	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-134	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-135	false	26.74	0.00	N/A	N/A	N/A	N/A	N/A
J-136	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-137	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-138	false	10.65	1,500.00	N/A	N/A	N/A	N/A	N/A
J-139	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-140	true	0.14	1,500.00	1,500.14	66.26	J-416	31.06	2,617.71
J-141	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-142	true	7.10	1,500.00	1,507.10	71.40	J-416	25.15	2,947.84
J-143	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-144	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-145	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-146	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-147	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-148	true	9.65	1,500.00	1,509.65	48.50	J-587	20.77	2,659.01
J-149	true	26.64	1,500.00	1,526.64	47.09	J-587	25.37	2,501.92
J-150	false	8.89	1,500.00	N/A	N/A	N/A	N/A	N/A
J-151	true	11.54	1,500.00	1,511.54	49.64	J-587	20.00	2,664.94
J-152	true	12.43	1,500.00	1,512.43	48.88	J-587	20.00	2,657.05
J-153	true	4.44	1,500.00	1,504.44	49.17	J-587	20.00	2,656.06
J-154	true	12.43	1,500.00	1,512.43	69.08	J-416	22.16	2,945.00
J-155	true	15.09	1,500.00	1,515.09	68.53	J-416	20.13	2,786.88
J-156	true	0.00	1,500.00	1,500.00	64.58	J-416	31.38	2,541.19
J-157	false	2.76	0.00	N/A	N/A	N/A	N/A	N/A
J-158	true	22.90	1,500.00	1,522.90	62.26	J-416	41.34	2,498.11
J-159	true	18.64	1,500.00	1,518.64	58.17	J-416	20.00	2,275.22
J-160	true	1.03	1,500.00	1,501.03	78.21	J-416	20.00	3,989.57
J-161	true	12.43	1,500.00	1,512.43	53.40	J-416	20.22	2,163.47
J-162	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-163	true	6.44	1,500.00	1,506.44	78.42	J-416	23.73	3,973.52
J-164	true	14.20	1,500.00	1,514.20	76.16	J-416	20.00	3,470.30
J-165	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-166	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-167	true	6.10	1,500.00	1,506.10	76.66	J-416	20.00	3,417.60
J-168	true	1.25	1,500.00	1,501.25	77.54	J-416	20.00	3,519.41
J-169	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-170	false	5.94	0.00	N/A	N/A	N/A	N/A	N/A
J-171	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-172	true	6.21	1,500.00	1,506.21	79.61	J-416	20.00	3,935.33
J-173	false	2.04	0.00	N/A	N/A	N/A	N/A	N/A
J-174	true	1.79	1,500.00	1,501.79	67.84	J-416	31.84	2,713.50
J-175	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-176	false	4.29	0.00	N/A	N/A	N/A	N/A	N/A
J-177	false	14.30	0.00	N/A	N/A	N/A	N/A	N/A
J-178	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-179	false	24.90	0.00	N/A	N/A	N/A	N/A	N/A
J-180	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-181	false	7.09	0.00	N/A	N/A	N/A	N/A	N/A
J-182	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-183	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-184	true	3.55	1,500.00	1,503.55	99.14	J-416	20.00	3,573.82
J-185	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-186	true	7.10	1,500.00	1,507.10	62.07	J-416	44.70	1,501.00
J-187	true	0.00	1,500.00	1,500.00	99.79	J-416	42.47	3,120.66
J-188	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-189	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-190	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-191	true	3.54	1,500.00	1,503.54	95.20	J-416	20.00	4,783.62
J-192	false	2.02	0.00	N/A	N/A	N/A	N/A	N/A
J-193	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-194	true	4.44	1,500.00	1,504.44	93.96	J-416	20.00	4,621.84
J-195	false	22.21	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-196	false	4.45	0.00	N/A	N/A	N/A	N/A	N/A
J-197	true	20.66	1,500.00	1,520.66	86.79	J-416	20.00	4,523.10
J-198	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-199	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-200	false	4.28	0.00	N/A	N/A	N/A	N/A	N/A
J-201	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-202	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-203	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-204	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-205	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-206	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-207	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-208	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-209	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-210	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-211	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-212	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-213	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-214	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-215	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-216	true	7.99	1,500.00	1,507.99	71.98	J-416	20.01	2,993.70
J-217	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-218	true	1.59	1,500.00	1,501.59	77.74	J-416	20.01	3,224.85
J-219	false	22.69	0.00	N/A	N/A	N/A	N/A	N/A
J-220	true	0.00	1,500.00	1,500.00	74.66	J-416	20.00	3,213.61
J-221	true	0.00	1,500.00	1,500.00	71.16	J-416	20.00	3,206.89
J-222	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-223	false	0.44	0.00	N/A	N/A	N/A	N/A	N/A
J-224	true	1.65	1,500.00	1,501.65	70.54	J-416	20.41	3,181.09
J-225	true	4.62	1,500.00	1,504.62	71.03	J-416	20.00	3,191.63
J-226	true	8.88	1,500.00	1,508.88	62.08	J-416	31.64	2,525.58
J-227	true	15.98	1,500.00	1,515.98	63.56	J-416	20.00	2,612.05
J-228	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-229	true	7.10	1,500.00	1,507.10	57.30	J-416	20.00	2,367.91
J-230	true	9.76	1,500.00	1,509.76	56.27	J-416	20.00	2,332.36
J-231	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-232	true	15.11	1,500.00	1,515.11	58.67	J-416	20.00	2,376.70
J-233	true	7.02	1,500.00	1,507.02	58.46	J-416	20.00	2,353.39
J-234	false	11.63	0.00	N/A	N/A	N/A	N/A	N/A
J-235	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-236	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-237	false	0.59	0.00	N/A	N/A	N/A	N/A	N/A
J-238	true	0.83	1,500.00	1,500.83	81.25	J-416	20.00	3,594.61
J-239	false	2.43	0.00	N/A	N/A	N/A	N/A	N/A
J-240	false	23.75	0.00	N/A	N/A	N/A	N/A	N/A
J-241	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-242	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-243	true	6.21	1,500.00	1,506.21	78.92	J-416	20.00	3,460.63

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-244	true	10.65	1,500.00	1,510.65	80.16	J-416	20.00	3,438.30
J-245	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-246	true	8.88	1,500.00	1,508.88	79.96	J-416	20.01	3,449.00
J-247	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-248	true	7.99	1,500.00	1,507.99	78.88	J-416	20.00	3,427.89
J-249	true	5.33	1,500.00	1,505.33	77.69	J-416	20.06	3,446.20
J-250	false	2.93	0.00	N/A	N/A	N/A	N/A	N/A
J-251	true	7.10	1,500.00	1,507.10	77.31	J-416	20.00	3,365.41
J-252	false	1.17	0.00	N/A	N/A	N/A	N/A	N/A
J-253	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-254	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-255	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-256	false	0.23	0.00	N/A	N/A	N/A	N/A	N/A
J-257	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-258	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-259	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-260	true	2.66	1,500.00	1,502.66	41.58	J-587	20.43	2,260.23
J-261	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-262	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-263	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-264	true	8.88	1,500.00	1,508.88	40.52	J-587	20.43	2,183.40
J-265	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-266	true	15.09	1,500.00	1,515.09	38.85	J-267	20.00	2,094.21
J-267	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-268	true	13.31	1,500.00	1,513.31	43.96	J-587	20.00	2,324.69
J-269	true	7.99	1,500.00	1,507.99	43.66	J-587	20.00	2,315.96
J-270	true	10.65	1,500.00	1,510.65	43.26	J-587	20.02	2,213.29
J-271	true	2.25	1,500.00	1,502.25	41.27	J-587	20.00	2,142.19
J-272	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-273	true	7.99	1,500.00	1,507.99	39.94	J-587	20.00	2,146.88
J-274	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-275	true	9.76	1,500.00	1,509.76	40.98	J-587	20.00	2,212.58
J-276	true	13.31	1,500.00	1,513.31	39.01	J-587	20.01	2,118.08
J-277	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-278	true	17.75	1,500.00	1,517.75	38.97	J-587	23.06	2,183.04
J-279	false	4.07	0.00	N/A	N/A	N/A	N/A	N/A
J-280	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-281	false	5.70	0.00	N/A	N/A	N/A	N/A	N/A
J-282	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-283	true	3.87	1,500.00	1,503.87	34.95	J-416	20.03	1,577.52
J-284	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-285	true	0.00	1,500.00	1,500.00	37.57	J-416	20.04	1,577.43
J-286	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-287	true	9.76	1,500.00	1,509.76	53.39	J-416	20.00	1,577.89
J-288	true	14.20	1,500.00	1,514.20	52.70	J-416	20.00	1,577.89
J-289	true	6.21	1,500.00	1,506.21	51.59	J-416	20.00	1,577.90
J-290	true	4.44	1,500.00	1,504.44	45.45	J-416	20.05	1,577.34
J-291	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-292	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-293	false	5.02	0.00	N/A	N/A	N/A	N/A	N/A
J-294	false	7.33	0.00	N/A	N/A	N/A	N/A	N/A
J-295	true	2.93	1,500.00	1,502.93	83.02	J-416	20.01	3,874.62
J-296	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-297	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-298	true	0.00	1,500.00	1,500.00	50.08	J-416	20.05	1,582.79
J-299	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-300	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-301	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-302	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-303	true	0.00	1,500.00	1,500.00	51.24	J-416	20.00	1,583.43
J-304	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-305	true	13.31	1,500.00	1,513.31	52.16	J-416	20.00	1,583.42
J-306	true	14.20	1,500.00	1,514.20	53.90	J-416	20.00	1,583.42
J-307	true	9.76	1,500.00	1,509.76	55.86	J-416	20.00	1,583.43
J-308	true	9.76	1,500.00	1,509.76	52.56	J-416	20.00	1,573.16
J-309	true	15.09	1,500.00	1,515.09	58.52	J-416	20.00	1,596.59
J-310	true	23.08	1,500.00	1,523.08	58.06	J-416	20.00	1,605.33
J-311	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-312	false	250.71	0.00	N/A	N/A	N/A	N/A	N/A
J-313	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-314	true	0.00	1,500.00	1,500.00	49.90	J-416	20.05	1,582.71
J-315	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-316	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-317	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-318	true	13.31	1,500.00	1,513.31	69.41	J-416	20.00	3,186.67
J-319	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-320	false	10.66	0.00	N/A	N/A	N/A	N/A	N/A
J-321	true	16.87	1,500.00	1,516.87	65.92	J-416	20.00	1,623.57
J-322	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-323	true	7.99	1,500.00	1,507.99	72.84	J-416	20.01	2,836.88
J-325	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-326	true	0.00	1,500.00	1,500.00	81.56	J-416	20.01	3,459.70
J-327	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-328	true	4.44	1,500.00	1,504.44	52.12	J-416	39.17	2,085.66
J-329	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-330	true	6.11	1,500.00	1,506.11	74.02	J-416	22.13	3,349.61
J-331	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-332	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-333	false	0.94	0.00	N/A	N/A	N/A	N/A	N/A
J-334	true	9.76	1,500.00	1,509.76	77.07	J-416	20.03	3,351.55
J-335	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-336	true	7.10	1,500.00	1,507.10	77.50	J-416	20.02	3,350.17
J-337	true	7.10	1,500.00	1,507.10	77.82	J-416	20.00	3,321.35
J-338	true	5.33	1,500.00	1,505.33	77.54	J-416	20.00	3,342.70
J-339	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-340	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-341	true	6.21	1,500.00	1,506.21	76.60	J-416	20.00	3,183.37
J-342	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-343	true	6.21	1,500.00	1,506.21	76.16	J-416	20.00	3,086.69
J-344	true	8.88	1,500.00	1,508.88	73.10	J-416	20.00	2,915.62
J-345	false	11.11	0.00	N/A	N/A	N/A	N/A	N/A
J-346	true	5.86	1,500.00	1,505.86	52.51	J-416	20.05	1,577.32
J-347	true	4.44	1,500.00	1,504.44	48.55	J-416	20.05	1,577.33
J-348	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-349	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-350	true	7.10	1,500.00	1,507.10	48.50	J-416	20.05	1,577.32
J-351	false	7.99	1,500.00	N/A	N/A	N/A	N/A	N/A
J-352	false	12.43	1,500.00	N/A	N/A	N/A	N/A	N/A
J-353	true	3.55	1,500.00	1,503.55	47.68	J-416	24.73	1,501.00
J-354	true	11.55	1,500.00	1,511.55	40.79	J-416	20.00	1,559.26
J-355	false	6.21	1,500.00	N/A	N/A	N/A	N/A	N/A
J-356	false	5.33	1,500.00	N/A	N/A	N/A	N/A	N/A
J-357	true	10.65	1,500.00	1,510.65	37.78	J-416	20.00	1,547.26
J-358	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-359	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-360	true	0.00	1,500.00	1,500.00	21.08	J-416	25.14	1,512.09
J-361	true	0.00	1,500.00	1,500.00	97.20	J-416	29.62	5,000.00
J-364	false	5.30	1,500.00	N/A	N/A	N/A	N/A	N/A
J-365	false	0.88	1,500.00	N/A	N/A	N/A	N/A	N/A
J-366	false	2.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-367	false	9.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-368	false	6.54	1,500.00	N/A	N/A	N/A	N/A	N/A
J-369	false	1.05	1,500.00	N/A	N/A	N/A	N/A	N/A
J-370	true	0.00	1,500.00	1,500.00	66.07	J-416	30.79	2,949.59
J-371	false	17.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-372	true	8.69	1,500.00	1,508.69	77.65	J-416	20.01	3,280.38
J-373	false	2.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-374	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-375	false	0.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-376	false	13.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-377	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-378	false	11.22	1,500.00	N/A	N/A	N/A	N/A	N/A
J-379	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-380	false	12.03	1,500.00	N/A	N/A	N/A	N/A	N/A
J-381	true	1.48	1,500.00	1,501.48	56.91	J-416	29.93	2,697.75
J-382	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-383	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-384	true	5.14	1,500.00	1,505.14	79.60	J-416	20.01	3,260.30
J-385	true	0.86	1,500.00	1,500.86	74.90	J-416	20.00	3,214.54
J-386	true	16.22	1,500.00	1,516.22	76.74	J-416	20.01	3,253.21
J-387	false	1.58	1,500.00	N/A	N/A	N/A	N/A	N/A
J-388	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-389	true	0.00	1,500.00	1,500.00	77.01	J-416	20.01	3,216.41
J-390	false	0.20	1,500.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-391	true	0.00	1,500.00	1,500.00	51.38	J-416	39.31	2,043.20
J-392	true	7.09	1,500.00	1,507.09	75.85	J-416	20.00	3,216.67
J-393	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-394	true	0.00	1,500.00	1,500.00	76.07	J-416	20.00	3,218.01
J-395	true	0.98	1,500.00	1,500.98	75.59	J-416	20.01	3,220.56
J-396	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-397	false	0.31	1,500.00	N/A	N/A	N/A	N/A	N/A
J-398	true	0.00	1,500.00	1,500.00	78.07	J-416	20.00	3,215.76
J-399	true	16.87	1,500.00	1,516.87	76.33	J-416	20.01	3,212.87
J-400	true	12.26	1,500.00	1,512.26	74.99	J-416	20.00	3,211.98
J-401	true	0.00	1,500.00	1,500.00	74.31	J-416	20.01	3,210.42
J-402	true	2.25	1,500.00	1,502.25	75.99	J-416	20.01	3,213.80
J-403	true	0.00	1,500.00	1,500.00	76.37	J-416	20.01	3,214.20
J-404	true	0.39	1,500.00	1,500.39	72.49	J-416	20.00	3,212.54
J-405	false	3.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-406	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-407	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-408	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-409	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-410	false	9.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-411	true	6.98	1,500.00	1,506.98	52.94	J-416	20.00	3,095.75
J-412	true	11.54	1,500.00	1,511.54	61.14	J-416	20.00	3,123.63
J-413	true	4.44	1,500.00	1,504.44	62.79	J-416	20.00	3,136.88
J-414	true	3.54	1,500.00	1,503.54	30.12	J-416	20.04	1,536.58
J-415	true	7.99	1,500.00	1,507.99	29.04	J-416	20.04	1,533.52
J-416	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-417	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-418	true	9.76	1,500.00	1,509.76	58.88	J-416	20.00	2,280.05
J-419	true	7.10	1,500.00	1,507.10	58.67	J-416	20.00	2,277.39
J-420	false	11.54	1,500.00	N/A	N/A	N/A	N/A	N/A
J-421	true	14.21	1,500.00	1,514.21	49.70	J-416	20.00	2,142.06
J-422	true	0.00	1,500.00	1,500.00	50.67	J-416	20.43	2,174.09
J-423	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-424	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-425	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-426	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-427	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-428	false	0.53	1,500.00	N/A	N/A	N/A	N/A	N/A
J-429	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-430	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-431	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-432	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-433	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-434	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-435	false	1.78	1,500.00	N/A	N/A	N/A	N/A	N/A
J-436	true	3.55	1,500.00	1,503.55	57.66	J-416	20.00	2,424.12
J-437	true	1.78	1,500.00	1,501.78	54.13	J-416	27.53	2,260.92
J-438	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-439	true	1.78	1,500.00	1,501.78	31.60	J-416	37.27	1,668.59
J-440	true	0.74	1,500.00	1,500.74	40.88	J-416	27.06	1,852.38
J-441	false	10.18	0.00	N/A	N/A	N/A	N/A	N/A
J-442	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-443	true	6.89	2,500.00	2,506.89	53.40	J-587	20.00	3,251.02
J-444	true	0.66	1,500.00	1,500.66	77.49	J-416	20.01	3,249.08
J-445	false	0.10	0.00	N/A	N/A	N/A	N/A	N/A
J-446	true	7.96	1,500.00	1,507.96	77.00	J-416	20.01	3,247.00
J-447	true	0.00	1,500.00	1,500.00	76.41	J-416	20.01	3,245.08
J-448	true	0.00	1,500.00	1,500.00	72.66	J-416	20.22	3,146.82
J-449	true	1.14	1,500.00	1,501.14	71.47	J-416	20.65	3,018.35
J-450	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-451	true	0.00	2,500.00	2,500.00	55.35	J-587	20.01	3,242.76
J-452	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-453	true	0.11	1,500.00	1,500.11	76.00	J-416	20.01	3,241.88
J-454	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-455	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-456	true	1.68	1,500.00	1,501.68	75.42	J-416	20.01	3,239.10
J-457	true	0.00	1,500.00	1,500.00	75.33	J-416	20.01	3,236.50
J-458	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-459	true	0.22	1,500.00	1,500.22	72.28	J-416	21.17	3,182.72
J-460	true	0.01	2,500.00	2,500.01	46.28	J-587	20.00	3,194.32
J-461	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-462	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-463	true	0.00	1,500.00	1,500.00	65.23	J-416	31.14	2,622.80
J-464	true	0.50	1,500.00	1,500.50	66.87	J-416	21.51	2,728.81
J-465	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-466	true	0.00	1,500.00	1,500.00	69.04	J-416	20.00	2,887.07
J-467	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-468	true	0.03	1,500.00	1,500.03	61.82	J-416	32.41	2,455.34
J-469	true	0.06	2,500.00	2,500.06	29.72	J-470	20.01	2,702.44
J-470	true	0.01	1,500.00	1,500.01	63.30	J-416	28.29	2,531.48
J-471	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-472	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-473	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-474	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-475	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-476	true	0.02	1,500.00	1,500.02	67.88	J-416	29.71	2,711.49
J-477	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-478	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-479	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-480	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-481	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-482	true	0.00	1,500.00	1,500.00	76.63	J-416	20.00	3,233.76
J-483	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-484	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-485	true	0.00	1,500.00	1,500.00	74.82	J-416	20.00	3,233.90
J-486	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-487	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-488	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-489	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-490	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-491	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-492	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-493	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-494	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-495	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-496	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-497	false	33.75	0.00	N/A	N/A	N/A	N/A	N/A
J-498	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-499	true	0.00	1,500.00	1,500.00	50.89	J-416	20.05	1,577.33
J-500	true	8.88	1,500.00	1,508.88	52.23	J-416	20.05	1,577.32
J-501	true	10.54	1,500.00	1,510.54	53.09	J-416	20.05	1,577.32
J-502	true	14.22	1,500.00	1,514.22	50.93	J-416	20.05	1,577.32
J-503	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-504	true	0.00	1,500.00	1,500.00	67.97	J-416	20.00	3,195.13
J-505	false	0.01	0.00	N/A	N/A	N/A	N/A	N/A
J-506	true	0.00	1,500.00	1,500.00	69.40	J-416	20.00	3,186.65
J-507	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A
J-508	true	10.65	1,500.00	1,510.65	64.09	J-416	20.00	3,171.91
J-509	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-510	true	7.10	1,500.00	1,507.10	54.72	J-416	31.40	2,554.02
J-511	true	11.54	1,500.00	1,511.54	63.78	J-416	20.01	3,170.08
J-512	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-513	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-514	true	5.33	1,500.00	1,505.33	61.01	J-416	20.01	3,162.79
J-515	true	7.10	1,500.00	1,507.10	65.18	J-416	20.00	3,153.22
J-516	false	3.54	0.00	N/A	N/A	N/A	N/A	N/A
J-517	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-518	true	2.66	1,500.00	1,502.66	60.05	J-416	20.00	3,162.03
J-519	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-520	true	5.33	1,500.00	1,505.33	59.77	J-416	20.00	3,160.93
J-521	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-522	true	6.21	1,500.00	1,506.21	71.32	J-416	20.01	2,893.69
J-523	true	2.05	1,500.00	1,502.05	62.15	J-416	21.93	2,812.71
J-524	false	15.16	0.00	N/A	N/A	N/A	N/A	N/A
J-525	true	2.66	1,500.00	1,502.66	57.85	J-416	20.00	2,283.78
J-527	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-528	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-529	false	11.53	0.00	N/A	N/A	N/A	N/A	N/A
J-530	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-531	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-532	true	7.10	1,500.00	1,507.10	66.26	J-416	20.22	2,972.06
J-533	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-534	true	7.10	1,500.00	1,507.10	64.02	J-416	20.22	2,788.54
J-535	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-536	true	4.44	1,500.00	1,504.44	65.80	J-416	20.65	2,895.62
J-537	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-538	true	2.66	1,500.00	1,502.66	67.20	J-416	20.00	3,008.10
J-539	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-540	true	5.33	1,500.00	1,505.33	69.33	J-416	20.00	3,191.50
J-541	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-542	true	12.43	1,500.00	1,512.43	71.62	J-416	20.01	3,191.99
J-543	true	5.74	1,500.00	1,505.74	78.74	J-416	20.01	3,288.06
J-544	true	8.49	1,500.00	1,508.49	78.49	J-416	20.00	3,288.15
J-546	true	7.10	1,500.00	1,507.10	75.47	J-416	20.00	3,288.29
J-547	true	2.79	1,500.00	1,502.79	75.52	J-416	20.01	3,214.57
J-548	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-549	true	7.34	1,500.00	1,507.34	73.00	J-416	20.00	3,211.85
J-550	true	0.00	1,500.00	1,500.00	72.80	J-416	20.00	3,211.35
J-551	true	0.00	1,500.00	1,500.00	73.00	J-416	20.00	3,210.63
J-552	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-553	true	22.19	1,500.00	1,522.19	73.63	J-416	20.00	3,211.79
J-554	true	17.75	1,500.00	1,517.75	73.45	J-416	20.00	3,211.44
J-555	true	9.76	1,500.00	1,509.76	72.20	J-416	20.00	3,211.14
J-556	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-557	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-558	false	6.28	0.00	N/A	N/A	N/A	N/A	N/A
J-559	true	14.20	1,500.00	1,514.20	72.27	J-416	20.00	3,209.02
J-560	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-561	true	7.10	1,500.00	1,507.10	74.30	J-416	20.00	3,208.71
J-562	true	0.00	1,500.00	1,500.00	74.48	J-416	20.00	3,207.66
J-563	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-564	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-565	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-566	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-567	true	3.09	1,500.00	1,503.09	76.00	J-416	20.01	3,210.06
J-568	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-569	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-570	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-571	true	20.42	1,500.00	1,520.42	49.68	J-416	20.05	1,582.72
J-572	true	11.54	1,500.00	1,511.54	54.71	J-416	20.00	1,583.45
J-573	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-574	true	8.88	1,500.00	1,508.88	55.23	J-416	20.00	1,583.45
J-575	false	7.11	0.00	N/A	N/A	N/A	N/A	N/A
J-576	true	11.54	1,500.00	1,511.54	51.49	J-416	20.00	1,583.45
J-577	true	15.09	1,500.00	1,515.09	54.83	J-416	20.00	1,583.45
J-578	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A
J-579	true	13.31	1,500.00	1,513.31	54.32	J-416	20.05	1,582.70
J-580	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-581	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-582	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-583	true	3.55	1,500.00	1,503.55	54.62	J-416	20.05	1,582.71
J-584	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-585	true	0.00	1,500.00	1,500.00	47.89	J-416	20.04	1,582.84
J-586	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-587	true	7.10	1,500.00	1,507.10	37.61	J-278	25.98	2,219.30
J-588	true	0.00	1,500.00	1,500.00	74.45	J-416	20.01	3,535.16
J-589	false	0.24	0.00	N/A	N/A	N/A	N/A	N/A
J-590	true	0.00	1,500.00	1,500.00	67.25	J-416	30.92	2,942.93
J-591	false	0.33	0.00	N/A	N/A	N/A	N/A	N/A
J-592	true	0.50	1,500.00	1,500.50	64.19	J-416	33.58	2,788.76
J-593	false	70.70	0.00	N/A	N/A	N/A	N/A	N/A
J-594	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-595	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-596	true	0.00	1,500.00	1,500.00	76.22	J-416	20.00	3,508.34
J-597	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-598	true	0.00	1,500.00	1,500.00	76.31	J-416	20.01	3,495.86
J-599	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-600	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-601	false	5.15	0.00	N/A	N/A	N/A	N/A	N/A
J-602	true	8.98	1,500.00	1,508.98	65.87	J-416	30.17	2,935.18
J-603	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-604	true	0.00	1,500.00	1,500.00	59.00	J-416	33.37	2,486.91
J-605	true	2.61	1,500.00	1,502.61	75.85	J-416	20.00	3,468.96
J-606	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-607	true	1.84	1,500.00	1,501.84	78.19	J-416	20.00	3,399.93
J-608	true	0.00	1,500.00	1,500.00	73.28	J-416	20.01	3,399.66
J-609	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-610	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-611	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-612	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-613	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-614	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-615	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-616	false	9.83	0.00	N/A	N/A	N/A	N/A	N/A
J-617	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-618	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-619	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-620	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-621	true	0.10	1,500.00	1,500.10	66.38	J-416	20.00	2,900.00
J-622	true	0.00	1,500.00	1,500.00	65.10	J-416	20.00	2,813.17
J-623	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-624	true	0.00	1,500.00	1,500.00	65.27	J-416	22.14	2,848.74
J-628	false	19.65	0.00	N/A	N/A	N/A	N/A	N/A
J-636	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-637	true	12.43	1,500.00	1,512.43	77.07	J-416	20.02	3,572.54
J-638	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-639	true	23.97	1,500.00	1,523.97	65.84	J-416	44.70	2,557.26
J-640	false	15.99	0.00	N/A	N/A	N/A	N/A	N/A
J-650	false	20.42	0.00	N/A	N/A	N/A	N/A	N/A
J-651	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-653	false	15.09	0.00	N/A	N/A	N/A	N/A	N/A
J-654	false	19.53	0.00	N/A	N/A	N/A	N/A	N/A
J-655	false	16.87	0.00	N/A	N/A	N/A	N/A	N/A
J-656	false	21.61	0.00	N/A	N/A	N/A	N/A	N/A
J-657	false	15.09	0.00	N/A	N/A	N/A	N/A	N/A
J-658	false	0.27	0.00	N/A	N/A	N/A	N/A	N/A
J-659	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-660	false	0.57	0.00	N/A	N/A	N/A	N/A	N/A
J-661	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-750	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-751	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-752	false	18.99	1,500.00	N/A	N/A	N/A	N/A	N/A
J-813	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-814	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-822	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-823	true	0.00	1,500.00	1,500.00	29.25	J-138	28.35	1,501.00
J-824	true	0.00	1,500.00	1,500.00	25.52	J-150	25.90	1,501.00
J-825	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-826	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-827	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-828	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-829	true	0.00	2,500.00	2,500.00	62.95	J-416	20.00	3,531.42
J-830	true	0.00	2,500.00	2,500.00	62.65	J-416	20.00	3,531.13
J-831	false	109.76	0.00	N/A	N/A	N/A	N/A	N/A
J-832	true	0.00	2,500.00	2,500.00	62.75	J-416	20.00	3,531.02
J-833	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-834	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-835	true	0.00	2,500.00	2,500.00	62.98	J-416	20.00	3,530.87
J-836	true	0.00	2,500.00	2,500.00	63.08	J-416	20.00	3,530.83
J-837	true	0.00	2,500.00	2,500.00	63.55	J-416	20.00	3,530.63
J-838	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-840	true	0.00	2,500.00	2,500.00	63.46	J-416	20.00	3,531.58
J-842	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-844	false	0.62	1,500.00	N/A	N/A	N/A	N/A	N/A
J-845	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-846	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-847	false	1.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-848	false	1.25	1,500.00	N/A	N/A	N/A	N/A	N/A
J-849	false	1.25	1,500.00	N/A	N/A	N/A	N/A	N/A
J-851	true	0.00	1,500.00	1,500.00	73.03	J-416	40.47	1,501.00
J-852	true	0.00	1,500.00	1,500.00	72.54	J-416	40.47	1,501.00
J-853	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-901	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-906	false	3.89	1,500.00	N/A	N/A	N/A	N/A	N/A
J-917	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-981	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-982	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	2,558.30	Zone	Demand	4.28	COMMERCIAL	4.28	2,772.65	92.74
J-2	2,558.00	Zone	Demand	9.81	COMMERCIAL	9.81	2,772.51	92.81
J-3	2,556.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.51	93.46
J-4	2,557.50	Zone	Demand	1.36	COMMERCIAL	1.36	2,772.38	92.97
J-5	2,559.00	Zone	Demand	2.51	COMMERCIAL	2.51	2,772.38	92.32
J-6	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.31	92.72
J-7	2,557.00	Zone	Demand	1.06	COMMERCIAL	1.06	2,772.31	93.15
J-8	2,557.00	Zone	Demand	94.85	IRRIGATION	94.85	2,772.24	93.12
J-9	2,555.00	Zone	Demand	5.50	COMMERCIAL	5.50	2,772.15	93.95
J-10	2,550.50	Zone	Demand	0.00	Composite	0.00	2,772.06	95.86
J-11	2,554.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,772.24	94.20
J-12	2,556.70	Zone	Demand	9.76	RESIDENTIAL	9.76	2,772.29	93.28
J-13	2,557.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,772.36	93.18
J-14	2,555.70	Zone	Demand	4.44	Composite	4.44	2,772.56	93.82
J-15	2,558.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,772.36	92.74
J-16	2,552.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,772.30	95.31
J-17	2,555.30	Zone	Demand	6.21	RESIDENTIAL	6.21	2,772.30	93.89
J-18	2,554.70	Zone	Demand	1.78	RESIDENTIAL	1.78	2,772.26	94.13
J-19	2,552.00	Zone	Demand	8.61	Composite	8.61	2,772.16	95.25
J-20	2,553.00	Zone	Demand	5.56	COMMERCIAL	5.56	2,772.16	94.82
J-21	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.05	94.12
J-22	2,553.50	Zone	Demand	7.24	Composite	7.24	2,772.10	94.58
J-23	2,557.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,772.27	93.14
J-24	2,553.00	Zone	Demand	5.46	Composite	5.46	2,772.22	94.85
J-25	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.12	93.51
J-26	2,554.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,772.28	94.44
J-27	2,555.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,772.34	93.82
J-28	2,558.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,772.33	92.73
J-29	2,556.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,772.35	93.60
J-30	2,579.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,772.62	83.55
J-31	2,581.50	Zone	Demand	4.17	RESIDENTIAL	4.17	2,772.62	82.69
J-32	2,585.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,772.70	80.99
J-33	2,595.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,772.82	76.93
J-34	2,596.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,772.88	76.31
J-35	2,597.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,772.87	75.87
J-36	2,604.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.02	72.91
J-37	2,601.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,773.16	74.49
J-38	2,603.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.35	73.70
J-39	2,591.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.50	78.96
J-40	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.35	78.46
J-41	2,591.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,773.41	78.92
J-42	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.28	79.29
J-43	2,581.00	Zone	Demand	9.05	COMMERCIAL	9.05	2,773.25	83.18
J-44	2,590.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.30	79.30
J-45	2,594.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.28	77.56
J-46	2,602.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.15	74.05
J-47	2,596.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.15	76.64
J-48	2,593.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.15	77.72
J-49	2,601.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,773.14	74.48
J-50	2,603.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,773.02	73.56
J-51	2,606.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,772.94	72.23
J-52	2,609.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,772.94	70.93

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-53	2,605.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.92	72.65
J-54	2,604.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.91	73.08
J-55	2,607.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,772.94	71.58
J-56	2,608.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,772.95	71.15
J-57	2,610.50	Zone	Demand	19.53	RESIDENTIAL	19.53	2,773.06	70.33
J-58	2,606.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,772.95	72.23
J-59	2,618.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.06	66.87
J-60	2,615.00	Zone	Demand	2.57	Composite	2.57	2,773.05	68.38
J-61	2,604.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,772.94	72.88
J-62	2,600.00	Zone	Demand	9.79	RESIDENTIAL	9.79	2,772.88	74.80
J-63	2,597.50	Zone	Demand	9.79	RESIDENTIAL	9.79	2,772.91	75.89
J-64	2,595.50	Zone	Demand	5.34	RESIDENTIAL	5.34	2,772.90	76.75
J-65	2,595.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,772.78	76.70
J-66	2,604.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,772.78	73.02
J-67	2,604.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,772.78	72.80
J-68	2,603.00	Zone	Demand	26.63	RESIDENTIAL	26.63	2,772.80	73.46
J-69	2,585.00	Zone	Demand	21.30	RESIDENTIAL	21.30	2,772.52	81.13
J-70	2,587.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,772.52	80.27
J-71	2,600.00	Zone	Demand	17.75	RESIDENTIAL	17.75	2,772.75	74.74
J-72	2,602.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,772.75	73.66
J-73	2,589.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,772.72	79.27
J-74	2,617.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.72	67.80
J-75	2,606.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,773.16	72.11
J-76	2,611.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,772.94	70.06
J-77	2,617.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.23	67.59
J-78	2,618.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.13	67.12
J-79	2,616.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,773.31	67.85
J-80	2,613.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.33	69.15
J-81	2,607.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.22	71.70
J-83	2,619.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,773.40	66.58
J-84	2,624.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,773.62	64.52
J-85	2,626.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,775.37	64.63
J-86	2,623.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,775.40	65.72
J-87	2,618.00	Zone	Demand	7.98	RESIDENTIAL	7.98	2,774.77	67.83
J-88	2,618.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,774.75	67.82
J-89	2,618.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,774.75	67.82
J-90	2,618.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,774.74	67.81
J-91	2,616.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,774.66	68.43
J-92	2,619.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.64	66.91
J-93	2,619.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.70	66.71
J-94	2,618.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,773.70	67.36
J-95	2,619.50	Zone	Demand	13.31	RESIDENTIAL	13.31	2,773.69	66.71
J-96	2,621.50	Zone	Demand	3.38	Composite	3.38	2,776.23	66.94
J-97	2,615.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.70	68.66
J-98	2,612.50	Zone	Demand	2.65	RESIDENTIAL	2.65	2,773.70	69.75
J-99	2,611.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,773.72	70.40
J-100	2,609.50	Zone	Demand	4.18	Composite	4.18	2,773.70	71.04
J-101	2,610.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.70	70.82
J-102	2,615.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.70	68.66
J-103	2,615.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.70	68.66
J-104	2,607.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.75	71.93
J-105	2,603.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.75	73.66

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-106	2,593.50	Zone	Demand	9.77	RESIDENTIAL	9.77	2,773.69	77.96
J-107	2,612.50	Zone	Demand	10.33	Composite	10.33	2,773.78	69.78
J-108	2,612.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.78	69.78
J-109	2,610.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.77	70.86
J-110	2,610.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.77	70.86
J-111	2,610.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.77	70.64
J-112	2,614.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.78	69.13
J-113	2,611.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.78	70.21
J-114	2,617.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.79	67.84
J-115	2,564.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,771.89	89.95
J-116	2,620.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,775.95	67.47
J-117	2,621.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.01	67.06
J-118	2,579.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.01	90.00
J-119	2,623.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.69	66.28
J-120	2,624.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,776.55	65.79
J-121	2,627.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,778.10	65.16
J-122	2,618.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,776.02	68.15
J-123	2,624.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,776.00	65.55
J-124	2,588.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.62	79.88
J-125	2,623.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,775.99	66.19
J-126	2,620.50	Zone	Demand	2.67	RESIDENTIAL	2.67	2,775.99	67.27
J-127	2,605.80	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.94	72.31
J-128	2,619.00	Zone	Demand	1.76	RESIDENTIAL	1.76	2,773.70	66.93
J-131	2,553.00	Zone	Demand	2.68	COMMERCIAL	2.68	2,772.23	94.85
J-132	2,624.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.35	65.70
J-133	2,564.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,771.89	89.94
J-134	2,558.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,771.88	92.54
J-135	2,557.50	Zone	Demand	26.74	COMMERCIAL	26.74	2,771.87	92.75
J-136	2,626.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.45	64.88
J-137	2,553.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,772.25	94.64
J-138	2,638.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,778.09	60.61
J-139	2,554.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,772.25	94.21
J-140	2,554.50	Zone	Demand	0.14	COMMERCIAL	0.14	2,772.09	94.14
J-141	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.09	94.36
J-142	2,554.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,772.28	94.44
J-143	2,610.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,772.95	70.50
J-144	2,611.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,772.92	70.06
J-145	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.47	89.33
J-146	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.97	90.41
J-147	2,615.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,773.06	68.39
J-148	2,623.00	Zone	Demand	9.65	RESIDENTIAL	9.65	2,776.27	66.31
J-149	2,621.00	Zone	Demand	26.64	RESIDENTIAL	26.64	2,775.70	66.93
J-150	2,620.00	Zone	Demand	8.89	RESIDENTIAL	8.89	2,776.55	67.73
J-151	2,624.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,776.43	65.73
J-152	2,625.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,776.43	65.52
J-153	2,626.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,776.45	65.09
J-154	2,561.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,772.64	91.35
J-155	2,556.50	Zone	Demand	15.09	RESIDENTIAL	15.09	2,772.64	93.51
J-156	2,556.20	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.64	93.64
J-157	2,559.50	Zone	Demand	2.76	COMMERCIAL	2.76	2,772.86	92.31
J-158	2,562.00	Zone	Demand	22.90	Composite	22.90	2,772.85	91.22
J-159	2,561.00	Zone	Demand	18.64	RESIDENTIAL	18.64	2,772.96	91.71

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis
Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-160	2,560.00	Zone	Demand	1.03	Composite	1.03	2,773.03	92.17
J-161	2,565.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,772.96	89.97
J-162	2,559.50	Zone	Demand	0.89	RESIDENTIAL	0.89	2,773.15	92.43
J-163	2,558.50	Zone	Demand	6.44	Composite	6.44	2,773.13	92.86
J-164	2,556.50	Zone	Demand	14.20	RESIDENTIAL	14.20	2,773.19	93.75
J-165	2,557.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.19	93.32
J-166	2,555.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.31	94.45
J-167	2,554.00	Zone	Demand	6.10	RESIDENTIAL	6.10	2,773.31	94.88
J-168	2,553.50	Zone	Demand	1.25	Composite	1.25	2,773.37	95.13
J-169	2,553.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.36	95.13
J-170	2,554.50	Zone	Demand	5.94	Composite	5.94	2,773.42	94.72
J-171	2,556.50	Zone	Demand	8.88	Composite	8.88	2,773.42	93.85
J-172	2,555.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,773.49	94.32
J-173	2,556.50	Zone	Demand	2.04	Composite	2.04	2,773.49	93.88
J-174	2,557.00	Zone	Demand	1.79	RESIDENTIAL	1.79	2,773.49	93.67
J-175	2,557.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.49	93.67
J-176	2,559.00	Zone	Demand	4.29	IRRIGATION	4.29	2,773.55	92.83
J-177	2,559.50	Zone	Demand	14.30	Composite	14.30	2,773.31	92.50
J-178	2,557.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,773.30	93.58
J-179	2,559.50	Zone	Demand	24.90	Composite	24.90	2,776.31	93.80
J-180	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.11	96.75
J-181	2,549.00	Zone	Demand	7.09	RESIDENTIAL	7.09	2,777.15	98.71
J-182	2,550.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,777.14	98.27
J-183	2,548.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,777.15	99.14
J-184	2,548.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,777.14	99.14
J-185	2,549.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,777.12	98.70
J-186	2,547.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,777.14	99.57
J-187	2,546.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.14	99.79
J-188	2,551.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,777.10	97.82
J-189	2,553.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,777.10	96.96
J-190	2,553.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,777.10	96.96
J-191	2,552.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,777.10	97.39
J-192	2,552.50	Zone	Demand	2.02	Composite	2.02	2,777.10	97.17
J-193	2,551.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,777.10	97.61
J-194	2,553.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,777.10	96.96
J-195	2,555.00	Zone	Demand	22.21	Composite	22.21	2,777.09	96.09
J-196	2,556.00	Zone	Demand	4.45	RESIDENTIAL	4.45	2,777.10	95.66
J-197	2,551.50	Zone	Demand	20.66	Composite	20.66	2,774.87	96.64
J-198	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.11	96.75
J-199	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.11	98.48
J-200	2,616.50	Zone	Demand	4.28	Composite	4.28	2,773.23	67.81
J-201	2,617.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.23	67.59
J-202	2,601.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.22	74.51
J-203	2,600.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.22	74.94
J-204	2,603.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.22	73.64
J-205	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.22	73.43
J-206	2,603.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.21	73.64
J-207	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.21	73.43
J-208	2,599.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,773.22	75.37
J-209	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.24	84.91
J-210	2,597.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.24	76.25
J-211	2,597.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.24	76.04

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-212	2,591.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.24	78.63
J-213	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.24	78.42
J-214	2,587.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.24	80.58
J-215	2,552.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,772.12	95.23
J-216	2,553.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,772.11	94.80
J-217	2,553.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,772.11	94.58
J-218	2,554.00	Zone	Demand	1.59	COMMERCIAL	1.59	2,772.06	94.35
J-219	2,554.50	Zone	Demand	22.69	IRRIGATION	22.69	2,772.03	94.11
J-220	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.91	92.98
J-221	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	90.38
J-222	2,564.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	89.73
J-223	2,564.50	Zone	Demand	0.44	COMMERCIAL	0.44	2,771.89	89.73
J-224	2,561.50	Zone	Demand	1.65	RESIDENTIAL	1.65	2,771.88	91.02
J-225	2,562.50	Zone	Demand	4.62	COMMERCIAL	4.62	2,771.89	90.59
J-226	2,561.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,771.89	91.24
J-227	2,565.00	Zone	Demand	15.98	RESIDENTIAL	15.98	2,771.88	89.51
J-228	2,566.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,771.80	89.04
J-229	2,568.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,771.78	88.17
J-230	2,569.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,771.78	87.73
J-231	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.77	92.27
J-232	2,565.00	Zone	Demand	15.11	Composite	15.11	2,771.78	89.47
J-233	2,565.00	Zone	Demand	7.02	Composite	7.02	2,771.78	89.46
J-234	2,565.00	Zone	Demand	11.63	COMMERCIAL	11.63	2,795.85	99.88
J-235	2,603.00	Zone	Demand	0.00	Fixed	0.00	2,773.21	73.64
J-236	2,613.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,773.21	69.32
J-237	2,565.50	Zone	Demand	0.59	IRRIGATION	0.59	2,794.70	99.16
J-238	2,568.50	Zone	Demand	0.83	Composite	0.83	2,788.28	95.09
J-239	2,569.00	Zone	Demand	2.43	RESIDENTIAL	2.43	2,788.28	94.87
J-240	2,569.50	Zone	Demand	23.75	IRRIGATION	23.75	2,786.78	94.00
J-241	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.89	88.21
J-242	2,570.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,785.29	93.14
J-243	2,568.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,784.45	93.65
J-244	2,566.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,783.81	94.02
J-245	2,564.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,784.45	95.38
J-246	2,569.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,784.23	93.12
J-247	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.24	88.37
J-248	2,571.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,783.79	92.06
J-249	2,570.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,784.02	92.60
J-250	2,571.00	Zone	Demand	2.93	Composite	2.93	2,783.46	91.92
J-251	2,573.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,782.42	90.61
J-252	2,570.00	Zone	Demand	1.17	IRRIGATION	1.17	2,783.47	92.36
J-253	2,571.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.47	91.71
J-254	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.07	90.67
J-255	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.06	90.67
J-256	2,577.00	Zone	Demand	0.23	COMMERCIAL	0.23	2,782.47	88.90
J-257	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,778.98	65.32
J-258	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.41	61.18
J-259	2,638.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,780.48	61.64
J-260	2,635.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,780.48	62.94
J-261	2,633.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,780.48	63.81
J-262	2,634.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,780.48	63.38
J-263	2,625.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,780.48	67.27

Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-264	2,634.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,780.50	63.38
J-265	2,633.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,780.50	63.81
J-266	2,635.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,780.57	62.98
J-267	2,636.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,780.57	62.55
J-268	2,632.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,780.69	64.33
J-269	2,633.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,781.04	64.05
J-270	2,630.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,781.07	65.36
J-271	2,632.50	Zone	Demand	2.25	Composite	2.25	2,781.08	64.28
J-272	2,638.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,781.08	61.90
J-273	2,634.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,781.09	63.64
J-274	2,634.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,781.09	63.42
J-275	2,635.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,781.10	63.21
J-276	2,635.70	Zone	Demand	13.31	RESIDENTIAL	13.31	2,781.11	62.91
J-277	2,636.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,781.11	62.78
J-278	2,641.00	Zone	Demand	17.75	RESIDENTIAL	17.75	2,781.20	60.66
J-279	2,638.00	Zone	Demand	4.07	Composite	4.07	2,781.33	62.01
J-280	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,781.62	61.71
J-281	2,653.00	Zone	Demand	5.70	Composite	5.70	2,820.58	72.50
J-282	2,644.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,820.77	76.48
J-283	2,640.00	Zone	Demand	3.87	Composite	3.87	2,820.77	78.21
J-284	2,638.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.89	79.13
J-285	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,820.89	79.99
J-286	2,635.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,820.89	80.43
J-287	2,639.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,821.04	78.76
J-288	2,637.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,820.98	79.60
J-289	2,644.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,821.12	76.63
J-290	2,647.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,821.11	75.33
J-291	2,643.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,821.11	77.06
J-292	2,654.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,821.11	72.30
J-293	2,654.00	Zone	Demand	5.02	Composite	5.02	2,821.27	72.37
J-294	2,667.00	Zone	Demand	7.33	IRRIGATION	7.33	2,827.70	69.53
J-295	2,565.50	Zone	Demand	2.93	COMMERCIAL	2.93	2,794.70	99.16
J-296	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,827.85	69.59
J-297	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,827.85	69.59
J-298	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,829.71	71.05
J-299	2,670.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,829.99	69.22
J-300	2,670.00	Zone	Demand	0.89	RESIDENTIAL	0.89	2,829.99	72.28
J-301	2,664.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,831.06	71.59
J-302	2,664.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,829.96	71.40
J-303	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,832.03	70.10
J-304	2,670.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,832.03	71.92
J-305	2,667.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,833.22	73.27
J-306	2,665.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,834.36	74.56
J-307	2,664.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,836.34	71.96
J-308	2,670.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,836.32	77.01
J-309	2,660.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,838.00	76.38
J-310	2,662.50	Zone	Demand	23.08	RESIDENTIAL	23.08	2,839.04	71.07
J-311	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,829.76	78.58
J-312	2,655.00	Zone	Demand	250.71	Composite	250.71	2,836.62	80.33
J-313	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.67	73.30
J-314	2,660.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,829.92	85.14
J-315	2,645.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,841.79	

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-316	2,643.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,770.99	55.37
J-317	2,631.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.55	61.67
J-318	2,577.50	Zone	Demand	13.31	RESIDENTIAL	13.31	2,773.24	84.69
J-319	2,566.00	Zone	Demand	12.43	Composite	12.43	2,772.47	89.33
J-320	2,563.00	Zone	Demand	10.66	RESIDENTIAL	10.66	2,771.96	90.41
J-321	2,647.50	Zone	Demand	16.87	RESIDENTIAL	16.87	2,840.99	83.71
J-322	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,769.77	76.91
J-323	2,572.50	Zone	Demand	7.99	RESIDENTIAL	7.99	2,775.80	87.96
J-325	2,645.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.22	85.11
J-326	2,565.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,784.63	94.81
J-327	2,565.50	Zone	Demand	7.99	RESIDENTIAL	7.99	2,784.47	94.74
J-328	2,565.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,784.47	94.95
J-329	2,565.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,784.24	94.64
J-330	2,565.00	Zone	Demand	6.11	RESIDENTIAL	6.11	2,784.24	94.85
J-331	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,784.02	94.33
J-332	2,568.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,782.01	92.38
J-333	2,569.50	Zone	Demand	0.94	Composite	0.94	2,781.74	91.83
J-334	2,571.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,781.62	90.91
J-335	2,572.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,781.62	90.69
J-336	2,571.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,781.56	91.10
J-337	2,571.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,781.34	91.01
J-338	2,572.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,781.87	90.80
J-339	2,573.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,781.87	90.37
J-340	2,572.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,782.42	91.04
J-341	2,571.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,780.08	90.46
J-342	2,572.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,780.08	90.02
J-343	2,570.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,779.06	90.45
J-344	2,573.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,776.94	88.02
J-345	2,572.00	Zone	Demand	11.11	Composite	11.11	2,776.24	88.37
J-346	2,632.00	Zone	Demand	5.86	Composite	5.86	2,820.93	81.74
J-347	2,630.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.93	82.39
J-348	2,630.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,820.93	82.60
J-349	2,633.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,820.93	81.31
J-350	2,638.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,820.98	79.17
J-351	2,640.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,820.98	78.30
J-352	2,640.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,820.98	78.08
J-353	2,680.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,836.32	67.63
J-354	2,695.00	Zone	Demand	11.55	RESIDENTIAL	11.55	2,836.31	61.14
J-355	2,682.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,836.32	66.55
J-356	2,678.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,836.32	68.28
J-357	2,700.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,836.31	58.98
J-358	2,699.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,827.70	55.68
J-359	2,701.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,827.70	54.82
J-360	2,717.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,827.70	47.89
J-361	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.17	97.20
J-364	2,554.00	Zone	Demand	5.30	COMMERCIAL	5.30	2,772.26	94.43
J-365	2,554.00	Zone	Demand	0.88	COMMERCIAL	0.88	2,772.26	94.43
J-366	2,554.00	Zone	Demand	2.76	COMMERCIAL	2.76	2,772.26	94.43
J-367	2,550.00	Zone	Demand	9.00	COMMERCIAL	9.00	2,771.95	96.03
J-368	2,580.00	Zone	Demand	6.54	IRRIGATION	6.54	2,786.70	89.43
J-369	2,550.50	Zone	Demand	1.05	COMMERCIAL	1.05	2,772.11	95.88
J-370	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.70	90.08

Title: INITIAL RUN

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Fire Flow Analysis Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-371	2,554.00	Zone	Demand	17.34	COMMERCIAL	17.34	2,772.09	94.36
J-372	2,555.50	Zone	Demand	8.69	IRRIGATION	8.69	2,772.06	93.69
J-373	2,556.00	Zone	Demand	2.00	COMMERCIAL	2.00	2,772.05	93.48
J-374	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.05	93.48
J-375	2,550.00	Zone	Demand	0.66	COMMERCIAL	0.66	2,772.05	96.07
J-376	2,549.50	Zone	Demand	13.76	COMMERCIAL	13.76	2,772.05	96.29
J-377	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.05	96.29
J-378	2,550.00	Zone	Demand	11.22	COMMERCIAL	11.22	2,772.05	96.07
J-379	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.03	96.28
J-380	2,589.00	Zone	Demand	12.03	COMMERCIAL	12.03	2,773.22	79.70
J-381	2,593.50	Zone	Demand	1.48	COMMERCIAL	1.48	2,773.22	77.76
J-382	2,547.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.00	97.13
J-383	2,548.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.99	96.69
J-384	2,548.50	Zone	Demand	5.14	COMMERCIAL	5.14	2,771.99	96.69
J-385	2,557.00	Zone	Demand	0.86	COMMERCIAL	0.86	2,771.90	92.98
J-386	2,556.00	Zone	Demand	16.22	COMMERCIAL	16.22	2,771.96	93.44
J-387	2,556.00	Zone	Demand	1.58	Composite	1.58	2,771.96	93.43
J-388	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.90	92.11
J-389	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.90	94.27
J-390	2,553.50	Zone	Demand	0.20	COMMERCIAL	0.20	2,771.90	94.49
J-391	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.90	93.84
J-392	2,554.00	Zone	Demand	7.09	COMMERCIAL	7.09	2,771.90	94.27
J-393	2,552.50	Zone	Demand	0.00	Composite	0.00	2,771.90	94.92
J-394	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.90	92.98
J-395	2,558.00	Zone	Demand	0.98	COMMERCIAL	0.98	2,771.90	92.55
J-396	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.91	91.68
J-397	2,560.00	Zone	Demand	0.31	Composite	0.31	2,771.91	91.68
J-398	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.90	95.14
J-399	2,554.00	Zone	Demand	16.87	RESIDENTIAL	16.87	2,771.89	94.27
J-400	2,556.50	Zone	Demand	12.26	Composite	12.26	2,771.89	93.19
J-401	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	91.89
J-402	2,555.50	Zone	Demand	2.25	COMMERCIAL	2.25	2,771.89	93.62
J-403	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	93.84
J-404	2,562.50	Zone	Demand	0.39	COMMERCIAL	0.39	2,771.89	90.59
J-405	2,567.00	Zone	Demand	3.34	COMMERCIAL	3.34	2,771.89	88.65
J-406	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	94.49
J-407	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	90.38
J-408	2,565.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	89.51
J-409	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.90	92.54
J-410	2,627.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,773.51	63.17
J-411	2,621.00	Zone	Demand	6.98	Composite	6.98	2,773.41	65.94
J-412	2,602.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,773.31	73.90
J-413	2,599.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.28	75.40
J-414	2,716.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,836.31	52.05
J-415	2,718.00	Zone	Demand	7.99	Composite	7.99	2,836.31	51.19
J-416	2,733.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,836.31	44.70
J-417	2,722.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,836.31	49.46
J-418	2,559.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,771.76	91.84
J-419	2,560.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,771.76	91.40
J-420	2,573.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,771.76	85.78
J-421	2,574.50	Zone	Demand	14.21	Composite	14.21	2,771.76	85.34
J-422	2,573.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.76	85.99

Title: INITIAL RUN

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Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-423	2,565.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,771.76	89.24
J-424	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.76	89.02
J-425	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.01	90.43
J-426	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.01	90.43
J-427	2,579.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.60	89.60
J-428	2,579.50	Zone	Demand	0.53	COMMERCIAL	0.53	2,786.62	89.61
J-429	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.64	91.13
J-430	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.64	91.13
J-431	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,786.64	90.92
J-432	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,786.64	90.92
J-433	2,572.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,786.65	92.65
J-434	2,572.50	Zone	Demand	0.00	Composite	0.00	2,786.65	92.65
J-435	2,578.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,786.65	90.06
J-436	2,579.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,786.65	89.84
J-437	2,578.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,786.65	90.06
J-438	2,579.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,786.65	89.62
J-439	2,580.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,786.65	89.19
J-440	2,580.00	Zone	Demand	0.74	Composite	0.74	2,786.65	89.41
J-441	2,554.00	Zone	Demand	10.18	IRRIGATION	10.18	2,772.10	94.36
J-442	2,592.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.35	78.25
J-443	2,556.00	Zone	Demand	6.89	RESIDENTIAL	6.89	2,771.96	93.43
J-444	2,554.00	Zone	Demand	0.66	COMMERCIAL	0.66	2,771.95	94.30
J-445	2,554.00	Zone	Demand	0.10	IRRIGATION	0.10	2,771.95	94.30
J-446	2,555.00	Zone	Demand	7.96	IRRIGATION	7.96	2,771.95	93.86
J-447	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.43
J-448	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.86
J-449	2,554.50	Zone	Demand	1.14	COMMERCIAL	1.14	2,771.94	94.08
J-450	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.43
J-451	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.43
J-452	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.43
J-453	2,556.50	Zone	Demand	0.11	COMMERCIAL	0.11	2,771.94	93.21
J-454	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.93	92.99
J-455	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.93	92.99
J-456	2,558.00	Zone	Demand	1.68	IRRIGATION	1.68	2,771.93	92.56
J-457	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.93	92.34
J-458	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.93	92.56
J-459	2,557.00	Zone	Demand	0.22	COMMERCIAL	0.22	2,771.94	92.99
J-460	2,556.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,771.94	93.21
J-461	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.43
J-462	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.43
J-463	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	92.99
J-464	2,557.00	Zone	Demand	0.50	IRRIGATION	0.50	2,771.94	92.99
J-465	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	93.43
J-466	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	92.78
J-467	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.94	92.35
J-468	2,558.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,771.94	92.56
J-469	2,557.50	Zone	Demand	0.06	COMMERCIAL	0.06	2,771.94	92.78
J-470	2,558.00	Zone	Demand	0.01	COMMERCIAL	0.01	2,771.94	92.56
J-471	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	94.06
J-472	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	94.06
J-473	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	93.62
J-474	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.93	91.91

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-475	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.93	92.56
J-476	2,553.00	Zone	Demand	0.02	COMMERCIAL	0.02	2,771.94	94.73
J-477	2,553.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.72
J-478	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	93.62
J-479	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.50
J-480	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.50
J-481	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	93.64
J-482	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.93
J-483	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.29
J-484	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.29
J-485	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.29
J-486	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.29
J-487	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.93
J-488	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.92	94.93
J-489	2,561.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,771.77	91.19
J-490	2,565.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,771.76	89.24
J-491	2,565.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,771.76	89.24
J-492	2,569.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,771.76	87.72
J-493	2,570.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,771.76	87.29
J-494	2,575.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,771.76	84.91
J-495	2,639.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.91	78.49
J-496	2,628.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.90	83.24
J-497	2,628.50	Zone	Demand	33.75	RESIDENTIAL	33.75	2,820.90	83.24
J-498	2,628.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,820.90	83.46
J-499	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.90	83.46
J-500	2,625.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,820.89	84.54
J-501	2,613.50	Zone	Demand	10.54	RESIDENTIAL	10.54	2,820.89	89.73
J-502	2,612.50	Zone	Demand	14.22	IRRIGATION	14.22	2,820.89	90.16
J-503	2,616.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.89	88.43
J-504	2,587.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.26	80.37
J-505	2,587.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,773.26	80.37
J-506	2,584.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.25	81.88
J-507	2,618.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,773.06	67.09
J-508	2,592.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,773.19	78.39
J-509	2,588.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,773.19	80.12
J-510	2,594.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.19	77.53
J-511	2,594.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,773.17	77.30
J-512	2,595.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.17	77.08
J-513	2,612.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.09	69.69
J-514	2,601.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.18	74.28
J-515	2,593.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.25	77.77
J-516	2,612.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,773.06	69.68
J-517	2,589.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.25	79.72
J-518	2,603.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.18	73.63
J-519	2,604.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.18	73.20
J-520	2,604.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.18	72.98
J-521	2,616.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.06	67.74
J-522	2,575.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,776.61	87.23
J-523	2,578.00	Zone	Demand	2.05	Composite	2.05	2,776.61	85.93
J-524	2,574.00	Zone	Demand	15.16	IRRIGATION	15.16	2,776.37	87.55
J-525	2,559.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,771.77	91.84
J-527	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.76	86.43

Title: INITIAL RUN

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Fire Flow Analysis Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-528	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.26	79.29
J-529	2,546.00	Zone	Demand	11.53	RESIDENTIAL	11.53	2,777.10	99.99
J-530	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.11	97.39
J-531	2,579.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,773.23	84.04
J-532	2,572.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.23	86.84
J-533	2,572.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,773.23	87.06
J-534	2,572.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,773.22	86.84
J-535	2,572.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.22	87.06
J-536	2,571.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,773.22	87.49
J-537	2,569.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,773.22	88.14
J-538	2,571.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.22	87.49
J-539	2,572.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,773.22	87.06
J-540	2,571.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,773.23	87.28
J-541	2,572.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,773.23	86.85
J-542	2,572.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,773.24	86.85
J-543	2,553.00	Zone	Demand	5.74	Composite	5.74	2,772.11	94.80
J-544	2,554.00	Zone	Demand	8.49	Composite	8.49	2,772.10	94.36
J-546	2,555.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,772.10	93.93
J-547	2,558.00	Zone	Demand	2.79	COMMERCIAL	2.79	2,771.92	92.55
J-548	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	92.11
J-549	2,559.50	Zone	Demand	7.34	IRRIGATION	7.34	2,771.88	91.89
J-550	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.87	91.88
J-551	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.87	91.88
J-552	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.87	91.88
J-553	2,557.50	Zone	Demand	22.19	RESIDENTIAL	22.19	2,771.88	92.75
J-554	2,557.50	Zone	Demand	17.75	RESIDENTIAL	17.75	2,771.87	92.75
J-555	2,558.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,771.87	92.32
J-556	2,559.00	Zone	Demand	7.99	Composite	7.99	2,771.87	92.10
J-557	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.87	91.67
J-558	2,561.50	Zone	Demand	6.28	Composite	6.28	2,771.87	91.02
J-559	2,559.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,771.87	92.10
J-560	2,558.50	Zone	Demand	7.10	Composite	7.10	2,771.87	92.31
J-561	2,557.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,771.87	92.75
J-562	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.87	92.53
J-563	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.87	92.75
J-564	2,557.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,771.87	92.75
J-565	2,560.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,771.87	91.67
J-566	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.88	92.32
J-567	2,556.00	Zone	Demand	3.09	COMMERCIAL	3.09	2,771.89	93.40
J-568	2,615.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,820.89	88.86
J-569	2,595.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.89	97.73
J-570	2,597.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,820.89	96.65
J-571	2,659.00	Zone	Demand	20.42	RESIDENTIAL	20.42	2,829.76	73.88
J-572	2,643.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,829.77	80.81
J-573	2,643.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,829.77	80.59
J-574	2,644.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,829.78	80.38
J-575	2,643.50	Zone	Demand	7.11	RESIDENTIAL	7.11	2,829.79	80.60
J-576	2,661.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,829.94	73.09
J-577	2,649.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,829.88	78.26
J-578	2,649.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,829.86	78.25
J-579	2,642.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,829.88	81.29
J-580	2,645.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,829.88	79.99

Title: INITIAL RUN

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Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-581	2,643.50	Zone	Demand	0.89	RESIDENTIAL	0.89	2,829.88	80.64
J-582	2,643.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,829.88	80.64
J-583	2,648.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,829.88	78.69
J-584	2,654.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,829.90	75.89
J-585	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,829.90	76.97
J-586	2,650.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,829.90	77.62
J-587	2,652.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,783.42	56.86
J-588	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.80	88.18
J-589	2,576.50	Zone	Demand	0.24	COMMERCIAL	0.24	2,786.58	90.89
J-590	2,574.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.58	91.76
J-591	2,579.50	Zone	Demand	0.33	COMMERCIAL	0.33	2,786.84	89.70
J-592	2,578.00	Zone	Demand	0.50	Composite	0.50	2,786.84	90.35
J-593	2,579.50	Zone	Demand	70.70	IRRIGATION	70.70	2,786.57	89.59
J-594	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.59	90.03
J-595	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.29	90.12
J-596	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.21	90.08
J-597	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,786.21	89.87
J-598	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.91	90.17
J-599	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.91	90.82
J-600	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.91	90.82
J-601	2,577.00	Zone	Demand	5.15	COMMERCIAL	5.15	2,785.91	90.38
J-602	2,577.50	Zone	Demand	8.98	COMMERCIAL	8.98	2,785.91	90.17
J-603	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.91	91.03
J-604	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.91	90.38
J-605	2,578.00	Zone	Demand	2.61	COMMERCIAL	2.61	2,785.24	89.66
J-606	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,785.24	89.66
J-607	2,572.00	Zone	Demand	1.84	COMMERCIAL	1.84	2,783.62	91.56
J-608	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.62	90.05
J-609	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,783.62	90.05
J-610	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.90	89.08
J-611	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.90	88.87
J-612	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.80	88.82
J-613	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.80	88.82
J-614	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,782.72	88.79
J-615	2,578.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,782.72	88.57
J-616	2,580.00	Zone	Demand	9.83	COMMERCIAL	9.83	2,782.20	87.48
J-617	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	90.81
J-618	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	90.81
J-619	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	90.81
J-620	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	88.86
J-621	2,566.00	Zone	Demand	0.10	COMMERCIAL	0.10	2,771.89	89.08
J-622	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	88.86
J-623	2,567.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	88.43
J-624	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,771.89	88.65
J-628	2,569.00	Zone	Demand	19.65	COMMERCIAL	19.65	2,790.50	95.83
J-636	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.01	90.43
J-637	2,558.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,774.84	93.60
J-638	2,559.00	Zone	Demand	14.21	RESIDENTIAL	14.21	2,774.84	93.38
J-639	2,556.00	Zone	Demand	23.97	Composite	23.97	2,774.83	94.68
J-640	2,564.50	Zone	Demand	15.99	RESIDENTIAL	15.99	2,772.96	90.19
J-650	2,610.00	Zone	Demand	20.42	RESIDENTIAL	20.42	2,773.35	70.67
J-651	2,553.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,772.11	94.58

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Fire Flow Analysis Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-653	2,627.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,776.49	64.68
J-654	2,682.00	Zone	Demand	19.53	RESIDENTIAL	19.53	2,836.31	66.76
J-655	2,680.00	Zone	Demand	16.87	RESIDENTIAL	16.87	2,836.31	67.63
J-656	2,693.00	Zone	Demand	21.61	RESIDENTIAL	21.61	2,836.31	62.00
J-657	2,563.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,771.82	90.35
J-658	2,598.00	Zone	Demand	0.27	RESIDENTIAL	0.27	2,773.23	75.82
J-659	2,638.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.92	58.38
J-660	2,640.00	Zone	Demand	0.57	COMMERCIAL	0.57	2,772.92	57.51
J-661	2,641.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,772.92	57.08
J-750	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.67	80.33
J-751	2,571.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,779.06	90.02
J-752	2,567.00	Zone	Demand	18.99	COMMERCIAL	18.99	2,791.37	97.07
J-813	2,565.00	Zone	Demand	0.00	Fixed	0.00	2,771.78	89.46
J-814	2,560.50	Zone	Demand	0.00	Fixed	0.00	2,771.77	91.40
J-822	2,615.00	Zone	Demand	0.00	Fixed	0.00	2,773.05	68.38
J-823	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,778.10	61.48
J-824	2,621.00	Zone	Demand	0.00	Fixed	0.00	2,776.55	67.30
J-825	2,609.00	Zone	Demand	0.00	Fixed	0.00	2,778.72	73.43
J-826	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,786.59	89.82
J-827	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,786.62	89.83
J-828	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.70	87.27
J-829	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.69	87.26
J-830	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.66	87.25
J-831	2,585.00	Zone	Demand	109.76	Fixed	109.76	2,786.66	87.25
J-832	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.65	87.25
J-833	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.65	87.25
J-834	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.65	87.25
J-835	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.65	87.25
J-836	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.65	87.25
J-837	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.65	87.25
J-838	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.65	87.25
J-840	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,786.69	87.26
J-842	2,552.50	Zone	Demand	0.00	Fixed	0.00	2,774.51	96.06
J-844	2,663.30	Zone	Demand	0.62	RESIDENTIAL	0.62	2,825.37	70.12
J-845	2,664.70	Zone	Demand	0.00	Fixed	0.00	2,826.25	69.89
J-846	2,665.90	Zone	Demand	0.00	Fixed	0.00	2,827.05	69.72
J-847	2,661.70	Zone	Demand	1.86	RESIDENTIAL	1.86	2,825.37	70.81
J-848	2,664.70	Zone	Demand	1.25	RESIDENTIAL	1.25	2,826.25	69.89
J-849	2,665.90	Zone	Demand	1.25	RESIDENTIAL	1.25	2,827.05	69.72
J-851	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,782.90	90.38
J-852	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,782.90	90.38
J-853	2,575.00	Zone	Demand	0.00	Fixed	0.00	2,782.90	89.95
J-901	2,591.00	Zone	Demand	0.00	Fixed	0.00	2,773.78	79.08
J-906	2,553.50	Zone	Demand	3.89	COMMERCIAL	3.89	2,777.23	96.80
J-917	2,625.00	Zone	Demand	0.00	Fixed	0.00	2,773.69	64.33
J-981	2,640.00	Zone	Demand	0.00	Fixed	0.00	2,766.50	54.73
J-982	2,644.50	Zone	Demand	0.00	Fixed	0.00	2,770.91	54.69

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-1	370.00	8.0	PVC	Open		-133.45	0.85	2,772.51	2,772.65	0.38	0.14
P-2	266.00	6.0	PVC	Open		0.00	0.00	2,772.51	2,772.51	0.00	0.00
P-3	365.00	8.0	PVC	Open		-123.65	0.79	2,772.38	2,772.51	0.33	0.12
P-4	357.00	8.0	PVC	Open		2.28	0.01	2,772.38	2,772.38	0.00	0.00
P-5	369.00	8.0	PVC	Open		-95.04	0.61	2,772.31	2,772.38	0.21	0.08
P-6	223.00	6.0	PVC	Open		1.06	0.01	2,772.31	2,772.31	0.00	0.00
P-7	358.00	8.0	PVC	Open		-93.98	0.60	2,772.24	2,772.31	0.20	0.07
P-8	530.00	8.0	PVC	Open		81.28	0.52	2,772.24	2,772.15	0.16	0.08
P-9	320.00	8.0	PVC	Open		0.00	0.00	2,772.06	2,772.06	0.00	0.00
P-10	680.00	8.0	PVC	Open		-5.95	0.04	2,772.24	2,772.24	0.00	0.00
P-11	314.00	8.0	PVC	Open		88.11	0.56	2,772.29	2,772.24	0.18	0.06
P-12	520.00	8.0	PVC	Open		73.63	0.47	2,772.36	2,772.29	0.13	0.07
P-13	660.00	8.0	PVC	Open		116.67	0.74	2,772.56	2,772.36	0.30	0.20
P-14	130.00	6.0	PVC	Open		2.66	0.03	2,772.36	2,772.36	0.00	0.00
P-15	770.00	6.0	PVC	Open		25.29	0.29	2,772.36	2,772.30	0.08	0.06
P-16	446.00	8.0	PVC	Open		24.24	0.15	2,772.30	2,772.29	0.02	0.01
P-17	380.00	8.0	PVC	Open		9.60	0.06	2,772.30	2,772.30	0.00	0.00
P-18	270.00	8.0	PVC	Open		76.81	0.49	2,772.30	2,772.26	0.14	0.04
P-19	440.00	8.0	PVC	Open		83.45	0.53	2,772.23	2,772.16	0.16	0.07
P-20	83.00	8.0	PVC	Open		5.56	0.04	2,772.16	2,772.16	0.00	0.00
P-21	72.00	8.0	PVC	Open		70.52	0.45	2,772.10	2,772.09	0.12	0.01
P-22	572.00	8.0	PVC	Open		69.28	0.44	2,772.16	2,772.10	0.12	0.07
P-23	195.00	6.0	PVC	Open		10.49	0.12	2,772.27	2,772.26	0.02	0.00
P-24	826.00	6.0	PVC	Open		20.52	0.23	2,772.27	2,772.22	0.05	0.04
P-25	368.00	8.0	PVC	Open		111.28	0.71	2,772.22	2,772.12	0.28	0.10
P-26	282.00	8.0	PVC	Open		96.23	0.61	2,772.28	2,772.22	0.21	0.06
P-27	228.00	8.0	PVC	Open		110.43	0.70	2,772.34	2,772.28	0.27	0.06
P-28	603.00	8.0	PVC	Open		24.06	0.15	2,772.34	2,772.33	0.02	0.01
P-29	340.00	6.0	PVC	Open		42.55	0.48	2,772.33	2,772.27	0.20	0.07
P-30	560.00	8.0	PVC	Open		32.69	0.21	2,772.35	2,772.33	0.03	0.02
P-31	249.00	8.0	PVC	Open		92.63	0.59	2,772.35	2,772.30	0.20	0.05
P-32	660.00	8.0	PVC	Open		137.75	0.88	2,772.62	2,772.35	0.41	0.27
P-33	400.00	6.0	PVC	Open		4.17	0.05	2,772.62	2,772.62	0.00	0.00
P-34	171.00	8.0	PVC	Open		144.58	0.92	2,772.70	2,772.62	0.45	0.08
P-35	375.00	8.0	PVC	Open		123.32	0.79	2,772.82	2,772.70	0.33	0.12
P-36	180.00	6.0	PVC	Open		54.29	0.62	2,772.88	2,772.82	0.31	0.05
P-37	318.00	6.0	PVC	Open		10.65	0.12	2,772.88	2,772.87	0.02	0.01
P-38	310.00	6.0	PVC	Open		68.49	0.78	2,773.02	2,772.88	0.47	0.14
P-39	238.00	6.0	PVC	Open		77.73	0.88	2,773.16	2,773.02	0.59	0.14
P-40	250.00	6.0	Asbestos	Open		94.27	1.07	2,773.35	2,773.16	0.74	0.19
P-41	164.00	8.0	PVC	Open		140.05	0.89	2,773.41	2,773.35	0.42	0.07
P-42	64.00	8.0	PVC	Open		85.53	0.55	2,772.26	2,772.25	0.17	0.01
P-43	80.00	8.0	PVC	Open		313.55	2.00	2,773.50	2,773.35	1.90	0.15
P-44	479.00	8.0	PVC	Open		79.09	0.50	2,773.35	2,773.28	0.15	0.07
P-45	70.00	8.0	PVC	Open		252.16	1.61	2,773.50	2,773.41	1.26	0.09
P-46	61.00	8.0	PVC	Open		125.92	0.80	2,772.05	2,772.03	0.34	0.02
P-47	451.00	8.0	PVC	Open		108.56	0.69	2,773.41	2,773.30	0.26	0.12
P-48	172.00	8.0	PVC	Open		70.31	0.45	2,773.30	2,773.28	0.12	0.02
P-49	149.00	6.0	PVC	Open		34.69	0.39	2,773.30	2,773.28	0.14	0.02
P-50	390.00	6.0	Asbestos	Open		42.23	0.48	2,773.35	2,773.28	0.18	0.07
P-51	250.00	6.0	Asbestos	Open		74.26	0.84	2,773.28	2,773.15	0.49	0.12

Title: INITIAL RUN

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Bentley Systems, Inc. Haestad Methods Solution Center Watertown, CT 06795 USA +1-203-755-1666

Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen- Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-52	390.00	6.0	Asbestos	Open		10.32	0.12	2,773.16	2,773.15	0.02	0.01
P-53	261.00	6.0	Asbestos	Open		15.98	0.18	2,773.15	2,773.15	0.03	0.01
P-54	211.00	6.0	Asbestos	Open		3.55	0.04	2,773.15	2,773.15	0.00	0.00
P-55	330.00	6.0	Asbestos	Open		7.99	0.09	2,773.15	2,773.14	0.01	0.00
P-56	352.00	6.0	PVC	Open		61.50	0.70	2,773.15	2,773.02	0.38	0.13
P-57	330.00	6.0	PVC	Open		-4.81	0.05	2,773.02	2,773.02	0.00	0.00
P-58	220.00	6.0	PVC	Open		-58.32	0.66	2,772.94	2,773.02	0.35	0.08
P-59	444.00	6.0	PVC	Open		8.88	0.10	2,772.94	2,772.94	0.01	0.01
P-60	31.00	6.0	PVC	Open		-45.00	0.51	2,772.94	2,772.94	0.22	0.01
P-61	83.00	6.0	PVC	Open		-46.98	0.53	2,772.92	2,772.94	0.23	0.02
P-63	87.00	6.0	Ductile I	Open		435.36	4.94	2,612.55	2,611.00	17.79	1.55
P-64	15.00	6.0	PVC	Open		-46.98	0.53	2,772.91	2,772.92	0.24	0.00
P-65	251.00	8.0	PVC	Open		46.98	0.30	2,772.91	2,772.90	0.06	0.01
P-66	334.00	6.0	PVC	Open		-1.98	0.02	2,772.94	2,772.94	0.00	0.00
P-67	129.00	8.0	PVC	Open		68.45	0.44	2,772.95	2,772.94	0.11	0.01
P-68	556.00	8.0	PVC	Open		94.30	0.60	2,773.06	2,772.95	0.20	0.11
P-69	387.00	8.0	PVC	Open		-10.76	0.07	2,772.95	2,772.95	0.00	0.00
P-71	131.00	8.0	PVC	Open		41.80	0.27	2,773.06	2,773.06	0.05	0.01
P-72	150.00	8.0	PVC	Open		43.79	0.28	2,772.95	2,772.94	0.05	0.01
P-73	326.00	6.0	PVC	Open		41.57	0.47	2,772.94	2,772.88	0.19	0.06
P-74	570.00	6.0	PVC	Open		21.30	0.24	2,772.91	2,772.88	0.06	0.03
P-75	280.00	8.0	PVC	Open		62.03	0.40	2,772.94	2,772.91	0.10	0.03
P-76	402.00	8.0	PVC	Open		30.94	0.20	2,772.91	2,772.90	0.03	0.01
P-77	150.00	6.0	PVC	Open		72.58	0.82	2,772.90	2,772.82	0.52	0.08
P-78	700.00	6.0	PVC	Open		32.81	0.37	2,772.78	2,772.70	0.12	0.09
P-79	325.00	6.0	PVC	Open		53.08	0.60	2,772.88	2,772.78	0.29	0.10
P-80	360.00	6.0	PVC	Open		7.84	0.09	2,772.78	2,772.78	0.01	0.00
P-81	158.00	4.0	PVC	Open		4.44	0.11	2,772.78	2,772.78	0.02	0.00
P-82	985.00	6.0	PVC	Open		10.80	0.12	2,772.80	2,772.78	0.02	0.02
P-83	930.00	8.0	PVC	Open		114.82	0.73	2,772.80	2,772.52	0.29	0.27
P-84	550.00	6.0	PVC	Open		7.99	0.09	2,772.52	2,772.52	0.01	0.01
P-85	410.00	8.0	PVC	Open		143.36	0.92	2,772.52	2,772.34	0.44	0.18
P-86	660.00	6.0	PVC	Open		57.84	0.66	2,772.75	2,772.52	0.34	0.23
P-87	130.00	4.0	PVC	Open		4.44	0.11	2,772.75	2,772.75	0.02	0.00
P-88	314.00	4.0	PVC	Open		8.88	0.23	2,772.75	2,772.72	0.09	0.03
P-89	1,283.00	6.0	PVC	Open		88.90	1.01	2,773.72	2,772.75	0.75	0.97
P-90	910.00	6.0	PVC	Open		79.42	0.90	2,773.72	2,773.16	0.61	0.56
P-91	383.00	8.0	PVC	Open		166.00	1.06	2,773.16	2,772.94	0.58	0.22
P-92	300.00	8.0	PVC	Open		7.54	0.05	2,772.94	2,772.94	0.00	0.00
P-93	292.00	8.0	PVC	Open		152.24	0.97	2,772.94	2,772.80	0.49	0.14
P-94	372.00	8.0	PVC	Open		92.79	0.59	2,773.23	2,773.16	0.20	0.07
P-95	150.00	2.0	PVC	Open		4.44	0.45	2,773.23	2,773.13	0.72	0.11
P-96	340.00	8.0	PVC	Open		100.78	0.64	2,773.31	2,773.23	0.23	0.08
P-97	125.00	8.0	PVC	Open		80.76	0.52	2,773.33	2,773.31	0.15	0.02
P-98	158.00	2.0	PVC	Open		4.44	0.45	2,773.33	2,773.22	0.72	0.11
P-99	360.00	8.0	PVC	Open		87.86	0.56	2,773.40	2,773.33	0.18	0.06
P-100	809.00	6.0	PVC	Open		29.78	0.34	2,773.40	2,773.31	0.10	0.08
P-101	95.00	4.0	PVC	Open		2.66	0.07	2,773.06	2,773.06	0.01	0.00
P-102	620.00	8.0	PVC	Open		128.30	0.82	2,773.62	2,773.40	0.36	0.22
P-103	150.00	6.0	PVC	Open		39.20	0.44	2,775.40	2,775.37	0.17	0.03
P-104	980.00	6.0	PVC	Open		81.73	0.93	2,775.40	2,774.77	0.64	0.63

Title: INITIAL RUN

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Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-105	280.00	4.0	PVC	Open		8.36	0.21	2,774.77	2,774.75	0.08	0.02
P-106	50.00	6.0	PVC	Open		65.40	0.74	2,774.77	2,774.75	0.43	0.02
P-107	233.00	4.0	PVC	Open		-0.52	0.01	2,774.75	2,774.75	0.00	0.00
P-108	110.00	4.0	PVC	Open		6.21	0.16	2,774.75	2,774.74	0.05	0.01
P-109	207.00	6.0	PVC	Open		62.21	0.71	2,774.75	2,774.66	0.39	0.08
P-110	300.00	6.0	PVC	Open		191.21	2.17	2,774.66	2,773.72	3.16	0.95
P-111	470.00	6.0	PVC	Open		15.78	0.18	2,773.72	2,773.70	0.03	0.02
P-112	120.00	2.0	PVC	Open		3.55	0.36	2,773.70	2,773.64	0.48	0.06
P-113	124.00	6.0	PVC	Open		10.47	0.12	2,773.70	2,773.70	0.02	0.00
P-114	145.00	6.0	PVC	Open		3.70	0.04	2,773.70	2,773.70	0.00	0.00
P-115	430.00	6.0	PVC	Open		13.31	0.15	2,773.70	2,773.69	0.02	0.01
P-116	316.00	8.0	PVC	Open		0.00	0.00	2,773.69	2,773.69	0.00	0.00
P-117	250.00	6.0	PVC	Open		13.17	0.15	2,773.70	2,773.70	0.02	0.01
P-118	190.00	4.0	PVC	Open		2.65	0.07	2,773.70	2,773.70	0.01	0.00
P-119	240.00	6.0	PVC	Open		18.48	0.21	2,773.72	2,773.70	0.04	0.01
P-120	621.00	6.0	PVC	Open		13.39	0.15	2,773.72	2,773.70	0.03	0.02
P-121	100.00	4.0	PVC	Open		3.55	0.09	2,773.70	2,773.70	0.01	0.00
P-122	280.00	6.0	PVC	Open		5.66	0.06	2,773.70	2,773.70	0.00	0.00
P-123	140.00	6.0	PVC	Open		3.55	0.04	2,773.70	2,773.70	0.00	0.00
P-124	530.00	6.0	PVC	Open		1.44	0.02	2,773.70	2,773.70	0.00	0.00
P-125	270.00	6.0	PVC	Open		35.44	0.40	2,773.75	2,773.72	0.14	0.04
P-126	78.00	6.0	PVC	Open		12.43	0.14	2,773.75	2,773.75	0.02	0.00
P-127	610.00	4.0	PVC	Open		9.77	0.25	2,773.75	2,773.69	0.10	0.06
P-128	430.00	8.0	PVC	Open		47.87	0.31	2,773.78	2,773.75	0.06	0.03
P-129	250.00	8.0	PVC	Open		9.36	0.06	2,773.78	2,773.78	0.00	0.00
P-130	480.00	6.0	PVC	Open		9.76	0.11	2,773.78	2,773.77	0.01	0.01
P-131	100.00	6.0	PVC	Open		2.66	0.03	2,773.77	2,773.77	0.00	0.00
P-132	80.00	6.0	PVC	Open		2.66	0.03	2,773.77	2,773.77	0.00	0.00
P-133	165.00	8.0	PVC	Open		26.23	0.17	2,773.78	2,773.78	0.02	0.00
P-134	270.00	6.0	PVC	Open		5.33	0.06	2,773.78	2,773.78	0.00	0.00
P-135	243.00	8.0	PVC	Open		38.66	0.25	2,773.79	2,773.78	0.04	0.01
P-136	600.00	8.0	PVC	Open		248.13	1.58	2,773.79	2,773.06	1.22	0.73
P-137	1,300.00	8.0	PVC	Open		292.11	1.86	2,775.95	2,773.79	1.66	2.16
P-138	194.00	8.0	PVC	Open		-113.72	0.73	2,775.95	2,776.01	0.29	0.06
P-139	1,200.00	4.0	PVC	Open		48.84	1.25	2,776.01	2,773.78	1.86	2.23
P-140	400.00	8.0	PVC	Open		-162.57	1.04	2,776.01	2,776.23	0.55	0.22
P-141	67.00	8.0	PVC	Open		-302.04	1.93	2,776.23	2,776.35	1.77	0.12
P-142	940.00	6.0	PVC	Open		136.09	1.54	2,776.23	2,774.66	1.66	1.56
P-143	95.00	8.0	PVC	Open		183.71	1.17	2,776.02	2,775.95	0.70	0.07
P-144	700.00	8.0	PVC	Open		218.34	1.39	2,776.69	2,776.02	0.96	0.67
P-145	260.00	8.0	PVC	Open		152.60	0.97	2,776.55	2,776.43	0.49	0.13
P-146	420.00	8.0	PVC	Open		423.58	2.70	2,778.10	2,776.69	3.36	1.41
P-147	656.00	8.0	PVC	Open		29.30	0.19	2,776.02	2,776.00	0.03	0.02
P-148	548.00	6.0	PVC	Open		10.02	0.11	2,776.00	2,775.99	0.02	0.01
P-149	1,112.00	6.0	PVC	Open		6.86	0.08	2,776.00	2,775.99	0.01	0.01
P-150	667.00	12.0	PVC	Open		1,294.45	3.67	2,775.80	2,772.62	3.68	3.19
P-151	601.00	6.0	PVC	Open		2.67	0.03	2,775.99	2,775.99	0.00	0.00
P-152	570.00	8.0	PVC	Open		404.58	2.58	2,775.37	2,773.62	3.08	1.76
P-154	5.00	6.0	Ductile I	Open		-0.00	0.00	2,611.00	2,611.00	0.00	0.00
P-155	5.00	6.0	Ductile I	Open		-0.00	0.00	2,611.00	2,611.00	0.00	0.00
P-156	5.00	6.0	Ductile I	Open		-0.00	0.00	2,611.00	2,611.00	0.00	0.00

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Watertown, CT 06795 USA

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Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-157	20.00	6.0	Ductile I	Open		-0.00	0.00	2,772.91	2,772.91	0.00	0.00
P-158	15.00	6.0	Ductile I	Open		-0.00	0.00	2,772.91	2,772.91	0.00	0.00
P-159	10.00	6.0	Ductile I	Open		-0.00	0.00	2,772.91	2,772.91	0.00	0.00
P-160	170.00	8.0	PVC	Open		33.52	0.21	2,771.89	2,771.89	0.03	0.01
P-161	575.00	8.0	PVC	Open		14.90	0.10	2,771.89	2,771.88	0.01	0.00
P-162	797.00	6.0	PVC	Open		6.19	0.07	2,771.89	2,771.88	0.01	0.00
P-163	505.00	6.0	PVC	Open		10.44	0.12	2,771.88	2,771.87	0.02	0.01
P-164	420.00	8.0	PVC	Open		367.15	2.34	2,776.45	2,775.37	2.56	1.08
P-165	150.00	8.0	PVC	Open		23.01	0.15	2,776.45	2,776.45	0.02	0.00
P-166	507.00	8.0	PVC	Open		241.90	1.54	2,773.06	2,772.47	1.16	0.59
P-167	1.00	96.0	PVC	Open		565.71	0.03	2,534.00	2,534.00	0.00	0.00
P-169	48.00	8.0	PVC	Open		565.71	3.61	2,773.78	2,773.50	5.85	0.28
P-170	364.00	4.0	PVC	Open		3.55	0.09	2,772.25	2,772.25	0.01	0.00
P-171	880.00	8.0	PVC	Open		390.17	2.49	2,778.98	2,776.45	2.87	2.53
P-172	340.00	8.0	PVC	Open		70.38	0.45	2,772.09	2,772.05	0.12	0.04
P-173	160.00	6.0	PVC	Open		0.14	0.00	2,772.09	2,772.09	0.00	0.00
P-174	460.00	8.0	PVC	Open		7.10	0.05	2,772.28	2,772.28	0.00	0.00
P-175	260.00	8.0	PVC	Open		-19.64	0.13	2,772.95	2,772.95	0.01	0.00
P-176	80.00	2.0	PVC	Open		2.66	0.27	2,772.95	2,772.92	0.29	0.02
P-177	170.00	8.0	PVC	Open		35.51	0.23	2,772.12	2,772.12	0.03	0.01
P-178	420.00	6.0	PVC	Open		3.47	0.04	2,772.11	2,772.11	0.00	0.00
P-179	393.00	8.0	PVC	Open		16.79	0.11	2,772.12	2,772.11	0.01	0.00
P-180	120.00	8.0	PVC	Open		5.33	0.03	2,772.11	2,772.11	0.00	0.00
P-181	394.00	8.0	PVC	Open		57.12	0.36	2,772.10	2,772.06	0.08	0.03
P-182	225.00	8.0	PVC	Open		55.54	0.35	2,772.06	2,772.05	0.08	0.02
P-183	442.00	8.0	PVC	Open		103.23	0.66	2,772.03	2,771.92	0.24	0.11
P-185	258.00	8.0	PVC	Open		168.77	1.08	2,776.43	2,776.27	0.59	0.15
P-186	1,300.00	6.0	PVC	Open		66.31	0.75	2,776.27	2,775.70	0.44	0.57
P-187	700.00	6.0	PVC	Open		92.81	1.05	2,776.27	2,775.70	0.82	0.57
P-188	800.00	8.0	PVC	Open		132.48	0.85	2,775.70	2,775.40	0.38	0.30
P-189	158.00	8.0	PVC	Open		205.24	1.31	2,776.69	2,776.55	0.85	0.14
P-190	700.00	8.0	PVC	Open		19.08	0.12	2,776.43	2,776.43	0.01	0.01
P-191	260.00	8.0	PVC	Open		40.13	0.26	2,776.45	2,776.43	0.04	0.01
P-192	700.00	6.0	PVC	Open		8.63	0.10	2,776.43	2,776.43	0.01	0.01
P-193	698.00	6.0	PVC	Open		21.56	0.24	2,776.49	2,776.45	0.06	0.04
P-194	448.00	8.0	PVC	Open		27.52	0.18	2,772.65	2,772.64	0.02	0.01
P-195	480.00	8.0	PVC	Open		8.19	0.05	2,772.64	2,772.64	0.00	0.00
P-196	800.00	8.0	PVC	Open		6.90	0.04	2,772.64	2,772.64	0.00	0.00
P-197	242.00	8.0	PVC	Open		0.00	0.00	2,772.64	2,772.64	0.00	0.00
P-198	371.00	8.0	PVC	Open		-165.25	1.05	2,772.65	2,772.86	0.57	0.21
P-199	846.00	8.0	PVC	Open		22.90	0.15	2,772.86	2,772.85	0.02	0.01
P-200	1,095.00	8.0	PVC	Open		-47.06	0.30	2,772.96	2,773.03	0.06	0.06
P-201	221.00	8.0	PVC	Open		-190.90	1.22	2,772.86	2,773.03	0.75	0.17
P-202	273.00	8.0	PVC	Open		-143.63	0.92	2,773.03	2,773.15	0.44	0.12
P-203	523.00	8.0	PVC	Open		-95.35	0.61	2,773.03	2,773.13	0.21	0.11
P-204	573.00	8.0	PVC	Open		-15.57	0.10	2,772.96	2,772.96	0.01	0.00
P-205	257.00	8.0	PVC	Open		-40.84	0.26	2,773.13	2,773.15	0.04	0.01
P-206	616.00	8.0	PVC	Open		-60.95	0.39	2,773.13	2,773.19	0.09	0.06
P-207	173.00	6.0	PVC	Open		3.55	0.04	2,773.19	2,773.19	0.00	0.00
P-208	796.00	8.0	PVC	Open		-78.70	0.50	2,773.19	2,773.31	0.15	0.12
P-209	188.00	6.0	PVC	Open		4.44	0.05	2,773.31	2,773.31	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-210	310.00	8.0	PVC	Open		-89.24	0.57	2,773.31	2,773.37	0.18	0.06
P-211	158.00	6.0	PVC	Open		4.44	0.05	2,773.37	2,773.36	0.00	0.00
P-212	275.00	8.0	PVC	Open		-94.93	0.61	2,773.37	2,773.42	0.21	0.06
P-213	272.00	6.0	PVC	Open		8.88	0.10	2,773.42	2,773.42	0.01	0.00
P-214	270.00	8.0	PVC	Open		-109.75	0.70	2,773.42	2,773.49	0.27	0.07
P-215	438.00	8.0	PVC	Open		7.38	0.05	2,773.49	2,773.49	0.00	0.00
P-216	49.00	6.0	PVC	Open		1.79	0.02	2,773.49	2,773.49	0.00	0.00
P-217	129.00	6.0	PVC	Open		3.55	0.04	2,773.49	2,773.49	0.00	0.00
P-218	168.00	8.0	PVC	Open		-123.35	0.79	2,773.49	2,773.55	0.33	0.06
P-219	462.00	8.0	PVC	Open		9.76	0.06	2,773.31	2,773.30	0.00	0.00
P-220	225.00	8.0	PVC	Open		-185.36	1.18	2,773.15	2,773.31	0.71	0.16
P-221	276.00	8.0	PVC	Open		-209.42	1.34	2,773.31	2,773.55	0.89	0.25
P-223	460.00	8.0	PVC	Open		-408.33	2.61	2,774.87	2,776.31	3.14	1.44
P-224	1,737.00	12.0	PVC	Open		-433.23	1.23	2,776.31	2,777.11	0.46	0.80
P-225	309.00	8.0	PVC	Open		52.34	0.33	2,777.17	2,777.15	0.07	0.02
P-226	502.00	8.0	PVC	Open		9.76	0.06	2,777.15	2,777.15	0.00	0.00
P-227	237.00	4.0	PVC	Open		6.21	0.16	2,777.15	2,777.14	0.05	0.01
P-228	299.00	8.0	PVC	Open		29.28	0.19	2,777.15	2,777.14	0.03	0.01
P-229	498.00	6.0	PVC	Open		7.10	0.08	2,777.14	2,777.14	0.01	0.00
P-230	317.00	4.0	PVC	Open		7.10	0.18	2,777.14	2,777.12	0.06	0.02
P-231	327.00	8.0	PVC	Open		11.53	0.07	2,777.14	2,777.14	0.00	0.00
P-232	487.00	12.0	PVC	Open		-61.51	0.17	2,777.10	2,777.11	0.01	0.01
P-233	464.00	6.0	PVC	Open		5.33	0.06	2,777.10	2,777.10	0.00	0.00
P-234	494.00	6.0	PVC	Open		5.33	0.06	2,777.10	2,777.10	0.00	0.00
P-235	332.00	12.0	PVC	Open		-41.10	0.12	2,777.10	2,777.10	0.01	0.00
P-236	458.00	8.0	PVC	Open		4.44	0.03	2,777.10	2,777.10	0.00	0.00
P-237	298.00	6.0	PVC	Open		2.02	0.02	2,777.10	2,777.10	0.00	0.00
P-238	363.00	12.0	PVC	Open		-31.09	0.09	2,777.10	2,777.10	0.00	0.00
P-239	465.00	8.0	PVC	Open		-22.21	0.14	2,777.09	2,777.10	0.02	0.01
P-240	513.00	12.0	PVC	Open		4.45	0.01	2,777.10	2,777.10	0.00	0.00
P-241	654.00	8.0	PVC	Open		12.55	0.08	2,771.96	2,771.95	0.01	0.00
P-242	880.00	12.0	PVC	Open		-26.30	0.07	2,773.25	2,773.25	0.00	0.00
P-243	980.00	12.0	PVC	Open		44.35	0.13	2,773.25	2,773.25	0.01	0.01
P-244	759.00	12.0	PVC	Open		32.70	0.09	2,773.23	2,773.23	0.00	0.00
P-245	100.00	12.0	PVC	Open		0.00	0.00	2,773.23	2,773.23	0.00	0.00
P-246	430.00	8.0	PVC	Open		28.41	0.18	2,773.23	2,773.22	0.02	0.01
P-247	712.00	8.0	PVC	Open		12.50	0.08	2,773.22	2,773.22	0.01	0.00
P-248	760.00	8.0	PVC	Open		13.25	0.08	2,773.22	2,773.22	0.01	0.00
P-249	50.00	8.0	PVC	Open		0.00	0.00	2,773.22	2,773.22	0.00	0.00
P-250	263.00	8.0	PVC	Open		2.74	0.02	2,773.21	2,773.21	0.00	0.00
P-251	50.00	8.0	PVC	Open		0.00	0.00	2,773.21	2,773.21	0.00	0.00
P-252	800.00	8.0	PVC	Open		7.18	0.05	2,773.22	2,773.21	0.00	0.00
P-253	655.00	12.0	PVC	Open		28.62	0.08	2,773.25	2,773.24	0.00	0.00
P-254	370.00	8.0	PVC	Open		28.62	0.18	2,773.24	2,773.24	0.02	0.01
P-255	1,670.00	12.0	PVC	Open		0.00	0.00	2,773.24	2,773.24	0.00	0.00
P-256	40.00	8.0	PVC	Open		0.00	0.00	2,773.24	2,773.24	0.00	0.00
P-257	650.00	12.0	PVC	Open		0.00	0.00	2,773.24	2,773.24	0.00	0.00
P-258	40.00	8.0	PVC	Open		0.00	0.00	2,773.24	2,773.24	0.00	0.00
P-259	1,020.00	12.0	PVC	Open		0.00	0.00	2,773.24	2,773.24	0.00	0.00
P-260	480.00	8.0	PVC	Open		229.47	1.46	2,772.47	2,771.97	1.05	0.51
P-261	167.00	8.0	PVC	Open		158.83	1.01	2,771.97	2,771.88	0.53	0.09

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-262	395.00	8.0	PVC	Open		88.62	0.57	2,771.88	2,771.80	0.18	0.07
P-263	527.00	8.0	PVC	Open		37.57	0.24	2,771.80	2,771.78	0.04	0.02
P-264	477.00	8.0	PVC	Open		39.50	0.25	2,771.80	2,771.78	0.04	0.02
P-265	341.00	8.0	PVC	Open		4.26	0.03	2,771.78	2,771.78	0.00	0.00
P-266	261.00	8.0	PVC	Open		34.73	0.22	2,771.78	2,771.78	0.03	0.01
P-267	136.00	8.0	PVC	Open		39.40	0.25	2,771.78	2,771.77	0.04	0.01
P-268	604.00	8.0	PVC	Open		14.44	0.09	2,771.78	2,771.78	0.01	0.00
P-269	355.00	8.0	PVC	Open		20.14	0.13	2,771.78	2,771.78	0.01	0.00
P-270	776.00	8.0	PVC	Open		54.24	0.35	2,771.88	2,771.82	0.08	0.06
P-271	810.00	8.0	PVC	Open		59.98	0.38	2,771.97	2,771.89	0.09	0.07
P-272	547.00	8.0	PVC	Open		8.88	0.06	2,771.89	2,771.89	0.00	0.00
P-273	618.00	8.0	PVC	Open		13.14	0.08	2,771.89	2,771.89	0.01	0.00
P-274	332.00	8.0	PVC	Open		8.52	0.05	2,771.89	2,771.89	0.00	0.00
P-275	700.00	8.0	PVC	Open		17.50	0.11	2,771.89	2,771.88	0.01	0.01
P-276	83.00	8.0	PVC	Open		-9.42	0.06	2,771.89	2,771.89	0.01	0.00
P-277	419.00	8.0	PVC	Open		4.35	0.03	2,771.89	2,771.89	0.00	0.00
P-278	620.00	12.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-280	813.00	8.0	PVC	Open		12.43	0.08	2,773.21	2,773.21	0.01	0.00
P-281	287.00	12.0	PVC	Open		1,354.36	3.84	2,795.85	2,794.70	4.01	1.15
P-282	797.00	12.0	PVC	Open		1,331.85	3.78	2,791.37	2,788.28	3.88	3.10
P-283	320.00	8.0	PVC	Open		2.43	0.02	2,788.28	2,788.28	0.00	0.00
P-284	388.00	12.0	PVC	Open		1,328.59	3.77	2,788.28	2,786.78	3.87	1.50
P-285	1,528.00	12.0	PVC	Open		75.17	0.21	2,786.80	2,786.78	0.02	0.03
P-286	358.00	12.0	PVC	Open		1,380.01	3.91	2,786.78	2,785.29	4.16	1.49
P-287	419.00	8.0	PVC	Open		322.03	2.06	2,785.29	2,784.45	2.00	0.84
P-288	341.00	8.0	PVC	Open		312.26	1.99	2,784.45	2,783.81	1.88	0.64
P-289	193.00	8.0	PVC	Open		3.55	0.02	2,784.45	2,784.45	0.00	0.00
P-290	267.00	12.0	PVC	Open		1,053.55	2.99	2,785.29	2,784.63	2.48	0.66
P-291	640.00	8.0	PVC	Open		179.04	1.14	2,784.23	2,783.81	0.66	0.42
P-292	460.00	12.0	PVC	Open		641.47	1.82	2,784.23	2,783.79	0.96	0.44
P-293	302.00	8.0	PVC	Open		193.20	1.23	2,784.02	2,783.79	0.76	0.23
P-294	213.00	12.0	PVC	Open		826.67	2.35	2,783.79	2,783.46	1.56	0.33
P-295	511.00	12.0	PVC	Open		948.70	2.69	2,783.46	2,782.42	2.03	1.03
P-296	305.00	12.0	PVC	Open		124.95	0.35	2,783.47	2,783.46	0.05	0.01
P-297	650.00	8.0	PVC	Open		0.00	0.00	2,783.47	2,783.47	0.00	0.00
P-298	516.00	12.0	PVC	Open		577.17	1.64	2,783.47	2,783.07	0.79	0.41
P-299	19.00	12.0	PVC	Open		433.00	1.23	2,783.07	2,783.06	0.46	0.01
P-300	1,334.00	8.0	PVC	Open		144.17	0.92	2,783.07	2,782.47	0.44	0.59
P-301	241.00	8.0	PVC	Open		441.33	2.82	2,778.98	2,778.10	3.64	0.88
P-302	911.00	12.0	PVC	Open		831.50	2.36	2,780.41	2,778.98	1.57	1.43
P-303	156.00	8.0	PVC	Open		141.01	0.90	2,780.48	2,780.41	0.43	0.07
P-304	239.00	8.0	PVC	Open		27.98	0.18	2,780.48	2,780.48	0.02	0.01
P-305	176.00	8.0	PVC	Open		10.65	0.07	2,780.48	2,780.48	0.00	0.00
P-306	140.00	6.0	PVC	Open		4.44	0.05	2,780.48	2,780.48	0.00	0.00
P-307	283.00	8.0	PVC	Open		4.44	0.03	2,780.48	2,780.48	0.00	0.00
P-308	265.00	8.0	PVC	Open		41.29	0.26	2,780.50	2,780.48	0.05	0.01
P-309	205.00	6.0	PVC	Open		5.33	0.06	2,780.50	2,780.50	0.00	0.00
P-310	977.00	8.0	PVC	Open		55.49	0.35	2,780.57	2,780.50	0.08	0.08
P-311	142.00	6.0	PVC	Open		4.44	0.05	2,780.57	2,780.57	0.00	0.00
P-312	850.00	8.0	PVC	Open		75.02	0.48	2,780.69	2,780.57	0.13	0.11
P-313	666.00	8.0	PVC	Open		119.25	0.76	2,780.69	2,780.48	0.31	0.21

Title: INITIAL RUN

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Bentley Systems, Inc.

Haestad Methods Solution Center

Watertown, CT 06795 USA

+1-203-755-1666

Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen- Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-314	402.00	8.0	PVC	Open		207.59	1.32	2,781.04	2,780.69	0.87	0.35
P-315	547.00	8.0	PVC	Open		158.96	1.01	2,781.33	2,781.04	0.53	0.29
P-316	401.00	8.0	PVC	Open		56.62	0.36	2,781.07	2,781.04	0.08	0.03
P-317	742.00	8.0	PVC	Open		27.79	0.18	2,781.09	2,781.07	0.02	0.02
P-318	343.00	6.0	PVC	Open		6.21	0.07	2,781.09	2,781.09	0.01	0.00
P-319	273.00	8.0	PVC	Open		41.99	0.27	2,781.10	2,781.09	0.05	0.01
P-320	288.00	8.0	PVC	Open		49.72	0.32	2,781.10	2,781.08	0.06	0.02
P-321	290.00	8.0	PVC	Open		28.86	0.18	2,781.11	2,781.10	0.02	0.01
P-322	133.00	8.0	PVC	Open		12.43	0.08	2,781.11	2,781.11	0.01	0.00
P-323	270.00	8.0	PVC	Open		39.48	0.25	2,781.08	2,781.07	0.04	0.01
P-324	472.00	6.0	PVC	Open		7.99	0.09	2,781.08	2,781.08	0.01	0.00
P-325	298.00	8.0	PVC	Open		144.98	0.93	2,781.33	2,781.20	0.45	0.13
P-326	747.00	8.0	PVC	Open		72.62	0.46	2,781.20	2,781.10	0.13	0.09
P-327	1,154.00	8.0	PVC	Open		54.61	0.35	2,781.20	2,781.11	0.08	0.09
P-328	160.00	8.0	PVC	Open		308.01	1.97	2,781.62	2,781.33	1.84	0.29
P-329	1,094.00	12.0	PVC	Open		690.48	1.96	2,781.62	2,780.41	1.11	1.21
P-330	804.00	12.0	PVC	Open		998.50	2.83	2,783.42	2,781.62	2.23	1.80
P-331	474.00	8.0	PVC	Open		137.13	0.88	2,820.77	2,820.58	0.40	0.19
P-332	221.00	6.0	PVC	Open		3.87	0.04	2,820.77	2,820.77	0.00	0.00
P-333	260.00	8.0	PVC	Open		151.66	0.97	2,820.89	2,820.77	0.49	0.13
P-334	213.00	6.0	PVC	Open		0.00	0.00	2,820.89	2,820.89	0.00	0.00
P-335	138.00	8.0	PVC	Open		3.55	0.02	2,820.89	2,820.89	0.00	0.00
P-336	267.00	8.0	PVC	Open		159.65	1.02	2,821.04	2,820.89	0.54	0.14
P-337	592.00	12.0	PVC	Open		178.91	0.51	2,821.04	2,820.98	0.09	0.05
P-338	260.00	12.0	PVC	Open		348.33	0.99	2,821.12	2,821.04	0.31	0.08
P-339	281.00	8.0	PVC	Open		16.87	0.11	2,821.12	2,821.11	0.01	0.00
P-340	449.00	12.0	PVC	Open		371.41	1.05	2,821.27	2,821.12	0.35	0.16
P-341	174.00	6.0	PVC	Open		4.44	0.05	2,821.11	2,821.11	0.00	0.00
P-342	286.00	8.0	PVC	Open		7.99	0.05	2,821.11	2,821.11	0.00	0.00
P-343	402.00	12.0	PVC	Open		874.16	2.48	2,821.27	2,820.58	1.73	0.70
P-344	1,192.00	12.0	PVC	Open		1,250.58	3.55	2,825.37	2,821.27	3.44	4.10
P-345	504.00	12.0	PVC	Open		396.97	1.13	2,829.96	2,829.76	0.39	0.20
P-346	261.00	12.0	PVC	Open		-132.05	0.37	2,829.94	2,829.96	0.05	0.01
P-347	228.00	8.0	PVC	Open		-55.90	0.36	2,829.92	2,829.94	0.08	0.02
P-348	532.00	12.0	PVC	Open		1,262.90	3.58	2,829.71	2,827.85	3.51	1.86
P-349	172.00	12.0	PVC	Open		849.29	2.41	2,829.99	2,829.71	1.64	0.28
P-350	180.00	8.0	PVC	Open		0.89	0.01	2,829.99	2,829.99	0.00	0.00
P-351	641.00	12.0	PVC	Open		856.39	2.43	2,831.06	2,829.99	1.67	1.07
P-352	215.00	8.0	PVC	Open		529.02	3.38	2,831.06	2,829.96	5.15	1.11
P-353	228.00	12.0	PVC	Open		1,394.29	3.96	2,832.03	2,831.06	4.24	0.97
P-354	388.00	8.0	PVC	Open		7.10	0.05	2,832.03	2,832.03	0.00	0.00
P-355	278.00	12.0	PVC	Open		1,401.39	3.98	2,833.22	2,832.03	4.28	1.19
P-356	862.00	8.0	PVC	Open		258.46	1.65	2,834.36	2,833.22	1.32	1.14
P-357	384.00	12.0	PVC	Open		1,156.24	3.28	2,834.36	2,833.22	2.96	1.14
P-358	445.00	12.0	PVC	Open		1,428.90	4.05	2,836.34	2,834.36	4.45	1.98
P-359	285.00	12.0	PVC	Open		116.58	0.33	2,836.34	2,836.32	0.04	0.01
P-360	433.00	12.0	PVC	Open		-525.10	1.49	2,836.34	2,836.62	0.66	0.29
P-361	110.00	12.0	PVC	Open		413.61	1.17	2,829.76	2,829.71	0.42	0.05
P-362	701.00	12.0	PVC	Open		1,030.15	2.92	2,838.00	2,836.34	2.37	1.66
P-363	278.00	12.0	PVC	Open		1,305.18	3.70	2,839.04	2,838.00	3.74	1.04
P-364	1,033.00	8.0	PVC	Open		259.94	1.66	2,838.00	2,836.62	1.33	1.38

Title: INITIAL RUN

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Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-365	213.00	8.0	PVC	Open		-515.87	3.29	2,836.62	2,837.67	4.90	1.04
P-366	15.00	8.0	PVC	Open		0.00	0.00	2,837.67	2,837.67	0.00	0.00
P-367	928.00	8.0	PVC	Open		515.87	3.29	2,842.22	2,837.67	4.90	4.55
P-370	40.00	8.0	PVC	Open		12.43	0.08	2,772.47	2,772.47	0.01	0.00
P-371	40.00	8.0	PVC	Open		10.66	0.07	2,771.97	2,771.96	0.01	0.00
P-372	360.00	12.0	PVC	Open		270.07	0.77	2,773.62	2,773.55	0.19	0.07
P-373	479.00	8.0	PVC	Open		29.44	0.19	2,771.91	2,771.90	0.03	0.01
P-374	102.00	12.0	PVC	Open		-494.74	1.40	2,777.11	2,777.17	0.59	0.06
P-375	90.00	12.0	PVC	Open		-547.08	1.55	2,777.17	2,777.23	0.71	0.06
P-376	789.00	12.0	PVC	Open		1,053.55	2.99	2,840.99	2,839.04	2.48	1.95
P-377	1,321.00	8.0	PVC	Open		274.70	1.75	2,840.99	2,839.04	1.48	1.95
P-378	203.00	12.0	PVC	Open		1,345.12	3.82	2,841.79	2,840.99	3.96	0.80
P-379	775.00	12.0	PVC	Open		1,294.45	3.67	2,772.62	2,769.77	3.68	2.85
P-380	558.00	12.0	PVC	Open		0.00	0.00	2,820.91	2,820.91	0.00	0.00
P-381	890.00	12.0	PVC	Open		1,294.45	3.67	2,769.77	2,766.50	3.68	3.27
P-383	107.00	12.0	PVC	Open		1,345.12	3.82	2,842.22	2,841.79	3.96	0.42
P-384	154.00	8.0	PVC	Open		224.16	1.43	2,784.63	2,784.47	1.01	0.16
P-385	378.00	6.0	PVC	Open		4.44	0.05	2,784.47	2,784.47	0.00	0.00
P-386	257.00	8.0	PVC	Open		211.74	1.35	2,784.47	2,784.24	0.91	0.23
P-387	333.00	8.0	PVC	Open		6.11	0.04	2,784.24	2,784.24	0.00	0.00
P-388	270.00	8.0	PVC	Open		198.52	1.27	2,784.24	2,784.02	0.80	0.22
P-389	185.00	8.0	PVC	Open		0.00	0.00	2,784.02	2,784.02	0.00	0.00
P-390	419.00	8.0	PVC	Open		480.65	3.07	2,783.81	2,782.01	4.28	1.79
P-391	250.00	8.0	PVC	Open		233.52	1.49	2,782.01	2,781.74	1.09	0.27
P-392	535.00	8.0	PVC	Open		99.85	0.64	2,781.74	2,781.62	0.23	0.12
P-393	113.00	8.0	PVC	Open		7.99	0.05	2,781.62	2,781.62	0.00	0.00
P-394	377.00	8.0	PVC	Open		82.09	0.52	2,781.62	2,781.56	0.16	0.06
P-395	474.00	8.0	PVC	Open		132.73	0.85	2,781.74	2,781.56	0.38	0.18
P-396	250.00	8.0	PVC	Open		207.73	1.33	2,781.56	2,781.34	0.88	0.22
P-397	598.00	8.0	PVC	Open		237.37	1.52	2,782.01	2,781.34	1.12	0.67
P-398	270.00	12.0	PVC	Open		929.17	2.64	2,781.87	2,781.34	1.95	0.53
P-399	202.00	8.0	PVC	Open		3.55	0.02	2,781.87	2,781.87	0.00	0.00
P-400	280.00	12.0	PVC	Open		938.05	2.66	2,782.42	2,781.87	1.98	0.55
P-401	233.00	8.0	PVC	Open		3.55	0.02	2,782.42	2,782.42	0.00	0.00
P-402	310.00	12.0	PVC	Open		1,367.16	3.88	2,781.34	2,780.08	4.08	1.27
P-403	377.00	8.0	PVC	Open		4.44	0.03	2,780.08	2,780.08	0.00	0.00
P-404	252.00	12.0	PVC	Open		1,356.51	3.85	2,780.08	2,779.06	4.02	1.01
P-405	213.00	8.0	PVC	Open		4.44	0.03	2,779.06	2,779.06	0.00	0.00
P-406	535.00	12.0	PVC	Open		1,345.85	3.82	2,779.06	2,776.94	3.96	2.12
P-407	160.00	8.0	PVC	Open		330.36	2.11	2,776.94	2,776.61	2.10	0.34
P-408	308.00	12.0	PVC	Open		1,006.62	2.86	2,776.94	2,776.24	2.27	0.70
P-409	9.00	8.0	PVC	Open		0.00	0.00	2,776.24	2,776.24	0.00	0.00
P-410	265.00	8.0	PVC	Open		23.97	0.15	2,820.93	2,820.93	0.02	0.00
P-411	136.00	8.0	PVC	Open		12.43	0.08	2,820.93	2,820.93	0.01	0.00
P-412	330.00	8.0	PVC	Open		7.10	0.05	2,820.93	2,820.93	0.00	0.00
P-413	942.00	12.0	PVC	Open		137.19	0.39	2,820.98	2,820.93	0.06	0.05
P-414	216.00	8.0	PVC	Open		27.53	0.18	2,820.98	2,820.98	0.02	0.00
P-415	433.00	8.0	PVC	Open		7.99	0.05	2,820.98	2,820.98	0.00	0.00
P-416	265.00	8.0	PVC	Open		12.43	0.08	2,820.98	2,820.98	0.01	0.00
P-417	392.00	12.0	PVC	Open		66.97	0.19	2,836.32	2,836.32	0.02	0.01
P-418	493.00	12.0	PVC	Open		51.88	0.15	2,836.32	2,836.31	0.01	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Fire Flow Analysis Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-419	263.00	6.0	PVC	Open		6.21	0.07	2,836.32	2,836.32	0.01	0.00
P-420	336.00	6.0	PVC	Open		5.33	0.06	2,836.32	2,836.32	0.00	0.00
P-421	907.00	8.0	PVC	Open		19.24	0.12	2,836.32	2,836.31	0.01	0.01
P-422	377.00	12.0	PVC	Open		43.78	0.12	2,836.31	2,836.31	0.01	0.00
P-423	770.00	8.0	PVC	Open		20.60	0.13	2,836.32	2,836.31	0.01	0.01
P-424	20.00	12.0	PVC	Open		0.00	0.00	2,827.85	2,827.85	0.00	0.00
P-425	1,980.00	12.0	PVC	Open		0.00	0.00	2,827.70	2,827.70	0.00	0.00
P-426	209.00	12.0	PVC	Open		0.00	0.00	2,827.70	2,827.70	0.00	0.00
P-427	207.00	12.0	PVC	Open		0.00	0.00	2,827.70	2,827.70	0.00	0.00
P-428	251.00	12.0	PVC	Open		829.38	2.35	2,784.63	2,784.23	1.57	0.39
P-429	281.00	4.0	PVC	Open		11.53	0.29	2,777.14	2,777.10	0.14	0.04
P-430	370.00	8.0	PVC	Open		124.57	0.80	2,772.38	2,772.26	0.34	0.13
P-431	54.00	6.0	PVC	Open		0.88	0.01	2,772.26	2,772.26	0.00	0.00
P-432	55.00	6.0	PVC	Open		2.76	0.03	2,772.26	2,772.26	0.00	0.00
P-433	506.00	8.0	PVC	Open		115.63	0.74	2,772.26	2,772.11	0.30	0.15
P-434	155.00	12.0	PVC	Open		40.11	0.11	2,772.05	2,772.05	0.01	0.00
P-435	467.00	8.0	PVC	Open		-3.55	0.02	2,771.95	2,771.95	0.00	0.00
P-436	360.00	8.0	PVC	Open		86.46	0.55	2,772.11	2,772.05	0.17	0.06
P-437	760.00	8.0	PVC	Open		-28.12	0.18	2,772.09	2,772.11	0.02	0.02
P-438	348.00	8.0	PVC	Open		65.23	0.42	2,772.09	2,772.06	0.10	0.04
P-439	51.00	12.0	PVC	Open		56.53	0.16	2,772.06	2,772.05	0.01	0.00
P-440	18.00	12.0	PVC	Open		0.00	0.00	2,772.05	2,772.05	0.00	0.00
P-441	642.00	12.0	PVC	Open		54.53	0.15	2,772.05	2,772.05	0.01	0.01
P-442	350.00	12.0	PVC	Open		13.76	0.04	2,772.05	2,772.05	0.00	0.00
P-443	336.00	12.0	PVC	Open		115.35	0.33	2,772.05	2,772.03	0.04	0.01
P-444	829.00	12.0	PVC	Open		115.35	0.33	2,772.03	2,772.00	0.04	0.03
P-445	120.00	8.0	PVC	Open		234.46	1.50	2,773.35	2,773.22	1.10	0.13
P-446	470.00	8.0	PVC	Open		1.48	0.01	2,773.22	2,773.22	0.00	0.00
P-447	265.00	12.0	PVC	Open		115.35	0.33	2,772.00	2,771.99	0.04	0.01
P-448	337.00	8.0	PVC	Open		1.26	0.01	2,771.90	2,771.90	0.00	0.00
P-449	39.00	8.0	PVC	Open		5.14	0.03	2,771.99	2,771.99	0.00	0.00
P-450	705.00	12.0	PVC	Open		110.21	0.31	2,771.99	2,771.96	0.04	0.03
P-451	197.00	12.0	PVC	Open		93.99	0.27	2,771.96	2,771.96	0.03	0.01
P-452	250.00	12.0	PVC	Open		0.00	0.00	2,772.05	2,772.05	0.00	0.00
P-453	546.00	8.0	PVC	Open		4.35	0.03	2,771.89	2,771.89	0.00	0.00
P-454	526.00	8.0	PVC	Open		28.17	0.18	2,771.90	2,771.89	0.02	0.01
P-455	730.00	8.0	PVC	Open		15.85	0.10	2,771.88	2,771.87	0.01	0.01
P-456	236.00	8.0	PVC	Open		0.40	0.00	2,771.90	2,771.90	0.00	0.00
P-457	235.00	12.0	PVC	Open		7.29	0.02	2,771.90	2,771.90	0.00	0.00
P-458	311.00	12.0	PVC	Open		7.09	0.02	2,771.90	2,771.90	0.00	0.00
P-459	314.00	12.0	PVC	Open		0.00	0.00	2,771.90	2,771.90	0.00	0.00
P-460	331.00	6.0	PVC	Open		0.00	0.00	2,771.90	2,771.90	0.00	0.00
P-461	399.00	12.0	PVC	Open		-6.89	0.02	2,771.90	2,771.90	0.00	0.00
P-462	322.00	12.0	PVC	Open		-62.71	0.18	2,771.90	2,771.90	0.01	0.00
P-463	711.00	12.0	PVC	Open		-63.68	0.18	2,771.90	2,771.91	0.01	0.01
P-464	355.00	12.0	PVC	Open		-55.82	0.16	2,771.90	2,771.90	0.01	0.00
P-465	158.00	8.0	PVC	Open		35.96	0.23	2,771.90	2,771.89	0.04	0.01
P-466	432.00	8.0	PVC	Open		-9.74	0.06	2,771.89	2,771.89	0.00	0.00
P-467	475.00	8.0	PVC	Open		-9.36	0.06	2,771.89	2,771.89	0.00	0.00
P-468	316.00	8.0	PVC	Open		-6.84	0.04	2,771.89	2,771.89	0.00	0.00
P-469	347.00	12.0	PVC	Open		-15.81	0.04	2,771.89	2,771.89	0.00	0.00

Title: INITIAL RUN

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Watertown, CT 06795 USA

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Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-470	178.00	12.0	PVC	Open		-19.86	0.06	2,771.89	2,771.89	0.00	0.00
P-471	660.00	12.0	PVC	Open		-17.60	0.05	2,771.89	2,771.89	0.00	0.00
P-472	224.00	12.0	PVC	Open		-17.22	0.05	2,771.89	2,771.89	0.00	0.00
P-473	296.00	12.0	PVC	Open		0.11	0.00	2,771.89	2,771.89	0.00	0.00
P-474	153.00	12.0	PVC	Open		-19.86	0.06	2,771.89	2,771.90	0.00	0.00
P-476	304.00	8.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-477	692.00	8.0	PVC	Open		-13.77	0.09	2,771.89	2,771.89	0.01	0.00
P-478	13.00	8.0	PVC	Open		0.31	0.00	2,771.91	2,771.91	0.00	0.00
P-479	84.00	8.0	PVC	Open		-0.45	0.00	2,771.87	2,771.87	0.00	0.00
P-480	200.00	12.0	PVC	Open		270.07	0.77	2,773.55	2,773.51	0.19	0.04
P-481	550.00	12.0	PVC	Open		260.30	0.74	2,773.51	2,773.41	0.18	0.10
P-482	703.00	8.0	PVC	Open		61.57	0.39	2,773.41	2,773.35	0.09	0.07
P-483	960.00	12.0	PVC	Open		191.75	0.54	2,773.41	2,773.31	0.10	0.10
P-484	265.00	12.0	PVC	Open		221.37	0.63	2,773.31	2,773.28	0.13	0.04
P-485	447.00	12.0	PVC	Open		21.50	0.06	2,836.31	2,836.31	0.00	0.00
P-486	160.00	12.0	PVC	Open		17.96	0.05	2,836.31	2,836.31	0.00	0.00
P-487	159.00	12.0	PVC	Open		0.00	0.00	2,836.31	2,836.31	0.00	0.00
P-488	981.00	8.0	PVC	Open		11.63	0.07	2,836.31	2,836.31	0.01	0.01
P-489	135.00	12.0	PVC	Open		0.00	0.00	2,836.31	2,836.31	0.00	0.00
P-490	338.00	8.0	PVC	Open		20.95	0.13	2,771.77	2,771.76	0.01	0.00
P-491	317.00	8.0	PVC	Open		2.33	0.01	2,771.76	2,771.76	0.00	0.00
P-492	1,010.00	8.0	PVC	Open		13.51	0.09	2,771.76	2,771.76	0.01	0.01
P-493	314.00	8.0	PVC	Open		13.32	0.09	2,771.76	2,771.76	0.01	0.00
P-494	159.00	8.0	PVC	Open		11.35	0.07	2,771.76	2,771.76	0.00	0.00
P-495	527.00	8.0	PVC	Open		11.36	0.07	2,771.76	2,771.76	0.00	0.00
P-496	134.00	12.0	PVC	Open		615.36	1.75	2,787.01	2,786.89	0.89	0.12
P-498	1.00	96.0	PVC	Open		-550.96	0.02	2,493.50	2,493.50	0.00	0.00
P-499	356.00	12.0	PVC	Open		397.93	1.13	2,786.84	2,786.70	0.39	0.14
P-500	259.00	12.0	PVC	Open		391.39	1.11	2,786.70	2,786.60	0.38	0.10
P-501	152.00	12.0	PVC	Open		260.00	0.74	2,786.62	2,786.59	0.18	0.03
P-503	30.00	8.0	PVC	Open		0.00	0.00	2,786.64	2,786.64	0.00	0.00
P-504	120.00	8.0	PVC	Open		41.42	0.26	2,786.64	2,786.64	0.05	0.01
P-505	30.00	8.0	PVC	Open		0.00	0.00	2,786.64	2,786.64	0.00	0.00
P-507	27.00	8.0	PVC	Open		0.00	0.00	2,786.65	2,786.65	0.00	0.00
P-508	197.00	8.0	PVC	Open		-11.40	0.07	2,786.65	2,786.65	0.00	0.00
P-509	785.00	8.0	PVC	Open		-9.62	0.06	2,786.65	2,786.65	0.00	0.00
P-510	222.00	8.0	PVC	Open		1.78	0.01	2,786.65	2,786.65	0.00	0.00
P-511	683.00	8.0	PVC	Open		-4.30	0.03	2,786.65	2,786.65	0.00	0.00
P-512	819.00	8.0	PVC	Open		1.78	0.01	2,786.65	2,786.65	0.00	0.00
P-513	283.00	8.0	PVC	Open		-0.74	0.00	2,786.65	2,786.65	0.00	0.00
P-514	136.00	6.0	PVC	Open		0.00	0.00	2,786.70	2,786.70	0.00	0.00
P-515	560.00	6.0	PVC	Open		-0.00	0.00	2,771.76	2,771.76	0.00	0.00
P-516	19.00	8.0	PVC	Open		-302.04	1.93	2,776.35	2,776.38	1.76	0.03
P-517	0.25	96.0	Steel	Open		1,365.99	0.06	2,419.00	2,419.00	0.00	0.00
P-518	250.00	8.0	PVC	Open		8.47	0.05	2,772.10	2,772.10	0.00	0.00
P-519	673.00	8.0	PVC	Open		220.95	1.41	2,773.22	2,772.56	0.98	0.66
P-520	32.00	8.0	PVC	Open		79.09	0.50	2,773.35	2,773.35	0.14	0.00
P-521	769.00	8.0	PVC	Open		99.84	0.64	2,772.56	2,772.38	0.23	0.17
P-522	105.00	8.0	PVC	Open		19.44	0.12	2,771.96	2,771.96	0.01	0.00
P-523	305.00	12.0	PVC	Open		-72.97	0.21	2,771.95	2,771.96	0.02	0.01
P-524	94.00	6.0	PVC	Open		-3.44	0.04	2,771.95	2,771.95	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-525	232.00	12.0	PVC	Open		-75.76	0.21	2,771.95	2,771.95	0.02	0.00
P-526	294.00	12.0	PVC	Open		-50.11	0.14	2,771.94	2,771.95	0.01	0.00
P-527	248.00	8.0	PVC	Open		1.17	0.01	2,771.94	2,771.94	0.00	0.00
P-528	83.00	8.0	PVC	Open		1.17	0.01	2,771.94	2,771.94	0.00	0.00
P-529	115.00	12.0	PVC	Open		-48.94	0.14	2,771.94	2,771.94	0.01	0.00
P-530	384.00	12.0	PVC	Open		-48.94	0.14	2,771.94	2,771.94	0.01	0.00
P-531	153.00	12.0	PVC	Open		-48.94	0.14	2,771.94	2,771.94	0.01	0.00
P-532	216.00	12.0	PVC	Open		-48.94	0.14	2,771.94	2,771.94	0.01	0.00
P-533	169.00	12.0	PVC	Open		-48.83	0.14	2,771.93	2,771.94	0.01	0.00
P-534	163.00	12.0	PVC	Open		-48.83	0.14	2,771.93	2,771.93	0.01	0.00
P-535	222.00	12.0	PVC	Open		-48.83	0.14	2,771.93	2,771.93	0.01	0.00
P-536	395.00	12.0	PVC	Open		-47.15	0.13	2,771.93	2,771.93	0.01	0.00
P-537	322.00	8.0	PVC	Open		-16.85	0.11	2,771.93	2,771.93	0.01	0.00
P-538	574.00	8.0	PVC	Open		-16.85	0.11	2,771.93	2,771.94	0.01	0.01
P-539	315.00	8.0	PVC	Open		-17.08	0.11	2,771.94	2,771.94	0.01	0.00
P-540	306.00	8.0	PVC	Open		-17.69	0.11	2,771.94	2,771.94	0.01	0.00
P-541	359.00	8.0	PVC	Open		-17.69	0.11	2,771.94	2,771.95	0.01	0.00
P-542	145.00	8.0	PVC	Open		0.61	0.00	2,771.94	2,771.94	0.00	0.00
P-543	289.00	8.0	PVC	Open		0.00	0.00	2,771.94	2,771.94	0.00	0.00
P-544	387.00	8.0	PVC	Open		0.39	0.00	2,771.94	2,771.94	0.00	0.00
P-545	57.00	12.0	PVC	Open		0.00	0.00	2,771.94	2,771.94	0.00	0.00
P-546	50.00	8.0	PVC	Open		0.61	0.00	2,771.94	2,771.94	0.00	0.00
P-547	329.00	8.0	PVC	Open		0.22	0.00	2,771.94	2,771.94	0.00	0.00
P-548	284.00	8.0	PVC	Open		0.03	0.00	2,771.94	2,771.94	0.00	0.00
P-549	284.00	8.0	PVC	Open		0.19	0.00	2,771.94	2,771.94	0.00	0.00
P-550	210.00	8.0	PVC	Open		0.11	0.00	2,771.94	2,771.94	0.00	0.00
P-551	171.00	8.0	PVC	Open		0.01	0.00	2,771.94	2,771.94	0.00	0.00
P-552	269.00	8.0	PVC	Open		-4.05	0.03	2,771.89	2,771.89	0.00	0.00
P-553	161.00	8.0	PVC	Open		-4.05	0.03	2,771.89	2,771.89	0.00	0.00
P-554	90.00	8.0	PVC	Open		0.00	0.00	2,771.93	2,771.93	0.00	0.00
P-555	63.00	12.0	PVC	Open		-64.00	0.18	2,771.93	2,771.93	0.02	0.00
P-556	252.00	8.0	PVC	Open		0.02	0.00	2,771.94	2,771.94	0.00	0.00
P-557	256.00	12.0	PVC	Open		-64.00	0.18	2,771.92	2,771.93	0.01	0.00
P-558	702.00	12.0	PVC	Open		-64.00	0.18	2,771.91	2,771.92	0.01	0.01
P-559	110.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-560	275.00	8.0	PVC	Open		-4.05	0.03	2,771.89	2,771.89	0.00	0.00
P-561	436.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-562	79.00	8.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-563	442.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-564	68.00	8.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-565	42.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-566	86.00	8.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-567	433.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-568	64.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-569	222.00	8.0	PVC	Open		3.55	0.02	2,771.77	2,771.77	0.00	0.00
P-570	307.00	8.0	PVC	Open		24.85	0.16	2,771.76	2,771.76	0.02	0.01
P-571	220.00	8.0	PVC	Open		4.44	0.03	2,771.76	2,771.76	0.00	0.00
P-572	247.00	8.0	PVC	Open		16.86	0.11	2,771.76	2,771.76	0.01	0.00
P-573	254.00	6.0	PVC	Open		5.33	0.06	2,771.76	2,771.76	0.00	0.00
P-574	400.00	8.0	PVC	Open		7.10	0.05	2,771.76	2,771.76	0.00	0.00
P-575	287.00	8.0	PVC	Open		6.21	0.04	2,771.76	2,771.76	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-576	606.00	12.0	PVC	Open		107.35	0.30	2,820.93	2,820.91	0.04	0.02
P-577	326.00	12.0	PVC	Open		107.35	0.30	2,820.91	2,820.90	0.04	0.01
P-578	16.00	8.0	PVC	Open		33.75	0.22	2,820.90	2,820.90	0.03	0.00
P-579	125.00	12.0	PVC	Open		73.60	0.21	2,820.90	2,820.90	0.02	0.00
P-580	48.00	8.0	PVC	Open		0.00	0.00	2,820.90	2,820.90	0.00	0.00
P-581	307.00	12.0	PVC	Open		49.20	0.14	2,820.90	2,820.89	0.01	0.00
P-582	1,252.00	8.0	PVC	Open		12.85	0.08	2,820.90	2,820.89	0.01	0.01
P-583	906.00	8.0	PVC	Open		11.90	0.08	2,820.89	2,820.89	0.01	0.00
P-584	151.00	8.0	PVC	Open		14.22	0.09	2,820.89	2,820.89	0.01	0.00
P-585	259.00	12.0	PVC	Open		28.42	0.08	2,820.89	2,820.89	0.00	0.00
P-586	471.00	12.0	PVC	Open		14.21	0.04	2,820.89	2,820.89	0.00	0.00
P-588	320.00	8.0	PVC	Open		54.23	0.35	2,773.09	2,773.06	0.08	0.02
P-589	481.00	8.0	PVC	Open		-72.70	0.46	2,773.19	2,773.25	0.13	0.06
P-590	480.00	8.0	PVC	Open		6.21	0.04	2,773.19	2,773.19	0.00	0.00
P-591	500.00	8.0	PVC	Open		7.10	0.05	2,773.19	2,773.19	0.00	0.00
P-592	334.00	8.0	PVC	Open		-48.74	0.31	2,773.17	2,773.19	0.06	0.02
P-593	250.00	6.0	PVC	Open		5.33	0.06	2,773.17	2,773.17	0.00	0.00
P-594	832.00	8.0	PVC	Open		71.40	0.46	2,773.17	2,773.06	0.12	0.10
P-595	350.00	8.0	PVC	Open		39.53	0.25	2,773.18	2,773.17	0.04	0.01
P-596	325.00	8.0	PVC	Open		6.22	0.04	2,773.06	2,773.06	0.00	0.00
P-597	223.00	8.0	PVC	Open		5.33	0.03	2,773.25	2,773.25	0.00	0.00
P-598	460.00	8.0	PVC	Open		42.43	0.27	2,773.09	2,773.06	0.05	0.02
P-599	540.00	12.0	PVC	Open		123.35	0.35	2,773.28	2,773.25	0.05	0.02
P-600	660.00	8.0	PVC	Open		66.58	0.42	2,773.25	2,773.18	0.11	0.07
P-601	160.00	8.0	PVC	Open		-21.72	0.14	2,773.18	2,773.18	0.02	0.00
P-602	120.00	6.0	PVC	Open		3.55	0.04	2,773.18	2,773.18	0.00	0.00
P-603	200.00	8.0	PVC	Open		-15.51	0.10	2,773.18	2,773.18	0.01	0.00
P-604	375.00	8.0	PVC	Open		103.76	0.66	2,773.18	2,773.09	0.24	0.09
P-605	500.00	8.0	PVC	Open		93.57	0.60	2,773.28	2,773.18	0.20	0.10
P-606	466.00	8.0	PVC	Open		2.05	0.01	2,776.61	2,776.61	0.00	0.00
P-607	121.00	8.0	PVC	Open		322.09	2.06	2,776.61	2,776.37	2.00	0.24
P-608	308.00	8.0	PVC	Open		306.93	1.96	2,776.37	2,775.80	1.82	0.56
P-609	198.00	12.0	PVC	Open		995.52	2.82	2,776.24	2,775.80	2.22	0.44
P-610	199.00	8.0	PVC	Open		18.46	0.12	2,771.77	2,771.77	0.01	0.00
P-611	673.00	8.0	PVC	Open		15.79	0.10	2,771.77	2,771.76	0.01	0.01
P-612	91.00	8.0	PVC	Open		0.00	0.00	2,771.76	2,771.76	0.00	0.00
P-613	354.00	8.0	PVC	Open		50.39	0.32	2,773.26	2,773.24	0.07	0.02
P-614	739.00	12.0	PVC	Open		0.00	0.00	2,777.11	2,777.11	0.00	0.00
P-615	878.00	12.0	PVC	Open		0.00	0.00	2,777.11	2,777.11	0.00	0.00
P-616	642.00	12.0	PVC	Open		0.00	0.00	2,777.11	2,777.11	0.00	0.00
P-617	35.00	8.0	PVC	Open		2.93	0.02	2,794.70	2,794.70	0.00	0.00
P-618	246.00	8.0	PVC	Open		0.00	0.00	2,771.90	2,771.90	0.00	0.00
P-619	179.00	8.0	PVC	Open		75.78	0.48	2,772.12	2,772.10	0.14	0.02
P-620	215.00	6.0	PVC	Open		3.55	0.04	2,773.24	2,773.23	0.00	0.00
P-621	780.00	8.0	PVC	Open		19.83	0.13	2,773.24	2,773.23	0.01	0.01
P-622	123.00	6.0	PVC	Open		1.78	0.02	2,773.23	2,773.23	0.00	0.00
P-623	286.00	6.0	PVC	Open		10.95	0.12	2,773.23	2,773.22	0.02	0.01
P-624	160.00	6.0	PVC	Open		2.66	0.03	2,773.22	2,773.22	0.00	0.00
P-625	660.00	8.0	PVC	Open		1.19	0.01	2,773.22	2,773.22	0.00	0.00
P-626	225.00	8.0	PVC	Open		14.21	0.09	2,773.22	2,773.22	0.01	0.00
P-627	357.00	8.0	PVC	Open		17.46	0.11	2,773.22	2,773.22	0.01	0.00

Title: INITIAL RUN

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Haestad Methods Solution Center

Watertown, CT 06795 USA

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-628	114.00	6.0	PVC	Open		2.66	0.03	2,773.22	2,773.22	0.00	0.00
P-629	395.00	8.0	PVC	Open		22.79	0.15	2,773.23	2,773.22	0.02	0.01
P-630	97.00	6.0	PVC	Open		1.78	0.02	2,773.23	2,773.23	0.00	0.00
P-631	305.00	8.0	PVC	Open		29.89	0.19	2,773.24	2,773.23	0.03	0.01
P-632	1,280.00	8.0	PVC	Open		-8.07	0.05	2,773.24	2,773.24	0.00	0.00
P-633	380.00	8.0	PVC	Open		1.78	0.01	2,773.22	2,773.22	0.00	0.00
P-634	316.00	8.0	PVC	Open		75.78	0.48	2,772.15	2,772.11	0.14	0.04
P-635	230.00	8.0	PVC	Open		48.42	0.31	2,772.11	2,772.10	0.06	0.01
P-636	60.00	8.0	PVC	Open		54.46	0.35	2,772.10	2,772.09	0.08	0.00
P-637	602.00	8.0	PVC	Open		14.52	0.09	2,772.10	2,772.10	0.01	0.00
P-638	650.00	8.0	PVC	Open		21.62	0.14	2,772.11	2,772.10	0.02	0.01
P-639	346.00	8.0	PVC	Open		29.44	0.19	2,771.92	2,771.91	0.03	0.01
P-640	269.00	8.0	PVC	Open		71.01	0.45	2,771.92	2,771.89	0.12	0.03
P-641	215.00	8.0	PVC	Open		42.51	0.27	2,771.89	2,771.88	0.05	0.01
P-642	245.00	8.0	PVC	Open		22.21	0.14	2,771.88	2,771.87	0.02	0.00
P-643	325.00	8.0	PVC	Open		13.26	0.08	2,771.87	2,771.87	0.01	0.00
P-644	190.00	8.0	PVC	Open		5.97	0.04	2,771.87	2,771.87	0.00	0.00
P-645	503.00	8.0	PVC	Open		28.50	0.18	2,771.89	2,771.88	0.02	0.01
P-646	268.00	8.0	PVC	Open		19.26	0.12	2,771.88	2,771.87	0.01	0.00
P-647	349.00	8.0	PVC	Open		10.47	0.07	2,771.87	2,771.87	0.00	0.00
P-648	172.00	8.0	PVC	Open		7.99	0.05	2,771.87	2,771.87	0.00	0.00
P-649	299.00	8.0	PVC	Open		7.29	0.05	2,771.87	2,771.87	0.00	0.00
P-650	355.00	8.0	PVC	Open		8.96	0.06	2,771.87	2,771.87	0.00	0.00
P-651	265.00	8.0	PVC	Open		12.95	0.08	2,771.88	2,771.88	0.01	0.00
P-652	260.00	8.0	PVC	Open		12.87	0.08	2,771.87	2,771.87	0.01	0.00
P-653	432.00	8.0	PVC	Open		6.28	0.04	2,771.87	2,771.87	0.00	0.00
P-654	153.00	8.0	PVC	Open		6.59	0.04	2,771.87	2,771.87	0.00	0.00
P-655	154.00	8.0	PVC	Open		6.90	0.04	2,771.87	2,771.87	0.00	0.00
P-656	96.00	8.0	PVC	Open		28.72	0.18	2,771.87	2,771.87	0.02	0.00
P-657	191.00	8.0	PVC	Open		11.97	0.08	2,771.87	2,771.87	0.01	0.00
P-658	46.00	8.0	PVC	Open		-7.56	0.05	2,771.87	2,771.87	0.01	0.00
P-659	352.00	8.0	PVC	Open		19.52	0.12	2,771.88	2,771.87	0.01	0.00
P-660	566.00	8.0	PVC	Open		16.75	0.11	2,771.88	2,771.87	0.01	0.01
P-661	219.00	8.0	PVC	Open		36.27	0.23	2,771.89	2,771.88	0.04	0.01
P-662	175.00	8.0	PVC	Open		3.55	0.02	2,771.87	2,771.87	0.00	0.00
P-663	197.00	8.0	PVC	Open		7.10	0.05	2,771.87	2,771.87	0.00	0.00
P-664	259.00	8.0	PVC	Open		14.71	0.09	2,771.87	2,771.87	0.01	0.00
P-665	637.00	8.0	PVC	Open		-64.61	0.41	2,829.88	2,829.94	0.10	0.07
P-666	120.00	8.0	PVC	Open		70.80	0.45	2,829.88	2,829.86	0.12	0.01
P-667	1,504.00	8.0	PVC	Open		-1.12	0.01	2,829.88	2,829.88	0.00	0.00
P-668	167.00	6.0	PVC	Open		4.44	0.05	2,829.88	2,829.88	0.00	0.00
P-669	251.00	8.0	PVC	Open		16.63	0.11	2,829.88	2,829.88	0.01	0.00
P-670	104.00	6.0	PVC	Open		3.55	0.04	2,829.88	2,829.88	0.00	0.00
P-671	231.00	8.0	PVC	Open		21.07	0.13	2,829.88	2,829.88	0.01	0.00
P-672	341.00	8.0	PVC	Open		22.40	0.14	2,829.88	2,829.88	0.02	0.01
P-673	337.00	8.0	PVC	Open		47.03	0.30	2,829.90	2,829.88	0.06	0.02
P-674	285.00	8.0	PVC	Open		5.33	0.03	2,829.90	2,829.90	0.00	0.00
P-675	199.00	6.0	PVC	Open		5.33	0.06	2,829.90	2,829.90	0.00	0.00
P-676	283.00	8.0	PVC	Open		55.90	0.36	2,829.92	2,829.90	0.08	0.02
P-677	397.00	8.0	PVC	Open		16.65	0.11	2,829.76	2,829.76	0.01	0.00
P-678	865.00	8.0	PVC	Open		17.46	0.11	2,829.77	2,829.76	0.01	0.01

Title: INITIAL RUN

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Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen- Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-679	123.00	8.0	PVC	Open		0.00	0.00	2,829.77	2,829.77	0.00	0.00
P-680	231.00	8.0	PVC	Open		29.00	0.19	2,829.78	2,829.77	0.02	0.01
P-681	142.00	8.0	PVC	Open		57.48	0.37	2,829.79	2,829.78	0.08	0.01
P-682	1,166.00	8.0	PVC	Open		19.60	0.13	2,829.78	2,829.76	0.01	0.01
P-683	818.00	8.0	PVC	Open		0.00	0.00	2,820.89	2,820.89	0.00	0.00
P-684	325.00	12.0	PVC	Open		1,005.60	2.85	2,784.15	2,783.42	2.26	0.74
P-685	51.00	8.0	PVC	Open		14.21	0.09	2,820.89	2,820.89	0.01	0.00
P-686	53.00	8.0	PVC	Open		14.21	0.09	2,820.89	2,820.89	0.01	0.00
P-687	22.00	6.0	PVC	Open		216.59	2.46	2,786.89	2,786.80	4.00	0.09
P-688	146.00	12.0	PVC	Open		398.77	1.13	2,786.89	2,786.84	0.39	0.06
P-689	70.00	12.0	PVC	Open		391.39	1.11	2,786.60	2,786.57	0.38	0.03
P-691	524.00	8.0	PVC	Open		141.42	0.90	2,786.80	2,786.58	0.43	0.22
P-692	113.00	6.0	PVC	Open		0.00	0.00	2,786.58	2,786.58	0.00	0.00
P-693	166.00	6.0	PVC	Open		0.50	0.01	2,786.84	2,786.84	0.00	0.00
P-694	689.00	8.0	PVC	Open		141.19	0.90	2,786.58	2,786.29	0.43	0.29
P-695	356.00	12.0	PVC	Open		580.69	1.65	2,786.57	2,786.29	0.80	0.28
P-696	63.00	12.0	PVC	Open		721.88	2.05	2,786.29	2,786.21	1.20	0.08
P-697	126.00	6.0	PVC	Open		0.00	0.00	2,786.21	2,786.21	0.00	0.00
P-698	248.00	12.0	PVC	Open		721.88	2.05	2,786.21	2,785.91	1.20	0.30
P-699	173.00	8.0	PVC	Open		14.13	0.09	2,785.91	2,785.91	0.01	0.00
P-700	11.00	8.0	PVC	Open		0.00	0.00	2,785.91	2,785.91	0.00	0.00
P-701	280.00	8.0	PVC	Open		14.12	0.09	2,785.91	2,785.91	0.01	0.00
P-702	156.00	8.0	PVC	Open		8.98	0.06	2,785.91	2,785.91	0.00	0.00
P-703	299.00	8.0	PVC	Open		0.00	0.00	2,785.91	2,785.91	0.00	0.00
P-704	279.00	8.0	PVC	Open		0.00	0.00	2,785.91	2,785.91	0.00	0.00
P-705	582.00	12.0	PVC	Open		707.75	2.01	2,785.91	2,785.24	1.16	0.67
P-706	10.00	6.0	PVC	Open		0.00	0.00	2,785.24	2,785.24	0.00	0.00
P-707	1,401.00	12.0	PVC	Open		705.14	2.00	2,785.24	2,783.62	1.15	1.61
P-708	201.00	8.0	PVC	Open		0.00	0.00	2,783.62	2,783.62	0.00	0.00
P-709	14.00	8.0	PVC	Open		0.00	0.00	2,783.62	2,783.62	0.00	0.00
P-710	132.00	12.0	PVC	Open		703.30	2.00	2,783.62	2,783.47	1.14	0.15
P-711	335.00	12.0	PVC	Open		433.00	1.23	2,783.06	2,782.90	0.46	0.15
P-712	323.00	12.0	PVC	Open		0.00	0.00	2,782.90	2,782.90	0.00	0.00
P-713	228.00	12.0	PVC	Open		433.00	1.23	2,782.90	2,782.80	0.46	0.10
P-714	8.00	12.0	PVC	Open		0.00	0.00	2,782.80	2,782.80	0.00	0.00
P-715	163.00	12.0	PVC	Open		433.00	1.23	2,782.80	2,782.72	0.46	0.07
P-716	160.00	6.0	PVC	Open		0.00	0.00	2,782.72	2,782.72	0.00	0.00
P-718	620.00	8.0	PVC	Open		143.94	0.92	2,782.47	2,782.20	0.44	0.27
P-719	471.00	12.0	PVC	Open		0.11	0.00	2,771.89	2,771.89	0.00	0.00
P-720	153.00	12.0	PVC	Open		0.11	0.00	2,771.89	2,771.89	0.00	0.00
P-721	14.00	12.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-722	1,051.00	12.0	PVC	Open		0.10	0.00	2,771.89	2,771.89	0.00	0.00
P-723	141.00	12.0	PVC	Open		0.10	0.00	2,771.89	2,771.89	0.00	0.00
P-724	320.00	12.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-725	502.00	12.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-726	214.00	12.0	PVC	Open		0.00	0.00	2,771.89	2,771.89	0.00	0.00
P-727	372.00	8.0	PVC	Open		50.61	0.32	2,774.87	2,774.84	0.07	0.02
P-728	156.00	8.0	PVC	Open		14.21	0.09	2,774.84	2,774.84	0.01	0.00
P-729	708.00	8.0	PVC	Open		23.97	0.15	2,774.84	2,774.83	0.02	0.01
P-730	797.00	8.0	PVC	Open		-12.85	0.08	2,772.96	2,772.96	0.01	0.00
P-731	160.00	8.0	PVC	Open		-15.99	0.10	2,772.96	2,772.96	0.01	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-732	48.00	12.0	PVC	Open		0.00	0.00	2,787.01	2,787.01	0.00	0.00
P-733	425.00	8.0	PVC	Open		-5.94	0.04	2,772.23	2,772.24	0.00	0.00
P-735	62.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-736	65.00	12.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-737	33.00	8.0	PVC	Open		0.00	0.00	2,771.92	2,771.92	0.00	0.00
P-738	136.00	8.0	PVC	Open		-11.19	0.07	2,771.89	2,771.89	0.01	0.00
P-739	392.00	12.0	PVC	Open		-105.39	0.30	2,773.26	2,773.28	0.03	0.01
P-740	14.00	8.0	PVC	Open		6.39	0.04	2,773.26	2,773.26	0.00	0.00
P-741	414.00	12.0	PVC	Open		-99.00	0.28	2,773.25	2,773.26	0.03	0.01
P-742	275.00	8.0	PVC	Open		44.01	0.28	2,773.28	2,773.26	0.05	0.01
P-743	120.00	8.0	PVC	Open		80.20	0.51	2,772.25	2,772.23	0.15	0.02
P-744	43.00	12.0	PVC	Open		1,262.90	3.58	2,827.85	2,827.70	3.50	0.15
P-747	1,566.00	12.0	PVC	Open		997.05	2.83	2,790.50	2,787.01	2.23	3.49
P-749	50.00	96.0	PVC	Open		1,016.70	0.05	2,422.00	2,422.00	0.00	0.00
P-751	37.00	8.0	PVC	Open		0.00	0.00	2,787.01	2,787.01	0.00	0.00
P-752	42.00	8.0	PVC	Open		0.00	0.00	2,787.01	2,787.01	0.00	0.00
P-753	697.00	8.0	PVC	Open		41.15	0.26	2,773.35	2,773.31	0.05	0.03
P-754	420.00	6.0	PVC	Open		8.07	0.09	2,772.12	2,772.11	0.01	0.00
P-755	452.00	6.0	PVC	Open		36.65	0.42	2,776.55	2,776.49	0.15	0.07
P-756	895.00	8.0	PVC	Open		0.29	0.00	2,836.31	2,836.31	0.00	0.00
P-757	777.00	8.0	PVC	Open		3.73	0.02	2,836.31	2,836.31	0.00	0.00
P-758	967.00	8.0	PVC	Open		9.98	0.06	2,836.31	2,836.31	0.00	0.00
P-759	920.00	8.0	PVC	Open		39.15	0.25	2,771.82	2,771.78	0.04	0.04
P-760	2,830.00	12.0	PVC	Open		32.97	0.09	2,773.25	2,773.23	0.00	0.01
P-762	30.00	8.0	PVC	Open		0.00	0.00	2,772.92	2,772.92	0.00	0.00
P-763	833.00	12.0	PVC	Open		1,350.84	3.83	2,794.70	2,791.37	3.99	3.32
P-764	330.00	8.0	PVC	Open		566.54	3.62	2,772.92	2,770.99	5.87	1.94
P-765	140.00	6.0	Steel	Open		435.36	4.94	2,543.00	2,541.14	13.29	1.86
P-766	2.00	12.0	PVC	Open		1,005.59	2.85	2,820.58	2,820.57	2.32	0.00
P-767	356.00	8.0	PVC	Open		567.11	3.62	2,775.02	2,772.92	5.88	2.09
P-768	239.00	12.0	PVC	Open		0.00	0.00	2,769.77	2,769.77	0.00	0.00
P-769	2.00	12.0	PVC	Open		0.00	0.00	2,795.85	2,795.85	0.00	0.00
P-844	254.00	12.0	PVC	Open		1,253.07	3.55	2,826.25	2,825.37	3.45	0.88
P-845	230.00	12.0	PVC	Open		1,254.32	3.56	2,827.05	2,826.25	3.46	0.80
P-846	188.00	12.0	PVC	Open		1,255.57	3.56	2,827.70	2,827.05	3.47	0.65
P-847	383.00	8.0	PVC	Open		1.86	0.01	2,825.37	2,825.37	0.00	0.00
P-848	176.00	8.0	PVC	Open		1.25	0.01	2,826.25	2,826.25	0.00	0.00
P-849	168.00	8.0	PVC	Open		1.25	0.01	2,827.05	2,827.05	0.00	0.00
P-900	587.00	12.0	PVC	Open		1,860.99	5.28	2,846.57	2,842.22	7.42	4.35
P-901	2.00	8.0	Steel	Open		565.71	3.61	2,773.79	2,773.78	5.25	0.01
P-904	143.00	12.0	PVC	Open		1,365.99	3.88	2,796.43	2,795.85	4.08	0.58
P-906	60.00	12.0	PVC	Open		-550.96	1.56	2,777.23	2,777.28	0.72	0.04
P-907	1,798.00	8.0	PVC	Open		1,016.70	6.49	2,823.25	2,790.50	18.22	32.75
P-950	171.00	8.0	PVC	Open		9.70	0.06	2,773.22	2,773.21	0.00	0.00
P-954	23.00	64.0	PVC	Open		-302.04	0.03	2,574.50	2,574.50	0.00	0.00
P-958	76.00	8.0	PVC	Open		1.32	0.01	2,771.78	2,771.78	0.00	0.00
P-959	345.00	8.0	PVC	Open		37.83	0.24	2,771.78	2,771.77	0.04	0.01
P-960	37.00	8.0	PVC	Open		34.28	0.22	2,771.77	2,771.76	0.03	0.00
P-964	1,139.00	12.0	PVC	Open		433.00	1.23	2,782.72	2,782.20	0.46	0.52
P-965	21.00	12.0	PVC	Open		0.00	0.00	2,786.78	2,786.78	0.00	0.00
P-968	1,673.00	8.0	PVC	Open		0.57	0.00	2,772.92	2,772.92	0.00	0.00

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-971	601.00	6.0	PVC	Open		39.24	0.45	2,773.05	2,772.95	0.17	0.10
P-972	79.00	6.0	PVC	Open		2.57	0.03	2,773.05	2,773.05	0.00	0.00
P-973	180.00	8.0	PVC	Open		41.80	0.27	2,773.06	2,773.05	0.05	0.01
P-974	904.00	8.0	PVC	Open		10.65	0.07	2,778.10	2,778.10	0.00	0.00
P-975	179.00	6.0	PVC	Open		10.65	0.12	2,778.10	2,778.09	0.02	0.00
P-976	344.00	6.0	PVC	Open		8.89	0.10	2,776.55	2,776.55	0.01	0.00
P-977	178.00	6.0	PVC	Open		8.89	0.10	2,776.55	2,776.55	0.01	0.00
P-978	629.00	8.0	PVC	Open		567.11	3.62	2,778.72	2,775.02	5.88	3.70
P-979	592.00	8.0	PVC	Open		567.11	3.62	2,782.20	2,778.72	5.88	3.48
P-980	752.00	8.0	PVC	Open		566.54	3.62	2,770.91	2,766.50	5.87	4.41
P-981	7.00	8.0	PVC	Open		1,860.99	11.88	2,766.50	2,766.08	59.50	0.42
P-982	100.00	12.0	PVC	Open		566.54	1.61	2,770.99	2,770.91	0.76	0.08
P-984	126.00	12.0	PVC	Open		260.00	0.74	2,786.59	2,786.57	0.18	0.02
P-985	103.00	6.0	PVC	Open		0.00	0.00	2,786.59	2,786.59	0.00	0.00
P-986	207.00	8.0	PVC	Open		0.53	0.00	2,786.62	2,786.62	0.00	0.00
P-987	32.00	8.0	PVC	Open		0.00	0.00	2,783.42	2,783.42	0.00	0.00
P-988	415.00	8.0	PVC	Open		41.42	0.26	2,786.64	2,786.62	0.05	0.02
P-989	710.00	8.0	PVC	Open		0.00	0.00	2,771.76	2,771.76	0.00	0.00
P-990	846.00	12.0	PVC	Open		-381.69	1.08	2,786.70	2,787.01	0.36	0.31
P-991	19.00	8.0	PVC	Open		0.00	0.00	2,781.62	2,781.62	0.00	0.00
P-992	269.00	12.0	PVC	Open		-156.78	0.44	2,786.69	2,786.70	0.07	0.02
P-993	340.00	12.0	PVC	Open		-156.78	0.44	2,786.66	2,786.69	0.07	0.02
P-994	67.00	12.0	PVC	Open		-156.78	0.44	2,786.66	2,786.66	0.07	0.00
P-995	230.00	12.0	PVC	Open		-47.02	0.13	2,786.65	2,786.66	0.01	0.00
P-996	172.00	12.0	PVC	Open		-47.02	0.13	2,786.65	2,786.65	0.01	0.00
P-997	147.00	8.0	PVC	Open		41.43	0.26	2,786.65	2,786.64	0.05	0.01
P-998	54.00	8.0	PVC	Open		-11.40	0.07	2,786.65	2,786.65	0.00	0.00
P-999	190.00	12.0	PVC	Open		-52.82	0.15	2,786.65	2,786.65	0.01	0.00
P-1000	80.00	12.0	PVC	Open		-5.80	0.02	2,786.65	2,786.65	0.00	0.00
P-1001	141.00	12.0	PVC	Open		-5.80	0.02	2,786.65	2,786.65	0.00	0.00
P-1002	262.00	12.0	PVC	Open		-5.80	0.02	2,786.65	2,786.65	0.00	0.00
P-1003	11.00	12.0	PVC	Open		-5.80	0.02	2,786.65	2,786.65	0.00	0.00
P-1005	258.00	12.0	PVC	Open		219.11	0.62	2,786.65	2,786.62	0.13	0.03
P-1006	84.00	12.0	PVC	Open		224.90	0.64	2,786.70	2,786.69	0.14	0.01
P-1007	290.00	12.0	PVC	Open		224.90	0.64	2,786.69	2,786.65	0.14	0.04
P-1008	716.00	8.0	PVC	Open		64.59	0.41	2,829.86	2,829.79	0.10	0.07
P-1014	443.00	8.0	PVC	Open		-337.06	2.15	2,773.55	2,774.51	2.18	0.96
P-1015	162.00	8.0	PVC	Open		-337.06	2.15	2,774.51	2,774.87	2.18	0.35
P-1029	716.00	12.0	PVC	Open		0.00	0.00	2,782.90	2,782.90	0.00	0.00
P-1030	230.00	12.0	PVC	Open		0.00	0.00	2,782.90	2,782.90	0.00	0.00
P-1031	211.00	12.0	PVC	Open		0.00	0.00	2,782.90	2,782.90	0.00	0.00
P-1032	536.00	8.0	PVC	Open		-6.38	0.04	2,773.26	2,773.26	0.00	0.00

Scenario: 2006 APPROVED DEV.

Fire Flow Analysis

Pump Report

Label	Discharge (gpm)	Control Status	Elevation (ft)	Intake Pump Grade (ft)	Pump Head (ft)	Discharge Pump Grade (ft)	Calculated Water Power (Hp)
PMP-1	565.71	On	2,534.00	2,534.00	239.79	2,773.79	34.25
PMP-2	435.36	On	2,543.00	2,541.14	71.41	2,612.55	7.85
PMP-2.1	0.00	Off	2,610.00	2,611.00	0.00	2,772.91	0.00
PMP-2.2	0.00	Pump cannot deliver he	2,610.00	2,611.00	0.00	2,772.91	0.00
PMP-2.3	0.00	Off	2,610.00	2,611.00	0.00	2,772.91	0.00
PMP-3	302.04	On	2,624.50	2,574.50	201.88	2,776.38	15.39
PMP-4	1,365.99	Fixed Speed Override	2,399.00	2,419.00	377.43	2,796.43	130.17
PMP-6	550.96	On	2,473.50	2,493.50	283.78	2,777.28	39.47
PMP-7	1,016.70	On	2,372.00	2,422.00	401.25	2,823.25	103.00
PMP-Boost	1,860.99	Fixed Speed Override	2,640.00	2,766.08	80.49	2,846.57	37.82

Fire Flow Analysis

Tank Report

Label	Base Elevation (ft)	Minimum Elevation (ft)	Initial HGL (ft)	Maximum Elevation (ft)	Inactive Volume (gal)	Tank Diameter (ft)	Inflow (gpm)	Current Status	Calculated Hydraulic Grade (ft)	Calculated Percent Full (%)
T-1	2,610.00	2,610.50	2,611.00	2,618.00	0.00	N/A	435.36	Filling	2,611.00	6.7

Scenario: 2006 APPROVED DEV.

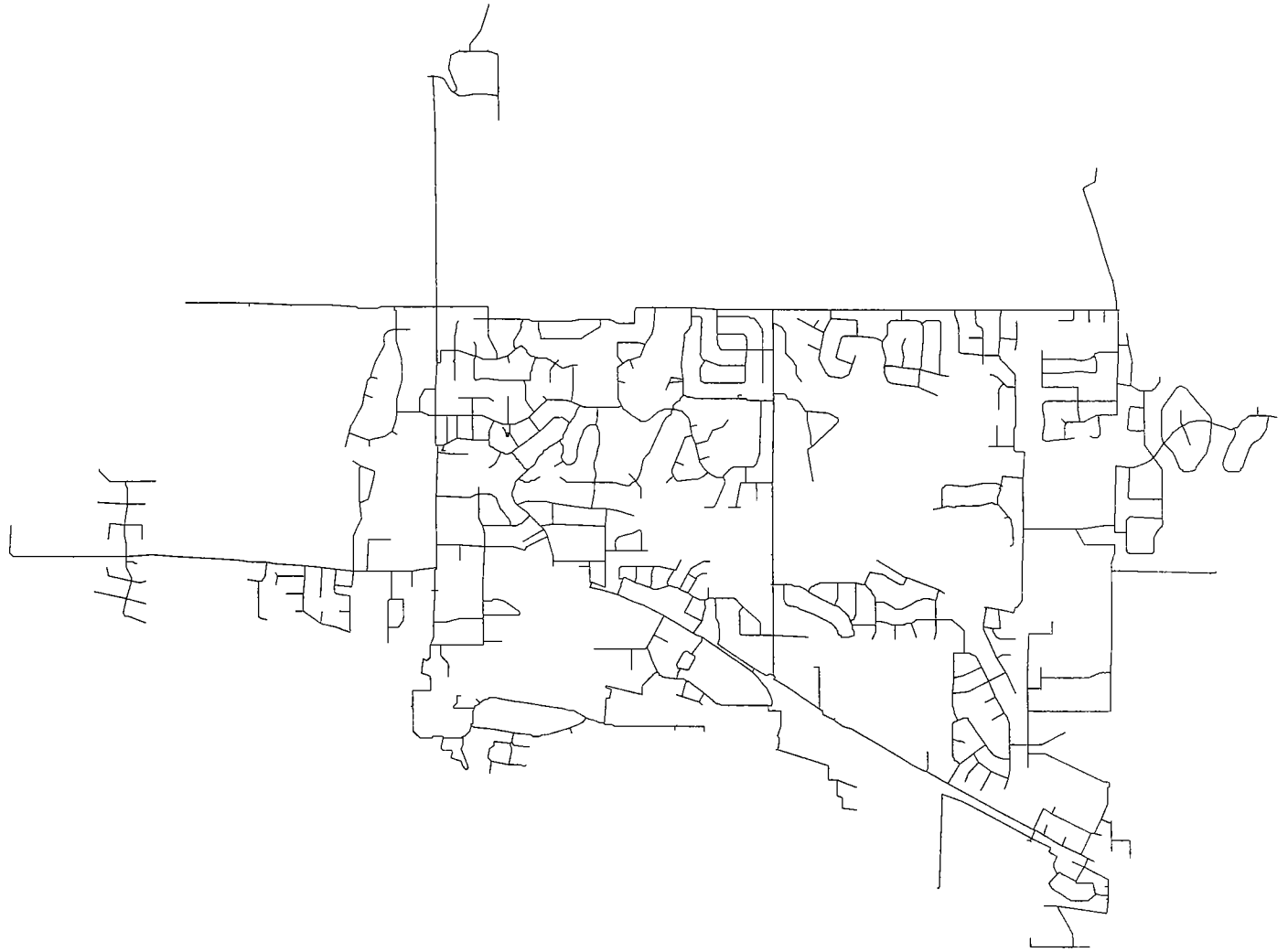
Fire Flow Analysis

Valve Report

Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)	Headloss (ft)	Calculated Pressure Setting (psi)
FCV-2-Hwy 55	2,602.00	12.0	Closed	0.00	2,820.91	2,769.77	0.00	
FCV-5 Southhampton	2,652.00	8.0	Closed	0.00	2,783.42	2,820.89	0.00	
FCV-6 GREAT SKY Wy	2,569.50	12.0	Inactive	-0.00	2,786.78	2,786.78	0.00	
TCV-3-Horse Shoe Bend	2,620.00	8.0	Throttling	567.11	2,775.02	2,775.02	0.00	
PSV-1 Floating Feather	2,653.00	12.0	Throttling	1,005.60	2,820.57	2,784.15	36.42	72.50
TCV-4-State at Well 4	2,565.00	12.0	Closed	0.00	2,771.89	2,795.85	0.00	
PSV-Gladestone	2,572.00	6.0	Closed	0.00	2,771.76	2,781.62	0.00	55.00

2006 Scenario w/ Approved Developments Well #4 Off

Scenario: 2006 APPROVED DEV. WELL 4 OFF



Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-1	false	4.28	0.00	N/A	N/A	N/A	N/A	N/A
J-2	false	9.81	0.00	N/A	N/A	N/A	N/A	N/A
J-3	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-4	true	1.36	1,500.00	1,501.36	68.12	J-587	20.00	2,080.53
J-5	true	2.51	1,500.00	1,502.51	66.82	J-587	20.00	2,050.53
J-6	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-7	false	1.06	0.00	N/A	N/A	N/A	N/A	N/A
J-8	true	94.85	1,500.00	1,594.85	67.36	J-587	20.01	2,018.81
J-9	false	5.50	0.00	N/A	N/A	N/A	N/A	N/A
J-10	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-11	true	0.01	1,500.00	1,500.01	66.36	J-587	20.00	2,006.85
J-12	true	9.76	1,500.00	1,509.76	67.09	J-587	20.00	2,017.79
J-13	true	15.09	1,500.00	1,515.09	66.29	J-587	20.00	2,022.20
J-14	true	4.44	1,500.00	1,504.44	68.02	J-587	20.00	2,026.78
J-15	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-16	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-17	true	6.21	1,500.00	1,506.21	67.94	J-587	20.00	2,001.36
J-18	true	1.78	1,500.00	1,501.78	67.81	J-587	20.00	1,998.29
J-19	false	8.61	0.00	N/A	N/A	N/A	N/A	N/A
J-20	true	5.55	1,500.00	1,505.55	64.92	J-587	20.00	1,990.87
J-21	true	0.00	1,500.00	1,500.00	65.74	J-587	20.00	1,977.61
J-22	true	7.24	1,500.00	1,507.24	66.54	J-587	20.00	1,981.92
J-23	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-24	true	5.46	1,500.00	1,505.46	67.05	J-587	20.00	1,980.69
J-25	true	0.00	1,500.00	1,500.00	65.20	J-587	20.00	1,980.60
J-26	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-27	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-28	true	14.20	1,500.00	1,514.20	65.61	J-587	20.00	1,989.23
J-29	true	12.43	1,500.00	1,512.43	67.55	J-587	20.00	1,998.13
J-30	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-31	false	4.17	0.00	N/A	N/A	N/A	N/A	N/A
J-32	true	11.54	1,500.00	1,511.54	54.88	J-587	20.01	2,010.08
J-33	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-34	true	3.55	1,500.00	1,503.55	47.12	J-587	20.01	2,023.94
J-35	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-36	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-37	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-38	true	3.55	1,500.00	1,503.55	48.25	J-587	20.01	2,000.37
J-39	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-40	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-41	false	3.56	0.00	N/A	N/A	N/A	N/A	N/A
J-42	true	0.00	1,500.00	1,500.00	54.29	J-587	20.00	1,966.41
J-43	true	9.05	1,500.00	1,509.05	57.65	J-587	20.00	1,943.28
J-44	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-45	true	2.66	1,500.00	1,502.66	51.18	J-587	20.01	2,000.26
J-46	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-47	true	4.44	1,500.00	1,504.44	36.79	J-587	20.00	1,883.05
J-48	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-49	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-50	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-51	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-52	false	8.88	1,500.00	1,508.88	11.90	J-587	30.96	1,363.54
J-53	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-54	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-55	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-56	true	6.21	1,500.00	1,506.21	45.99	J-587	20.01	1,977.69
J-57	true	19.53	1,500.00	1,519.53	44.16	J-587	20.01	1,953.69
J-58	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-59	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-60	true	2.57	1,500.00	1,502.57	32.01	J-587	21.80	1,852.59
J-61	true	9.77	1,500.00	1,509.77	46.94	J-587	20.01	1,958.21
J-62	false	9.79	0.00	N/A	N/A	N/A	N/A	N/A
J-63	true	9.79	1,500.00	1,509.79	50.91	J-587	20.01	2,003.62
J-64	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-65	true	12.43	1,500.00	1,512.43	46.08	J-587	20.00	1,982.58
J-66	true	14.20	1,500.00	1,514.20	35.01	J-587	20.00	1,902.71
J-67	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-68	true	26.63	1,500.00	1,526.63	46.37	J-587	20.01	1,947.44
J-69	true	21.30	1,500.00	1,521.30	53.38	J-587	20.01	1,957.16
J-70	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-71	true	17.75	1,500.00	1,517.75	30.53	J-587	20.00	1,719.60
J-72	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-73	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-74	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-75	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-76	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-77	true	3.56	1,500.00	1,503.56	38.39	J-587	20.00	1,890.93
J-78	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-79	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-80	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-81	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-83	true	10.65	1,500.00	1,510.65	37.06	J-587	20.00	1,867.24
J-84	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-85	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-86	true	11.53	1,500.00	1,511.53	32.67	J-587	20.00	1,669.24
J-87	false	7.98	0.00	N/A	N/A	N/A	N/A	N/A
J-88	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-89	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-90	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-91	true	7.10	1,500.00	1,507.10	33.80	J-587	20.00	1,754.04
J-92	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-93	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-94	false	3.56	1,500.00	1,503.56	22.01	J-917	20.00	1,474.79
J-95	false	13.31	0.00	N/A	N/A	N/A	N/A	N/A
J-96	false	3.38	0.00	N/A	N/A	N/A	N/A	N/A
J-97	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-98	false	2.65	0.00	N/A	N/A	N/A	N/A	N/A
J-99	false	3.57	0.00	N/A	N/A	N/A	N/A	N/A
J-100	false	4.18	1,500.00	1,504.18	17.05	J-101	20.00	1,438.27
J-101	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-102	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-103	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-104	true	0.00	1,500.00	1,500.00	33.30	J-587	20.00	1,777.63
J-105	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-106	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-107	false	10.33	0.00	N/A	N/A	N/A	N/A	N/A
J-108	true	7.10	1,500.00	1,507.10	34.37	J-587	20.00	1,780.22
J-109	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-110	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-111	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-112	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-113	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-114	true	5.33	1,500.00	1,505.33	34.72	J-587	20.00	1,784.34
J-115	true	4.44	1,500.00	1,504.44	57.32	J-587	20.01	1,926.68
J-116	true	5.33	1,500.00	1,505.33	35.80	J-587	20.00	1,698.14
J-117	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-118	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-119	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-120	true	7.11	1,500.00	1,507.11	33.01	J-587	20.00	1,593.76
J-121	false	7.10	1,500.00	1,507.10	29.75	J-587	20.00	1,493.89
J-122	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-123	true	12.43	1,500.00	1,512.43	22.05	J-125	20.65	1,553.42
J-124	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-125	false	14.20	1,500.00	1,514.20	7.94	J-126	21.10	1,273.24
J-126	false	2.67	0.00	N/A	N/A	N/A	N/A	N/A
J-127	true	0.00	1,500.00	1,500.00	47.68	J-587	20.01	2,056.82
J-128	true	1.76	1,500.00	1,501.76	25.20	J-917	20.03	1,636.61
J-131	false	2.68	0.00	N/A	N/A	N/A	N/A	N/A
J-132	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-133	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-134	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-135	false	26.74	0.00	N/A	N/A	N/A	N/A	N/A
J-136	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-137	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-138	false	10.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-139	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-140	true	0.14	1,500.00	1,500.14	53.82	J-587	20.00	1,981.17
J-141	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-142	true	7.10	1,500.00	1,507.10	58.88	J-587	20.01	1,977.43
J-143	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-144	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-145	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-146	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-147	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-148	true	9.66	1,500.00	1,509.66	31.92	J-587	20.00	1,618.40
J-149	true	26.64	1,500.00	1,526.64	31.01	J-587	20.00	1,650.08
J-150	false	8.88	1,500.00	N/A	N/A	N/A	N/A	N/A
J-151	true	11.54	1,500.00	1,511.54	32.78	J-587	20.00	1,604.52
J-152	true	12.43	1,500.00	1,512.43	31.95	J-587	20.00	1,599.26
J-153	true	4.44	1,500.00	1,504.44	32.25	J-587	20.00	1,595.77
J-154	true	12.43	1,500.00	1,512.43	59.81	J-587	20.00	2,336.48
J-155	true	15.09	1,500.00	1,515.09	59.26	J-587	20.00	2,336.48
J-156	true	0.00	1,500.00	1,500.00	55.31	J-587	20.45	2,306.54
J-157	false	2.76	0.00	N/A	N/A	N/A	N/A	N/A
J-158	true	22.90	1,500.00	1,522.90	53.99	J-587	22.97	2,290.60
J-159	true	18.64	1,500.00	1,518.64	50.49	J-587	20.00	2,106.46
J-160	true	1.03	1,500.00	1,501.03	70.53	J-587	20.00	2,639.53
J-161	true	12.44	1,500.00	1,512.44	45.72	J-587	20.22	2,007.20
J-162	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-163	true	6.44	1,500.00	1,506.44	71.02	J-587	20.00	2,711.36
J-164	true	14.20	1,500.00	1,514.20	69.08	J-587	20.00	2,788.48
J-165	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-166	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-167	true	6.10	1,500.00	1,506.10	69.74	J-587	20.00	2,842.24
J-168	true	1.25	1,500.00	1,501.25	70.66	J-587	20.00	2,857.58
J-169	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-170	false	5.94	0.00	N/A	N/A	N/A	N/A	N/A
J-171	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-172	true	6.21	1,500.00	1,506.21	72.73	J-587	20.01	2,875.35
J-173	false	2.04	0.00	N/A	N/A	N/A	N/A	N/A
J-174	true	1.78	1,500.00	1,501.78	60.97	J-587	24.05	2,530.16
J-175	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-176	false	4.29	0.00	N/A	N/A	N/A	N/A	N/A
J-177	false	14.30	0.00	N/A	N/A	N/A	N/A	N/A
J-178	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-179	false	24.90	0.00	N/A	N/A	N/A	N/A	N/A
J-180	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-181	false	7.09	0.00	N/A	N/A	N/A	N/A	N/A
J-182	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-183	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-184	true	3.55	1,500.00	1,503.55	99.53	J-416	20.00	3,399.21
J-185	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-186	true	7.10	1,500.00	1,507.10	62.47	J-416	40.17	1,501.00
J-187	true	0.00	1,500.00	1,500.00	94.59	J-416	37.04	2,972.84
J-188	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-189	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-190	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-191	true	3.54	1,500.00	1,503.54	95.04	J-416	20.00	4,288.46
J-192	false	2.02	0.00	N/A	N/A	N/A	N/A	N/A
J-193	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-194	true	4.44	1,500.00	1,504.44	93.81	J-416	20.01	4,287.85
J-195	false	22.21	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-196	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-197	true	20.66	1,500.00	1,520.66	81.60	J-587	20.00	3,564.38
J-198	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-199	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-200	false	4.28	0.00	N/A	N/A	N/A	N/A	N/A
J-201	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-202	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-203	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-204	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-205	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-206	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-207	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-208	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-209	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-210	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-211	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-212	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-213	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-214	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-215	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-216	true	7.99	1,500.00	1,507.99	59.53	J-587	20.01	1,980.10
J-217	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-218	true	1.59	1,500.00	1,501.59	65.30	J-587	20.00	1,979.05
J-219	false	22.69	0.00	N/A	N/A	N/A	N/A	N/A
J-220	true	0.00	1,500.00	1,500.00	62.16	J-587	20.00	1,965.53
J-221	true	0.00	1,500.00	1,500.00	58.62	J-587	20.01	1,958.80
J-222	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-223	false	0.44	0.00	N/A	N/A	N/A	N/A	N/A
J-224	true	1.65	1,500.00	1,501.65	57.97	J-587	20.01	1,954.76
J-225	true	4.62	1,500.00	1,504.62	58.39	J-587	20.01	1,945.89
J-226	true	8.88	1,500.00	1,508.88	49.30	J-587	20.00	1,927.18
J-227	true	15.98	1,500.00	1,515.98	50.43	J-587	20.00	1,880.46
J-228	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-229	true	7.10	1,500.00	1,507.10	44.18	J-587	20.00	1,880.44
J-230	true	9.76	1,500.00	1,509.76	43.15	J-587	20.00	1,880.43
J-231	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-232	true	15.11	1,500.00	1,515.11	45.54	J-587	20.00	1,880.45
J-233	true	7.02	1,500.00	1,507.02	45.33	J-587	20.01	1,880.14
J-234	false	11.63	0.00	N/A	N/A	N/A	N/A	N/A
J-235	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-236	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-237	false	0.59	0.00	N/A	N/A	N/A	N/A	N/A
J-238	false	0.83	1,500.00	1,500.83	-1.90	J-982	20.04	1,153.48
J-239	false	2.43	0.00	N/A	N/A	N/A	N/A	N/A
J-240	false	23.75	0.00	N/A	N/A	N/A	N/A	N/A
J-241	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-242	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-243	false	6.21	1,500.00	1,506.21	-2.88	J-982	20.08	1,152.07

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis
Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-244	false	10.65	1,500.00	1,510.65	-1.53	J-982	20.01	1,152.07
J-245	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-246	false	8.88	1,500.00	1,508.88	-1.56	J-982	20.04	1,152.06
J-247	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-248	false	7.99	1,500.00	1,507.99	-2.45	J-982	20.03	1,151.59
J-249	false	5.33	1,500.00	1,505.33	-3.81	J-982	20.05	1,151.83
J-250	false	2.93	0.00	N/A	N/A	N/A	N/A	N/A
J-251	false	7.10	1,500.00	1,507.10	-3.91	J-982	20.05	1,150.01
J-252	false	1.17	0.00	N/A	N/A	N/A	N/A	N/A
J-253	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-254	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-255	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-256	false	0.23	0.00	N/A	N/A	N/A	N/A	N/A
J-257	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-258	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-259	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-260	false	2.66	1,500.00	1,502.66	20.20	J-587	20.01	1,382.92
J-261	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-262	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-263	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-264	false	8.88	1,500.00	1,508.88	19.13	J-587	20.00	1,382.84
J-265	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-266	false	15.09	1,500.00	1,515.09	17.45	J-587	20.00	1,381.13
J-267	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-268	false	13.31	1,500.00	1,513.31	22.50	J-587	20.00	1,377.43
J-269	false	7.99	1,500.00	1,507.99	21.98	J-587	20.00	1,367.89
J-270	false	10.65	1,500.00	1,510.65	21.47	J-587	20.00	1,364.49
J-271	false	2.25	1,500.00	1,502.25	19.46	J-587	20.00	1,363.89
J-272	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-273	false	7.99	1,500.00	1,507.99	18.13	J-587	20.00	1,363.80
J-274	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-275	false	9.76	1,500.00	1,509.76	19.15	J-587	20.01	1,363.37
J-276	false	13.31	1,500.00	1,513.31	17.17	J-587	20.00	1,363.14
J-277	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-278	false	17.75	1,500.00	1,517.75	17.11	J-587	20.00	1,362.64
J-279	false	4.07	0.00	N/A	N/A	N/A	N/A	N/A
J-280	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-281	false	5.70	0.00	N/A	N/A	N/A	N/A	N/A
J-282	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-283	false	3.87	1,500.00	1,503.87	-53.89	J-416	20.01	829.29
J-284	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-285	false	0.00	1,500.00	1,500.00	-51.26	J-416	20.00	829.52
J-286	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-287	false	9.76	1,500.00	1,509.76	-35.44	J-416	20.01	829.31
J-288	false	14.20	1,500.00	1,514.20	-36.13	J-416	20.01	829.31
J-289	false	6.21	1,500.00	1,506.21	-37.24	J-416	20.01	829.38
J-290	false	4.44	1,500.00	1,504.44	-43.38	J-416	20.00	829.49
J-291	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-292	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-293	false	5.02	0.00	N/A	N/A	N/A	N/A	N/A
J-294	false	7.33	0.00	N/A	N/A	N/A	N/A	N/A
J-295	false	2.93	1,500.00	1,502.93	-4.75	J-982	20.06	1,153.36
J-296	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-297	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-298	false	0.00	1,500.00	1,500.00	-38.76	J-416	20.00	829.48
J-299	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-300	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-301	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-302	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-303	false	0.00	1,500.00	1,500.00	-37.60	J-416	20.00	829.47
J-304	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-305	false	13.31	1,500.00	1,513.31	-36.67	J-416	20.01	829.43
J-306	false	14.20	1,500.00	1,514.20	-34.93	J-416	20.01	829.39
J-307	false	9.76	1,500.00	1,509.76	-32.98	J-416	20.01	829.35
J-308	false	9.76	1,500.00	1,509.76	-36.27	J-416	20.00	824.55
J-309	false	15.09	1,500.00	1,515.09	-30.31	J-416	20.02	837.52
J-310	false	23.08	1,500.00	1,523.08	-30.78	J-416	20.02	842.99
J-311	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-312	false	250.71	0.00	N/A	N/A	N/A	N/A	N/A
J-313	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-314	false	0.00	1,500.00	1,500.00	-38.93	J-416	20.00	829.47
J-315	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-316	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-317	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-318	true	13.31	1,500.00	1,513.31	56.61	J-587	20.00	1,953.66
J-319	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-320	false	10.66	0.00	N/A	N/A	N/A	N/A	N/A
J-321	false	16.87	1,500.00	1,516.87	-22.91	J-416	20.00	854.43
J-322	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-323	false	7.99	1,500.00	1,507.99	-8.48	J-982	20.01	1,112.77
J-325	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-326	false	0.00	1,500.00	1,500.00	0.02	J-982	20.03	1,152.32
J-327	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-328	false	4.44	1,500.00	1,504.44	-29.42	J-982	20.00	1,152.33
J-329	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-330	false	6.11	1,500.00	1,506.11	-7.51	J-982	20.07	1,151.80
J-331	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-332	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-333	false	0.94	0.00	N/A	N/A	N/A	N/A	N/A
J-334	false	9.76	1,500.00	1,509.76	-3.94	J-982	20.09	1,149.73
J-335	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-336	false	7.10	1,500.00	1,507.10	-3.68	J-982	20.01	1,149.95
J-337	false	7.10	1,500.00	1,507.10	-3.43	J-982	20.05	1,149.07
J-338	false	5.33	1,500.00	1,505.33	-3.70	J-982	20.05	1,149.54
J-339	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-340	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-341	false	6.21	1,500.00	1,506.21	-4.56	J-982	20.18	1,147.06
J-342	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-343	false	6.21	1,500.00	1,506.21	-4.97	J-982	20.01	1,141.82
J-344	false	8.88	1,500.00	1,508.88	-8.11	J-982	20.01	1,122.57
J-345	false	11.11	0.00	N/A	N/A	N/A	N/A	N/A
J-346	false	5.86	1,500.00	1,505.86	-36.33	J-416	20.01	829.31
J-347	false	4.44	1,500.00	1,504.44	-40.28	J-416	20.01	829.39
J-348	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-349	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-350	false	7.10	1,500.00	1,507.10	-40.33	J-416	20.01	829.41
J-351	false	7.99	1,500.00	N/A	N/A	N/A	N/A	N/A
J-352	false	12.43	1,500.00	N/A	N/A	N/A	N/A	N/A
J-353	false	3.55	1,500.00	1,503.55	-41.16	J-416	20.00	821.10
J-354	false	11.55	1,500.00	1,511.55	-48.05	J-416	20.00	818.07
J-355	false	6.21	1,500.00	N/A	N/A	N/A	N/A	N/A
J-356	false	5.33	1,500.00	N/A	N/A	N/A	N/A	N/A
J-357	false	10.65	1,500.00	1,510.65	-51.05	J-416	20.02	812.34
J-358	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-359	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-360	false	0.00	1,500.00	1,500.00	-67.75	J-416	20.02	829.17
J-361	true	0.00	1,500.00	1,500.00	97.20	J-416	20.00	4,307.78
J-364	false	5.30	1,500.00	N/A	N/A	N/A	N/A	N/A
J-365	false	0.88	1,500.00	N/A	N/A	N/A	N/A	N/A
J-366	false	2.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-367	false	9.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-368	false	6.54	1,500.00	N/A	N/A	N/A	N/A	N/A
J-369	false	1.05	1,500.00	N/A	N/A	N/A	N/A	N/A
J-370	false	0.00	1,500.00	1,500.00	-13.74	J-982	20.04	1,160.39
J-371	false	17.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-372	true	8.69	1,500.00	1,508.69	65.54	J-587	20.00	2,011.40
J-373	false	2.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-374	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-375	false	0.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-376	false	13.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-377	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-378	false	11.22	1,500.00	N/A	N/A	N/A	N/A	N/A
J-379	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-380	false	12.03	1,500.00	N/A	N/A	N/A	N/A	N/A
J-381	true	1.48	1,500.00	1,501.48	44.40	J-587	20.00	2,003.11
J-382	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-383	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-384	true	5.14	1,500.00	1,505.14	67.38	J-587	20.00	1,997.89
J-385	true	0.86	1,500.00	1,500.86	62.41	J-587	20.00	1,965.43
J-386	true	16.22	1,500.00	1,516.22	64.49	J-587	20.00	1,992.88
J-387	false	1.58	1,500.00	N/A	N/A	N/A	N/A	N/A
J-388	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-389	true	0.00	1,500.00	1,500.00	64.53	J-587	20.00	1,966.65
J-390	false	0.20	1,500.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-391	true	0.00	1,500.00	1,500.00	38.91	J-587	22.68	1,817.07
J-392	true	7.09	1,500.00	1,507.09	63.37	J-587	20.00	1,966.66
J-393	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-394	true	0.00	1,500.00	1,500.00	63.60	J-587	20.00	1,967.46
J-395	true	0.98	1,500.00	1,500.98	63.14	J-587	20.00	1,969.55
J-396	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-397	false	0.31	1,500.00	N/A	N/A	N/A	N/A	N/A
J-398	true	0.00	1,500.00	1,500.00	65.59	J-587	20.00	1,965.75
J-399	true	16.87	1,500.00	1,516.87	63.83	J-587	20.00	1,963.85
J-400	true	12.26	1,500.00	1,512.26	62.48	J-587	20.00	1,963.21
J-401	true	0.00	1,500.00	1,500.00	61.79	J-587	20.00	1,962.06
J-402	true	2.25	1,500.00	1,502.25	63.50	J-587	20.00	1,964.50
J-403	true	0.00	1,500.00	1,500.00	63.88	J-587	20.00	1,964.88
J-404	true	0.39	1,500.00	1,500.39	59.98	J-587	20.01	1,962.96
J-405	false	3.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-406	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-407	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-408	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-409	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-410	false	9.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-411	true	6.98	1,500.00	1,506.98	39.55	J-587	20.01	1,878.12
J-412	true	11.54	1,500.00	1,511.54	47.94	J-587	20.01	1,901.61
J-413	true	4.44	1,500.00	1,504.44	49.67	J-587	20.00	1,913.45
J-414	false	3.54	1,500.00	1,503.54	-58.71	J-416	20.00	808.09
J-415	false	7.99	1,500.00	1,507.99	-59.79	J-416	20.03	806.23
J-416	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-417	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-418	true	9.76	1,500.00	1,509.76	45.76	J-587	20.00	1,880.35
J-419	true	7.10	1,500.00	1,507.10	45.55	J-587	20.00	1,880.37
J-420	false	11.54	1,500.00	N/A	N/A	N/A	N/A	N/A
J-421	true	14.21	1,500.00	1,514.21	36.57	J-587	20.00	1,836.96
J-422	true	0.00	1,500.00	1,500.00	37.54	J-587	20.26	1,866.83
J-423	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-424	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-425	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-426	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-427	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-428	false	0.53	1,500.00	N/A	N/A	N/A	N/A	N/A
J-429	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-430	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-431	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-432	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-433	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-434	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-435	false	1.78	1,500.00	N/A	N/A	N/A	N/A	N/A
J-436	false	3.55	1,500.00	1,503.55	-22.08	J-982	20.02	1,160.66
J-437	false	1.78	1,500.00	1,501.78	-25.62	J-982	20.00	1,160.81
J-438	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-439	false	1.78	1,500.00	1,501.78	-48.14	J-440	20.03	1,160.63
J-440	false	0.74	1,500.00	1,500.74	-38.87	J-439	20.08	1,160.25
J-441	false	10.18	0.00	N/A	N/A	N/A	N/A	N/A
J-442	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-443	false	6.89	2,500.00	2,506.89	36.06	J-587	20.00	1,991.22
J-444	true	0.66	1,500.00	1,500.66	65.21	J-587	20.00	1,989.96
J-445	false	0.10	0.00	N/A	N/A	N/A	N/A	N/A
J-446	true	7.96	1,500.00	1,507.96	64.71	J-587	20.00	1,988.40
J-447	true	0.00	1,500.00	1,500.00	64.11	J-587	20.00	1,986.97
J-448	true	0.00	1,500.00	1,500.00	60.36	J-587	20.01	1,986.76
J-449	true	1.14	1,500.00	1,501.14	59.17	J-587	20.01	1,986.45
J-450	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-451	false	0.00	2,500.00	2,500.00	37.94	J-587	20.00	1,985.56
J-452	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-453	true	0.11	1,500.00	1,500.11	63.67	J-587	20.00	1,984.65
J-454	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-455	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-456	true	1.68	1,500.00	1,501.68	63.08	J-587	20.00	1,982.56
J-457	true	0.00	1,500.00	1,500.00	62.98	J-587	20.00	1,980.76
J-458	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-459	true	0.22	1,500.00	1,500.22	59.96	J-587	20.01	1,985.12
J-460	false	0.01	2,500.00	2,500.01	28.86	J-587	20.01	1,985.31
J-461	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-462	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-463	true	0.00	1,500.00	1,500.00	52.91	J-587	20.00	1,985.83
J-464	true	0.50	1,500.00	1,500.50	54.56	J-587	20.00	1,985.83
J-465	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-466	true	0.00	1,500.00	1,500.00	56.72	J-587	20.00	1,985.85
J-467	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-468	true	0.03	1,500.00	1,500.03	49.50	J-587	20.00	1,985.80
J-469	false	0.06	2,500.00	2,500.06	12.31	J-587	20.00	1,985.82
J-470	true	0.01	1,500.00	1,500.01	50.98	J-587	20.00	1,985.78
J-471	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-472	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-473	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-474	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-475	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-476	true	0.02	1,500.00	1,500.02	55.57	J-587	20.00	1,987.23
J-477	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-478	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-479	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-480	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-481	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-482	true	0.00	1,500.00	1,500.00	64.25	J-587	20.00	1,978.71
J-483	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-484	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-485	true	0.00	1,500.00	1,500.00	62.45	J-587	20.01	1,978.33
J-486	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-487	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-488	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-489	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-490	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-491	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-492	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-493	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-494	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-495	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-496	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-497	false	33.75	0.00	N/A	N/A	N/A	N/A	N/A
J-498	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-499	false	0.00	1,500.00	1,500.00	-37.95	J-416	20.01	829.33
J-500	false	8.88	1,500.00	1,508.88	-36.61	J-416	20.01	829.27
J-501	false	10.54	1,500.00	1,510.54	-35.75	J-416	20.02	829.19
J-502	false	14.22	1,500.00	1,514.22	-37.91	J-416	20.02	829.22
J-503	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-504	true	0.00	1,500.00	1,500.00	55.21	J-587	20.00	1,960.19
J-505	false	0.01	0.00	N/A	N/A	N/A	N/A	N/A
J-506	true	0.00	1,500.00	1,500.00	56.60	J-587	20.00	1,953.74
J-507	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A
J-508	true	10.65	1,500.00	1,510.65	51.22	J-587	20.01	1,947.17
J-509	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-510	true	7.10	1,500.00	1,507.10	41.85	J-587	20.00	1,947.73
J-511	true	11.54	1,500.00	1,511.54	50.91	J-587	20.01	1,946.03
J-512	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-513	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-514	true	5.33	1,500.00	1,505.33	48.08	J-587	20.01	1,938.20
J-515	true	7.10	1,500.00	1,507.10	52.17	J-587	20.00	1,926.75
J-516	false	3.54	0.00	N/A	N/A	N/A	N/A	N/A
J-517	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-518	true	2.66	1,500.00	1,502.66	47.12	J-587	20.01	1,937.66
J-519	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-520	true	5.33	1,500.00	1,505.33	46.83	J-587	20.01	1,936.53
J-521	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-522	false	6.21	1,500.00	1,506.21	-9.96	J-982	20.01	1,118.50
J-523	false	2.05	1,500.00	1,502.05	-19.13	J-982	20.00	1,118.55
J-524	false	15.16	0.00	N/A	N/A	N/A	N/A	N/A
J-525	true	2.66	1,500.00	1,502.66	44.73	J-587	20.00	1,880.37
J-527	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-528	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-529	false	11.53	0.00	N/A	N/A	N/A	N/A	N/A
J-530	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-531	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-532	true	7.10	1,500.00	1,507.10	53.47	J-587	20.01	1,955.45
J-533	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-534	true	7.10	1,500.00	1,507.10	51.24	J-587	20.00	1,956.95
J-535	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-536	true	4.44	1,500.00	1,504.44	53.03	J-587	20.01	1,956.76
J-537	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-538	true	2.66	1,500.00	1,502.66	54.42	J-587	20.01	1,956.94
J-539	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-540	true	5.33	1,500.00	1,505.33	56.56	J-587	20.01	1,957.82
J-541	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-542	true	12.43	1,500.00	1,512.43	58.86	J-587	20.00	1,958.99
J-543	true	5.74	1,500.00	1,505.74	66.66	J-587	20.00	2,016.39
J-544	true	8.49	1,500.00	1,508.49	66.41	J-587	20.00	2,016.15
J-546	true	7.10	1,500.00	1,507.10	63.39	J-587	20.01	2,015.89
J-547	true	2.79	1,500.00	1,502.79	63.03	J-587	20.00	1,967.04
J-548	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-549	true	7.34	1,500.00	1,507.34	60.49	J-587	20.01	1,963.56
J-550	true	0.00	1,500.00	1,500.00	60.29	J-587	20.01	1,963.07
J-551	true	0.00	1,500.00	1,500.00	60.48	J-587	20.01	1,962.38
J-552	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-553	true	22.19	1,500.00	1,522.19	61.12	J-587	20.01	1,963.52
J-554	true	17.75	1,500.00	1,517.75	60.94	J-587	20.01	1,963.15
J-555	true	9.76	1,500.00	1,509.76	59.69	J-587	20.01	1,962.93
J-556	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-557	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-558	false	6.28	0.00	N/A	N/A	N/A	N/A	N/A
J-559	true	14.20	1,500.00	1,514.20	59.74	J-587	20.01	1,960.99
J-560	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-561	true	7.10	1,500.00	1,507.10	61.77	J-587	20.00	1,961.14
J-562	true	0.00	1,500.00	1,500.00	61.95	J-587	20.00	1,960.29
J-563	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-564	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-565	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-566	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-567	true	3.09	1,500.00	1,503.09	63.49	J-587	20.00	1,961.90
J-568	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-569	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-570	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-571	false	20.42	1,500.00	1,520.42	-39.15	J-416	20.00	829.46
J-572	false	11.54	1,500.00	1,511.54	-34.13	J-416	20.01	829.29
J-573	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-574	false	8.88	1,500.00	1,508.88	-33.61	J-416	20.01	829.28
J-575	false	7.11	0.00	N/A	N/A	N/A	N/A	N/A
J-576	false	11.54	1,500.00	1,511.54	-37.34	J-416	20.01	829.42
J-577	false	15.09	1,500.00	1,515.09	-34.01	J-416	20.01	829.30
J-578	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A
J-579	false	13.31	1,500.00	1,513.31	-34.51	J-416	20.01	829.27
J-580	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-581	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-582	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-583	false	3.55	1,500.00	1,503.55	-34.21	J-416	20.01	829.32
J-584	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-585	false	0.00	1,500.00	1,500.00	-40.94	J-416	20.00	829.47
J-586	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-587	false	7.10	1,500.00	1,507.10	14.20	J-278	25.84	1,314.19
J-588	false	0.00	1,500.00	1,500.00	-6.03	J-982	20.08	1,157.91
J-589	false	0.24	0.00	N/A	N/A	N/A	N/A	N/A
J-590	false	0.00	1,500.00	1,500.00	-13.03	J-982	20.04	1,159.05
J-591	false	0.33	0.00	N/A	N/A	N/A	N/A	N/A
J-592	false	0.50	1,500.00	1,500.50	-15.57	J-982	20.04	1,160.94
J-593	false	70.70	0.00	N/A	N/A	N/A	N/A	N/A
J-594	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-595	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-596	false	0.00	1,500.00	1,500.00	-3.87	J-982	20.05	1,158.05
J-597	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-598	false	0.00	1,500.00	1,500.00	-3.97	J-982	20.03	1,157.08
J-599	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-600	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-601	false	5.15	0.00	N/A	N/A	N/A	N/A	N/A
J-602	false	8.98	1,500.00	1,508.98	-14.41	J-982	20.09	1,156.65
J-603	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-604	false	0.00	1,500.00	1,500.00	-21.28	J-982	20.04	1,157.04
J-605	false	2.61	1,500.00	1,502.61	-4.74	J-982	20.02	1,155.18
J-606	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-607	false	1.84	1,500.00	1,501.84	-2.89	J-982	20.02	1,151.58
J-608	false	0.00	1,500.00	1,500.00	-7.79	J-982	20.02	1,151.62
J-609	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-610	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-611	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-612	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-613	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-614	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-615	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-616	false	9.83	0.00	N/A	N/A	N/A	N/A	N/A
J-617	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-618	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-619	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-620	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-621	true	0.10	1,500.00	1,500.10	53.87	J-587	20.00	1,963.33
J-622	true	0.00	1,500.00	1,500.00	52.59	J-587	20.00	1,963.31
J-623	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-624	true	0.00	1,500.00	1,500.00	52.76	J-587	20.00	1,963.32
J-628	false	19.65	0.00	N/A	N/A	N/A	N/A	N/A
J-636	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-637	true	12.43	1,500.00	1,512.43	71.88	J-587	20.00	3,352.91
J-638	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-639	true	23.97	1,500.00	1,523.97	60.65	J-587	31.44	2,445.95
J-640	false	15.99	0.00	N/A	N/A	N/A	N/A	N/A
J-650	false	20.42	0.00	N/A	N/A	N/A	N/A	N/A
J-651	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-653	false	15.09	0.00	N/A	N/A	N/A	N/A	N/A
J-654	false	19.53	0.00	N/A	N/A	N/A	N/A	N/A
J-655	false	16.87	0.00	N/A	N/A	N/A	N/A	N/A
J-656	false	21.61	0.00	N/A	N/A	N/A	N/A	N/A
J-657	false	15.09	0.00	N/A	N/A	N/A	N/A	N/A
J-658	false	0.27	0.00	N/A	N/A	N/A	N/A	N/A
J-659	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-660	false	0.57	0.00	N/A	N/A	N/A	N/A	N/A
J-661	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-750	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-751	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-752	false	18.99	1,500.00	N/A	N/A	N/A	N/A	N/A
J-813	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-814	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-822	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-823	false	0.00	1,500.00	1,500.00	10.62	J-138	20.00	1,262.58
J-824	false	0.00	1,500.00	1,500.00	8.56	J-150	20.44	1,288.15
J-825	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-826	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-827	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-828	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-829	false	0.00	2,500.00	2,500.00	-181.96	J-982	20.08	1,160.35
J-830	false	0.00	2,500.00	2,500.00	-182.29	J-982	20.08	1,160.35
J-831	false	109.76	0.00	N/A	N/A	N/A	N/A	N/A
J-832	false	0.00	2,500.00	2,500.00	-182.20	J-982	20.08	1,160.30
J-833	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-834	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-835	false	0.00	2,500.00	2,500.00	-181.98	J-982	20.08	1,160.26
J-836	false	0.00	2,500.00	2,500.00	-181.89	J-982	20.08	1,160.26
J-837	false	0.00	2,500.00	2,500.00	-181.44	J-982	20.08	1,160.23
J-838	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-840	false	0.00	2,500.00	2,500.00	-181.44	J-982	20.08	1,160.38
J-842	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-844	false	0.62	1,500.00	N/A	N/A	N/A	N/A	N/A
J-845	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-846	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-847	false	1.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-848	false	1.25	1,500.00	N/A	N/A	N/A	N/A	N/A
J-849	false	1.25	1,500.00	N/A	N/A	N/A	N/A	N/A
J-851	false	0.00	1,500.00	1,500.00	-7.88	J-982	20.01	1,144.47
J-852	false	0.00	1,500.00	1,500.00	-8.37	J-982	20.01	1,144.47
J-853	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-901	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-906	false	3.89	1,500.00	N/A	N/A	N/A	N/A	N/A
J-917	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-981	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-982	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	2,558.30	Zone	Demand	4.28	COMMERCIAL	4.28	2,756.87	85.91
J-2	2,558.00	Zone	Demand	9.81	COMMERCIAL	9.81	2,754.98	85.22
J-3	2,556.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,754.98	85.87
J-4	2,557.50	Zone	Demand	1.36	COMMERCIAL	1.36	2,753.17	84.66
J-5	2,559.00	Zone	Demand	2.51	COMMERCIAL	2.51	2,752.73	83.82
J-6	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.41	84.11
J-7	2,557.00	Zone	Demand	1.06	COMMERCIAL	1.06	2,752.41	84.54
J-8	2,557.00	Zone	Demand	94.85	IRRIGATION	94.85	2,752.09	84.41
J-9	2,555.00	Zone	Demand	5.50	COMMERCIAL	5.50	2,751.98	85.23
J-10	2,550.50	Zone	Demand	0.00	Composite	0.00	2,751.78	87.08
J-11	2,554.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,752.00	85.45
J-12	2,556.70	Zone	Demand	9.76	RESIDENTIAL	9.76	2,752.12	84.55
J-13	2,557.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,752.27	84.49
J-14	2,555.70	Zone	Demand	4.44	Composite	4.44	2,752.70	85.23
J-15	2,558.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.27	84.05
J-16	2,552.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,752.10	86.57
J-17	2,555.30	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.05	85.12
J-18	2,554.70	Zone	Demand	1.78	RESIDENTIAL	1.78	2,751.96	85.35
J-19	2,552.00	Zone	Demand	8.61	Composite	8.61	2,751.73	86.41
J-20	2,553.00	Zone	Demand	5.55	COMMERCIAL	5.55	2,751.73	85.98
J-21	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.35	85.17
J-22	2,553.50	Zone	Demand	7.24	Composite	7.24	2,751.50	85.67
J-23	2,557.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,751.94	84.34
J-24	2,553.00	Zone	Demand	5.46	Composite	5.46	2,751.75	85.99
J-25	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.56	84.61
J-26	2,554.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,751.83	85.59
J-27	2,555.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,751.92	84.98
J-28	2,558.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,751.96	83.92
J-29	2,556.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,752.06	84.83
J-30	2,579.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.36	74.79
J-31	2,581.50	Zone	Demand	4.17	RESIDENTIAL	4.17	2,752.36	73.92
J-32	2,585.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,752.44	72.23
J-33	2,595.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.70	68.23
J-34	2,596.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.76	67.61
J-35	2,597.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,752.76	67.17
J-36	2,604.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.92	64.22
J-37	2,601.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.97	65.75
J-38	2,603.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,753.06	64.92
J-39	2,591.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.20	70.18
J-40	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.04	69.68
J-41	2,591.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,753.11	70.14
J-42	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.82	70.44
J-43	2,581.00	Zone	Demand	9.05	COMMERCIAL	9.05	2,752.64	74.26
J-44	2,590.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.93	70.49
J-45	2,594.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.96	68.78
J-46	2,602.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.96	65.32
J-47	2,596.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.96	67.91
J-48	2,593.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.96	68.99
J-49	2,601.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,752.95	65.74
J-50	2,603.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,752.97	64.88
J-51	2,606.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,753.03	63.61
J-52	2,609.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,753.02	62.31

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-53	2,605.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.24	64.14
J-54	2,604.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.28	64.59
J-55	2,607.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.71	62.83
J-56	2,608.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.64	62.36
J-57	2,610.50	Zone	Demand	19.53	RESIDENTIAL	19.53	2,752.60	61.48
J-58	2,606.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.50	63.38
J-59	2,618.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.56	58.00
J-60	2,615.00	Zone	Demand	2.57	Composite	2.57	2,752.56	59.51
J-61	2,604.50	Zone	Demand	9.77	RESIDENTIAL	9.77	2,752.45	64.01
J-62	2,600.00	Zone	Demand	9.79	RESIDENTIAL	9.79	2,752.47	65.97
J-63	2,597.50	Zone	Demand	9.79	RESIDENTIAL	9.79	2,752.74	67.16
J-64	2,595.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.91	68.10
J-65	2,595.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,752.42	67.89
J-66	2,604.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,752.34	64.18
J-67	2,604.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.34	63.96
J-68	2,603.00	Zone	Demand	26.63	RESIDENTIAL	26.63	2,752.26	64.58
J-69	2,585.00	Zone	Demand	21.30	RESIDENTIAL	21.30	2,751.99	72.25
J-70	2,587.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,751.98	71.38
J-71	2,600.00	Zone	Demand	17.75	RESIDENTIAL	17.75	2,751.99	65.76
J-72	2,602.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,751.99	64.68
J-73	2,589.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,751.96	70.29
J-74	2,617.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.14	58.47
J-75	2,606.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.35	63.10
J-76	2,611.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.35	61.16
J-77	2,617.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,752.37	58.57
J-78	2,618.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.26	58.09
J-79	2,616.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,752.40	58.80
J-80	2,613.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.41	60.10
J-81	2,607.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.29	62.65
J-83	2,619.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,752.43	57.51
J-84	2,624.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.54	55.40
J-85	2,626.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,752.55	54.75
J-86	2,623.50	Zone	Demand	11.53	RESIDENTIAL	11.53	2,752.53	55.82
J-87	2,618.00	Zone	Demand	7.98	RESIDENTIAL	7.98	2,752.42	58.16
J-88	2,618.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.41	58.15
J-89	2,618.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.41	58.15
J-90	2,618.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.40	58.15
J-91	2,616.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.41	58.80
J-92	2,619.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,751.61	57.37
J-93	2,619.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,751.56	57.13
J-94	2,618.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,751.50	57.76
J-95	2,619.50	Zone	Demand	13.31	RESIDENTIAL	13.31	2,751.49	57.11
J-96	2,621.50	Zone	Demand	3.38	Composite	3.38	2,753.18	56.97
J-97	2,615.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,751.46	59.04
J-98	2,612.50	Zone	Demand	2.65	RESIDENTIAL	2.65	2,751.46	60.12
J-99	2,611.00	Zone	Demand	3.57	RESIDENTIAL	3.57	2,751.42	60.75
J-100	2,609.50	Zone	Demand	4.18	Composite	4.18	2,751.46	61.42
J-101	2,610.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,751.45	61.20
J-102	2,615.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,751.48	59.05
J-103	2,615.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,751.48	59.05
J-104	2,607.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.34	62.23
J-105	2,603.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,751.34	63.96

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-106	2,593.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,751.28	68.26
J-107	2,612.50	Zone	Demand	10.33	Composite	10.33	2,751.33	60.06
J-108	2,612.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,751.30	60.05
J-109	2,610.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,751.29	61.13
J-110	2,610.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,751.29	61.13
J-111	2,610.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,751.29	60.91
J-112	2,614.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,751.29	59.40
J-113	2,611.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,751.29	60.48
J-114	2,617.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,751.28	58.10
J-115	2,564.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,750.08	80.51
J-116	2,620.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.54	57.35
J-117	2,621.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.71	56.98
J-118	2,579.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.66	73.84
J-119	2,623.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.60	55.86
J-120	2,624.50	Zone	Demand	7.11	RESIDENTIAL	7.11	2,752.58	55.42
J-121	2,627.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.72	54.18
J-122	2,618.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.55	58.00
J-123	2,624.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,752.53	55.39
J-124	2,588.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,741.35	66.35
J-125	2,623.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,752.52	56.04
J-126	2,620.50	Zone	Demand	2.67	RESIDENTIAL	2.67	2,752.52	57.12
J-127	2,605.80	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.04	63.70
J-128	2,619.00	Zone	Demand	1.76	RESIDENTIAL	1.76	2,751.67	57.40
J-131	2,553.00	Zone	Demand	2.68	COMMERCIAL	2.68	2,751.94	86.07
J-132	2,624.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.33	55.74
J-133	2,564.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,750.10	80.52
J-134	2,558.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,750.15	83.13
J-135	2,557.50	Zone	Demand	26.74	COMMERCIAL	26.74	2,750.56	83.53
J-136	2,626.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.59	54.55
J-137	2,553.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,751.95	85.86
J-138	2,638.00	Zone	Demand	10.66	RESIDENTIAL	10.66	2,752.72	49.63
J-139	2,554.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,751.95	85.43
J-140	2,554.50	Zone	Demand	0.14	COMMERCIAL	0.14	2,751.48	85.22
J-141	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.48	85.44
J-142	2,554.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,751.83	85.59
J-143	2,610.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.58	61.69
J-144	2,611.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.55	61.24
J-145	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.90	79.56
J-146	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.37	80.63
J-147	2,615.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,750.51	58.63
J-148	2,623.00	Zone	Demand	9.66	RESIDENTIAL	9.66	2,752.56	56.06
J-149	2,621.00	Zone	Demand	26.64	RESIDENTIAL	26.64	2,752.53	56.91
J-150	2,620.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,752.58	57.36
J-151	2,624.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,752.58	55.41
J-152	2,625.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,752.58	55.20
J-153	2,626.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.59	54.77
J-154	2,561.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,756.86	84.52
J-155	2,556.50	Zone	Demand	15.09	RESIDENTIAL	15.09	2,756.86	86.69
J-156	2,556.20	Zone	Demand	0.00	RESIDENTIAL	0.00	2,756.86	86.82
J-157	2,559.50	Zone	Demand	2.76	COMMERCIAL	2.76	2,759.00	86.31
J-158	2,562.00	Zone	Demand	22.90	Composite	22.90	2,758.99	85.23
J-159	2,561.00	Zone	Demand	18.64	RESIDENTIAL	18.64	2,760.32	86.23

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-160	2,560.00	Zone	Demand	1.03	Composite	1.03	2,760.38	86.69
J-161	2,565.00	Zone	Demand	12.44	RESIDENTIAL	12.44	2,760.31	84.50
J-162	2,559.50	Zone	Demand	0.89	RESIDENTIAL	0.89	2,761.11	87.23
J-163	2,558.50	Zone	Demand	6.44	Composite	6.44	2,761.07	87.64
J-164	2,556.50	Zone	Demand	14.20	RESIDENTIAL	14.20	2,761.49	88.69
J-165	2,557.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,761.49	88.26
J-166	2,555.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,762.14	89.62
J-167	2,554.00	Zone	Demand	6.10	RESIDENTIAL	6.10	2,762.14	90.05
J-168	2,553.50	Zone	Demand	1.25	Composite	1.25	2,762.42	90.39
J-169	2,553.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,762.42	90.39
J-170	2,554.50	Zone	Demand	5.94	Composite	5.94	2,762.68	90.07
J-171	2,556.50	Zone	Demand	8.88	Composite	8.88	2,762.68	89.20
J-172	2,555.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,762.97	89.76
J-173	2,556.50	Zone	Demand	2.04	Composite	2.04	2,762.97	89.33
J-174	2,557.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,762.97	89.11
J-175	2,557.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,762.97	89.11
J-176	2,559.00	Zone	Demand	4.29	IRRIGATION	4.29	2,763.17	88.34
J-177	2,559.50	Zone	Demand	14.30	Composite	14.30	2,761.99	87.61
J-178	2,557.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,761.98	88.69
J-179	2,559.50	Zone	Demand	24.90	Composite	24.90	2,774.28	92.92
J-180	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.99	96.69
J-181	2,549.00	Zone	Demand	7.09	RESIDENTIAL	7.09	2,777.15	98.71
J-182	2,550.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,777.14	98.27
J-183	2,548.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,777.15	99.14
J-184	2,548.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,777.14	99.14
J-185	2,549.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,777.12	98.70
J-186	2,547.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,777.14	99.57
J-187	2,546.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.14	99.79
J-188	2,551.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,776.98	97.77
J-189	2,553.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,776.98	96.90
J-190	2,553.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,776.98	96.91
J-191	2,552.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,776.98	97.34
J-192	2,552.50	Zone	Demand	2.02	Composite	2.02	2,776.98	97.12
J-193	2,551.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,776.98	97.55
J-194	2,553.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,776.98	96.90
J-195	2,555.00	Zone	Demand	22.21	Composite	22.21	2,776.97	96.04
J-196	2,556.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,776.98	95.61
J-197	2,551.50	Zone	Demand	20.66	Composite	20.66	2,768.99	94.10
J-198	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.99	96.69
J-199	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.99	98.42
J-200	2,616.50	Zone	Demand	4.28	Composite	4.28	2,752.63	58.90
J-201	2,617.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.63	58.68
J-202	2,601.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.62	65.60
J-203	2,600.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.61	66.03
J-204	2,603.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.61	64.73
J-205	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.61	64.51
J-206	2,603.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.61	64.73
J-207	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.61	64.51
J-208	2,599.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,752.61	66.46
J-209	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.64	75.99
J-210	2,597.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.64	67.34
J-211	2,597.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.64	67.12

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-212	2,591.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.64	69.72
J-213	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.64	69.50
J-214	2,587.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.64	71.67
J-215	2,552.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,751.56	86.34
J-216	2,553.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,751.55	85.90
J-217	2,553.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,751.55	85.69
J-218	2,554.00	Zone	Demand	1.59	COMMERCIAL	1.59	2,751.41	85.41
J-219	2,554.50	Zone	Demand	22.69	IRRIGATION	22.69	2,751.28	85.14
J-220	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.84	83.86
J-221	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.63	81.18
J-222	2,564.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.59	80.51
J-223	2,564.50	Zone	Demand	0.44	COMMERCIAL	0.44	2,750.55	80.50
J-224	2,561.50	Zone	Demand	1.65	RESIDENTIAL	1.65	2,750.55	81.79
J-225	2,562.50	Zone	Demand	4.62	COMMERCIAL	4.62	2,750.38	81.29
J-226	2,561.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,750.08	81.81
J-227	2,565.00	Zone	Demand	15.98	RESIDENTIAL	15.98	2,748.79	79.52
J-228	2,566.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,748.26	78.85
J-229	2,568.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,748.08	77.91
J-230	2,569.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,747.97	77.43
J-231	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,747.88	81.93
J-232	2,565.00	Zone	Demand	15.11	Composite	15.11	2,748.09	79.21
J-233	2,565.00	Zone	Demand	7.02	Composite	7.02	2,748.02	79.18
J-234	2,565.00	Zone	Demand	11.63	COMMERCIAL	11.63	2,747.06	78.77
J-235	2,603.00	Zone	Demand	0.00	Fixed	0.00	2,752.61	64.73
J-236	2,613.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,752.61	60.40
J-237	2,565.50	Zone	Demand	0.59	IRRIGATION	0.59	2,747.06	78.55
J-238	2,568.50	Zone	Demand	0.83	Composite	0.83	2,747.06	77.26
J-239	2,569.00	Zone	Demand	2.43	RESIDENTIAL	2.43	2,747.06	77.04
J-240	2,569.50	Zone	Demand	23.75	IRRIGATION	23.75	2,747.07	76.82
J-241	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.34	71.97
J-242	2,570.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,746.76	76.48
J-243	2,568.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,746.58	77.26
J-244	2,566.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,746.45	77.86
J-245	2,564.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,746.58	78.99
J-246	2,569.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,746.55	76.82
J-247	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,743.11	74.03
J-248	2,571.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,746.47	75.92
J-249	2,570.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,746.50	76.36
J-250	2,571.00	Zone	Demand	2.93	Composite	2.93	2,746.41	75.89
J-251	2,573.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,746.04	74.87
J-252	2,570.00	Zone	Demand	1.17	IRRIGATION	1.17	2,746.45	76.34
J-253	2,571.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.45	75.69
J-254	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.25	74.74
J-255	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.25	74.74
J-256	2,577.00	Zone	Demand	0.23	COMMERCIAL	0.23	2,745.96	73.10
J-257	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.82	54.00
J-258	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.96	49.30
J-259	2,638.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.96	49.74
J-260	2,635.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.95	51.03
J-261	2,633.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,752.95	51.90
J-262	2,634.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.95	51.47
J-263	2,625.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.95	55.36

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-264	2,634.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,752.95	51.46
J-265	2,633.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.95	51.90
J-266	2,635.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,752.95	51.03
J-267	2,636.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.95	50.60
J-268	2,632.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,752.97	52.34
J-269	2,633.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,753.00	51.92
J-270	2,630.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,752.99	53.21
J-271	2,632.50	Zone	Demand	2.25	Composite	2.25	2,752.99	52.13
J-272	2,638.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,752.99	49.75
J-273	2,634.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,752.99	51.48
J-274	2,634.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.99	51.27
J-275	2,635.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,753.00	51.05
J-276	2,635.70	Zone	Demand	13.31	RESIDENTIAL	13.31	2,753.00	50.75
J-277	2,636.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,753.00	50.62
J-278	2,641.00	Zone	Demand	17.75	RESIDENTIAL	17.75	2,753.02	48.47
J-279	2,638.00	Zone	Demand	4.07	Composite	4.07	2,753.06	49.78
J-280	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.14	49.39
J-281	2,653.00	Zone	Demand	5.70	Composite	5.70	2,820.57	72.50
J-282	2,644.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,820.58	76.40
J-283	2,640.00	Zone	Demand	3.87	Composite	3.87	2,820.58	78.13
J-284	2,638.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.59	79.00
J-285	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,820.59	79.86
J-286	2,635.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,820.59	80.30
J-287	2,639.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,820.61	78.57
J-288	2,637.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,820.56	79.42
J-289	2,644.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,820.65	76.43
J-290	2,647.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.65	75.13
J-291	2,643.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.64	76.86
J-292	2,654.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,820.64	72.10
J-293	2,654.00	Zone	Demand	5.02	Composite	5.02	2,820.73	72.14
J-294	2,667.00	Zone	Demand	7.33	IRRIGATION	7.33	2,822.63	67.33
J-295	2,565.50	Zone	Demand	2.93	COMMERCIAL	2.93	2,747.06	78.55
J-296	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.67	67.35
J-297	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.67	67.35
J-298	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.23	68.24
J-299	2,670.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,823.33	66.34
J-300	2,670.00	Zone	Demand	0.89	RESIDENTIAL	0.89	2,823.33	66.34
J-301	2,664.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,823.70	69.09
J-302	2,664.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.30	68.71
J-303	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,824.03	67.94
J-304	2,670.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,824.03	66.64
J-305	2,667.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,824.45	68.12
J-306	2,665.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,824.86	69.16
J-307	2,664.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,825.57	69.90
J-308	2,670.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,825.56	67.30
J-309	2,660.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,826.33	71.96
J-310	2,662.50	Zone	Demand	23.08	RESIDENTIAL	23.08	2,826.82	71.09
J-311	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.24	68.25
J-312	2,655.00	Zone	Demand	250.71	Composite	250.71	2,825.66	73.83
J-313	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,826.16	75.35
J-314	2,660.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.29	70.43
J-315	2,645.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.14	79.24

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-316	2,643.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,740.51	42.19
J-317	2,631.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.54	52.58
J-318	2,577.50	Zone	Demand	13.31	RESIDENTIAL	13.31	2,752.65	75.78
J-319	2,566.00	Zone	Demand	12.43	Composite	12.43	2,749.90	79.56
J-320	2,563.00	Zone	Demand	10.66	RESIDENTIAL	10.66	2,749.37	80.63
J-321	2,647.50	Zone	Demand	16.87	RESIDENTIAL	16.87	2,827.75	77.99
J-322	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,739.97	64.02
J-323	2,572.50	Zone	Demand	7.99	RESIDENTIAL	7.99	2,742.90	73.72
J-325	2,645.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.34	79.11
J-326	2,565.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.63	78.37
J-327	2,565.50	Zone	Demand	7.99	RESIDENTIAL	7.99	2,746.59	78.35
J-328	2,565.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,746.59	78.57
J-329	2,565.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,746.54	78.33
J-330	2,565.00	Zone	Demand	6.11	RESIDENTIAL	6.11	2,746.54	78.54
J-331	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.50	78.10
J-332	2,568.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,746.10	76.84
J-333	2,569.50	Zone	Demand	0.94	Composite	0.94	2,746.10	76.41
J-334	2,571.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,746.20	75.59
J-335	2,572.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,746.36	75.44
J-336	2,571.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,745.99	75.71
J-337	2,571.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,745.67	75.57
J-338	2,572.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,745.85	75.22
J-339	2,573.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,745.85	74.79
J-340	2,572.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,746.04	75.30
J-341	2,571.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,745.03	75.30
J-342	2,572.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,745.03	74.86
J-343	2,570.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,744.52	75.51
J-344	2,573.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,743.46	73.53
J-345	2,572.00	Zone	Demand	11.11	Composite	11.11	2,743.11	74.03
J-346	2,632.00	Zone	Demand	5.86	Composite	5.86	2,820.50	81.56
J-347	2,630.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.50	82.20
J-348	2,630.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,820.50	82.42
J-349	2,633.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,820.50	81.12
J-350	2,638.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,820.55	78.98
J-351	2,640.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,820.55	78.12
J-352	2,640.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,820.55	77.90
J-353	2,680.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,825.55	62.97
J-354	2,695.00	Zone	Demand	11.55	RESIDENTIAL	11.55	2,825.54	56.48
J-355	2,682.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,825.55	61.89
J-356	2,678.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,825.55	63.62
J-357	2,700.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,825.54	54.32
J-358	2,699.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.63	53.49
J-359	2,701.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.63	52.62
J-360	2,717.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,822.63	45.70
J-361	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,777.17	97.20
J-364	2,554.00	Zone	Demand	5.30	COMMERCIAL	5.30	2,752.66	85.95
J-365	2,554.00	Zone	Demand	0.88	COMMERCIAL	0.88	2,752.66	85.95
J-366	2,554.00	Zone	Demand	2.76	COMMERCIAL	2.76	2,752.66	85.95
J-367	2,550.00	Zone	Demand	9.00	COMMERCIAL	9.00	2,751.28	87.08
J-368	2,580.00	Zone	Demand	6.54	IRRIGATION	6.54	2,749.14	73.18
J-369	2,550.50	Zone	Demand	1.05	COMMERCIAL	1.05	2,751.99	87.18
J-370	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.14	73.83

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-371	2,554.00	Zone	Demand	17.34	COMMERCIAL	17.34	2,751.90	85.62
J-372	2,555.50	Zone	Demand	8.69	IRRIGATION	8.69	2,751.78	84.92
J-373	2,556.00	Zone	Demand	2.00	COMMERCIAL	2.00	2,751.77	84.70
J-374	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.77	84.70
J-375	2,550.00	Zone	Demand	0.66	COMMERCIAL	0.66	2,751.75	87.29
J-376	2,549.50	Zone	Demand	13.76	COMMERCIAL	13.76	2,751.75	87.50
J-377	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.75	87.50
J-378	2,550.00	Zone	Demand	11.22	COMMERCIAL	11.22	2,751.74	87.29
J-379	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.68	87.47
J-380	2,589.00	Zone	Demand	12.03	COMMERCIAL	12.03	2,752.99	70.95
J-381	2,593.50	Zone	Demand	1.48	COMMERCIAL	1.48	2,752.99	69.01
J-382	2,547.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.52	88.27
J-383	2,548.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.47	87.81
J-384	2,548.50	Zone	Demand	5.14	COMMERCIAL	5.14	2,751.47	87.81
J-385	2,557.00	Zone	Demand	0.86	COMMERCIAL	0.86	2,750.79	83.84
J-386	2,556.00	Zone	Demand	16.22	COMMERCIAL	16.22	2,751.33	84.51
J-387	2,556.00	Zone	Demand	1.58	Composite	1.58	2,751.30	84.50
J-388	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.78	82.98
J-389	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.79	85.14
J-390	2,553.50	Zone	Demand	0.20	COMMERCIAL	0.20	2,750.79	85.36
J-391	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.79	84.71
J-392	2,554.00	Zone	Demand	7.09	COMMERCIAL	7.09	2,750.79	85.14
J-393	2,552.50	Zone	Demand	0.00	Composite	0.00	2,750.79	85.79
J-394	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.80	83.85
J-395	2,558.00	Zone	Demand	0.98	COMMERCIAL	0.98	2,750.84	83.43
J-396	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.93	82.61
J-397	2,560.00	Zone	Demand	0.31	Composite	0.31	2,750.93	82.61
J-398	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.76	85.99
J-399	2,554.00	Zone	Demand	16.87	RESIDENTIAL	16.87	2,750.73	85.12
J-400	2,556.50	Zone	Demand	12.26	Composite	12.26	2,750.71	84.03
J-401	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.68	82.72
J-402	2,555.50	Zone	Demand	2.25	COMMERCIAL	2.25	2,750.74	84.47
J-403	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.75	84.69
J-404	2,562.50	Zone	Demand	0.39	COMMERCIAL	0.39	2,750.73	81.44
J-405	2,567.00	Zone	Demand	3.34	COMMERCIAL	3.34	2,750.72	79.49
J-406	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.76	85.34
J-407	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	81.22
J-408	2,565.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.38	80.21
J-409	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.79	83.41
J-410	2,627.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,752.54	54.10
J-411	2,621.00	Zone	Demand	6.98	Composite	6.98	2,752.55	56.92
J-412	2,602.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,752.57	64.93
J-413	2,599.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.58	66.45
J-414	2,716.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,825.54	47.39
J-415	2,718.00	Zone	Demand	7.99	Composite	7.99	2,825.54	46.53
J-416	2,733.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,825.54	40.04
J-417	2,722.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,825.54	44.80
J-418	2,559.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,747.81	81.47
J-419	2,560.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,747.81	81.04
J-420	2,573.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,747.60	75.33
J-421	2,574.50	Zone	Demand	14.21	Composite	14.21	2,747.42	74.82
J-422	2,573.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,747.63	75.55

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-423	2,565.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,747.72	78.84
J-424	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,747.72	78.62
J-425	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.66	74.27
J-426	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.66	74.27
J-427	2,579.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.04	73.35
J-428	2,579.50	Zone	Demand	0.53	COMMERCIAL	0.53	2,749.10	73.38
J-429	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.13	74.90
J-430	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.13	74.90
J-431	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,749.14	74.69
J-432	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,749.14	74.69
J-433	2,572.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,749.15	76.43
J-434	2,572.50	Zone	Demand	0.00	Composite	0.00	2,749.15	76.43
J-435	2,578.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,749.15	73.83
J-436	2,579.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.15	73.61
J-437	2,578.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,749.15	73.83
J-438	2,579.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,749.15	73.40
J-439	2,580.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,749.15	72.96
J-440	2,580.00	Zone	Demand	0.74	Composite	0.74	2,749.15	73.18
J-441	2,554.00	Zone	Demand	10.18	IRRIGATION	10.18	2,751.51	85.45
J-442	2,592.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,753.06	69.47
J-443	2,556.00	Zone	Demand	6.89	RESIDENTIAL	6.89	2,751.30	84.50
J-444	2,554.00	Zone	Demand	0.66	COMMERCIAL	0.66	2,751.26	85.35
J-445	2,554.00	Zone	Demand	0.10	IRRIGATION	0.10	2,751.27	85.35
J-446	2,555.00	Zone	Demand	7.96	IRRIGATION	7.96	2,751.23	84.90
J-447	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.21	84.46
J-448	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.21	84.89
J-449	2,554.50	Zone	Demand	1.14	COMMERCIAL	1.14	2,751.21	85.11
J-450	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.20	84.45
J-451	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.17	84.44
J-452	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.16	84.43
J-453	2,556.50	Zone	Demand	0.11	COMMERCIAL	0.11	2,751.14	84.21
J-454	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.13	83.99
J-455	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.11	83.98
J-456	2,558.00	Zone	Demand	1.68	IRRIGATION	1.68	2,751.10	83.54
J-457	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.07	83.31
J-458	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.09	83.54
J-459	2,557.00	Zone	Demand	0.22	COMMERCIAL	0.22	2,751.14	84.00
J-460	2,556.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,751.17	84.22
J-461	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.20	84.45
J-462	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.17	84.44
J-463	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.17	84.01
J-464	2,557.00	Zone	Demand	0.50	IRRIGATION	0.50	2,751.17	84.01
J-465	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.20	84.45
J-466	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.17	83.79
J-467	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.17	83.36
J-468	2,558.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,751.17	83.58
J-469	2,557.50	Zone	Demand	0.06	COMMERCIAL	0.06	2,751.17	83.79
J-470	2,558.00	Zone	Demand	0.01	COMMERCIAL	0.01	2,751.17	83.58
J-471	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.75	84.91
J-472	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.75	84.91
J-473	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.75	84.48
J-474	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.09	82.89

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-475	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.06	83.53
J-476	2,553.00	Zone	Demand	0.02	COMMERCIAL	0.02	2,751.21	85.75
J-477	2,553.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.68
J-478	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.75	84.48
J-479	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.46
J-480	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.46
J-481	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	84.59
J-482	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.89
J-483	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.24
J-484	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.24
J-485	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.24
J-486	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.24
J-487	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.89
J-488	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.02	85.89
J-489	2,561.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,747.83	80.83
J-490	2,565.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,747.67	78.82
J-491	2,565.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,747.67	78.82
J-492	2,569.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,747.57	77.26
J-493	2,570.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,747.57	76.82
J-494	2,575.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,747.42	74.38
J-495	2,639.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.48	78.30
J-496	2,628.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.47	83.06
J-497	2,628.50	Zone	Demand	33.75	RESIDENTIAL	33.75	2,820.47	83.06
J-498	2,628.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,820.47	83.27
J-499	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.47	83.27
J-500	2,625.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,820.46	84.35
J-501	2,613.50	Zone	Demand	10.54	RESIDENTIAL	10.54	2,820.46	89.54
J-502	2,612.50	Zone	Demand	14.22	IRRIGATION	14.22	2,820.46	89.97
J-503	2,616.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.46	88.25
J-504	2,587.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.76	71.50
J-505	2,587.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,752.76	71.50
J-506	2,584.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.70	72.99
J-507	2,618.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,752.57	58.22
J-508	2,592.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,752.63	69.50
J-509	2,588.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,752.63	71.23
J-510	2,594.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.63	68.63
J-511	2,594.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,752.60	68.40
J-512	2,595.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.60	68.19
J-513	2,612.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.58	60.82
J-514	2,601.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.59	65.37
J-515	2,593.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.60	68.83
J-516	2,612.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,752.57	60.82
J-517	2,589.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.60	70.78
J-518	2,603.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.59	64.72
J-519	2,604.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.59	64.29
J-520	2,604.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.58	64.07
J-521	2,616.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.57	58.87
J-522	2,575.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,743.29	72.81
J-523	2,578.00	Zone	Demand	2.05	Composite	2.05	2,743.29	71.51
J-524	2,574.00	Zone	Demand	15.16	IRRIGATION	15.16	2,743.17	73.19
J-525	2,559.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,747.84	81.48
J-527	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,747.63	75.99

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-528	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.76	70.42
J-529	2,546.00	Zone	Demand	11.53	RESIDENTIAL	11.53	2,777.10	99.99
J-530	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.99	97.34
J-531	2,579.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,752.65	75.13
J-532	2,572.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.65	77.94
J-533	2,572.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,752.65	78.16
J-534	2,572.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,752.65	77.94
J-535	2,572.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.65	78.16
J-536	2,571.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,752.65	78.59
J-537	2,569.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,752.65	79.24
J-538	2,571.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.66	78.60
J-539	2,572.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,752.66	78.16
J-540	2,571.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,752.68	78.39
J-541	2,572.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,752.68	77.95
J-542	2,572.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,752.69	77.96
J-543	2,553.00	Zone	Demand	5.74	Composite	5.74	2,751.92	86.06
J-544	2,554.00	Zone	Demand	8.49	Composite	8.49	2,751.90	85.62
J-546	2,555.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,751.91	85.19
J-547	2,558.00	Zone	Demand	2.79	COMMERCIAL	2.79	2,750.87	83.45
J-548	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.75	82.96
J-549	2,559.50	Zone	Demand	7.34	IRRIGATION	7.34	2,750.72	82.73
J-550	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.69	82.72
J-551	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.67	82.71
J-552	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.64	82.70
J-553	2,557.50	Zone	Demand	22.19	RESIDENTIAL	22.19	2,750.71	83.59
J-554	2,557.50	Zone	Demand	17.75	RESIDENTIAL	17.75	2,750.69	83.59
J-555	2,558.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,750.68	83.15
J-556	2,559.00	Zone	Demand	7.99	Composite	7.99	2,750.68	82.93
J-557	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.64	82.48
J-558	2,561.50	Zone	Demand	6.28	Composite	6.28	2,750.64	81.83
J-559	2,559.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,750.63	82.91
J-560	2,558.50	Zone	Demand	7.10	Composite	7.10	2,750.63	83.13
J-561	2,557.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,750.63	83.56
J-562	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.63	83.34
J-563	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.60	83.55
J-564	2,557.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,750.59	83.54
J-565	2,560.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,750.59	82.46
J-566	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.64	83.13
J-567	2,556.00	Zone	Demand	3.09	COMMERCIAL	3.09	2,750.68	84.23
J-568	2,615.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,820.46	88.68
J-569	2,595.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.46	97.55
J-570	2,597.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,820.46	96.47
J-571	2,659.00	Zone	Demand	20.42	RESIDENTIAL	20.42	2,823.24	71.06
J-572	2,643.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,823.24	77.98
J-573	2,643.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.24	77.76
J-574	2,644.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,823.24	77.55
J-575	2,643.50	Zone	Demand	7.11	RESIDENTIAL	7.11	2,823.24	77.77
J-576	2,661.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,823.30	70.22
J-577	2,649.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,823.26	75.40
J-578	2,649.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,823.26	75.39
J-579	2,642.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,823.26	78.42
J-580	2,645.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,823.26	77.12

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-581	2,643.50	Zone	Demand	0.89	RESIDENTIAL	0.89	2,823.26	77.77
J-582	2,643.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,823.26	77.77
J-583	2,648.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,823.26	75.83
J-584	2,654.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,823.27	73.02
J-585	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,823.27	74.10
J-586	2,650.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,823.27	74.75
J-587	2,652.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,753.48	43.90
J-588	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.63	71.66
J-589	2,576.50	Zone	Demand	0.24	COMMERCIAL	0.24	2,748.64	74.48
J-590	2,574.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.64	75.34
J-591	2,579.50	Zone	Demand	0.33	COMMERCIAL	0.33	2,749.28	73.46
J-592	2,578.00	Zone	Demand	0.50	Composite	0.50	2,749.28	74.11
J-593	2,579.50	Zone	Demand	70.70	IRRIGATION	70.70	2,749.02	73.34
J-594	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.05	73.79
J-595	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.65	73.83
J-596	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.59	73.81
J-597	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.59	73.59
J-598	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.36	73.92
J-599	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.36	74.57
J-600	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.36	74.57
J-601	2,577.00	Zone	Demand	5.15	COMMERCIAL	5.15	2,748.36	74.14
J-602	2,577.50	Zone	Demand	8.98	COMMERCIAL	8.98	2,748.36	73.92
J-603	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.36	74.79
J-604	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,748.36	74.14
J-605	2,578.00	Zone	Demand	2.61	COMMERCIAL	2.61	2,747.83	73.48
J-606	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,747.83	73.48
J-607	2,572.00	Zone	Demand	1.84	COMMERCIAL	1.84	2,746.57	75.53
J-608	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.57	74.01
J-609	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.57	74.01
J-610	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.17	73.19
J-611	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.17	72.98
J-612	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.12	72.95
J-613	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.12	72.95
J-614	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.08	72.94
J-615	2,578.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,746.08	72.72
J-616	2,580.00	Zone	Demand	9.83	COMMERCIAL	9.83	2,745.82	71.74
J-617	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	81.65
J-618	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	81.65
J-619	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	81.65
J-620	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	79.70
J-621	2,566.00	Zone	Demand	0.10	COMMERCIAL	0.10	2,750.72	79.92
J-622	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	79.70
J-623	2,567.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	79.27
J-624	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,750.72	79.49
J-628	2,569.00	Zone	Demand	19.65	COMMERCIAL	19.65	2,757.31	81.47
J-636	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.66	74.27
J-637	2,558.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,768.96	91.06
J-638	2,559.00	Zone	Demand	14.21	RESIDENTIAL	14.21	2,768.96	90.84
J-639	2,556.00	Zone	Demand	23.97	Composite	23.97	2,768.95	92.13
J-640	2,564.50	Zone	Demand	15.99	RESIDENTIAL	15.99	2,760.31	84.72
J-650	2,610.00	Zone	Demand	20.42	RESIDENTIAL	20.42	2,752.55	61.68
J-651	2,553.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,751.55	85.69

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-653	2,627.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,752.58	54.33
J-654	2,682.00	Zone	Demand	19.53	RESIDENTIAL	19.53	2,825.54	62.10
J-655	2,680.00	Zone	Demand	16.87	RESIDENTIAL	16.87	2,825.54	62.97
J-656	2,693.00	Zone	Demand	21.61	RESIDENTIAL	21.61	2,825.54	57.34
J-657	2,563.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,748.40	80.21
J-658	2,598.00	Zone	Demand	0.27	RESIDENTIAL	0.27	2,752.63	66.90
J-659	2,638.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,741.43	44.75
J-660	2,640.00	Zone	Demand	0.57	COMMERCIAL	0.57	2,741.43	43.88
J-661	2,641.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,741.43	43.45
J-750	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,826.16	75.35
J-751	2,571.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,744.52	75.07
J-752	2,567.00	Zone	Demand	18.99	COMMERCIAL	18.99	2,747.06	77.90
J-813	2,565.00	Zone	Demand	0.00	Fixed	0.00	2,748.02	79.18
J-814	2,560.50	Zone	Demand	0.00	Fixed	0.00	2,747.83	81.05
J-822	2,615.00	Zone	Demand	0.00	Fixed	0.00	2,752.56	59.51
J-823	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,752.72	50.50
J-824	2,621.00	Zone	Demand	0.00	Fixed	0.00	2,752.58	56.93
J-825	2,609.00	Zone	Demand	0.00	Fixed	0.00	2,744.17	58.48
J-826	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,749.05	73.57
J-827	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,749.10	73.59
J-828	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.23	71.05
J-829	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.20	71.04
J-830	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.17	71.03
J-831	2,585.00	Zone	Demand	109.76	Fixed	109.76	2,749.16	71.02
J-832	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.16	71.02
J-833	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.15	71.02
J-834	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.15	71.02
J-835	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.15	71.02
J-836	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.15	71.02
J-837	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.15	71.02
J-838	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.15	71.02
J-840	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,749.21	71.05
J-842	2,552.50	Zone	Demand	0.00	Fixed	0.00	2,767.43	92.99
J-844	2,663.30	Zone	Demand	0.62	RESIDENTIAL	0.62	2,821.94	68.63
J-845	2,664.70	Zone	Demand	0.00	Fixed	0.00	2,822.20	68.14
J-846	2,665.90	Zone	Demand	0.00	Fixed	0.00	2,822.43	67.72
J-847	2,661.70	Zone	Demand	1.86	RESIDENTIAL	1.86	2,821.94	69.33
J-848	2,664.70	Zone	Demand	1.25	RESIDENTIAL	1.25	2,822.20	68.14
J-849	2,665.90	Zone	Demand	1.25	RESIDENTIAL	1.25	2,822.43	67.72
J-851	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,746.17	74.49
J-852	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,746.17	74.49
J-853	2,575.00	Zone	Demand	0.00	Fixed	0.00	2,746.17	74.06
J-901	2,591.00	Zone	Demand	0.00	Fixed	0.00	2,753.47	70.29
J-906	2,553.50	Zone	Demand	3.89	COMMERCIAL	3.89	2,777.35	96.85
J-917	2,625.00	Zone	Demand	0.00	Fixed	0.00	2,751.49	54.73
J-981	2,640.00	Zone	Demand	0.00	Fixed	0.00	2,738.39	42.57
J-982	2,644.50	Zone	Demand	0.00	Fixed	0.00	2,740.48	41.52

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-1	370.00	8.0	PVC	Open		-527.71	3.37	2,754.98	2,756.87	5.12	1.90
P-2	266.00	6.0	PVC	Open		0.00	0.00	2,754.98	2,754.98	0.00	0.00
P-3	365.00	8.0	PVC	Open		-517.90	3.31	2,753.17	2,754.98	4.94	1.80
P-4	357.00	8.0	PVC	Open		-249.86	1.59	2,752.73	2,753.17	1.24	0.44
P-5	369.00	8.0	PVC	Open		-208.60	1.33	2,752.41	2,752.73	0.88	0.33
P-6	223.00	6.0	PVC	Open		1.06	0.01	2,752.41	2,752.41	0.00	0.00
P-7	358.00	8.0	PVC	Open		-207.54	1.32	2,752.09	2,752.41	0.87	0.31
P-8	530.00	8.0	PVC	Open		96.19	0.61	2,752.09	2,751.98	0.21	0.11
P-9	320.00	8.0	PVC	Open		0.00	0.00	2,751.78	2,751.78	0.00	0.00
P-10	680.00	8.0	PVC	Open		-77.14	0.49	2,752.00	2,752.09	0.14	0.10
P-11	314.00	8.0	PVC	Open		60.64	0.39	2,752.12	2,752.09	0.09	0.03
P-12	520.00	8.0	PVC	Open		113.66	0.73	2,752.27	2,752.12	0.29	0.15
P-13	660.00	8.0	PVC	Open		177.05	1.13	2,752.70	2,752.27	0.65	0.43
P-14	130.00	6.0	PVC	Open		2.66	0.03	2,752.27	2,752.27	0.00	0.00
P-15	770.00	6.0	PVC	Open		45.64	0.52	2,752.27	2,752.10	0.22	0.17
P-16	446.00	8.0	PVC	Open		-43.25	0.28	2,752.10	2,752.12	0.05	0.02
P-17	380.00	8.0	PVC	Open		-78.24	0.50	2,752.05	2,752.10	0.15	0.06
P-18	270.00	8.0	PVC	Open		117.10	0.75	2,752.05	2,751.96	0.30	0.08
P-19	440.00	8.0	PVC	Open		149.34	0.95	2,751.94	2,751.73	0.47	0.21
P-20	83.00	8.0	PVC	Open		5.55	0.04	2,751.73	2,751.73	0.00	0.00
P-21	72.00	8.0	PVC	Open		131.99	0.84	2,751.50	2,751.48	0.38	0.03
P-22	572.00	8.0	PVC	Open		135.18	0.86	2,751.73	2,751.50	0.39	0.23
P-23	195.00	6.0	PVC	Open		-35.09	0.40	2,751.94	2,751.96	0.14	0.03
P-24	826.00	6.0	PVC	Open		45.99	0.52	2,751.94	2,751.75	0.23	0.19
P-25	368.00	8.0	PVC	Open		156.01	1.00	2,751.75	2,751.56	0.51	0.19
P-26	282.00	8.0	PVC	Open		115.47	0.74	2,751.83	2,751.75	0.30	0.08
P-27	228.00	8.0	PVC	Open		129.68	0.83	2,751.92	2,751.83	0.37	0.08
P-28	603.00	8.0	PVC	Open		-51.52	0.33	2,751.92	2,751.96	0.07	0.04
P-29	340.00	6.0	PVC	Open		22.44	0.25	2,751.96	2,751.94	0.06	0.02
P-30	560.00	8.0	PVC	Open		88.16	0.56	2,752.06	2,751.96	0.18	0.10
P-31	249.00	8.0	PVC	Open		45.08	0.29	2,752.06	2,752.05	0.05	0.01
P-32	660.00	8.0	PVC	Open		145.66	0.93	2,752.36	2,752.06	0.45	0.30
P-33	400.00	6.0	PVC	Open		4.17	0.05	2,752.36	2,752.36	0.00	0.00
P-34	171.00	8.0	PVC	Open		152.49	0.97	2,752.44	2,752.36	0.49	0.08
P-35	375.00	8.0	PVC	Open		181.17	1.16	2,752.70	2,752.44	0.68	0.25
P-36	180.00	6.0	PVC	Open		59.06	0.67	2,752.76	2,752.70	0.36	0.06
P-37	318.00	6.0	PVC	Open		10.65	0.12	2,752.76	2,752.76	0.02	0.01
P-38	310.00	6.0	PVC	Open		73.26	0.83	2,752.92	2,752.76	0.53	0.16
P-39	238.00	6.0	PVC	Open		43.41	0.49	2,752.97	2,752.92	0.20	0.05
P-40	250.00	6.0	Asbesto	Open		62.02	0.70	2,753.06	2,752.97	0.35	0.09
P-41	164.00	8.0	PVC	Open		116.21	0.74	2,753.11	2,753.06	0.30	0.05
P-42	64.00	8.0	PVC	Open		80.23	0.51	2,751.96	2,751.95	0.15	0.01
P-43	80.00	8.0	PVC	Open		304.01	1.94	2,753.20	2,753.06	1.79	0.14
P-44	479.00	8.0	PVC	Open		147.75	0.94	2,753.04	2,752.82	0.46	0.22
P-45	70.00	8.0	PVC	Open		255.19	1.63	2,753.20	2,753.11	1.29	0.09
P-46	61.00	8.0	PVC	Open		236.54	1.51	2,751.35	2,751.28	1.12	0.07
P-47	451.00	8.0	PVC	Open		135.42	0.86	2,753.11	2,752.93	0.40	0.18
P-48	172.00	8.0	PVC	Open		177.40	1.13	2,752.93	2,752.82	0.65	0.11
P-49	149.00	6.0	PVC	Open		-45.53	0.52	2,752.93	2,752.96	0.22	0.03
P-50	390.00	6.0	Asbesto	Open		50.65	0.57	2,753.06	2,752.96	0.25	0.10
P-51	250.00	6.0	Asbesto	Open		2.45	0.03	2,752.96	2,752.96	0.00	0.00

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-52	390.00	6.0	Asbestos	Open		12.39	0.14	2,752.97	2,752.96	0.02	0.01
P-53	261.00	6.0	Asbestos	Open		15.98	0.18	2,752.96	2,752.96	0.03	0.01
P-54	211.00	6.0	Asbestos	Open		3.55	0.04	2,752.96	2,752.96	0.00	0.00
P-55	330.00	6.0	Asbestos	Open		7.99	0.09	2,752.96	2,752.95	0.01	0.00
P-56	352.00	6.0	PVC	Open		-8.24	0.09	2,752.96	2,752.97	0.01	0.00
P-57	330.00	6.0	PVC	Open		34.28	0.39	2,752.97	2,752.92	0.13	0.04
P-58	220.00	6.0	PVC	Open		50.52	0.57	2,753.03	2,752.97	0.27	0.06
P-59	444.00	6.0	PVC	Open		8.88	0.10	2,753.03	2,753.02	0.01	0.01
P-60	31.00	6.0	PVC	Open		63.83	0.72	2,753.04	2,753.03	0.41	0.01
P-61	83.00	6.0	PVC	Open		166.44	1.89	2,753.24	2,753.04	2.43	0.20
P-63	87.00	6.0	Ductile I	Open		435.36	4.94	2,612.55	2,611.00	17.79	1.55
P-64	15.00	6.0	PVC	Open		166.44	1.89	2,753.28	2,753.24	2.43	0.04
P-65	251.00	8.0	PVC	Open		272.68	1.74	2,753.28	2,752.91	1.46	0.37
P-66	334.00	6.0	PVC	Open		102.61	1.16	2,753.04	2,752.71	0.98	0.33
P-67	129.00	8.0	PVC	Open		-161.21	1.03	2,752.64	2,752.71	0.55	0.07
P-68	556.00	8.0	PVC	Open		-51.77	0.33	2,752.60	2,752.64	0.07	0.04
P-69	387.00	8.0	PVC	Open		-94.35	0.60	2,752.50	2,752.58	0.20	0.08
P-71	131.00	8.0	PVC	Open		31.14	0.20	2,752.57	2,752.56	0.03	0.00
P-72	150.00	8.0	PVC	Open		116.71	0.74	2,752.50	2,752.45	0.30	0.04
P-73	326.00	6.0	PVC	Open		-19.66	0.22	2,752.45	2,752.47	0.05	0.02
P-74	570.00	6.0	PVC	Open		68.86	0.78	2,752.74	2,752.47	0.47	0.27
P-75	280.00	8.0	PVC	Open		-63.04	0.40	2,752.71	2,752.74	0.10	0.03
P-76	402.00	8.0	PVC	Open		-141.69	0.90	2,752.74	2,752.91	0.43	0.17
P-77	150.00	6.0	PVC	Open		125.66	1.43	2,752.91	2,752.70	1.43	0.21
P-78	700.00	6.0	PVC	Open		-17.14	0.19	2,752.42	2,752.44	0.04	0.03
P-79	325.00	6.0	PVC	Open		39.42	0.45	2,752.47	2,752.42	0.17	0.06
P-80	360.00	6.0	PVC	Open		44.13	0.50	2,752.42	2,752.34	0.21	0.08
P-81	158.00	4.0	PVC	Open		4.44	0.11	2,752.34	2,752.34	0.02	0.00
P-82	985.00	6.0	PVC	Open		-25.49	0.29	2,752.26	2,752.34	0.08	0.08
P-83	930.00	8.0	PVC	Open		115.12	0.73	2,752.26	2,751.99	0.29	0.27
P-84	550.00	6.0	PVC	Open		7.99	0.09	2,751.99	2,751.98	0.01	0.01
P-85	410.00	8.0	PVC	Open		87.03	0.56	2,751.99	2,751.92	0.18	0.07
P-86	660.00	6.0	PVC	Open		1.20	0.01	2,751.99	2,751.99	0.00	0.00
P-87	130.00	4.0	PVC	Open		4.44	0.11	2,751.99	2,751.99	0.02	0.00
P-88	314.00	4.0	PVC	Open		8.88	0.23	2,751.99	2,751.96	0.09	0.03
P-89	1,283.00	6.0	PVC	Open		32.27	0.37	2,752.14	2,751.99	0.12	0.15
P-90	910.00	6.0	PVC	Open		-46.11	0.52	2,752.14	2,752.35	0.23	0.21
P-91	383.00	8.0	PVC	Open		-4.12	0.03	2,752.35	2,752.35	0.00	0.00
P-92	300.00	8.0	PVC	Open		-126.60	0.81	2,752.35	2,752.45	0.35	0.10
P-93	292.00	8.0	PVC	Open		116.26	0.74	2,752.35	2,752.26	0.30	0.09
P-94	372.00	8.0	PVC	Open		48.20	0.31	2,752.37	2,752.35	0.06	0.02
P-95	150.00	2.0	PVC	Open		4.44	0.45	2,752.37	2,752.26	0.72	0.11
P-96	340.00	8.0	PVC	Open		56.20	0.36	2,752.40	2,752.37	0.08	0.03
P-97	125.00	8.0	PVC	Open		47.77	0.30	2,752.41	2,752.40	0.06	0.01
P-98	158.00	2.0	PVC	Open		4.44	0.45	2,752.41	2,752.29	0.72	0.11
P-99	360.00	8.0	PVC	Open		54.87	0.35	2,752.43	2,752.41	0.08	0.03
P-100	809.00	6.0	PVC	Open		18.20	0.21	2,752.43	2,752.40	0.04	0.04
P-101	95.00	4.0	PVC	Open		2.66	0.07	2,752.57	2,752.57	0.01	0.00
P-102	620.00	8.0	PVC	Open		83.72	0.53	2,752.54	2,752.43	0.16	0.10
P-103	150.00	6.0	PVC	Open		-36.01	0.41	2,752.53	2,752.55	0.14	0.02
P-104	980.00	6.0	PVC	Open		31.16	0.35	2,752.53	2,752.42	0.11	0.11

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-105	280.00	4.0	PVC	Open		4.59	0.12	2,752.42	2,752.41	0.03	0.01
P-106	50.00	6.0	PVC	Open		18.59	0.21	2,752.42	2,752.41	0.04	0.00
P-107	233.00	4.0	PVC	Open		-4.29	0.11	2,752.41	2,752.41	0.02	0.01
P-108	110.00	4.0	PVC	Open		6.21	0.16	2,752.41	2,752.40	0.04	0.00
P-109	207.00	6.0	PVC	Open		11.64	0.13	2,752.41	2,752.41	0.02	0.00
P-110	300.00	6.0	PVC	Open		97.39	1.11	2,752.41	2,752.14	0.89	0.27
P-111	470.00	6.0	PVC	Open		104.12	1.18	2,752.14	2,751.67	1.01	0.47
P-112	120.00	2.0	PVC	Open		3.55	0.36	2,751.67	2,751.61	0.48	0.06
P-113	124.00	6.0	PVC	Open		98.81	1.12	2,751.67	2,751.56	0.92	0.11
P-114	145.00	6.0	PVC	Open		58.34	0.66	2,751.56	2,751.50	0.35	0.05
P-115	430.00	6.0	PVC	Open		13.31	0.15	2,751.50	2,751.49	0.02	0.01
P-116	316.00	8.0	PVC	Open		0.00	0.00	2,751.49	2,751.49	0.00	0.00
P-117	250.00	6.0	PVC	Open		-41.47	0.47	2,751.46	2,751.50	0.19	0.05
P-118	190.00	4.0	PVC	Open		2.65	0.07	2,751.46	2,751.46	0.01	0.00
P-119	240.00	6.0	PVC	Open		-36.15	0.41	2,751.42	2,751.46	0.15	0.04
P-120	621.00	6.0	PVC	Open		-20.31	0.23	2,751.42	2,751.46	0.05	0.03
P-121	100.00	4.0	PVC	Open		3.55	0.09	2,751.46	2,751.45	0.01	0.00
P-122	280.00	6.0	PVC	Open		-28.04	0.32	2,751.46	2,751.48	0.09	0.03
P-123	140.00	6.0	PVC	Open		3.55	0.04	2,751.48	2,751.48	0.00	0.00
P-124	530.00	6.0	PVC	Open		35.14	0.40	2,751.56	2,751.48	0.14	0.07
P-125	270.00	6.0	PVC	Open		-52.89	0.60	2,751.34	2,751.42	0.29	0.08
P-126	78.00	6.0	PVC	Open		12.43	0.14	2,751.34	2,751.34	0.02	0.00
P-127	610.00	4.0	PVC	Open		9.76	0.25	2,751.34	2,751.28	0.10	0.06
P-128	430.00	8.0	PVC	Open		-40.47	0.26	2,751.33	2,751.34	0.04	0.02
P-129	250.00	8.0	PVC	Open		-67.89	0.43	2,751.30	2,751.33	0.11	0.03
P-130	480.00	6.0	PVC	Open		9.76	0.11	2,751.30	2,751.29	0.01	0.01
P-131	100.00	6.0	PVC	Open		2.66	0.03	2,751.29	2,751.29	0.00	0.00
P-132	80.00	6.0	PVC	Open		2.66	0.03	2,751.29	2,751.29	0.00	0.00
P-133	165.00	8.0	PVC	Open		-51.02	0.33	2,751.29	2,751.30	0.07	0.01
P-134	270.00	6.0	PVC	Open		5.33	0.06	2,751.29	2,751.29	0.00	0.00
P-135	243.00	8.0	PVC	Open		-38.60	0.25	2,751.28	2,751.29	0.04	0.01
P-136	600.00	8.0	PVC	Open		253.42	1.62	2,751.28	2,750.51	1.27	0.76
P-137	1,300.00	8.0	PVC	Open		220.15	1.41	2,752.54	2,751.28	0.98	1.27
P-138	194.00	8.0	PVC	Open		-204.91	1.31	2,752.54	2,752.71	0.85	0.17
P-139	1,200.00	4.0	PVC	Open		37.76	0.96	2,752.71	2,751.33	1.15	1.38
P-140	400.00	8.0	PVC	Open		-242.67	1.55	2,752.71	2,753.18	1.17	0.47
P-141	67.00	8.0	PVC	Open		-338.90	2.16	2,753.18	2,753.33	2.20	0.15
P-142	940.00	6.0	PVC	Open		92.85	1.05	2,753.18	2,752.41	0.82	0.77
P-143	95.00	8.0	PVC	Open		20.56	0.13	2,752.55	2,752.54	0.02	0.00
P-144	700.00	8.0	PVC	Open		55.18	0.35	2,752.60	2,752.55	0.08	0.05
P-145	260.00	8.0	PVC	Open		36.81	0.23	2,752.58	2,752.58	0.04	0.01
P-146	420.00	8.0	PVC	Open		116.08	0.74	2,752.72	2,752.60	0.30	0.13
P-147	656.00	8.0	PVC	Open		29.30	0.19	2,752.55	2,752.53	0.03	0.02
P-148	548.00	6.0	PVC	Open		10.02	0.11	2,752.53	2,752.52	0.02	0.01
P-149	1,112.00	6.0	PVC	Open		6.86	0.08	2,752.53	2,752.52	0.01	0.01
P-150	867.00	12.0	PVC	Open		886.91	2.52	2,742.90	2,741.35	1.78	1.54
P-151	601.00	6.0	PVC	Open		2.67	0.03	2,752.52	2,752.52	0.00	0.00
P-152	570.00	8.0	PVC	Open		27.51	0.18	2,752.55	2,752.54	0.02	0.01
P-154	5.00	6.0	Ductile I	Open		123.67	1.40	2,611.00	2,610.99	1.56	0.01
P-155	5.00	6.0	Ductile I	Open		157.40	1.79	2,611.00	2,610.99	2.44	0.01
P-156	5.00	6.0	Ductile I	Open		158.06	1.79	2,611.00	2,610.99	2.49	0.01

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-157	20.00	6.0	Ductile I	Open		123.67	1.40	2,753.31	2,753.28	1.55	0.03
P-158	15.00	6.0	Ductile I	Open		157.40	1.79	2,753.31	2,753.28	2.47	0.04
P-159	10.00	6.0	Ductile I	Open		158.06	1.79	2,753.30	2,753.28	2.49	0.02
P-160	170.00	8.0	PVC	Open		-69.11	0.44	2,750.08	2,750.10	0.12	0.02
P-161	575.00	8.0	PVC	Open		-59.03	0.38	2,750.10	2,750.15	0.09	0.05
P-162	797.00	6.0	PVC	Open		-22.51	0.26	2,750.10	2,750.15	0.06	0.05
P-163	505.00	6.0	PVC	Open		-92.19	1.05	2,750.15	2,750.56	0.81	0.41
P-164	420.00	8.0	PVC	Open		65.30	0.42	2,752.59	2,752.55	0.10	0.04
P-165	150.00	8.0	PVC	Open		41.56	0.27	2,752.59	2,752.59	0.05	0.01
P-166	507.00	8.0	PVC	Open		247.19	1.58	2,750.51	2,749.90	1.21	0.61
P-167	1.00	96.0	PVC	Open		559.20	0.02	2,534.00	2,534.00	0.00	0.00
P-169	48.00	8.0	PVC	Open		559.20	3.57	2,753.47	2,753.20	5.72	0.27
P-170	364.00	4.0	PVC	Open		3.55	0.09	2,751.95	2,751.95	0.01	0.00
P-171	880.00	8.0	PVC	Open		106.86	0.68	2,752.82	2,752.59	0.26	0.23
P-172	340.00	8.0	PVC	Open		131.85	0.84	2,751.48	2,751.35	0.38	0.13
P-173	160.00	6.0	PVC	Open		0.14	0.00	2,751.48	2,751.48	0.00	0.00
P-174	460.00	8.0	PVC	Open		7.10	0.05	2,751.83	2,751.83	0.00	0.00
P-175	260.00	8.0	PVC	Open		-103.23	0.66	2,752.58	2,752.64	0.24	0.06
P-176	80.00	2.0	PVC	Open		2.66	0.27	2,752.58	2,752.55	0.30	0.02
P-177	170.00	8.0	PVC	Open		35.51	0.23	2,751.56	2,751.56	0.04	0.01
P-178	420.00	6.0	PVC	Open		3.47	0.04	2,751.55	2,751.55	0.00	0.00
P-179	393.00	8.0	PVC	Open		16.79	0.11	2,751.56	2,751.55	0.01	0.00
P-180	120.00	8.0	PVC	Open		5.33	0.03	2,751.55	2,751.55	0.00	0.00
P-181	394.00	8.0	PVC	Open		106.28	0.68	2,751.51	2,751.41	0.25	0.10
P-182	225.00	8.0	PVC	Open		104.69	0.67	2,751.41	2,751.35	0.25	0.06
P-183	442.00	8.0	PVC	Open		213.85	1.36	2,751.28	2,750.87	0.92	0.41
P-185	258.00	8.0	PVC	Open		42.97	0.27	2,752.58	2,752.56	0.05	0.01
P-186	1,300.00	6.0	PVC	Open		13.74	0.16	2,752.56	2,752.53	0.03	0.03
P-187	700.00	6.0	PVC	Open		19.58	0.22	2,752.56	2,752.53	0.05	0.03
P-188	800.00	8.0	PVC	Open		6.67	0.04	2,752.53	2,752.53	0.00	0.00
P-189	158.00	8.0	PVC	Open		60.89	0.39	2,752.60	2,752.58	0.09	0.01
P-190	700.00	8.0	PVC	Open		11.72	0.07	2,752.58	2,752.58	0.00	0.00
P-191	260.00	8.0	PVC	Open		30.13	0.19	2,752.59	2,752.58	0.03	0.01
P-192	700.00	6.0	PVC	Open		5.99	0.07	2,752.58	2,752.58	0.00	0.00
P-193	698.00	6.0	PVC	Open		-6.99	0.08	2,752.58	2,752.59	0.01	0.01
P-194	448.00	8.0	PVC	Open		27.52	0.18	2,756.87	2,756.86	0.02	0.01
P-195	480.00	8.0	PVC	Open		8.19	0.05	2,756.86	2,756.86	0.00	0.00
P-196	800.00	8.0	PVC	Open		6.90	0.04	2,756.86	2,756.86	0.00	0.00
P-197	242.00	8.0	PVC	Open		0.00	0.00	2,756.86	2,756.86	0.00	0.00
P-198	371.00	8.0	PVC	Open		-559.50	3.57	2,756.87	2,759.00	5.73	2.13
P-199	846.00	8.0	PVC	Open		22.90	0.15	2,759.00	2,758.99	0.02	0.01
P-200	1,095.00	8.0	PVC	Open		-47.07	0.30	2,760.32	2,760.38	0.06	0.06
P-201	221.00	8.0	PVC	Open		-585.16	3.73	2,759.00	2,760.38	6.25	1.38
P-202	273.00	8.0	PVC	Open		-375.12	2.39	2,760.38	2,761.11	2.67	0.73
P-203	523.00	8.0	PVC	Open		-258.13	1.65	2,760.38	2,761.07	1.31	0.69
P-204	573.00	8.0	PVC	Open		-15.58	0.10	2,760.31	2,760.32	0.01	0.00
P-205	257.00	8.0	PVC	Open		-81.83	0.52	2,761.07	2,761.11	0.16	0.04
P-206	616.00	8.0	PVC	Open		-182.74	1.17	2,761.07	2,761.49	0.69	0.42
P-207	173.00	6.0	PVC	Open		3.55	0.04	2,761.49	2,761.49	0.00	0.00
P-208	796.00	8.0	PVC	Open		-200.49	1.28	2,761.49	2,762.14	0.82	0.65
P-209	188.00	6.0	PVC	Open		4.44	0.05	2,762.14	2,762.14	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-210	310.00	8.0	PVC	Open		-211.03	1.35	2,762.14	2,762.42	0.90	0.28
P-211	158.00	6.0	PVC	Open		4.44	0.05	2,762.42	2,762.42	0.00	0.00
P-212	275.00	8.0	PVC	Open		-216.72	1.38	2,762.42	2,762.68	0.95	0.26
P-213	272.00	6.0	PVC	Open		8.88	0.10	2,762.68	2,762.68	0.01	0.00
P-214	270.00	8.0	PVC	Open		-231.55	1.48	2,762.68	2,762.97	1.07	0.29
P-215	438.00	8.0	PVC	Open		7.37	0.05	2,762.97	2,762.97	0.00	0.00
P-216	49.00	6.0	PVC	Open		1.78	0.02	2,762.97	2,762.97	0.00	0.00
P-217	129.00	6.0	PVC	Open		3.55	0.04	2,762.97	2,762.97	0.00	0.00
P-218	168.00	8.0	PVC	Open		-245.12	1.56	2,762.97	2,763.17	1.19	0.20
P-219	462.00	8.0	PVC	Open		9.76	0.06	2,761.99	2,761.98	0.00	0.00
P-220	225.00	8.0	PVC	Open		-457.84	2.92	2,761.11	2,761.99	3.90	0.88
P-221	276.00	8.0	PVC	Open		-481.90	3.08	2,761.99	2,763.17	4.30	1.19
P-223	460.00	8.0	PVC	Open		-802.58	5.12	2,768.99	2,774.28	11.50	5.29
P-224	1,737.00	12.0	PVC	Open		-827.48	2.35	2,774.28	2,776.99	1.56	2.71
P-225	309.00	8.0	PVC	Open		52.34	0.33	2,777.17	2,777.15	0.07	0.02
P-226	502.00	8.0	PVC	Open		9.76	0.06	2,777.15	2,777.15	0.00	0.00
P-227	237.00	4.0	PVC	Open		6.21	0.16	2,777.15	2,777.14	0.05	0.01
P-228	299.00	8.0	PVC	Open		29.28	0.19	2,777.15	2,777.14	0.03	0.01
P-229	498.00	6.0	PVC	Open		7.10	0.08	2,777.14	2,777.14	0.01	0.00
P-230	317.00	4.0	PVC	Open		7.10	0.18	2,777.14	2,777.12	0.06	0.02
P-231	327.00	8.0	PVC	Open		11.53	0.07	2,777.14	2,777.14	0.00	0.00
P-232	487.00	12.0	PVC	Open		-61.49	0.17	2,776.98	2,776.99	0.01	0.01
P-233	464.00	6.0	PVC	Open		5.33	0.06	2,776.98	2,776.98	0.00	0.00
P-234	494.00	6.0	PVC	Open		5.33	0.06	2,776.98	2,776.98	0.00	0.00
P-235	332.00	12.0	PVC	Open		-41.09	0.12	2,776.98	2,776.98	0.01	0.00
P-236	458.00	8.0	PVC	Open		4.44	0.03	2,776.98	2,776.98	0.00	0.00
P-237	298.00	6.0	PVC	Open		2.02	0.02	2,776.98	2,776.98	0.00	0.00
P-238	363.00	12.0	PVC	Open		-31.08	0.09	2,776.98	2,776.98	0.00	0.00
P-239	465.00	8.0	PVC	Open		-22.21	0.14	2,776.97	2,776.98	0.02	0.01
P-240	513.00	12.0	PVC	Open		4.44	0.01	2,776.98	2,776.98	0.00	0.00
P-241	654.00	8.0	PVC	Open		31.86	0.20	2,751.30	2,751.28	0.03	0.02
P-242	880.00	12.0	PVC	Open		-152.54	0.43	2,752.64	2,752.70	0.07	0.06
P-243	980.00	12.0	PVC	Open		-124.43	0.35	2,752.60	2,752.64	0.05	0.05
P-244	759.00	12.0	PVC	Open		32.70	0.09	2,752.63	2,752.63	0.00	0.00
P-245	100.00	12.0	PVC	Open		0.00	0.00	2,752.63	2,752.63	0.00	0.00
P-246	430.00	8.0	PVC	Open		28.41	0.18	2,752.63	2,752.62	0.02	0.01
P-247	712.00	8.0	PVC	Open		12.50	0.08	2,752.62	2,752.61	0.01	0.00
P-248	760.00	8.0	PVC	Open		13.25	0.08	2,752.62	2,752.61	0.01	0.00
P-249	50.00	8.0	PVC	Open		0.00	0.00	2,752.61	2,752.61	0.00	0.00
P-250	263.00	8.0	PVC	Open		2.74	0.02	2,752.61	2,752.61	0.00	0.00
P-251	50.00	8.0	PVC	Open		0.00	0.00	2,752.61	2,752.61	0.00	0.00
P-252	800.00	8.0	PVC	Open		7.18	0.05	2,752.61	2,752.61	0.00	0.00
P-253	655.00	12.0	PVC	Open		-13.91	0.04	2,752.64	2,752.64	0.00	0.00
P-254	370.00	8.0	PVC	Open		-13.91	0.09	2,752.64	2,752.65	0.01	0.00
P-255	1,670.00	12.0	PVC	Open		0.00	0.00	2,752.64	2,752.64	0.00	0.00
P-256	40.00	8.0	PVC	Open		0.00	0.00	2,752.64	2,752.64	0.00	0.00
P-257	650.00	12.0	PVC	Open		0.00	0.00	2,752.64	2,752.64	0.00	0.00
P-258	40.00	8.0	PVC	Open		0.00	0.00	2,752.64	2,752.64	0.00	0.00
P-259	1,020.00	12.0	PVC	Open		0.00	0.00	2,752.64	2,752.64	0.00	0.00
P-260	480.00	8.0	PVC	Open		234.76	1.50	2,749.90	2,749.37	1.10	0.53
P-261	167.00	8.0	PVC	Open		431.76	2.76	2,749.37	2,748.79	3.49	0.58

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-262	395.00	8.0	PVC	Open		261.92	1.67	2,748.79	2,748.26	1.35	0.53
P-263	527.00	8.0	PVC	Open		122.94	0.78	2,748.26	2,748.08	0.33	0.17
P-264	477.00	8.0	PVC	Open		127.44	0.81	2,748.26	2,748.09	0.35	0.17
P-265	341.00	8.0	PVC	Open		23.32	0.15	2,748.09	2,748.08	0.02	0.01
P-266	261.00	8.0	PVC	Open		139.16	0.89	2,748.08	2,747.97	0.42	0.11
P-267	136.00	8.0	PVC	Open		186.18	1.19	2,747.97	2,747.88	0.71	0.10
P-268	604.00	8.0	PVC	Open		56.78	0.36	2,748.02	2,747.97	0.08	0.05
P-269	355.00	8.0	PVC	Open		89.01	0.57	2,748.09	2,748.02	0.18	0.06
P-270	776.00	8.0	PVC	Open		153.87	0.98	2,748.79	2,748.40	0.50	0.39
P-271	810.00	8.0	PVC	Open		-207.66	1.33	2,749.37	2,750.08	0.87	0.71
P-272	547.00	8.0	PVC	Open		8.88	0.06	2,750.08	2,750.08	0.00	0.00
P-273	618.00	8.0	PVC	Open		-151.87	0.97	2,750.08	2,750.38	0.49	0.30
P-274	332.00	8.0	PVC	Open		-156.49	1.00	2,750.38	2,750.55	0.52	0.17
P-275	700.00	8.0	PVC	Open		-7.20	0.05	2,750.55	2,750.55	0.00	0.00
P-276	83.00	8.0	PVC	Open		-149.73	0.96	2,750.55	2,750.59	0.47	0.04
P-277	419.00	8.0	PVC	Open		-60.70	0.39	2,750.59	2,750.63	0.09	0.04
P-278	620.00	12.0	PVC	Open		0.00	0.00	2,750.38	2,750.38	0.00	0.00
P-280	813.00	8.0	PVC	Open		12.43	0.08	2,752.61	2,752.61	0.01	0.00
P-281	287.00	12.0	PVC	Open		-11.63	0.03	2,747.06	2,747.06	0.00	0.00
P-282	797.00	12.0	PVC	Open		-34.14	0.10	2,747.06	2,747.06	0.00	0.00
P-283	320.00	8.0	PVC	Open		2.43	0.02	2,747.06	2,747.06	0.00	0.00
P-284	388.00	12.0	PVC	Open		-37.40	0.11	2,747.06	2,747.07	0.01	0.00
P-285	1,528.00	12.0	PVC	Open		662.85	1.88	2,748.63	2,747.07	1.02	1.56
P-286	358.00	12.0	PVC	Open		601.70	1.71	2,747.07	2,746.76	0.85	0.31
P-287	419.00	8.0	PVC	Open		142.44	0.91	2,746.76	2,746.58	0.43	0.18
P-288	341.00	8.0	PVC	Open		132.67	0.85	2,746.58	2,746.45	0.38	0.13
P-289	193.00	8.0	PVC	Open		3.55	0.02	2,746.58	2,746.58	0.00	0.00
P-290	267.00	12.0	PVC	Open		454.83	1.29	2,746.76	2,746.63	0.50	0.13
P-291	640.00	8.0	PVC	Open		80.91	0.52	2,746.55	2,746.45	0.15	0.10
P-292	460.00	12.0	PVC	Open		262.01	0.74	2,746.55	2,746.47	0.18	0.08
P-293	302.00	8.0	PVC	Open		72.07	0.46	2,746.50	2,746.47	0.13	0.04
P-294	213.00	12.0	PVC	Open		326.09	0.93	2,746.47	2,746.41	0.27	0.06
P-295	511.00	12.0	PVC	Open		545.95	1.55	2,746.41	2,746.04	0.71	0.36
P-296	305.00	12.0	PVC	Open		222.78	0.63	2,746.45	2,746.41	0.13	0.04
P-297	650.00	8.0	PVC	Open		0.00	0.00	2,746.45	2,746.45	0.00	0.00
P-298	516.00	12.0	PVC	Open		393.86	1.12	2,746.45	2,746.25	0.39	0.20
P-299	19.00	12.0	PVC	Open		295.80	0.84	2,746.25	2,746.25	0.22	0.00
P-300	1,334.00	8.0	PVC	Open		98.06	0.63	2,746.25	2,745.96	0.22	0.29
P-301	241.00	8.0	PVC	Open		133.84	0.85	2,752.82	2,752.72	0.39	0.09
P-302	911.00	12.0	PVC	Open		240.70	0.68	2,752.96	2,752.82	0.15	0.14
P-303	156.00	8.0	PVC	Open		-12.39	0.08	2,752.96	2,752.96	0.00	0.00
P-304	239.00	8.0	PVC	Open		-24.89	0.16	2,752.95	2,752.96	0.02	0.00
P-305	176.00	8.0	PVC	Open		10.65	0.07	2,752.95	2,752.95	0.00	0.00
P-306	140.00	6.0	PVC	Open		4.44	0.05	2,752.95	2,752.95	0.00	0.00
P-307	283.00	8.0	PVC	Open		4.44	0.03	2,752.95	2,752.95	0.00	0.00
P-308	265.00	8.0	PVC	Open		-11.57	0.07	2,752.95	2,752.95	0.00	0.00
P-309	205.00	6.0	PVC	Open		5.33	0.06	2,752.95	2,752.95	0.00	0.00
P-310	977.00	8.0	PVC	Open		2.63	0.02	2,752.95	2,752.95	0.00	0.00
P-311	142.00	6.0	PVC	Open		4.44	0.05	2,752.95	2,752.95	0.00	0.00
P-312	850.00	8.0	PVC	Open		22.16	0.14	2,752.97	2,752.95	0.02	0.01
P-313	666.00	8.0	PVC	Open		18.71	0.12	2,752.97	2,752.96	0.01	0.01

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-314	402.00	8.0	PVC	Open		54.18	0.35	2,753.00	2,752.97	0.07	0.03
P-315	547.00	8.0	PVC	Open		71.99	0.46	2,753.06	2,753.00	0.12	0.07
P-316	401.00	8.0	PVC	Open		-9.82	0.06	2,752.99	2,753.00	0.00	0.00
P-317	742.00	8.0	PVC	Open		-0.94	0.01	2,752.99	2,752.99	0.00	0.00
P-318	343.00	6.0	PVC	Open		6.21	0.07	2,752.99	2,752.99	0.01	0.00
P-319	273.00	8.0	PVC	Open		13.27	0.08	2,753.00	2,752.99	0.01	0.00
P-320	288.00	8.0	PVC	Open		12.01	0.08	2,753.00	2,752.99	0.01	0.00
P-321	290.00	8.0	PVC	Open		0.89	0.01	2,753.00	2,753.00	0.00	0.00
P-322	133.00	8.0	PVC	Open		12.43	0.08	2,753.00	2,753.00	0.01	0.00
P-323	270.00	8.0	PVC	Open		1.77	0.01	2,752.99	2,752.99	0.00	0.00
P-324	472.00	6.0	PVC	Open		7.99	0.09	2,752.99	2,752.99	0.01	0.00
P-325	298.00	8.0	PVC	Open		78.54	0.50	2,753.06	2,753.02	0.15	0.04
P-326	747.00	8.0	PVC	Open		34.15	0.22	2,753.02	2,753.00	0.03	0.02
P-327	1,154.00	8.0	PVC	Open		26.64	0.17	2,753.02	2,753.00	0.02	0.02
P-328	160.00	8.0	PVC	Open		154.61	0.99	2,753.14	2,753.06	0.51	0.08
P-329	1,094.00	12.0	PVC	Open		253.09	0.72	2,753.14	2,752.96	0.17	0.19
P-330	804.00	12.0	PVC	Open		407.70	1.16	2,753.48	2,753.14	0.41	0.33
P-331	474.00	8.0	PVC	Open		25.43	0.16	2,820.58	2,820.57	0.02	0.01
P-332	221.00	6.0	PVC	Open		3.87	0.04	2,820.58	2,820.58	0.00	0.00
P-333	260.00	8.0	PVC	Open		39.96	0.26	2,820.59	2,820.58	0.04	0.01
P-334	213.00	6.0	PVC	Open		0.00	0.00	2,820.59	2,820.59	0.00	0.00
P-335	138.00	8.0	PVC	Open		3.55	0.02	2,820.59	2,820.59	0.00	0.00
P-336	267.00	8.0	PVC	Open		47.95	0.31	2,820.61	2,820.59	0.06	0.02
P-337	592.00	12.0	PVC	Open		178.91	0.51	2,820.61	2,820.56	0.09	0.05
P-338	260.00	12.0	PVC	Open		236.63	0.67	2,820.65	2,820.61	0.15	0.04
P-339	281.00	8.0	PVC	Open		16.87	0.11	2,820.65	2,820.65	0.01	0.00
P-340	449.00	12.0	PVC	Open		259.71	0.74	2,820.73	2,820.65	0.18	0.08
P-341	174.00	6.0	PVC	Open		4.44	0.05	2,820.65	2,820.64	0.00	0.00
P-342	286.00	8.0	PVC	Open		7.99	0.05	2,820.65	2,820.64	0.00	0.00
P-343	402.00	12.0	PVC	Open		395.01	1.12	2,820.73	2,820.57	0.39	0.16
P-344	1,192.00	12.0	PVC	Open		659.74	1.87	2,821.94	2,820.73	1.02	1.21
P-345	504.00	12.0	PVC	Open		210.59	0.60	2,823.30	2,823.24	0.12	0.06
P-346	261.00	12.0	PVC	Open		-96.35	0.27	2,823.30	2,823.30	0.03	0.01
P-347	228.00	8.0	PVC	Open		-40.18	0.26	2,823.29	2,823.30	0.04	0.01
P-348	532.00	12.0	PVC	Open		672.05	1.91	2,823.23	2,822.67	1.05	0.56
P-349	172.00	12.0	PVC	Open		480.52	1.36	2,823.33	2,823.23	0.56	0.10
P-350	180.00	8.0	PVC	Open		0.89	0.01	2,823.33	2,823.33	0.00	0.00
P-351	641.00	12.0	PVC	Open		487.62	1.38	2,823.70	2,823.33	0.57	0.37
P-352	215.00	8.0	PVC	Open		306.93	1.96	2,823.70	2,823.30	1.82	0.39
P-353	228.00	12.0	PVC	Open		803.43	2.28	2,824.03	2,823.70	1.48	0.34
P-354	388.00	8.0	PVC	Open		7.10	0.05	2,824.03	2,824.03	0.00	0.00
P-355	278.00	12.0	PVC	Open		810.53	2.30	2,824.45	2,824.03	1.50	0.42
P-356	862.00	8.0	PVC	Open		149.05	0.95	2,824.86	2,824.45	0.47	0.41
P-357	384.00	12.0	PVC	Open		674.80	1.91	2,824.86	2,824.45	1.06	0.41
P-358	445.00	12.0	PVC	Open		838.05	2.38	2,825.57	2,824.86	1.60	0.71
P-359	285.00	12.0	PVC	Open		116.58	0.33	2,825.57	2,825.56	0.04	0.01
P-360	433.00	12.0	PVC	Open		-278.79	0.79	2,825.57	2,825.66	0.20	0.09
P-361	110.00	12.0	PVC	Open		191.53	0.54	2,823.24	2,823.23	0.10	0.01
P-362	701.00	12.0	PVC	Open		685.61	1.94	2,826.33	2,825.57	1.09	0.77
P-363	278.00	12.0	PVC	Open		878.67	2.49	2,826.82	2,826.33	1.75	0.49
P-364	1,033.00	8.0	PVC	Open		177.97	1.14	2,826.33	2,825.66	0.66	0.68

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-365	213.00	8.0	PVC	Open		-351.53	2.24	2,825.66	2,826.16	2.36	0.50
P-366	15.00	8.0	PVC	Open		0.00	0.00	2,826.16	2,826.16	0.00	0.00
P-367	928.00	8.0	PVC	Open		351.54	2.24	2,828.34	2,826.16	2.36	2.19
P-370	40.00	8.0	PVC	Open		12.43	0.08	2,749.90	2,749.90	0.01	0.00
P-371	40.00	8.0	PVC	Open		10.66	0.07	2,749.37	2,749.37	0.01	0.00
P-372	360.00	12.0	PVC	Open		-62.42	0.18	2,752.54	2,752.54	0.01	0.00
P-373	479.00	8.0	PVC	Open		67.09	0.43	2,750.84	2,750.78	0.11	0.05
P-374	102.00	12.0	PVC	Open		-888.98	2.52	2,776.99	2,777.17	1.79	0.18
P-375	90.00	12.0	PVC	Open		-941.32	2.67	2,777.17	2,777.35	2.00	0.18
P-376	789.00	12.0	PVC	Open		716.24	2.03	2,827.75	2,826.82	1.19	0.94
P-377	1,321.00	8.0	PVC	Open		185.51	1.18	2,827.75	2,826.82	0.71	0.94
P-378	203.00	12.0	PVC	Open		918.61	2.61	2,828.14	2,827.75	1.90	0.39
P-379	775.00	12.0	PVC	Open		886.91	2.52	2,741.35	2,739.97	1.78	1.38
P-380	558.00	12.0	PVC	Open		0.00	0.00	2,820.48	2,820.48	0.00	0.00
P-381	890.00	12.0	PVC	Open		886.91	2.52	2,739.97	2,738.39	1.78	1.58
P-383	107.00	12.0	PVC	Open		918.61	2.61	2,828.34	2,828.14	1.91	0.20
P-384	154.00	8.0	PVC	Open		103.03	0.66	2,746.63	2,746.59	0.24	0.04
P-385	378.00	6.0	PVC	Open		4.44	0.05	2,746.59	2,746.59	0.00	0.00
P-386	257.00	8.0	PVC	Open		90.61	0.58	2,746.59	2,746.54	0.19	0.05
P-387	333.00	8.0	PVC	Open		6.11	0.04	2,746.54	2,746.54	0.00	0.00
P-388	270.00	8.0	PVC	Open		77.40	0.49	2,746.54	2,746.50	0.14	0.04
P-389	185.00	8.0	PVC	Open		0.00	0.00	2,746.50	2,746.50	0.00	0.00
P-390	419.00	8.0	PVC	Open		202.93	1.30	2,746.45	2,746.10	0.84	0.35
P-391	250.00	8.0	PVC	Open		7.29	0.05	2,746.10	2,746.10	0.00	0.00
P-392	535.00	8.0	PVC	Open		-92.31	0.59	2,746.10	2,746.20	0.20	0.10
P-393	113.00	8.0	PVC	Open		-264.93	1.69	2,746.20	2,746.36	1.38	0.16
P-394	377.00	8.0	PVC	Open		162.86	1.04	2,746.20	2,745.99	0.56	0.21
P-395	474.00	8.0	PVC	Open		98.67	0.63	2,746.10	2,745.99	0.22	0.10
P-396	250.00	8.0	PVC	Open		254.43	1.62	2,745.99	2,745.67	1.28	0.32
P-397	598.00	8.0	PVC	Open		185.87	1.19	2,746.10	2,745.67	0.71	0.43
P-398	270.00	12.0	PVC	Open		526.42	1.49	2,745.85	2,745.67	0.66	0.18
P-399	202.00	8.0	PVC	Open		3.55	0.02	2,745.85	2,745.85	0.00	0.00
P-400	280.00	12.0	PVC	Open		535.30	1.52	2,746.04	2,745.85	0.68	0.19
P-401	233.00	8.0	PVC	Open		3.55	0.02	2,746.04	2,746.04	0.00	0.00
P-402	310.00	12.0	PVC	Open		959.62	2.72	2,745.67	2,745.03	2.07	0.64
P-403	377.00	8.0	PVC	Open		4.44	0.03	2,745.03	2,745.03	0.00	0.00
P-404	252.00	12.0	PVC	Open		948.96	2.69	2,745.03	2,744.52	2.03	0.51
P-405	213.00	8.0	PVC	Open		4.44	0.03	2,744.52	2,744.52	0.00	0.00
P-406	535.00	12.0	PVC	Open		938.31	2.66	2,744.52	2,743.46	1.98	1.06
P-407	160.00	8.0	PVC	Open		231.79	1.48	2,743.46	2,743.29	1.07	0.17
P-408	308.00	12.0	PVC	Open		697.65	1.98	2,743.46	2,743.11	1.13	0.35
P-409	9.00	8.0	PVC	Open		0.00	0.00	2,743.11	2,743.11	0.00	0.00
P-410	265.00	8.0	PVC	Open		23.97	0.15	2,820.50	2,820.50	0.02	0.00
P-411	136.00	8.0	PVC	Open		12.43	0.08	2,820.50	2,820.50	0.01	0.00
P-412	330.00	8.0	PVC	Open		7.10	0.05	2,820.50	2,820.50	0.00	0.00
P-413	942.00	12.0	PVC	Open		137.19	0.39	2,820.56	2,820.50	0.06	0.05
P-414	216.00	8.0	PVC	Open		27.53	0.18	2,820.56	2,820.55	0.02	0.00
P-415	433.00	8.0	PVC	Open		7.99	0.05	2,820.55	2,820.55	0.00	0.00
P-416	265.00	8.0	PVC	Open		12.43	0.08	2,820.55	2,820.55	0.01	0.00
P-417	392.00	12.0	PVC	Open		66.98	0.19	2,825.56	2,825.55	0.01	0.01
P-418	493.00	12.0	PVC	Open		51.89	0.15	2,825.55	2,825.54	0.01	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-419	263.00	6.0	PVC	Open		6.21	0.07	2,825.55	2,825.55	0.01	0.00
P-420	336.00	6.0	PVC	Open		5.33	0.06	2,825.55	2,825.55	0.00	0.00
P-421	907.00	8.0	PVC	Open		19.24	0.12	2,825.56	2,825.54	0.01	0.01
P-422	377.00	12.0	PVC	Open		43.79	0.12	2,825.54	2,825.54	0.01	0.00
P-423	770.00	8.0	PVC	Open		20.60	0.13	2,825.56	2,825.54	0.01	0.01
P-424	20.00	12.0	PVC	Open		0.00	0.00	2,822.67	2,822.67	0.00	0.00
P-425	1,980.00	12.0	PVC	Open		0.00	0.00	2,822.63	2,822.63	0.00	0.00
P-426	209.00	12.0	PVC	Open		0.00	0.00	2,822.63	2,822.63	0.00	0.00
P-427	207.00	12.0	PVC	Open		0.00	0.00	2,822.63	2,822.63	0.00	0.00
P-428	251.00	12.0	PVC	Open		351.79	1.00	2,746.63	2,746.55	0.31	0.08
P-429	281.00	4.0	PVC	Open		11.53	0.29	2,777.14	2,777.10	0.14	0.04
P-430	370.00	8.0	PVC	Open		266.68	1.70	2,753.17	2,752.66	1.40	0.52
P-431	54.00	6.0	PVC	Open		0.88	0.01	2,752.66	2,752.66	0.00	0.00
P-432	55.00	6.0	PVC	Open		2.76	0.03	2,752.66	2,752.66	0.00	0.00
P-433	506.00	8.0	PVC	Open		257.75	1.65	2,752.66	2,751.99	1.31	0.66
P-434	155.00	12.0	PVC	Open		100.13	0.28	2,751.75	2,751.74	0.03	0.00
P-435	467.00	8.0	PVC	Open		-22.86	0.15	2,751.27	2,751.28	0.02	0.01
P-436	360.00	8.0	PVC	Open		183.47	1.17	2,751.99	2,751.74	0.69	0.25
P-437	760.00	8.0	PVC	Open		-73.22	0.47	2,751.90	2,751.99	0.13	0.10
P-438	348.00	8.0	PVC	Open		125.25	0.80	2,751.90	2,751.78	0.34	0.12
P-439	51.00	12.0	PVC	Open		116.55	0.33	2,751.78	2,751.77	0.04	0.00
P-440	18.00	12.0	PVC	Open		0.00	0.00	2,751.77	2,751.77	0.00	0.00
P-441	642.00	12.0	PVC	Open		114.55	0.32	2,751.77	2,751.75	0.04	0.03
P-442	350.00	12.0	PVC	Open		13.76	0.04	2,751.75	2,751.75	0.00	0.00
P-443	336.00	12.0	PVC	Open		272.37	0.77	2,751.74	2,751.68	0.19	0.07
P-444	829.00	12.0	PVC	Open		272.37	0.77	2,751.68	2,751.52	0.19	0.16
P-445	120.00	8.0	PVC	Open		156.26	1.00	2,753.06	2,752.99	0.51	0.06
P-446	470.00	8.0	PVC	Open		1.48	0.01	2,752.99	2,752.99	0.00	0.00
P-447	265.00	12.0	PVC	Open		272.37	0.77	2,751.52	2,751.47	0.19	0.05
P-448	337.00	8.0	PVC	Open		-24.47	0.16	2,750.78	2,750.79	0.02	0.01
P-449	39.00	8.0	PVC	Open		5.14	0.03	2,751.47	2,751.47	0.00	0.00
P-450	705.00	12.0	PVC	Open		267.24	0.76	2,751.47	2,751.33	0.19	0.13
P-451	197.00	12.0	PVC	Open		251.02	0.71	2,751.33	2,751.30	0.17	0.03
P-452	250.00	12.0	PVC	Open		0.00	0.00	2,751.75	2,751.75	0.00	0.00
P-453	546.00	8.0	PVC	Open		-60.70	0.39	2,750.63	2,750.68	0.09	0.05
P-454	526.00	8.0	PVC	Open		91.56	0.58	2,750.78	2,750.68	0.19	0.10
P-455	730.00	8.0	PVC	Open		-8.86	0.06	2,750.55	2,750.56	0.00	0.00
P-456	236.00	8.0	PVC	Open		-25.33	0.16	2,750.79	2,750.79	0.02	0.00
P-457	235.00	12.0	PVC	Open		7.29	0.02	2,750.79	2,750.79	0.00	0.00
P-458	311.00	12.0	PVC	Open		7.09	0.02	2,750.79	2,750.79	0.00	0.00
P-459	314.00	12.0	PVC	Open		0.00	0.00	2,750.79	2,750.79	0.00	0.00
P-460	331.00	6.0	PVC	Open		0.00	0.00	2,750.79	2,750.79	0.00	0.00
P-461	399.00	12.0	PVC	Open		-32.62	0.09	2,750.79	2,750.80	0.00	0.00
P-462	322.00	12.0	PVC	Open		-219.73	0.62	2,750.80	2,750.84	0.13	0.04
P-463	711.00	12.0	PVC	Open		-220.71	0.63	2,750.84	2,750.93	0.13	0.09
P-464	355.00	12.0	PVC	Open		-187.11	0.53	2,750.76	2,750.80	0.10	0.03
P-465	158.00	8.0	PVC	Open		91.99	0.59	2,750.76	2,750.73	0.19	0.03
P-466	432.00	8.0	PVC	Open		-38.57	0.25	2,750.71	2,750.73	0.04	0.02
P-467	475.00	8.0	PVC	Open		-36.56	0.23	2,750.71	2,750.73	0.04	0.02
P-468	316.00	8.0	PVC	Open		-62.87	0.40	2,750.68	2,750.71	0.10	0.03
P-469	347.00	12.0	PVC	Open		-77.92	0.22	2,750.75	2,750.76	0.02	0.01

Title: INITIAL RUN

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Project Engineer: DMC
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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-470	178.00	12.0	PVC	Open		-95.12	0.27	2,750.74	2,750.75	0.03	0.01
P-471	660.00	12.0	PVC	Open		-92.86	0.26	2,750.73	2,750.74	0.03	0.02
P-472	224.00	12.0	PVC	Open		-92.47	0.26	2,750.72	2,750.73	0.03	0.01
P-473	296.00	12.0	PVC	Open		0.11	0.00	2,750.72	2,750.72	0.00	0.00
P-474	153.00	12.0	PVC	Open		-95.12	0.27	2,750.76	2,750.76	0.03	0.00
P-476	304.00	8.0	PVC	Open		0.00	0.00	2,750.38	2,750.38	0.00	0.00
P-477	692.00	8.0	PVC	Open		-89.03	0.57	2,750.59	2,750.72	0.18	0.13
P-478	13.00	8.0	PVC	Open		0.31	0.00	2,750.93	2,750.93	0.00	0.00
P-479	84.00	8.0	PVC	Open		-127.79	0.82	2,750.56	2,750.59	0.35	0.03
P-480	200.00	12.0	PVC	Open		-62.42	0.18	2,752.54	2,752.54	0.01	0.00
P-481	550.00	12.0	PVC	Open		-72.18	0.20	2,752.54	2,752.55	0.02	0.01
P-482	703.00	8.0	PVC	Open		-7.18	0.05	2,752.55	2,752.55	0.00	0.00
P-483	960.00	12.0	PVC	Open		-71.99	0.20	2,752.55	2,752.57	0.02	0.02
P-484	265.00	12.0	PVC	Open		-111.12	0.32	2,752.57	2,752.58	0.04	0.01
P-485	447.00	12.0	PVC	Open		21.50	0.06	2,825.54	2,825.54	0.00	0.00
P-486	160.00	12.0	PVC	Open		17.96	0.05	2,825.54	2,825.54	0.00	0.00
P-487	159.00	12.0	PVC	Open		0.00	0.00	2,825.54	2,825.54	0.00	0.00
P-488	981.00	8.0	PVC	Open		11.63	0.07	2,825.54	2,825.54	0.00	0.00
P-489	135.00	12.0	PVC	Open		0.00	0.00	2,825.54	2,825.54	0.00	0.00
P-490	338.00	8.0	PVC	Open		95.34	0.61	2,747.88	2,747.81	0.21	0.07
P-491	317.00	8.0	PVC	Open		7.67	0.05	2,747.81	2,747.81	0.00	0.00
P-492	1,010.00	8.0	PVC	Open		93.24	0.60	2,747.81	2,747.60	0.20	0.20
P-493	314.00	8.0	PVC	Open		165.44	1.06	2,747.60	2,747.42	0.57	0.18
P-494	159.00	8.0	PVC	Open		83.74	0.53	2,747.63	2,747.60	0.16	0.03
P-495	527.00	8.0	PVC	Open		83.74	0.53	2,747.72	2,747.63	0.16	0.09
P-496	134.00	12.0	PVC	Open		1,038.36	2.95	2,749.66	2,749.34	2.41	0.32
P-498	1.00	96.0	PVC	Open		-945.20	0.04	2,493.50	2,493.50	0.00	0.00
P-499	356.00	12.0	PVC	Open		398.91	1.13	2,749.28	2,749.14	0.40	0.14
P-500	259.00	12.0	PVC	Open		392.38	1.11	2,749.14	2,749.04	0.38	0.10
P-501	152.00	12.0	PVC	Open		339.22	0.96	2,749.10	2,749.05	0.29	0.04
P-503	30.00	8.0	PVC	Open		0.00	0.00	2,749.13	2,749.13	0.00	0.00
P-504	120.00	8.0	PVC	Open		54.70	0.35	2,749.14	2,749.13	0.08	0.01
P-505	30.00	8.0	PVC	Open		0.00	0.00	2,749.14	2,749.14	0.00	0.00
P-507	27.00	8.0	PVC	Open		0.00	0.00	2,749.15	2,749.15	0.00	0.00
P-508	197.00	8.0	PVC	Open		-11.40	0.07	2,749.15	2,749.15	0.00	0.00
P-509	785.00	8.0	PVC	Open		-9.62	0.06	2,749.15	2,749.15	0.00	0.00
P-510	222.00	8.0	PVC	Open		1.78	0.01	2,749.15	2,749.15	0.00	0.00
P-511	683.00	8.0	PVC	Open		-4.30	0.03	2,749.15	2,749.15	0.00	0.00
P-512	819.00	8.0	PVC	Open		1.78	0.01	2,749.15	2,749.15	0.00	0.00
P-513	283.00	8.0	PVC	Open		-0.74	0.00	2,749.15	2,749.15	0.00	0.00
P-514	136.00	6.0	PVC	Open		0.00	0.00	2,749.14	2,749.14	0.00	0.00
P-515	560.00	6.0	PVC	Open		0.00	0.00	2,747.72	2,747.72	0.00	0.00
P-516	19.00	8.0	PVC	Open		-338.90	2.16	2,753.33	2,753.37	2.20	0.04
P-517	0.25	96.0	Steel	Open		-0.00	0.00	2,419.00	2,419.00	0.00	0.00
P-518	250.00	8.0	PVC	Open		4.04	0.03	2,751.51	2,751.50	0.00	0.00
P-519	673.00	8.0	PVC	Open		142.75	0.91	2,752.99	2,752.70	0.44	0.29
P-520	32.00	8.0	PVC	Open		147.75	0.94	2,753.06	2,753.04	0.47	0.01
P-521	769.00	8.0	PVC	Open		-38.74	0.25	2,752.70	2,752.73	0.04	0.03
P-522	105.00	8.0	PVC	Open		38.75	0.25	2,751.30	2,751.30	0.04	0.00
P-523	305.00	12.0	PVC	Open		-210.69	0.60	2,751.26	2,751.30	0.12	0.04
P-524	94.00	6.0	PVC	Open		-22.75	0.26	2,751.26	2,751.27	0.06	0.01

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-525	232.00	12.0	PVC	Open		-232.79	0.66	2,751.23	2,751.26	0.15	0.03
P-526	294.00	12.0	PVC	Open		-165.52	0.47	2,751.21	2,751.23	0.08	0.02
P-527	248.00	8.0	PVC	Open		1.17	0.01	2,751.21	2,751.21	0.00	0.00
P-528	83.00	8.0	PVC	Open		1.17	0.01	2,751.21	2,751.21	0.00	0.00
P-529	115.00	12.0	PVC	Open		-164.35	0.47	2,751.20	2,751.21	0.08	0.01
P-530	384.00	12.0	PVC	Open		-164.34	0.47	2,751.17	2,751.20	0.08	0.03
P-531	153.00	12.0	PVC	Open		-164.34	0.47	2,751.16	2,751.17	0.08	0.01
P-532	216.00	12.0	PVC	Open		-164.34	0.47	2,751.14	2,751.16	0.08	0.02
P-533	169.00	12.0	PVC	Open		-164.23	0.47	2,751.13	2,751.14	0.08	0.01
P-534	163.00	12.0	PVC	Open		-164.23	0.47	2,751.11	2,751.13	0.08	0.01
P-535	222.00	12.0	PVC	Open		-164.23	0.47	2,751.10	2,751.11	0.08	0.02
P-536	395.00	12.0	PVC	Open		-162.55	0.46	2,751.07	2,751.10	0.08	0.03
P-537	322.00	8.0	PVC	Open		-58.47	0.37	2,751.07	2,751.09	0.09	0.03
P-538	574.00	8.0	PVC	Open		-58.47	0.37	2,751.09	2,751.14	0.09	0.05
P-539	315.00	8.0	PVC	Open		-58.70	0.37	2,751.14	2,751.17	0.09	0.03
P-540	306.00	8.0	PVC	Open		-59.31	0.38	2,751.17	2,751.20	0.09	0.03
P-541	359.00	8.0	PVC	Open		-59.31	0.38	2,751.20	2,751.23	0.09	0.03
P-542	145.00	8.0	PVC	Open		0.61	0.00	2,751.17	2,751.17	0.00	0.00
P-543	289.00	8.0	PVC	Open		0.00	0.00	2,751.17	2,751.17	0.00	0.00
P-544	387.00	8.0	PVC	Open		0.39	0.00	2,751.17	2,751.17	0.00	0.00
P-545	57.00	12.0	PVC	Open		0.00	0.00	2,751.20	2,751.20	0.00	0.00
P-546	50.00	8.0	PVC	Open		0.61	0.00	2,751.17	2,751.17	0.00	0.00
P-547	329.00	8.0	PVC	Open		0.22	0.00	2,751.17	2,751.17	0.00	0.00
P-548	284.00	8.0	PVC	Open		0.03	0.00	2,751.17	2,751.17	0.00	0.00
P-549	284.00	8.0	PVC	Open		0.19	0.00	2,751.17	2,751.17	0.00	0.00
P-550	210.00	8.0	PVC	Open		0.11	0.00	2,751.17	2,751.17	0.00	0.00
P-551	171.00	8.0	PVC	Open		0.01	0.00	2,751.17	2,751.17	0.00	0.00
P-552	269.00	8.0	PVC	Open		-17.20	0.11	2,750.75	2,750.76	0.01	0.00
P-553	161.00	8.0	PVC	Open		-17.20	0.11	2,750.75	2,750.75	0.01	0.00
P-554	90.00	8.0	PVC	Open		0.00	0.00	2,751.09	2,751.09	0.00	0.00
P-555	63.00	12.0	PVC	Open		-221.03	0.63	2,751.06	2,751.07	0.13	0.01
P-556	252.00	8.0	PVC	Open		0.02	0.00	2,751.21	2,751.21	0.00	0.00
P-557	256.00	12.0	PVC	Open		-221.03	0.63	2,751.02	2,751.06	0.13	0.03
P-558	702.00	12.0	PVC	Open		-221.02	0.63	2,750.93	2,751.02	0.13	0.09
P-559	110.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-560	275.00	8.0	PVC	Open		-17.20	0.11	2,750.75	2,750.75	0.01	0.00
P-561	436.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-562	79.00	8.0	PVC	Open		0.00	0.00	2,750.75	2,750.75	0.00	0.00
P-563	442.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-564	68.00	8.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-565	42.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-566	86.00	8.0	PVC	Open		0.00	0.00	2,750.75	2,750.75	0.00	0.00
P-567	433.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-568	64.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-569	222.00	8.0	PVC	Open		3.55	0.02	2,747.83	2,747.83	0.00	0.00
P-570	307.00	8.0	PVC	Open		145.66	0.93	2,747.81	2,747.67	0.45	0.14
P-571	220.00	8.0	PVC	Open		4.44	0.03	2,747.67	2,747.67	0.00	0.00
P-572	247.00	8.0	PVC	Open		137.67	0.88	2,747.67	2,747.57	0.41	0.10
P-573	254.00	6.0	PVC	Open		5.33	0.06	2,747.57	2,747.57	0.00	0.00
P-574	400.00	8.0	PVC	Open		127.91	0.82	2,747.57	2,747.42	0.36	0.14
P-575	287.00	8.0	PVC	Open		6.21	0.04	2,747.42	2,747.42	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-576	606.00	12.0	PVC	Open		107.35	0.30	2,820.50	2,820.48	0.04	0.02
P-577	326.00	12.0	PVC	Open		107.35	0.30	2,820.48	2,820.47	0.04	0.01
P-578	16.00	8.0	PVC	Open		33.75	0.22	2,820.47	2,820.47	0.03	0.00
P-579	125.00	12.0	PVC	Open		73.60	0.21	2,820.47	2,820.47	0.02	0.00
P-580	48.00	8.0	PVC	Open		0.00	0.00	2,820.47	2,820.47	0.00	0.00
P-581	307.00	12.0	PVC	Open		49.20	0.14	2,820.47	2,820.46	0.01	0.00
P-582	1,252.00	8.0	PVC	Open		12.85	0.08	2,820.47	2,820.46	0.01	0.01
P-583	906.00	8.0	PVC	Open		11.90	0.08	2,820.46	2,820.46	0.01	0.00
P-584	151.00	8.0	PVC	Open		14.22	0.09	2,820.46	2,820.46	0.01	0.00
P-585	259.00	12.0	PVC	Open		28.42	0.08	2,820.46	2,820.46	0.00	0.00
P-586	471.00	12.0	PVC	Open		14.21	0.04	2,820.46	2,820.46	0.00	0.00
P-588	320.00	8.0	PVC	Open		43.56	0.28	2,752.58	2,752.57	0.05	0.02
P-589	481.00	8.0	PVC	Open		-79.68	0.51	2,752.63	2,752.70	0.15	0.07
P-590	480.00	8.0	PVC	Open		6.21	0.04	2,752.63	2,752.63	0.00	0.00
P-591	500.00	8.0	PVC	Open		7.10	0.05	2,752.63	2,752.63	0.00	0.00
P-592	334.00	8.0	PVC	Open		-55.71	0.36	2,752.60	2,752.63	0.08	0.03
P-593	250.00	6.0	PVC	Open		5.33	0.06	2,752.60	2,752.60	0.00	0.00
P-594	832.00	8.0	PVC	Open		8.08	0.05	2,752.60	2,752.60	0.00	0.00
P-595	350.00	8.0	PVC	Open		-30.77	0.20	2,752.59	2,752.60	0.03	0.01
P-596	325.00	8.0	PVC	Open		6.22	0.04	2,752.57	2,752.57	0.00	0.00
P-597	223.00	8.0	PVC	Open		5.33	0.03	2,752.60	2,752.60	0.00	0.00
P-598	460.00	8.0	PVC	Open		-40.31	0.26	2,752.58	2,752.60	0.04	0.02
P-599	540.00	12.0	PVC	Open		-101.36	0.29	2,752.58	2,752.60	0.03	0.02
P-600	660.00	8.0	PVC	Open		10.65	0.07	2,752.60	2,752.59	0.00	0.00
P-601	160.00	8.0	PVC	Open		-36.09	0.23	2,752.59	2,752.59	0.04	0.01
P-602	120.00	6.0	PVC	Open		3.55	0.04	2,752.59	2,752.59	0.00	0.00
P-603	200.00	8.0	PVC	Open		-29.88	0.19	2,752.58	2,752.59	0.03	0.01
P-604	375.00	8.0	PVC	Open		10.35	0.07	2,752.58	2,752.58	0.00	0.00
P-605	500.00	8.0	PVC	Open		-14.20	0.09	2,752.58	2,752.58	0.01	0.00
P-606	466.00	8.0	PVC	Open		2.05	0.01	2,743.29	2,743.29	0.00	0.00
P-607	121.00	8.0	PVC	Open		223.52	1.43	2,743.29	2,743.17	1.00	0.12
P-608	308.00	8.0	PVC	Open		208.36	1.33	2,743.17	2,742.90	0.88	0.27
P-609	198.00	12.0	PVC	Open		686.54	1.95	2,743.11	2,742.90	1.09	0.22
P-610	199.00	8.0	PVC	Open		90.84	0.58	2,747.88	2,747.84	0.19	0.04
P-611	673.00	8.0	PVC	Open		88.18	0.56	2,747.84	2,747.72	0.18	0.12
P-612	91.00	8.0	PVC	Open		0.00	0.00	2,747.63	2,747.63	0.00	0.00
P-613	354.00	8.0	PVC	Open		92.92	0.59	2,752.76	2,752.69	0.20	0.07
P-614	739.00	12.0	PVC	Open		0.00	0.00	2,776.99	2,776.99	0.00	0.00
P-615	878.00	12.0	PVC	Open		0.00	0.00	2,776.99	2,776.99	0.00	0.00
P-616	642.00	12.0	PVC	Open		0.00	0.00	2,776.99	2,776.99	0.00	0.00
P-617	35.00	8.0	PVC	Open		2.93	0.02	2,747.06	2,747.06	0.01	0.00
P-618	246.00	8.0	PVC	Open		0.00	0.00	2,750.79	2,750.79	0.00	0.00
P-619	179.00	8.0	PVC	Open		120.50	0.77	2,751.56	2,751.51	0.32	0.06
P-620	215.00	6.0	PVC	Open		3.55	0.04	2,752.65	2,752.65	0.00	0.00
P-621	780.00	8.0	PVC	Open		5.17	0.03	2,752.65	2,752.65	0.00	0.00
P-622	123.00	6.0	PVC	Open		1.78	0.02	2,752.65	2,752.65	0.00	0.00
P-623	286.00	6.0	PVC	Open		-3.70	0.04	2,752.65	2,752.65	0.00	0.00
P-624	160.00	6.0	PVC	Open		2.66	0.03	2,752.65	2,752.65	0.00	0.00
P-625	660.00	8.0	PVC	Open		-13.47	0.09	2,752.65	2,752.65	0.01	0.00
P-626	225.00	8.0	PVC	Open		14.21	0.09	2,752.65	2,752.65	0.01	0.00
P-627	357.00	8.0	PVC	Open		32.12	0.20	2,752.66	2,752.65	0.03	0.01

Title: INITIAL RUN

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Bentley Systems, Inc. Haestad Methods Solution Center

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-628	114.00	6.0	PVC	Open		2.66	0.03	2,752.66	2,752.66	0.00	0.00
P-629	395.00	8.0	PVC	Open		37.44	0.24	2,752.68	2,752.66	0.04	0.02
P-630	97.00	6.0	PVC	Open		1.78	0.02	2,752.68	2,752.68	0.00	0.00
P-631	305.00	8.0	PVC	Open		44.54	0.28	2,752.69	2,752.68	0.05	0.02
P-632	1,280.00	8.0	PVC	Open		-35.95	0.23	2,752.65	2,752.69	0.04	0.05
P-633	380.00	8.0	PVC	Open		1.78	0.01	2,752.61	2,752.61	0.00	0.00
P-634	316.00	8.0	PVC	Open		90.69	0.58	2,751.98	2,751.92	0.19	0.06
P-635	230.00	8.0	PVC	Open		59.09	0.38	2,751.92	2,751.90	0.09	0.02
P-636	60.00	8.0	PVC	Open		69.37	0.44	2,751.90	2,751.90	0.12	0.01
P-637	602.00	8.0	PVC	Open		18.77	0.12	2,751.91	2,751.90	0.01	0.01
P-638	650.00	8.0	PVC	Open		25.87	0.17	2,751.92	2,751.91	0.02	0.01
P-639	346.00	8.0	PVC	Open		67.09	0.43	2,750.87	2,750.84	0.11	0.04
P-640	269.00	8.0	PVC	Open		143.97	0.92	2,750.87	2,750.75	0.44	0.12
P-641	215.00	8.0	PVC	Open		87.10	0.56	2,750.75	2,750.72	0.18	0.04
P-642	245.00	8.0	PVC	Open		60.64	0.39	2,750.72	2,750.69	0.09	0.02
P-643	325.00	8.0	PVC	Open		53.53	0.34	2,750.69	2,750.67	0.07	0.02
P-644	190.00	8.0	PVC	Open		78.93	0.50	2,750.67	2,750.64	0.15	0.03
P-645	503.00	8.0	PVC	Open		56.87	0.36	2,750.75	2,750.71	0.08	0.04
P-646	268.00	8.0	PVC	Open		53.80	0.34	2,750.71	2,750.69	0.07	0.02
P-647	349.00	8.0	PVC	Open		43.16	0.28	2,750.69	2,750.68	0.05	0.02
P-648	172.00	8.0	PVC	Open		7.99	0.05	2,750.68	2,750.68	0.00	0.00
P-649	299.00	8.0	PVC	Open		-25.40	0.16	2,750.67	2,750.68	0.02	0.01
P-650	355.00	8.0	PVC	Open		7.11	0.05	2,750.69	2,750.69	0.00	0.00
P-651	265.00	8.0	PVC	Open		19.12	0.12	2,750.72	2,750.71	0.01	0.00
P-652	260.00	8.0	PVC	Open		30.03	0.19	2,750.64	2,750.64	0.03	0.01
P-653	432.00	8.0	PVC	Open		6.28	0.04	2,750.64	2,750.64	0.00	0.00
P-654	153.00	8.0	PVC	Open		23.75	0.15	2,750.64	2,750.63	0.02	0.00
P-655	154.00	8.0	PVC	Open		-48.90	0.31	2,750.63	2,750.64	0.06	0.01
P-656	96.00	8.0	PVC	Open		-44.25	0.28	2,750.63	2,750.63	0.05	0.01
P-657	191.00	8.0	PVC	Open		-71.01	0.45	2,750.60	2,750.63	0.12	0.02
P-658	46.00	8.0	PVC	Open		-134.89	0.86	2,750.59	2,750.60	0.39	0.02
P-659	352.00	8.0	PVC	Open		63.88	0.41	2,750.64	2,750.60	0.10	0.04
P-660	566.00	8.0	PVC	Open		26.76	0.17	2,750.64	2,750.63	0.02	0.01
P-661	219.00	8.0	PVC	Open		90.64	0.58	2,750.68	2,750.64	0.19	0.04
P-662	175.00	8.0	PVC	Open		3.55	0.02	2,750.59	2,750.59	0.00	0.00
P-663	197.00	8.0	PVC	Open		7.10	0.05	2,750.63	2,750.63	0.00	0.00
P-664	259.00	8.0	PVC	Open		-2.45	0.02	2,750.63	2,750.63	0.00	0.00
P-665	637.00	8.0	PVC	Open		-44.63	0.28	2,823.26	2,823.30	0.05	0.03
P-666	120.00	8.0	PVC	Open		35.10	0.22	2,823.26	2,823.26	0.03	0.00
P-667	1,504.00	8.0	PVC	Open		-6.14	0.04	2,823.26	2,823.26	0.00	0.00
P-668	167.00	6.0	PVC	Open		4.44	0.05	2,823.26	2,823.26	0.00	0.00
P-669	251.00	8.0	PVC	Open		11.62	0.07	2,823.26	2,823.26	0.00	0.00
P-670	104.00	6.0	PVC	Open		3.55	0.04	2,823.26	2,823.26	0.00	0.00
P-671	231.00	8.0	PVC	Open		16.05	0.10	2,823.26	2,823.26	0.01	0.00
P-672	341.00	8.0	PVC	Open		11.70	0.07	2,823.26	2,823.26	0.01	0.00
P-673	337.00	8.0	PVC	Open		31.30	0.20	2,823.27	2,823.26	0.03	0.01
P-674	285.00	8.0	PVC	Open		5.33	0.03	2,823.27	2,823.27	0.00	0.00
P-675	199.00	6.0	PVC	Open		5.33	0.06	2,823.27	2,823.27	0.00	0.00
P-676	283.00	8.0	PVC	Open		40.18	0.26	2,823.29	2,823.27	0.04	0.01
P-677	397.00	8.0	PVC	Open		-19.06	0.12	2,823.24	2,823.24	0.01	0.00
P-678	865.00	8.0	PVC	Open		-1.91	0.01	2,823.24	2,823.24	0.00	0.00

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-679	123.00	8.0	PVC	Open		0.00	0.00	2,823.24	2,823.24	0.00	0.00
P-680	231.00	8.0	PVC	Open		9.63	0.06	2,823.24	2,823.24	0.00	0.00
P-681	142.00	8.0	PVC	Open		21.78	0.14	2,823.24	2,823.24	0.02	0.00
P-682	1,166.00	8.0	PVC	Open		3.27	0.02	2,823.24	2,823.24	0.00	0.00
P-683	818.00	8.0	PVC	Open		0.00	0.00	2,820.59	2,820.59	0.00	0.00
P-684	325.00	12.0	PVC	Open		414.80	1.18	2,753.61	2,753.48	0.42	0.14
P-685	51.00	8.0	PVC	Open		14.21	0.09	2,820.46	2,820.46	0.00	0.00
P-686	53.00	8.0	PVC	Open		14.21	0.09	2,820.46	2,820.46	0.00	0.00
P-687	22.00	6.0	PVC	Open		638.61	7.25	2,749.34	2,748.63	32.22	0.71
P-688	146.00	12.0	PVC	Open		399.75	1.13	2,749.34	2,749.28	0.39	0.06
P-689	70.00	12.0	PVC	Open		392.38	1.11	2,749.04	2,749.02	0.38	0.03
P-691	524.00	8.0	PVC	Open		-24.24	0.15	2,748.63	2,748.64	0.02	0.01
P-692	113.00	6.0	PVC	Open		0.00	0.00	2,748.64	2,748.64	0.00	0.00
P-693	166.00	6.0	PVC	Open		0.50	0.01	2,749.28	2,749.28	0.00	0.00
P-694	689.00	8.0	PVC	Open		-24.48	0.16	2,748.64	2,748.65	0.02	0.01
P-695	356.00	12.0	PVC	Open		660.89	1.87	2,749.02	2,748.65	1.02	0.36
P-696	63.00	12.0	PVC	Open		636.41	1.81	2,748.65	2,748.59	0.95	0.06
P-697	126.00	6.0	PVC	Open		0.00	0.00	2,748.59	2,748.59	0.00	0.00
P-698	248.00	12.0	PVC	Open		636.40	1.81	2,748.59	2,748.36	0.95	0.24
P-699	173.00	8.0	PVC	Open		14.12	0.09	2,748.36	2,748.36	0.01	0.00
P-700	11.00	8.0	PVC	Open		0.00	0.00	2,748.36	2,748.36	0.00	0.00
P-701	280.00	8.0	PVC	Open		14.12	0.09	2,748.36	2,748.36	0.01	0.00
P-702	156.00	8.0	PVC	Open		8.98	0.06	2,748.36	2,748.36	0.00	0.00
P-703	299.00	8.0	PVC	Open		0.00	0.00	2,748.36	2,748.36	0.00	0.00
P-704	279.00	8.0	PVC	Open		0.00	0.00	2,748.36	2,748.36	0.00	0.00
P-705	582.00	12.0	PVC	Open		622.28	1.77	2,748.36	2,747.83	0.91	0.53
P-706	10.00	6.0	PVC	Open		0.00	0.00	2,747.83	2,747.83	0.00	0.00
P-707	1,401.00	12.0	PVC	Open		619.66	1.76	2,747.83	2,746.57	0.90	1.26
P-708	201.00	8.0	PVC	Open		0.00	0.00	2,746.57	2,746.57	0.00	0.00
P-709	14.00	8.0	PVC	Open		0.00	0.00	2,746.57	2,746.57	0.00	0.00
P-710	132.00	12.0	PVC	Open		617.82	1.75	2,746.57	2,746.45	0.90	0.12
P-711	335.00	12.0	PVC	Open		295.80	0.84	2,746.25	2,746.17	0.23	0.08
P-712	323.00	12.0	PVC	Open		0.00	0.00	2,746.17	2,746.17	0.00	0.00
P-713	228.00	12.0	PVC	Open		295.80	0.84	2,746.17	2,746.12	0.23	0.05
P-714	8.00	12.0	PVC	Open		0.00	0.00	2,746.12	2,746.12	0.00	0.00
P-715	163.00	12.0	PVC	Open		295.80	0.84	2,746.12	2,746.08	0.23	0.04
P-716	160.00	6.0	PVC	Open		0.00	0.00	2,746.08	2,746.08	0.00	0.00
P-718	620.00	8.0	PVC	Open		97.83	0.62	2,745.96	2,745.82	0.22	0.14
P-719	471.00	12.0	PVC	Open		0.11	0.00	2,750.72	2,750.72	0.00	0.00
P-720	153.00	12.0	PVC	Open		0.11	0.00	2,750.72	2,750.72	0.00	0.00
P-721	14.00	12.0	PVC	Open		0.00	0.00	2,750.72	2,750.72	0.00	0.00
P-722	1,051.00	12.0	PVC	Open		0.11	0.00	2,750.72	2,750.72	0.00	0.00
P-723	141.00	12.0	PVC	Open		0.11	0.00	2,750.72	2,750.72	0.00	0.00
P-724	320.00	12.0	PVC	Open		0.00	0.00	2,750.72	2,750.72	0.00	0.00
P-725	502.00	12.0	PVC	Open		0.00	0.00	2,750.72	2,750.72	0.00	0.00
P-726	214.00	12.0	PVC	Open		0.00	0.00	2,750.72	2,750.72	0.00	0.00
P-727	372.00	8.0	PVC	Open		50.61	0.32	2,768.99	2,768.96	0.07	0.02
P-728	156.00	8.0	PVC	Open		14.21	0.09	2,768.96	2,768.96	0.01	0.00
P-729	708.00	8.0	PVC	Open		23.97	0.15	2,768.96	2,768.95	0.02	0.01
P-730	797.00	8.0	PVC	Open		-12.85	0.08	2,760.31	2,760.32	0.01	0.00
P-731	160.00	8.0	PVC	Open		-15.99	0.10	2,760.31	2,760.31	0.01	0.00

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-732	48.00	12.0	PVC	Open		0.01	0.00	2,749.66	2,749.66	0.00	0.00
P-733	425.00	8.0	PVC	Open		-77.12	0.49	2,751.94	2,752.00	0.14	0.06
P-735	62.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-736	65.00	12.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-737	33.00	8.0	PVC	Open		0.00	0.00	2,751.02	2,751.02	0.00	0.00
P-738	136.00	8.0	PVC	Open		-2.17	0.01	2,750.68	2,750.68	0.00	0.00
P-739	392.00	12.0	PVC	Open		-230.77	0.65	2,752.76	2,752.82	0.14	0.06
P-740	14.00	8.0	PVC	Open		-1.45	0.01	2,752.76	2,752.76	0.00	0.00
P-741	414.00	12.0	PVC	Open		-232.22	0.66	2,752.70	2,752.76	0.15	0.06
P-742	275.00	8.0	PVC	Open		94.39	0.60	2,752.82	2,752.76	0.20	0.06
P-743	120.00	8.0	PVC	Open		74.91	0.48	2,751.95	2,751.94	0.13	0.02
P-744	43.00	12.0	PVC	Open		672.05	1.91	2,822.67	2,822.63	1.06	0.05
P-747	1,566.00	12.0	PVC	Open		1,499.28	4.25	2,757.31	2,749.66	4.88	7.64
P-749	50.00	96.0	PVC	Open		1,518.93	0.07	2,422.00	2,422.00	0.00	0.00
P-751	37.00	8.0	PVC	Open		0.00	0.00	2,749.66	2,749.66	0.00	0.00
P-752	42.00	8.0	PVC	Open		0.00	0.00	2,749.66	2,749.66	0.00	0.00
P-753	697.00	8.0	PVC	Open		-27.60	0.18	2,752.55	2,752.57	0.02	0.02
P-754	420.00	6.0	PVC	Open		8.07	0.09	2,751.56	2,751.55	0.01	0.00
P-755	452.00	6.0	PVC	Open		8.10	0.09	2,752.58	2,752.58	0.01	0.00
P-756	895.00	8.0	PVC	Open		0.29	0.00	2,825.54	2,825.54	0.00	0.00
P-757	777.00	8.0	PVC	Open		3.73	0.02	2,825.54	2,825.54	0.00	0.00
P-758	967.00	8.0	PVC	Open		9.98	0.06	2,825.54	2,825.54	0.00	0.00
P-759	920.00	8.0	PVC	Open		138.78	0.89	2,748.40	2,748.02	0.41	0.38
P-760	2,830.00	12.0	PVC	Open		32.97	0.09	2,752.64	2,752.63	0.00	0.01
P-762	30.00	8.0	PVC	Open		0.00	0.00	2,741.43	2,741.43	0.00	0.00
P-763	833.00	12.0	PVC	Open		-15.15	0.04	2,747.06	2,747.06	0.00	0.00
P-764	330.00	8.0	PVC	Open		383.23	2.45	2,741.43	2,740.51	2.78	0.92
P-765	140.00	6.0	Steel	Open		435.36	4.94	2,543.00	2,541.14	13.29	1.86
P-766	2.00	12.0	PVC	Open		414.74	1.18	2,820.57	2,820.57	0.37	0.00
P-767	356.00	8.0	PVC	Open		383.80	2.45	2,742.42	2,741.43	2.79	0.99
P-768	239.00	12.0	PVC	Open		0.00	0.00	2,739.97	2,739.97	0.00	0.00
P-769	2.00	12.0	PVC	Open		0.00	0.00	2,747.06	2,747.06	0.00	0.00
P-844	254.00	12.0	PVC	Open		662.22	1.88	2,822.20	2,821.94	1.02	0.26
P-845	230.00	12.0	PVC	Open		663.47	1.88	2,822.43	2,822.20	1.03	0.24
P-846	188.00	12.0	PVC	Open		664.72	1.89	2,822.63	2,822.43	1.03	0.19
P-847	383.00	8.0	PVC	Open		1.86	0.01	2,821.94	2,821.94	0.00	0.00
P-848	176.00	8.0	PVC	Open		1.25	0.01	2,822.20	2,822.20	0.00	0.00
P-849	168.00	8.0	PVC	Open		1.25	0.01	2,822.43	2,822.43	0.00	0.00
P-900	587.00	12.0	PVC	Open		1,270.15	3.60	2,830.43	2,828.34	3.54	2.08
P-901	2.00	8.0	Steel	Open		559.20	3.57	2,753.48	2,753.47	5.13	0.01
P-904	143.00	12.0	PVC	Open		-0.00	0.00	2,747.06	2,747.06	0.00	0.00
P-906	60.00	12.0	PVC	Open		-945.21	2.68	2,777.35	2,777.47	2.01	0.12
P-907	1,798.00	8.0	PVC	Open		1,518.93	9.69	2,829.10	2,757.31	39.93	71.79
P-950	171.00	8.0	PVC	Open		9.70	0.06	2,752.61	2,752.61	0.00	0.00
P-954	23.00	64.0	PVC	Open		-338.90	0.03	2,574.50	2,574.50	0.00	0.00
P-958	76.00	8.0	PVC	Open		-25.20	0.16	2,748.02	2,748.02	0.02	0.00
P-959	345.00	8.0	PVC	Open		163.98	1.05	2,748.02	2,747.83	0.56	0.19
P-960	37.00	8.0	PVC	Open		160.43	1.02	2,747.83	2,747.81	0.54	0.02
P-964	1,139.00	12.0	PVC	Open		295.80	0.84	2,746.08	2,745.82	0.23	0.26
P-965	21.00	12.0	PVC	Open		0.00	0.00	2,747.07	2,747.07	0.00	0.00
P-968	1,673.00	8.0	PVC	Open		0.57	0.00	2,741.43	2,741.43	0.00	0.00

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-971	601.00	6.0	PVC	Open		28.57	0.32	2,752.56	2,752.50	0.10	0.06
P-972	79.00	6.0	PVC	Open		2.57	0.03	2,752.56	2,752.56	0.00	0.00
P-973	180.00	8.0	PVC	Open		31.14	0.20	2,752.56	2,752.56	0.03	0.00
P-974	904.00	8.0	PVC	Open		10.66	0.07	2,752.72	2,752.72	0.00	0.00
P-975	179.00	6.0	PVC	Open		10.66	0.12	2,752.72	2,752.72	0.02	0.00
P-976	344.00	6.0	PVC	Open		8.88	0.10	2,752.58	2,752.58	0.01	0.00
P-977	178.00	6.0	PVC	Open		8.88	0.10	2,752.58	2,752.58	0.01	0.00
P-978	629.00	8.0	PVC	Open		383.80	2.45	2,744.17	2,742.42	2.79	1.75
P-979	592.00	8.0	PVC	Open		383.80	2.45	2,745.82	2,744.17	2.79	1.65
P-980	752.00	8.0	PVC	Open		383.23	2.45	2,740.48	2,738.39	2.78	2.09
P-981	7.00	8.0	PVC	Open		1,270.15	8.11	2,738.39	2,738.19	28.11	0.20
P-982	100.00	12.0	PVC	Open		383.23	1.09	2,740.51	2,740.48	0.37	0.04
P-984	126.00	12.0	PVC	Open		339.22	0.96	2,749.05	2,749.02	0.29	0.04
P-985	103.00	6.0	PVC	Open		0.00	0.00	2,749.05	2,749.05	0.00	0.00
P-986	207.00	8.0	PVC	Open		0.53	0.00	2,749.10	2,749.10	0.00	0.00
P-987	32.00	8.0	PVC	Open		0.00	0.00	2,753.48	2,753.48	0.00	0.00
P-988	415.00	8.0	PVC	Open		54.70	0.35	2,749.13	2,749.10	0.08	0.03
P-989	710.00	8.0	PVC	Open		272.93	1.74	2,747.42	2,746.39	1.46	1.04
P-990	846.00	12.0	PVC	Open		-460.91	1.31	2,749.23	2,749.66	0.52	0.44
P-991	19.00	8.0	PVC	Open		272.93	1.74	2,746.39	2,746.36	1.46	0.03
P-992	269.00	12.0	PVC	Open		-186.45	0.53	2,749.20	2,749.23	0.10	0.03
P-993	340.00	12.0	PVC	Open		-186.45	0.53	2,749.17	2,749.20	0.10	0.03
P-994	67.00	12.0	PVC	Open		-186.45	0.53	2,749.16	2,749.17	0.09	0.01
P-995	230.00	12.0	PVC	Open		-76.69	0.22	2,749.16	2,749.16	0.02	0.00
P-996	172.00	12.0	PVC	Open		-76.69	0.22	2,749.15	2,749.16	0.02	0.00
P-997	147.00	8.0	PVC	Open		54.70	0.35	2,749.15	2,749.14	0.08	0.01
P-998	54.00	8.0	PVC	Open		-11.40	0.07	2,749.15	2,749.15	0.00	0.00
P-999	190.00	12.0	PVC	Open		-66.10	0.19	2,749.15	2,749.15	0.01	0.00
P-1000	80.00	12.0	PVC	Open		10.59	0.03	2,749.15	2,749.15	0.00	0.00
P-1001	141.00	12.0	PVC	Open		10.59	0.03	2,749.15	2,749.15	0.00	0.00
P-1002	262.00	12.0	PVC	Open		10.59	0.03	2,749.15	2,749.15	0.00	0.00
P-1003	11.00	12.0	PVC	Open		10.59	0.03	2,749.15	2,749.15	0.00	0.00
P-1005	258.00	12.0	PVC	Open		285.05	0.81	2,749.15	2,749.10	0.21	0.05
P-1006	84.00	12.0	PVC	Open		274.46	0.78	2,749.23	2,749.21	0.20	0.02
P-1007	290.00	12.0	PVC	Open		274.46	0.78	2,749.21	2,749.15	0.20	0.06
P-1008	716.00	8.0	PVC	Open		28.88	0.18	2,823.26	2,823.24	0.02	0.02
P-1014	443.00	8.0	PVC	Open		-731.31	4.67	2,763.17	2,767.43	9.61	4.26
P-1015	162.00	8.0	PVC	Open		-731.31	4.67	2,767.43	2,768.99	9.61	1.56
P-1029	716.00	12.0	PVC	Open		0.00	0.00	2,746.17	2,746.17	0.00	0.00
P-1030	229.00	12.0	PVC	Open		0.00	0.00	2,746.17	2,746.17	0.00	0.00
P-1031	211.00	12.0	PVC	Open		0.00	0.00	2,746.17	2,746.17	0.00	0.00
P-1032	536.00	8.0	PVC	Open		1.47	0.01	2,752.76	2,752.76	0.00	0.00

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Pump Report

Label	Discharge (gpm)	Control Status	Elevation (ft)	Intake Pump Grade (ft)	Pump Head (ft)	Discharge Pump Grade (ft)	Calculated Water Power (Hp)
PMP-1	559.20	On	2,534.00	2,534.00	219.48	2,753.48	30.99
PMP-2	435.36	On	2,543.00	2,541.14	71.41	2,612.55	7.85
PMP-2.1	123.67	On	2,610.00	2,610.99	142.32	2,753.31	4.44
PMP-2.2	157.40	On	2,610.00	2,610.99	142.33	2,753.31	5.66
PMP-2.3	158.06	On	2,610.00	2,610.99	142.31	2,753.30	5.68
PMP-3	338.90	On	2,624.50	2,574.50	178.87	2,753.37	15.30
PMP-4	0.00	Off	2,399.00	2,419.00	0.00	2,747.06	0.00
PMP-6	945.21	On	2,473.50	2,493.50	283.97	2,777.47	67.77
PMP-7	1,518.93	Fixed Speed Override	2,372.00	2,422.00	407.10	2,829.10	156.12
PMP-Boost	1,270.15	Fixed Speed Override	2,640.00	2,738.19	92.24	2,830.43	29.58

Scenario: 2006 APPROVED DEV. WELL 4 OFF

Fire Flow Analysis

Tank Report

Label	Base Elevation (ft)	Minimum Elevation (ft)	Initial HGL (ft)	Maximum Elevation (ft)	Inactive Volume (gal)	Tank Diameter (ft)	Inflow (gpm)	Current Status	Calculated Hydraulic Grade (ft)	Calculated Percent Full (%)
T-1	2,610.00	2,610.50	2,611.00	2,618.00	0.00	N/A	-3.76	Draining	2,611.00	6.7

Scenario: 2006 APPROVED DEV. WELL 4 OFF

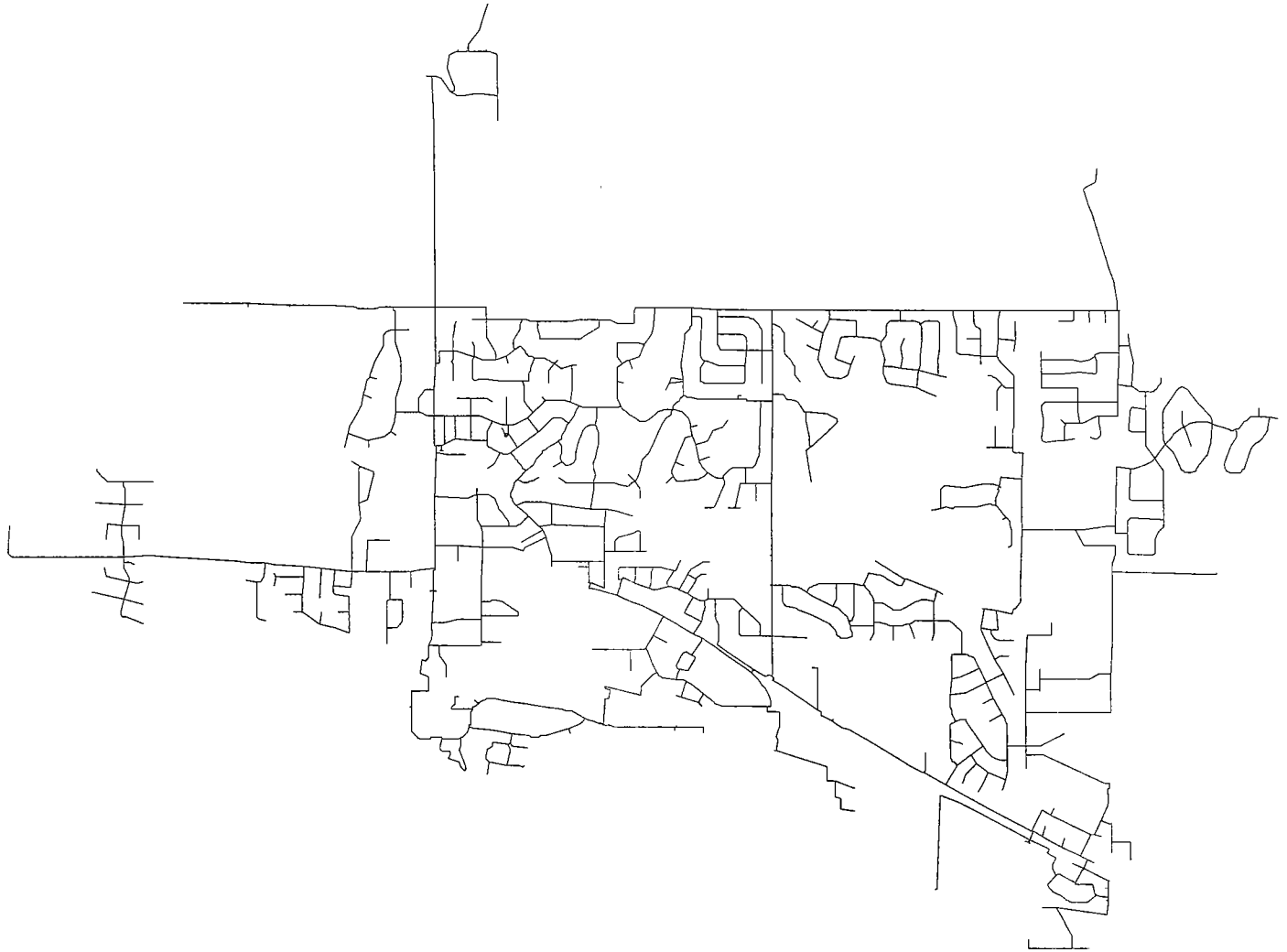
Fire Flow Analysis

Valve Report

Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)	Headloss (ft)	Calculated Pressure Setting (psi)
FCV-2-Hwy 55	2,602.00	12.0	Closed	0.00	2,820.48	2,739.97	0.00	
FCV-5 Southhampton	2,652.00	8.0	Closed	0.00	2,753.48	2,820.59	0.00	
FCV-6 GREAT SKY Wy	2,569.50	12.0	Inactive	-0.00	2,747.07	2,747.07	0.00	
TCV-3-Horse Shoe Bend	2,620.00	8.0	Throttling	383.80	2,742.42	2,742.42	0.00	
PSV-1 Floating Feather	2,653.00	12.0	Throttling	414.80	2,820.57	2,753.61	66.96	72.50
TCV-4-State at Well 4	2,565.00	12.0	Closed	0.00	2,750.38	2,747.06	0.00	
PSV-Gladestone	2,572.00	6.0	Inactive	272.93	2,746.39	2,746.39	0.00	55.00


2006 Scenario w/ Approved Developments Well #6 Off

Scenario: 2006 APPROVED DEV. WELL 6 OFF



Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-1	false	4.28	0.00	N/A	N/A	N/A	N/A	N/A
J-2	false	9.81	0.00	N/A	N/A	N/A	N/A	N/A
J-3	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-4	true	1.36	1,500.00	1,501.36	46.64	J-587	20.02	1,576.28
J-5	true	2.51	1,500.00	1,502.51	48.94	J-587	20.00	1,578.13
J-6	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-7	false	1.06	0.00	N/A	N/A	N/A	N/A	N/A
J-8	true	94.85	1,500.00	1,594.85	51.46	J-587	20.00	1,577.49
J-9	false	5.50	0.00	N/A	N/A	N/A	N/A	N/A
J-10	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-11	true	0.01	1,500.00	1,500.01	51.32	J-587	20.01	1,576.94
J-12	true	9.76	1,500.00	1,509.76	51.83	J-587	20.01	1,578.12
J-13	true	15.09	1,500.00	1,515.09	51.06	J-587	20.00	1,579.59
J-14	true	4.44	1,500.00	1,504.44	52.97	J-587	20.02	1,580.45
J-15	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-16	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-17	true	6.21	1,500.00	1,506.21	53.59	J-587	20.02	1,578.69
J-18	true	1.78	1,500.00	1,501.78	53.36	J-587	20.02	1,577.63
J-19	false	8.61	0.00	N/A	N/A	N/A	N/A	N/A
J-20	true	5.55	1,500.00	1,505.55	50.41	J-587	20.02	1,575.40
J-21	true	0.00	1,500.00	1,500.00	51.36	J-587	20.00	1,573.32
J-22	true	7.24	1,500.00	1,507.24	52.18	J-587	20.01	1,574.17
J-23	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-24	true	5.46	1,500.00	1,505.46	53.18	J-587	20.01	1,576.22
J-25	true	0.00	1,500.00	1,500.00	51.04	J-587	20.01	1,574.92
J-26	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-27	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-28	true	14.20	1,500.00	1,514.20	51.79	J-587	20.00	1,579.45
J-29	true	12.43	1,500.00	1,512.43	53.81	J-587	20.02	1,580.84
J-30	false	2.67	0.00	N/A	N/A	N/A	N/A	N/A
J-31	false	4.17	0.00	N/A	N/A	N/A	N/A	N/A
J-32	true	11.54	1,500.00	1,511.54	43.18	J-587	20.00	1,598.97
J-33	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-34	true	3.55	1,500.00	1,503.55	36.30	J-587	20.00	1,614.50
J-35	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-36	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-37	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-38	true	3.56	1,500.00	1,503.56	37.60	J-587	20.00	1,607.48
J-39	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-40	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-41	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-42	true	0.00	1,500.00	1,500.00	43.76	J-587	20.00	1,595.81
J-43	true	9.05	1,500.00	1,509.05	47.35	J-587	20.00	1,588.53
J-44	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-45	true	2.66	1,500.00	1,502.66	40.59	J-587	20.03	1,607.43
J-46	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-47	true	4.44	1,500.00	1,504.44	26.34	J-587	20.00	1,585.99
J-48	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-49	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-50	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-51	false	4.45	0.00	N/A	N/A	N/A	N/A	N/A
J-52	false	8.88	1,500.00	1,508.88	2.06	J-587	30.50	1,235.57
J-53	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-54	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-55	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-56	true	6.21	1,500.00	1,506.21	35.80	J-587	20.00	1,601.77
J-57	true	19.53	1,500.00	1,519.53	33.94	J-587	20.00	1,590.63
J-58	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-59	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-60	true	2.57	1,500.00	1,502.57	21.76	J-587	21.37	1,539.85
J-61	true	9.76	1,500.00	1,509.76	36.33	J-587	20.00	1,585.41
J-62	false	9.79	0.00	N/A	N/A	N/A	N/A	N/A
J-63	true	9.79	1,500.00	1,509.79	40.76	J-587	20.00	1,617.33
J-64	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-65	true	12.44	1,500.00	1,512.44	35.05	J-587	20.00	1,594.50
J-66	true	14.20	1,500.00	1,514.20	23.95	J-587	20.02	1,578.86
J-67	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-68	true	26.63	1,500.00	1,526.63	35.23	J-587	20.00	1,578.39
J-69	true	21.30	1,500.00	1,521.30	41.02	J-587	20.00	1,576.13
J-70	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-71	false	17.75	1,500.00	1,517.75	19.08	J-72	20.00	1,462.35
J-72	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-73	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-74	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-75	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-76	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-77	true	3.55	1,500.00	1,503.55	28.19	J-587	20.01	1,564.02
J-78	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-79	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-80	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-81	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-83	true	10.65	1,500.00	1,510.65	27.16	J-587	20.01	1,558.65
J-84	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-85	false	1.79	0.00	N/A	N/A	N/A	N/A	N/A
J-86	false	11.53	1,500.00	1,511.53	24.93	J-587	20.01	1,485.98
J-87	false	7.98	0.00	N/A	N/A	N/A	N/A	N/A
J-88	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-89	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-90	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-91	true	7.10	1,500.00	1,507.10	24.68	J-587	20.00	1,524.08
J-92	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-93	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-94	false	3.56	1,500.00	1,503.56	12.05	J-917	20.00	1,277.24
J-95	false	13.31	0.00	N/A	N/A	N/A	N/A	N/A
J-96	false	3.38	0.00	N/A	N/A	N/A	N/A	N/A
J-97	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-98	false	2.65	0.00	N/A	N/A	N/A	N/A	N/A
J-99	false	3.56	0.00	N/A	N/A	N/A	N/A	N/A
J-100	false	4.18	1,500.00	1,504.18	7.09	J-101	20.01	1,280.08
J-101	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-102	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-103	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-104	false	0.00	1,500.00	1,500.00	23.24	J-917	20.00	1,496.55
J-105	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-106	false	9.77	0.00	N/A	N/A	N/A	N/A	N/A
J-107	false	10.33	0.00	N/A	N/A	N/A	N/A	N/A
J-108	true	7.10	1,500.00	1,507.10	24.15	J-587	20.00	1,535.51
J-109	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-110	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-111	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-112	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-113	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-114	true	5.33	1,500.00	1,505.33	24.33	J-587	20.00	1,535.17
J-115	true	4.44	1,500.00	1,504.44	43.78	J-587	20.00	1,560.06
J-116	true	5.33	1,500.00	1,505.33	27.17	J-587	20.01	1,512.96
J-117	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-118	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-119	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-120	false	7.11	1,500.00	1,507.11	26.29	J-587	20.01	1,461.07
J-121	false	7.10	1,500.00	1,507.10	24.75	J-587	20.00	1,431.07
J-122	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-123	false	12.43	1,500.00	1,512.43	13.63	J-125	20.65	1,362.12
J-124	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-125	false	14.20	1,500.00	1,514.20	-0.49	J-126	21.08	1,160.95
J-126	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-127	true	0.00	1,500.00	1,500.00	37.93	J-587	20.00	1,646.86
J-128	false	1.76	1,500.00	1,501.76	15.25	J-917	20.00	1,384.24
J-131	false	2.68	0.00	N/A	N/A	N/A	N/A	N/A
J-132	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-133	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-134	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-135	false	26.74	0.00	N/A	N/A	N/A	N/A	N/A
J-136	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-137	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-138	false	10.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-139	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-140	true	0.14	1,500.00	1,500.14	39.47	J-587	20.00	1,574.41
J-141	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-142	true	7.10	1,500.00	1,507.10	45.29	J-587	20.00	1,577.24
J-143	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-144	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-145	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-146	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-147	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-148	false	9.65	1,500.00	1,509.65	24.90	J-587	20.01	1,470.30
J-149	false	26.64	1,500.00	1,526.64	23.51	J-587	20.00	1,477.97
J-150	false	8.88	1,500.00	N/A	N/A	N/A	N/A	N/A
J-151	false	11.54	1,500.00	1,511.54	26.00	J-587	20.01	1,465.32
J-152	false	12.43	1,500.00	1,512.43	25.27	J-587	20.01	1,463.75
J-153	false	4.45	1,500.00	1,504.45	25.58	J-587	20.01	1,462.11
J-154	false	12.43	1,500.00	1,512.43	16.92	J-155	22.16	1,454.76
J-155	false	15.09	1,500.00	1,515.09	16.37	J-156	20.13	1,449.17
J-156	false	0.00	1,500.00	1,500.00	12.42	J-155	23.44	1,399.79
J-157	false	2.76	0.00	N/A	N/A	N/A	N/A	N/A
J-158	false	22.90	1,500.00	1,522.90	0.03	J-161	28.63	1,257.83
J-159	false	18.64	1,500.00	1,518.64	-10.14	J-161	20.00	1,148.43
J-160	false	1.03	1,500.00	1,501.03	9.90	J-161	20.00	1,329.26
J-161	false	12.43	1,500.00	1,512.43	-14.91	J-640	20.22	1,126.53
J-162	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-163	false	6.44	1,500.00	1,506.44	7.79	J-179	20.00	1,328.38
J-164	false	14.20	1,500.00	1,514.20	3.77	J-165	20.00	1,290.77
J-165	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-166	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-167	false	6.10	1,500.00	1,506.10	2.74	J-166	20.00	1,283.52
J-168	false	1.25	1,500.00	1,501.25	2.94	J-171	20.00	1,285.94
J-169	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-170	false	5.94	0.00	N/A	N/A	N/A	N/A	N/A
J-171	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-172	false	6.22	1,500.00	1,506.22	3.15	J-179	20.00	1,274.01
J-173	false	2.04	0.00	N/A	N/A	N/A	N/A	N/A
J-174	false	1.78	1,500.00	1,501.78	-8.61	J-175	22.31	1,186.04
J-175	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-176	false	4.29	0.00	N/A	N/A	N/A	N/A	N/A
J-177	false	14.30	0.00	N/A	N/A	N/A	N/A	N/A
J-178	false	9.77	0.00	N/A	N/A	N/A	N/A	N/A
J-179	false	24.90	0.00	N/A	N/A	N/A	N/A	N/A
J-180	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-181	false	7.09	0.00	N/A	N/A	N/A	N/A	N/A
J-182	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-183	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-184	false	3.56	1,500.00	1,503.56	-30.72	J-185	20.00	1,049.69
J-185	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-186	false	7.10	1,500.00	1,507.10	-67.79	J-185	33.23	907.05
J-187	false	0.00	1,500.00	1,500.00	-35.67	J-185	21.69	1,032.26
J-188	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-189	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-190	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-191	false	3.54	1,500.00	1,503.54	-23.27	J-196	20.00	1,067.87
J-192	false	2.02	0.00	N/A	N/A	N/A	N/A	N/A
J-193	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-194	false	4.44	1,500.00	1,504.44	-24.50	J-196	20.00	1,063.25
J-195	false	22.20	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Project Engineer: DMC

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-196	false	4.45	0.00	N/A	N/A	N/A	N/A	N/A
J-197	false	20.66	1,500.00	1,520.66	-7.68	J-179	20.00	1,154.00
J-198	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-199	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-200	false	4.28	0.00	N/A	N/A	N/A	N/A	N/A
J-201	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-202	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-203	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-204	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-205	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-206	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-207	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-208	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-209	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-210	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-211	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-212	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-213	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-214	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-215	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-216	true	7.99	1,500.00	1,507.99	45.37	J-587	20.00	1,575.36
J-217	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-218	true	1.59	1,500.00	1,501.59	50.95	J-587	20.00	1,573.93
J-219	false	22.69	0.00	N/A	N/A	N/A	N/A	N/A
J-220	true	0.00	1,500.00	1,500.00	47.67	J-587	20.00	1,568.70
J-221	true	0.00	1,500.00	1,500.00	44.21	J-587	20.00	1,566.88
J-222	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-223	false	0.45	0.00	N/A	N/A	N/A	N/A	N/A
J-224	true	1.65	1,500.00	1,501.65	43.68	J-587	20.00	1,566.12
J-225	true	4.62	1,500.00	1,504.62	44.34	J-587	20.00	1,564.30
J-226	true	8.88	1,500.00	1,508.88	35.76	J-587	20.00	1,560.07
J-227	true	15.98	1,500.00	1,515.98	37.97	J-587	20.00	1,550.92
J-228	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-229	true	7.10	1,500.00	1,507.10	31.72	J-587	20.01	1,550.61
J-230	true	9.76	1,500.00	1,509.76	30.69	J-587	20.01	1,550.69
J-231	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-232	true	15.11	1,500.00	1,515.11	33.09	J-587	20.01	1,550.54
J-233	true	7.02	1,500.00	1,507.02	32.88	J-587	20.01	1,550.54
J-234	false	11.64	0.00	N/A	N/A	N/A	N/A	N/A
J-235	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-236	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-237	false	0.59	0.00	N/A	N/A	N/A	N/A	N/A
J-238	true	0.83	1,500.00	1,500.83	80.81	J-587	20.02	3,047.43
J-239	false	2.43	0.00	N/A	N/A	N/A	N/A	N/A
J-240	false	23.75	0.00	N/A	N/A	N/A	N/A	N/A
J-241	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-242	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-243	true	6.21	1,500.00	1,506.21	77.45	J-587	20.02	2,910.54

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-244	true	10.66	1,500.00	1,510.66	78.49	J-587	20.02	2,889.91
J-245	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-246	true	8.88	1,500.00	1,508.88	78.69	J-587	20.02	2,905.73
J-247	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-248	true	7.99	1,500.00	1,507.99	77.60	J-587	20.02	2,888.69
J-249	true	5.33	1,500.00	1,505.33	76.46	J-587	20.02	2,903.46
J-250	false	2.93	0.00	N/A	N/A	N/A	N/A	N/A
J-251	true	7.10	1,500.00	1,507.10	75.68	J-587	20.02	2,846.40
J-252	false	1.17	0.00	N/A	N/A	N/A	N/A	N/A
J-253	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-254	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-255	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-256	false	0.24	0.00	N/A	N/A	N/A	N/A	N/A
J-257	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-258	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-259	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-260	false	2.66	1,500.00	1,502.66	18.04	J-587	20.00	1,369.28
J-261	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-262	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-263	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-264	false	8.88	1,500.00	1,508.88	16.98	J-587	20.00	1,369.10
J-265	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-266	false	15.09	1,500.00	1,515.09	15.31	J-267	20.00	1,367.58
J-267	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-268	false	13.31	1,500.00	1,513.31	20.42	J-587	20.00	1,364.84
J-269	false	7.99	1,500.00	1,507.99	20.12	J-587	20.00	1,361.25
J-270	false	10.65	1,500.00	1,510.65	19.72	J-587	20.00	1,360.80
J-271	false	2.25	1,500.00	1,502.25	17.73	J-587	20.00	1,360.79
J-272	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-273	false	7.99	1,500.00	1,507.99	16.40	J-587	20.00	1,360.78
J-274	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-275	false	9.76	1,500.00	1,509.76	17.44	J-587	20.00	1,360.76
J-276	false	13.31	1,500.00	1,513.31	15.47	J-587	20.00	1,360.76
J-277	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-278	false	17.75	1,500.00	1,517.75	15.43	J-587	20.00	1,360.75
J-279	false	4.07	0.00	N/A	N/A	N/A	N/A	N/A
J-280	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-281	false	5.70	0.00	N/A	N/A	N/A	N/A	N/A
J-282	false	10.65	0.00	N/A	N/A	N/A	N/A	N/A
J-283	true	3.87	1,500.00	1,503.87	38.66	J-587	20.05	1,685.59
J-284	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-285	true	0.00	1,500.00	1,500.00	41.29	J-587	20.03	1,685.92
J-286	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-287	true	9.76	1,500.00	1,509.76	57.11	J-587	20.06	1,685.53
J-288	true	14.20	1,500.00	1,514.20	56.42	J-587	20.06	1,685.55
J-289	true	6.21	1,500.00	1,506.21	55.31	J-587	20.06	1,685.57
J-290	true	4.44	1,500.00	1,504.44	49.17	J-587	20.00	1,686.35
J-291	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-292	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-293	false	5.02	0.00	N/A	N/A	N/A	N/A	N/A
J-294	false	7.33	0.00	N/A	N/A	N/A	N/A	N/A
J-295	true	2.93	1,500.00	1,502.93	83.87	J-587	20.00	3,298.93
J-296	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-297	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-298	true	0.00	1,500.00	1,500.00	57.10	J-587	20.04	1,704.54
J-299	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-300	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-301	false	8.88	0.00	N/A	N/A	N/A	N/A	N/A
J-302	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-303	true	0.00	1,500.00	1,500.00	58.26	J-587	20.00	1,705.16
J-304	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-305	true	13.31	1,500.00	1,513.31	59.19	J-587	20.00	1,705.15
J-306	true	14.20	1,500.00	1,514.20	60.93	J-587	20.00	1,705.16
J-307	true	9.76	1,500.00	1,509.76	62.88	J-587	20.00	1,705.15
J-308	true	9.76	1,500.00	1,509.76	59.59	J-587	20.00	1,691.92
J-309	true	15.09	1,500.00	1,515.09	65.54	J-587	20.00	1,721.76
J-310	true	23.08	1,500.00	1,523.08	65.08	J-587	20.00	1,732.80
J-311	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-312	false	250.70	0.00	N/A	N/A	N/A	N/A	N/A
J-313	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-314	true	0.00	1,500.00	1,500.00	56.93	J-587	20.05	1,704.33
J-315	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-316	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-317	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-318	true	13.31	1,500.00	1,513.31	46.21	J-587	20.02	1,591.24
J-319	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-320	false	10.66	0.00	N/A	N/A	N/A	N/A	N/A
J-321	true	16.86	1,500.00	1,516.86	72.95	J-587	20.00	1,756.29
J-322	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-323	true	7.99	1,500.00	1,507.99	72.26	J-587	20.02	2,514.91
J-325	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-326	true	0.00	1,500.00	1,500.00	80.35	J-587	20.02	2,915.71
J-327	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-328	true	4.44	1,500.00	1,504.44	50.92	J-587	32.21	2,024.90
J-329	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-330	true	6.11	1,500.00	1,506.11	72.81	J-587	20.00	2,909.39
J-331	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-332	false	9.76	0.00	N/A	N/A	N/A	N/A	N/A
J-333	false	0.94	0.00	N/A	N/A	N/A	N/A	N/A
J-334	true	9.76	1,500.00	1,509.76	72.76	J-587	20.02	2,830.28
J-335	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-336	true	7.10	1,500.00	1,507.10	74.69	J-587	20.02	2,829.08
J-337	true	7.10	1,500.00	1,507.10	75.95	J-587	20.02	2,820.28
J-338	true	5.33	1,500.00	1,505.33	75.78	J-587	20.02	2,832.54
J-339	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-340	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-341	true	6.21	1,500.00	1,506.21	75.10	J-587	20.01	2,778.69
J-342	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-343	true	6.21	1,500.00	1,506.21	74.93	J-587	20.01	2,730.81
J-344	true	8.88	1,500.00	1,508.88	72.33	J-587	20.01	2,583.84
J-345	false	11.11	0.00	N/A	N/A	N/A	N/A	N/A
J-346	true	5.86	1,500.00	1,505.86	56.22	J-587	20.05	1,685.60
J-347	true	4.44	1,500.00	1,504.44	52.26	J-587	20.04	1,685.79
J-348	false	12.43	0.00	N/A	N/A	N/A	N/A	N/A
J-349	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-350	true	7.10	1,500.00	1,507.10	52.21	J-587	20.04	1,685.73
J-351	false	7.99	1,500.00	N/A	N/A	N/A	N/A	N/A
J-352	false	12.43	1,500.00	N/A	N/A	N/A	N/A	N/A
J-353	true	3.55	1,500.00	1,503.55	54.71	J-587	28.30	1,501.00
J-354	true	11.55	1,500.00	1,511.55	47.81	J-587	20.03	1,673.65
J-355	false	6.21	1,500.00	N/A	N/A	N/A	N/A	N/A
J-356	false	5.33	1,500.00	N/A	N/A	N/A	N/A	N/A
J-357	true	10.65	1,500.00	1,510.65	44.81	J-587	20.03	1,658.38
J-358	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-359	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-360	true	0.00	1,500.00	1,500.00	28.11	J-587	26.39	1,605.73
J-361	false	0.00	1,500.00	1,500.00	-21.86	J-196	20.00	1,078.90
J-364	false	5.30	1,500.00	N/A	N/A	N/A	N/A	N/A
J-365	false	0.88	1,500.00	N/A	N/A	N/A	N/A	N/A
J-366	false	2.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-367	false	9.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-368	false	6.53	1,500.00	N/A	N/A	N/A	N/A	N/A
J-369	false	1.05	1,500.00	N/A	N/A	N/A	N/A	N/A
J-370	true	0.00	1,500.00	1,500.00	65.24	J-587	25.04	2,750.88
J-371	false	17.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-372	true	8.69	1,500.00	1,508.69	48.95	J-587	20.02	1,573.26
J-373	false	2.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-374	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-375	false	0.66	1,500.00	N/A	N/A	N/A	N/A	N/A
J-376	false	13.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-377	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-378	false	11.22	1,500.00	N/A	N/A	N/A	N/A	N/A
J-379	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-380	false	12.03	1,500.00	N/A	N/A	N/A	N/A	N/A
J-381	true	1.48	1,500.00	1,501.48	32.39	J-587	20.01	1,593.73
J-382	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-383	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-384	true	5.14	1,500.00	1,505.14	51.40	J-587	20.00	1,572.46
J-385	true	0.86	1,500.00	1,500.86	47.82	J-587	20.02	1,567.48
J-386	true	16.22	1,500.00	1,516.22	48.72	J-587	20.00	1,571.87
J-387	false	1.58	1,500.00	N/A	N/A	N/A	N/A	N/A
J-388	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-389	true	0.00	1,500.00	1,500.00	49.87	J-587	20.02	1,567.46
J-390	false	0.20	1,500.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-391	true	0.00	1,500.00	1,500.00	24.24	J-587	20.26	1,559.42
J-392	true	7.09	1,500.00	1,507.09	48.70	J-587	20.00	1,568.30
J-393	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-394	true	0.00	1,500.00	1,500.00	48.90	J-587	20.00	1,568.38
J-395	true	0.98	1,500.00	1,500.98	48.35	J-587	20.00	1,568.71
J-396	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-397	false	0.31	1,500.00	N/A	N/A	N/A	N/A	N/A
J-398	true	0.00	1,500.00	1,500.00	50.94	J-587	20.00	1,568.15
J-399	true	16.86	1,500.00	1,516.86	49.26	J-587	20.00	1,567.84
J-400	true	12.26	1,500.00	1,512.26	47.95	J-587	20.00	1,567.71
J-401	true	0.00	1,500.00	1,500.00	47.30	J-587	20.02	1,566.82
J-402	true	2.25	1,500.00	1,502.25	48.90	J-587	20.00	1,567.92
J-403	true	0.00	1,500.00	1,500.00	49.27	J-587	20.00	1,567.97
J-404	true	0.39	1,500.00	1,500.39	45.42	J-587	20.00	1,567.73
J-405	false	3.34	1,500.00	N/A	N/A	N/A	N/A	N/A
J-406	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-407	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-408	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-409	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-410	false	9.76	1,500.00	N/A	N/A	N/A	N/A	N/A
J-411	true	6.98	1,500.00	1,506.98	29.72	J-587	20.00	1,565.43
J-412	true	11.54	1,500.00	1,511.54	37.96	J-587	20.00	1,574.04
J-413	true	4.44	1,500.00	1,504.44	39.61	J-587	20.00	1,577.98
J-414	true	3.54	1,500.00	1,503.54	37.15	J-587	20.05	1,645.26
J-415	true	7.99	1,500.00	1,507.99	36.07	J-587	20.05	1,641.46
J-416	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-417	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-418	true	9.76	1,500.00	1,509.76	33.30	J-587	20.00	1,550.85
J-419	true	7.10	1,500.00	1,507.10	33.09	J-587	20.00	1,550.84
J-420	false	11.54	1,500.00	N/A	N/A	N/A	N/A	N/A
J-421	true	14.21	1,500.00	1,514.21	24.12	J-587	20.00	1,550.91
J-422	true	0.00	1,500.00	1,500.00	25.09	J-587	20.00	1,550.90
J-423	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-424	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-425	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-426	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-427	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-428	false	0.52	1,500.00	N/A	N/A	N/A	N/A	N/A
J-429	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-430	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-431	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-432	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-433	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-434	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-435	false	1.78	1,500.00	N/A	N/A	N/A	N/A	N/A
J-436	true	3.55	1,500.00	1,503.55	56.83	J-587	20.00	2,328.98
J-437	true	1.78	1,500.00	1,501.78	53.30	J-587	26.99	2,184.45
J-438	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-439	true	1.78	1,500.00	1,501.78	30.77	J-587	36.80	1,644.41
J-440	true	0.74	1,500.00	1,500.74	40.05	J-587	26.71	1,812.41
J-441	false	10.18	0.00	N/A	N/A	N/A	N/A	N/A
J-442	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-443	false	6.89	2,500.00	2,506.89	-0.36	J-587	20.00	1,571.65
J-444	true	0.66	1,500.00	1,500.66	49.56	J-587	20.00	1,571.50
J-445	false	0.10	0.00	N/A	N/A	N/A	N/A	N/A
J-446	true	7.96	1,500.00	1,507.96	49.13	J-587	20.00	1,571.32
J-447	true	0.00	1,500.00	1,500.00	48.59	J-587	20.00	1,571.13
J-448	true	0.00	1,500.00	1,500.00	44.84	J-587	20.00	1,571.11
J-449	true	1.14	1,500.00	1,501.14	43.65	J-587	20.00	1,571.12
J-450	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-451	false	0.00	2,500.00	2,500.00	2.01	J-587	20.00	1,570.88
J-452	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-453	true	0.11	1,500.00	1,500.11	48.26	J-587	20.00	1,570.75
J-454	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-455	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-456	true	1.68	1,500.00	1,501.68	47.75	J-587	20.02	1,569.86
J-457	true	0.00	1,500.00	1,500.00	47.72	J-587	20.00	1,570.30
J-458	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-459	true	0.22	1,500.00	1,500.22	44.54	J-587	20.00	1,570.73
J-460	false	0.01	2,500.00	2,500.01	-7.04	J-587	20.00	1,570.78
J-461	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-462	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-463	true	0.00	1,500.00	1,500.00	37.48	J-587	20.00	1,570.78
J-464	true	0.50	1,500.00	1,500.50	39.13	J-587	20.00	1,570.79
J-465	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-466	true	0.00	1,500.00	1,500.00	41.29	J-587	20.00	1,570.79
J-467	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-468	true	0.03	1,500.00	1,500.03	34.07	J-587	20.01	1,570.48
J-469	false	0.06	2,500.00	2,500.06	-23.60	J-470	20.00	1,570.76
J-470	true	0.01	1,500.00	1,500.01	35.55	J-587	20.01	1,570.37
J-471	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-472	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-473	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-474	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-475	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-476	true	0.02	1,500.00	1,500.02	40.05	J-587	20.00	1,571.13
J-477	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-478	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-479	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-480	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-481	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-482	true	0.00	1,500.00	1,500.00	49.08	J-587	20.00	1,570.01
J-483	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-484	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-485	true	0.00	1,500.00	1,500.00	47.27	J-587	20.00	1,570.01
J-486	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-487	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-488	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-489	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-490	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-491	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-492	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-493	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-494	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-495	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-496	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-497	false	33.75	0.00	N/A	N/A	N/A	N/A	N/A
J-498	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A
J-499	true	0.00	1,500.00	1,500.00	54.60	J-587	20.05	1,685.70
J-500	true	8.88	1,500.00	1,508.88	55.94	J-587	20.05	1,685.65
J-501	true	10.54	1,500.00	1,510.54	56.80	J-587	20.05	1,685.69
J-502	true	14.22	1,500.00	1,514.22	54.64	J-587	20.04	1,685.78
J-503	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-504	true	0.00	1,500.00	1,500.00	44.75	J-587	20.02	1,593.15
J-505	false	0.01	0.00	N/A	N/A	N/A	N/A	N/A
J-506	true	0.00	1,500.00	1,500.00	46.20	J-587	20.00	1,591.80
J-507	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A
J-508	true	10.65	1,500.00	1,510.65	40.94	J-587	20.00	1,588.31
J-509	false	6.21	0.00	N/A	N/A	N/A	N/A	N/A
J-510	true	7.10	1,500.00	1,507.10	31.57	J-587	20.01	1,588.05
J-511	true	11.54	1,500.00	1,511.54	40.65	J-587	20.00	1,588.02
J-512	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-513	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-514	true	5.33	1,500.00	1,505.33	37.87	J-587	20.00	1,585.97
J-515	true	7.10	1,500.00	1,507.10	42.01	J-587	20.00	1,582.84
J-516	false	3.54	0.00	N/A	N/A	N/A	N/A	N/A
J-517	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-518	true	2.66	1,500.00	1,502.66	36.91	J-587	20.00	1,585.65
J-519	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-520	true	5.33	1,500.00	1,505.33	36.64	J-587	20.00	1,585.28
J-521	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-522	true	6.21	1,500.00	1,506.21	70.64	J-587	20.02	2,563.78
J-523	true	2.05	1,500.00	1,502.05	61.47	J-587	20.00	2,564.61
J-524	false	15.16	0.00	N/A	N/A	N/A	N/A	N/A
J-525	true	2.66	1,500.00	1,502.66	32.27	J-587	20.01	1,550.63
J-527	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-528	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-529	false	11.53	0.00	N/A	N/A	N/A	N/A	N/A
J-530	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-531	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-532	true	7.10	1,500.00	1,507.10	43.05	J-587	20.00	1,592.41
J-533	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-534	true	7.10	1,500.00	1,507.10	40.81	J-587	20.00	1,592.59
J-535	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-536	true	4.44	1,500.00	1,504.44	42.59	J-587	20.00	1,592.69
J-537	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-538	true	2.66	1,500.00	1,502.66	43.99	J-587	20.00	1,592.78
J-539	false	2.66	0.00	N/A	N/A	N/A	N/A	N/A
J-540	true	5.33	1,500.00	1,505.33	46.12	J-587	20.00	1,592.91
J-541	false	1.78	0.00	N/A	N/A	N/A	N/A	N/A
J-542	true	12.43	1,500.00	1,512.43	48.41	J-587	20.02	1,592.43
J-543	true	5.74	1,500.00	1,505.74	50.09	J-587	20.02	1,574.32
J-544	true	8.48	1,500.00	1,508.48	49.78	J-587	20.00	1,574.77
J-546	true	7.10	1,500.00	1,507.10	46.78	J-587	20.00	1,574.91
J-547	true	2.79	1,500.00	1,502.79	48.58	J-587	20.00	1,569.50
J-548	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-549	true	7.34	1,500.00	1,507.34	46.04	J-587	20.00	1,568.48
J-550	true	0.00	1,500.00	1,500.00	45.84	J-587	20.00	1,568.33
J-551	true	0.00	1,500.00	1,500.00	46.04	J-587	20.00	1,568.17
J-552	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-553	true	22.19	1,500.00	1,522.19	46.68	J-587	20.00	1,568.46
J-554	true	17.75	1,500.00	1,517.75	46.49	J-587	20.00	1,568.35
J-555	true	9.76	1,500.00	1,509.76	45.25	J-587	20.00	1,568.26
J-556	false	7.99	0.00	N/A	N/A	N/A	N/A	N/A
J-557	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-558	false	6.28	0.00	N/A	N/A	N/A	N/A	N/A
J-559	true	14.20	1,500.00	1,514.20	45.33	J-587	20.00	1,567.74
J-560	false	7.10	0.00	N/A	N/A	N/A	N/A	N/A
J-561	true	7.10	1,500.00	1,507.10	47.36	J-587	20.02	1,567.04
J-562	true	0.00	1,500.00	1,500.00	47.56	J-587	20.00	1,567.41
J-563	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-564	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-565	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-566	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-567	true	3.09	1,500.00	1,503.09	49.01	J-587	20.00	1,567.54
J-568	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-569	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-570	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-571	true	20.42	1,500.00	1,520.42	56.71	J-587	20.05	1,704.40
J-572	true	11.54	1,500.00	1,511.54	61.73	J-587	20.05	1,704.39
J-573	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-574	true	8.88	1,500.00	1,508.88	62.25	J-587	20.05	1,704.39
J-575	false	7.11	0.00	N/A	N/A	N/A	N/A	N/A
J-576	true	11.54	1,500.00	1,511.54	58.52	J-587	20.05	1,704.32
J-577	true	15.09	1,500.00	1,515.09	61.85	J-587	20.05	1,704.35
J-578	false	6.22	0.00	N/A	N/A	N/A	N/A	N/A
J-579	true	13.31	1,500.00	1,513.31	61.34	J-587	20.05	1,704.35
J-580	false	4.44	0.00	N/A	N/A	N/A	N/A	N/A
J-581	false	0.89	0.00	N/A	N/A	N/A	N/A	N/A
J-582	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A
J-583	true	3.55	1,500.00	1,503.55	61.65	J-587	20.05	1,704.35
J-584	false	3.55	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-585	true	0.00	1,500.00	1,500.00	54.92	J-587	20.05	1,704.35
J-586	false	5.33	0.00	N/A	N/A	N/A	N/A	N/A
J-587	false	7.10	1,500.00	1,507.10	14.11	J-278	24.85	1,327.74
J-588	true	0.00	1,500.00	1,500.00	73.69	J-587	20.02	2,987.70
J-589	false	0.24	0.00	N/A	N/A	N/A	N/A	N/A
J-590	true	0.00	1,500.00	1,500.00	66.43	J-587	25.07	2,748.86
J-591	false	0.33	0.00	N/A	N/A	N/A	N/A	N/A
J-592	true	0.50	1,500.00	1,500.50	63.39	J-587	26.92	2,603.44
J-593	false	70.70	0.00	N/A	N/A	N/A	N/A	N/A
J-594	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-595	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-596	true	0.00	1,500.00	1,500.00	75.29	J-587	20.02	2,956.97
J-597	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-598	true	0.00	1,500.00	1,500.00	75.30	J-587	20.02	2,946.38
J-599	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-600	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-601	false	5.15	0.00	N/A	N/A	N/A	N/A	N/A
J-602	true	8.98	1,500.00	1,508.98	64.87	J-587	24.81	2,735.25
J-603	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-604	true	0.00	1,500.00	1,500.00	58.00	J-587	28.30	2,361.94
J-605	true	2.61	1,500.00	1,502.61	74.78	J-587	20.02	2,924.85
J-606	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-607	true	1.84	1,500.00	1,501.84	76.97	J-587	20.00	2,878.39
J-608	true	0.00	1,500.00	1,500.00	72.07	J-587	20.02	2,877.99
J-609	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-610	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-611	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-612	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-613	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-614	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-615	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-616	false	9.83	0.00	N/A	N/A	N/A	N/A	N/A
J-617	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-618	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-619	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-620	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-621	true	0.10	1,500.00	1,500.10	39.32	J-587	20.00	1,567.67
J-622	true	0.00	1,500.00	1,500.00	38.04	J-587	20.00	1,567.66
J-623	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-624	true	0.00	1,500.00	1,500.00	38.21	J-587	20.00	1,567.66
J-628	false	19.65	0.00	N/A	N/A	N/A	N/A	N/A
J-636	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-637	false	12.43	1,500.00	1,512.43	-17.40	J-638	20.02	1,110.27
J-638	false	14.21	0.00	N/A	N/A	N/A	N/A	N/A
J-639	false	23.97	1,500.00	1,523.97	-28.63	J-638	24.97	1,051.09
J-640	false	15.99	0.00	N/A	N/A	N/A	N/A	N/A
J-650	false	20.42	0.00	N/A	N/A	N/A	N/A	N/A
J-651	false	11.54	0.00	N/A	N/A	N/A	N/A	N/A

Title: INITIAL RUN

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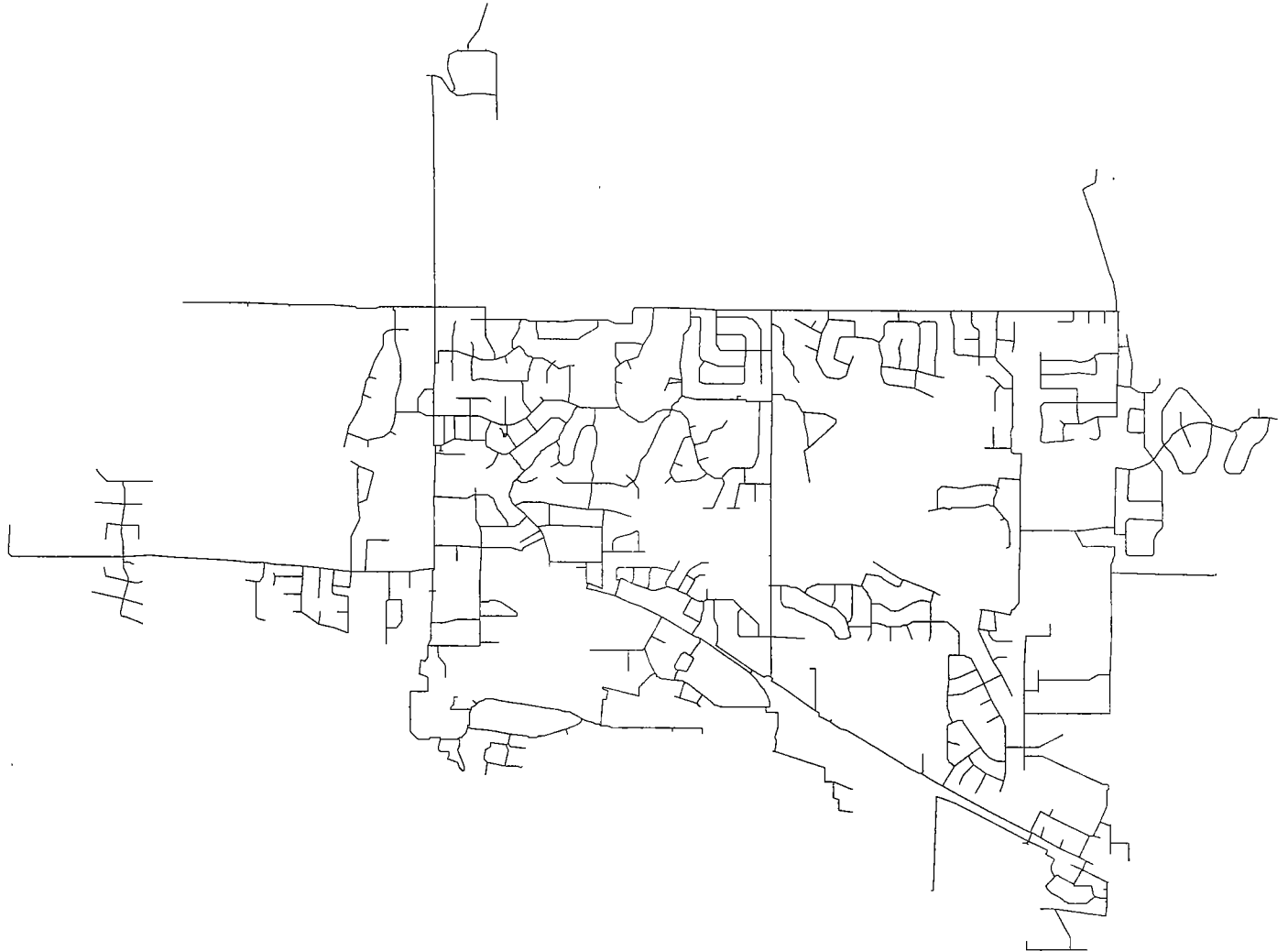
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Fire Flow Analysis

Fire Flow Report

Label	Satisfies Fire Flow Constraints?	Base Flow (gpm)	Needed Fire Flow (gpm)	Total Flow Needed (gpm)	Calculated Residual Pressure @ Total Flow Needed (psi)	Calculated Minimum Zone Junction @ Total Flow Needed	Calculated Minimum Zone Pressure (psi)	Available Fire Flow (gpm)
J-653	false	15.09	0.00	N/A	N/A	N/A	N/A	N/A
J-654	false	19.53	0.00	N/A	N/A	N/A	N/A	N/A
J-655	false	16.86	0.00	N/A	N/A	N/A	N/A	N/A
J-656	false	21.61	0.00	N/A	N/A	N/A	N/A	N/A
J-657	false	15.09	0.00	N/A	N/A	N/A	N/A	N/A
J-658	false	0.27	0.00	N/A	N/A	N/A	N/A	N/A
J-659	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-660	false	0.57	0.00	N/A	N/A	N/A	N/A	N/A
J-661	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-750	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-751	false	4.44	1,500.00	N/A	N/A	N/A	N/A	N/A
J-752	false	18.99	1,500.00	N/A	N/A	N/A	N/A	N/A
J-813	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-814	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-822	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-823	false	0.00	1,500.00	1,500.00	5.62	J-138	20.00	1,188.02
J-824	false	0.00	1,500.00	1,500.00	1.84	J-150	20.45	1,202.70
J-825	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-826	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-827	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-828	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-829	true	0.00	2,500.00	2,500.00	54.29	J-587	20.02	2,977.10
J-830	true	0.00	2,500.00	2,500.00	53.99	J-587	20.02	2,976.86
J-831	false	109.76	0.00	N/A	N/A	N/A	N/A	N/A
J-832	true	0.00	2,500.00	2,500.00	54.09	J-587	20.02	2,976.74
J-833	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-834	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-835	true	0.00	2,500.00	2,500.00	54.32	J-587	20.02	2,976.59
J-836	true	0.00	2,500.00	2,500.00	54.42	J-587	20.02	2,976.54
J-837	true	0.00	2,500.00	2,500.00	54.89	J-587	20.02	2,976.32
J-838	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-840	true	0.00	2,500.00	2,500.00	54.80	J-587	20.02	2,977.25
J-842	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-844	false	0.62	1,500.00	N/A	N/A	N/A	N/A	N/A
J-845	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-846	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-847	false	1.86	1,500.00	N/A	N/A	N/A	N/A	N/A
J-848	false	1.25	1,500.00	N/A	N/A	N/A	N/A	N/A
J-849	false	1.25	1,500.00	N/A	N/A	N/A	N/A	N/A
J-851	true	0.00	1,500.00	1,500.00	71.99	J-587	38.07	1,501.00
J-852	true	0.00	1,500.00	1,500.00	71.51	J-587	38.07	1,501.00
J-853	false	0.00	0.00	N/A	N/A	N/A	N/A	N/A
J-901	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-906	false	3.89	1,500.00	N/A	N/A	N/A	N/A	N/A
J-917	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-981	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A
J-982	false	0.00	1,500.00	N/A	N/A	N/A	N/A	N/A

Scenario: 2006 APPROVED DEV. WELL 6 OFF



Title: INITIAL RUN

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01/17/07 12:00:44 Bentley Systems, Inc. Haestad Methods Solution Center Watertown, CT 06795 USA

Project Engineer: DMC
WaterCAD v7.0 [07.00.049.00]

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-1	2,558.30	Zone	Demand	4.28	COMMERCIAL	4.28	2,742.74	79.80
J-2	2,558.00	Zone	Demand	9.81	COMMERCIAL	9.81	2,743.95	80.45
J-3	2,556.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,743.95	81.10
J-4	2,557.50	Zone	Demand	1.36	COMMERCIAL	1.36	2,745.20	81.21
J-5	2,559.00	Zone	Demand	2.51	COMMERCIAL	2.51	2,745.91	80.87
J-6	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.97	81.33
J-7	2,557.00	Zone	Demand	1.06	COMMERCIAL	1.06	2,745.97	81.76
J-8	2,557.00	Zone	Demand	94.85	IRRIGATION	94.85	2,746.03	81.78
J-9	2,555.00	Zone	Demand	5.50	COMMERCIAL	5.50	2,745.75	82.53
J-10	2,550.50	Zone	Demand	0.00	Composite	0.00	2,745.48	84.36
J-11	2,554.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,746.22	82.95
J-12	2,556.70	Zone	Demand	9.76	RESIDENTIAL	9.76	2,746.34	82.05
J-13	2,557.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,746.50	81.99
J-14	2,555.70	Zone	Demand	4.44	Composite	4.44	2,746.82	82.69
J-15	2,558.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,746.50	81.56
J-16	2,552.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,746.48	84.14
J-17	2,555.30	Zone	Demand	6.21	RESIDENTIAL	6.21	2,746.58	82.76
J-18	2,554.70	Zone	Demand	1.78	RESIDENTIAL	1.78	2,746.48	82.97
J-19	2,552.00	Zone	Demand	8.61	Composite	8.61	2,746.26	84.05
J-20	2,553.00	Zone	Demand	5.55	COMMERCIAL	5.55	2,746.26	83.61
J-21	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.08	82.89
J-22	2,553.50	Zone	Demand	7.24	Composite	7.24	2,746.19	83.37
J-23	2,557.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,746.58	82.02
J-24	2,553.00	Zone	Demand	5.46	Composite	5.46	2,746.57	83.75
J-25	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.30	82.33
J-26	2,554.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,746.76	83.40
J-27	2,555.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,746.94	82.83
J-28	2,558.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,746.87	81.71
J-29	2,556.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,746.89	82.59
J-30	2,579.50	Zone	Demand	2.67	RESIDENTIAL	2.67	2,748.05	72.92
J-31	2,581.50	Zone	Demand	4.17	RESIDENTIAL	4.17	2,748.05	72.06
J-32	2,585.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,748.36	70.46
J-33	2,595.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,748.87	66.57
J-34	2,596.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,748.98	65.97
J-35	2,597.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,748.97	65.54
J-36	2,604.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.24	62.62
J-37	2,601.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,749.29	64.16
J-38	2,603.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,749.35	63.32
J-39	2,591.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.43	68.55
J-40	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.22	68.02
J-41	2,591.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.38	68.52
J-42	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.24	68.89
J-43	2,581.00	Zone	Demand	9.05	COMMERCIAL	9.05	2,749.23	72.79
J-44	2,590.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.29	68.92
J-45	2,594.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.30	67.19
J-46	2,602.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.30	63.73
J-47	2,596.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.29	66.32
J-48	2,593.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.29	67.40
J-49	2,601.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,749.29	64.16
J-50	2,603.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,749.32	63.31
J-51	2,606.00	Zone	Demand	4.45	RESIDENTIAL	4.45	2,749.45	62.07
J-52	2,609.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,749.45	60.77

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-53	2,605.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.72	62.61
J-54	2,604.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.77	63.07
J-55	2,607.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.21	61.31
J-56	2,608.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,749.18	60.87
J-57	2,610.50	Zone	Demand	19.53	RESIDENTIAL	19.53	2,749.18	60.00
J-58	2,606.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,749.01	61.87
J-59	2,618.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.15	56.52
J-60	2,615.00	Zone	Demand	2.57	Composite	2.57	2,749.14	58.03
J-61	2,604.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,748.94	62.49
J-62	2,600.00	Zone	Demand	9.79	RESIDENTIAL	9.79	2,748.90	64.42
J-63	2,597.50	Zone	Demand	9.79	RESIDENTIAL	9.79	2,749.22	65.64
J-64	2,595.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.32	66.55
J-65	2,595.50	Zone	Demand	12.44	RESIDENTIAL	12.44	2,748.59	66.24
J-66	2,604.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,748.55	62.54
J-67	2,604.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,748.55	62.32
J-68	2,603.00	Zone	Demand	26.63	RESIDENTIAL	26.63	2,748.53	62.96
J-69	2,585.00	Zone	Demand	21.30	RESIDENTIAL	21.30	2,747.55	70.33
J-70	2,587.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,747.55	69.46
J-71	2,600.00	Zone	Demand	17.75	RESIDENTIAL	17.75	2,747.93	64.00
J-72	2,602.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,747.93	62.92
J-73	2,589.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,747.90	68.53
J-74	2,617.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.30	57.24
J-75	2,606.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,749.05	61.68
J-76	2,611.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,748.87	59.65
J-77	2,617.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.15	57.17
J-78	2,618.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.04	56.69
J-79	2,616.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,749.24	57.43
J-80	2,613.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.26	58.74
J-81	2,607.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.15	61.29
J-83	2,619.50	Zone	Demand	10.65	RESIDENTIAL	10.65	2,749.34	56.18
J-84	2,624.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,749.60	54.13
J-85	2,626.00	Zone	Demand	1.79	RESIDENTIAL	1.79	2,751.39	54.25
J-86	2,623.50	Zone	Demand	11.53	RESIDENTIAL	11.53	2,751.40	55.34
J-87	2,618.00	Zone	Demand	7.98	RESIDENTIAL	7.98	2,750.60	57.37
J-88	2,618.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,750.58	57.36
J-89	2,618.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,750.58	57.36
J-90	2,618.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,750.57	57.36
J-91	2,616.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,750.47	57.96
J-92	2,619.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.13	56.30
J-93	2,619.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.17	56.10
J-94	2,618.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,749.16	56.75
J-95	2,619.50	Zone	Demand	13.31	RESIDENTIAL	13.31	2,749.15	56.09
J-96	2,621.50	Zone	Demand	3.38	Composite	3.38	2,752.27	56.58
J-97	2,615.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.15	58.04
J-98	2,612.50	Zone	Demand	2.65	RESIDENTIAL	2.65	2,749.15	59.12
J-99	2,611.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,749.15	59.77
J-100	2,609.50	Zone	Demand	4.18	Composite	4.18	2,749.15	60.42
J-101	2,610.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.15	60.20
J-102	2,615.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.15	58.04
J-103	2,615.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.15	58.04
J-104	2,607.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.15	61.29
J-105	2,603.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.15	63.02

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-106	2,593.50	Zone	Demand	9.77	RESIDENTIAL	9.77	2,749.09	67.32
J-107	2,612.50	Zone	Demand	10.33	Composite	10.33	2,749.16	59.13
J-108	2,612.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.15	59.12
J-109	2,610.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.15	60.20
J-110	2,610.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.15	60.20
J-111	2,610.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.15	59.99
J-112	2,614.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.15	58.47
J-113	2,611.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.15	59.55
J-114	2,617.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.15	57.18
J-115	2,564.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,745.73	78.62
J-116	2,620.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,751.89	57.06
J-117	2,621.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,751.97	56.66
J-118	2,579.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,792.21	92.25
J-119	2,623.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.75	55.92
J-120	2,624.50	Zone	Demand	7.11	RESIDENTIAL	7.11	2,752.62	55.43
J-121	2,627.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,754.29	54.85
J-122	2,618.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,751.97	57.75
J-123	2,624.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,751.96	55.14
J-124	2,588.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.61	81.60
J-125	2,623.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,751.95	55.79
J-126	2,620.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,751.95	56.87
J-127	2,605.80	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.48	62.16
J-128	2,619.00	Zone	Demand	1.76	RESIDENTIAL	1.76	2,749.19	56.33
J-131	2,553.00	Zone	Demand	2.68	COMMERCIAL	2.68	2,746.33	83.65
J-132	2,624.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.42	55.34
J-133	2,564.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,745.71	78.62
J-134	2,558.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,745.69	81.21
J-135	2,557.50	Zone	Demand	26.74	COMMERCIAL	26.74	2,745.62	81.39
J-136	2,626.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,752.52	54.52
J-137	2,553.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,746.43	83.47
J-138	2,638.00	Zone	Demand	10.66	RESIDENTIAL	10.66	2,754.28	50.31
J-139	2,554.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,746.42	83.04
J-140	2,554.50	Zone	Demand	0.14	COMMERCIAL	0.14	2,746.18	82.93
J-141	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.18	83.15
J-142	2,554.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,746.76	83.40
J-143	2,610.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,749.10	60.18
J-144	2,611.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.08	59.74
J-145	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.93	78.28
J-146	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,746.06	79.20
J-147	2,615.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,747.93	57.51
J-148	2,623.00	Zone	Demand	9.65	RESIDENTIAL	9.65	2,752.33	55.95
J-149	2,621.00	Zone	Demand	26.64	RESIDENTIAL	26.64	2,751.73	56.56
J-150	2,620.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,752.61	57.38
J-151	2,624.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,752.49	55.38
J-152	2,625.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,752.50	55.16
J-153	2,626.00	Zone	Demand	4.45	RESIDENTIAL	4.45	2,752.51	54.74
J-154	2,561.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,742.73	78.41
J-155	2,556.50	Zone	Demand	15.09	RESIDENTIAL	15.09	2,742.73	80.57
J-156	2,556.20	Zone	Demand	0.00	RESIDENTIAL	0.00	2,742.73	80.70
J-157	2,559.50	Zone	Demand	2.76	COMMERCIAL	2.76	2,741.70	78.83
J-158	2,562.00	Zone	Demand	22.90	Composite	22.90	2,741.69	77.74
J-159	2,561.00	Zone	Demand	18.64	RESIDENTIAL	18.64	2,741.09	77.92

Title: INITIAL RUN

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01/17/07 12:02:29 BENTLEY Systems, Inc. Haestad Methods Solution Center

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-160	2,560.00	Zone	Demand	1.03	Composite	1.03	2,741.16	78.38
J-161	2,565.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,741.09	76.18
J-162	2,559.50	Zone	Demand	0.89	RESIDENTIAL	0.89	2,740.97	78.51
J-163	2,558.50	Zone	Demand	6.44	Composite	6.44	2,740.97	78.95
J-164	2,556.50	Zone	Demand	14.20	RESIDENTIAL	14.20	2,740.82	79.75
J-165	2,557.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,740.82	79.32
J-166	2,555.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,740.69	80.34
J-167	2,554.00	Zone	Demand	6.10	RESIDENTIAL	6.10	2,740.69	80.77
J-168	2,553.50	Zone	Demand	1.25	Composite	1.25	2,740.65	80.97
J-169	2,553.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,740.65	80.97
J-170	2,554.50	Zone	Demand	5.94	Composite	5.94	2,740.62	80.53
J-171	2,556.50	Zone	Demand	8.88	Composite	8.88	2,740.62	79.66
J-172	2,555.50	Zone	Demand	6.22	RESIDENTIAL	6.22	2,740.60	80.08
J-173	2,556.50	Zone	Demand	2.04	Composite	2.04	2,740.60	79.65
J-174	2,557.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,740.60	79.44
J-175	2,557.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,740.60	79.44
J-176	2,559.00	Zone	Demand	4.29	IRRIGATION	4.29	2,740.60	78.57
J-177	2,559.50	Zone	Demand	14.30	Composite	14.30	2,740.78	78.43
J-178	2,557.00	Zone	Demand	9.77	RESIDENTIAL	9.77	2,740.78	79.51
J-179	2,559.50	Zone	Demand	24.90	Composite	24.90	2,739.84	78.02
J-180	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,739.76	80.59
J-181	2,549.00	Zone	Demand	7.09	RESIDENTIAL	7.09	2,739.74	82.52
J-182	2,550.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,739.73	82.09
J-183	2,548.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,739.74	82.96
J-184	2,548.00	Zone	Demand	3.56	RESIDENTIAL	3.56	2,739.73	82.95
J-185	2,549.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,739.71	82.51
J-186	2,547.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,739.73	83.38
J-187	2,546.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,739.73	83.60
J-188	2,551.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,739.76	81.67
J-189	2,553.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,739.75	80.80
J-190	2,553.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,739.75	80.80
J-191	2,552.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,739.75	81.23
J-192	2,552.50	Zone	Demand	2.02	Composite	2.02	2,739.75	81.02
J-193	2,551.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,739.75	81.45
J-194	2,553.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,739.75	80.80
J-195	2,555.00	Zone	Demand	22.20	Composite	22.20	2,739.75	79.93
J-196	2,556.00	Zone	Demand	4.45	RESIDENTIAL	4.45	2,739.75	79.50
J-197	2,551.50	Zone	Demand	20.66	Composite	20.66	2,740.04	81.57
J-198	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,739.76	80.59
J-199	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,739.76	82.32
J-200	2,616.50	Zone	Demand	4.28	Composite	4.28	2,749.21	57.42
J-201	2,617.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.21	57.20
J-202	2,601.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.20	64.12
J-203	2,600.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.20	64.55
J-204	2,603.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.20	63.25
J-205	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.20	63.04
J-206	2,603.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.20	63.25
J-207	2,603.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.20	63.04
J-208	2,599.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,749.20	64.98
J-209	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	74.51
J-210	2,597.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	65.86
J-211	2,597.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	65.65

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-212	2,591.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	68.24
J-213	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	68.02
J-214	2,587.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	70.19
J-215	2,552.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,746.29	84.06
J-216	2,553.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,746.29	83.63
J-217	2,553.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,746.29	83.41
J-218	2,554.00	Zone	Demand	1.59	COMMERCIAL	1.59	2,746.13	83.13
J-219	2,554.50	Zone	Demand	22.69	IRRIGATION	22.69	2,746.03	82.87
J-220	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.69	81.64
J-221	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.62	79.01
J-222	2,564.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.62	78.36
J-223	2,564.50	Zone	Demand	0.45	COMMERCIAL	0.45	2,745.63	78.37
J-224	2,561.50	Zone	Demand	1.65	RESIDENTIAL	1.65	2,745.63	79.66
J-225	2,562.50	Zone	Demand	4.62	COMMERCIAL	4.62	2,745.66	79.25
J-226	2,561.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,745.73	79.92
J-227	2,565.00	Zone	Demand	15.98	RESIDENTIAL	15.98	2,745.97	78.30
J-228	2,566.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,745.90	77.83
J-229	2,568.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,745.88	76.96
J-230	2,569.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,745.87	76.52
J-231	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.86	81.06
J-232	2,565.00	Zone	Demand	15.11	Composite	15.11	2,745.88	78.26
J-233	2,565.00	Zone	Demand	7.02	Composite	7.02	2,745.87	78.25
J-234	2,565.00	Zone	Demand	11.64	COMMERCIAL	11.64	2,796.10	99.99
J-235	2,603.00	Zone	Demand	0.00	Fixed	0.00	2,749.20	63.25
J-236	2,613.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,749.19	58.92
J-237	2,565.50	Zone	Demand	0.59	IRRIGATION	0.59	2,795.44	99.49
J-238	2,568.50	Zone	Demand	0.83	Composite	0.83	2,791.81	96.61
J-239	2,569.00	Zone	Demand	2.43	RESIDENTIAL	2.43	2,791.81	96.40
J-240	2,569.50	Zone	Demand	23.75	IRRIGATION	23.75	2,790.96	95.82
J-241	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.95	90.40
J-242	2,570.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,789.54	94.99
J-243	2,568.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,788.73	95.50
J-244	2,566.50	Zone	Demand	10.66	RESIDENTIAL	10.66	2,788.10	95.88
J-245	2,564.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,788.73	97.23
J-246	2,569.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,788.54	94.99
J-247	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,780.36	90.15
J-248	2,571.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,788.14	93.94
J-249	2,570.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,788.35	94.47
J-250	2,571.00	Zone	Demand	2.93	Composite	2.93	2,787.83	93.81
J-251	2,573.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,786.75	92.48
J-252	2,570.00	Zone	Demand	1.17	IRRIGATION	1.17	2,787.86	94.26
J-253	2,571.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.86	93.61
J-254	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.44	92.56
J-255	2,573.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.43	92.56
J-256	2,577.00	Zone	Demand	0.24	COMMERCIAL	0.24	2,786.83	90.78
J-257	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,755.23	55.05
J-258	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,756.78	50.96
J-259	2,638.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,756.85	51.42
J-260	2,635.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,756.86	52.72
J-261	2,633.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,756.86	53.59
J-262	2,634.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,756.86	53.15
J-263	2,625.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,756.86	57.05

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-264	2,634.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,756.87	53.16
J-265	2,633.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,756.87	53.59
J-266	2,635.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,756.96	52.76
J-267	2,636.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,756.96	52.33
J-268	2,632.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,757.08	54.12
J-269	2,633.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,757.46	53.85
J-270	2,630.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,757.49	55.16
J-271	2,632.50	Zone	Demand	2.25	Composite	2.25	2,757.50	54.08
J-272	2,638.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,757.50	51.70
J-273	2,634.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,757.51	53.44
J-274	2,634.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,757.51	53.22
J-275	2,635.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,757.52	53.01
J-276	2,635.70	Zone	Demand	13.31	RESIDENTIAL	13.31	2,757.53	52.71
J-277	2,636.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,757.53	52.58
J-278	2,641.00	Zone	Demand	17.75	RESIDENTIAL	17.75	2,757.62	50.46
J-279	2,638.00	Zone	Demand	4.07	Composite	4.07	2,757.76	51.82
J-280	2,639.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,758.07	51.52
J-281	2,653.00	Zone	Demand	5.70	Composite	5.70	2,820.58	72.50
J-282	2,644.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,820.78	76.49
J-283	2,640.00	Zone	Demand	3.87	Composite	3.87	2,820.78	78.22
J-284	2,638.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.92	79.14
J-285	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,820.92	80.01
J-286	2,635.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,820.92	80.44
J-287	2,639.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,821.07	78.77
J-288	2,637.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,821.02	79.62
J-289	2,644.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,821.15	76.65
J-290	2,647.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,821.15	75.35
J-291	2,643.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,821.15	77.08
J-292	2,654.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,821.15	72.32
J-293	2,654.00	Zone	Demand	5.02	Composite	5.02	2,821.31	72.39
J-294	2,667.00	Zone	Demand	7.33	IRRIGATION	7.33	2,828.07	69.69
J-295	2,565.50	Zone	Demand	2.93	COMMERCIAL	2.93	2,795.44	99.49
J-296	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.23	69.76
J-297	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.23	69.76
J-298	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,830.19	71.25
J-299	2,670.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,830.48	69.43
J-300	2,670.00	Zone	Demand	0.89	RESIDENTIAL	0.89	2,830.48	69.43
J-301	2,664.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,831.60	72.51
J-302	2,664.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,830.44	71.80
J-303	2,667.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,832.61	71.65
J-304	2,670.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,832.61	70.35
J-305	2,667.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,833.86	72.19
J-306	2,665.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,835.05	73.57
J-307	2,664.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,837.11	74.90
J-308	2,670.00	Zone	Demand	9.76	RESIDENTIAL	9.76	2,837.10	72.30
J-309	2,660.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,838.84	77.37
J-310	2,662.50	Zone	Demand	23.08	RESIDENTIAL	23.08	2,839.91	76.76
J-311	2,665.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,830.24	71.27
J-312	2,655.00	Zone	Demand	250.70	Composite	250.70	2,837.41	78.92
J-313	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,838.49	80.69
J-314	2,660.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,830.41	73.51
J-315	2,645.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,842.76	85.56

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-316	2,643.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,774.93	57.08
J-317	2,631.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.54	51.28
J-318	2,577.50	Zone	Demand	13.31	RESIDENTIAL	13.31	2,749.21	74.29
J-319	2,566.00	Zone	Demand	12.43	Composite	12.43	2,746.93	78.28
J-320	2,563.00	Zone	Demand	10.66	RESIDENTIAL	10.66	2,746.06	79.20
J-321	2,647.50	Zone	Demand	16.86	RESIDENTIAL	16.86	2,841.93	84.12
J-322	2,592.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,773.66	78.60
J-323	2,572.50	Zone	Demand	7.99	RESIDENTIAL	7.99	2,779.90	89.73
J-325	2,645.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,843.20	85.54
J-326	2,565.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,788.92	96.66
J-327	2,565.50	Zone	Demand	7.99	RESIDENTIAL	7.99	2,788.77	96.60
J-328	2,565.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,788.77	96.82
J-329	2,565.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,788.55	96.50
J-330	2,565.00	Zone	Demand	6.11	RESIDENTIAL	6.11	2,788.55	96.72
J-331	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,788.35	96.20
J-332	2,568.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,786.30	94.23
J-333	2,569.50	Zone	Demand	0.94	Composite	0.94	2,786.02	93.68
J-334	2,571.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,785.90	92.76
J-335	2,572.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,785.90	92.55
J-336	2,571.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,785.84	92.95
J-337	2,571.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,785.62	92.86
J-338	2,572.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,786.17	92.66
J-339	2,573.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,786.17	92.23
J-340	2,572.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,786.75	92.91
J-341	2,571.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,784.32	92.29
J-342	2,572.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,784.32	91.86
J-343	2,570.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,783.27	92.27
J-344	2,573.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,781.08	89.81
J-345	2,572.00	Zone	Demand	11.11	Composite	11.11	2,780.36	90.15
J-346	2,632.00	Zone	Demand	5.86	Composite	5.86	2,820.97	81.76
J-347	2,630.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,820.96	82.40
J-348	2,630.00	Zone	Demand	12.43	RESIDENTIAL	12.43	2,820.96	82.62
J-349	2,633.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,820.96	81.32
J-350	2,638.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,821.01	79.18
J-351	2,640.00	Zone	Demand	7.99	RESIDENTIAL	7.99	2,821.01	78.32
J-352	2,640.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,821.01	78.10
J-353	2,680.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,837.10	67.97
J-354	2,695.00	Zone	Demand	11.55	RESIDENTIAL	11.55	2,837.09	61.48
J-355	2,682.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,837.09	66.89
J-356	2,678.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,837.09	68.62
J-357	2,700.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,837.09	59.31
J-358	2,699.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.07	55.84
J-359	2,701.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.07	54.98
J-360	2,717.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,828.07	48.05
J-361	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,739.76	81.02
J-364	2,554.00	Zone	Demand	5.30	COMMERCIAL	5.30	2,745.30	82.77
J-365	2,554.00	Zone	Demand	0.88	COMMERCIAL	0.88	2,745.30	82.77
J-366	2,554.00	Zone	Demand	2.76	COMMERCIAL	2.76	2,745.30	82.77
J-367	2,550.00	Zone	Demand	9.00	COMMERCIAL	9.00	2,745.49	84.58
J-368	2,580.00	Zone	Demand	6.53	IRRIGATION	6.53	2,791.73	91.60
J-369	2,550.50	Zone	Demand	1.05	COMMERCIAL	1.05	2,745.45	84.34
J-370	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.73	92.25

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-371	2,554.00	Zone	Demand	17.34	COMMERCIAL	17.34	2,745.51	82.86
J-372	2,555.50	Zone	Demand	8.69	IRRIGATION	8.69	2,745.48	82.20
J-373	2,556.00	Zone	Demand	2.00	COMMERCIAL	2.00	2,745.48	81.98
J-374	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.48	81.98
J-375	2,550.00	Zone	Demand	0.66	COMMERCIAL	0.66	2,745.48	84.57
J-376	2,549.50	Zone	Demand	13.76	COMMERCIAL	13.76	2,745.48	84.79
J-377	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.48	84.79
J-378	2,550.00	Zone	Demand	11.22	COMMERCIAL	11.22	2,745.48	84.57
J-379	2,549.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.48	84.79
J-380	2,589.00	Zone	Demand	12.03	COMMERCIAL	12.03	2,748.83	69.15
J-381	2,593.50	Zone	Demand	1.48	COMMERCIAL	1.48	2,748.83	67.21
J-382	2,547.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.49	85.66
J-383	2,548.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.49	85.23
J-384	2,548.50	Zone	Demand	5.14	COMMERCIAL	5.14	2,745.49	85.23
J-385	2,557.00	Zone	Demand	0.86	COMMERCIAL	0.86	2,745.61	81.60
J-386	2,556.00	Zone	Demand	16.22	COMMERCIAL	16.22	2,745.49	81.98
J-387	2,556.00	Zone	Demand	1.58	Composite	1.58	2,745.49	81.99
J-388	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.63	80.75
J-389	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	82.89
J-390	2,553.50	Zone	Demand	0.20	COMMERCIAL	0.20	2,745.59	83.11
J-391	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	82.46
J-392	2,554.00	Zone	Demand	7.09	COMMERCIAL	7.09	2,745.59	82.89
J-393	2,552.50	Zone	Demand	0.00	Composite	0.00	2,745.59	83.54
J-394	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	81.59
J-395	2,558.00	Zone	Demand	0.98	COMMERCIAL	0.98	2,745.58	81.16
J-396	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.56	80.28
J-397	2,560.00	Zone	Demand	0.31	Composite	0.31	2,745.56	80.28
J-398	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	83.76
J-399	2,554.00	Zone	Demand	16.86	RESIDENTIAL	16.86	2,745.59	82.89
J-400	2,556.50	Zone	Demand	12.26	Composite	12.26	2,745.60	81.81
J-401	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.62	80.52
J-402	2,555.50	Zone	Demand	2.25	COMMERCIAL	2.25	2,745.59	82.24
J-403	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	82.46
J-404	2,562.50	Zone	Demand	0.39	COMMERCIAL	0.39	2,745.60	79.22
J-405	2,567.00	Zone	Demand	3.34	COMMERCIAL	3.34	2,745.60	77.27
J-406	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	83.11
J-407	2,563.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	79.00
J-408	2,565.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.66	78.16
J-409	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.61	81.17
J-410	2,627.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,749.50	52.78
J-411	2,621.00	Zone	Demand	6.98	Composite	6.98	2,749.41	55.56
J-412	2,602.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,749.31	63.52
J-413	2,599.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.28	65.02
J-414	2,716.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,837.09	52.39
J-415	2,718.00	Zone	Demand	7.99	Composite	7.99	2,837.09	51.52
J-416	2,733.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.09	45.03
J-417	2,722.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,837.09	49.79
J-418	2,559.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,745.86	80.63
J-419	2,560.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,745.86	80.19
J-420	2,573.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,745.85	74.57
J-421	2,574.50	Zone	Demand	14.21	Composite	14.21	2,745.85	74.13
J-422	2,573.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.85	74.78

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

**Fire Flow Analysis
Junction Report**

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-423	2,565.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,745.85	78.03
J-424	2,566.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.85	77.81
J-425	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,792.21	92.68
J-426	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,792.21	92.68
J-427	2,579.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.62	91.77
J-428	2,579.50	Zone	Demand	0.52	COMMERCIAL	0.52	2,791.66	91.79
J-429	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.69	93.32
J-430	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.69	93.32
J-431	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,791.70	93.11
J-432	2,576.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,791.70	93.11
J-433	2,572.50	Zone	Demand	0.00	COMMERCIAL	0.00	2,791.71	94.84
J-434	2,572.50	Zone	Demand	0.00	Composite	0.00	2,791.71	94.84
J-435	2,578.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,791.71	92.25
J-436	2,579.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,791.71	92.03
J-437	2,578.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,791.71	92.25
J-438	2,579.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,791.71	91.81
J-439	2,580.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,791.71	91.38
J-440	2,580.00	Zone	Demand	0.74	Composite	0.74	2,791.71	91.60
J-441	2,554.00	Zone	Demand	10.18	IRRIGATION	10.18	2,746.21	83.16
J-442	2,592.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.22	67.80
J-443	2,556.00	Zone	Demand	6.89	RESIDENTIAL	6.89	2,745.49	81.99
J-444	2,554.00	Zone	Demand	0.66	COMMERCIAL	0.66	2,745.50	82.85
J-445	2,554.00	Zone	Demand	0.10	IRRIGATION	0.10	2,745.50	82.85
J-446	2,555.00	Zone	Demand	7.96	IRRIGATION	7.96	2,745.50	82.42
J-447	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	81.99
J-448	2,555.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	82.42
J-449	2,554.50	Zone	Demand	1.14	COMMERCIAL	1.14	2,745.51	82.64
J-450	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	81.99
J-451	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.52	81.99
J-452	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.52	82.00
J-453	2,556.50	Zone	Demand	0.11	COMMERCIAL	0.11	2,745.52	81.78
J-454	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.52	81.57
J-455	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.53	81.57
J-456	2,558.00	Zone	Demand	1.68	IRRIGATION	1.68	2,745.53	81.13
J-457	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	80.92
J-458	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.53	81.14
J-459	2,557.00	Zone	Demand	0.22	COMMERCIAL	0.22	2,745.52	81.56
J-460	2,556.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,745.51	81.78
J-461	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	81.99
J-462	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	81.99
J-463	2,557.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	81.56
J-464	2,557.00	Zone	Demand	0.50	IRRIGATION	0.50	2,745.51	81.56
J-465	2,556.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	81.99
J-466	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	81.35
J-467	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.51	80.91
J-468	2,558.00	Zone	Demand	0.03	COMMERCIAL	0.03	2,745.51	81.13
J-469	2,557.50	Zone	Demand	0.06	COMMERCIAL	0.06	2,745.51	81.35
J-470	2,558.00	Zone	Demand	0.01	COMMERCIAL	0.01	2,745.51	81.13
J-471	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	82.68
J-472	2,554.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	82.68
J-473	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	82.24
J-474	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.53	80.49

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-475	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	81.14
J-476	2,553.00	Zone	Demand	0.02	COMMERCIAL	0.02	2,745.51	83.29
J-477	2,553.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	83.30
J-478	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.59	82.24
J-479	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	83.09
J-480	2,553.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	83.09
J-481	2,555.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	82.22
J-482	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	83.52
J-483	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	82.87
J-484	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	82.87
J-485	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	82.87
J-486	2,554.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	82.87
J-487	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	83.52
J-488	2,552.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.54	83.52
J-489	2,561.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,745.86	79.98
J-490	2,565.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,745.85	78.03
J-491	2,565.50	Zone	Demand	4.44	RESIDENTIAL	4.44	2,745.85	78.03
J-492	2,569.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,745.85	76.51
J-493	2,570.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,745.85	76.08
J-494	2,575.50	Zone	Demand	6.21	RESIDENTIAL	6.21	2,745.85	73.70
J-495	2,639.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.94	78.50
J-496	2,628.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.93	83.26
J-497	2,628.50	Zone	Demand	33.75	RESIDENTIAL	33.75	2,820.93	83.26
J-498	2,628.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,820.93	83.47
J-499	2,628.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.93	83.47
J-500	2,625.50	Zone	Demand	8.88	RESIDENTIAL	8.88	2,820.93	84.55
J-501	2,613.50	Zone	Demand	10.54	RESIDENTIAL	10.54	2,820.92	89.74
J-502	2,612.50	Zone	Demand	14.22	IRRIGATION	14.22	2,820.92	90.17
J-503	2,616.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.93	88.45
J-504	2,587.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	69.97
J-505	2,587.50	Zone	Demand	0.01	COMMERCIAL	0.01	2,749.23	69.97
J-506	2,584.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	71.49
J-507	2,618.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,749.15	56.74
J-508	2,592.00	Zone	Demand	10.65	RESIDENTIAL	10.65	2,749.21	68.02
J-509	2,588.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,749.21	69.75
J-510	2,594.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.21	67.15
J-511	2,594.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,749.21	66.93
J-512	2,595.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.21	66.72
J-513	2,612.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.18	59.35
J-514	2,601.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.22	63.91
J-515	2,593.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.25	67.39
J-516	2,612.00	Zone	Demand	3.54	RESIDENTIAL	3.54	2,749.15	59.34
J-517	2,589.00	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.25	69.33
J-518	2,603.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.22	63.26
J-519	2,604.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.22	62.83
J-520	2,604.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.22	62.61
J-521	2,616.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.15	57.39
J-522	2,575.00	Zone	Demand	6.21	RESIDENTIAL	6.21	2,780.73	89.01
J-523	2,578.00	Zone	Demand	2.05	Composite	2.05	2,780.73	87.71
J-524	2,574.00	Zone	Demand	15.16	IRRIGATION	15.16	2,780.48	89.34
J-525	2,559.50	Zone	Demand	2.66	RESIDENTIAL	2.66	2,745.86	80.63
J-527	2,572.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.85	75.22

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-528	2,590.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,749.23	68.89
J-529	2,546.00	Zone	Demand	11.53	RESIDENTIAL	11.53	2,739.69	83.80
J-530	2,552.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,739.76	81.24
J-531	2,579.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,749.21	73.64
J-532	2,572.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.20	76.45
J-533	2,572.00	Zone	Demand	1.78	RESIDENTIAL	1.78	2,749.20	76.67
J-534	2,572.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,749.20	76.45
J-535	2,572.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.20	76.66
J-536	2,571.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,749.20	77.10
J-537	2,569.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,749.19	77.75
J-538	2,571.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.20	77.10
J-539	2,572.00	Zone	Demand	2.66	RESIDENTIAL	2.66	2,749.20	76.67
J-540	2,571.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,749.21	76.88
J-541	2,572.50	Zone	Demand	1.78	RESIDENTIAL	1.78	2,749.21	76.45
J-542	2,572.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,749.21	76.46
J-543	2,553.00	Zone	Demand	5.74	Composite	5.74	2,745.59	83.32
J-544	2,554.00	Zone	Demand	8.48	Composite	8.48	2,745.53	82.87
J-546	2,555.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,745.56	82.45
J-547	2,558.00	Zone	Demand	2.79	COMMERCIAL	2.79	2,745.74	81.23
J-548	2,559.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.67	80.76
J-549	2,559.50	Zone	Demand	7.34	IRRIGATION	7.34	2,745.65	80.54
J-550	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.64	80.53
J-551	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.63	80.53
J-552	2,559.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.63	80.53
J-553	2,557.50	Zone	Demand	22.19	RESIDENTIAL	22.19	2,745.65	81.40
J-554	2,557.50	Zone	Demand	17.75	RESIDENTIAL	17.75	2,745.64	81.40
J-555	2,558.50	Zone	Demand	9.76	RESIDENTIAL	9.76	2,745.63	80.96
J-556	2,559.00	Zone	Demand	7.99	Composite	7.99	2,745.63	80.75
J-557	2,560.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.62	80.31
J-558	2,561.50	Zone	Demand	6.28	Composite	6.28	2,745.62	79.66
J-559	2,559.00	Zone	Demand	14.20	RESIDENTIAL	14.20	2,745.62	80.74
J-560	2,558.50	Zone	Demand	7.10	Composite	7.10	2,745.62	80.96
J-561	2,557.50	Zone	Demand	7.10	RESIDENTIAL	7.10	2,745.62	81.39
J-562	2,558.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.62	81.18
J-563	2,557.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.62	81.39
J-564	2,557.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,745.62	81.39
J-565	2,560.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,745.62	80.31
J-566	2,558.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.62	80.96
J-567	2,556.00	Zone	Demand	3.09	COMMERCIAL	3.09	2,745.62	82.04
J-568	2,615.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,820.93	88.88
J-569	2,595.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,820.93	97.75
J-570	2,597.50	Zone	Demand	14.21	RESIDENTIAL	14.21	2,820.93	96.67
J-571	2,659.00	Zone	Demand	20.42	RESIDENTIAL	20.42	2,830.24	74.09
J-572	2,643.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,830.25	81.01
J-573	2,643.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,830.25	80.80
J-574	2,644.00	Zone	Demand	8.88	RESIDENTIAL	8.88	2,830.26	80.58
J-575	2,643.50	Zone	Demand	7.11	RESIDENTIAL	7.11	2,830.27	80.81
J-576	2,661.00	Zone	Demand	11.54	RESIDENTIAL	11.54	2,830.43	73.30
J-577	2,649.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,830.36	78.47
J-578	2,649.00	Zone	Demand	6.22	RESIDENTIAL	6.22	2,830.35	78.46
J-579	2,642.00	Zone	Demand	13.31	RESIDENTIAL	13.31	2,830.36	81.50
J-580	2,645.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,830.36	80.20

Title: INITIAL RUN

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

**Fire Flow Analysis
Junction Report**

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-581	2,643.50	Zone	Demand	0.89	RESIDENTIAL	0.89	2,830.36	80.85
J-582	2,643.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,830.36	80.85
J-583	2,648.00	Zone	Demand	3.55	RESIDENTIAL	3.55	2,830.37	78.90
J-584	2,654.50	Zone	Demand	3.55	RESIDENTIAL	3.55	2,830.39	76.10
J-585	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,830.39	77.18
J-586	2,650.50	Zone	Demand	5.33	RESIDENTIAL	5.33	2,830.39	77.83
J-587	2,652.00	Zone	Demand	7.10	RESIDENTIAL	7.10	2,759.98	46.72
J-588	2,583.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.52	90.22
J-589	2,576.50	Zone	Demand	0.24	COMMERCIAL	0.24	2,791.38	92.97
J-590	2,574.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.38	93.84
J-591	2,579.50	Zone	Demand	0.33	COMMERCIAL	0.33	2,791.89	91.89
J-592	2,578.00	Zone	Demand	0.50	Composite	0.50	2,791.89	92.54
J-593	2,579.50	Zone	Demand	70.70	IRRIGATION	70.70	2,791.59	91.76
J-594	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.62	92.21
J-595	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.20	92.24
J-596	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.11	92.20
J-597	2,578.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,791.11	91.99
J-598	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.76	92.27
J-599	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.76	92.92
J-600	2,576.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.76	92.92
J-601	2,577.00	Zone	Demand	5.15	COMMERCIAL	5.15	2,790.76	92.48
J-602	2,577.50	Zone	Demand	8.98	COMMERCIAL	8.98	2,790.76	92.27
J-603	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.76	93.13
J-604	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,790.76	92.48
J-605	2,578.00	Zone	Demand	2.61	COMMERCIAL	2.61	2,789.96	91.70
J-606	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,789.96	91.70
J-607	2,572.00	Zone	Demand	1.84	COMMERCIAL	1.84	2,788.04	93.47
J-608	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,788.04	91.96
J-609	2,575.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,788.04	91.96
J-610	2,577.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.27	90.97
J-611	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.27	90.76
J-612	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.16	90.71
J-613	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.16	90.71
J-614	2,577.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,787.08	90.68
J-615	2,578.00	Zone	Demand	0.00	COMMERCIAL	0.00	2,787.08	90.46
J-616	2,580.00	Zone	Demand	9.83	COMMERCIAL	9.83	2,786.54	89.36
J-617	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	79.43
J-618	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	79.43
J-619	2,562.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	79.43
J-620	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	77.49
J-621	2,566.00	Zone	Demand	0.10	COMMERCIAL	0.10	2,745.60	77.70
J-622	2,566.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	77.49
J-623	2,567.50	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	77.05
J-624	2,567.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,745.60	77.27
J-628	2,569.00	Zone	Demand	19.65	COMMERCIAL	19.65	2,798.66	99.36
J-636	2,578.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,792.21	92.68
J-637	2,558.50	Zone	Demand	12.43	RESIDENTIAL	12.43	2,740.01	78.53
J-638	2,559.00	Zone	Demand	14.21	RESIDENTIAL	14.21	2,740.01	78.31
J-639	2,556.00	Zone	Demand	23.97	Composite	23.97	2,740.00	79.61
J-640	2,564.50	Zone	Demand	15.99	RESIDENTIAL	15.99	2,741.09	76.40
J-650	2,610.00	Zone	Demand	20.42	RESIDENTIAL	20.42	2,749.34	60.29
J-651	2,553.50	Zone	Demand	11.54	RESIDENTIAL	11.54	2,746.29	83.41

Title: INITIAL RUN

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Project Engineer: DMC

WaterCAD v7.0 [07.00.049.00]

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Junction Report

Label	Elevation (ft)	Zone	Type	Base Flow (gpm)	Pattern	Demand (Calculated) (gpm)	Calculated Hydraulic Grade (ft)	Pressure (psi)
J-653	2,627.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,752.55	54.32
J-654	2,682.00	Zone	Demand	19.53	RESIDENTIAL	19.53	2,837.09	67.10
J-655	2,680.00	Zone	Demand	16.86	RESIDENTIAL	16.86	2,837.09	67.97
J-656	2,693.00	Zone	Demand	21.61	RESIDENTIAL	21.61	2,837.08	62.34
J-657	2,563.00	Zone	Demand	15.09	RESIDENTIAL	15.09	2,745.91	79.14
J-658	2,598.00	Zone	Demand	0.27	RESIDENTIAL	0.27	2,749.22	65.42
J-659	2,638.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.94	60.11
J-660	2,640.00	Zone	Demand	0.57	COMMERCIAL	0.57	2,776.94	59.25
J-661	2,641.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,776.94	58.81
J-750	2,652.00	Zone	Demand	0.00	RESIDENTIAL	0.00	2,838.49	80.69
J-751	2,571.00	Zone	Demand	4.44	RESIDENTIAL	4.44	2,783.27	91.84
J-752	2,567.00	Zone	Demand	18.99	COMMERCIAL	18.99	2,793.55	98.02
J-813	2,565.00	Zone	Demand	0.00	Fixed	0.00	2,745.87	78.25
J-814	2,560.50	Zone	Demand	0.00	Fixed	0.00	2,745.86	80.20
J-822	2,615.00	Zone	Demand	0.00	Fixed	0.00	2,749.14	58.03
J-823	2,636.00	Zone	Demand	0.00	Fixed	0.00	2,754.28	51.17
J-824	2,621.00	Zone	Demand	0.00	Fixed	0.00	2,752.62	56.94
J-825	2,609.00	Zone	Demand	0.00	Fixed	0.00	2,782.94	75.25
J-826	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,791.62	91.99
J-827	2,579.00	Zone	Demand	0.00	Fixed	0.00	2,791.66	92.01
J-828	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.79	89.47
J-829	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.76	89.46
J-830	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.73	89.44
J-831	2,585.00	Zone	Demand	109.76	Fixed	109.76	2,791.72	89.44
J-832	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.72	89.44
J-833	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.72	89.44
J-834	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.71	89.43
J-835	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.72	89.44
J-836	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.72	89.44
J-837	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.72	89.44
J-838	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.72	89.44
J-840	2,585.00	Zone	Demand	0.00	Fixed	0.00	2,791.77	89.46
J-842	2,552.50	Zone	Demand	0.00	Fixed	0.00	2,740.19	81.20
J-844	2,663.30	Zone	Demand	0.62	RESIDENTIAL	0.62	2,825.63	70.23
J-845	2,664.70	Zone	Demand	0.00	Fixed	0.00	2,826.55	70.02
J-846	2,665.90	Zone	Demand	0.00	Fixed	0.00	2,827.38	69.87
J-847	2,661.70	Zone	Demand	1.86	RESIDENTIAL	1.86	2,825.63	70.92
J-848	2,664.70	Zone	Demand	1.25	RESIDENTIAL	1.25	2,826.55	70.02
J-849	2,665.90	Zone	Demand	1.25	RESIDENTIAL	1.25	2,827.38	69.87
J-851	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,787.27	92.27
J-852	2,574.00	Zone	Demand	0.00	Fixed	0.00	2,787.27	92.27
J-853	2,575.00	Zone	Demand	0.00	Fixed	0.00	2,787.27	91.84
J-901	2,591.00	Zone	Demand	0.00	Fixed	0.00	2,749.71	68.66
J-906	2,553.50	Zone	Demand	3.89	COMMERCIAL	3.89	2,739.76	80.59
J-917	2,625.00	Zone	Demand	0.00	Fixed	0.00	2,749.15	53.71
J-981	2,640.00	Zone	Demand	0.00	Fixed	0.00	2,770.28	56.37
J-982	2,644.50	Zone	Demand	0.00	Fixed	0.00	2,774.85	56.40

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-1	370.00	8.0	PVC	Open		417.51	2.66	2,743.95	2,742.74	3.27	1.21
P-2	266.00	6.0	PVC	Open		0.00	0.00	2,743.95	2,743.95	0.00	0.00
P-3	365.00	8.0	PVC	Open		427.31	2.73	2,745.20	2,743.95	3.42	1.25
P-4	357.00	8.0	PVC	Open		321.79	2.05	2,745.91	2,745.20	1.99	0.71
P-5	369.00	8.0	PVC	Open		80.86	0.52	2,745.97	2,745.91	0.15	0.06
P-6	223.00	6.0	PVC	Open		1.06	0.01	2,745.97	2,745.97	0.00	0.00
P-7	358.00	8.0	PVC	Open		81.92	0.52	2,746.03	2,745.97	0.16	0.06
P-8	530.00	8.0	PVC	Open		158.56	1.01	2,746.03	2,745.75	0.53	0.28
P-9	320.00	8.0	PVC	Open		0.00	0.00	2,745.48	2,745.48	0.00	0.00
P-10	680.00	8.0	PVC	Open		111.27	0.71	2,746.22	2,746.03	0.28	0.19
P-11	314.00	8.0	PVC	Open		224.06	1.43	2,746.34	2,746.03	1.01	0.32
P-12	520.00	8.0	PVC	Open		117.48	0.75	2,746.50	2,746.34	0.30	0.16
P-13	660.00	8.0	PVC	Open		150.63	0.96	2,746.82	2,746.50	0.48	0.32
P-14	130.00	6.0	PVC	Open		2.66	0.03	2,746.50	2,746.50	0.00	0.00
P-15	770.00	6.0	PVC	Open		15.40	0.17	2,746.50	2,746.48	0.03	0.02
P-16	446.00	8.0	PVC	Open		116.35	0.74	2,746.48	2,746.34	0.30	0.13
P-17	380.00	8.0	PVC	Open		111.59	0.71	2,746.58	2,746.48	0.28	0.11
P-18	270.00	8.0	PVC	Open		132.12	0.84	2,746.58	2,746.48	0.38	0.10
P-19	440.00	8.0	PVC	Open		83.18	0.53	2,746.33	2,746.26	0.16	0.07
P-20	83.00	8.0	PVC	Open		5.55	0.04	2,746.26	2,746.26	0.00	0.00
P-21	72.00	8.0	PVC	Open		109.69	0.70	2,746.19	2,746.18	0.27	0.02
P-22	572.00	8.0	PVC	Open		69.01	0.44	2,746.26	2,746.19	0.12	0.07
P-23	195.00	6.0	PVC	Open		72.13	0.82	2,746.58	2,746.48	0.51	0.10
P-24	826.00	6.0	PVC	Open		10.97	0.12	2,746.58	2,746.57	0.02	0.01
P-25	368.00	8.0	PVC	Open		188.19	1.20	2,746.57	2,746.30	0.73	0.27
P-26	282.00	8.0	PVC	Open		182.68	1.17	2,746.76	2,746.57	0.69	0.19
P-27	228.00	8.0	PVC	Open		196.88	1.26	2,746.94	2,746.76	0.79	0.18
P-28	603.00	8.0	PVC	Open		70.41	0.45	2,746.94	2,746.87	0.12	0.07
P-29	340.00	6.0	PVC	Open		94.64	1.07	2,746.87	2,746.58	0.85	0.29
P-30	560.00	8.0	PVC	Open		38.43	0.25	2,746.89	2,746.87	0.04	0.02
P-31	249.00	8.0	PVC	Open		249.92	1.60	2,746.89	2,746.58	1.24	0.31
P-32	660.00	8.0	PVC	Open		300.78	1.92	2,748.05	2,746.89	1.75	1.16
P-33	400.00	6.0	PVC	Open		4.17	0.05	2,748.05	2,748.05	0.00	0.00
P-34	171.00	8.0	PVC	Open		307.62	1.96	2,748.36	2,748.05	1.83	0.31
P-35	375.00	8.0	PVC	Open		262.53	1.68	2,748.87	2,748.36	1.36	0.51
P-36	180.00	6.0	PVC	Open		79.10	0.90	2,748.98	2,748.87	0.61	0.11
P-37	318.00	6.0	PVC	Open		10.65	0.12	2,748.98	2,748.97	0.02	0.01
P-38	310.00	6.0	PVC	Open		93.30	1.06	2,749.24	2,748.98	0.82	0.26
P-39	238.00	6.0	PVC	Open		48.64	0.55	2,749.29	2,749.24	0.25	0.06
P-40	250.00	6.0	Asbestos	Open		48.22	0.55	2,749.35	2,749.29	0.23	0.06
P-41	164.00	8.0	PVC	Open		87.31	0.56	2,749.38	2,749.35	0.18	0.03
P-42	64.00	8.0	PVC	Open		202.47	1.29	2,746.48	2,746.43	0.83	0.05
P-43	80.00	8.0	PVC	Open		374.77	2.39	2,749.43	2,749.22	2.66	0.21
P-44	479.00	8.0	PVC	Open		-37.26	0.24	2,749.22	2,749.24	0.04	0.02
P-45	70.00	8.0	PVC	Open		185.48	1.18	2,749.43	2,749.38	0.71	0.05
P-46	61.00	8.0	PVC	Open		202.56	1.29	2,746.08	2,746.03	0.83	0.05
P-47	451.00	8.0	PVC	Open		94.61	0.60	2,749.38	2,749.29	0.20	0.09
P-48	172.00	8.0	PVC	Open		116.48	0.74	2,749.29	2,749.24	0.30	0.05
P-49	149.00	6.0	PVC	Open		-25.42	0.29	2,749.29	2,749.30	0.08	0.01
P-50	390.00	6.0	Asbestos	Open		35.54	0.40	2,749.35	2,749.30	0.13	0.05
P-51	250.00	6.0	Asbestos	Open		7.45	0.08	2,749.30	2,749.30	0.01	0.00

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-52	390.00	6.0	Asbestos	Open		-6.64	0.08	2,749.29	2,749.30	0.01	0.00
P-53	261.00	6.0	Asbestos	Open		15.98	0.18	2,749.30	2,749.29	0.03	0.01
P-54	211.00	6.0	Asbestos	Open		3.55	0.04	2,749.29	2,749.29	0.00	0.00
P-55	330.00	6.0	Asbestos	Open		7.99	0.09	2,749.29	2,749.29	0.01	0.00
P-56	352.00	6.0	PVC	Open		-22.26	0.25	2,749.30	2,749.32	0.06	0.02
P-57	330.00	6.0	PVC	Open		49.09	0.56	2,749.32	2,749.24	0.25	0.08
P-58	220.00	6.0	PVC	Open		79.34	0.90	2,749.45	2,749.32	0.61	0.13
P-59	444.00	6.0	PVC	Open		8.88	0.10	2,749.45	2,749.45	0.01	0.01
P-60	31.00	6.0	PVC	Open		92.67	1.05	2,749.48	2,749.45	0.81	0.03
P-61	83.00	6.0	PVC	Open		184.01	2.09	2,749.72	2,749.48	2.94	0.24
P-63	87.00	6.0	Ductile I	Open		435.36	4.94	2,612.55	2,611.00	17.79	1.55
P-64	15.00	6.0	PVC	Open		184.01	2.09	2,749.77	2,749.72	2.93	0.04
P-65	251.00	8.0	PVC	Open		301.14	1.92	2,749.77	2,749.32	1.76	0.44
P-66	334.00	6.0	PVC	Open		91.34	1.04	2,749.48	2,749.21	0.79	0.26
P-67	129.00	8.0	PVC	Open		-110.01	0.70	2,749.18	2,749.21	0.27	0.03
P-68	556.00	8.0	PVC	Open		10.62	0.07	2,749.18	2,749.18	0.00	0.00
P-69	387.00	8.0	PVC	Open		-105.53	0.67	2,749.01	2,749.10	0.25	0.10
P-71	131.00	8.0	PVC	Open		47.13	0.30	2,749.15	2,749.15	0.06	0.01
P-72	150.00	8.0	PVC	Open		143.90	0.92	2,749.01	2,748.94	0.44	0.07
P-73	326.00	6.0	PVC	Open		34.10	0.39	2,748.94	2,748.90	0.13	0.04
P-74	570.00	6.0	PVC	Open		75.93	0.86	2,749.22	2,748.90	0.56	0.32
P-75	280.00	8.0	PVC	Open		-23.11	0.15	2,749.21	2,749.22	0.02	0.00
P-76	402.00	8.0	PVC	Open		-108.83	0.69	2,749.22	2,749.32	0.26	0.11
P-77	150.00	6.0	PVC	Open		186.98	2.12	2,749.32	2,748.87	3.03	0.45
P-78	700.00	6.0	PVC	Open		56.63	0.64	2,748.59	2,748.36	0.33	0.23
P-79	325.00	6.0	PVC	Open		100.23	1.14	2,748.90	2,748.59	0.94	0.31
P-80	360.00	6.0	PVC	Open		31.16	0.35	2,748.59	2,748.55	0.11	0.04
P-81	158.00	4.0	PVC	Open		4.44	0.11	2,748.55	2,748.55	0.02	0.00
P-82	985.00	6.0	PVC	Open		-12.52	0.14	2,748.53	2,748.55	0.02	0.02
P-83	930.00	8.0	PVC	Open		229.05	1.46	2,748.53	2,747.55	1.05	0.98
P-84	550.00	6.0	PVC	Open		7.99	0.09	2,747.55	2,747.55	0.01	0.01
P-85	410.00	8.0	PVC	Open		276.17	1.76	2,747.55	2,746.94	1.49	0.61
P-86	660.00	6.0	PVC	Open		76.41	0.87	2,747.93	2,747.55	0.57	0.38
P-87	130.00	4.0	PVC	Open		4.44	0.11	2,747.93	2,747.93	0.02	0.00
P-88	314.00	4.0	PVC	Open		8.88	0.23	2,747.93	2,747.90	0.09	0.03
P-89	1,283.00	6.0	PVC	Open		107.48	1.22	2,749.30	2,747.93	1.07	1.37
P-90	910.00	6.0	PVC	Open		51.08	0.58	2,749.30	2,749.05	0.27	0.25
P-91	383.00	8.0	PVC	Open		149.33	0.95	2,749.05	2,748.87	0.47	0.18
P-92	300.00	8.0	PVC	Open		-100.04	0.64	2,748.87	2,748.94	0.23	0.07
P-93	292.00	8.0	PVC	Open		243.16	1.55	2,748.87	2,748.53	1.17	0.34
P-94	372.00	8.0	PVC	Open		104.47	0.67	2,749.15	2,749.05	0.25	0.09
P-95	150.00	2.0	PVC	Open		4.44	0.45	2,749.15	2,749.04	0.72	0.11
P-96	340.00	8.0	PVC	Open		112.46	0.72	2,749.24	2,749.15	0.28	0.10
P-97	125.00	8.0	PVC	Open		89.39	0.57	2,749.26	2,749.24	0.19	0.02
P-98	158.00	2.0	PVC	Open		4.44	0.45	2,749.26	2,749.15	0.72	0.11
P-99	360.00	8.0	PVC	Open		96.50	0.62	2,749.34	2,749.26	0.21	0.08
P-100	809.00	6.0	PVC	Open		32.83	0.37	2,749.34	2,749.24	0.12	0.10
P-101	95.00	4.0	PVC	Open		2.66	0.07	2,749.15	2,749.15	0.01	0.00
P-102	620.00	8.0	PVC	Open		139.98	0.89	2,749.60	2,749.34	0.42	0.26
P-103	150.00	6.0	PVC	Open		32.64	0.37	2,751.40	2,751.39	0.12	0.02
P-104	980.00	6.0	PVC	Open		92.93	1.05	2,751.40	2,750.60	0.82	0.80

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-105	280.00	4.0	PVC	Open		9.55	0.24	2,750.60	2,750.58	0.10	0.03
P-106	50.00	6.0	PVC	Open		75.40	0.86	2,750.60	2,750.58	0.56	0.03
P-107	233.00	4.0	PVC	Open		0.67	0.02	2,750.58	2,750.58	0.00	0.00
P-108	110.00	4.0	PVC	Open		6.21	0.16	2,750.58	2,750.57	0.05	0.01
P-109	207.00	6.0	PVC	Open		73.41	0.83	2,750.58	2,750.47	0.53	0.11
P-110	300.00	6.0	PVC	Open		213.01	2.42	2,750.47	2,749.30	3.88	1.16
P-111	470.00	6.0	PVC	Open		47.36	0.54	2,749.30	2,749.19	0.24	0.11
P-112	120.00	2.0	PVC	Open		3.55	0.36	2,749.19	2,749.13	0.48	0.06
P-113	124.00	6.0	PVC	Open		42.04	0.48	2,749.19	2,749.17	0.19	0.02
P-114	145.00	6.0	PVC	Open		24.07	0.27	2,749.17	2,749.16	0.07	0.01
P-115	430.00	6.0	PVC	Open		13.31	0.15	2,749.16	2,749.15	0.02	0.01
P-116	316.00	8.0	PVC	Open		0.00	0.00	2,749.15	2,749.15	0.00	0.00
P-117	250.00	6.0	PVC	Open		-7.20	0.08	2,749.15	2,749.16	0.01	0.00
P-118	190.00	4.0	PVC	Open		2.65	0.07	2,749.15	2,749.15	0.01	0.00
P-119	240.00	6.0	PVC	Open		-1.88	0.02	2,749.15	2,749.15	0.00	0.00
P-120	621.00	6.0	PVC	Open		2.18	0.02	2,749.15	2,749.15	0.00	0.00
P-121	100.00	4.0	PVC	Open		3.55	0.09	2,749.15	2,749.15	0.01	0.00
P-122	280.00	6.0	PVC	Open		-5.55	0.06	2,749.15	2,749.15	0.00	0.00
P-123	140.00	6.0	PVC	Open		3.55	0.04	2,749.15	2,749.15	0.00	0.00
P-124	530.00	6.0	PVC	Open		12.65	0.14	2,749.17	2,749.15	0.02	0.01
P-125	270.00	6.0	PVC	Open		3.86	0.04	2,749.15	2,749.15	0.00	0.00
P-126	78.00	6.0	PVC	Open		12.43	0.14	2,749.15	2,749.15	0.02	0.00
P-127	610.00	4.0	PVC	Open		9.77	0.25	2,749.15	2,749.09	0.10	0.06
P-128	430.00	8.0	PVC	Open		16.29	0.10	2,749.16	2,749.15	0.01	0.00
P-129	250.00	8.0	PVC	Open		-28.72	0.18	2,749.15	2,749.16	0.02	0.01
P-130	480.00	6.0	PVC	Open		9.76	0.11	2,749.15	2,749.15	0.01	0.01
P-131	100.00	6.0	PVC	Open		2.66	0.03	2,749.15	2,749.15	0.00	0.00
P-132	80.00	6.0	PVC	Open		2.66	0.03	2,749.15	2,749.15	0.00	0.00
P-133	165.00	8.0	PVC	Open		-11.85	0.08	2,749.15	2,749.15	0.00	0.00
P-134	270.00	6.0	PVC	Open		5.33	0.06	2,749.15	2,749.15	0.00	0.00
P-135	243.00	8.0	PVC	Open		0.57	0.00	2,749.15	2,749.15	0.00	0.00
P-136	600.00	8.0	PVC	Open		325.64	2.08	2,749.15	2,747.93	2.04	1.22
P-137	1,300.00	8.0	PVC	Open		331.55	2.12	2,751.89	2,749.15	2.11	2.74
P-138	194.00	8.0	PVC	Open		-134.83	0.86	2,751.89	2,751.97	0.39	0.08
P-139	1,200.00	4.0	PVC	Open		55.35	1.41	2,751.97	2,749.16	2.34	2.81
P-140	400.00	8.0	PVC	Open		-190.17	1.21	2,751.97	2,752.27	0.74	0.30
P-141	67.00	8.0	PVC	Open		-340.26	2.17	2,752.27	2,752.42	2.22	0.15
P-142	940.00	6.0	PVC	Open		146.70	1.66	2,752.27	2,750.47	1.92	1.80
P-143	95.00	8.0	PVC	Open		202.04	1.29	2,751.97	2,751.89	0.83	0.08
P-144	700.00	8.0	PVC	Open		236.66	1.51	2,752.75	2,751.97	1.12	0.78
P-145	260.00	8.0	PVC	Open		153.13	0.98	2,752.62	2,752.49	0.50	0.13
P-146	420.00	8.0	PVC	Open		441.88	2.82	2,754.29	2,752.75	3.64	1.53
P-147	656.00	8.0	PVC	Open		29.29	0.19	2,751.97	2,751.96	0.02	0.02
P-148	548.00	6.0	PVC	Open		10.01	0.11	2,751.96	2,751.95	0.02	0.01
P-149	1,112.00	6.0	PVC	Open		6.85	0.08	2,751.96	2,751.95	0.01	0.01
P-150	867.00	12.0	PVC	Open		1,317.04	3.74	2,779.90	2,776.61	3.80	3.30
P-151	601.00	6.0	PVC	Open		2.66	0.03	2,751.95	2,751.95	0.00	0.00
P-152	570.00	8.0	PVC	Open		408.08	2.60	2,751.39	2,749.60	3.13	1.78
P-154	5.00	6.0	Ductile I	Open		139.66	1.58	2,611.00	2,610.99	1.95	0.01
P-155	5.00	6.0	Ductile I	Open		172.40	1.96	2,611.00	2,610.99	2.93	0.01
P-156	5.00	6.0	Ductile I	Open		173.08	1.96	2,611.00	2,610.99	2.98	0.01

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-157	20.00	6.0	Ductile I	Open		139.66	1.58	2,749.81	2,749.77	1.97	0.04
P-158	15.00	6.0	Ductile I	Open		172.40	1.96	2,749.81	2,749.77	2.93	0.04
P-159	10.00	6.0	Ductile I	Open		173.08	1.96	2,749.80	2,749.77	2.95	0.03
P-160	170.00	8.0	PVC	Open		58.11	0.37	2,745.73	2,745.71	0.08	0.01
P-161	575.00	8.0	PVC	Open		33.16	0.21	2,745.71	2,745.69	0.03	0.02
P-162	797.00	6.0	PVC	Open		12.52	0.14	2,745.71	2,745.69	0.02	0.02
P-163	505.00	6.0	PVC	Open		35.03	0.40	2,745.69	2,745.62	0.14	0.07
P-164	420.00	8.0	PVC	Open		377.23	2.41	2,752.52	2,751.39	2.70	1.13
P-165	150.00	8.0	PVC	Open		27.66	0.18	2,752.52	2,752.51	0.02	0.00
P-166	507.00	8.0	PVC	Open		319.42	2.04	2,747.93	2,746.93	1.97	1.00
P-167	1.00	96.0	PVC	Open		560.25	0.02	2,534.00	2,534.00	0.00	0.00
P-169	48.00	8.0	PVC	Open		560.24	3.58	2,749.71	2,749.43	5.75	0.28
P-170	364.00	4.0	PVC	Open		3.55	0.09	2,746.43	2,746.42	0.01	0.00
P-171	880.00	8.0	PVC	Open		404.90	2.58	2,755.23	2,752.52	3.08	2.71
P-172	340.00	8.0	PVC	Open		109.55	0.70	2,746.18	2,746.08	0.27	0.09
P-173	160.00	6.0	PVC	Open		0.14	0.00	2,746.18	2,746.18	0.00	0.00
P-174	460.00	8.0	PVC	Open		7.10	0.05	2,746.76	2,746.76	0.00	0.00
P-175	260.00	8.0	PVC	Open		-114.41	0.73	2,749.10	2,749.18	0.29	0.08
P-176	80.00	2.0	PVC	Open		2.66	0.27	2,749.10	2,749.08	0.29	0.02
P-177	170.00	8.0	PVC	Open		35.51	0.23	2,746.30	2,746.29	0.04	0.01
P-178	420.00	6.0	PVC	Open		3.47	0.04	2,746.29	2,746.29	0.00	0.00
P-179	393.00	8.0	PVC	Open		16.79	0.11	2,746.29	2,746.29	0.01	0.00
P-180	120.00	8.0	PVC	Open		5.33	0.03	2,746.29	2,746.29	0.00	0.00
P-181	394.00	8.0	PVC	Open		94.60	0.60	2,746.21	2,746.13	0.21	0.08
P-182	225.00	8.0	PVC	Open		93.01	0.59	2,746.13	2,746.08	0.20	0.04
P-183	442.00	8.0	PVC	Open		179.87	1.15	2,746.03	2,745.74	0.67	0.30
P-185	258.00	8.0	PVC	Open		173.39	1.11	2,752.49	2,752.33	0.62	0.16
P-186	1,300.00	6.0	PVC	Open		68.25	0.77	2,752.33	2,751.73	0.46	0.60
P-187	700.00	6.0	PVC	Open		95.49	1.08	2,752.33	2,751.73	0.86	0.60
P-188	800.00	8.0	PVC	Open		137.10	0.88	2,751.73	2,751.40	0.40	0.32
P-189	158.00	8.0	PVC	Open		205.22	1.31	2,752.75	2,752.62	0.86	0.14
P-190	700.00	8.0	PVC	Open		21.88	0.14	2,752.50	2,752.49	0.01	0.01
P-191	260.00	8.0	PVC	Open		44.23	0.28	2,752.51	2,752.50	0.05	0.01
P-192	700.00	6.0	PVC	Open		9.92	0.11	2,752.50	2,752.49	0.01	0.01
P-193	698.00	6.0	PVC	Open		21.01	0.24	2,752.55	2,752.51	0.06	0.04
P-194	448.00	8.0	PVC	Open		27.52	0.18	2,742.74	2,742.73	0.02	0.01
P-195	480.00	8.0	PVC	Open		8.19	0.05	2,742.73	2,742.73	0.00	0.00
P-196	800.00	8.0	PVC	Open		6.90	0.04	2,742.73	2,742.73	0.00	0.00
P-197	242.00	8.0	PVC	Open		0.00	0.00	2,742.73	2,742.73	0.00	0.00
P-198	371.00	8.0	PVC	Open		385.71	2.46	2,742.74	2,741.70	2.81	1.04
P-199	846.00	8.0	PVC	Open		22.90	0.15	2,741.70	2,741.69	0.02	0.01
P-200	1,095.00	8.0	PVC	Open		-47.05	0.30	2,741.09	2,741.16	0.06	0.06
P-201	221.00	8.0	PVC	Open		360.06	2.30	2,741.70	2,741.16	2.47	0.55
P-202	273.00	8.0	PVC	Open		183.81	1.17	2,741.16	2,740.97	0.70	0.19
P-203	523.00	8.0	PVC	Open		128.17	0.82	2,741.16	2,740.97	0.36	0.19
P-204	573.00	8.0	PVC	Open		-15.57	0.10	2,741.09	2,741.09	0.01	0.00
P-205	257.00	8.0	PVC	Open		19.86	0.13	2,740.97	2,740.97	0.01	0.00
P-206	616.00	8.0	PVC	Open		101.87	0.65	2,740.97	2,740.82	0.23	0.14
P-207	173.00	6.0	PVC	Open		3.55	0.04	2,740.82	2,740.82	0.00	0.00
P-208	796.00	8.0	PVC	Open		84.12	0.54	2,740.82	2,740.69	0.17	0.13
P-209	188.00	6.0	PVC	Open		4.44	0.05	2,740.69	2,740.69	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-210	310.00	8.0	PVC	Open		73.58	0.47	2,740.69	2,740.65	0.13	0.04
P-211	158.00	6.0	PVC	Open		4.44	0.05	2,740.65	2,740.65	0.00	0.00
P-212	275.00	8.0	PVC	Open		67.89	0.43	2,740.65	2,740.62	0.11	0.03
P-213	272.00	6.0	PVC	Open		8.88	0.10	2,740.62	2,740.62	0.01	0.00
P-214	270.00	8.0	PVC	Open		53.07	0.34	2,740.62	2,740.60	0.07	0.02
P-215	438.00	8.0	PVC	Open		7.37	0.05	2,740.60	2,740.60	0.00	0.00
P-216	49.00	6.0	PVC	Open		1.78	0.02	2,740.60	2,740.60	0.00	0.00
P-217	129.00	6.0	PVC	Open		3.55	0.04	2,740.60	2,740.60	0.00	0.00
P-218	168.00	8.0	PVC	Open		39.48	0.25	2,740.60	2,740.60	0.04	0.01
P-219	462.00	8.0	PVC	Open		9.77	0.06	2,740.78	2,740.78	0.00	0.00
P-220	225.00	8.0	PVC	Open		202.79	1.29	2,740.97	2,740.78	0.84	0.19
P-221	276.00	8.0	PVC	Open		178.72	1.14	2,740.78	2,740.60	0.66	0.18
P-223	460.00	8.0	PVC	Open		142.64	0.91	2,740.04	2,739.84	0.44	0.20
P-224	1,737.00	12.0	PVC	Open		117.74	0.33	2,739.84	2,739.76	0.04	0.07
P-225	309.00	8.0	PVC	Open		52.35	0.33	2,739.76	2,739.74	0.07	0.02
P-226	502.00	8.0	PVC	Open		9.76	0.06	2,739.74	2,739.74	0.00	0.00
P-227	237.00	4.0	PVC	Open		6.21	0.16	2,739.74	2,739.73	0.05	0.01
P-228	299.00	8.0	PVC	Open		29.29	0.19	2,739.74	2,739.73	0.03	0.01
P-229	498.00	6.0	PVC	Open		7.10	0.08	2,739.73	2,739.73	0.01	0.00
P-230	317.00	4.0	PVC	Open		7.10	0.18	2,739.73	2,739.71	0.06	0.02
P-231	327.00	8.0	PVC	Open		11.53	0.07	2,739.73	2,739.73	0.00	0.00
P-232	487.00	12.0	PVC	Open		-61.50	0.17	2,739.76	2,739.76	0.01	0.01
P-233	464.00	6.0	PVC	Open		5.33	0.06	2,739.76	2,739.75	0.00	0.00
P-234	494.00	6.0	PVC	Open		5.33	0.06	2,739.76	2,739.75	0.00	0.00
P-235	332.00	12.0	PVC	Open		-41.10	0.12	2,739.75	2,739.76	0.01	0.00
P-236	458.00	8.0	PVC	Open		4.44	0.03	2,739.75	2,739.75	0.00	0.00
P-237	298.00	6.0	PVC	Open		2.02	0.02	2,739.75	2,739.75	0.00	0.00
P-238	363.00	12.0	PVC	Open		-31.09	0.09	2,739.75	2,739.75	0.00	0.00
P-239	465.00	8.0	PVC	Open		-22.20	0.14	2,739.75	2,739.75	0.02	0.01
P-240	513.00	12.0	PVC	Open		4.45	0.01	2,739.75	2,739.75	0.00	0.00
P-241	654.00	8.0	PVC	Open		-2.78	0.02	2,745.49	2,745.49	0.00	0.00
P-242	880.00	12.0	PVC	Open		2.02	0.01	2,749.23	2,749.23	0.00	0.00
P-243	980.00	12.0	PVC	Open		81.23	0.23	2,749.25	2,749.23	0.02	0.02
P-244	759.00	12.0	PVC	Open		32.70	0.09	2,749.22	2,749.21	0.00	0.00
P-245	100.00	12.0	PVC	Open		0.00	0.00	2,749.21	2,749.21	0.00	0.00
P-246	430.00	8.0	PVC	Open		28.41	0.18	2,749.21	2,749.20	0.02	0.01
P-247	712.00	8.0	PVC	Open		12.50	0.08	2,749.20	2,749.20	0.01	0.00
P-248	760.00	8.0	PVC	Open		13.25	0.08	2,749.20	2,749.20	0.01	0.00
P-249	50.00	8.0	PVC	Open		0.00	0.00	2,749.20	2,749.20	0.00	0.00
P-250	263.00	8.0	PVC	Open		2.74	0.02	2,749.20	2,749.20	0.00	0.00
P-251	50.00	8.0	PVC	Open		0.00	0.00	2,749.20	2,749.20	0.00	0.00
P-252	800.00	8.0	PVC	Open		7.18	0.05	2,749.20	2,749.20	0.00	0.00
P-253	655.00	12.0	PVC	Open		37.18	0.11	2,749.23	2,749.23	0.01	0.00
P-254	370.00	8.0	PVC	Open		37.17	0.24	2,749.23	2,749.21	0.04	0.01
P-255	1,670.00	12.0	PVC	Open		0.01	0.00	2,749.23	2,749.23	0.00	0.00
P-256	40.00	8.0	PVC	Open		0.00	0.00	2,749.23	2,749.23	0.00	0.00
P-257	650.00	12.0	PVC	Open		0.00	0.00	2,749.23	2,749.23	0.00	0.00
P-258	40.00	8.0	PVC	Open		0.00	0.00	2,749.23	2,749.23	0.00	0.00
P-259	1,020.00	12.0	PVC	Open		0.00	0.00	2,749.23	2,749.23	0.00	0.00
P-260	480.00	8.0	PVC	Open		306.99	1.96	2,746.93	2,746.06	1.82	0.88
P-261	167.00	8.0	PVC	Open		158.83	1.01	2,746.06	2,745.97	0.53	0.09

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-262	395.00	8.0	PVC	Open		88.61	0.57	2,745.97	2,745.90	0.18	0.07
P-263	527.00	8.0	PVC	Open		37.57	0.24	2,745.90	2,745.88	0.04	0.02
P-264	477.00	8.0	PVC	Open		39.50	0.25	2,745.90	2,745.88	0.04	0.02
P-265	341.00	8.0	PVC	Open		4.26	0.03	2,745.88	2,745.88	0.00	0.00
P-266	261.00	8.0	PVC	Open		34.73	0.22	2,745.88	2,745.87	0.03	0.01
P-267	136.00	8.0	PVC	Open		39.40	0.25	2,745.87	2,745.86	0.04	0.01
P-268	604.00	8.0	PVC	Open		14.44	0.09	2,745.87	2,745.87	0.01	0.00
P-269	355.00	8.0	PVC	Open		20.14	0.13	2,745.88	2,745.87	0.01	0.00
P-270	776.00	8.0	PVC	Open		54.24	0.35	2,745.97	2,745.91	0.07	0.06
P-271	810.00	8.0	PVC	Open		137.50	0.88	2,746.06	2,745.73	0.41	0.33
P-272	547.00	8.0	PVC	Open		8.88	0.06	2,745.73	2,745.73	0.00	0.00
P-273	618.00	8.0	PVC	Open		66.08	0.42	2,745.73	2,745.66	0.11	0.07
P-274	332.00	8.0	PVC	Open		61.46	0.39	2,745.66	2,745.63	0.09	0.03
P-275	700.00	8.0	PVC	Open		10.40	0.07	2,745.63	2,745.63	0.00	0.00
P-276	83.00	8.0	PVC	Open		50.61	0.32	2,745.63	2,745.62	0.06	0.01
P-277	419.00	8.0	PVC	Open		14.09	0.09	2,745.62	2,745.62	0.01	0.00
P-278	620.00	12.0	PVC	Open		0.00	0.00	2,745.66	2,745.66	0.00	0.00
P-280	813.00	8.0	PVC	Open		12.43	0.08	2,749.20	2,749.19	0.01	0.00
P-281	287.00	12.0	PVC	Open		1,010.94	2.87	2,796.10	2,795.44	2.29	0.66
P-282	797.00	12.0	PVC	Open		988.43	2.80	2,793.55	2,791.81	2.19	1.75
P-283	320.00	8.0	PVC	Open		2.43	0.02	2,791.81	2,791.81	0.00	0.00
P-284	388.00	12.0	PVC	Open		985.17	2.79	2,791.81	2,790.96	2.18	0.84
P-285	1,528.00	12.0	PVC	Open		384.40	1.09	2,791.52	2,790.96	0.37	0.56
P-286	358.00	12.0	PVC	Open		1,345.82	3.82	2,790.96	2,789.54	3.96	1.42
P-287	419.00	8.0	PVC	Open		318.11	2.03	2,789.54	2,788.73	1.95	0.82
P-288	341.00	8.0	PVC	Open		308.35	1.97	2,788.73	2,788.10	1.84	0.63
P-289	193.00	8.0	PVC	Open		3.55	0.02	2,788.73	2,788.73	0.00	0.00
P-290	267.00	12.0	PVC	Open		1,023.27	2.90	2,789.54	2,788.92	2.34	0.62
P-291	640.00	8.0	PVC	Open		183.96	1.17	2,788.54	2,788.10	0.70	0.45
P-292	460.00	12.0	PVC	Open		613.72	1.74	2,788.54	2,788.14	0.89	0.41
P-293	302.00	8.0	PVC	Open		185.75	1.19	2,788.35	2,788.14	0.71	0.21
P-294	213.00	12.0	PVC	Open		791.48	2.25	2,788.14	2,787.83	1.43	0.31
P-295	511.00	12.0	PVC	Open		970.28	2.75	2,787.83	2,786.75	2.11	1.08
P-296	305.00	12.0	PVC	Open		181.73	0.52	2,787.86	2,787.83	0.09	0.03
P-297	650.00	8.0	PVC	Open		0.00	0.00	2,787.86	2,787.86	0.00	0.00
P-298	516.00	12.0	PVC	Open		587.59	1.67	2,787.86	2,787.44	0.82	0.42
P-299	19.00	12.0	PVC	Open		440.80	1.25	2,787.44	2,787.43	0.48	0.01
P-300	1,334.00	8.0	PVC	Open		146.80	0.94	2,787.44	2,786.83	0.46	0.61
P-301	241.00	8.0	PVC	Open		459.64	2.93	2,755.23	2,754.29	3.93	0.95
P-302	911.00	12.0	PVC	Open		864.53	2.45	2,756.78	2,755.23	1.70	1.55
P-303	156.00	8.0	PVC	Open		149.30	0.95	2,756.85	2,756.78	0.47	0.07
P-304	239.00	8.0	PVC	Open		30.83	0.20	2,756.86	2,756.85	0.03	0.01
P-305	176.00	8.0	PVC	Open		10.65	0.07	2,756.86	2,756.86	0.00	0.00
P-306	140.00	6.0	PVC	Open		4.44	0.05	2,756.86	2,756.86	0.00	0.00
P-307	283.00	8.0	PVC	Open		4.44	0.03	2,756.86	2,756.86	0.00	0.00
P-308	265.00	8.0	PVC	Open		44.15	0.28	2,756.87	2,756.86	0.05	0.01
P-309	205.00	6.0	PVC	Open		5.33	0.06	2,756.87	2,756.87	0.00	0.00
P-310	977.00	8.0	PVC	Open		58.35	0.37	2,756.96	2,756.87	0.09	0.08
P-311	142.00	6.0	PVC	Open		4.44	0.05	2,756.96	2,756.96	0.00	0.00
P-312	850.00	8.0	PVC	Open		77.88	0.50	2,757.08	2,756.96	0.14	0.12
P-313	666.00	8.0	PVC	Open		124.68	0.80	2,757.08	2,756.85	0.34	0.23

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-314	402.00	8.0	PVC	Open		215.87	1.38	2,757.46	2,757.08	0.94	0.38
P-315	547.00	8.0	PVC	Open		163.81	1.05	2,757.76	2,757.46	0.56	0.31
P-316	401.00	8.0	PVC	Open		60.05	0.38	2,757.49	2,757.46	0.09	0.04
P-317	742.00	8.0	PVC	Open		29.24	0.19	2,757.51	2,757.49	0.03	0.02
P-318	343.00	6.0	PVC	Open		6.21	0.07	2,757.51	2,757.51	0.01	0.00
P-319	273.00	8.0	PVC	Open		43.44	0.28	2,757.52	2,757.51	0.05	0.01
P-320	288.00	8.0	PVC	Open		51.71	0.33	2,757.52	2,757.50	0.07	0.02
P-321	290.00	8.0	PVC	Open		30.28	0.19	2,757.53	2,757.52	0.03	0.01
P-322	133.00	8.0	PVC	Open		12.43	0.08	2,757.53	2,757.53	0.01	0.00
P-323	270.00	8.0	PVC	Open		41.47	0.26	2,757.50	2,757.49	0.05	0.01
P-324	472.00	6.0	PVC	Open		7.99	0.09	2,757.50	2,757.50	0.01	0.00
P-325	298.00	8.0	PVC	Open		148.41	0.95	2,757.76	2,757.62	0.47	0.14
P-326	747.00	8.0	PVC	Open		74.62	0.48	2,757.62	2,757.52	0.13	0.10
P-327	1,154.00	8.0	PVC	Open		56.03	0.36	2,757.62	2,757.53	0.08	0.09
P-328	160.00	8.0	PVC	Open		316.29	2.02	2,758.07	2,757.76	1.93	0.31
P-329	1,094.00	12.0	PVC	Open		715.24	2.03	2,758.07	2,756.78	1.18	1.29
P-330	804.00	12.0	PVC	Open		1,031.53	2.93	2,759.98	2,758.07	2.38	1.91
P-331	474.00	8.0	PVC	Open		143.03	0.91	2,820.78	2,820.58	0.44	0.21
P-332	221.00	6.0	PVC	Open		3.87	0.04	2,820.78	2,820.78	0.00	0.00
P-333	260.00	8.0	PVC	Open		157.55	1.01	2,820.92	2,820.78	0.52	0.14
P-334	213.00	6.0	PVC	Open		0.00	0.00	2,820.92	2,820.92	0.00	0.00
P-335	138.00	8.0	PVC	Open		3.55	0.02	2,820.92	2,820.92	0.00	0.00
P-336	267.00	8.0	PVC	Open		165.54	1.06	2,821.07	2,820.92	0.57	0.15
P-337	592.00	12.0	PVC	Open		178.90	0.51	2,821.07	2,821.02	0.09	0.05
P-338	260.00	12.0	PVC	Open		354.21	1.00	2,821.15	2,821.07	0.32	0.08
P-339	281.00	8.0	PVC	Open		16.87	0.11	2,821.15	2,821.15	0.01	0.00
P-340	449.00	12.0	PVC	Open		377.29	1.07	2,821.31	2,821.15	0.36	0.16
P-341	174.00	6.0	PVC	Open		4.44	0.05	2,821.15	2,821.15	0.00	0.00
P-342	286.00	8.0	PVC	Open		7.99	0.05	2,821.15	2,821.15	0.00	0.00
P-343	402.00	12.0	PVC	Open		901.31	2.56	2,821.31	2,820.58	1.84	0.74
P-344	1,192.00	12.0	PVC	Open		1,283.61	3.64	2,825.63	2,821.31	3.62	4.31
P-345	504.00	12.0	PVC	Open		407.43	1.16	2,830.44	2,830.24	0.41	0.21
P-346	261.00	12.0	PVC	Open		-133.98	0.38	2,830.43	2,830.44	0.05	0.01
P-347	228.00	8.0	PVC	Open		-56.75	0.36	2,830.41	2,830.43	0.08	0.02
P-348	532.00	12.0	PVC	Open		1,295.93	3.68	2,830.19	2,828.23	3.68	1.96
P-349	172.00	12.0	PVC	Open		869.91	2.47	2,830.48	2,830.19	1.72	0.30
P-350	180.00	8.0	PVC	Open		0.89	0.01	2,830.48	2,830.48	0.00	0.00
P-351	641.00	12.0	PVC	Open		877.02	2.49	2,831.60	2,830.48	1.74	1.12
P-352	215.00	8.0	PVC	Open		541.41	3.46	2,831.60	2,830.44	5.38	1.16
P-353	228.00	12.0	PVC	Open		1,427.31	4.05	2,832.61	2,831.60	4.44	1.01
P-354	388.00	8.0	PVC	Open		7.10	0.05	2,832.61	2,832.61	0.00	0.00
P-355	278.00	12.0	PVC	Open		1,434.41	4.07	2,833.86	2,832.61	4.48	1.25
P-356	862.00	8.0	PVC	Open		264.59	1.69	2,835.05	2,833.86	1.38	1.19
P-357	384.00	12.0	PVC	Open		1,183.13	3.36	2,835.05	2,833.86	3.09	1.19
P-358	445.00	12.0	PVC	Open		1,461.92	4.15	2,837.11	2,835.05	4.65	2.07
P-359	285.00	12.0	PVC	Open		116.58	0.33	2,837.11	2,837.10	0.04	0.01
P-360	433.00	12.0	PVC	Open		-538.84	1.53	2,837.11	2,837.41	0.69	0.30
P-361	110.00	12.0	PVC	Open		426.01	1.21	2,830.24	2,830.19	0.45	0.05
P-362	701.00	12.0	PVC	Open		1,049.42	2.98	2,838.84	2,837.11	2.46	1.72
P-363	278.00	12.0	PVC	Open		1,329.01	3.77	2,839.91	2,838.84	3.87	1.08
P-364	1,033.00	8.0	PVC	Open		264.50	1.69	2,838.84	2,837.41	1.38	1.42

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-365	213.00	8.0	PVC	Open		-525.04	3.35	2,837.41	2,838.49	5.07	1.08
P-366	15.00	8.0	PVC	Open		0.00	0.00	2,838.49	2,838.49	0.00	0.00
P-367	928.00	8.0	PVC	Open		525.04	3.35	2,843.20	2,838.49	5.07	4.71
P-370	40.00	8.0	PVC	Open		12.43	0.08	2,746.93	2,746.93	0.01	0.00
P-371	40.00	8.0	PVC	Open		10.66	0.07	2,746.06	2,746.06	0.00	0.00
P-372	360.00	12.0	PVC	Open		261.89	0.74	2,749.60	2,749.54	0.18	0.07
P-373	479.00	8.0	PVC	Open		73.79	0.47	2,745.69	2,745.63	0.13	0.06
P-374	102.00	12.0	PVC	Open		56.24	0.16	2,739.76	2,739.76	0.01	0.00
P-375	90.00	12.0	PVC	Open		3.89	0.01	2,739.76	2,739.76	0.00	0.00
P-376	789.00	12.0	PVC	Open		1,072.39	3.04	2,841.93	2,839.91	2.56	2.02
P-377	1,321.00	8.0	PVC	Open		279.70	1.79	2,841.93	2,839.91	1.53	2.02
P-378	203.00	12.0	PVC	Open		1,368.96	3.88	2,842.76	2,841.93	4.10	0.83
P-379	775.00	12.0	PVC	Open		1,317.04	3.74	2,776.61	2,773.66	3.80	2.95
P-380	558.00	12.0	PVC	Open		0.00	0.00	2,820.94	2,820.94	0.00	0.00
P-381	890.00	12.0	PVC	Open		1,317.04	3.74	2,773.66	2,770.28	3.80	3.38
P-383	107.00	12.0	PVC	Open		1,368.96	3.88	2,843.20	2,842.76	4.09	0.44
P-384	154.00	8.0	PVC	Open		216.72	1.38	2,788.92	2,788.77	0.95	0.15
P-385	378.00	6.0	PVC	Open		4.44	0.05	2,788.77	2,788.77	0.00	0.00
P-386	257.00	8.0	PVC	Open		204.29	1.30	2,788.77	2,788.55	0.85	0.22
P-387	333.00	8.0	PVC	Open		6.11	0.04	2,788.55	2,788.55	0.00	0.00
P-388	270.00	8.0	PVC	Open		191.08	1.22	2,788.55	2,788.35	0.75	0.20
P-389	185.00	8.0	PVC	Open		0.00	0.00	2,788.35	2,788.35	0.00	0.00
P-390	419.00	8.0	PVC	Open		481.65	3.07	2,788.10	2,786.30	4.30	1.80
P-391	250.00	8.0	PVC	Open		234.01	1.49	2,786.30	2,786.02	1.09	0.27
P-392	535.00	8.0	PVC	Open		100.05	0.64	2,786.02	2,785.90	0.23	0.12
P-393	113.00	8.0	PVC	Open		7.99	0.05	2,785.90	2,785.90	0.00	0.00
P-394	377.00	8.0	PVC	Open		82.29	0.53	2,785.90	2,785.84	0.16	0.06
P-395	474.00	8.0	PVC	Open		133.02	0.85	2,786.02	2,785.84	0.38	0.18
P-396	250.00	8.0	PVC	Open		208.21	1.33	2,785.84	2,785.62	0.88	0.22
P-397	598.00	8.0	PVC	Open		237.88	1.52	2,786.30	2,785.62	1.13	0.67
P-398	270.00	12.0	PVC	Open		950.75	2.70	2,786.17	2,785.62	2.03	0.55
P-399	202.00	8.0	PVC	Open		3.55	0.02	2,786.17	2,786.17	0.00	0.00
P-400	280.00	12.0	PVC	Open		959.63	2.72	2,786.75	2,786.17	2.07	0.58
P-401	233.00	8.0	PVC	Open		3.55	0.02	2,786.75	2,786.75	0.00	0.00
P-402	310.00	12.0	PVC	Open		1,389.75	3.94	2,785.62	2,784.32	4.21	1.31
P-403	377.00	8.0	PVC	Open		4.44	0.03	2,784.32	2,784.32	0.00	0.00
P-404	252.00	12.0	PVC	Open		1,379.09	3.91	2,784.32	2,783.27	4.15	1.05
P-405	213.00	8.0	PVC	Open		4.44	0.03	2,783.27	2,783.27	0.00	0.00
P-406	535.00	12.0	PVC	Open		1,368.44	3.88	2,783.27	2,781.08	4.09	2.19
P-407	160.00	8.0	PVC	Open		335.82	2.14	2,781.08	2,780.73	2.16	0.35
P-408	308.00	12.0	PVC	Open		1,023.74	2.90	2,781.08	2,780.36	2.34	0.72
P-409	9.00	8.0	PVC	Open		0.00	0.00	2,780.36	2,780.36	0.00	0.00
P-410	265.00	8.0	PVC	Open		23.97	0.15	2,820.97	2,820.96	0.02	0.00
P-411	136.00	8.0	PVC	Open		12.43	0.08	2,820.96	2,820.96	0.01	0.00
P-412	330.00	8.0	PVC	Open		7.10	0.05	2,820.96	2,820.96	0.00	0.00
P-413	942.00	12.0	PVC	Open		137.18	0.39	2,821.02	2,820.97	0.06	0.05
P-414	216.00	8.0	PVC	Open		27.52	0.18	2,821.02	2,821.01	0.02	0.00
P-415	433.00	8.0	PVC	Open		7.99	0.05	2,821.01	2,821.01	0.00	0.00
P-416	265.00	8.0	PVC	Open		12.43	0.08	2,821.01	2,821.01	0.01	0.00
P-417	392.00	12.0	PVC	Open		66.97	0.19	2,837.10	2,837.10	0.02	0.01
P-418	493.00	12.0	PVC	Open		51.88	0.15	2,837.10	2,837.09	0.01	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-419	263.00	6.0	PVC	Open		6.21	0.07	2,837.10	2,837.09	0.01	0.00
P-420	336.00	6.0	PVC	Open		5.33	0.06	2,837.10	2,837.09	0.00	0.00
P-421	907.00	8.0	PVC	Open		19.24	0.12	2,837.10	2,837.09	0.01	0.01
P-422	377.00	12.0	PVC	Open		43.78	0.12	2,837.09	2,837.09	0.01	0.00
P-423	770.00	8.0	PVC	Open		20.60	0.13	2,837.10	2,837.09	0.01	0.01
P-424	20.00	12.0	PVC	Open		0.00	0.00	2,828.23	2,828.23	0.00	0.00
P-425	1,980.00	12.0	PVC	Open		0.00	0.00	2,828.07	2,828.07	0.00	0.00
P-426	209.00	12.0	PVC	Open		0.00	0.00	2,828.07	2,828.07	0.00	0.00
P-427	207.00	12.0	PVC	Open		0.00	0.00	2,828.07	2,828.07	0.00	0.00
P-428	251.00	12.0	PVC	Open		806.55	2.29	2,788.92	2,788.54	1.49	0.37
P-429	281.00	4.0	PVC	Open		11.53	0.29	2,739.73	2,739.69	0.14	0.04
P-430	370.00	8.0	PVC	Open		-106.89	0.68	2,745.20	2,745.30	0.26	0.09
P-431	54.00	6.0	PVC	Open		0.88	0.01	2,745.30	2,745.30	0.00	0.00
P-432	55.00	6.0	PVC	Open		2.76	0.03	2,745.30	2,745.30	0.00	0.00
P-433	506.00	8.0	PVC	Open		-115.82	0.74	2,745.30	2,745.45	0.30	0.15
P-434	155.00	12.0	PVC	Open		31.00	0.09	2,745.48	2,745.48	0.00	0.00
P-435	467.00	8.0	PVC	Open		11.78	0.08	2,745.50	2,745.49	0.01	0.00
P-436	360.00	8.0	PVC	Open		-58.60	0.37	2,745.45	2,745.48	0.09	0.03
P-437	760.00	8.0	PVC	Open		58.28	0.37	2,745.51	2,745.45	0.09	0.06
P-438	348.00	8.0	PVC	Open		56.12	0.36	2,745.51	2,745.48	0.08	0.03
P-439	51.00	12.0	PVC	Open		47.43	0.13	2,745.48	2,745.48	0.01	0.00
P-440	18.00	12.0	PVC	Open		0.00	0.00	2,745.48	2,745.48	0.00	0.00
P-441	642.00	12.0	PVC	Open		45.42	0.13	2,745.48	2,745.48	0.01	0.01
P-442	350.00	12.0	PVC	Open		13.76	0.04	2,745.48	2,745.48	0.00	0.00
P-443	336.00	12.0	PVC	Open		-38.82	0.11	2,745.48	2,745.48	0.01	0.00
P-444	829.00	12.0	PVC	Open		-38.82	0.11	2,745.48	2,745.49	0.01	0.00
P-445	120.00	8.0	PVC	Open		412.03	2.63	2,749.22	2,748.83	3.19	0.38
P-446	470.00	8.0	PVC	Open		1.48	0.01	2,748.83	2,748.83	0.00	0.00
P-447	265.00	12.0	PVC	Open		-38.82	0.11	2,745.49	2,745.49	0.01	0.00
P-448	337.00	8.0	PVC	Open		51.01	0.33	2,745.63	2,745.61	0.07	0.02
P-449	39.00	8.0	PVC	Open		5.14	0.03	2,745.49	2,745.49	0.00	0.00
P-450	705.00	12.0	PVC	Open		-43.96	0.12	2,745.49	2,745.49	0.01	0.01
P-451	197.00	12.0	PVC	Open		-60.17	0.17	2,745.49	2,745.49	0.01	0.00
P-452	250.00	12.0	PVC	Open		0.00	0.00	2,745.48	2,745.48	0.00	0.00
P-453	546.00	8.0	PVC	Open		14.09	0.09	2,745.62	2,745.62	0.01	0.00
P-454	526.00	8.0	PVC	Open		22.78	0.15	2,745.63	2,745.62	0.02	0.01
P-455	730.00	8.0	PVC	Open		8.74	0.06	2,745.63	2,745.62	0.00	0.00
P-456	236.00	8.0	PVC	Open		50.15	0.32	2,745.61	2,745.59	0.07	0.02
P-457	235.00	12.0	PVC	Open		7.29	0.02	2,745.59	2,745.59	0.00	0.00
P-458	311.00	12.0	PVC	Open		7.09	0.02	2,745.59	2,745.59	0.00	0.00
P-459	314.00	12.0	PVC	Open		0.00	0.00	2,745.59	2,745.59	0.00	0.00
P-460	331.00	6.0	PVC	Open		0.00	0.00	2,745.59	2,745.59	0.00	0.00
P-461	399.00	12.0	PVC	Open		42.85	0.12	2,745.59	2,745.59	0.01	0.00
P-462	322.00	12.0	PVC	Open		91.45	0.26	2,745.59	2,745.58	0.03	0.01
P-463	711.00	12.0	PVC	Open		90.48	0.26	2,745.58	2,745.56	0.03	0.02
P-464	355.00	12.0	PVC	Open		48.60	0.14	2,745.59	2,745.59	0.01	0.00
P-465	158.00	8.0	PVC	Open		-18.17	0.12	2,745.59	2,745.59	0.01	0.00
P-466	432.00	8.0	PVC	Open		18.00	0.11	2,745.60	2,745.59	0.01	0.00
P-467	475.00	8.0	PVC	Open		17.04	0.11	2,745.60	2,745.59	0.01	0.00
P-468	316.00	8.0	PVC	Open		47.29	0.30	2,745.62	2,745.60	0.06	0.02
P-469	347.00	12.0	PVC	Open		23.78	0.07	2,745.59	2,745.59	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-470	178.00	12.0	PVC	Open		30.43	0.09	2,745.59	2,745.59	0.00	0.00
P-471	660.00	12.0	PVC	Open		32.68	0.09	2,745.60	2,745.59	0.00	0.00
P-472	224.00	12.0	PVC	Open		33.07	0.09	2,745.60	2,745.60	0.00	0.00
P-473	296.00	12.0	PVC	Open		0.11	0.00	2,745.60	2,745.60	0.00	0.00
P-474	153.00	12.0	PVC	Open		30.43	0.09	2,745.59	2,745.59	0.00	0.00
P-476	304.00	8.0	PVC	Open		0.00	0.00	2,745.66	2,745.66	0.00	0.00
P-477	692.00	8.0	PVC	Open		36.51	0.23	2,745.62	2,745.60	0.04	0.03
P-478	13.00	8.0	PVC	Open		0.31	0.00	2,745.56	2,745.56	0.00	0.00
P-479	84.00	8.0	PVC	Open		17.03	0.11	2,745.62	2,745.62	0.01	0.00
P-480	200.00	12.0	PVC	Open		261.89	0.74	2,749.54	2,749.50	0.18	0.04
P-481	550.00	12.0	PVC	Open		252.13	0.72	2,749.50	2,749.41	0.17	0.09
P-482	703.00	8.0	PVC	Open		59.77	0.38	2,749.41	2,749.34	0.09	0.06
P-483	960.00	12.0	PVC	Open		185.38	0.53	2,749.41	2,749.31	0.10	0.09
P-484	265.00	12.0	PVC	Open		213.19	0.60	2,749.31	2,749.28	0.12	0.03
P-485	447.00	12.0	PVC	Open		21.50	0.06	2,837.09	2,837.09	0.00	0.00
P-486	160.00	12.0	PVC	Open		17.96	0.05	2,837.09	2,837.09	0.00	0.00
P-487	159.00	12.0	PVC	Open		0.00	0.00	2,837.09	2,837.09	0.00	0.00
P-488	981.00	8.0	PVC	Open		11.63	0.07	2,837.09	2,837.08	0.01	0.01
P-489	135.00	12.0	PVC	Open		0.00	0.00	2,837.09	2,837.09	0.00	0.00
P-490	338.00	8.0	PVC	Open		20.95	0.13	2,745.86	2,745.86	0.01	0.00
P-491	317.00	8.0	PVC	Open		2.33	0.01	2,745.86	2,745.86	0.00	0.00
P-492	1,010.00	8.0	PVC	Open		13.51	0.09	2,745.86	2,745.85	0.01	0.01
P-493	314.00	8.0	PVC	Open		13.32	0.09	2,745.85	2,745.85	0.01	0.00
P-494	159.00	8.0	PVC	Open		11.35	0.07	2,745.85	2,745.85	0.00	0.00
P-495	527.00	8.0	PVC	Open		11.36	0.07	2,745.85	2,745.85	0.01	0.00
P-496	134.00	12.0	PVC	Open		920.76	2.61	2,792.21	2,791.95	1.91	0.26
P-498	1.00	96.0	PVC	Open		-0.00	0.00	2,493.50	2,493.50	0.00	0.00
P-499	356.00	12.0	PVC	Open		426.48	1.21	2,791.89	2,791.73	0.45	0.16
P-500	259.00	12.0	PVC	Open		419.95	1.19	2,791.73	2,791.62	0.43	0.11
P-501	152.00	12.0	PVC	Open		331.04	0.94	2,791.66	2,791.62	0.28	0.04
P-503	30.00	8.0	PVC	Open		0.00	0.00	2,791.69	2,791.69	0.00	0.00
P-504	120.00	8.0	PVC	Open		53.31	0.34	2,791.70	2,791.69	0.07	0.01
P-505	30.00	8.0	PVC	Open		0.00	0.00	2,791.70	2,791.70	0.00	0.00
P-507	27.00	8.0	PVC	Open		0.00	0.00	2,791.71	2,791.71	0.00	0.00
P-508	197.00	8.0	PVC	Open		-11.40	0.07	2,791.71	2,791.71	0.00	0.00
P-509	785.00	8.0	PVC	Open		-9.62	0.06	2,791.71	2,791.71	0.00	0.00
P-510	222.00	8.0	PVC	Open		1.78	0.01	2,791.71	2,791.71	0.00	0.00
P-511	683.00	8.0	PVC	Open		-4.30	0.03	2,791.71	2,791.71	0.00	0.00
P-512	819.00	8.0	PVC	Open		1.78	0.01	2,791.71	2,791.71	0.00	0.00
P-513	283.00	8.0	PVC	Open		-0.74	0.00	2,791.71	2,791.71	0.00	0.00
P-514	136.00	6.0	PVC	Open		0.00	0.00	2,791.73	2,791.73	0.00	0.00
P-515	560.00	6.0	PVC	Open		0.00	0.00	2,745.85	2,745.85	0.00	0.00
P-516	19.00	8.0	PVC	Open		-340.26	2.17	2,752.42	2,752.46	2.22	0.04
P-517	0.25	96.0	Steel	Open		1,022.58	0.05	2,419.00	2,419.00	0.00	0.00
P-518	250.00	8.0	PVC	Open		47.91	0.31	2,746.21	2,746.19	0.06	0.02
P-519	673.00	8.0	PVC	Open		398.52	2.54	2,748.83	2,746.82	2.99	2.01
P-520	32.00	8.0	PVC	Open		-37.26	0.24	2,749.22	2,749.22	0.05	0.00
P-521	769.00	8.0	PVC	Open		243.44	1.55	2,746.82	2,745.91	1.18	0.91
P-522	105.00	8.0	PVC	Open		4.11	0.03	2,745.49	2,745.49	0.00	0.00
P-523	305.00	12.0	PVC	Open		65.87	0.19	2,745.50	2,745.49	0.02	0.00
P-524	94.00	6.0	PVC	Open		11.88	0.13	2,745.50	2,745.50	0.02	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-525	232.00	12.0	PVC	Open		78.41	0.22	2,745.50	2,745.50	0.02	0.00
P-526	294.00	12.0	PVC	Open		63.79	0.18	2,745.51	2,745.50	0.01	0.00
P-527	248.00	8.0	PVC	Open		1.17	0.01	2,745.51	2,745.51	0.00	0.00
P-528	83.00	8.0	PVC	Open		1.17	0.01	2,745.51	2,745.51	0.00	0.00
P-529	115.00	12.0	PVC	Open		64.96	0.18	2,745.51	2,745.51	0.01	0.00
P-530	384.00	12.0	PVC	Open		64.96	0.18	2,745.52	2,745.51	0.01	0.01
P-531	153.00	12.0	PVC	Open		64.96	0.18	2,745.52	2,745.52	0.02	0.00
P-532	216.00	12.0	PVC	Open		64.96	0.18	2,745.52	2,745.52	0.01	0.00
P-533	169.00	12.0	PVC	Open		65.07	0.18	2,745.52	2,745.52	0.01	0.00
P-534	163.00	12.0	PVC	Open		65.07	0.18	2,745.53	2,745.52	0.01	0.00
P-535	222.00	12.0	PVC	Open		65.07	0.18	2,745.53	2,745.53	0.01	0.00
P-536	395.00	12.0	PVC	Open		66.75	0.19	2,745.54	2,745.53	0.02	0.01
P-537	322.00	8.0	PVC	Open		23.41	0.15	2,745.54	2,745.53	0.02	0.01
P-538	574.00	8.0	PVC	Open		23.41	0.15	2,745.53	2,745.52	0.02	0.01
P-539	315.00	8.0	PVC	Open		23.19	0.15	2,745.52	2,745.51	0.02	0.01
P-540	306.00	8.0	PVC	Open		22.57	0.14	2,745.51	2,745.51	0.02	0.00
P-541	359.00	8.0	PVC	Open		22.57	0.14	2,745.51	2,745.50	0.02	0.01
P-542	145.00	8.0	PVC	Open		0.61	0.00	2,745.51	2,745.51	0.00	0.00
P-543	289.00	8.0	PVC	Open		0.00	0.00	2,745.51	2,745.51	0.00	0.00
P-544	387.00	8.0	PVC	Open		0.39	0.00	2,745.51	2,745.51	0.00	0.00
P-545	57.00	12.0	PVC	Open		0.00	0.00	2,745.51	2,745.51	0.00	0.00
P-546	50.00	8.0	PVC	Open		0.61	0.00	2,745.51	2,745.51	0.00	0.00
P-547	329.00	8.0	PVC	Open		0.22	0.00	2,745.51	2,745.51	0.00	0.00
P-548	284.00	8.0	PVC	Open		0.03	0.00	2,745.51	2,745.51	0.00	0.00
P-549	284.00	8.0	PVC	Open		0.19	0.00	2,745.51	2,745.51	0.00	0.00
P-550	210.00	8.0	PVC	Open		0.11	0.00	2,745.51	2,745.51	0.00	0.00
P-551	171.00	8.0	PVC	Open		0.01	0.00	2,745.51	2,745.51	0.00	0.00
P-552	269.00	8.0	PVC	Open		6.65	0.04	2,745.59	2,745.59	0.00	0.00
P-553	161.00	8.0	PVC	Open		6.65	0.04	2,745.59	2,745.59	0.00	0.00
P-554	90.00	8.0	PVC	Open		0.00	0.00	2,745.53	2,745.53	0.00	0.00
P-555	63.00	12.0	PVC	Open		90.16	0.26	2,745.54	2,745.54	0.03	0.00
P-556	252.00	8.0	PVC	Open		0.02	0.00	2,745.51	2,745.51	0.00	0.00
P-557	256.00	12.0	PVC	Open		90.16	0.26	2,745.54	2,745.54	0.03	0.01
P-558	702.00	12.0	PVC	Open		90.16	0.26	2,745.56	2,745.54	0.03	0.02
P-559	110.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-560	275.00	8.0	PVC	Open		6.65	0.04	2,745.59	2,745.59	0.00	0.00
P-561	436.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-562	79.00	8.0	PVC	Open		0.00	0.00	2,745.59	2,745.59	0.00	0.00
P-563	442.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-564	68.00	8.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-565	42.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-566	86.00	8.0	PVC	Open		0.00	0.00	2,745.59	2,745.59	0.00	0.00
P-567	433.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-568	64.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-569	222.00	8.0	PVC	Open		3.55	0.02	2,745.86	2,745.86	0.00	0.00
P-570	307.00	8.0	PVC	Open		24.85	0.16	2,745.86	2,745.85	0.02	0.01
P-571	220.00	8.0	PVC	Open		4.44	0.03	2,745.85	2,745.85	0.00	0.00
P-572	247.00	8.0	PVC	Open		16.86	0.11	2,745.85	2,745.85	0.01	0.00
P-573	254.00	6.0	PVC	Open		5.33	0.06	2,745.85	2,745.85	0.00	0.00
P-574	400.00	8.0	PVC	Open		7.10	0.05	2,745.85	2,745.85	0.00	0.00
P-575	287.00	8.0	PVC	Open		6.21	0.04	2,745.85	2,745.85	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-576	606.00	12.0	PVC	Open		107.34	0.30	2,820.97	2,820.94	0.04	0.02
P-577	326.00	12.0	PVC	Open		107.34	0.30	2,820.94	2,820.93	0.04	0.01
P-578	16.00	8.0	PVC	Open		33.75	0.22	2,820.93	2,820.93	0.03	0.00
P-579	125.00	12.0	PVC	Open		73.59	0.21	2,820.93	2,820.93	0.02	0.00
P-580	48.00	8.0	PVC	Open		0.00	0.00	2,820.93	2,820.93	0.00	0.00
P-581	307.00	12.0	PVC	Open		49.20	0.14	2,820.93	2,820.93	0.01	0.00
P-582	1,252.00	8.0	PVC	Open		12.85	0.08	2,820.93	2,820.92	0.01	0.01
P-583	906.00	8.0	PVC	Open		11.90	0.08	2,820.93	2,820.92	0.01	0.00
P-584	151.00	8.0	PVC	Open		14.22	0.09	2,820.92	2,820.92	0.01	0.00
P-585	259.00	12.0	PVC	Open		28.42	0.08	2,820.93	2,820.93	0.00	0.00
P-586	471.00	12.0	PVC	Open		14.21	0.04	2,820.93	2,820.93	0.00	0.00
P-588	320.00	8.0	PVC	Open		59.56	0.38	2,749.18	2,749.15	0.09	0.03
P-589	481.00	8.0	PVC	Open		-39.40	0.25	2,749.21	2,749.23	0.04	0.02
P-590	480.00	8.0	PVC	Open		6.21	0.04	2,749.21	2,749.21	0.00	0.00
P-591	500.00	8.0	PVC	Open		7.10	0.05	2,749.21	2,749.21	0.00	0.00
P-592	334.00	8.0	PVC	Open		-15.43	0.10	2,749.21	2,749.21	0.01	0.00
P-593	250.00	6.0	PVC	Open		5.33	0.06	2,749.21	2,749.21	0.00	0.00
P-594	832.00	8.0	PVC	Open		33.15	0.21	2,749.21	2,749.18	0.03	0.03
P-595	350.00	8.0	PVC	Open		34.59	0.22	2,749.22	2,749.21	0.03	0.01
P-596	325.00	8.0	PVC	Open		6.22	0.04	2,749.15	2,749.15	0.00	0.00
P-597	223.00	8.0	PVC	Open		5.33	0.03	2,749.25	2,749.25	0.00	0.00
P-598	460.00	8.0	PVC	Open		-3.01	0.02	2,749.18	2,749.18	0.00	0.00
P-599	540.00	12.0	PVC	Open		136.64	0.39	2,749.28	2,749.25	0.06	0.03
P-600	660.00	8.0	PVC	Open		42.99	0.27	2,749.25	2,749.22	0.05	0.03
P-601	160.00	8.0	PVC	Open		-3.07	0.02	2,749.22	2,749.22	0.00	0.00
P-602	120.00	6.0	PVC	Open		3.55	0.04	2,749.22	2,749.22	0.00	0.00
P-603	200.00	8.0	PVC	Open		3.14	0.02	2,749.22	2,749.22	0.00	0.00
P-604	375.00	8.0	PVC	Open		63.65	0.41	2,749.22	2,749.18	0.10	0.04
P-605	500.00	8.0	PVC	Open		72.12	0.46	2,749.28	2,749.22	0.13	0.06
P-606	466.00	8.0	PVC	Open		2.05	0.01	2,780.73	2,780.73	0.00	0.00
P-607	121.00	8.0	PVC	Open		327.56	2.09	2,780.73	2,780.48	2.06	0.25
P-608	308.00	8.0	PVC	Open		312.40	1.99	2,780.48	2,779.90	1.88	0.58
P-609	198.00	12.0	PVC	Open		1,012.63	2.87	2,780.36	2,779.90	2.29	0.45
P-610	199.00	8.0	PVC	Open		18.46	0.12	2,745.86	2,745.86	0.01	0.00
P-611	673.00	8.0	PVC	Open		15.79	0.10	2,745.86	2,745.85	0.01	0.01
P-612	91.00	8.0	PVC	Open		0.00	0.00	2,745.85	2,745.85	0.00	0.00
P-613	354.00	8.0	PVC	Open		41.84	0.27	2,749.23	2,749.21	0.05	0.02
P-614	739.00	12.0	PVC	Open		0.00	0.00	2,739.76	2,739.76	0.00	0.00
P-615	878.00	12.0	PVC	Open		0.00	0.00	2,739.76	2,739.76	0.00	0.00
P-616	642.00	12.0	PVC	Open		0.00	0.00	2,739.76	2,739.76	0.00	0.00
P-617	35.00	8.0	PVC	Open		2.93	0.02	2,795.44	2,795.44	0.01	0.00
P-618	246.00	8.0	PVC	Open		0.00	0.00	2,745.61	2,745.61	0.00	0.00
P-619	179.00	8.0	PVC	Open		152.69	0.97	2,746.30	2,746.21	0.49	0.09
P-620	215.00	6.0	PVC	Open		3.55	0.04	2,749.21	2,749.21	0.00	0.00
P-621	780.00	8.0	PVC	Open		20.71	0.13	2,749.21	2,749.20	0.01	0.01
P-622	123.00	6.0	PVC	Open		1.78	0.02	2,749.20	2,749.20	0.00	0.00
P-623	286.00	6.0	PVC	Open		11.83	0.13	2,749.20	2,749.20	0.02	0.01
P-624	160.00	6.0	PVC	Open		2.66	0.03	2,749.20	2,749.20	0.00	0.00
P-625	660.00	8.0	PVC	Open		2.07	0.01	2,749.20	2,749.20	0.00	0.00
P-626	225.00	8.0	PVC	Open		14.21	0.09	2,749.20	2,749.19	0.01	0.00
P-627	357.00	8.0	PVC	Open		16.58	0.11	2,749.20	2,749.20	0.01	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-628	114.00	6.0	PVC	Open		2.66	0.03	2,749.20	2,749.20	0.00	0.00
P-629	395.00	8.0	PVC	Open		21.91	0.14	2,749.21	2,749.20	0.01	0.01
P-630	97.00	6.0	PVC	Open		1.78	0.02	2,749.21	2,749.21	0.00	0.00
P-631	305.00	8.0	PVC	Open		29.01	0.19	2,749.21	2,749.21	0.02	0.01
P-632	1,280.00	8.0	PVC	Open		-0.40	0.00	2,749.21	2,749.21	0.00	0.00
P-633	380.00	8.0	PVC	Open		1.78	0.01	2,749.20	2,749.20	0.00	0.00
P-634	316.00	8.0	PVC	Open		153.07	0.98	2,745.75	2,745.59	0.50	0.16
P-635	230.00	8.0	PVC	Open		103.61	0.66	2,745.59	2,745.53	0.24	0.06
P-636	60.00	8.0	PVC	Open		131.74	0.84	2,745.53	2,745.51	0.38	0.02
P-637	602.00	8.0	PVC	Open		36.62	0.23	2,745.56	2,745.53	0.04	0.02
P-638	650.00	8.0	PVC	Open		43.72	0.28	2,745.59	2,745.56	0.05	0.03
P-639	346.00	8.0	PVC	Open		73.79	0.47	2,745.74	2,745.69	0.13	0.05
P-640	269.00	8.0	PVC	Open		103.29	0.66	2,745.74	2,745.67	0.24	0.06
P-641	215.00	8.0	PVC	Open		62.27	0.40	2,745.67	2,745.65	0.10	0.02
P-642	245.00	8.0	PVC	Open		39.15	0.25	2,745.65	2,745.64	0.04	0.01
P-643	325.00	8.0	PVC	Open		30.28	0.19	2,745.64	2,745.63	0.03	0.01
P-644	190.00	8.0	PVC	Open		38.25	0.24	2,745.63	2,745.63	0.04	0.01
P-645	503.00	8.0	PVC	Open		41.02	0.26	2,745.67	2,745.65	0.05	0.02
P-646	268.00	8.0	PVC	Open		34.61	0.22	2,745.65	2,745.64	0.03	0.01
P-647	349.00	8.0	PVC	Open		25.73	0.16	2,745.64	2,745.63	0.02	0.01
P-648	172.00	8.0	PVC	Open		7.99	0.05	2,745.63	2,745.63	0.00	0.00
P-649	299.00	8.0	PVC	Open		-7.98	0.05	2,745.63	2,745.63	0.00	0.00
P-650	355.00	8.0	PVC	Open		8.87	0.06	2,745.64	2,745.64	0.00	0.00
P-651	265.00	8.0	PVC	Open		15.78	0.10	2,745.65	2,745.65	0.01	0.00
P-652	260.00	8.0	PVC	Open		17.16	0.11	2,745.63	2,745.62	0.01	0.00
P-653	432.00	8.0	PVC	Open		6.28	0.04	2,745.62	2,745.62	0.00	0.00
P-654	153.00	8.0	PVC	Open		10.89	0.07	2,745.62	2,745.62	0.00	0.00
P-655	154.00	8.0	PVC	Open		-21.09	0.13	2,745.62	2,745.63	0.01	0.00
P-656	96.00	8.0	PVC	Open		-3.57	0.02	2,745.62	2,745.62	0.00	0.00
P-657	191.00	8.0	PVC	Open		2.39	0.02	2,745.62	2,745.62	0.00	0.00
P-658	46.00	8.0	PVC	Open		9.93	0.06	2,745.62	2,745.62	0.00	0.00
P-659	352.00	8.0	PVC	Open		-7.54	0.05	2,745.62	2,745.62	0.00	0.00
P-660	566.00	8.0	PVC	Open		-5.97	0.04	2,745.62	2,745.62	0.00	0.00
P-661	219.00	8.0	PVC	Open		-13.51	0.09	2,745.62	2,745.62	0.01	0.00
P-662	175.00	8.0	PVC	Open		3.55	0.02	2,745.62	2,745.62	0.00	0.00
P-663	197.00	8.0	PVC	Open		7.10	0.05	2,745.62	2,745.62	0.00	0.00
P-664	259.00	8.0	PVC	Open		10.41	0.07	2,745.62	2,745.62	0.00	0.00
P-665	637.00	8.0	PVC	Open		-65.69	0.42	2,830.36	2,830.43	0.11	0.07
P-666	120.00	8.0	PVC	Open		72.73	0.46	2,830.36	2,830.35	0.13	0.02
P-667	1,504.00	8.0	PVC	Open		-0.81	0.01	2,830.36	2,830.36	0.00	0.00
P-668	167.00	6.0	PVC	Open		4.44	0.05	2,830.36	2,830.36	0.00	0.00
P-669	251.00	8.0	PVC	Open		16.94	0.11	2,830.36	2,830.36	0.01	0.00
P-670	104.00	6.0	PVC	Open		3.55	0.04	2,830.36	2,830.36	0.00	0.00
P-671	231.00	8.0	PVC	Open		21.38	0.14	2,830.37	2,830.36	0.01	0.00
P-672	341.00	8.0	PVC	Open		22.95	0.15	2,830.37	2,830.36	0.02	0.01
P-673	337.00	8.0	PVC	Open		47.86	0.31	2,830.39	2,830.37	0.06	0.02
P-674	285.00	8.0	PVC	Open		5.33	0.03	2,830.39	2,830.39	0.00	0.00
P-675	199.00	6.0	PVC	Open		5.33	0.06	2,830.39	2,830.39	0.00	0.00
P-676	283.00	8.0	PVC	Open		56.75	0.36	2,830.41	2,830.39	0.08	0.02
P-677	397.00	8.0	PVC	Open		18.58	0.12	2,830.24	2,830.24	0.01	0.00
P-678	865.00	8.0	PVC	Open		18.45	0.12	2,830.25	2,830.24	0.01	0.01

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-679	123.00	8.0	PVC	Open		0.00	0.00	2,830.25	2,830.25	0.00	0.00
P-680	231.00	8.0	PVC	Open		29.99	0.19	2,830.26	2,830.25	0.03	0.01
P-681	142.00	8.0	PVC	Open		59.41	0.38	2,830.27	2,830.26	0.09	0.01
P-682	1,166.00	8.0	PVC	Open		20.54	0.13	2,830.26	2,830.24	0.01	0.02
P-683	818.00	8.0	PVC	Open		0.00	0.00	2,820.92	2,820.92	0.00	0.00
P-684	325.00	12.0	PVC	Open		1,038.63	2.95	2,760.77	2,759.98	2.41	0.78
P-685	51.00	8.0	PVC	Open		14.21	0.09	2,820.93	2,820.93	0.00	0.00
P-686	53.00	8.0	PVC	Open		14.21	0.09	2,820.93	2,820.93	0.00	0.00
P-687	22.00	6.0	PVC	Open		493.45	5.60	2,791.95	2,791.52	19.50	0.43
P-688	146.00	12.0	PVC	Open		427.32	1.21	2,791.95	2,791.89	0.45	0.07
P-689	70.00	12.0	PVC	Open		419.95	1.19	2,791.62	2,791.59	0.44	0.03
P-691	524.00	8.0	PVC	Open		109.05	0.70	2,791.52	2,791.38	0.27	0.14
P-692	113.00	6.0	PVC	Open		0.00	0.00	2,791.38	2,791.38	0.00	0.00
P-693	166.00	6.0	PVC	Open		0.50	0.01	2,791.89	2,791.89	0.00	0.00
P-694	689.00	8.0	PVC	Open		108.81	0.69	2,791.38	2,791.20	0.26	0.18
P-695	356.00	12.0	PVC	Open		680.28	1.93	2,791.59	2,791.20	1.08	0.38
P-696	63.00	12.0	PVC	Open		789.09	2.24	2,791.20	2,791.11	1.43	0.09
P-697	126.00	6.0	PVC	Open		0.00	0.00	2,791.11	2,791.11	0.00	0.00
P-698	248.00	12.0	PVC	Open		789.09	2.24	2,791.11	2,790.76	1.43	0.35
P-699	173.00	8.0	PVC	Open		14.13	0.09	2,790.76	2,790.76	0.01	0.00
P-700	11.00	8.0	PVC	Open		0.00	0.00	2,790.76	2,790.76	0.00	0.00
P-701	280.00	8.0	PVC	Open		14.13	0.09	2,790.76	2,790.76	0.01	0.00
P-702	156.00	8.0	PVC	Open		8.98	0.06	2,790.76	2,790.76	0.00	0.00
P-703	299.00	8.0	PVC	Open		0.00	0.00	2,790.76	2,790.76	0.00	0.00
P-704	279.00	8.0	PVC	Open		0.00	0.00	2,790.76	2,790.76	0.00	0.00
P-705	582.00	12.0	PVC	Open		774.96	2.20	2,790.76	2,789.96	1.38	0.80
P-706	10.00	6.0	PVC	Open		0.00	0.00	2,789.96	2,789.96	0.00	0.00
P-707	1,401.00	12.0	PVC	Open		772.34	2.19	2,789.96	2,788.04	1.37	1.92
P-708	201.00	8.0	PVC	Open		0.00	0.00	2,788.04	2,788.04	0.00	0.00
P-709	14.00	8.0	PVC	Open		0.00	0.00	2,788.04	2,788.04	0.00	0.00
P-710	132.00	12.0	PVC	Open		770.50	2.19	2,788.04	2,787.86	1.36	0.18
P-711	335.00	12.0	PVC	Open		440.80	1.25	2,787.43	2,787.27	0.48	0.16
P-712	323.00	12.0	PVC	Open		0.00	0.00	2,787.27	2,787.27	0.00	0.00
P-713	228.00	12.0	PVC	Open		440.80	1.25	2,787.27	2,787.16	0.48	0.11
P-714	8.00	12.0	PVC	Open		0.00	0.00	2,787.16	2,787.16	0.00	0.00
P-715	163.00	12.0	PVC	Open		440.79	1.25	2,787.16	2,787.08	0.47	0.08
P-716	160.00	8.0	PVC	Open		0.00	0.00	2,787.08	2,787.08	0.00	0.00
P-718	620.00	8.0	PVC	Open		146.56	0.94	2,786.83	2,786.54	0.46	0.28
P-719	471.00	12.0	PVC	Open		0.11	0.00	2,745.60	2,745.60	0.00	0.00
P-720	153.00	12.0	PVC	Open		0.11	0.00	2,745.60	2,745.60	0.00	0.00
P-721	14.00	12.0	PVC	Open		0.00	0.00	2,745.60	2,745.60	0.00	0.00
P-722	1,051.00	12.0	PVC	Open		0.11	0.00	2,745.60	2,745.60	0.00	0.00
P-723	141.00	12.0	PVC	Open		0.11	0.00	2,745.60	2,745.60	0.00	0.00
P-724	320.00	12.0	PVC	Open		0.00	0.00	2,745.60	2,745.60	0.00	0.00
P-725	502.00	12.0	PVC	Open		0.00	0.00	2,745.60	2,745.60	0.00	0.00
P-726	214.00	12.0	PVC	Open		0.00	0.00	2,745.60	2,745.60	0.00	0.00
P-727	372.00	8.0	PVC	Open		50.61	0.32	2,740.04	2,740.01	0.07	0.02
P-728	156.00	8.0	PVC	Open		14.21	0.09	2,740.01	2,740.01	0.01	0.00
P-729	708.00	8.0	PVC	Open		23.97	0.15	2,740.01	2,740.00	0.02	0.01
P-730	797.00	8.0	PVC	Open		-12.85	0.08	2,741.09	2,741.09	0.01	0.00
P-731	160.00	8.0	PVC	Open		-15.99	0.10	2,741.09	2,741.09	0.01	0.00

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-732	48.00	12.0	PVC	Open		0.00	0.00	2,792.21	2,792.21	0.00	0.00
P-733	425.00	8.0	PVC	Open		111.29	0.71	2,746.33	2,746.22	0.28	0.12
P-735	62.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-736	65.00	12.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-737	33.00	8.0	PVC	Open		0.00	0.00	2,745.54	2,745.54	0.00	0.00
P-738	136.00	8.0	PVC	Open		33.20	0.21	2,745.62	2,745.62	0.03	0.00
P-739	392.00	12.0	PVC	Open		-50.06	0.14	2,749.23	2,749.24	0.01	0.00
P-740	14.00	8.0	PVC	Open		12.69	0.08	2,749.23	2,749.23	0.00	0.00
P-741	414.00	12.0	PVC	Open		-37.37	0.11	2,749.23	2,749.23	0.01	0.00
P-742	275.00	8.0	PVC	Open		29.16	0.19	2,749.24	2,749.23	0.02	0.01
P-743	120.00	8.0	PVC	Open		197.15	1.26	2,746.43	2,746.33	0.79	0.10
P-744	43.00	12.0	PVC	Open		1,295.93	3.68	2,828.23	2,828.07	3.68	0.16
P-747	1,566.00	12.0	PVC	Open		1,373.49	3.90	2,798.66	2,792.21	4.12	6.45
P-749	50.00	96.0	PVC	Open		1,393.14	0.06	2,422.00	2,422.00	0.00	0.00
P-751	37.00	8.0	PVC	Open		0.00	0.00	2,792.21	2,792.21	0.00	0.00
P-752	42.00	8.0	PVC	Open		0.00	0.00	2,792.21	2,792.21	0.00	0.00
P-753	697.00	8.0	PVC	Open		39.36	0.25	2,749.34	2,749.31	0.04	0.03
P-754	420.00	6.0	PVC	Open		8.07	0.09	2,746.29	2,746.29	0.01	0.00
P-755	452.00	6.0	PVC	Open		36.10	0.41	2,752.62	2,752.55	0.15	0.07
P-756	895.00	8.0	PVC	Open		0.29	0.00	2,837.09	2,837.09	0.00	0.00
P-757	777.00	8.0	PVC	Open		3.73	0.02	2,837.09	2,837.09	0.00	0.00
P-758	967.00	8.0	PVC	Open		9.98	0.06	2,837.09	2,837.08	0.00	0.00
P-759	920.00	8.0	PVC	Open		39.15	0.25	2,745.91	2,745.87	0.04	0.04
P-760	2,830.00	12.0	PVC	Open		32.97	0.09	2,749.23	2,749.22	0.00	0.01
P-762	30.00	8.0	PVC	Open		0.00	0.00	2,776.94	2,776.94	0.00	0.00
P-763	833.00	12.0	PVC	Open		1,007.42	2.86	2,795.44	2,793.55	2.27	1.89
P-764	330.00	8.0	PVC	Open		576.96	3.68	2,776.94	2,774.93	6.08	2.01
P-765	140.00	6.0	Steel	Open		435.36	4.94	2,543.00	2,541.14	13.29	1.86
P-766	2.00	12.0	PVC	Open		1,038.63	2.95	2,820.58	2,820.57	2.44	0.00
P-767	356.00	8.0	PVC	Open		577.52	3.69	2,779.11	2,776.94	6.09	2.17
P-768	239.00	12.0	PVC	Open		0.00	0.00	2,773.66	2,773.66	0.00	0.00
P-769	2.00	12.0	PVC	Open		0.00	0.00	2,796.10	2,796.10	0.00	0.00
P-844	254.00	12.0	PVC	Open		1,286.10	3.65	2,826.55	2,825.63	3.63	0.92
P-845	230.00	12.0	PVC	Open		1,287.35	3.65	2,827.38	2,826.55	3.64	0.84
P-846	188.00	12.0	PVC	Open		1,288.60	3.66	2,828.07	2,827.38	3.64	0.69
P-847	383.00	8.0	PVC	Open		1.86	0.01	2,825.63	2,825.63	0.00	0.00
P-848	176.00	8.0	PVC	Open		1.25	0.01	2,826.55	2,826.55	0.00	0.00
P-849	168.00	8.0	PVC	Open		1.25	0.01	2,827.38	2,827.38	0.00	0.00
P-900	587.00	12.0	PVC	Open		1,894.00	5.37	2,847.71	2,843.20	7.68	4.51
P-901	2.00	8.0	Steel	Open		560.24	3.58	2,749.72	2,749.71	5.00	0.01
P-904	143.00	12.0	PVC	Open		1,022.58	2.90	2,796.43	2,796.10	2.34	0.33
P-906	60.00	12.0	PVC	Open		0.00	0.00	2,739.76	2,739.76	0.00	0.00
P-907	1,798.00	8.0	PVC	Open		1,393.14	8.89	2,859.26	2,798.66	33.71	60.60
P-950	171.00	8.0	PVC	Open		9.70	0.06	2,749.20	2,749.20	0.00	0.00
P-954	23.00	64.0	PVC	Open		-340.26	0.03	2,574.50	2,574.50	0.00	0.00
P-958	76.00	8.0	PVC	Open		1.32	0.01	2,745.87	2,745.87	0.00	0.00
P-959	345.00	8.0	PVC	Open		37.83	0.24	2,745.87	2,745.86	0.04	0.01
P-960	37.00	8.0	PVC	Open		34.28	0.22	2,745.86	2,745.86	0.03	0.00
P-964	1,139.00	12.0	PVC	Open		440.79	1.25	2,787.08	2,786.54	0.48	0.54
P-965	21.00	12.0	PVC	Open		0.00	0.00	2,790.96	2,790.96	0.00	0.00
P-968	1,673.00	8.0	PVC	Open		0.57	0.00	2,776.94	2,776.94	0.00	0.00

Title: INITIAL RUN

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Project Engineer: DMC

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Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pipe Report

Label	Length (ft)	Dia (in)	Material	Control Status	Hazen-Williams C	Discharge (gpm)	Velocity (ft/s)	Upstream Structure Hydraulic Grade (ft)	Downstream Structure Hydraulic Grade (ft)	Headloss Gradient (ft/1000ft)	Pressure Pipe Headloss (ft)
P-971	601.00	6.0	PVC	Open		44.57	0.51	2,749.14	2,749.01	0.21	0.13
P-972	79.00	6.0	PVC	Open		2.57	0.03	2,749.14	2,749.14	0.00	0.00
P-973	180.00	8.0	PVC	Open		47.13	0.30	2,749.15	2,749.14	0.06	0.01
P-974	904.00	8.0	PVC	Open		10.66	0.07	2,754.29	2,754.28	0.00	0.00
P-975	179.00	6.0	PVC	Open		10.66	0.12	2,754.28	2,754.28	0.02	0.00
P-976	344.00	6.0	PVC	Open		8.88	0.10	2,752.62	2,752.62	0.01	0.00
P-977	178.00	6.0	PVC	Open		8.88	0.10	2,752.62	2,752.61	0.01	0.00
P-978	629.00	8.0	PVC	Open		577.52	3.69	2,782.94	2,779.11	6.09	3.83
P-979	592.00	8.0	PVC	Open		577.52	3.69	2,786.54	2,782.94	6.09	3.61
P-980	752.00	8.0	PVC	Open		576.96	3.68	2,774.85	2,770.28	6.08	4.57
P-981	7.00	8.0	PVC	Open		1,894.00	12.09	2,770.28	2,769.85	61.59	0.43
P-982	100.00	12.0	PVC	Open		576.96	1.64	2,774.93	2,774.85	0.79	0.08
P-984	126.00	12.0	PVC	Open		331.04	0.94	2,791.62	2,791.59	0.28	0.04
P-985	103.00	6.0	PVC	Open		0.00	0.00	2,791.62	2,791.62	0.00	0.00
P-986	207.00	8.0	PVC	Open		0.52	0.00	2,791.66	2,791.66	0.00	0.00
P-987	32.00	8.0	PVC	Open		0.00	0.00	2,759.98	2,759.98	0.00	0.00
P-988	415.00	8.0	PVC	Open		53.31	0.34	2,791.69	2,791.66	0.07	0.03
P-989	710.00	8.0	PVC	Open		0.00	0.00	2,745.85	2,745.85	0.00	0.00
P-990	846.00	12.0	PVC	Open		-452.73	1.28	2,791.79	2,792.21	0.50	0.42
P-991	19.00	8.0	PVC	Open		0.00	0.00	2,785.90	2,785.90	0.00	0.00
P-992	269.00	12.0	PVC	Open		-183.43	0.52	2,791.76	2,791.79	0.09	0.03
P-993	340.00	12.0	PVC	Open		-183.43	0.52	2,791.73	2,791.76	0.09	0.03
P-994	67.00	12.0	PVC	Open		-183.43	0.52	2,791.72	2,791.73	0.09	0.01
P-995	230.00	12.0	PVC	Open		-73.67	0.21	2,791.72	2,791.72	0.02	0.00
P-996	172.00	12.0	PVC	Open		-73.67	0.21	2,791.72	2,791.72	0.02	0.00
P-997	147.00	8.0	PVC	Open		53.31	0.34	2,791.71	2,791.70	0.07	0.01
P-998	54.00	8.0	PVC	Open		-11.40	0.07	2,791.71	2,791.71	0.00	0.00
P-999	190.00	12.0	PVC	Open		-64.71	0.18	2,791.71	2,791.72	0.01	0.00
P-1000	80.00	12.0	PVC	Open		8.97	0.03	2,791.72	2,791.72	0.00	0.00
P-1001	141.00	12.0	PVC	Open		8.97	0.03	2,791.72	2,791.72	0.00	0.00
P-1002	262.00	12.0	PVC	Open		8.97	0.03	2,791.72	2,791.72	0.00	0.00
P-1003	11.00	12.0	PVC	Open		8.97	0.03	2,791.72	2,791.72	0.00	0.00
P-1005	258.00	12.0	PVC	Open		278.26	0.79	2,791.72	2,791.66	0.20	0.05
P-1006	84.00	12.0	PVC	Open		269.29	0.76	2,791.79	2,791.77	0.19	0.02
P-1007	290.00	12.0	PVC	Open		269.29	0.76	2,791.77	2,791.72	0.19	0.06
P-1008	716.00	8.0	PVC	Open		66.52	0.42	2,830.35	2,830.27	0.11	0.08
P-1014	443.00	8.0	PVC	Open		213.91	1.37	2,740.60	2,740.19	0.92	0.41
P-1015	162.00	8.0	PVC	Open		213.91	1.37	2,740.19	2,740.04	0.92	0.15
P-1029	716.00	12.0	PVC	Open		0.00	0.00	2,787.27	2,787.27	0.00	0.00
P-1030	229.00	12.0	PVC	Open		0.00	0.00	2,787.27	2,787.27	0.00	0.00
P-1031	211.00	12.0	PVC	Open		0.00	0.00	2,787.27	2,787.27	0.00	0.00
P-1032	536.00	8.0	PVC	Open		-12.68	0.08	2,749.23	2,749.23	0.01	0.00

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Pump Report

Label	Discharge (gpm)	Control Status	Elevation (ft)	Intake Pump Grade (ft)	Pump Head (ft)	Discharge Pump Grade (ft)	Calculated Water Power (Hp)
PMP-1	560.24	On	2,534.00	2,534.00	215.72	2,749.72	30.51
PMP-2	435.36	On	2,543.00	2,541.14	71.41	2,612.55	7.85
PMP-2.1	139.66	On	2,610.00	2,610.99	138.82	2,749.81	4.89
PMP-2.2	172.40	On	2,610.00	2,610.99	138.82	2,749.81	6.04
PMP-2.3	173.08	On	2,610.00	2,610.99	138.81	2,749.80	6.07
PMP-3	340.26	On	2,624.50	2,574.50	177.96	2,752.46	15.29
PMP-4	1,022.58	On	2,399.00	2,419.00	377.43	2,796.43	97.44
PMP-6	0.00	Off	2,473.50	2,493.50	0.00	2,739.76	0.00
PMP-7	1,393.14	Fixed Speed Override	2,372.00	2,422.00	437.26	2,859.26	153.80
PMP-Boost	1,894.00	Fixed Speed Override	2,640.00	2,769.85	77.86	2,847.71	37.23

Scenario: 2006 APPROVED DEV. WELL 6 OFF

Fire Flow Analysis

Tank Report

Label	Base Elevation (ft)	Minimum Elevation (ft)	Initial HGL (ft)	Maximum Elevation (ft)	Inactive Volume (gal)	Tank Diameter (ft)	Inflow (gpm)	Current Status	Calculated Hydraulic Grade (ft)	Calculated Percent Full (%)
T-1	2,610.00	2,610.50	2,611.00	2,618.00	0.00	N/A	-49.78	Draining	2,611.00	6.7

Scenario: 2006 APPROVED DEV. WELL 6 OFF
Fire Flow Analysis
Valve Report

Label	Elevation (ft)	Diameter (in)	Control Status	Discharge (gpm)	From HGL (ft)	To HGL (ft)	Headloss (ft)	Calculated Pressure Setting (psi)
FCV-2-Hwy 55	2,602.00	12.0	Closed	0.00	2,820.94	2,773.66	0.00	
FCV-5 Southhampton	2,652.00	8.0	Closed	0.00	2,759.98	2,820.92	0.00	
FCV-6 GREAT SKY Wy	2,569.50	12.0	Inactive	-0.00	2,790.96	2,790.96	0.00	
TCV-3-Horse Shoe Bend	2,620.00	8.0	Throttling	577.52	2,779.11	2,779.11	0.00	
PSV-1 Floating Feather	2,653.00	12.0	Throttling	1,038.63	2,820.57	2,760.77	59.80	72.50
TCV-4-State at Well 4	2,565.00	12.0	Closed	0.00	2,745.66	2,796.10	0.00	
PSV-2	2,572.00	6.0	Closed	0.00	2,745.85	2,785.90	0.00	55.00