M3 EAGLE
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EXHIBIT NO.	EXHIBIT DESCRIPTION
	M3 EAGLE'S TECHNICAL REPORTS AND SUPPORTING DOCUMENTATION (submitted 11/26/08)
1	Drillers Logs Location Map For M3 Eagle 09-13-2007 small
2	M3 Eagle Regional Hydrogeologic Characterization Year One Progress Report
3	Map of Protestants Wells 10-14-2008
4	M3 Eagle SVR #6 Composite - FINAL
5	M3 Eagle SVR #7 Composite by Hydro Logic, Inc. 4-14-2008 - FINAL
6	M3 Eagle SVR #9 Test Well Composite Diagram by Hydro Logic, Inc 07-07-2008 smaller
7	M3 Eagle Test Well #1 Composite by Hydro Logic, Inc. 4-23-2008
8	M3 Eagle Test Well #2 Composite - FINAL
9	M3 Eagle Test Well #3 Composite Diagram by Hydro Logic, Inc. 9-27-2007
10	M3 Eagle Test Well #4 Composite Diagram by Hydro Logic, Inc 4-16-2008
11	Magnetometer Report for M3 Eagle May 20, 2007
12	RE-Analysis of 16 Aquifer Tests in the Greater Eagle-Star Area of North Ada County, Idaho
13	Seismic Reflection Profiling in the Big Gulch Area - Report by John Bradford at CGISS (BSU) - September 2006
14	Star Supply Well #3 Composite - FINAL smaller
15	SVR #10 Test Well Composite Diagram by Hydro Logic, Inc 07-07-2008 smaller
16	Modeling of Ground Water Flow in the Pierce Gulch Sand Aquifer 11-19-2008
17	Well Density by section and Quarter Section 09-13-2007
18	Water Level Measurement Survey Update to M3 Eagle Hydrogeologic Characterization
19	Documentation provided by S. H. Wood, PhD., Professor Emeritus
	19A (Wood geophysical logs)
	19B (Wood May 20, 2007 Qualitative Interpretation of Magnetic Anomalies and Progress Report on Geologic Mapping in the Foothills North of Eagle, Ada and Gem Counties, Idaho)

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UPDATED 4/14/2009

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EXHIBIT NO.	EXHIBIT DESCRIPTION
	19C (Wood/USGS 2004 Geological Field Trips in Southern Idaho, Eastern Oregon, and Northern Nevada)
	19D (Wood/Clemens 2002 Geologic and Tectonic History of the Western Snake River Plain, Idaho and Oregon)
	19E (Wood/Squires 1/8/2001 Stratigraphic Study of the Boise (Idaho) Aquifer System Using Borehole Geophysical Logs with Emphasis on Facies Identification of Sand Aquifers)
	19F (Wood August, 1997 Structure Contour Map of Top of the Mudstone Facies, Western Snake River Plain, Idaho)
	19G (Wood January, 1994 Seismic Expression and Geological Significance of a Lacustrine Delta in Neogene Deposits of the Western Snake River Plain, Idaho)
	19H (Wood/Anderson December, 1981 Geothermal Investigations in Idaho, Part II Geological, Hydrological, Geochemical and Geophysical Investigations of the Nampa-Caldwell and Adjacent Areas, Southern Idaho)
20	Test Well #1 Plot - M3 Eagle
21	Monthly Monitoring Hand Measured Water Levels
22	Figures and Tables to be included and described in upcoming Aquifer Test 2008 Report
23	2007 Regional Ground Water Level Contour Map
24	Summary of Water Chemistry Data for M3 Eagle and Select Regional Wells
25	Water Chemistry and Cross-Section Wells Map
26	Cross-Sections from wells with geophysical logs (four total)
27	Cross-Sections of wells near M3 Eagle with well construction and lithology (thirteen total)
28	Hydrographs of United Water Idaho's State and Linder Monitoring Wells (1999-2008)
29	Ground water gradient map in Eagle, Idaho area (USGS 1980)
30	Hydrograph of Vail and Miller domestic wells (1995-1998)
31	Ground Water Gradient Map from Lindholm (USGS 1991)
32	Curriculum Vitae and Summaries of Facts and Opinions of M3 Eagle Experts
	32A (Squires, Ed CV and Summary of Opinion)
	32B (Utting, Mark CV)

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EXHIBIT NO.	EXHIBIT DESCRIPTION
	32C (Pearson, Loren Facts and Opinions)
	32D (Osiensky, James CV and Summary of Opinion)
	32E (Wood, Spencer CV and Facts)
	32F (Jim Rumbaugh - NOT TESTIFYING)
	32G (Dittus, Roger Facts and Opinions, CV)
	32H (Schwartzman, Peter CV and Facts
	32I (Glanzman CV)
	32J (Del Leavitt - NOT TESTIFYING)
	32K (Wonders, Scott Facts and Opinions
	32L (Holt, Steven CV, Nov 26, 2008 Engineering Water Uses Report
	32M (Church, John CV and Facts and Opinions
33	Documentation for the Treasure Valley Hydrologic Project (includes oversize map: Structure Contour Map of Top of the Mudstone Facies, Western Snake River Plain, Idaho, by Spencer H. Wood)
	33A (Petrich Feb 2004 Treasure Valley Hydrologic Project Executive Summary)
	33B (Petrich Feb 2004 Simulation of Ground Water Flow in the Lower Boise River Basin)
	33C (Petrich Feb 2004 Simulation of Increased Ground Water Withdrawals in the Lower Boise River Basin)
	33D (Petrich & Urban Feb 2004 Characterization of Ground Water Flow in the Lower Boise River Basin
	33E (Mar 04 Appendix C: Monitoring Well Diagrams for the Report, Characterization of Ground Water Flow in the Lower Boise River Basin)
	33F (Petrich & Urban 2004 Water Quality Data for Monitoring Well TVHP #4 Municipal Park Addendum to the Report Characterization of the Ground Water Flow in Lower Boise River Basin)
	33G (Hutchings & Petrich Dec 2002 Ground Water Recharge and Flow in the Regional Treasure Valley Aquifer System Geochemistry and Isotope Study)
	33H (Hutchings & Petrich Dec 2002 Influence of Canal Seepage on Aquifer Recharge Near the New York Canal)
	33I (Urban Water Budget for the Treasure Valley Aquifer System for the Years 1996 and 2000)

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EXHIBIT NO.	EXHIBIT DESCRIPTION
	33J (Dittus, Allred, Squires Oct. 1999 Hydrogeology, Geochemistry, and Well Construction of the Treasure Valley Hydrologic Project Monitoring Well #1, Ada County, Idaho)
	33K (Treasure Valley Hydrologic Project #2 Monitoring Well Nov. 1999)
	33L (Scanlan July 2001 Final Report on the Quarry View Park Well Project)
	33M (Municipal Park Monitoring Well (TVHP#4) July 2002)
	33N (Beukelman 1997 Treasure Valley Hydrologic Project Geological and Geophysical Framework of the Treasure Valley Reports on the Ontario, Parma, Notus and Boise Cross Sections)
	33O (Squires & Wood Jan 2001 Stratigraphic Studies of the Boise (ID) Aquifer System Using Borehole Geophysical Logs with Emphasis on Facies Identification of Sand Aquifers)
	33P (Wood Aug 1997 Structure Contour Map of the Base of Quaternary Basalt, Murphy and west part of Mountain Home Map Sheets, Idaho)
	33Q (Wood Aug 1997 Structure Contour Map of Top of the Mudstone Facies, Western Snake River Plain, Idaho)
	33R (Geologic Cross-Section Across the Treasure Valley from 15 Miles Northwest of Star to the Snake River)
	33S (Geologic Cross-Section Across the Treasure Valley from 6 Miles East-Northeast of Star to the Snake River)
	33T (Othberg & Stanford 1992 Geologic map of the Boise Valley and Adjoining Area, Western Snake River Plain, Idaho)
	33U (Liberty & Wood Apr 2001Treasure Valley Seismic Reflection Project - UPRR 2000 Profile)
	33V (Treasure Valley's Water Future, Summary of the Treasure Valley Water Summit, Jan 14-15, 2000 (May 2002))
34	Map and composite diagram of Eagle Pines Water Association well
35	Draft spreadsheet containing information currently known about Protestants' wells (HLI 2008)
36	November 6, 2008 Memorandum from Dale Ralston, PhD and Professor Emeritus to Josephine Beeman
37	Compact disc of ground water level monitoring data and aquifer test data obtained by Hydro Logic, Inc. in the North Ada County Area
38	M3 Eagle Potable Water Facility Planning Progress Update Meeting #3 Presentation Slides, November 25, 2008, prepared by Stanley Consultants, Inc.
39	Map of Preliminary Sewer Plan, prepared by Stanley Consultants, Inc.
40	Demographic Forecast: Economic & Fiscal Impact Analysis, October 2008, prepared by Dr. John Church
41	Development of a Numerical Ground Water Flow Model for the M3 Eagle Development Area Near Eagle Idaho, Douglas, Stacey L., Master's Thesis (December 2007).

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EXHIBIT NO.	EXHIBIT DESCRIPTION
	M3 EAGLE'S SECOND AMENDED APPLICATION FOR PERMIT (last amended April 2008)
42	M3 Eagle's Second Amended Application for Permit No. 63-32573 with Attachments and Exhibits (filed February 1, 2008; last amended April 2008)
	M3 EAGLE'S SUPPLEMENTAL REPORTS BY HLI (submitted in 2009)
43	Ground Water Geochemistry of Wells in the North Ada County Area of Idaho (Jan. 20, 2009)
44	A Nine-Day Constant-Rate-Discharge Aquifer Test of the SVR #7 Test Well In Big Gulch, North Ada County, Idaho (Jan. 20, 2009)
45	Technical Memorandum re Response to IDWR's March 2, 2009 Staff Memorandum On M3 Eagle Hydrogeologic Studies (with exhibits), prepared by Hydro Logic Inc., dated April 1, 2009 (submitted April 3, 2009)
	DOCUMENTS SUBMITTED BY NACGUA
46	Memorandum from Dale R. Ralston to Jo Beeman regarding Initial Hydrogeologic Analysis, dated November 6, 2008
47	Hydrogeologic Analysis of the M3 Eagle Site, Expert Report Prepared for the North Ada County Groundwater Users Association, by Ralston Hydrologic Services, Inc., dated January 2009
48	Hydrogeologic Analysis of the M3 Eagle Site: Supplement #1 Comments from Review of Geochemistry Report, Expert Report Prepared for the North Ada County Groundwater Users Association, by Ralston Hydrologic Services, Inc., dated January 2009
49	Letter from Dr. Dale Ralston to NACFA c/o David Head re comments relative to IDWR's March 2, 2009 Staff Memorandum, dated March 31, 2009 (submitted April 3, 2009)
	IDWR STAFF MEMORANDUM
50	IDWR Staff Memorandum re Application for Water Right 63-32573, dated March 2, 2009
	OTHER DOCUMENTS OFFERED BY M3
51	Technical Memorandum from Ed Squires, Hydro Logic, Inc., to Dennis Owsley, IDWR, re Written Analysis of Dale Ralston's Technical Report Per Hearing Officer's February 10th, 2009 Order, dated March 2, 2009
52	Refined Analysis of 2008 Water Level Data from TW #1 and TW #4 Using BETCO to better correct for Barometric Effects, M3 Eagle Master Planned Community, dated April 8, 2009
53	M3 Eagle Master Potable Water & Wastewater Study, by Stanley Consultants (04/28/06)
54	M3 Eagle Financial Statement, dated March 30, 2009
55	Letter from J. Fereday to D. Tuthill re M3 Eagle Planned Community, dated March 23, 2007.
56	Letter from J. Fereday to D. Tuthill re M3 Eagle Amended Water Right Application, dated September 24, 2007.
57	Eagle Foothills Comprehensive Plan
58	Pre-Annexation and Development Agreement by and between City of Eagle and M3 Eagle LLC, dated/recorded December 27, 2007.
59	M3 Eagle Average Monthly Residential Housing Additions cmopared to Monthly Residential Dwelling Unit Permits Issued in Ada and Canyon Counties 2000-2008, prepared by Dr. John Church

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EXHIBIT NO.	EXHIBIT DESCRIPTION
60	M3 Eagle: A Summary of Projected 30-Year Buildout Scenario of Residential Housing Units, Households, and Polulation, prepared by Dr. John Church
61	Graphs: The Idaho Economy has Recovered from Severe Recessions in the Past, prepared by Dr. John Church
62	Water Volumes Calculated Using Peak Day Water Production Overstate Annual Water Demand, prepared by Dr. John Church
63	Map based on Figure 1 from Memorandum re Ground Water Geochemistry of Wells in the North Ada County Area of Idaho, dated January 20, 2009, with PGSA wells highlighted and noted.
64	Letter from E. Squires to Nichole Baird Spencer (City of Eagle) re Comments on Letters Submitted by NACFA and Phillip Fry Concerning the M3 Eagle Proposed Planned Community Development North of Eagle, Idaho, dated October 16, 2006.
65	M3 Eagle slide presentation (April 2009)
	OTHER DOCUMENTS BY OR FROM PROTESTANTS
100	Notices of Protest
101	Protestant Questionnaires
102	Affidavit of Dale R. Ralston in Support of NACGUA's Reply to M3 Eagle's Response to NACGUA's Motion for Stay, and Limited Discovery for Purposes of Settlement, dated November 24, 2008
103	Dale Ralston List of References Reviewed, dated Feb. 2, 2009
104	Alan Smith Response to Discovery Request of Applicant M3 Eagle LLC, dated October 27, 2008.
105	Letter from K. Pennisi to Gary Spackman re NACFA's assignment of protest to NACGUA, dated August 26, 2008.
106	David Head notes re water quantity calculations (David Head Deposition Ex. 86)
107	NACGUA bullet list re M3 Eagle water right application (Morgan Masner Deposition Ex. 107)
108	E-mail and attachments from K. Pennisi to "NACFA Supporters" (Conrad Deposition Ex. 24)
109	Letter from David Head to "NACFA Water Group a/k/a . . . . NACGWUA," dated August 12, 2008
110	Letter from David Head to Karl J. Dreher re Request for Comprehensive Groundwater Resource Evaluation and Consideration for New Water Rights Moratorium, dated January 25, 2006
111	Letter from Karl J. Dreher to David Head re Request for Comprehensive Groundwater Resource Evaluation and Consideration for New Water Rights Moratorium, dated May 2, 2006
112	Letter from David Head to David Tuthill re Status of Comprehensive Water Resource Evaluation in North Ada County / Follow-Up on May 12, 2006 Correspondence with Director Dreher, dated January 16, 2007
113	NACFA/NACGUA letter from David Head and John Thornton to M3 Water Protestants re Status on Protest with M3 Municipal water right application, dated September 28, 2008

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EXHIBIT NO.	EXHIBIT DESCRIPTION
114	NACGUA Meeting Presentation (October 2008)
	CITY OF EAGLE WATER RIGHT APPLICATION DOCUMENTS
130	Memorandum from Sean Vincent and Shane Bendixsen to Gary Spackman re Review of City of Eagle, Idaho 7-Day Aquifer Test Report in Support of Applications for Water Right Appropriation 63-32089 and 63-32090, dated November 29, 2006
131	Memorandum from Sean Vincent to Gary Spackman re Review of Addendum to City of Eagle, Idaho 7-Day Aquifer Test Report, dated February 27, 2006 [*sic - should be 2007*]
132	City of Eagle, Idaho 7-Day Aquifer Test Report prepared by Holladay Engineering Company, dated June 2006
133	Addendum to City of Eagle, Idaho 7-Day Aquifer Test Report prepared by Holladay Engineering Company and SPF Water Engineering, dated February 22, 2007
	SUNCOR WATER RIGHT APPLICATION DOCUMENTS
140	Letter from Terry Scanlan (SPF Water Engineering LLC) to Steve Lester (IDWR) re Application for Permit No. 63-32061 - SunCor Idaho, LLC, dated March 3, 2005
141	Lynn Well Water Level Measurement Table and Graph prepared by SPF Water Engineering LLC, dated 10/19/2006 (Application for Permit No. 63-32061, Ex. 38)
142	Maps regarding Avimor and Spring Valley Ranch Resource Area prepared by SPF Water Engineering LLC, all dated January 20, 2006 (Application for Permit No. 63-32061, Exs. 32-34, 36)
143	Letter from Terry Scanlan (SPF Water Engineering LLC) to Bob Taunton (SunCor) re SunCor Water Level Monitoring Program Status, dated October 16, 2006, with enclosed Stipulation to Withdraw Protest between SunCor and NACFA (Application for Permit No. 63-32061, Ex. 42)
144	Aquifer Evaluation in the Big Gulch and Little Gulch Areas of Spring Valley Ranch prepared by SPF Water Engineering LLC, dated October 2004 (Application for Permit No. 63-32061, Ex. 27)

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Hydro Logic, Inc.
1002 W. Franklin Street, Boise, ID 83702 (208) 342-8369, (Fax) 342-3100, hydrologic@qwest.net

TECHNICAL MEMORANDUM

TO: Dennis Owsley/ Idaho Department of Water Resources/ Boise, Idaho

FROM: Ed Squires/ Hydro Logic, Inc. / Boise, Idaho

DATE: March 2, 2009

SUBJECT: Written Analysis of Dale Ralston's Technical Report
Per Hearing Officer's February 10th , 2009 Order

This Memorandum has been prepared in response to the Hearing Officer's February 10, 2009 Order in this matter ("February 10 Order") authorizing parties to submit a written analysis addressing the other parties' technical reports previously submitted in this matter. In response to the February 10 Order, Hydro Logic, Inc. ("Hydro Logic") believes it appropriate to provide, on behalf of Applicant M3 Eagle, a brief analysis of two points in the January 2009 *Hydrogeologic Analysis of the M3 Eagle Site* prepared for the North Ada County Ground Water Users Association by Dr. Dale Ralston of Ralston Hydrologic Services, Inc. ("Ralston Report").

In addressing these two points, Hydro Logic does not imply that these are the only statements in the Ralston Report on which it is prepared to comment in this matter. At the hearing, Hydro Logic will provide testimony on several additional points concerning the Ralston Report. However, these two points are appropriate for a written response before the hearing.

Point One: Hydrogeologic data west and northwest of the M3 Eagle site. The Ralston Report, at page 8, states, in reference to the reports and other materials M3 Eagle submitted on November 26, 2008, that:

> Essentially no hydrogeologic data are presented to support the boundary of the Pierce Gulch Sand Aquifer more than about one mile northwest of the M3 Eagle site, as shown on Figure 4.

This is incorrect. Several of the peer-reviewed publications cited by Dr. Ralston clearly describe the regional extent of the of the prograding delta system that comprises the Pierce Gulch Sand Aquifer.[1] These same reports also provide sub-surface cross-sectional

[1] These cited publications, copies of which also were included in M3 Eagle's November 26, 2008 submission in this matter, include: Wood, S.H., and Clemens, D.M., 2002, *Geologic and Tectonic History of the Snake River Plain, Idaho and Oregon*: in Bill Bonnichsen, P.M. White, and Michael McCurry, eds, *Tectonic and Magmatic Evolution of the Snake River Plain Volcanic Province*: Idaho Geologic Survey Bull. 340, pp. 69-103; Squires, E. and Wood, S.H., 2001, *Stratigraphic Studies of the Boise (Idaho) Aquifer System Using Borehole Geophysical Logs with Emphasis on Facies Identification of Sand Aquifers; Report to the Treasure Valley Hydrologic Study, Idaho Department of Water Resources*: Hydrologic, Inc. and

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diagrams of the extensive sand body supported by deep borehole geophysical logs. In addition, substantial hydrogeological and geophysical data were provided with M3 Eagle's November 26, 2008 submitted materials demonstrating that the Pierce Gulch Sand Aquifer ("PGSA") extends at least 24 miles to the west-northwest of the M3 Eagle site. Specifically, a large-scale map[2] and associated report showing several deep oil and gas exploratory wells to the west-northwest of the M3 Eagle site was submitted with several geophysical traces from the plotted boreholes. Among these is the Ted Daws #1 bore (labeled as the TD1 geophysical log), which is located in Payette Valley in the exact direction, and along the geologic strike, of the Pierce Gulch Sand Aquifer as described by Hydro Logic in its conceptual model for the aquifer. In this boring, the base of the Pierce Gulch Sand is approximately 600 feet below land surface which also fits well with the conceptual model and suggests that, if structural faulting is present in the sub-surface, the offset is not significant. Another example is the submitted geophysical logs for the Upper Deer Flat exploratory bore by Champlin Petroleum (labeled DF geophysical log) shows the same geophysical signature 18 miles to the southwest of the M3 Eagle site south of Lake Lowell.

It is possible that Dr. Ralston did not recognize that the reports cited by Hydro Logic (and cited by Dr. Ralston's own reports)[3] show the geologic extent of the Pierce Gulch Sand Aquifer and that M3 Eagle, LLC's submittal on November 26, 2008 included the data from these wells (at Tab 19 of the binders provided to the Department in November 2008). Although the geophysical log data were available only in copies having very small print and are difficult to read without magnification, the accompanying reports and sub-surface cross-sections make the three-dimensional geometry and extent of the Pierce Gulch Sand abundantly clear. In any event, these data to the west and west-northwest show that the subsurface contains the same Pierce Gulch Sand Aquifer signature, including the geophysical signature of the underlying transgressive sand of the Terteling Springs Formation underlying it, as is present under the western portion of the M3 Eagle property. The PGSA also shows up in these data along the same approximate dip angle as that under the M3Eagle property and elsewhere.

In summary, the existing data and reports show the continuity of the PGSA from at least the area around Garden City to the west-northwest through the M3 Eagle area and beyond

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Boise State University, 15 pp.; Wood, S.H., 2004, *Geology Across and Under the Western Snake River Plain, Idaho: Owyhee Mountains to the Boise Foothills*, in USGS Open File Report 2004-1222, Geological *Field Trips in Southern Idaho, Eastern Oregon, and Northern Nevada*, eds K.M. Haller and S.H. Wood; Wood, S.H., 1994, *Seismic Expression and Geologic Significance of a Lacustrine Delta in Neogene Deposits of the Western Snake River Plain, Idaho:* AAPPG Bulletin V-79, No. 1 pp. 101-121; S.H. Wood and J. E. Anderson, 1981, Chapter 2-*Geology, in Geothermal Investigations in Idaho, Part 2, Geological, Hydrological, Geochemical and Geophysical Investigations of the Nampa-Caldwell and Adjacent Areas, Southwestern Idaho*, J. C. Mitchell, editor, IDWR Water Information Bulletin No. 30 (Demember 1981).

[2] Spencer A. Wood, *Structure Contour Map of Top of the Mudstone Facies, Western Snake River Plain, Idaho, Contribution to the Treasure Valley Hydrologic Project* (August 1997).

[3] These wells include: Oroco Oil & Gas Richardson #1; Sundance-Hunter Linning #1-36; Chevron Highland L&L #1; El Paso Natural Gas Webber State #1; Oroco Oil & Gas Cleveland #1; Oroco-Simplot Ted Daws #1; and El Paso Natural Gas Virgil Johnson #2.

to the Payette Basin. Furthermore, the aquifer testing and modeling conducted or evaluated by Hydro Logic supports this conceptual model. Indeed, we believe the Pierce Gulch Sand Aquifer, and the ground water flow within it, extends/flows to the Payette Basin, the Snake River Basin, and the Boise Basin. We believe our maps and graphs show this.

However, we further believe that whether a component of the ground water within the aquifer flows to the Payette Basin, or not, is immaterial to the question whether there is sufficient water in the PGSA to support the M3 Eagle water right application without causing injury to existing water rights. This point is further discussed below.

Point Two: Pacific Groundwater Group's additional model run with a no-flow boundary at the assumed north boundary used in the Treasure Valley Hydrologic Study.
As a further check of Hydro Logic's conceptual model, and because of the comments in the Ralston Report discussed above, Pacific Groundwater Group conducted an additional model run using the M3 numerical model but imposing on it the assumed northern (no-flow) boundary described in the Treasure Valley Hydrologic Project model. In other words, we cut off the Payette basin flux and used the H-match version of the M3 model.

Attached hereto, we provide the following four figures depicting the "no-flow-to-the-Payette" model run:

1) A map of the model showing the area converted to no flow in the model based on the TVHP boundary (Gray).
2) A map of the entire M3 model area depicting the imposed no flow boundary of the TVHP.
3) A figure showing a comparison of the two model boundaries (original M3 model versus TVHP boundary) and the target heads of the model run.
4) A figure showing the 50-year predicted long-term drawdown from the M3 ground water withdrawals at full build out.

As predicted, there is essentially no difference with respect to predicted drawdowns in the Pierce Gulch Sand Aquifer as a result of imposing a no flow boundary between the Boise and Payette Basins.

Respectfully submitted,

Ed Squires
Hydro Logic, Inc.

Figure 1. Potentiometric surface Contour Map from March 2008 Submittal to IDWR with Approximate Northern Boundary of TVHP Model.

Model Boundary Derived from Figures 1-1 and 3-1 from Petrich 2004.

Approximate Location of Northern No-Flow Boundary

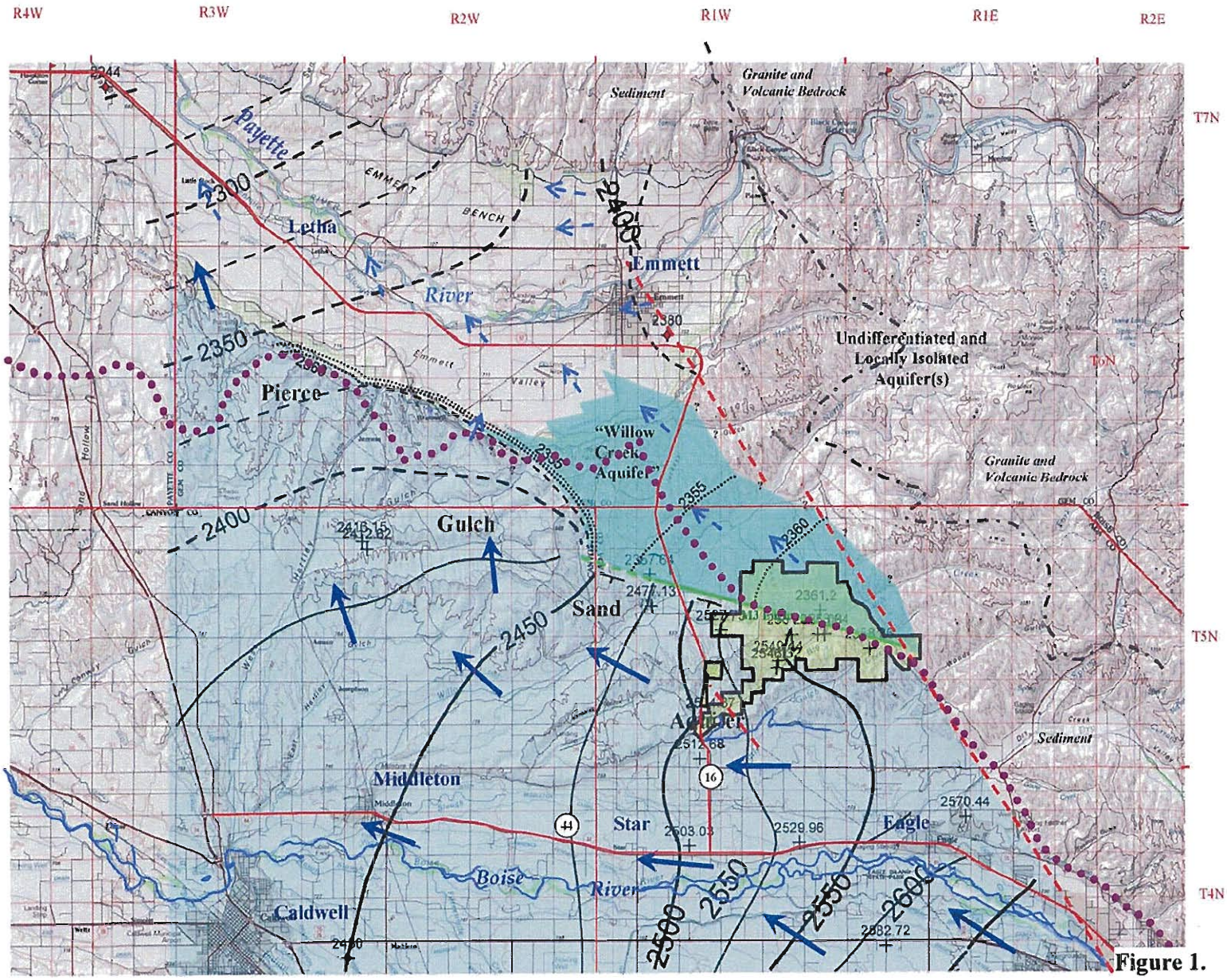


Figure 1.

January 28, 2009

GRAY = NO FLOW BOUNDARY (ALL MODEL LAYERS)

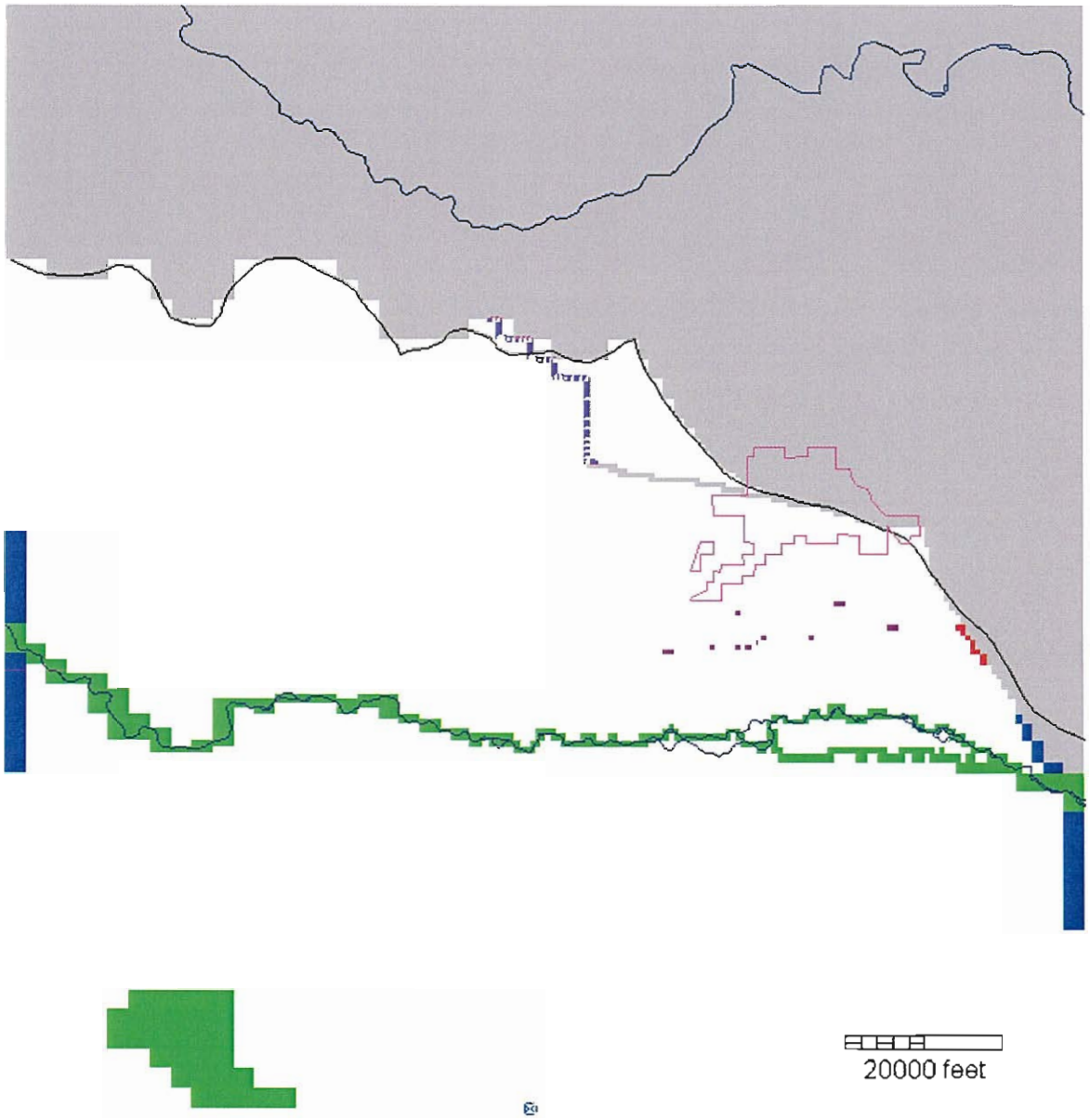
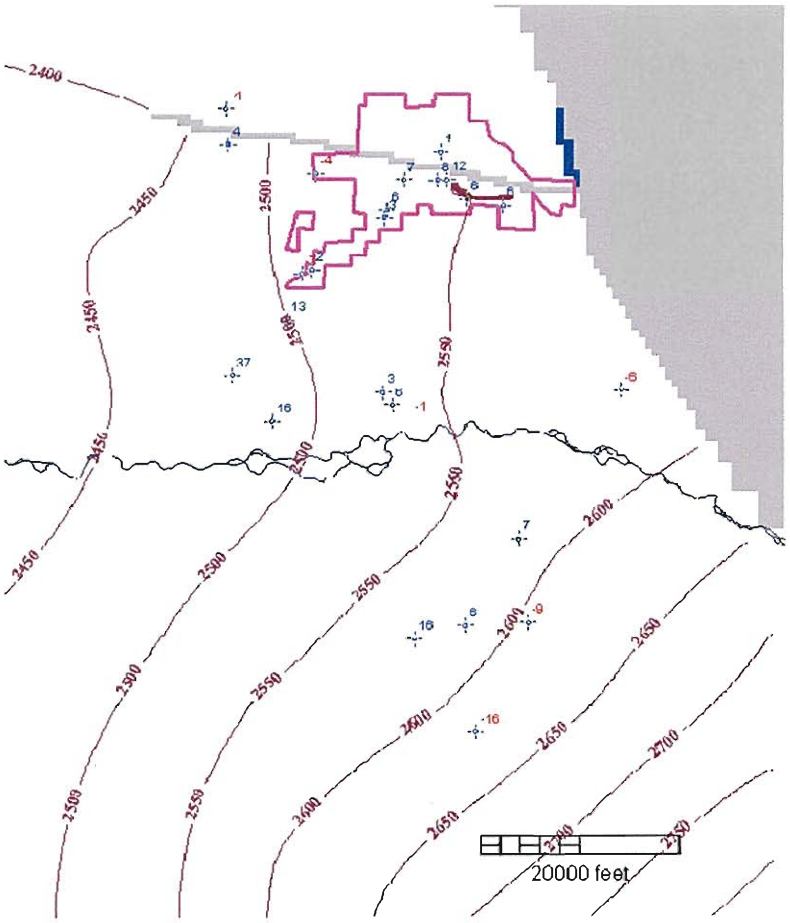


Figure 2.

Original M3 Eagle Model Run
Layer 6 (PGSA)



Payette Boundary (No Flow)
Layer 6 (PGSA)

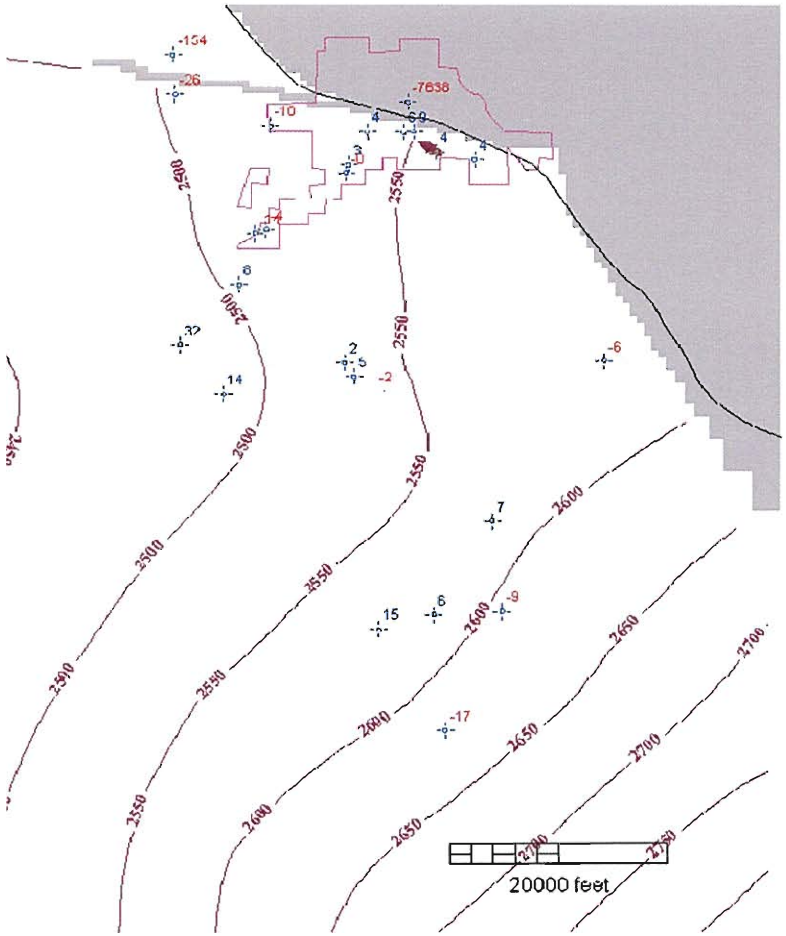
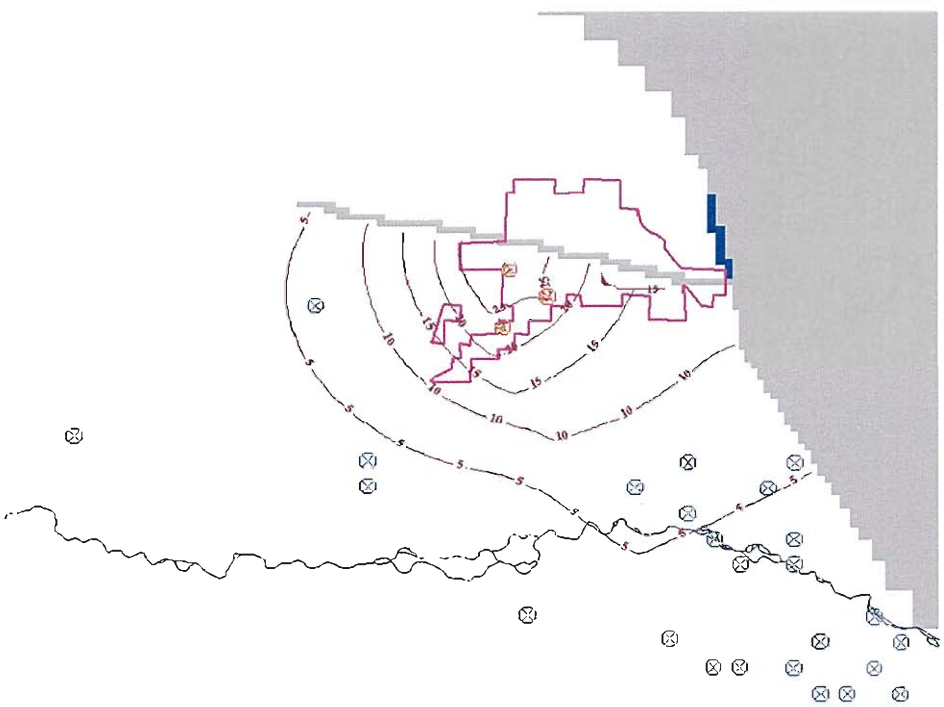


Figure 3.

Original M3 Eagle Model Run
Layer 6 (PGSA)



Payette Boundary (No Flow)
Layer 6 (PGSA)

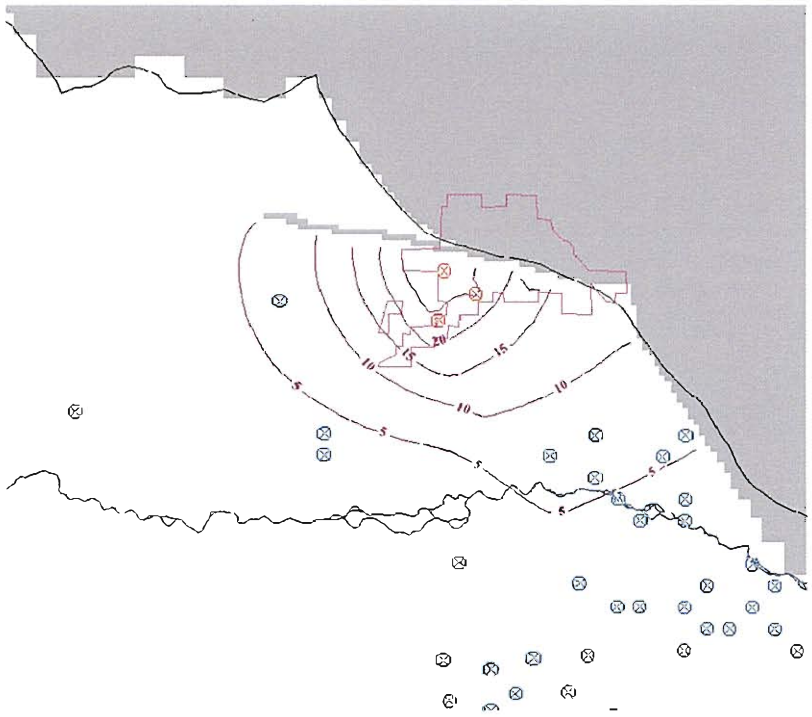


Figure 4.

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Hydro Logic, Inc
1002 W. Franklin Street, Boise ID 83702 (208) 342-8369, (Fax) 342-3100, hydrologic@qwest.net

April 8, 2009

Mr. Sean Vincent
Hydrology Section
Technical Services Bureau
Idaho Department of Water Resources
322 East Front Street
Boise, ID 83702-5431

Re: Updated Analysis of 2008 Water Level Data from TW #1 and TW #4 through use of BETCO to correct for Barometric Effects,
M3 Eagle Master Planned Community; water right application no. 63-32573

Dear Sean:

As follow up to our memorandum dated April 1, 2009 responding to your March 2, 2009 Staff Memo, we are providing this Technical Memorandum reporting on an additional analysis of water levels recorded in M3 Eagle Test Wells #1 and #4 for data collected during late 2007 through November 2008. Because of IDWR's expressed concern with the possible hydraulic effects of a deep-seated bedrock fault on ground water flow within the overlying Pierce Gulch Sand Aquifer, we have just (yesterday) obtained the BETCO software and now have used it to double check the water level data from these wells relative to barometric effects. This effort is another look at the hydraulic events portrayed on Figure 5 of our April 1 memorandum. While our data loggers, and our data analyses, do take into account barometric effects, we used the BETCO protocol as an additional check to ensure that the hydrostatic changes noted in Figure 5 were not caused by incompletely removed, or over-compensated barometric effects. By using the multiple regression analysis methods incorporated by BETCO, short-, medium- and long-term barometric effects are removed from the data.

If you have any questions, please give me or Ed Squires a call.

Sincerely,
Hydro Logic Inc.

Mark Utting

c: Gary Spackman, Hearing Officer, Idaho Department of Water Resources
Jeffrey C. Fereday, Givens-Pursley

M3 EAGLE LLC
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Hydro Logic, Inc
1002 W. Franklin Street, Boise ID 83702 (208) 342-8369, (Fax) 342-3100, hydrologic@qwest.net

TECHNICAL MEMORANDUM

TO: Sean Vincent/ Hydrology Section / Technical Services Bureau / Idaho Department of Water Resources / 322 East Front Street / Boise, ID 83702-5431

CC: Gary Spackman, Jeff Fereday, Bill Brownlee, Dennis Owsley, Mike McVay

FROM: Mark Utting and Ed Squires/ Hydro Logic, Inc. / 1002 W. Franklin St., Boise, Idaho 83702

DATE: April 8, 2009

Refined Analysis of 2008 Water Level Data from TW #1 and TW #4 Using BETCO to better correct for Barometric Effects, M3 Eagle Master Planned Community

This technical memorandum presents the results of HLI's recently conducted update to the analysis of water level data from M3 Test Wells #1 and #4 presented in Figure 5 of our Technical Memorandum to IDWR dated April 3, 2009. This updated analysis reconfirms that hydraulic events can be observed in the water level changes measured in both wells. This recent reanalysis used water level data preprocessing using the computer program BETCO developed by Sandia National Laboratories, under funding of the US Department of Defense. BETCO uses multiple-regression analysis technique to remove short-, medium- and long-term fluctuations in water level data caused by changes in barometric pressure. BETCO can only be used when: 1) water level data are collected on a regular basis with constant data collection intervals, and 2) barometric pressure data are collected at the same time as the water level measurements. BETCO works best when the data collection interval is between 30 and 120 minutes. The data collected at the M3 site meets all these criteria since they were recorded with down-well data loggers with onsite Barologgers, all recording at identical 60-minute intervals.

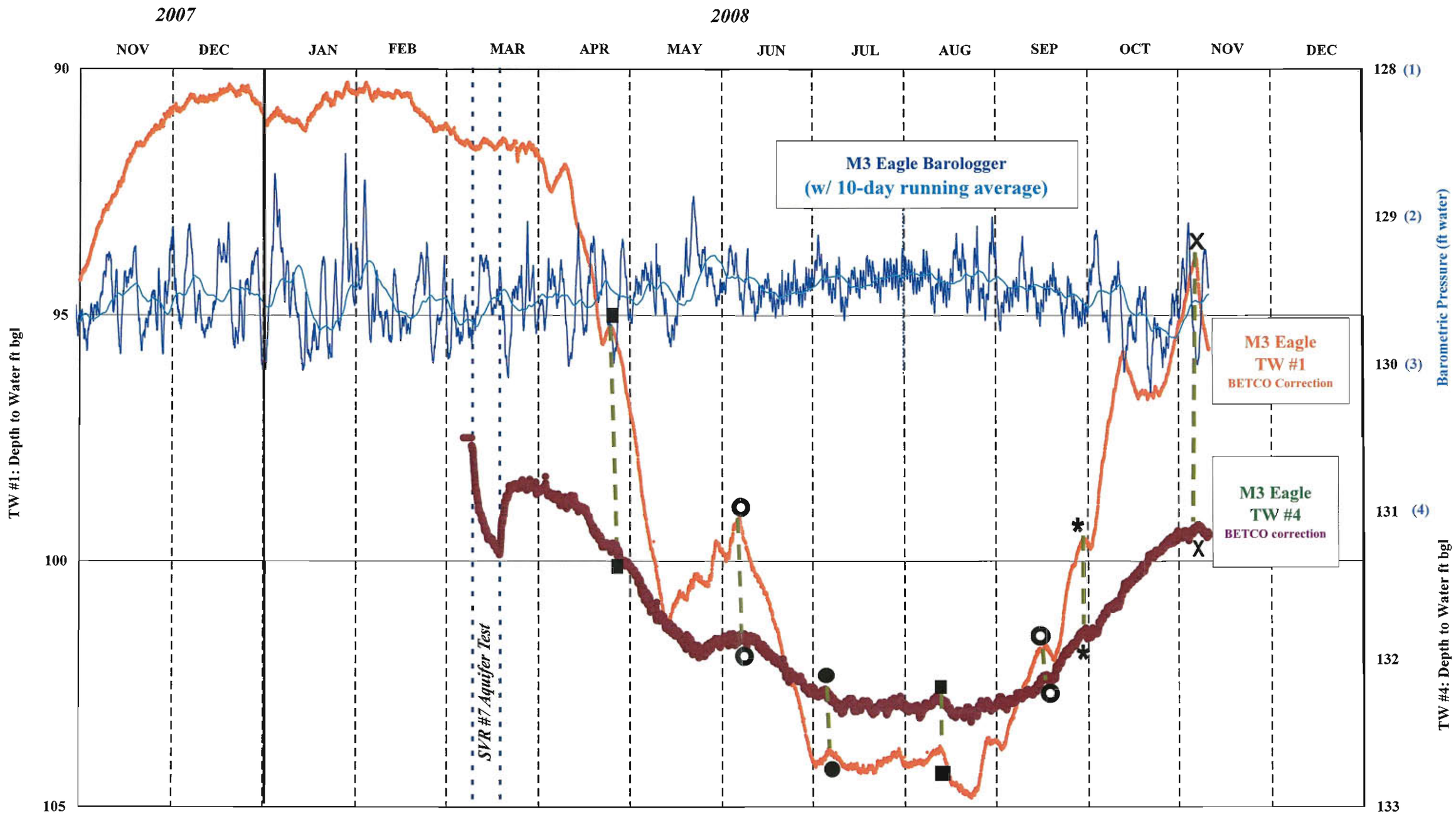
The data presented in Figure 5 of the April 3 Memo show a correlation between hydraulic events in TW #1 and TW #4. The water level data presented in Figure 5 were preprocessed using barometric efficiency corrections factors ("BE") of 0.27 and 0.33, respectively. Because these BE's were calculated using linear regression on data collected over a relatively short-time period of no significant regional well pumping, the BE's represent the corrections for short-time barometric response. In order to reduce the uncertainty that the hydraulic events may have resulted from barometric events not completely removed by using these short-term BE corrections, we have employed the preprocessing using BETCO which effectively removes short through long term barometric effects by using multiple regression.

The attached figure shows BETCO-preprocessed water levels, barometric data and the 10-day-running-average barometric data plot. The attached figure shows that hydraulic events (some of which are designated by circles, squares, stars and X's) appear in the water level changes in both wells. The responses in TW #1 are larger than those in TW #4 because TW #4 is closer to the edge of the Pierce Gulch Sand Aquifer where unconfined conditions lead to much larger storativities which in turn reduce the amount of water level change that occurs in these portions of the aquifer. The figure also shows that short-term barometric fluctuations (represented by the sharp spikes in the data plot) through long-term barometric fluctuations (represented by the 10-day running average curve) do not directly correlate to the hydraulic events observable in both well water levels.

The use of BETCO to preprocess the data is an update to the preprocessing using calculated BE correction factors based on field data collected during periods of no significant nearby well pumping. This analysis supports and updates our previous analyses using field-data-based BE corrections. The use of the field-data-based BE corrections was a significant improvement on the techniques used in previous hydrogeologic investigations in the North Ada County (none of the pumping tests or water level analyses conducted in his area, that we have reviewed through the M3 hydrogeologic characterization process, have used any corrections for barometric effects. The use of BETCO further improves our technique for analyses of continuous water level monitoring data. It also supports our previous conclusions that analysis of spot-water level measurements from multi-purpose wells of uncertain construction can be misleading and far less certain than analyses based on data collected on a continuous basis from properly designed and constructed single-purpose monitoring wells.

Comparison of Water Level Responses in TW #1 and TW #4 and Barometer Using Water Level Correction from BETCO Monitored For M3 Eagle By: Hydro Logic, Inc.

UPDATE to Figure 5.



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M3-Eagle
Master Potable Water
&
Wastewater Study

04/28/06

M3 EAGLE LLC
EXHIBIT
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PRELIMINARY POTABLE WATER STUDY FOR M3-EAGLE PLANNED UNIT DEVELOPENT EAGLE, IDAHO

INTRODUCTION

The project development, by approval and agreement with the City of Eagle, will be added to the City of Eagle service area in accordance with City Ordinance 517, 5-10-2005. All water users within this development will be connected to the system in accordance with City Ordinance 202, 5-26-1992.

The project is requesting annexation into the City of Eagle as a Planned Unit Development. The water system will be under the jurisdiction of the City of Eagle review and approval process and comply with Title 6, Chapter 5, Water System, in accordance with City Ordinance 530, 10-18-2005, and with other applicable regulatory agencies.

A final Master Potable Water Study for this development will be developed at the initial stages of project design to establish the design parameters and methods required to properly provide for complete potable water system. This Preliminary Study is to identify the overall needs, concept, key elements, and to set the basis for the master plan. The study will also address phasing of the system which will parallel the development phasing.

PROJECT DESCRIPTION

The M3-Eagle project is located in Ada County, Idaho northwest of the City of Eagle Idaho, beginning just north of Homer Road and extending approximately four miles to the north. It is bounded on the west by State Highway 16 and extends to Willow Creek Road on the east side (Exhibit A Vicinity Map, M3-Eagle Development Plan). The Development is located in northwesterly area of Ada County, but is requesting annexation into the City of Eagle.

M3-Eagle Planned Unit Development project will ultimately encompass approximately 6500 acres of developed property and over 2,200 acres of regional park located in the foothills northwest of the City of Eagle (Exhibit C Development Plan and Exhibit P Master Parks and Open Space Plan, M3-Eagle Development Plan). Because of the terrain and an average density of two units per acre, much of the developed areas will be clustered thereby resulting in more open space as common areas.

DESIGN ELEMENTS

General

The community water system includes wells, well houses, pumping and treatment facilities, storage tanks, distribution main trunk lines, lateral main lines, service lines, valves, water meters, fire hydrants, and other appurtenances as required to supply and deliver potable water

to the development for standard uses. A separate irrigation source and system will be provided to the maximum practical extent to minimize use of potable water for irrigation.

The public drinking water system will be designed and constructed in accordance with the following standards and regulations:

- City of Eagle City Code, Title 6, Chapter 5 *Water Systems*
- Idaho Department of Environmental Quality (DEQ)
  IDAPA 58 01 08 "Idaho Rules for Public Drinking Water Systems"
  IDAPA 37.03.09 "Well Construction Standards"
- Code of Federal Regulations (CFR) Title 40, Parts 141 & 143
- Recommended Standards for Water works: Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers, 2003
  Also known as the Ten-State Standards
- American Water Works Association (AWWA)
- Idaho Guidance for Public Drinking Water Systems, 2005
- and other applicable regulating agencies in accordance with the provisions of the Idaho Code Section 50-1326

Fire Protection will be provided through the community water system. All fire protection devices will be designed and constructed in accordance with the City of Eagle standards, the International Code Council (ICC) International Fire Code (IFC) relating to fire protection facilities, and Appendix C Fire Hydrant Locations and Distribution with applicable fire flow requirements.

All hydrants shall be located adjacent to dedicated public streets where an when reasonably possible, otherwise, they shall have dedicated easements for access and maintenance. All hydrants shall include appropriate valving and thrust blocks required for the fire flows.

The average spacing between hydrants shall not exceed five hundred (500) feet such that the location shall be located within two hundred (250) feet the building being served. At least one hydrant shall be located at very street intersection. Single access streets shall have a hydrant located at the beginning of the street.

Consideration shall be given to locating hydrants with respect to accessibility, obstructions, proximity to buildings being protected, driveway entrances, signs, light pole locations, and other circumstances where adjustments to specific locations would be warranted. No hydrant shall be substantially obscured or access impeded.

Commercial and institutional buildings shall be provided with approved fire lanes in accordance with the ICC, IFC, Section 503.3

System Volume Requirements

The system will provide no less than 800 gallons per day (gpd) for 13720 residences = 10,976,000 gpd or 11,000,000 gpd as per IDAPA 58.01.08.552.01.a. Water system shall be sized to accommodate the additional flows required for fire protection.

Water System Construction Phasing

The project will be constructed in a number of phases as indicated on the Master Phasing Plan defined in the M3-Eagle Development Plan over an estimated period of 20 years. All applicable components for the system will be designed and constructed to accommodate future phases.

Wells

Several wells will be located throughout the development with the locations determined and identified at a later time. Wells will consist of the well, pumps, valves, chlorination, controls and housing for the facilities. Wells will pump to one of several storage tanks. Preliminary estimates indicate that total potable water demand will be approximately 8,000 acre-feet per year.

Design and construction of Wells shall conform to IDAPA 58.01.08 *Idaho Rules for Public Drinking Water Systems* section 550 *Design for Public Drinking Water Systems* paragraph 03 *Wells*.

Prior to drilling, a Site Evaluation Report will be submitted for each well location. Each well location will be evaluated for the following:

- Identification of nearby surface waters
- Identification of known aquifers
- Estimate of hydrologic properties of each aquifer
- Potability and quality of anticipated groundwater
- Prediction of the drawdown of existing wells that may be caused by pumping of proposed well
- Demonstration of the extent of the capture zone of the well
- Potential sources of contamination of the well
- Compliance with Minimum Well Construction Standards and permitting requirements

Prior to connection to a water distribution system the following will be provided:

- Copy of well logs
- Test pumping
- As-built plans
- Sample results for iron, manganese, corrosively, and other secondary contaminants
- Sand production measured
- Static water level measured prior to and during pumping
- Well yield in gpm, duration of test, and depth of test pump
- Test pump capacity and head characteristics

- Profile of water level recovery projected to the original static water level

Minimum well construction standards:

- The discharge line will be equipped with the necessary valves and appurtenances to allow well to be pumped at waste at design capacity
- Pressure gauge provided
- Totalizing flow meter and accessible check valve installed on discharge line
- Screened vent
- Casings extended a minimum of eighteen (18) inches above ground surface or twelve (12) inches above well house floor
- Watertight seal provided at top of well casing
- Screens and/or gravel pack provided where fine grained materials develop in the water source

Well House minimum standards:

- Location to be protected from flooding and adequately drained
- Well and well house located on dedicated lot with a minimum of fifty (50) feet to nearest lot line
- Finish floor a minimum of six (6) inches above ground surface
- Exterior esthetically designed to blend with surrounding environment
- Automated air flow system provided to remove excess heat and moisture
- Thermostatically regulated heater
- All pumping system electrical controls and components in conformance with national and state electrical codes
- Water treatment systems, equipment and devices shall be in compliance with potable water systems for public use
- A separate ventilated room shall be provided if gas chlorination equipment is used
- Lockable door

Storage Systems

The distribution system begins at three storage tanks which are located on the ridges within the development. One storage tank (WT-1) is located on the north ridge of Big Gulch Creek near elevation 3060 and will service the slope areas north and south of the ridge. A second tank (WT-2) is located on the ridge between Big Gulch and Little Gulch Creeks near elevation 3020 and will serve the slopes each side of the ridge. The third tank (WT-3) is located on the south ridge of Little Gulch Creek at about elevation 2960 and serves both north and south slopes from the ridge. Preliminary estimate for total capacity of all three tanks will be approximately 6 million gallons. Each tank will be sized for the area it serves.

Design and construction of Storage Tanks shall conform to IDAPA 58.01.08 *Idaho Rules for Public Drinking Water Systems* section 550 *Design for Public Drinking Water Systems* paragraph 08 *Water Storage*

Water Storage Tank minimum standards:

- Location to be protected from flooding and adequately drained
- Water storage tanks will be protected from contamination
- Tanks will be located on dedicated lots with a minimum of fifty (50) feet to nearest lot line
- Finish floor a minimum of six (6) inches above ground surface
- Watertight sloped roof
- Minimum of two (2) manhole accesses with raised watertight lockable covers
- Screened overflow discharge to daylight
- Screened drain discharge to daylight
- Exterior esthetically designed to blend with surrounding environment
- Tanks flushed and disinfected in accordance with AWWA standards

Distribution System

The distribution system will be divided into pressure zones to limit maximum pressures with pressure regulating valves. Pressures for each pressure zone will be limited to a minimum of forty (40) pounds per square inch (psi) to a maximum of eighty (80) psi. Booster pumps will be used to maintain minimum pressures for areas near the ridges.

Distribution systems will be sized for no less than eight hundred (800) gallons per day per residence or fire flows of 1,500 gallons per minute (gpm) maintaining a minimum of forty (40) psi throughout the distribution system during maximum hourly demand, excluding fire flow. Fire hydrants will be located at 450-foot maximum spacing in residential areas and as required for commercial areas based on occupancy schedules.

Distribution main and lateral lines will be located underground in street sections as much as possible and practicable. The system will be interconnected throughout the development to provide service to all residences and commercial areas at all times during maintenance and repairs of any of the wells, tanks or distribution lines. The distribution system includes, distribution and service lines, pressure regulating and air-release valves, gate valves, fire hydrants, thrust blocks, and meters to provide a complete system to the end users.

Design and construction of Distribution Systems shall conform to IDAPA 58.01.08 *Idaho Rules for Public Drinking Water Systems* section 550 *Design for Public Drinking Water Systems* paragraph 06 *Distribution Systems*

Services and Meters

Service Connections consisting of the water distribution system which connects the meter to the main, corporation stop, service pipe, curb stop and box, meter, yoke and meter box and will be owned and maintained by the City. The customer service line, being that part of the piping on private property, that connects the service to the private property system will be installed, owned and maintained by the private property owner. Joint service connections that serve two (2) or more premises may be used with appropriate sizing.

Commercial, industrial, public or institutional facilities may be supplied with fire water lines as needed in addition to and separate from regular service connections.

Access to Property
Duly appointed employees of the City of Eagle water department will be provided reasonable and normal access to all components of the water system which the City owns to inspect, maintain and monitor as required.

Responsibility for Equipment
All components of the water supply system including wells, storage tanks, distribution lines, valves, fire hydrants, service connections with all necessary appurtenances thereof shall be the sole responsibility of the City of Eagle water department. All equipment including service lines and valves to service customer premises shall be the sole responsibility of said customer.

Easements
Easements will be provided on and across private properties where required for the installation and maintenance of water mains and necessary valves and equipment in connection therewith.

Construction and Design Standards
The standards and specifications for design and construction of the water system will be in accordance with the standards developed and adopted by the City of Eagle and/or as designed and approved by the City of Eagle.

Donation of Water System to the City
The project will provide water sources, storage capacity and distribution systems complete with all appurtenances that will ultimately be connected to and owned by the City of Eagle Water System.

PRESSURIZED IRRIGATION SERVICES

Existing natural native drought-resistant vegetation will be maintained for all of the undeveloped property and much of the upper developed property. All other developed property will be irrigated combinations of sod lawns and landscaped areas having ground cover, bushes and trees.

Irrigation services will be provided, to the extent possible, from Class B quality sewage treatment effluent This will be collected into several esthetically attractive and environmentally blended retention ponds. Pumping stations will be provided to pump and pressurize the water from these ponds to a distribution system that will supply irrigation water to public and common landscape areas.

Class B quality effluent is acceptable for use as irrigation on:

- parks,
- pastures,
- food crops,
- landscaping,
- golf courses,
- common areas,
- playgrounds and
- other similar type areas that may be exposed to human access.

Average irrigation demand is estimated at one (1) to two (2) inches of water per week. For preliminary estimates two (2) inches per week or 0.167 acre-feet/acre/week will be used. Irrigation period is generally mid April through mid October or approximately twenty-six (26) weeks which equals 4.4 acre-feet/acre required for the season.

Estimated Sewage Treatment Effluent contribution:

13720 units x 2.8 residents/unit x 100gpcd or 13.37cfpd x 75% dischargeable effluent
= 8.8 ac-ft/day or 62 ac-ft/wk
= 62 ac-ft effluent / 0.167 ac-ft required = 370 acres irrigated from effluent.

Estimated Stormwater contribution:
The following are average rainfall for each month in inches.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.6	1.4	1.3	1.1	1.1	0.9	0.2	0.4	0.8	0.9	1.8	1.6

Only the months of March through October should be considered collectable rainfall stored for irrigation use. Unfortunately, the warmest months needing the most irrigation are also the driest months; therefore, no collectable volumes for irrigation will be anticipated at this time. Deficit makeup water for irrigation may be provided from the potable water system, as determined and approved, during extreme dry years when effluent alone may not be sufficient volume for irrigation needs.

Pressurized Irrigation Construction Phasing

The project will be constructed in a number of phases as indicated on the Master Phasing Plan defined in the M3-Eagle Development Plan over an estimated period of 20 years. All applicable components for the system will be designed and constructed to accommodate future phases.

Distribution main and lateral lines will be located underground in street sections as much as possible and practicable. The system will be interconnected throughout various areas to provide service to all designated areas at all times during maintenance and repairs of any of the ponds, pumps, or distribution lines. The distribution system includes, ponds, pumping systems, distribution and service lines, pressure regulating and air-release valves, gate valves, and thrust blocks, to provide a complete system.

PRELIMINARY WASTEWATER STUDY FOR M3-EAGLE PLANNED UNIT DEVELOPENT EAGLE, IDAHO

INTRODUCTION

The project is requesting annexation into the City of Eagle as a Planned Unit Development and the Eagle Sewer District. The wastewater collection system and treatment plant will be under the jurisdiction of the City of Eagle and the Eagle Sewer District review and approval process in addition to other applicable regulatory agencies.

A complete Wastewater Study for this development will be completed at the initial stages of project design to establish the design parameters and methods to properly provide for wastewater collection and treatment facilities. This Preliminary Study is to identify the overall needs, concept, key elements, and to set the basis for the master plan. A Master Facilities Plan will be provided for the treatment plant and updated with the development phasing.

PROJECT DESCRIPTION

The M3-Eagle project is located in Ada County, Idaho northwest of the City of Eagle Idaho, beginning just north of Homer Road and extending approximately four miles to the north. It is bounded on the west by State Highway 16 and extends to Willow Creek Road on the east side (Exhibit A Vicinity Map, M3-Eagle Development Plan). The Development is located in northwesterly area of Ada County, but is requesting annexation into the City of Eagle.

M3-Eagle Planned Unit Development project will ultimately encompass approximately 6500 acres of developed property and over 2,200 acres of regional park located in the foothills northwest of the City of Eagle (Exhibit C Development Plan and Exhibit P Master Parks and Open Space Plan, M3-Eagle Development Plan). Additionally, there will be much more open space in common areas. Because of the terrain and an average density of two units per acre, much of the developed areas will be clustered thereby resulting in more open space as common areas.

DESIGN ELEMENTS

General

The intent of M3-Eagle Development is to be annexed into the Eagle Sewer District Service area. M3-Eagle Development will construct the sanitary sewer system to service the development and give ownership to the Eagle Sewer District for operation and maintenance by their experienced qualified staff.

A self-contained collection system and treatment facility will be design and constructed in accordance with the Eagle Sewer District, Idaho Department of Environmental Quality (DEQ),

and with the State of Idaho Water Quality Standards and Wastewater Treatment Requirements standards and regulations. Various components of the system will be constructed in phases according to the project development phasing (Exhibit Q Master Phasing Plan, M3-Eagle Development Plan) and will consist of pipe lines, manholes, lift stations, and treatment facilities.

Effluent will be discharged as "Class B" quality effluent and directed to on-site ponds developed primarily for:

- maintaining wetlands,
- maintaining stormwater wet ponds and
- irrigation use

Collection System

The sanitary sewer collection system consists of standard underground trunk lines, lateral lines, service lines, manholes and other appurtenances as required to transport sewer flows to treatment facilities. Laterals and mains will be located in street sections as much as possible and practicable (Preliminary Wastewater Plan exhibit this document). The collection system is divided into four main gravity collection zones. These zones are dictated by the drainage basin in which they are associated (Appendices C Master Drainage Study) as follows:

1. Big Gulch is the largest with the main collection trunk line following Big Gulch Creek with sub-drainage basins on each side sloping towards the creek. This zone is further divided into three smaller zones. The collection system for this zone will be routed to a treatment plant located near the downstream end of Big Gulch Creek at the southeast corner of the project.
2. Little Gulch is the second largest area with the main collection trunk line following Little Gulch Creek with sub-drainage basins on each side sloping towards the creek. This zone will be provided with one or both of the following options:
    a. Lift station located at the downstream end of Little Gulch Creek and pumped over the hill by pressurized line to the Big Gulch collection system and treatment plant;
    b. An individual septic system and drain field will be provided for the equestrian facilities.
3. Willow Creek area is on the northerly side of the development. This zone is separated into many small drainage areas that slope to the north edge of the property boundary. These areas will be serviced by gravity collection system to the boundary. At those locations lift stations will be utilized and pumped over the ridge to the Big Gulch collection system.
4. Dry Creek area is located on the easterly side of the development and slopes towards the southerly boundary. This area will be serviced by gravity collection system to a point near the southerly boundary. At this location lift stations will be utilized and pumped over the ridge to the Little Gulch collection system.

Areas that do not gravity flow to a treatment plant will be routed to standard lift stations and pumped to the nearest gravity system flowing to a treatment plant within the development. Lift stations will be located, sized and designed based on the area it serves.

Pipe line sizing shall be based on minimum velocity of two (2) feet per second (fps) when flowing full with appropriate Manning coefficients. Special provisions shall be made for velocities greater than twelve (12) fps to protect against displacement by erosion and impact. Consideration shall be given to over-sizing main lines for future phase additions. No public gravity sewer lines shall be less than eight (8) inches in diameter. Individual residential service lines shall be a minimum of four (4) inch diameter and commercial services will be determined on individual cases.

Pipe Lines shall be laid in straight alignment between manholes. Pipes with greater than fifteen (15) percent slopes shall be anchored with concrete at thirty six (36) feet on centers. Drop manholes may be permitted for pipe lines with an elevation difference of twenty four (24) inches or more and constructed with outside drop connection encased in concrete.

Manholes shall be placed at the end of each line, at all grade, size, intersections, or alignment change and/or not to exceed four hundred (400) feet spacing for line sizes less than fifteen (15) inches in diameter, five hundred (500) feet for eighteen (18) to thirty (30) inches diameter, and six hundred (600) feet for thirty six (36) inch diameter and larger.

Forty eight (48) inch diameter manholes shall be used for pipe line sizes of twenty four (24) inch or smaller. Sixty (60) inch diameter manholes shall be used for twenty seven (27) to thirty six (36) inch diameter pipes. Manholes for pipes larger than thirty six (36) inch diameter shall be determined on individual cases.

Wastewater Lift Pump Stations will be located, as previously mentioned, in areas that do not gravity flow to the treatment plant and will be pumped to the nearest gravity system flowing to the treatment plant. Lift stations will be located, sized and designed based on the area it serves.

Wastewater Lift Pump Stations shall be designed and constructed, as a minimum, to the Ten-State Standards. Lift stations shall be readily accessible during all types of weather; structures, mechanical and electrical components shall be protected from functional and physical damage, accessible during the 25-year flood, and protected from physical damage during the 100-year flood.

Multiple pumps or ejector units shall be provided for each lift station. Each unit shall have the capacity such that with any unit out of service the remaining unit(s) will have the capacity for the peak hourly flow. Pumps and controls should be designed to maintain a minimum flow velocity of two (2) fps in the force main and operate at uniform delivery rates in order to minimize hydraulic surges.

Provisions shall be made to automatically alternate the use of pumps. Shutoff valves shall be placed on the suction lines of dry pit pumps. Shutoff valves and check valves shall be placed on discharge lines of each pump (except screw type pumps). Appropriate protection from clogging or damage shall be provided.

All pumping stations shall be equipped with an alarm system tele-metered to a 24-hour office or individual person. The alarm system shall be activated in cases of power or equipment failure or unauthorized entry. Electrical systems and components shall comply with the National Electrical Code requirements for Class I Group D, Division 1 locations.

Wastewater flow measuring devices shall be provided at all pumping stations with a 1200 gpm or greater design peak flow which include indicating, totalizing, and recording flow measurements.

Treatment Facilities

As previously discussed the treatment plant(s) will be self-contained system(s) designed and constructed in accordance with DEQ and the State of Idaho Water Quality Standards and Wastewater Treatment Requirements. For development flexibility the treatment plant should be constructed in phases at a rate of approximately one and a quarter (1.25) times the project development phasing. One hundred (100) percent of the treatment facility would be constructed and operational at eighty (80) percent of ultimate development build out.

Effluent will be treated to "Class B" quality in accordance with DEQ Wastewater Land Application Permitting Rules. Discharge from the plant(s) will be directed to on-site irrigation ponds with overflow from the ponds discharged to the Big Gulch and Little Gulch Creeks. Effluent used for irrigation purposes require a Wastewater Land Application Permit issued by Idaho DEQ. Discharge off-site or to streams will require a National Pollutant Discharge Elimination System (NPDES) Permit issued by the United States Environmental Protection Agency (EPA).

Engineering services to be performed shall consist of a preliminary project submittal, facility plan, preparation of construction, specification, and contractual documents, construction inspections, administration and compliance certification.

The Facility Plan shall identify and evaluate wastewater basic information, criteria and assumptions, related potential problems, examination of alternate solutions, preliminary layouts, flow diagrams, phasing, discharge locations, solids disposal options, cost estimates, conclusion of proposed project for review and official actions and procedures required to implement the project.

The facility plan must include the wastewater treatment facilities, major collection systems, interceptor sewers, and lift pump stations. The population prediction shall be based on phasing up to twenty (20) years or less. Wastewater Treatment Facility flows shall be based on an

average residential daily flow of one hundred (100) gallons per capita plus any commercial and institutional facilities.

Design Flows	Duration	Units	
Average Flow	24 hours	gallons per day	(gpd)
Maximum Day Flow	24 hours	gallons per day	(gpd)
Peak Hourly Flow	1 hour	gallons per hour	(gph)
Peak Instantaneous Flow	1 minute	gallons per minute	(gpm)

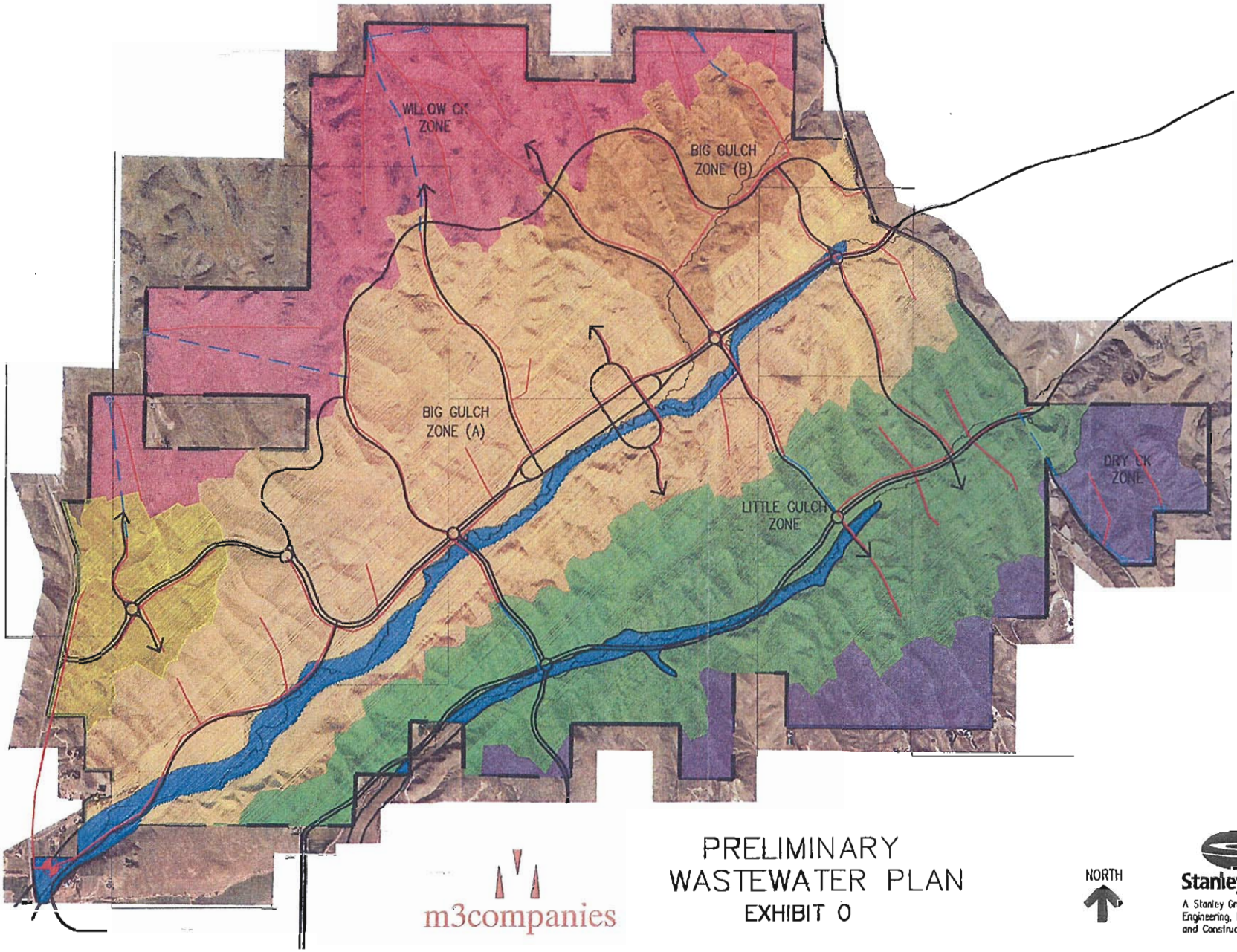
Residential Flows:	gpd/capita 100	Hourly Ratio Factor	Peak hourly Flows gph/capita
500 residents		4	16.7
1000 residents		3.8	15.8
2000		3.7	15.4
5000		3.3	13.75
10,000		3.0	12.5
20,000		2.85	11.9
30,000		2.6	10.8

Commercial/Institutional Flows:	gpd/capita
Stores, offices, and small businesses =	12 – 25
Hotels & motels =	50 – 150
Schools =	10 – 25

The following organic loads for the design year shall be determined and used as a basis for design of the treatment facilities:

Five (5) day Biochemical Oxygen Demand (BOD_5)
Design Average BOD_5
Design Maximum BOD_5
Design Peak BOD_5

Domestic waste treatment design shall be on the basis of at least 2.75 ounces of BOD_5 per capita per day and 3.2 ounces of suspended solids per capita per day unless alternate values are justified. When grinders are used in areas tributary to the treatment plant the values will be increased by 25 to 30%.



m3companies

PRELIMINARY WASTEWATER PLAN

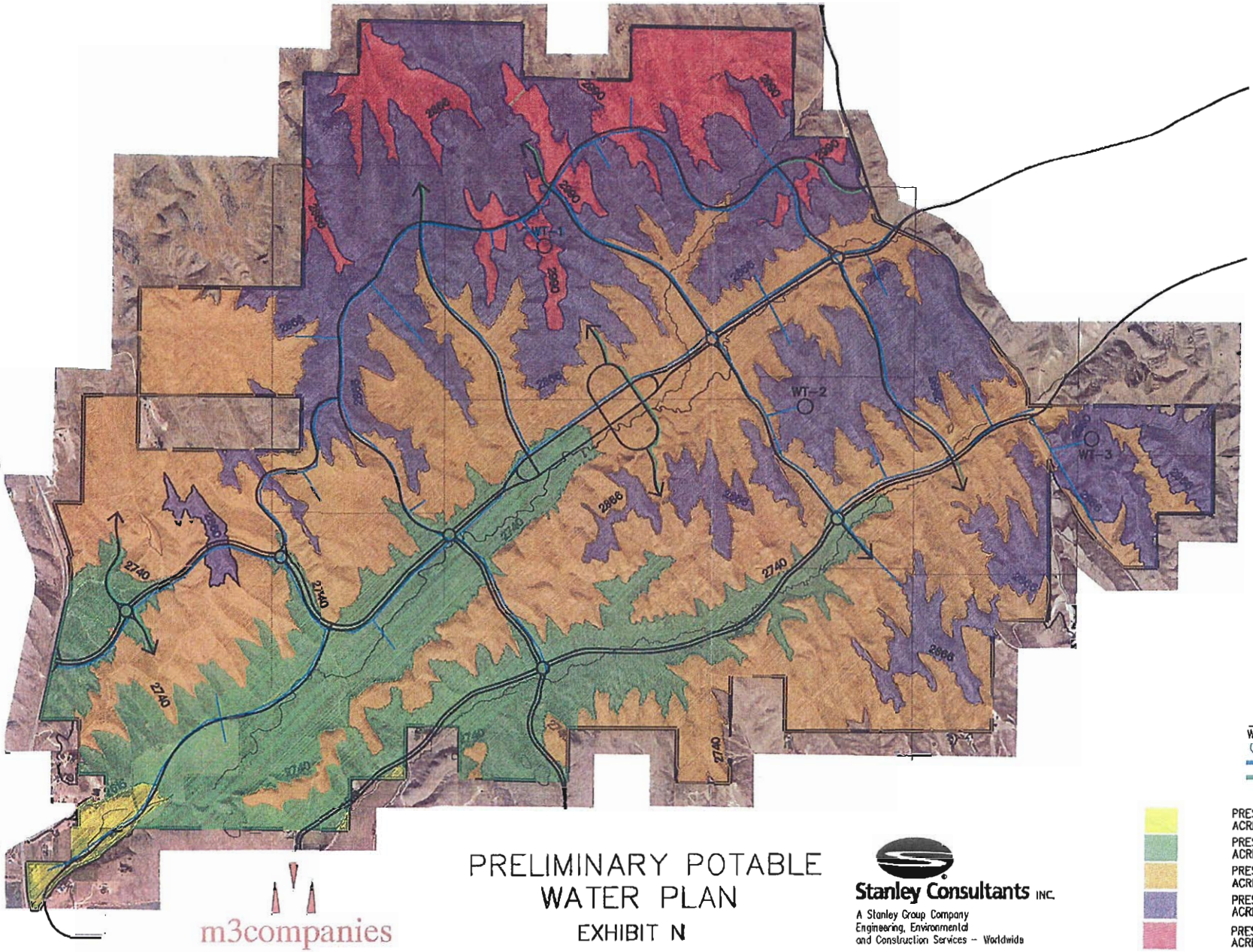
EXHIBIT O

NORTH

Stanley Consultants INC.

A Stanley Group Company
Engineering, Environmental and Construction Services - Worldwide

M3 EAGLE 0027



NORTH

LEGEND

WT-1 ○ POTABLE WATER TANK

MAIN DISTRIBUTION LINES

SECONDARY DISTRIBUTION LINES

PRESSURE ZONE AREA 0000–2615
ACRES = 73

PRESSURE ZONE AREA 2615–2740
ACRES = 1,511

PRESSURE ZONE AREA 2740–2866
ACRES = 3,232

PRESSURE ZONE AREA 2866–2990
ACRES = 1,955

PRESSURE ZONE AREA 2990–UP
ACRES = 544

M3 EAGLE 0028

m3companies

PRELIMINARY POTABLE WATER PLAN

EXHIBIT N

Stanley Consultants INC.
A Stanley Group Company
Engineering, Environmental
and Construction Services – Worldwide

MEMO

Las Vegas, NV

TO: M3 Eagle, LLC **DATE:** October 8, 2008

FROM: Stanley Consultants, Inc.

SUBJECT: Preliminary Water System Planning

Introduction

Water planning efforts for the M3 Eagle development have been proceeding. This memorandum outlines our current planning and presents information for discussion. This memo includes preliminary water demands and estimated storage volumes for each phase. A backbone water system structure was developed based on available roadway information and the pressure zones have been determined from mass grading information. Two exhibits accompany this memo; a hydraulic schematic and a preliminary water plan.

Estimated M3 Eagle Residential Water Demands

The M3 Eagle Phase I demands are estimated based on approximately 1,000 residential units located in the southwestern portion of the development. Phase 1 is roughly 180 acres in size and composed mainly of residential development. The water demand for Phase 1 is estimated at 276 gpm on a maximum day and 538 gpm during the peak hour. See Table 1 below. Schools and commercial development were not included in the preliminary demand estimate, as they are still being evaluated.

Table 1 -M3 Eagle Residential Water Demand Summary

Land Use Component	Total Acres	Total Dwelling Units	Average Demand (gpm)	Max Hourly Water Demand (gpm)	Peak Hour Water Demand (gpm)
Phase 1	177.5	969	184	276	538
Phase 2	144.7	1,354	257	386	751
Phase 3	133.4	2,012	382	573	1,116
Phase 4	132.5	1,856	353	529	1,030
Phase 5	148.6	962	183	274	534
Total	**736.7**	**7,153**	**1,359**	**2,039**	**3,968**

Estimated Water Storage Volumes

The M3 Eagle water storage calculations are based on four components; peak hour operation, fire flow, irrigation, and well cycling. The operational volume (peak hour storage) has been estimated from residential unit counts. The equation used to calculate the operational storage is ((5.4 x max day rate) / 24 hours). The fire flow volume is 540,000 gallons, based on a 3,000 gpm fire for 3 hours. The

irrigation and well pump cycling storage is referenced from the water rights application. Table 2 below summarizes the storage volume for the development per phase. These are rough estimations that should be used as guidance in our initial planning efforts.

Table 2 - M3 Eagle Residential Water Storage Summary[1]

Land Use Component	Required Peak Storage	Required Irrigation Storage	Required Fire Flow Storage(1)	Pump Cycle Storage	Total Storage
Phase 1	89,477	245,758	540,000	40,960	916,195
Phase 2	125,028	200,345	540,000	33,391	898,764
Phase 3	185,788	184,699	540,000	30,783	941,271
Phase 4	171,383	183,453	540,000	30,576	925,412
Phase 5	88,831	205,745	540,000	34,291	868,866
Total	**660,508**	**1,020,000**	**540,000**	**170,000**	**2,390,508**

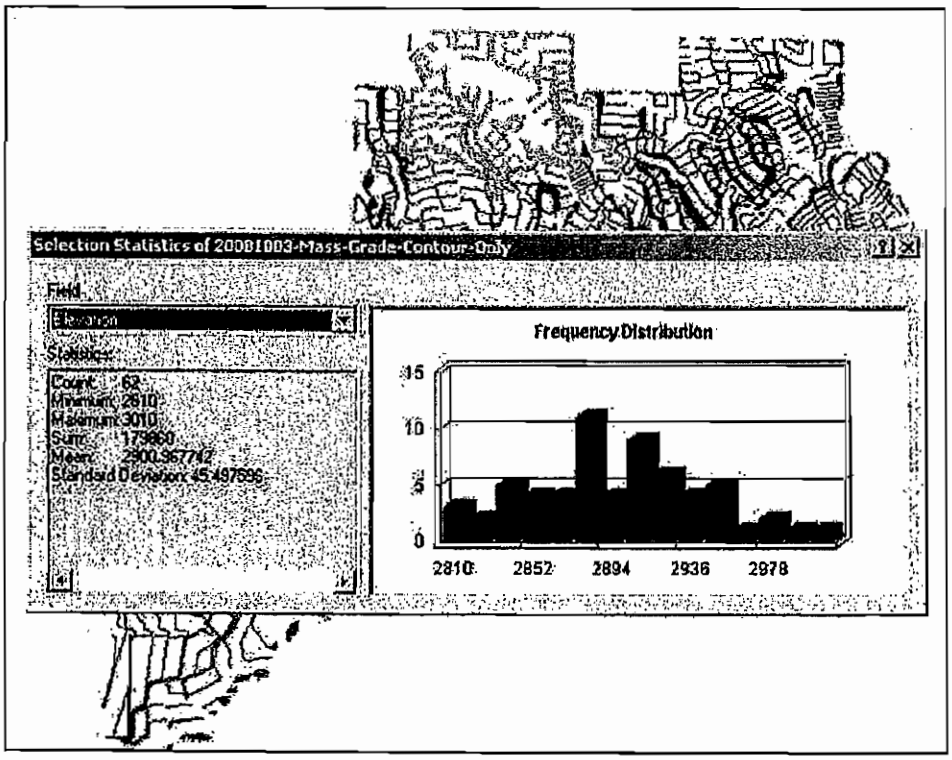
These storage volumes do not include well pump capacity for irrigation. It is assumed for this planning that the irrigation water will go directly to the system and the tanks provide a portion of that irrigation water for operational efficiency.

Preliminary Concept Water System

A backbone water system structure was developed based on available roadway and grading information as detailed in AutoCAD Drawings *M3 Roads concept 10-02-09.dwg* and *x-Mass Grading 10-02-08.dwg* respectively. This system, along the northeast project section area, utilizes available grading and elevation data sets to develop the DTM surface which represents the proposed hydraulic pressure zones. The preliminary system includes a pipe network covering four (4) pressure zones which contains four (4) reservoirs, two pumping stations, 3 to 4 well pumping systems, and multiple PRV's. A hydraulic schematic of the pressure zone and reservoir alternative is attached to this memorandum as Figure 1. This figure graphically illustrates the vertical representation of the development. Phase 1 appears to be serviceable from the lowest reservoir, which is called Phase 1 Reservoir. Service elevations for this reservoir, as depicted on Figure 1, are a high of 2,694 feet to a low of 2,579 feet.

Well #2, as identified on Figure 1 and Figure 2, is planned to pump directly to the second pressure zone reservoir at a high water level of 2,920 feet. This reservoir is planned to act as a forebay in collecting water from the remaining wells (to be determined) and to pump uphill to the final two reservoirs at 3,030 feet and 3,140 feet. It is worth noting that current mass grading, near the highest development location, indicates cuts in grade up to 30 feet. The highest reservoir (HWL=3,140') for the development is planned to be located here and benefits the system by providing gravity flow, rather than a pumped system. Therefore, it would be recommended that a portion of this area be dedicated for a reservoir site with a ground elevation of approximately 3,120 feet. This would minimize the amount of units on a pumped or boosted system at the higher elevations.

A 500-unit parcel is being considered for inclusion into Phase 1. This parcel is located on the northern boundary of M3 Eagle. Below is an elevation analysis of this parcel, based on the mass grading drawing. These elevations have been presented and identified on Figure 1, the hydraulic schematic, to show that significant infrastructure will be required to supply water via gravity to this area, if built in Phase 1. An alternative would be to provide a pumped system to this parcel as a temporary solution, until supporting gravity infrastructure is constructed.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Statistics:
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Minimum: 2810
Maximum: 3010
Sum: 179860
Mean: 2900.967742
Standard Deviation: 45.497596
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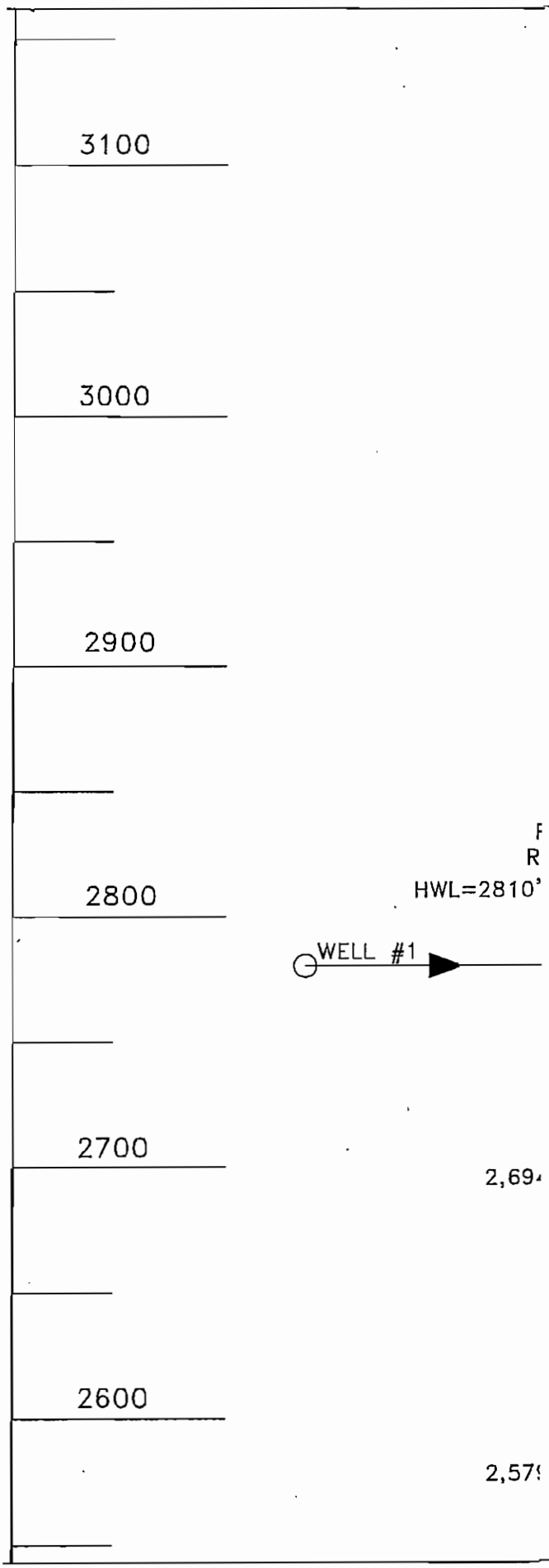
10
5
0
2810
2852
2894
2936
2978



LEGEND

PROPOSED RESERVOIR

Stanley Consultants INC.
A Stanley Group Company
Engineering, Environmental and Construction Services - Worldwide
1940 S. Bonito Way, Ste. 140
Meridian, ID 83642
Ph: (208) 288-0573
Fax: (208) 288-0574

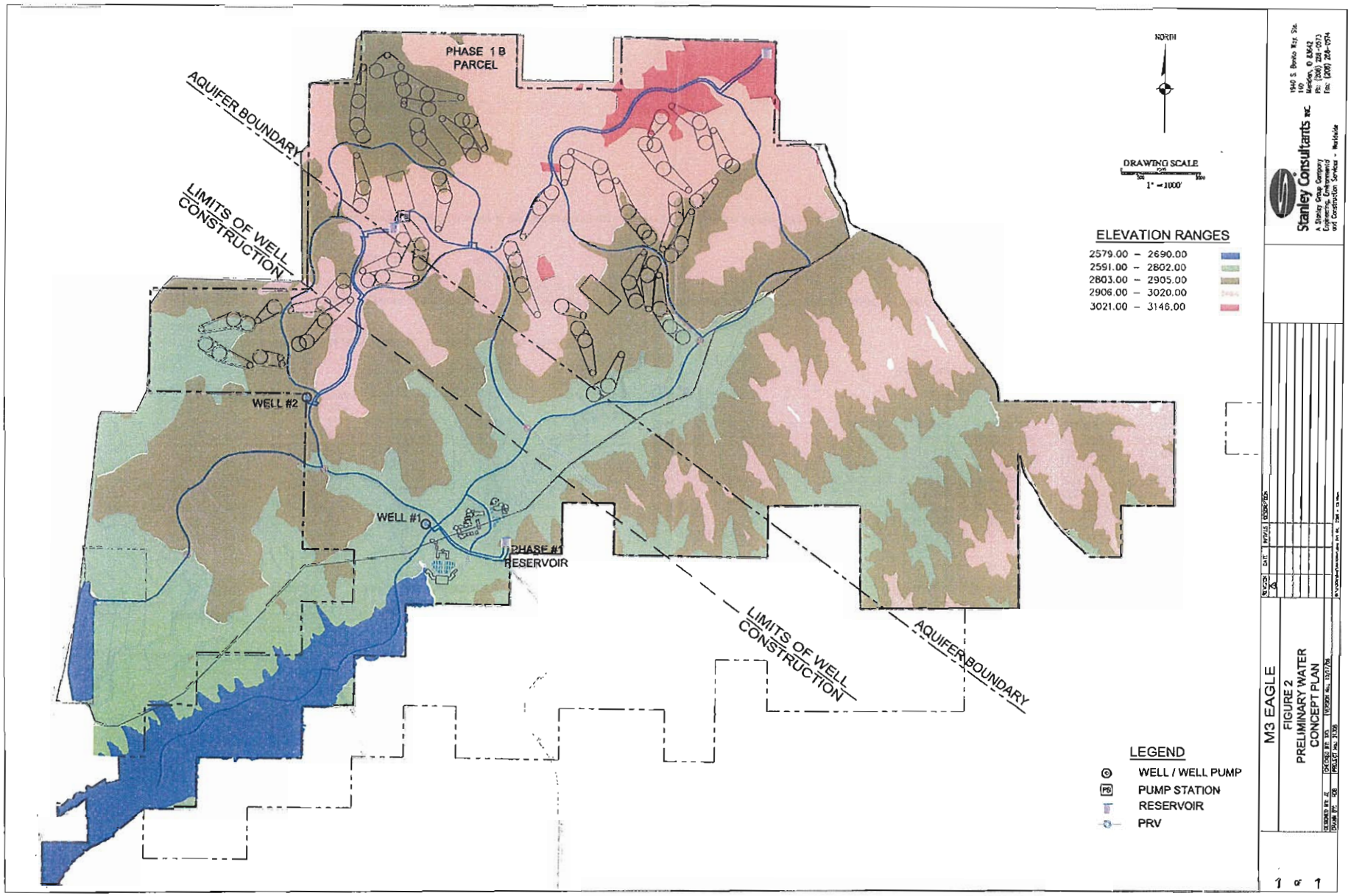
REVISION	DATE	INITIALS	DESCRIPTION
1			

M3 EAGLE

FIGURE 1
PRELIMINARY
HYDRAULIC SCHEMATIC

DESIGNED BY: JZ
DRAWN BY: RDB
CHECKED BY: XXX
PROJECT No.: 21308
VERSION No.: 10/17/08

M3 EAGLE 0032



M3 EAGLE 0033

M3 EAGLE EFFLUENT REUSE

Water Rights Application for Irrigation:

Land Use	Acres
Golf Courses	240
Park and Ballfields	191
Common Area (turf)	84
Common Area (drip)	130
Common Area (drip)	120
Total	**765**

Phase I (Average Daily Flow = .25 mgd)

Month	Days/Month	Evapotranspiration Grass (Turf) Actual ET* mm/day	Grass (Turf) Actual ET mm/month	Grass (Turf) Actual ET Inch/Month	Precipitation** Inches/month	Irrigation Requirements inches/month		Irrigated Acres	Irrigation Requirements (cf/month)	Irrigation Requirements gal/month	Effluent Generated gpd	Effluent Generated gal/month	Change in Irrigation Needs gal/month
Jan	31	0.25	7.75	0.31	0.99	-0.68	No irrigation		0	0	250,000	7,750,000	-7,750,000
Feb	28	0.57	15.96	0.63	0.76	-0.13	No irrigation		0	0	250,000	7,000,000	-7,000,000
March	31	1.47	45.57	1.79	1.15	0.64		240	561,135	4,197,291	250,000	7,750,000	-3,552,709
April	30	3.89	116.7	4.59	1.06	3.53		240	3,079,246	23,032,761	250,000	7,500,000	15,532,761
May	31	5.45	168.95	6.65	1.06	5.59		240	4,871,380	36,437,922	250,000	7,750,000	28,687,922
June	30	6.49	194.7	7.67	0.74	6.93		240	6,033,369	45,129,598	250,000	7,500,000	37,629,598
July	31	6.85	212.35	8.36	0.28	8.08		240	7,039,502	52,655,473	250,000	7,750,000	44,905,473
Aug	31	5.93	183.83	7.24	0.26	6.98		240	6,078,712	45,468,768	250,000	7,750,000	37,718,768
Sept	30	4.63	138.9	5.47	0.55	4.92		240	4,285,001	32,051,805	250,000	7,500,000	24,551,805
Oct	31	2.92	90.52	3.56	0.6	2.96		240	2,582,045	19,313,695	250,000	7,750,000	11,563,695
Nov	30	0.68	20.4	0.80	1.35	-0.55	No irrigation		0	0	250,000	7,500,000	-7,500,000
Dec	31	0.24	7.44	0.29	1.14	-0.85	No irrigation		0	0	250,000	7,750,000	-7,750,000
Total				**47.36**	**9.94**				**34,530,389**	**258,287,312**		**91,250,000**	**167,037,312**

*** Boise WSFO Airport Site (NWS NOAA 101022 (1974 to 2004) mean - University of Idaho website**
**** Intellicast. Com website, Eagle historic weather averages**

During Phase I, there is not enough effluent to water the golf courses. If the effluent is blended with potable for watering approximately 240 acres, the irrigation water will have the following estimated nitrate concentration:
(Note that the Total Nitrogen Limit for the treatment plant is 15 mg/L. All of the nitrogen is assumed to be in the form of nitrates for this evaulation.)

Nitrate Conc. For Potable Water =	0.3	mg/L	167.037 mgd
Nitrate Conc. For WWTF =	15	mg/L max.	91.25 mgd

Blended Water Nitrate Conc. = 5.49

Based on this analysis, there will be no flow to the groundwater if irrigation water is applied at the consumption rate. Therefore, all nitrogen will remain in the soil and will not flow to the groundwater.

M3 EAGLE 0034

Phase 2 (Average Daily Flow = .69 mgd)

Month	Days/Month	Grass (Turf) Actual ET* mm/day	Grass (Turf) Actual ET mm/month	Grass (Turf) Actual ET Inch/Month	Precipitation** Inches/month	Irrigation Requirements inches/month		Irrigated Acres (full build-out)	Irrigation Requirements (cf/month)	Irrigation Requirements gal/month	Effluent Generated gpd	Effluent Generated gal/month	Change in Irrigation Needs gal/month
Jan	31	0.25	7.75	0.31	0.99	-0.68	No irrigation		0	0	690,000	21,390,000	-21,390,000
Feb	28	0.57	15.96	0.63	0.76	-0.13	No irrigation		0	0	690,000	19,320,000	-19,320,000
March	31	1.47	45.57	1.79	1.15	0.64		234	547,107	4092358.416	690,000	21,390,000	-17,297,642
April	30	3.89	116.7	4.59	1.06	3.53		234	3,002,265	22456941.88	690,000	20,700,000	1,756,942
May	31	5.45	168.95	6.65	1.06	5.59		234	4,749,595	35526974.11	690,000	21,390,000	14,136,974
June	30	6.49	194.7	7.67	0.74	6.93		234	5,882,534	44001357.88	690,000	20,700,000	23,301,358
July	31	6.85	212.35	8.36	0.28	8.08		234	6,863,514	51339086.59	690,000	21,390,000	29,949,087
Aug	31	5.93	183.83	7.24	0.26	6.98		234	5,926,744	44332048.45	690,000	21,390,000	22,942,048
Sept	30	4.63	138.9	5.47	0.55	4.92		234	4,177,876	31250509.59	690,000	20,700,000	10,550,510
Oct	31	2.92	90.52	3.56	0.6	2.96		234	2,517,494	18830852.18	690,000	21,390,000	-2,559,148
Nov	30	0.68	20.4	0.80	1.35	-0.55	No irrigation		0	0	690,000	20,700,000	-20,700,000
Dec	31	0.24	7.44	0.29	1.14	-0.85	No irrigation		0	0	690,000	21,390,000	-21,390,000
								Total	33,667,130	251,830,129		251,850,000	-19,871

* Boise WSFO Airport Site (NWS NOAA 101022 (1974 to 2004) mean - University of Idaho website
** Intellicast. Com website, Eagle historic weather averages

During Phase 2, there will be enough effluent to water the golf courses.

Phase 3 (Average Daily Flow = 1.34 mgd)

Month	Days/Month	Grass (Turf) Actual ET* mm/day	Grass (Turf) Actual ET mm/month	Grass (Turf) Actual ET Inch/Month	Precipitation** Inches/month	Irrigation Requirements inches/month		Irrigated Acres (full build-out)	Irrigation Requirements (cf/month)	Irrigation Requirements gal/month	Effluent Generated gpd	Effluent Generated gal/month	Change in Irrigation Needs gal/month
Jan	31	0.25	7.75	0.31	0.99	-0.68	No irrigation		0	0	1,340,000	41,540,000	-41,540,000
Feb	28	0.57	15.96	0.63	0.76	-0.13	No irrigation		0	0	1,340,000	37,520,000	-37,520,000
March	31	1.47	45.57	1.79	1.15	0.64		454	1,062,533	7,947,745	1,340,000	41,540,000	-33,592,255
April	30	3.89	116.7	4.59	1.06	3.53		454	5,830,681	43,613,492	1,340,000	40,200,000	3,413,492
May	31	5.45	168.95	6.65	1.06	5.59		454	9,224,161	68,996,724	1,340,000	41,540,000	27,456,724
June	30	6.49	194.7	7.67	0.74	6.93		454	11,424,435	85,454,774	1,340,000	40,200,000	45,254,774
July	31	6.85	212.35	8.36	0.28	8.08		454	13,329,590	99,705,333	1,340,000	41,540,000	58,165,333
Aug	31	5.93	183.83	7.24	0.26	6.98		454	11,510,295	86,097,006	1,340,000	41,540,000	44,557,006
Sept	30	4.63	138.9	5.47	0.55	4.92		454	8,113,827	60,691,428	1,340,000	40,200,000	20,491,428
Oct	31	2.92	90.52	3.56	0.6	2.96		454	4,889,209	36,571,285	1,340,000	41,540,000	-4,968,715
Nov	30	0.68	20.4	0.80	1.35	-0.55	No irrigation		0	0	1,340,000	40,200,000	-40,200,000
Dec	31	0.24	7.44	0.29	1.14	-0.85	No irrigation		0	0	1,340,000	41,540,000	-41,540,000
								Total	65,384,731	489,077,787		489,100,000	-22,213

* Boise WSFO Airport Site (NWS NOAA 101022 (1974 to 2004) mean - University of Idaho website
** Intellicast. Com website, Eagle historic weather averages

During Phase 3, there will be enough effluent to water approximately 455 acres.

M3 EAGLE 0035

Phase 4 (Average Daily Flow = 2.02 mgd)

Month	Days/Month	Grass (Turf) Actual ET* mm/day	Grass (Turf) Actual ET mm/month	Grass (Turf) Actual ET inch/Month	Precipitation** Inches/month	Irrigation Requirements inches/month		Irrigated Acres (full build-out)	Irrigation Requirements (cf/month)	Irrigation Requirements gal/month	Effluent Generated gpd	Effluent Generated gal/month	Change in Irrigation Needs gal/month
Jan	31	0.25	7.75	0.31	0.99	-0.68	No irrigation		0	0	2,020,000	62,620,000	-62,620,000
Feb	28	0.57	15.96	0.63	0.76	-0.13	No irrigation		0	0	2,020,000	56,560,000	-56,560,000
March	31	1.47	45.57	1.79	1.15	0.64		685	1,601,807	11,981,516	2,020,000	62,620,000	-50,638,484
April	30	3.89	116.7	4.59	1.06	3.53		685	8,789,965	65,748,935	2,020,000	60,600,000	5,148,935
May	31	5.45	168.95	6.65	1.06	5.59		685	13,905,760	104,015,085	2,020,000	62,620,000	41,395,085
June	30	6.49	194.7	7.67	0.74	6.93		685	17,222,754	128,826,198	2,020,000	60,600,000	68,226,198
July	31	6.85	212.35	8.36	0.28	8.08		685	20,094,844	150,309,437	2,020,000	62,620,000	87,689,437
Aug	31	5.93	183.83	7.24	0.26	6.98		685	17,352,191	129,794,386	2,020,000	62,620,000	67,174,386
Sept	30	4.63	138.9	5.47	0.55	4.92		685	12,231,891	91,484,548	2,020,000	60,600,000	30,894,548
Oct	31	2.92	90.52	3.56	0.6	2.96		685	7,370,662	55,132,551	2,020,000	62,620,000	-7,487,449
Nov	30	0.68	20.4	0.80	1.35	-0.55	No irrigation		0	0	2,020,000	60,600,000	-60,600,000
Dec	31	0.24	7.44	0.29	1.14	-0.85	No irrigation		0	0	2,020,000	62,620,000	-62,620,000
								Total	98,569,874	737,302,656		737,300,000	2,656

* Boise WSFO Airport Site (NWS NOAA 101022 (1974 to 2004) mean - University of Idaho website
** Intellicast. Com website, Eagle historic weather averages

During Phase 4, there will be enough effluent to water approximately 685 acres.

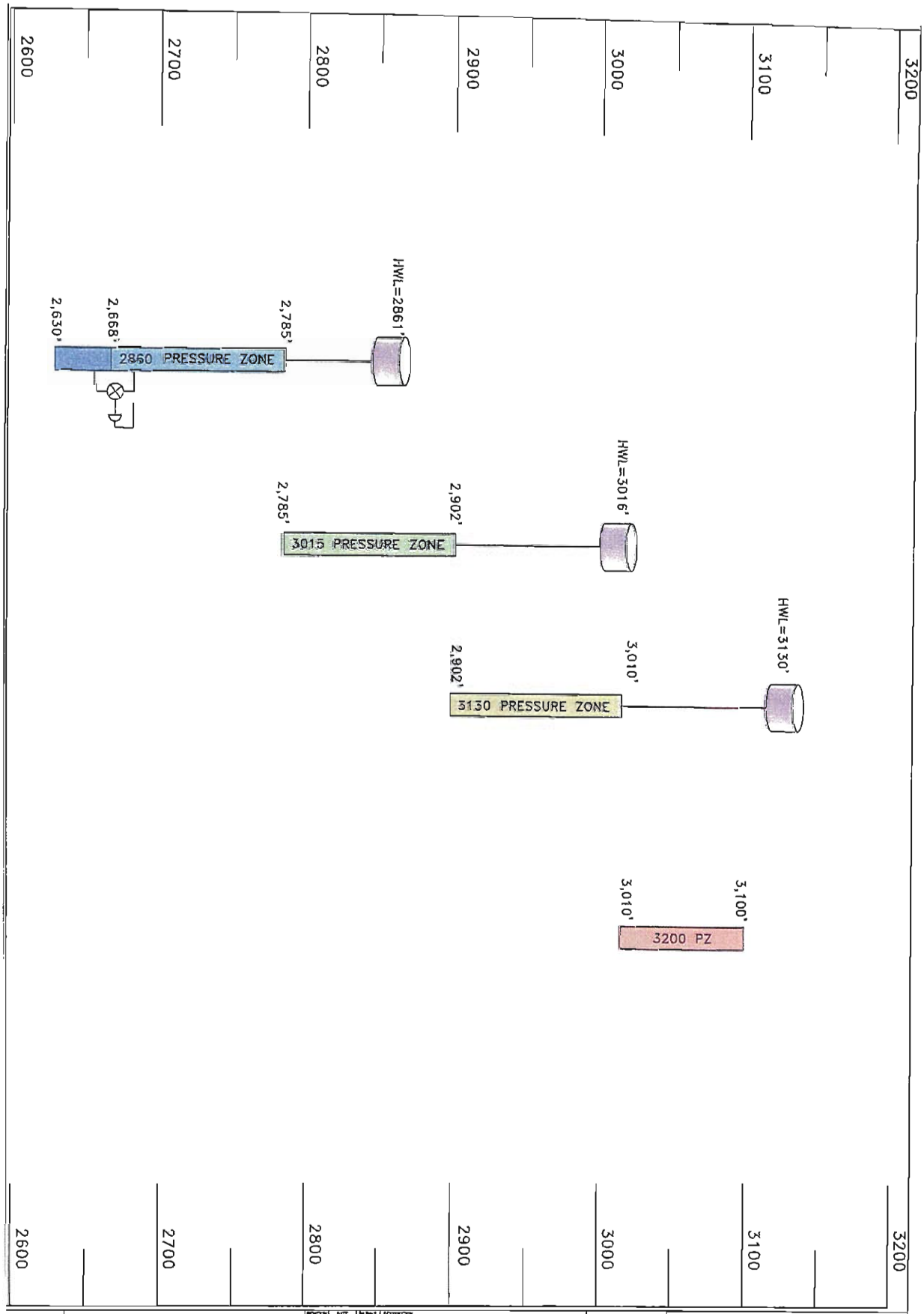
Phase 5 (Average Daily Flow = 2.5 mgd)

Month	Days/Month	Grass (Turf) Actual ET* mm/day	Grass (Turf) Actual ET mm/month	Grass (Turf) Actual ET inch/Month	Precipitation** Inches/month	Irrigation Requirements inches/month		Irrigated Acres (full build-out)	Irrigation Requirements (cf/month)	Irrigation Requirements gal/month	Effluent Generated gpd	Effluent Generated gal/month	Monthly Irrigation Needs gal/month
Jan	31	0.25	7.75	0.31	0.99	-0.68	No irrigation		0	0	2,500,000	77,500,000	-77,500,000
Feb	28	0.57	15.96	0.63	0.76	-0.13	No irrigation		0	0	2,500,000	70,000,000	-70,000,000
March	31	1.47	45.57	1.79	1.15	0.64		765	1,788,618	13,378,864	2,500,000	77,500,000	-64,121,136
April	30	3.89	116.7	4.59	1.06	3.53		765	9,815,097	73,416,925	2,500,000	75,000,000	-1,583,075
May	31	5.45	168.95	6.65	1.06	5.59		765	15,527,524	116,145,877	2,500,000	77,500,000	38,645,877
June	30	6.49	194.7	7.67	0.74	6.93		765	19,231,363	143,850,593	2,500,000	75,000,000	68,850,593
July	31	6.85	212.35	8.36	0.28	8.08		765	22,438,412	167,839,322	2,500,000	77,500,000	90,339,322
Aug	31	5.93	183.83	7.24	0.26	6.98		765	19,375,895	144,931,697	2,500,000	77,500,000	67,431,697
Sept	30	4.63	138.9	5.47	0.55	4.92		765	13,658,440	102,165,128	2,500,000	75,000,000	27,165,128
Oct	31	2.92	90.52	3.56	0.6	2.96		765	8,230,268	61,562,401	2,500,000	77,500,000	-15,937,599
Nov	30	0.68	20.4	0.80	1.35	-0.55	No irrigation		0	0	2,500,000	75,000,000	-75,000,000
Dec	31	0.24	7.44	0.29	1.14	-0.85	No irrigation		0	0	2,500,000	77,500,000	-77,500,000
								Total	110,065,616	823,290,807		912500000	-89,209,193

* Boise WSFO Airport Site (NWS NOAA 101022 (1974 to 2004) mean - University of Idaho website
** Intellicast. Com website, Eagle historic weather averages

During Phase 5, effluent production exceeds consumptive use by turf grass.

M3 EAGLE 0036



M3 EAGLE
ALTERNATIVE 3
EXHIBIT B
HYDRAULIC SCHEMATIC

Stanley Consultants INC.
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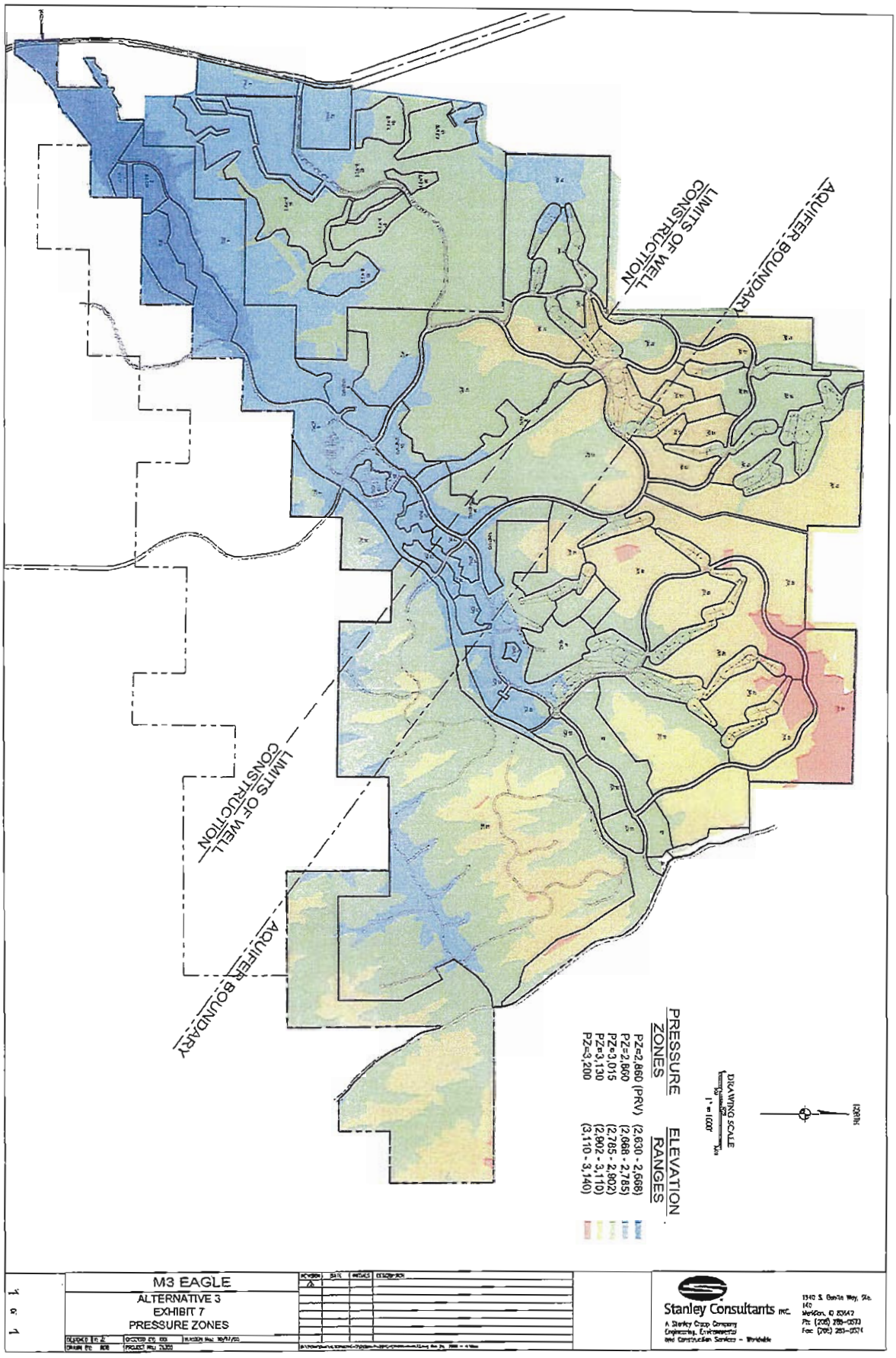
LIMITS OF WELL CONSTRUCTION
AQUIFER BOUNDARY
LIMITS OF WELL CONSTRUCTION
AQUIFER BOUNDARY
PRESSURE ZONES
ELEVATION RANGES
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PZ=2,860 (2,668 - 2,785)
PZ=3,015 (2,785 - 2,802)
PZ=3,130 (2,802 - 3,110)
PZ<3,200 (3,110 - 3,140)
DRAWING SCALE
1" = 1000'
NORTH
M3 EAGLE
ALTERNATIVE 3
EXHIBIT 7
PRESSURE ZONES
Stanley Consultants INC.
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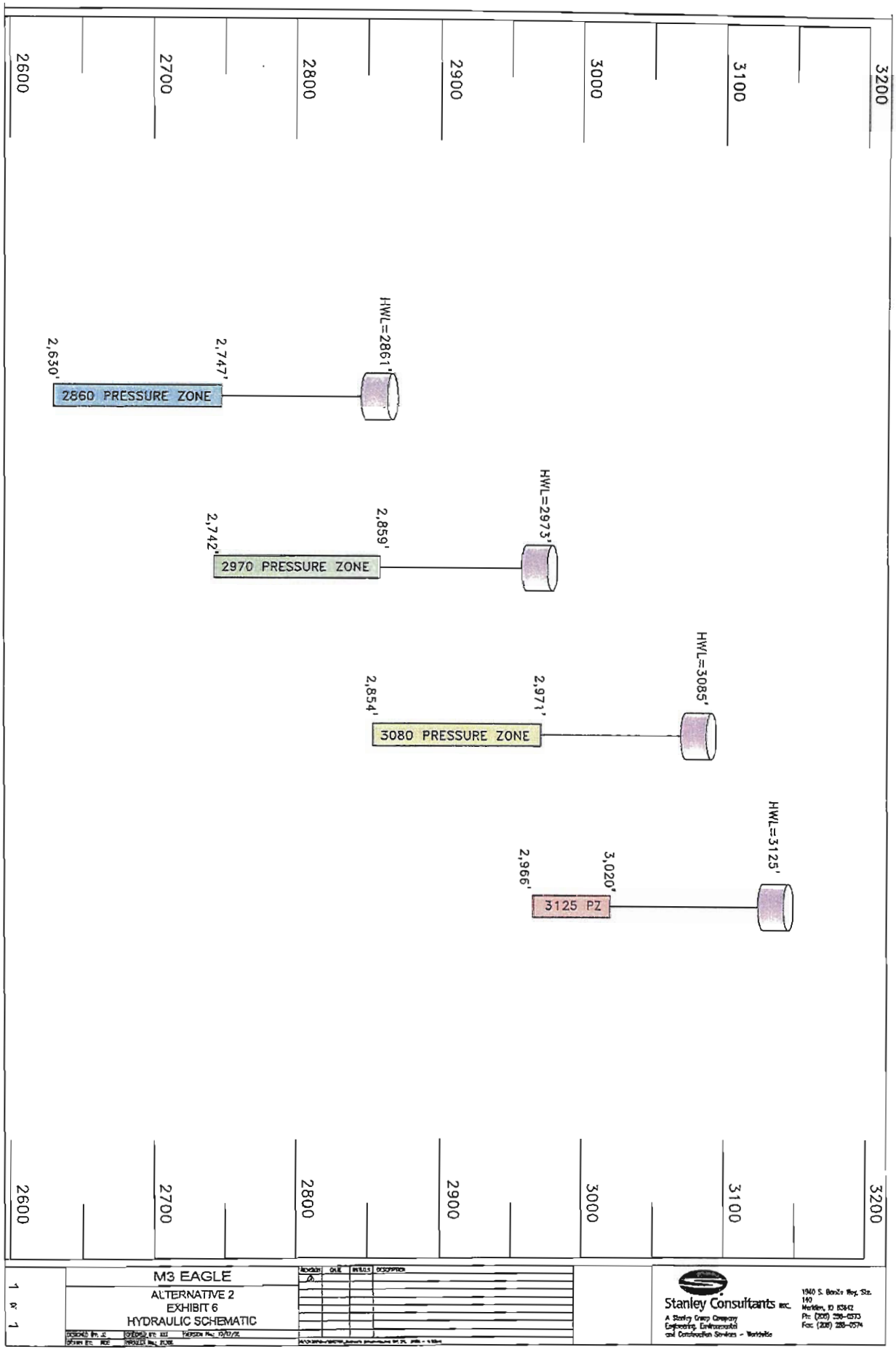
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2970 PRESSURE ZONE
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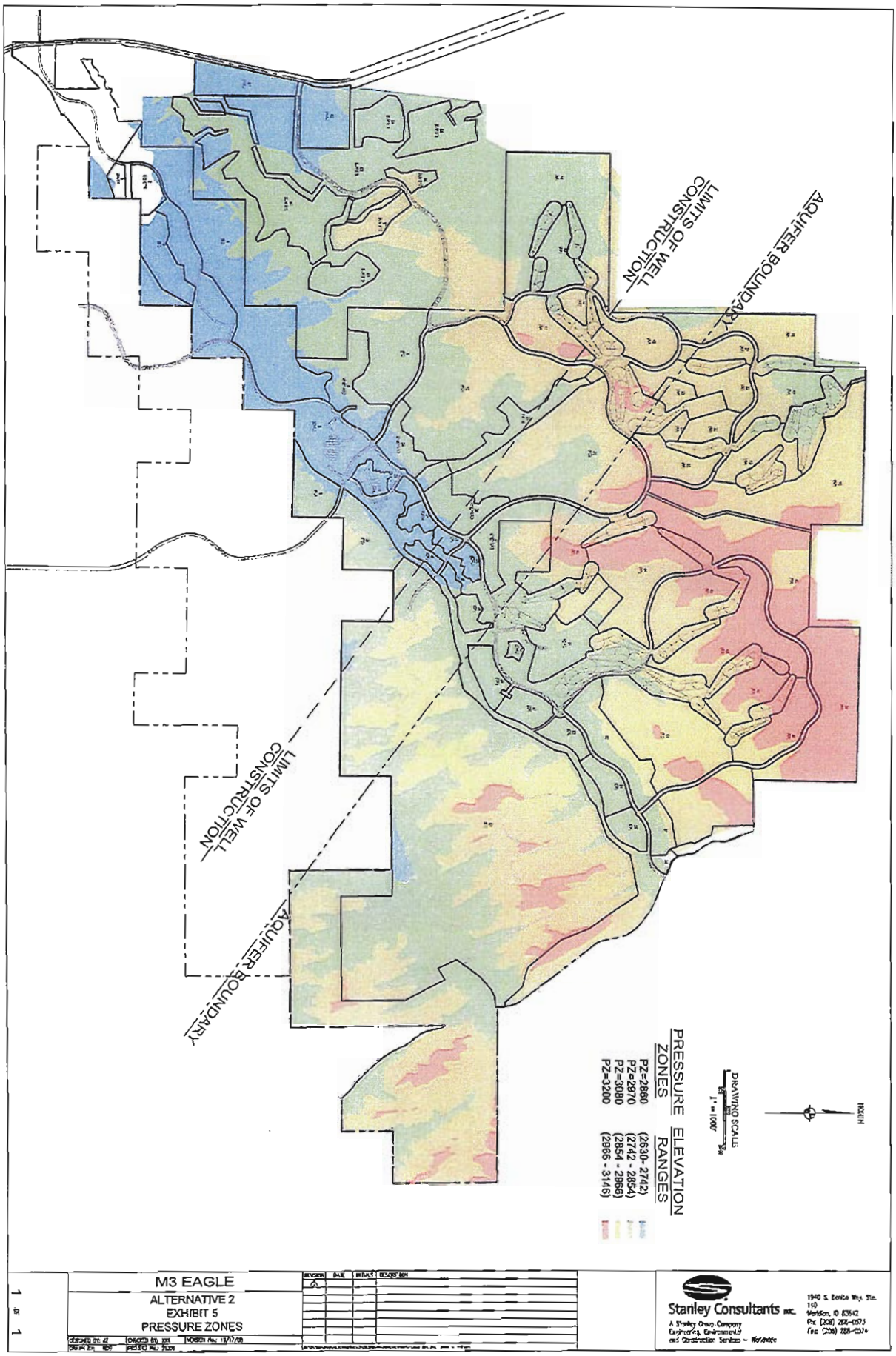
3,020'
3125 PZ
M3 EAGLE
ALTERNATIVE 2
EXHIBIT 6
HYDRAULIC SCHEMATIC
Stanley Consultants inc.
A Stanley Group Company
Engineering, Environmental
and Construction Services - Worldwide



M3 EAGLE
ALTERNATIVE 2
EXHIBIT 5
PRESSURE ZONES

Stanley Consultants INC.
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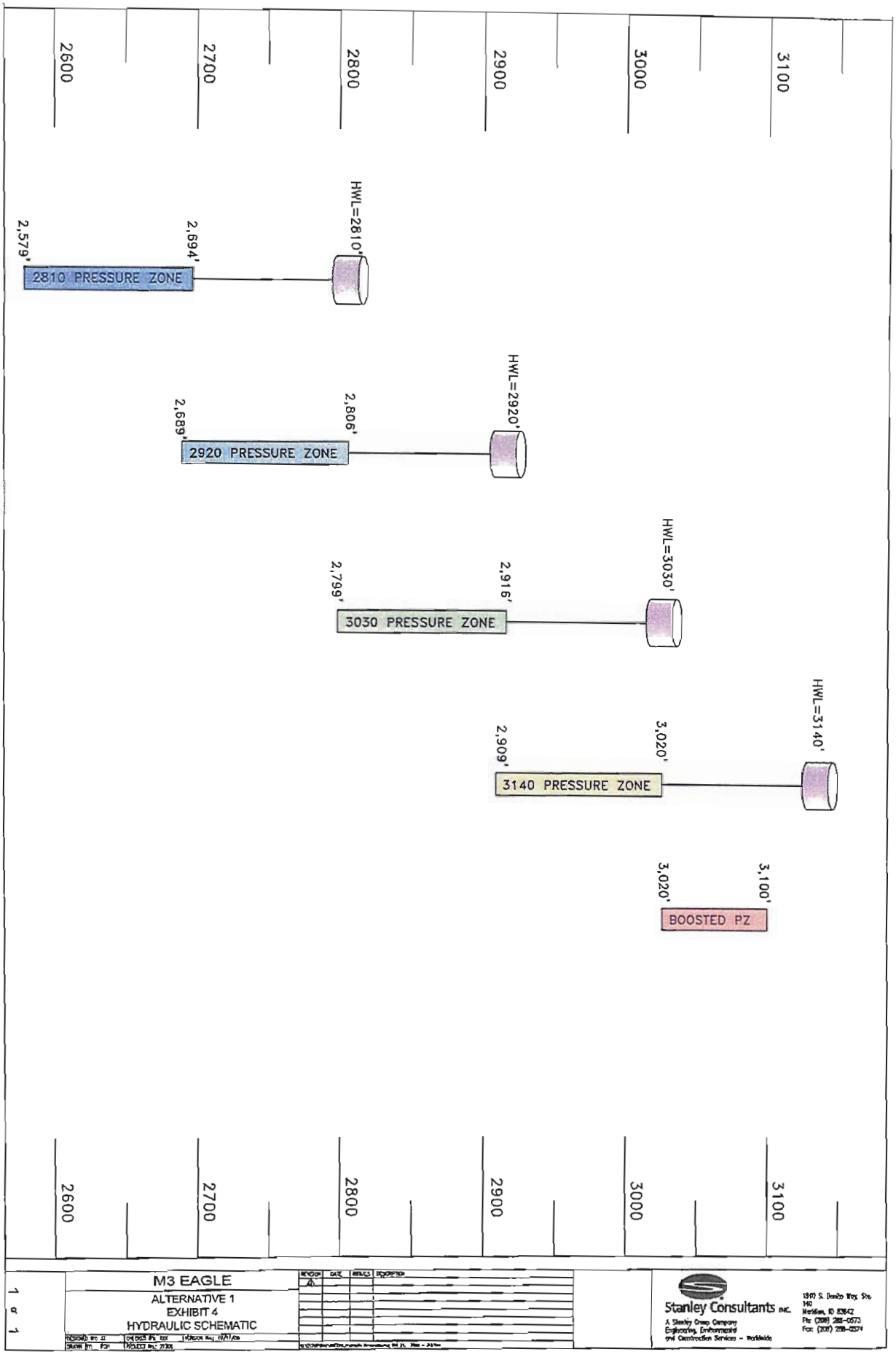
M3 EAGLE 0040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2700
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3000
3100
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2,694'
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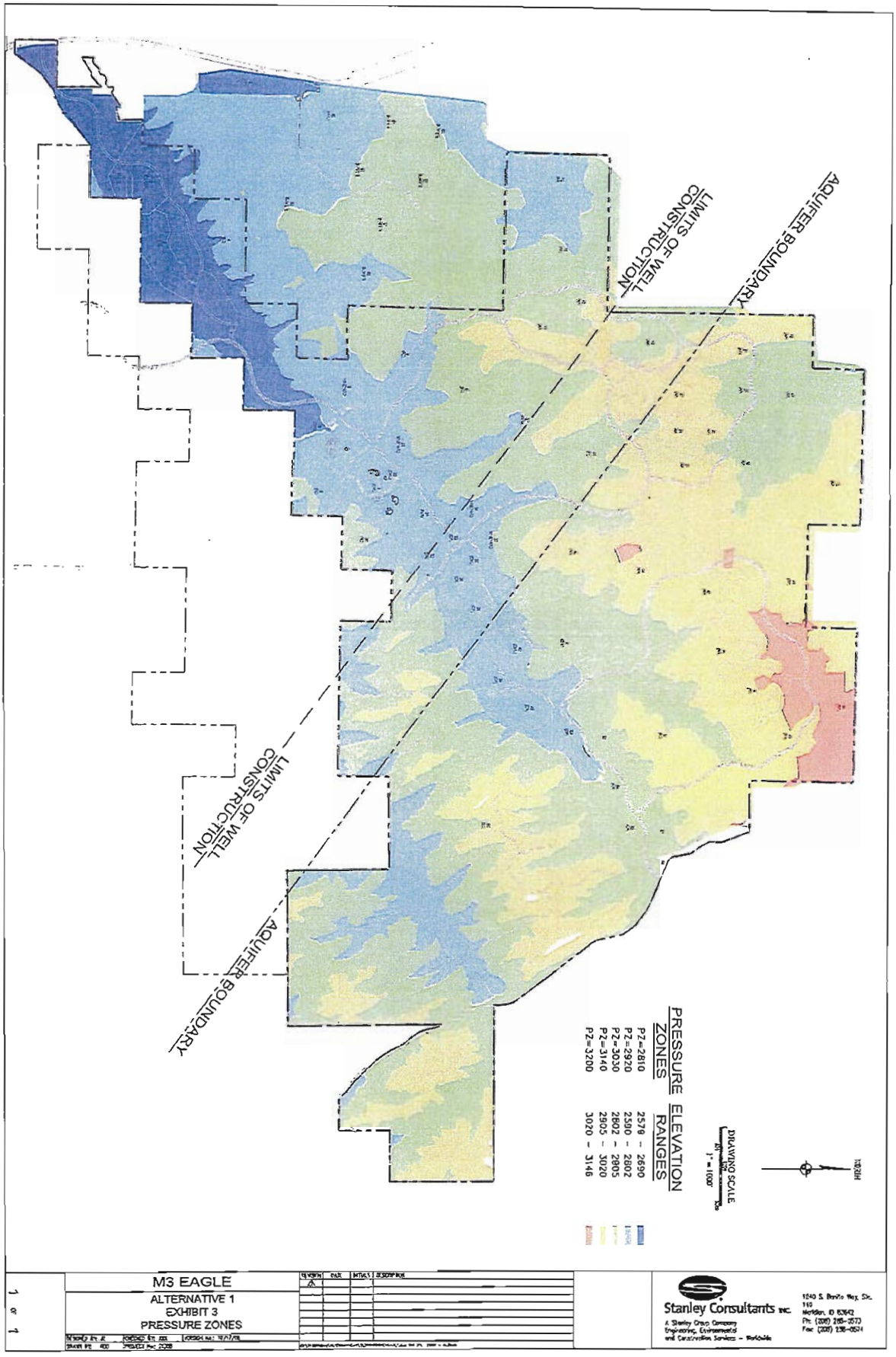
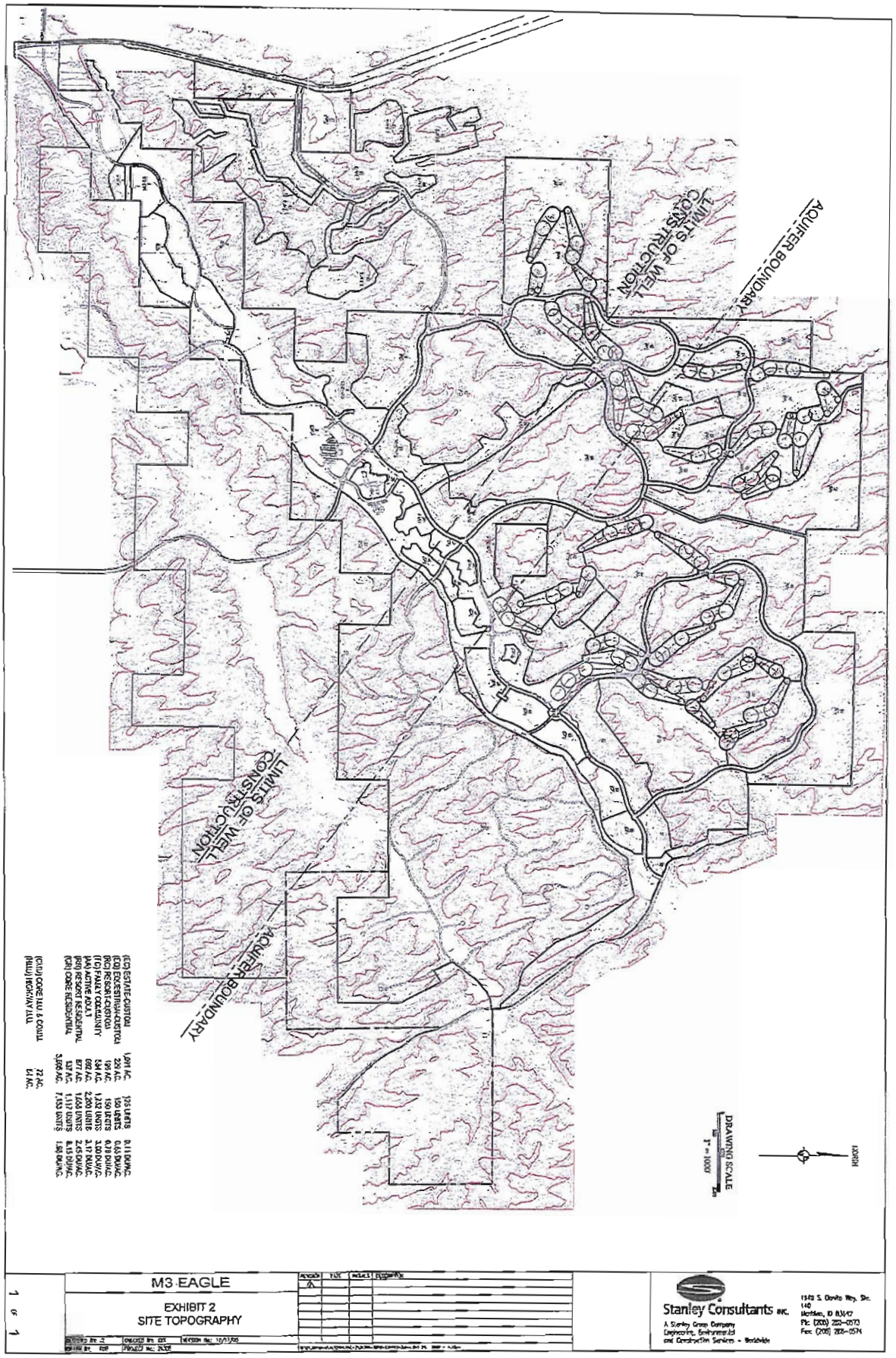
2920 PRESSURE ZONE
HWL=3030'
2,799'
2,916'
3030 PRESSURE ZONE
HWL=3140'
2,909'
3,020'
3140 PRESSURE ZONE
3,020'
3,100'
BOOSTED PZ
M3 EAGLE
ALTERNATIVE 1
EXHIBIT 4
HYDRAULIC SCHEMATIC
Stanley Consultants INC.

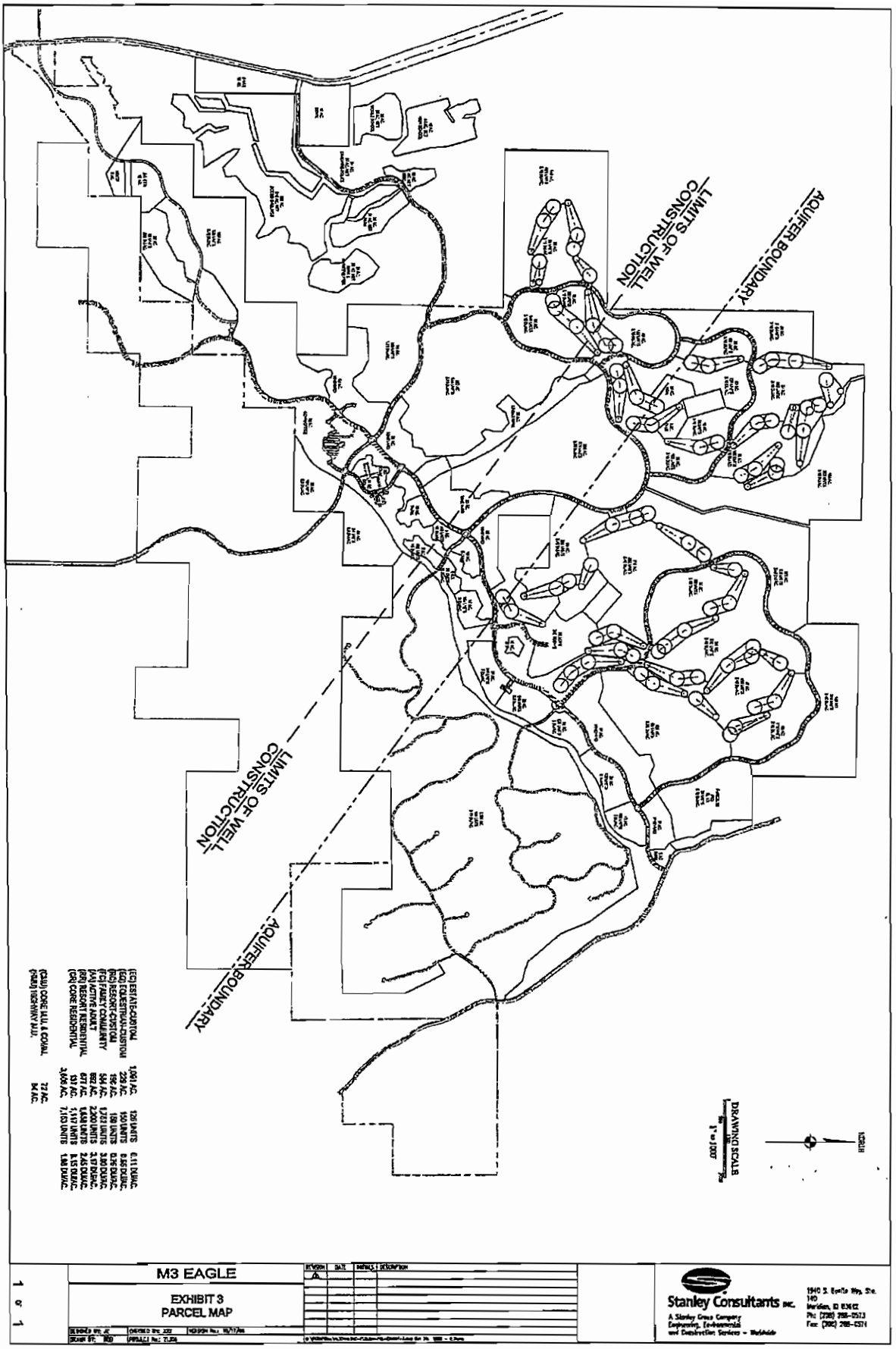


M3 EAGLE
ALTERNATIVE 1
EXHIBIT 3
PRESSURE ZONES

Stanley Consultants INC.
A Stanley Group Company
Engineering, Environmental and Construction Services – Worldwide
1240 S. Bonito Way, Ste. 110
Meridian, ID 83642
Ph: (208) 288-3573
Fax: (208) 288-0524

1 of 1


AQUIFER BOUNDARY
LIMITS OF WELL CONSTRUCTION
AQUIFER BOUNDARY
LIMITS OF WELL CONSTRUCTION
DRAWING SCALE
1" = 1000'
NORTH
M3 EAGLE
EXHIBIT 2
SITE TOPOGRAPHY
Stanley Consultants INC.
A Stanley Group Company
Engineering, Environmental and Construction Services - Worldwide
1340 S. Cloverdale Way, Ste. 140
Meridian, ID 83642
Ph: (208) 288-0570
Fax: (208) 288-0574
1 of 1



M3 EAGLE 0044

Stanley Consultants

A Stanley Group Company
Engineering, Environmental and Construction Services - Worldwide

Meeting Agenda

Project: **M3 Eagle Water and Wastewater Master Plans**
Stanley Consulting Project No. 21308
Date/Time: **October 30, 2008, 9:30 a.m.**
Place: **Stanley Consultants – Meridian Office**

Discussion Topics for Water Facility Plan

1) **Introductions**

2) **General**
   a) Parcel Exhibit
   b) Topo Exhibit
   c) Parcel Distribution Exhibit

3) **Pressure Zones**
   a) Alternative #1 – High to Low Approach
      i) Pressure Zone Exhibit
      ii) Pressure Zone Hydraulic Schematic Exhibit
   b) Alternative #2 – Low to High Approach
      i) Pressure Zone Exhibit
      ii) Pressure Zone Hydraulic Schematic Exhibit
   c) Alternative #3 – Combination Approach
      i) Pressure Zone Exhibit
      ii) Pressure Zone Hydraulic Schematic Exhibit

4) **Demands**
   a) Water Right Application Reference
   b) Residential Demands
   c) Commercial and Other Demands
   d) Demands per Alternative #3 Pressure Zone

5) **System Layout**
   a) Gravity System
   b) Pump/Well System
   c) Combination System

6) **Discussion/Questions**

(End of Videoconference with Las Vegas Office)

Discussion Topics for Wastewater Facility Plan

1) **Sewer System – Designed for basements?**

2) **Status of Nutrient Pathogen Study**

3) **Eagle Sewer District**
   a) Status of Agreement
   b) Participation in Design and Planning Process

4) **SBR and IFAS Processes**
   a) Equipment Comparison – Phase I and Phase V
   b) Phasing Plan
   c) Phase I Opinion of Cost
   d) Phase V Total Opinion of Cost
   e) Operation and Maintenance Costs
   f) Manufacturer's Experience with Nutrient Removal Facilities

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M3 Eagle Development
Eagle, Idaho
Design Wastewater Flows and Organic Loadings

	Phase I 2011-2014	Phase 2 2015-2018	Phase 3 2019-2022	Phase 4 2023-2026	Phase 5 2027-2030
Avg. Daily Flow, MGD	0.25	0.69	1.34	2.02	2.50
Peak Month Flow, MGD	0.33	0.89	1.74	2.63	3.25
Peak Day Flow, MGD	0.51	1.37	2.68	4.05	5.01
Peak Hour Flow, MGD	0.89	2.18	3.87	5.53	6.67
Avg. Day BOD5 Loading, lbs/day	528	1433	2791	4218	5219
Peak Month BOD5 Loading, lbs/day	687	1862	3629	5483	6785
Avg. Day TSS Loading, lbs/day	528	1433	2791	4218	5219
Peak Month TSS Loading, lbs/day	687	1862	3629	5483	6785
Avg.Day TKN Loading, lbs/day	85	229	447	675	835
Peak Month TKN Loading, lbs/day	110	298	581	877	1086

Note: Flows and loadings include estimated school flows for 5,153 family dwelling units.

M3 Eagle WWTP - Phase I (Avg. Flow - 0.25 MGD, Peak Month Flow - 0.33 MGD)

SBR Option

Liquids Processing

Plant Lift Station
2 Ea. 1 MGD Fine Screens
2 Ea. 60' x 60' SBR Basins
1 Ea. 60' x 10' post equalization basin
2 Ea. 4 disk cloth filters
UV Disinfection w/ 2 channels w/1 MGD capacity

Solids Processing

2 Ea. 60' x 60' aerobic digesters
Sludge Pump Room (below grade structure)
1 Each Screw Press
Sludge Conveyor

IFAS Option

Liquids Processing

Plant Lift Station
2 Ea. 1MGD Fine Screens
2 Ea. STM Aerotor Treatment Trains
2 Ea. 25-foot Diameter Clarifiers
RAS/WAS Pump Station
2 Ea. 4 Disk Cloth Filters
UV Disinfection w/2 channels w/1 MGD Capacity

Solids Processing

2 Ea. 60' x 60' aerobic digesters
Sludge Pump Room (below grade structure)
1 Each Screw Press
Sludge Conveyor

M3 Eagle WWTP - Phase V (Avg. Flow - 2.5 MGD, Peak Month Flow - 3.25 MGD)

SBR Option

Liquids Processing

Plant Lift Station (Upgrade Pumps)
3 Ea. 3 MGD Fine Screens
2 Ea. 7' Diam. Grit Vortex Units/Classifiers
SBR Process
- 4 Each 80' x 80' SBR Basins
- 1 Each 160' x 15' post equalization basin

3 Each 10 disk Cloth Filter Units
UV Disinfection w/ 3 channels w/3.3 MGD Capacity per channel

Solids Processing

4 Ea. 60' x 60' aerobic digesters (Phase I SBRs)
Sludge Pump Room (Existing Phase I)
2 Ea. Screw Presses (1 existing during Phase 1)
Sludge Conveyor (Existing)

IFAS Option

Liquids Processing

Plant Lift Station (Upgrade Pumps)
3 Ea. 3 MGD Fine Screens
2 Ea. 7' Diam. Grit Vortex Units/Classifiers
IFAS Process
- 2 Ea. STM Aerotor Treatment Trains (0.33 MGD Capacity - Phase I)
- 5 Ea. STM Aerotor Treatment Trains (3.75 MGD Capacity) - Includes one redundant train
- 2 Ea. 25-foot Diameter Clarifiers (Phase I)
- 4 Ea. 55-foot Diameter Clarifiers (Phase V) - includes one redundant clarifier

RAS/WAS Pump Station
3 Each 10 disk Cloth Filter Units
UV Disinfection w/ 3 channels w/3.3 MGD Capacity per channel

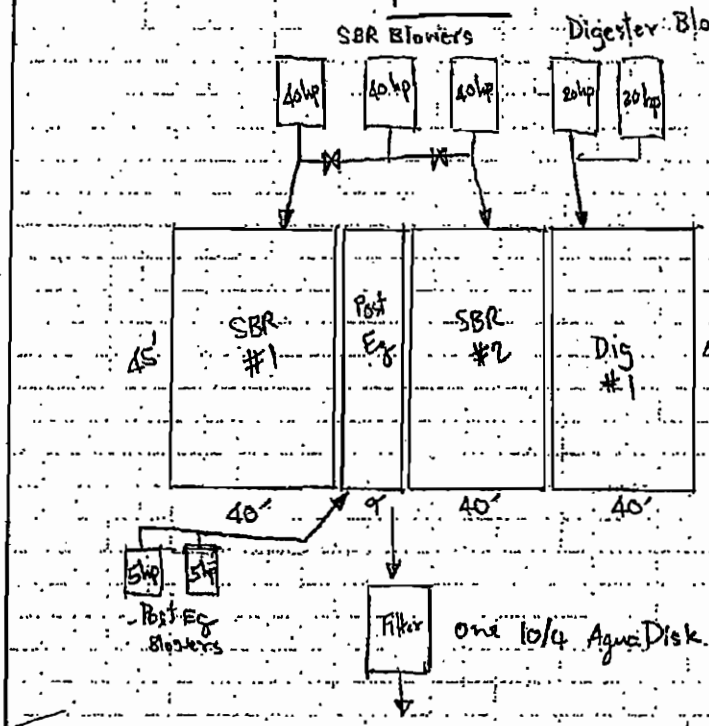
Solids Processing

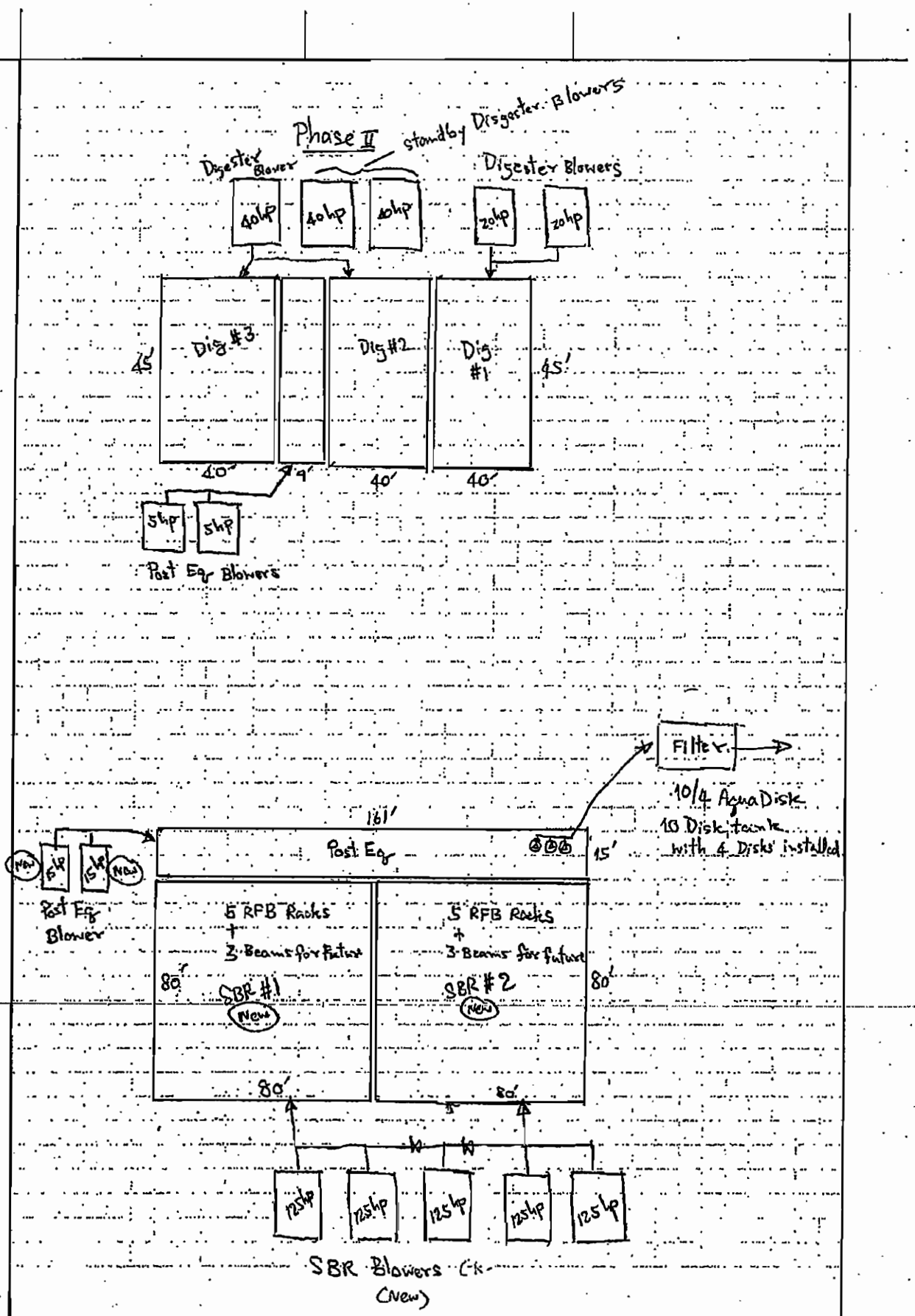
4 Each 60' x 60' aerobic digesters
Sludge Pump Room (below grade structure)
1 Each Screw Press
Sludge Conveyor

Aqua Aerobics

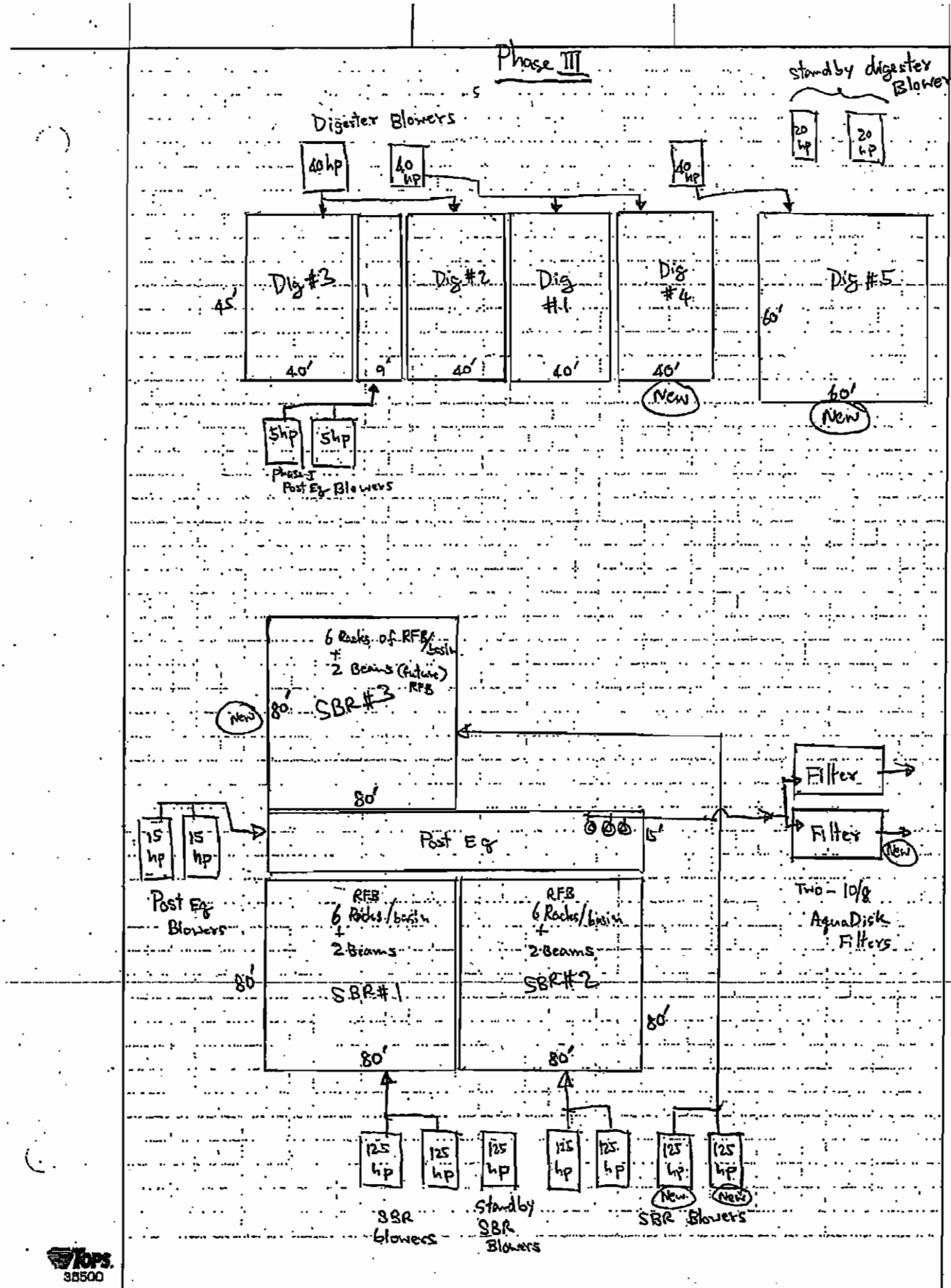
SBR

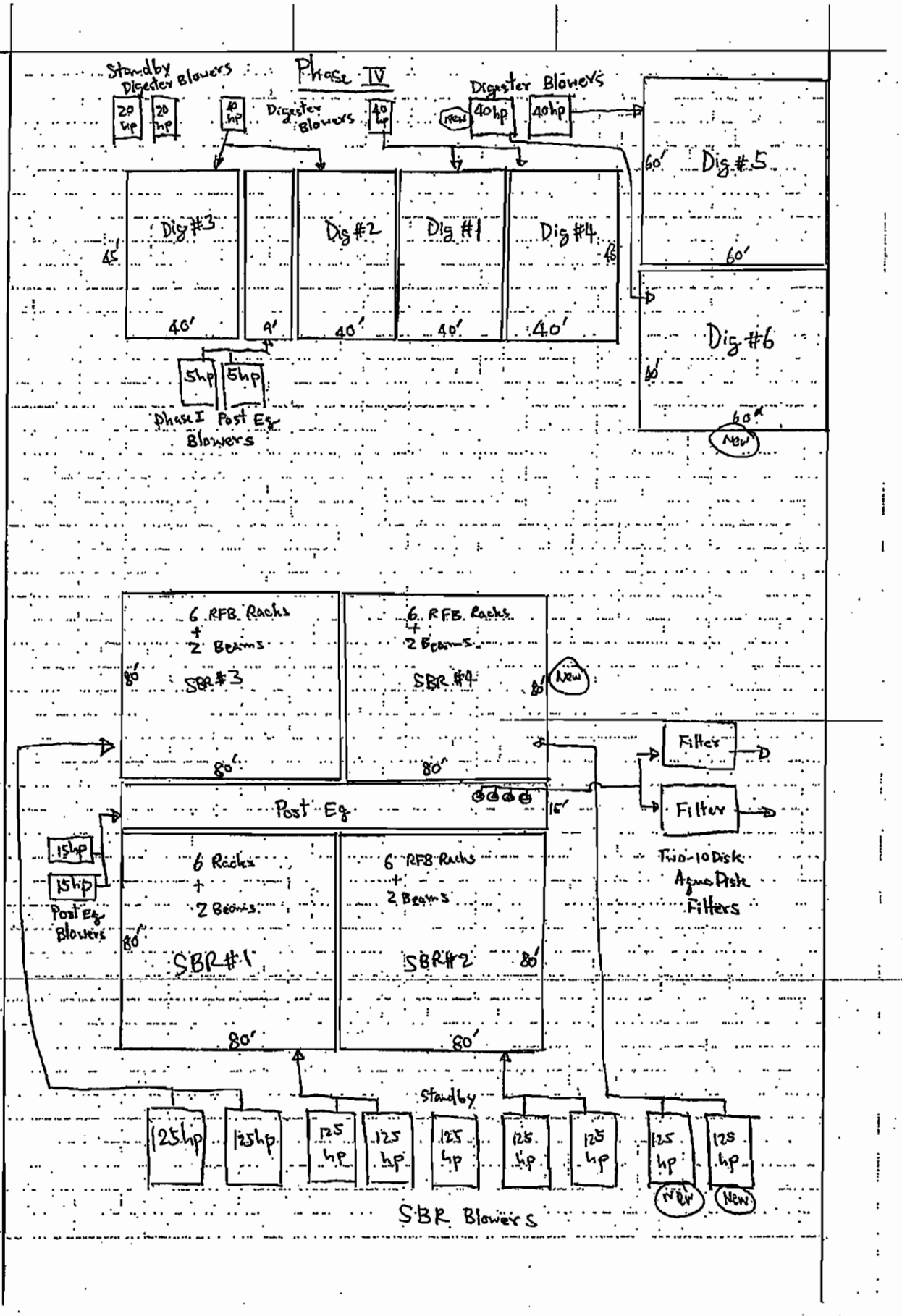
Phase I



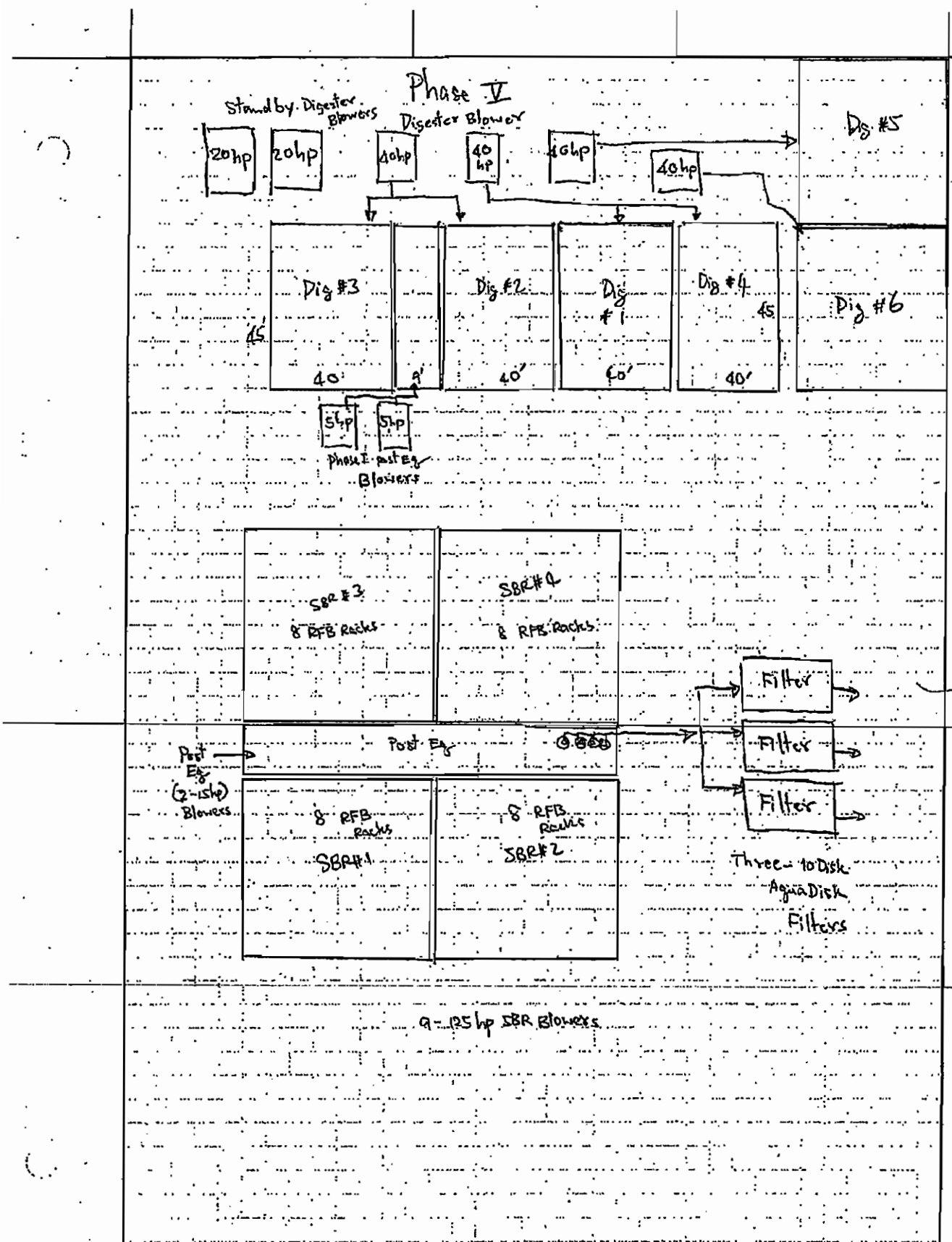


M3 EAGLE 0051

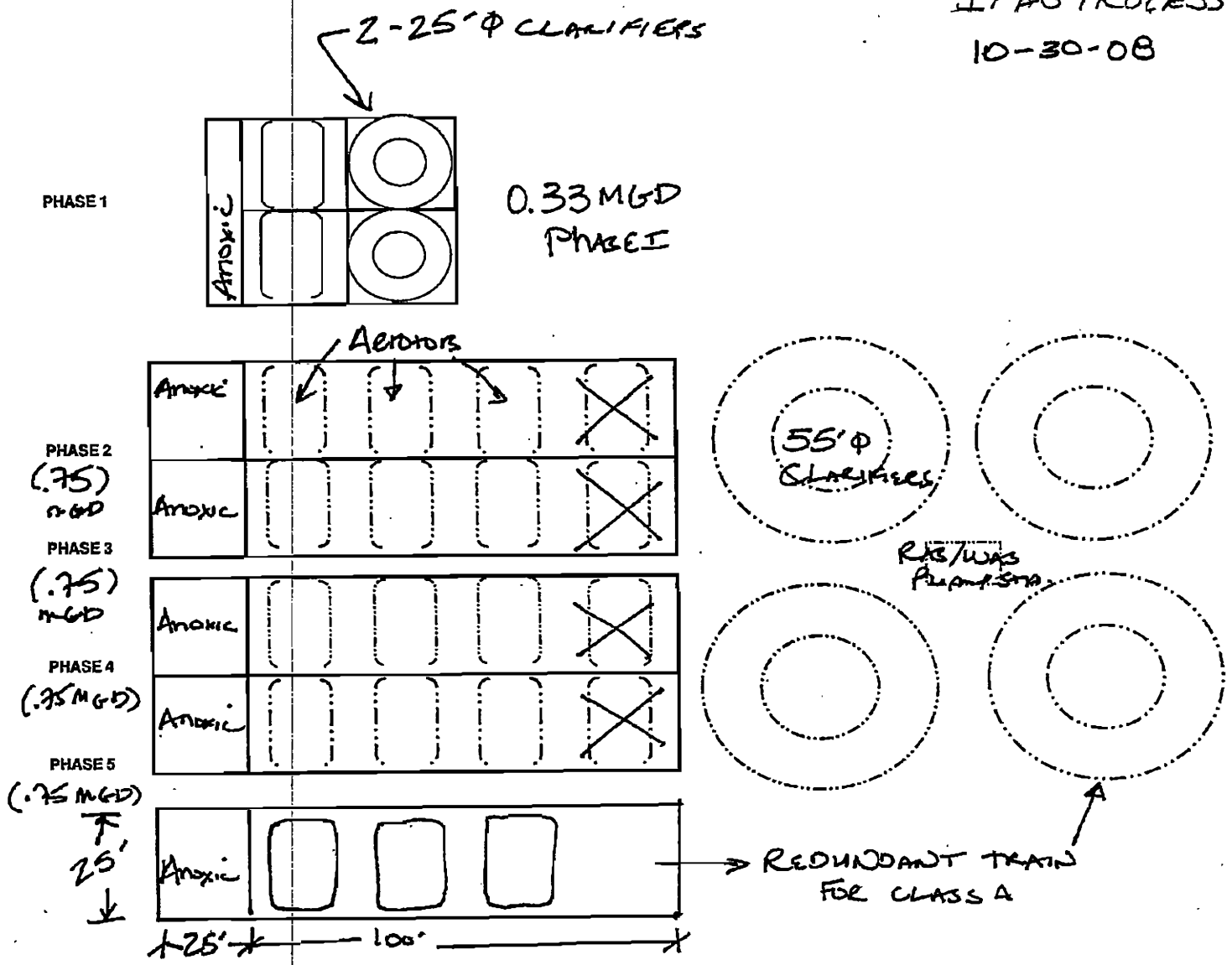

Phase III
standby digester Blower
Digester Blowers
40 hp
40 hp
40 hp
20 hp
20 hp
Dig #3
Dig #2
Dig #1
Dig #4
Dig #5
45'
40'
9'
40'
40'
40'
60'
New
60'
New
5hp
5hp
Phase I Post Eq Blowers
6 Racks of RFB/basin
+
2 Beams (future) RFB
New
80'
SBR #3
80'
Filter
Filter
New
Two - 10/8 AquaDisk Filters
15 hp
15 hp
Post Eq Blowers
Post Eq
15'
RFB
6 Racks/basin
+
2 Beams
SBR #1
80'
80'
RFB
6 Racks/basin
+
2 Beams
SBR #2
80'
80'
125 hp
125 hp
125 hp
125 hp
125 hp
125 hp
125 hp
SBR blowers
Standby SBR Blowers
New
New
SBR Blowers


Standby Digester Blowers
20 hp
20 hp
Phase IV
40 hp
Digester Blowers
40 hp
Digester Blowers
New
40hp
40hp
Dig #5
60'
60'
Dig #3
Dig #2
Dig #1
Dig #4
45'
40'
9'
40'
40'
40'
Dig #6
60'
60'
New
5hp
5hp
Phase I Post Eq Blowers
6 RFB Racks + 2 Beams
SBR #3
80'
80'
6 RFB Racks + 2 Beams
SBR #4
New
80'
80'
Filter
Filter
Post Eq
16'
15hp
15hp
Post Eq Blowers
6 Racks + 2 Beams
SBR #1
80'
80'
6 RFB Racks + 2 Beams
SBR #2
80'
80'
Two-10 Disk Aqua Disk Filters
Standby
125 hp
125 hp
125 hp
125 hp
125 hp
125 hp
125 hp
125 hp
125 hp
125 hp
New
New
SBR Blowers

TOPS. 35500


Phase V
Stand by Digester Blowers
Digester Blower
20hp
20hp
40hp
40 hp
40hp
40hp
Dig #5
Dig #3
Dig #2
Dig #1
Dig #4
Dig #6
45'
40'
9'
40'
40'
40'
45'
5hp
5hp
Phase I post Eq Blowers
SBR #3
8 RFB Racks
SBR #4
8 RFB Racks
Filter
Filter
Filter
Post Eq
Post Eq (2-15hp) Blowers
8 RFB Racks
SBR #1
8 RFB Racks
SBR #2
Three - 10 Disk AquaDisk Filters
9 - 125 hp SBR Blowers

M3 EAGLE
IFAS PROCESS
10-30-08



From: Jon RICHENS [JRICHENS@westech-inc.com]
Sent: Thursday, August 21, 2008 5:50 PM
To: Johnson, Holly
Cc: Rob Young; Catarina GARCIA; Jon RICHENS
Subject: M3 Eagle Development - Potential Phasing - STM

Attachments: Eagle Phasing.PDF

Holly,

I have run a few scenarios. The following is what I have come up with:

Phase 1
-Two (2) trains of 0.165 MGD or .33 MGD total -Each train will have
Anoxic zone 6.5' x 25' x 17.75' deep
12 HP STM in a 25' x 25' x 17.75' deep tank
25' clarifier in a square tank with the corners grouted to 45 degrees Common wall construction

Phase 2
-Add one (1) STM train and two (2) clarifiers STM train will include
25' x 25' x 17.75' deep anoxic tank
Four (4) STM units in a 100' x 25' x 17.75' deep tank Clarifiers will be 55ft diameter Phase 2 will add 0.75 MGD of treatment (1.08 MGD total) The 2nd clarifier is for redundancy, the STM can treat with 1 unit out of service.
Note: Clarifiers are up-sized by a couple feet for upcoming phase.
Also, all STM units are the same size with parts 100% exchangeable

Phase 3
-Add one (1) additional STM train and one (1) clarifier Tanks are the same as phase 2.
Phase 3 will add an additional 0.75 MGD of treatment and still include a redundant clarifier and redundant STM unit (total system design is 1.83 MGD)

Phase 4
-Add one (1) additional STM train no additional clarification needed Tanks are the same as phase 2.
Phase 4 will add an additional 0.75 MGD of biological treatment (2.58 total) The flow through the 55' clarifiers will be 3 x .75 or 2.25 MGD. This can be handled by two (2) 55' units. The 3rd unit is still redundant.

Phase 5
-Add one (1) additional STM train and one (1) clarifier Tanks are the same as phase 2.
Phase 5 will add an additional 0.75 MGD of treatment for a total of 3.33 MGD.
We will still have a redundant clarifier and redundant STM unit. Again, all of the STM units are the same size.

I have thrown together a sketch to illustrate my thoughts. Take a look and let me know what you think.

Have a great weekend. If you have any questions/comments, give me a call.

Regards,

Jon T. Richens, P.E.
Product Manager
Process Division
WesTech Engineering Inc.
direct ph: (801) 290-1238
ph: (801) 265-1000

SBR Conceptual Planning Level Cost Estimate - 0.25 MGD Average		
Process Equipment		**Cost**
Influent Lift Station	$	540,000.00
Preliminary Treatment (Headworks) 6 mm screen	$	182,913.60
SBR Equipment	$	495,600.00
2 4-Disk Filters w/SS Tanks	$	524,400.00
UV	$	360,000.00
Sludge Thickening	$	300,000.00
Equipment Subtotal	**$**	**2,400,000.00**
Installation (40%)	$	960,000.00
Administration Building	$	240,000.00
Headworks Building (2 levels)	$	720,000.00
SBR/Post Equalization Structure	$	500,000.00
UV Structure/electrical building	$	250,000.00
Sludge Holding Tank (40 x 40 x 20' deep)	$	230,000.00
Subtotal Installed Equipment and Buildings	**$**	**5,300,000.00**
Site Work (5%)	$	265,000.00
Piping (10%)	$	530,000.00
Electrical and I & C (20%)	$	1,060,000.00
HVAC (5%)	$	265,000.00
Subtotal Cost	**$**	**7,420,000.00**
Undeveloped Design Details (Contingency) (25%)	$	1,855,000.00
WTF Subtotal	**$**	**9,300,000.00**
Engineering, CA (15%)	$	1,400,000.00
Conceptual Planning Level Project Cost	**$**	**10,700,000.00**

STM Aerotor Conceptual Planning Level Cost Estimate - 0.25 mgd	
Process Equipment	**Cost**
Influent Lift Station	$540,000
Preliminary Treatment (Headworks)-6mm Screen	$182,914
STM Aerator/Clarifiers	$579,180
2 Ea. 4-Disk Cloth Filters/SS Tanks	$524,400
UV	$360,000
Sludge Thickening	$300,000
Equipment Subtotal	**$2,490,000**
Installation (40%)	$1,000,000
Administration Building	$240,000
Headworks Building (2 levels)	$720,000
STM/Clarifier Structure	$455,000
UV Structure/Electrical Building	$250,000
Sludge Holding Tank (40' x 40' x 20')	$230,000
Subtotal Installed Equipment and Buildings	**$5,385,000**
Site Work (5%)	$269,250
Piping (10%)	$538,500
Electrical and I & C (20%)	$1,077,000
HVAC (5%)	$269,250
Subtotal Cost	**$7,539,000**
Undeveloped Design Details (Contingency) (25%)	$1,884,750
WTF Subtotal	**$9,400,000**
Engineering, CA (15%)	$1,400,000
Conceptual Planning Level Project Cost	**$10,800,000**

SBR Conceptual Planning Level Cost Estimate - 2.5 MGD Avg.		
Process Equipment		**Cost**
Influent Lift Station	$	540,000
Flume, Grit Removal, Screens	$	800,000
SBR Basins	$	2,610,000
Post Equalization	$	130,000
Cloth Disk Filters	$	1,730,000
UV Equipment	$	1,320,000
2 Screw Presses, Conveyor, Polymer Feed	$	600,000
Aerobic Digester Equipment	$	190,000
Equipment Subtotal	$	**7,920,000**
Installation (40%)	$	3,170,000
Headworks Building/Concrete Structures	$	550,000
SBR Basins	$	2,730,000
Post Equalization Basin	$	230,000
Filter Building	$	560,000
UV Structure/Electrical Building	$	500,000
Dewatering Building	$	600,000
Aerobic Digester Tanks/Sludge Pumping Room	$	2,570,000
Administration Building	$	250,000
Blower/Generator Building	$	750,000
Subtotal Installed Equipment and Buildings	$	**19,830,000**
Site Work (5%)	$	991,500
Piping (10%)	$	1,983,000
Electrical and I & C (20%)	$	3,966,000
HVAC (5%)	$	991,500
Subtotal Cost	$	**27,762,000**
Undeveloped Design Details (Contingency) (25%)	$	6,940,500
WTF Subtotal	$	**34,700,000**
Engineering, CA (15%)	$	5,200,000
Conceptual Planning Level Project Cost	$	**39,900,000**

$ 15.96 per gallon w/engineering
$ 13.88 per gallon (construction only)

STM Aerotor Conceptual Planning Level Cost Estimate - 2.50 mgd		
Process Equipment		**Cost**
Influent Lift Station	$	540,000
Flume, Grit Removal, Screens	$	800,000
STM Aerators/Clarifiers (all phases)	$	3,480,000
Cloth Disk Filters	$	1,600,000
UV	$	1,320,000
2 Screw Presses, Conveyor, Poly Feed	$	600,000
Aerobic Digester Equipment	$	360,000
Equipment Subtotal	$	**8,700,000**
Installation (40%)	$	3,480,000
Headworks Building/Concrete Structures	$	550,000
IFAS and Clarifier Structures	$	3,930,000
Filter Building	$	560,000
UV Structure/Electrical Building for UV	$	500,000
Dewatering Building	$	600,000
Sludge Holding Tanks/Pumping Room	$	2,110,000
Administration Building	$	250,000
Blower/Generator Building	$	750,000
Subtotal Installed Equipment and Buildings	$	**21,430,000**
Site Work (5%)	$	1,070,000
Piping (10%)	$	2,140,000
Electrical and I & C (20%)	$	4,290,000
HVAC (5%)	$	1,070,000
Subtotal Cost	$	**30,000,000**
Undeveloped Design Details (Contingency) (25%)	$	7,500,000
WTF Subtotal	$	**37,500,000**
Engineering, CA (15%)	$	5,600,000
Conceptual Planning Level Project Cost	$	**43,100,000**

$ 17.24 per gallon including engineering
$ 15.00 per gallon (construction only)

Plant Case Study

Rincon, NM WWTP

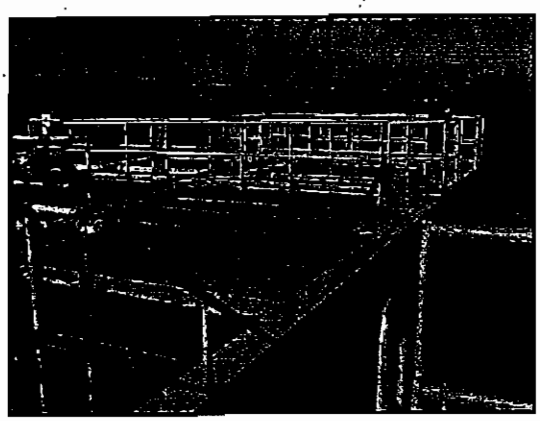
WESTECH

WESTECH EQUIPMENT:
DUAL TRAIN SYSTEM - (2) STM-AEROTORS

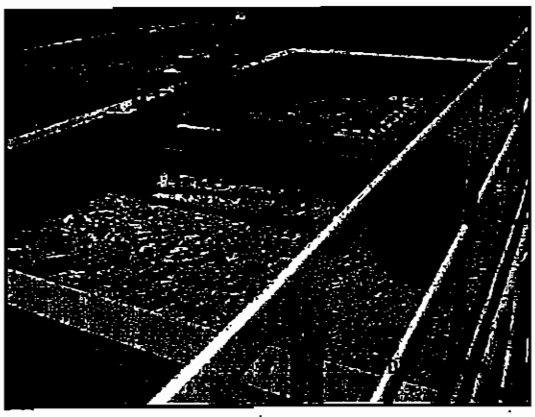
ENGINEER: BOHANNAN HUSTON
LAS CRUCES, NM
ROBERT RICHARDSON
505.532.8670

OPERATOR: KURT MOFFATT
505.635.5634

FLOW RATE: 33,000 GPD PERMIT



Performance Data - Monthly Ave.			
2004-05	Effluent (mg/l)		
Month	TN	TKN	NO_3
Sept	11	2.6	8.8
Oct	6	1.9	4.4
Nov	6	1.5	4.5
Dec	7	1.6	5.5
Jan	5	1.2	4.0
Feb	5	1.4	3.6
March	3	1.2	1.3
April	6	1.2	4.4
May			
June	6	2.0	4.1
July			
LIMIT	10		



Aqua-Aerobic Systems, Inc.

BIG CREEK/MENTOR UTILITY AUTHORITY
Project ID: 105092
1048 E. 8TH STREET
MIO
MICHIGAN
48647
USA
989/826-6568
GREG ANDERSON

Start-up Date: October 1998
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 0.185 MGD

1	**Pre-Equalization Basin(s)**
1	Fixed Coarse Bubble Diffusers
2	**AquaSBR Basin(s)**
1	Retrievable Coarse Bubble Diffusers
1	6 x 4 Gravity Decanter(s)
1	AquaDDM Mixer(s)
2	**Aerobic Digester Basin(s)**
1	Fixed Coarse Bubble Diffusers

Aqua-Aerobic Systems, Inc.

BLOUNTSTOWN WWTP
Project ID: 105166
16140 SOUTHEAST JOHNSON ST.
BLOUNTSTOWN
FLORIDA
32424
USA
850/674-4297
CHARLES SHERROD, OPERATOR

Start-up Date: October 1998
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 1.5 MGD

2	**AquaSBR Basin(s)**
2	AquaDDM Mixer(s)
2	10 x 9 Gravity Decanter(s)
14	Retrievable Fine Bubble Diffusers
3	Positive Displacement Blowers
2	Pump(s)
1	PLC Controls
1	**Post-Equalization Basin(s)**
1	AquaJet Aerator(s)
1	**Aerobic Digester Basin(s)**
1	Pump(s)
2	**Tertiary Filter(s)**
2	ADF Disk Package Filter(s)

Aqua-Aerobic Systems, Inc.

BONIFAY WWTP (CITY OF)
Project ID: 103506
611 E. BAY AVE.
BONIFAY
FLORIDA
32425
USA
850/547-2701
SARA WARD, OPERATOR

Start-up Date: July 1990
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 0.55 MGD

2	**AquaSBR Basin(s)**
2	Influent Baffles
2	AquaDDM Mixer(s)
4	10 x 9 Gravity Decanter(s)
2	Pump(s)
2	Fixed Coarse Bubble Diffusers
3	Positive Displacement Blowers
1	PLC Controls
2	**Aerobic Digester Basin(s)**
1	AquaDDM Mixer(s)
1	6 x 4 Floating Weir(s)
2	Fixed Coarse Bubble Diffusers
2	Positive Displacement Blowers
1	AquaDDM Mixer(s)
1	Positive Displacement Blowers
1	**Tertiary Filter(s)**
1	ABF Package Filter(s)

Aqua-Aerobic Systems, Inc.

COFFEYVILLE WWTF
Project ID: 105815
503 E. COUNTY ROAD 1400
COFFEYVILLE
KANSAS
67337
USA
620/252-6146
RODNEY GAUT, LAB MANAGER

Start-up Date: December 2001
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 4 MGD

4	**AquaSBR Basin(s)**
24	Retrievable Fine Bubble Diffusers
4	AquaDDM Mixer(s)
4	10 x 9 Gravity Decanter(s)
4	Pump(s)
5	Positive Displacement Blowers
1	PLC Controls
1	**Aerobic Digester Basin(s)**
1	Fixed Coarse Bubble Diffusers
1	AquaDDM Mixer(s)
1	**Sludge Holding Basin(s)**
1	Fixed Coarse Bubble Diffusers
2	Positive Displacement Blowers

Aqua-Aerobic Systems, Inc.

DALE SERVICE CORPORATION (SECTION 1)
Project ID: 105763
15051 Birchdale Ave.
Dale City
Virginia
22193
USA
703/670-5131
Terry Miller

Start-up Date: June 2002
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 4.25 MGD

4	**AquaSBR Basin(s)**
4	AquaDDM Mixer(s)
8	8 x 7 Gravity Decanter(s)
4	Pump(s)
56	Retrievable Fine Bubble Diffusers
5	Positive Displacement Blowers
1	PLC Controls
2	**Tertiary Filter(s)**
2	ADF Disk Package Filter(s)

Aqua-Aerobic Systems, Inc.

DALE SERVICE CORPORATION (SECTION 8)
Project ID: 105764
13291 Delaney Road
Dale City
Virginia
22193
USA
703-670-3665
John Giles

Start-up Date: June 2002
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 4.25 MGD

4	**AquaSBR Basin(s)**
4	AquaDDM Mixer(s)
8	8 x 7 Gravity Decanter(s)
4	Pump(s)
56	Retrievable Fine Bubble Diffusers
5	Positive Displacement Blowers
1	PLC Controls
2	**Tertiary Filter(s)**
2	ADF Disk Package Filter(s)

Aqua-Aerobic Systems, Inc.

GRACEVILLE WWTP
Project ID: 105240
865 6TH AVENUE
GRACEVILLE
FLORIDA
32440
USA
850-263-4219
CHARLIE MARTIN, SUPERINTENDENT

Start-up Date: February 1999
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 1.1 MGD

2	**AquaSBR Basin(s)**
2	AquaDDM Mixer(s)
2	8 x 7 Gravity Decanter(s)
2	Pump(s)
2	Fixed Coarse Bubble Diffusers
3	Positive Displacement Blowers
1	PLC Controls
2	**Post-Equalization Basin(s)**
2	Pump(s)
2	**Tertiary Filter(s)**
2	ADF Disk Package Filter(s)

Aqua-Aerobic Systems, Inc.

LYNN HAVEN WWTP
Project ID: 104579A/B
1010 West 6th Street
Lynn Haven
Florida
32444
USA
850/ 265-7338
Greg Kidwell

Start-up Date: March 1998
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 2.5 MGD

1	**Aeration Tank(s)**
2	Fixed Fine Bubble Diffusers
2	**AquaSBR Basin(s)**
8	AquaJet Aerator(s)
2	AquaDDM Mixer(s)
4	10 x 9 Gravity Decanter(s)
2	Pump(s)
1	PLC Controls
3	**Aerobic Digester Basin(s)**
2	AquaDDM Mixer(s)
6	Retrievable Coarse Bubble Diffusers
4	Positive Displacement Blowers
1	AquaDDM Mixer(s)
1	AquaDDM Mixer(s)
1	6 x 4 Floating Weir(s)
1	Pump(s)
3	Positive Displacement Blowers
1	**Sludge Holding Basin(s)**
1	AquaJet Aerator(s)
2	**Tertiary Filter(s)**
2	ADF Disk Package Filter(s)

Aqua-Aerobic Systems, Inc.

MILLVILLE WWTP
Project ID: 105156ANDA
2226 MICHIGAN AVENUE
PANAMA CITY
FLORIDA
32405
USA
850/872-3193
LAVELLE HUNT, SUPERINTENDENT

Start-up Date: June 1999
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 5 MGD

3	**AquaSBR Basin(s)**
48	Retrievable Fine Bubble Diffusers
6	10 x 9 Gravity Decanter(s)
3	AquaDDM Mixer(s)
3	Blowers supplied by others
1	PLC Controls
2	**Aerobic Digester Basin(s)**
2	Fixed Coarse Bubble Diffusers
2	AquaDDM Mixer(s)
2	6 x 4 Floating Weir(s)
2	Blowers supplied by others
2	**Sludge Holding Basin(s)**
2	Fixed Coarse Bubble Diffusers
2	AquaDDM Mixer(s)
2	Blowers supplied by others
4	**Tertiary Filter(s)**
4	ABF Concrete Filter(s)

Aqua-Aerobic Systems, Inc.

SPRING GROVE WWTP
Project ID: 103753
9626 OAK HILL ROAD
HOLLY
MICHIGAN
48442
USA
248/789-4665 Cell
ANTHONY DOWSON

Start-up Date: August 1991
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 0.106 MGD

1	**AquaSBR Basin(s)**
2	Retrievable Coarse Bubble Diffusers
1	6 x 4 Gravity Decanter(s)
1	AquaDDM Mixer(s)
1	Pump(s)
3	Positive Displacement Blowers
1	PLC Controls

Aqua-Aerobic Systems, Inc.

TANEYTOWN WWTP (CITY OF)
Project ID: 105408
3201 WHIP-OR-WILL DRIVE
TANEYTOWN
MARYLAND
21787
USA
410-756-2022
CHARLES STITELY, SUPERINTENDENT

Start-up Date: March 2000
Waste Characteristics: MUNICIPAL / DOMESTIC
Treatment Objective: Nitrification / DeNitrification / Phosphorus
Avg. Daily Flow: 1.65 MGD

2	**AquaSBR Basin(s)**
2	AquaDDM Mixer(s)
2	10 x 9 Gravity Decanter(s)
2	Pump(s)
16	Retrievable Fine Bubble Diffusers
2	Influent Baffles
3	Positive Displacement Blowers
1	PLC/SCADA Controls
2	**Aerobic Digester Basin(s)**
2	AquaDDM Mixer(s)
8	Retrievable Coarse Bubble Diffusers
2	Pump(s)
3	Positive Displacement Blowers

Estimated O&M Costs for Full Build-Out (SBR and Filters)

Annual Power Cost	$166,000.00	$166,000
Estimated Man-hours per Week	13	
Equipment Maintenance Annually	$1,710.00	$1,710
Equipment Maintenance Every 3 Years	$2,902.00	$967
Equipment Maintenance Every 5 Years	$22,418.00	$4,484
		$173,161 per year

Estimated O&M - Cloth Media Filters
3 Each 10 disk units (full build-out)

Equipment Lubrication	10 hours/year		$250
Parts Replacement			
Seals (every 10 years)	12 hours labor		
	$3,009.00	Material Cost	$301
Filter Media Cloths (every 7 years)	45 hours labor		
	$39,600.00	Material Cost	$5,657
			$6,208 per year

Total SBR O&M Costs & Filters (no labor) **$179,369 per year**

Estimated O&M Costs for Full Build-Out (IFAS Option - Aerators, Clarifiers, and Filters)

Phase I Aerator Costs - power	$10,117 per year
Phase II - V Aerator Costs - power	$72,434 per year
Phase I Maintenance Costs	$1,865 per year
Phase II - V Maintenance Costs	$9,985 per year
	$94,401 per year
Clarifiers O&M Phase I	$1,170 per year
Clarifiers O&M Phase II-V	$2,960 per year

Estimated O&M - Cloth Media Filters
3 Each 10 disk units (full build-out)

Equipment Lubrication	10 hours/year		$250
Parts Replacement			
Seals (every 10 years)	12 hours labor		
	$3,009.00	Material Cost	$301
Filter Media Cloths (every 7 years)	45 hours labor		
	$39,600.00	Material Cost	$5,657
			$6,208 per year

Total IFAS O&M Costs & Filters (no labor) **$104,739 per year**

Estimated O&M Costs for Full Build-Out (MBR Option)

Total Annual Chemical Cleaning Costs	$4,881 per year
Annual Plant O&M Costs	$2,770 per year
Annualized membrane replacement	$88,900 per year
Annual Electrical Costs	$247,035 per year
Total MBR O&M Costs (no labor)	**$342,886 per year**

PRELIMINARY POTABLE WATER STUDY FOR M3-EAGLE PLANNED UNIT DEVELOPENT EAGLE, IDAHO

INTRODUCTION

The project development, by approval and agreement with the City of Eagle, will be added to the City of Eagle service area in accordance with City Ordinance 517, 5-10-2005. All water users within this development will be connected to the system in accordance with City Ordinance 202, 5-26-1992.

The project is requesting annexation into the City of Eagle as a Planned Unit Development. The water system will be under the jurisdiction of the City of Eagle review and approval process and comply with Title 6, Chapter 5, Water System, in accordance with City Ordinance 530, 10-18-2005, and with other applicable regulatory agencies.

A final Master Potable Water Study for this development will be developed at the initial stages of project design to establish the design parameters and methods required to properly provide for complete potable water system. This Preliminary Study is to identify the overall needs, concept, key elements, and to set the basis for the master plan. The study will also address phasing of the system which will parallel the development phasing.

PROJECT DESCRIPTION

The M3-Eagle project is located in Ada County, Idaho northwest of the City of Eagle Idaho, beginning just north of Homer Road and extending approximately four miles to the north. It is bounded on the west by State Highway 16 and extends to Willow Creek Road on the east side (Exhibit A Vicinity Map, M3-Eagle Development Plan). The Development is located in northwesterly area of Ada County, but is requesting annexation into the City of Eagle.

M3-Eagle Planned Unit Development project will ultimately encompass approximately 6500 acres of developed property and over 2,200 acres of regional park located in the foothills northwest of the City of Eagle (Exhibit C Development Plan and Exhibit P Master Parks and Open Space Plan, M3-Eagle Development Plan). Because of the terrain and an average density of two units per acre, much of the developed areas will be clustered thereby resulting in more open space as common areas.

DESIGN ELEMENTS

General

The community water system includes wells, well houses, pumping and treatment facilities, storage tanks, distribution main trunk lines, lateral main lines, service lines, valves, water meters, fire hydrants, and other appurtenances as required to supply and deliver potable water

to the development for standard uses. A separate irrigation source and system will be provided to the maximum practical extent to minimize use of potable water for irrigation.

The public drinking water system will be designed and constructed in accordance with the following standards and regulations:

- City of Eagle City Code, Title 6, Chapter 5 *Water Systems*
- Idaho Department of Environmental Quality (DEQ)
  IDAPA 58 01 08 "Idaho Rules for Public Drinking Water Systems"
  IDAPA 37 03.09 "Well Construction Standards"
- Code of Federal Regulations (CFR) Title 40, Parts 141 & 143
- Recommended Standards for Water works: Great Lakes-Upper Mississippi River Board of State Public Health and Environmental Managers, 2003
  Also known as the Ten-State Standards
- American Water Works Association (AWWA)
- Idaho Guidance for Public Drinking Water Systems, 2005
- and other applicable regulating agencies in accordance with the provisions of the Idaho Code Section 50-1326

Fire Protection will be provided through the community water system. All fire protection devices will be designed and constructed in accordance with the City of Eagle standards, the International Code Council (ICC) International Fire Code (IFC) relating to fire protection facilities, and Appendix C Fire Hydrant Locations and Distribution with applicable fire flow requirements.

All hydrants shall be located adjacent to dedicated public streets where an when reasonably possible, otherwise, they shall have dedicated easements for access and maintenance. All hydrants shall include appropriate valving and thrust blocks required for the fire flows.

The average spacing between hydrants shall not exceed five hundred (500) feet such that the location shall be located within two hundred (250) feet the building being served. At least one hydrant shall be located at very street intersection. Single access streets shall have a hydrant located at the beginning of the street.

Consideration shall be given to locating hydrants with respect to accessibility, obstructions, proximity to buildings being protected, driveway entrances, signs, light pole locations, and other circumstances where adjustments to specific locations would be warranted. No hydrant shall be substantially obscured or access impeded.

Commercial and institutional buildings shall be provided with approved fire lanes in accordance with the ICC, IFC, Section 503.3

System Volume Requirements

The system will provide no less than 800 gallons per day (gpd) for 13720 residences = 10,976,000 gpd or 11,000,000 gpd as per IDAPA 58.01.08.552.01.a. Water system shall be sized to accommodate the additional flows required for fire protection.

Water System Construction Phasing
The project will be constructed in a number of phases as indicated on the Master Phasing Plan defined in the M3-Eagle Development Plan over an estimated period of 20 years. All applicable components for the system will be designed and constructed to accommodate future phases.

Wells
Several wells will be located throughout the development with the locations determined and identified at a later time. Wells will consist of the well, pumps, valves, chlorination, controls and housing for the facilities. Wells will pump to one of several storage tanks. Preliminary estimates indicate that total potable water demand will be approximately 8,000 acre-feet per year.

Design and construction of Wells shall conform to IDAPA 58.01 08 *Idaho Rules for Public Drinking Water Systems* section 550 *Design for Public Drinking Water Systems* paragraph 03 *Wells*.

Prior to drilling, a Site Evaluation Report will be submitted for each well location. Each well location will be evaluated for the following:

- Identification of nearby surface waters
- Identification of known aquifers
- Estimate of hydrologic properties of each aquifer
- Potability and quality of anticipated groundwater
- Prediction of the drawdown of existing wells that may be caused by pumping of proposed well
- Demonstration of the extent of the capture zone of the well
- Potential sources of contamination of the well
- Compliance with Minimum Well Construction Standards and permitting requirements

Prior to connection to a water distribution system the following will be provided:

- Copy of well logs
- Test pumping
- As-built plans
- Sample results for iron, manganese, corrosively, and other secondary contaminants
- Sand production measured
- Static water level measured prior to and during pumping
- Well yield in gpm, duration of test, and depth of test pump
- Test pump capacity and head characteristics

- Profile of water level recovery projected to the original static water level

Minimum well construction standards:

- The discharge line will be equipped with the necessary valves and appurtenances to allow well to be pumped at waste at design capacity
- Pressure gauge provided
- Totalizing flow meter and accessible check valve installed on discharge line
- Screened vent
- Casings extended a minimum of eighteen (18) inches above ground surface or twelve (12) inches above well house floor
- Watertight seal provided at top of well casing
- Screens and/or gravel pack provided where fine grained materials develop in the water source

Well House minimum standards:

- Location to be protected from flooding and adequately drained
- Well and well house located on dedicated lot with a minimum of fifty (50) feet to nearest lot line
- Finish floor a minimum of six (6) inches above ground surface
- Exterior esthetically designed to blend with surrounding environment
- Automated air flow system provided to remove excess heat and moisture
- Thermostatically regulated heater
- All pumping system electrical controls and components in conformance with national and state electrical codes
- Water treatment systems, equipment and devices shall be in compliance with potable water systems for public use
- A separate ventilated room shall be provided if gas chlorination equipment is used
- Lockable door

Storage Systems

The distribution system begins at three storage tanks which are located on the ridges within the development. One storage tank (WT-1) is located on the north ridge of Big Gulch Creek near elevation 3060 and will service the slope areas north and south of the ridge. A second tank (WT-2) is located on the ridge between Big Gulch and Little Gulch Creeks near elevation 3020 and will serve the slopes each side of the ridge. The third tank (WT-3) is located on the south ridge of Little Gulch Creek at about elevation 2960 and serves both north and south slopes from the ridge. Preliminary estimate for total capacity of all three tanks will be approximately 6 million gallons. Each tank will be sized for the area it serves

Design and construction of Storage Tanks shall conform to IDAPA 58.01.08 *Idaho Rules for Public Drinking Water Systems* section 550 *Design for Public Drinking Water Systems* paragraph 08 *Water Storage*

Water Storage Tank minimum standards:

- Location to be protected from flooding and adequately drained
- Water storage tanks will be protected from contamination
- Tanks will be located on dedicated lots with a minimum of fifty (50) feet to nearest lot line
- Finish floor a minimum of six (6) inches above ground surface
- Watertight sloped roof
- Minimum of two (2) manhole accesses with raised watertight lockable covers
- Screened overflow discharge to daylight
- Screened drain discharge to daylight
- Exterior esthetically designed to blend with surrounding environment
- Tanks flushed and disinfected in accordance with AWWA standards

Distribution System

The distribution system will be divided into pressure zones to limit maximum pressures with pressure regulating valves. Pressures for each pressure zone will be limited to a minimum of forty (40) pounds per square inch (psi) to a maximum of eighty (80) psi. Booster pumps will be used to maintain minimum pressures for areas near the ridges.

Distribution systems will be sized for no less than eight hundred (800) gallons per day per residence or fire flows of 1,500 gallons per minute (gpm) maintaining a minimum of forty (40) psi throughout the distribution system during maximum hourly demand, excluding fire flow. Fire hydrants will be located at 450-foot maximum spacing in residential areas and as required for commercial areas based on occupancy schedules.

Distribution main and lateral lines will be located underground in street sections as much as possible and practicable. The system will be interconnected throughout the development to provide service to all residences and commercial areas at all times during maintenance and repairs of any of the wells, tanks or distribution lines. The distribution system includes, distribution and service lines, pressure regulating and air-release valves, gate valves, fire hydrants, thrust blocks, and meters to provide a complete system to the end users.

Design and construction of Distribution Systems shall conform to IDAPA 58.01.08 *Idaho Rules for Public Drinking Water Systems* section 550 *Design for Public Drinking Water Systems* paragraph 06 *Distribution Systems*

Services and Meters

Service Connections consisting of the water distribution system which connects the meter to the main, corporation stop, service pipe, curb stop and box, meter, yoke and meter box and will be owned and maintained by the City. The customer service line, being that part of the piping on private property, that connects the service to the private property system will be installed, owned and maintained by the private property owner. Joint service connections that serve two (2) or more premises may be used with appropriate sizing.

Commercial, industrial, public or institutional facilities may be supplied with fire water lines as needed in addition to and separate from regular service connections.

Access to Property
Duly appointed employees of the City of Eagle water department will be provided reasonable and normal access to all components of the water system which the City owns to inspect, maintain and monitor as required.

Responsibility for Equipment
All components of the water supply system including wells, storage tanks, distribution lines, valves, fire hydrants, service connections with all necessary appurtenances thereof shall be the sole responsibility of the City of Eagle water department. All equipment including service lines and valves to service customer premises shall be the sole responsibility of said customer.

Easements
Easements will be provided on and across private properties where required for the installation and maintenance of water mains and necessary valves and equipment in connection therewith.

Construction and Design Standards
The standards and specifications for design and construction of the water system will be in accordance with the standards developed and adopted by the City of Eagle and/or as designed and approved by the City of Eagle

Donation of Water System to the City
The project will provide water sources, storage capacity and distribution systems complete with all appurtenances that will ultimately be connected to and owned by the City of Eagle Water System.

PRESSURIZED IRRIGATION SERVICES

Existing natural native drought-resistant vegetation will be maintained for all of the undeveloped property and much of the upper developed property All other developed property will be irrigated combinations of sod lawns and landscaped areas having ground cover, bushes and trees.

Irrigation services will be provided, to the extent possible, from Class B quality sewage treatment effluent This will be collected into several esthetically attractive and environmentally blended retention ponds. Pumping stations will be provided to pump and pressurize the water from these ponds to a distribution system that will supply irrigation water to public and common landscape areas.

Class B quality effluent is acceptable for use as irrigation on:

- parks,
- pastures,
- food crops,
- landscaping,
- golf courses,
- common areas,
- playgrounds and
- other similar type areas that may be exposed to human access.

Average irrigation demand is estimated at one (1) to two (2) inches of water per week. For preliminary estimates two (2) inches per week or 0.167 acre-feet/acre/week will be used. Irrigation period is generally mid April through mid October or approximately twenty-six (26) weeks which equals 4.4 acre-feet/acre required for the season.

Estimated Sewage Treatment Effluent contribution:

13720 units x 2.8 residents/unit x 100gpcd or 13.37cfpd x 75% dischargeable effluent
= 8.8 ac-ft/day or 62 ac-ft/wk
= 62 ac-ft effluent / 0.167 ac-ft required = 370 acres irrigated from effluent

Estimated Stormwater contribution:
The following are average rainfall for each month in inches.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1.6	1.4	1.3	1.1	1.1	0.9	0.2	0.4	0.8	0.9	1.8	1.6

Only the months of March through October should be considered collectable rainfall stored for irrigation use. Unfortunately, the warmest months needing the most irrigation are also the driest months; therefore, no collectable volumes for irrigation will be anticipated at this time. Deficit makeup water for irrigation may be provided from the potable water system, as determined and approved, during extreme dry years when effluent alone may not be sufficient volume for irrigation needs.

Pressurized Irrigation Construction Phasing

The project will be constructed in a number of phases as indicated on the Master Phasing Plan defined in the M3-Eagle Development Plan over an estimated period of 20 years. All applicable components for the system will be designed and constructed to accommodate future phases.

Distribution main and lateral lines will be located underground in street sections as much as possible and practicable. The system will be interconnected throughout various areas to provide service to all designated areas at all times during maintenance and repairs of any of the ponds, pumps, or distribution lines. The distribution system includes, ponds, pumping systems, distribution and service lines, pressure regulating and air-release valves, gate valves, and thrust blocks, to provide a complete system.

PRELIMINARY WASTEWATER STUDY FOR M3-EAGLE PLANNED UNIT DEVELOPENT EAGLE, IDAHO

INTRODUCTION

The project is requesting annexation into the City of Eagle as a Planned Unit Development and the Eagle Sewer District. The wastewater collection system and treatment plant will be under the jurisdiction of the City of Eagle and the Eagle Sewer District review and approval process in addition to other applicable regulatory agencies.

A complete Wastewater Study for this development will be completed at the initial stages of project design to establish the design parameters and methods to properly provide for wastewater collection and treatment facilities. This Preliminary Study is to identify the overall needs, concept, key elements, and to set the basis for the master plan. A Master Facilities Plan will be provided for the treatment plant and updated with the development phasing.

PROJECT DESCRIPTION

The M3-Eagle project is located in Ada County, Idaho northwest of the City of Eagle Idaho, beginning just north of Homer Road and extending approximately four miles to the north. It is bounded on the west by State Highway 16 and extends to Willow Creek Road on the east side (Exhibit A Vicinity Map, M3-Eagle Development Plan). The Development is located in northwesterly area of Ada County, but is requesting annexation into the City of Eagle.

M3-Eagle Planned Unit Development project will ultimately encompass approximately 6500 acres of developed property and over 2,200 acres of regional park located in the foothills northwest of the City of Eagle (Exhibit C Development Plan and Exhibit P Master Parks and Open Space Plan, M3-Eagle Development Plan). Additionally, there will be much more open space in common areas. Because of the terrain and an average density of two units per acre, much of the developed areas will be clustered thereby resulting in more open space as common areas.

DESIGN ELEMENTS

General

The intent of M3-Eagle Development is to be annexed into the Eagle Sewer District Service area. M3-Eagle Development will construct the sanitary sewer system to service the development and give ownership to the Eagle Sewer District for operation and maintenance by their experienced qualified staff.

A self-contained collection system and treatment facility will be design and constructed in accordance with the Eagle Sewer District, Idaho Department of Environmental Quality (DEQ),

and with the State of Idaho Water Quality Standards and Wastewater Treatment Requirements standards and regulations. Various components of the system will be constructed in phases according to the project development phasing (Exhibit Q Master Phasing Plan, M3-Eagle Development Plan) and will consist of pipe lines, manholes, lift stations, and treatment facilities.

Effluent will be discharged as "Class B" quality effluent and directed to on-site ponds developed primarily for:

- maintaining wetlands,
- maintaining stormwater wet ponds and
- irrigation use

Collection System

The sanitary sewer collection system consists of standard underground trunk lines, lateral lines, service lines, manholes and other appurtenances as required to transport sewer flows to treatment facilities. Laterals and mains will be located in street sections as much as possible and practicable (Preliminary Wastewater Plan exhibit this document). The collection system is divided into four main gravity collection zones. These zones are dictated by the drainage basin in which they are associated (Appendices C Master Drainage Study) as follows:

1. Big Gulch is the largest with the main collection trunk line following Big Gulch Creek with sub-drainage basins on each side sloping towards the creek. This zone is further divided into three smaller zones. The collection system for this zone will be routed to a treatment plant located near the downstream end of Big Gulch Creek at the southeast corner of the project.
2. Little Gulch is the second largest area with the main collection trunk line following Little Gulch Creek with sub-drainage basins on each side sloping towards the creek. This zone will be provided with one or both of the following options:
    a. Lift station located at the downstream end of Little Gulch Creek and pumped over the hill by pressurized line to the Big Gulch collection system and treatment plant;
    b. An individual septic system and drain field will be provided for the equestrian facilities.
3. Willow Creek area is on the northerly side of the development. This zone is separated into many small drainage areas that slope to the north edge of the property boundary. These areas will be serviced by gravity collection system to the boundary. At those locations lift stations will be utilized and pumped over the ridge to the Big Gulch collection system.
4. Dry Creek area is located on the easterly side of the development and slopes towards the southerly boundary. This area will be serviced by gravity collection system to a point near the southerly boundary. At this location lift stations will be utilized and pumped over the ridge to the Little Gulch collection system.

Areas that do not gravity flow to a treatment plant will be routed to standard lift stations and pumped to the nearest gravity system flowing to a treatment plant within the development. Lift stations will be located, sized and designed based on the area it serves.

Pipe line sizing shall be based on minimum velocity of two (2) feet per second (fps) when flowing full with appropriate Manning coefficients. Special provisions shall be made for velocities greater than twelve (12) fps to protect against displacement by erosion and impact. Consideration shall be given to over-sizing main lines for future phase additions. No public gravity sewer lines shall be less than eight (8) inches in diameter. Individual residential service lines shall be a minimum of four (4) inch diameter and commercial services will be determined on individual cases.

Pipe Lines shall be laid in straight alignment between manholes. Pipes with greater than fifteen (15) percent slopes shall be anchored with concrete at thirty six (36) feet on centers. Drop manholes may be permitted for pipe lines with an elevation difference of twenty four (24) inches or more and constructed with outside drop connection encased in concrete.

Manholes shall be placed at the end of each line, at all grade, size, intersections, or alignment change and/or not to exceed four hundred (400) feet spacing for line sizes less than fifteen (15) inches in diameter, five hundred (500) feet for eighteen (18) to thirty (30) inches diameter, and six hundred (600) feet for thirty six (36) inch diameter and larger.

Forty eight (48) inch diameter manholes shall be used for pipe line sizes of twenty four (24) inch or smaller. Sixty (60) inch diameter manholes shall be used for twenty seven (27) to thirty six (36) inch diameter pipes. Manholes for pipes larger than thirty six (36) inch diameter shall be determined on individual cases.

Wastewater Lift Pump Stations will be located, as previously mentioned, in areas that do not gravity flow to the treatment plant and will be pumped to the nearest gravity system flowing to the treatment plant. Lift stations will be located, sized and designed based on the area it serves.

Wastewater Lift Pump Stations shall be designed and constructed, as a minimum, to the Ten-State Standards. Lift stations shall be readily accessible during all types of weather; structures, mechanical and electrical components shall be protected from functional and physical damage, accessible during the 25-year flood, and protected from physical damage during the 100-year flood.

Multiple pumps or ejector units shall be provided for each lift station. Each unit shall have the capacity such that with any unit out of service the remaining unit(s) will have the capacity for the peak hourly flow. Pumps and controls should be designed to maintain a minimum flow velocity of two (2) fps in the force main and operate at uniform delivery rates in order to minimize hydraulic surges.

Provisions shall be made to automatically alternate the use of pumps. Shutoff valves shall be placed on the suction lines of dry pit pumps. Shutoff valves and check valves shall be placed on discharge lines of each pump (except screw type pumps). Appropriate protection from clogging or damage shall be provided.

All pumping stations shall be equipped with an alarm system tele-metered to a 24-hour office or individual person The alarm system shall be activated in cases of power or equipment failure or unauthorized entry. Electrical systems and components shall comply with the National Electrical Code requirements for Class I Group D, Division 1 locations.

Wastewater flow measuring devices shall be provided at all pumping stations with a 1200 gpm or greater design peak flow which include indicating, totalizing, and recording flow measurements.

Treatment Facilities

As previously discussed the treatment plant(s) will be self-contained system(s) designed and constructed in accordance with DEQ and the State of Idaho Water Quality Standards and Wastewater Treatment Requirements. For development flexibility the treatment plant should be constructed in phases at a rate of approximately one and a quarter (1.25) times the project development phasing. One hundred (100) percent of the treatment facility would be constructed and operational at eighty (80) percent of ultimate development build out.

Effluent will be treated to "Class B" quality in accordance with DEQ Wastewater Land Application Permitting Rules. Discharge from the plant(s) will be directed to on-site irrigation ponds with overflow from the ponds discharged to the Big Gulch and Little Gulch Creeks Effluent used for irrigation purposes require a Wastewater Land Application Permit issued by Idaho DEQ. Discharge off-site or to streams will require a National Pollutant Discharge Elimination System (NPDES) Permit issued by the United States Environmental Protection Agency (EPA).

Engineering services to be performed shall consist of a preliminary project submittal, facility plan, preparation of construction, specification, and contractual documents, construction inspections, administration and compliance certification.

The Facility Plan shall identify and evaluate wastewater basic information, criteria and assumptions, related potential problems, examination of alternate solutions, preliminary layouts, flow diagrams, phasing, discharge locations, solids disposal options, cost estimates, conclusion of proposed project for review and official actions and procedures required to implement the project.

The facility plan must include the wastewater treatment facilities, major collection systems, interceptor sewers, and lift pump stations. The population prediction shall be based on phasing up to twenty (20) years or less. Wastewater Treatment Facility flows shall be based on an

average residential daily flow of one hundred (100) gallons per capita plus any commercial and institutional facilities.

Design Flows	Duration	Units	
Average Flow	24 hours	gallons per day	(gpd)
Maximum Day Flow	24 hours	gallons per day	(gpd)
Peak Hourly Flow	1 hour	gallons per hour	(gph)
Peak Instantaneous Flow	1 minute	gallons per minute	(gpm)

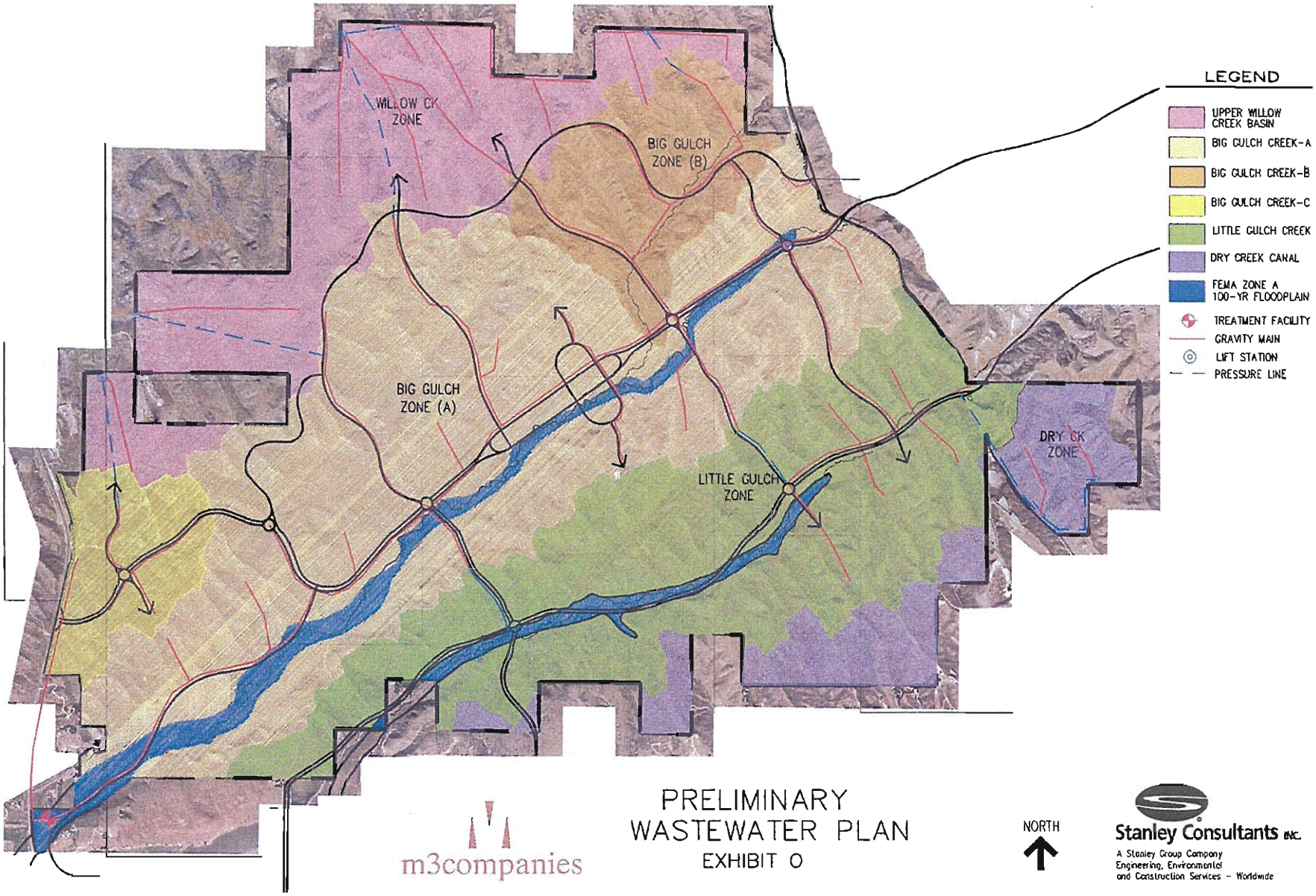
Residential Flows:	gpd/capita 100	Hourly Ratio Factor	Peak hourly Flows gph/capita
500 residents		4	16.7
1000 residents		3.8	15.8
2000		3.7	15.4
5000		3.3	13.75
10,000		3.0	12.5
20,000		2.85	11.9
30,000		2.6	10.8

Commercial/Institutional Flows:	gpd/capita
Stores, offices, and small businesses =	12 – 25
Hotels & motels =	50 – 150
Schools =	10 – 25

The following organic loads for the design year shall be determined and used as a basis for design of the treatment facilities:

Five (5) day Biochemical Oxygen Demand (BOD_5)
Design Average BOD_5
Design Maximum BOD_5
Design Peak BOD_5

Domestic waste treatment design shall be on the basis of at least 2.75 ounces of BOD_5 per capita per day and 3.2 ounces of suspended solids per capita per day unless alternate values are justified. When grinders are used in areas tributary to the treatment plant the values will be increased by 25 to 30%.



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PRELIMINARY WASTEWATER PLAN

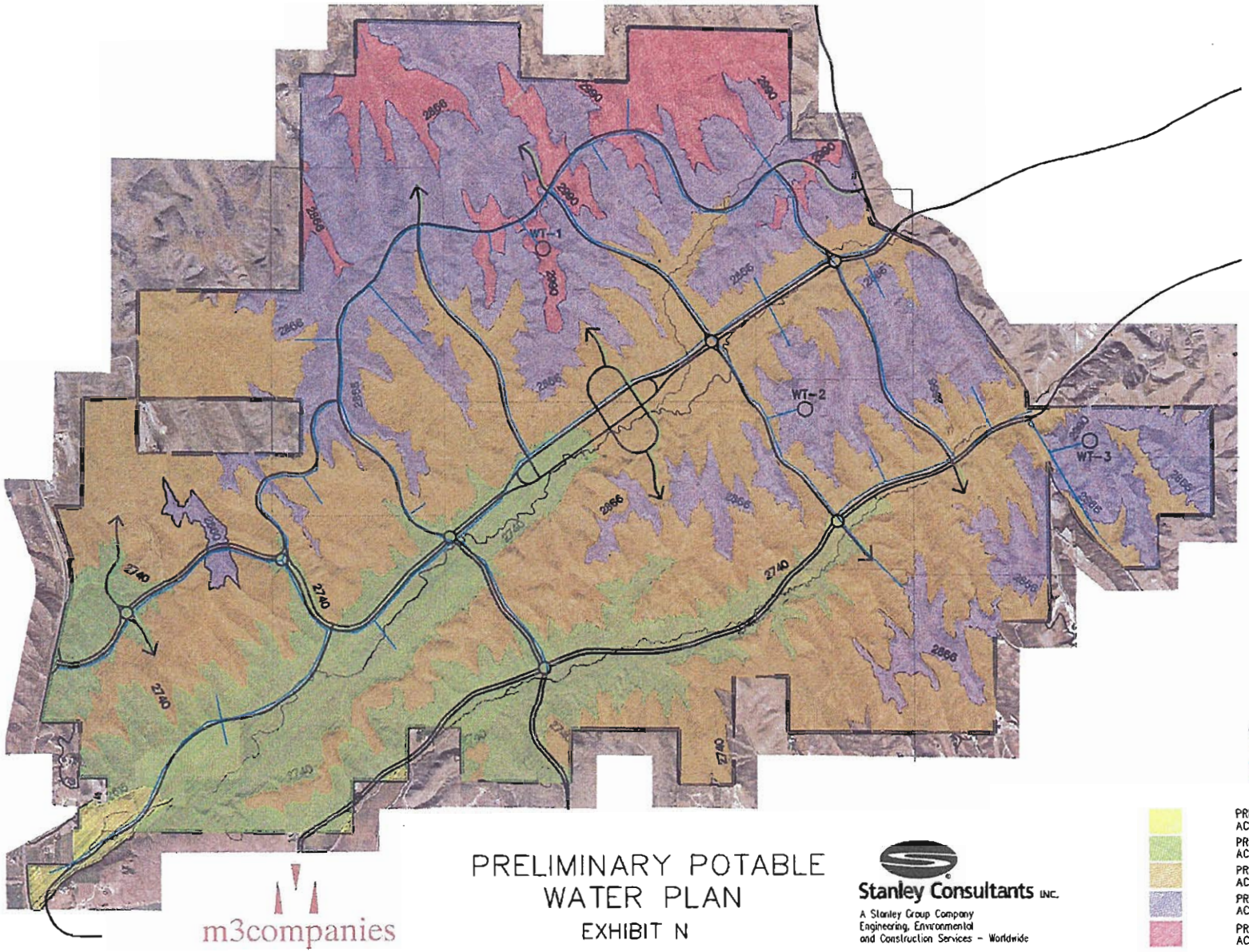
EXHIBIT O

NORTH

Stanley Consultants INC.

A Stanley Group Company
Engineering, Environmental and Construction Services - Worldwide

M3 EAGLE 0087



NORTH

LEGEND

WT-1 POTABLE WATER TANK

MAIN DISTRIBUTION LINES

SECONDARY DISTRIBUTION LINES

PRESSURE ZONE AREA 0000-2615
ACRES = 73

PRESSURE ZONE AREA 2615-2740
ACRES = 1,511

PRESSURE ZONE AREA 2740-2866
ACRES = 3,232

PRESSURE ZONE AREA 2866-2990
ACRES = 1,955

PRESSURE ZONE AREA 2990-UP
ACRES = 544

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PRELIMINARY POTABLE WATER PLAN

EXHIBIT N

Stanley Consultants INC.
A Stanley Group Company
Engineering, Environmental
and Construction Services - Worldwide

M3 EAGLE 0088

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March 30, 2009

Idaho Department of Water Resources
322 E. Front Street
Boise, Idaho 83720

Dear Sir or Madam:

Pursuant to your request enclosed for your review are the M3 Eagle, L.L.C. statement of assets, liabilities and equity – income tax basis as of December 31, 2008 and 2007.

The accompanying statement of assets, liabilities and equity – income tax basis of M3 Eagle, L.L.C. as of December 31, 2008 and 2007 as well as the related tax-basis supplementary information have been prepared by Thomas D. Cervino, CPA. I have prepared these internal financial statements in my capacity as an employee of The M3 Companies, L.L.C., the parent company of M3 Builders, L.L.C. (the manager of M3 Eagle, L.L.C.) and not in the capacity of a CPA in the practice of public accounting.

Please call me at (602) 386-1312 if you should have any questions related to the financial statements.

Sincerely,

THE M3 COMPANIES, L.L.C.

Thomas D. Cervino, CPA

Enclosures

4222 E Camelback Road ♦ Suite H100 ♦ Phoenix AZ 85018 ♦ Phone 602.386.1306 ♦ Fax 602.386.1315

M3 EAGLE LLC
EXHIBIT
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M3 Eagle, L.L.C.
Statement of Assets, Liabilities and Equity - Income Tax Basis
December 31, 2008 and 2007

	December 31, 2008	December 31, 2007
ASSETS		
Current Assets		
Cash and cash equivalents	$ 4,944,738	$ 528,038
Refundable escrow - title company	-	50,000
Total Current Assets	4,944,738	578,038
Property		
Land and capitalized entitlement and carrying costs	74,666,087	67,252,175
Other Assets		
Non-refundable escrow - title company	100,000	50,390
Organization costs, net of accumulated amortization	40,041	43,509
Total Assets	$ 79,750,866	$ 67,924,112
LIABILITIES AND MEMBERS' EQUITY		
Current Liabilities		
Accounts payable and accrued expenses	$ 376,277	$ 289,216
Interest payable	108,606	-
Notes payable	15,000,000	3,500,000
Total Current Liabilities	15,484,883	3,789,216
Total Liabilities	15,484,883	3,789,216
Equity:		
Members' Equity	64,265,983	64,134,896
Total Liabilities & Equity	$ 79,750,866	$ 67,924,112

See Accompanying Selected Information

M3 Eagle L.L.C.
Selected Information – Substantially All Disclosures are Not Included
December 31, 2008 and 2007

Note 1: Summary of Significant Accounting Policies

Nature of Operations: M3 Eagle, L.L.C. (the "Company") owns approximately 17,000 acres of undeveloped land north of Eagle, Idaho. The Company is in the process of entitling 6,000 acres as a master planned community. The remaining 11,000 acres are being held for investment and potential exchange with the Bureau of Land Management.

Basis of Presentation: The accompanying financial statements are presented on the basis of accounting used by the Company for federal income tax reporting. These financial statements differ from generally accepted accounting principles primarily in that certain carrying costs related to the land may be capitalized at the election of the Company in accordance with §266 of the Internal Revenue Code. In addition, capitalized property taxes are reported on a cash basis under the recurring item exception of §461 rather than on an accrual basis. Accordingly, the accompanying financial statements are not intended to present financial position and results of operations in conformity with generally accepted accounting principles.

Use of Estimates: The preparation of financial statements in conformity with the income tax basis of accounting requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Land Entitlement and Carrying Costs: Costs incurred with regard to the entitlement and carrying costs of the land are being capitalized to the land.

Income Taxes: The Company is a Limited Liability Company taxed as a partnership for income tax purposes. For federal income tax purposes, taxable income earned by a partnership flows through to the partners. Accordingly, no provision or liability for income taxes is included in these financial statements.

Cash Equivalents: The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

Organization Costs: Organization costs in the amount of $52,035 have been capitalized and are being amortized over fifteen years.

Advertising: The Company capitalizes advertising costs when incurred.

M3 Eagle L.L.C.
Selected Information – Substantially All Disclosures are Not Included
December 31, 2008 and 2007

Note 2: **Escrow - Title Company:** An agreement was entered into and an escrow was established on November 8, 2007 for the acquisition of land in the amount of $1,148,835. The earnest money is non-refundable as of December 31, 2008. The amended agreement calls for a closing on or before November 7, 2009. M3 may terminate the agreement prior to the closing at its discretion or based on the failure of the seller to meet identified conditions.

An agreement was entered into and an escrow was established on June 26, 2007 for the acquisition of land in the amount of $1,272,000. The earnest money became non-refundable on July 26, 2007 and the agreement calls for a closing on or before February 1, 2008. M3 may terminate the agreement prior to the closing at its discretion or based on the failure of the seller to meet identified conditions.

Note 3: **Notes Payable as of December 31, 2008 and 2007 consists of the following:**

The Company has obtained a $15,000,000 credit facility (the "Facility") from the Company's major equity contributor to finance the entitlement budget through March of 2009.

	12/31/08
Facility – unsecured note with base interest payable monthly at a rate of Libor plus 40 basis points, plus credit enhancement interest payable monthly of 500 basis points, maturing on 2/25/09	$15,000,000

The interest accrued on the outstanding note has been capitalized as a cost of land in the amount of $1,081,449 through December 31, 2008.

	12/31/07
Note Payable – Predevelopment financing, secured via a deed of trust with interest calculated at a rate of 12% maturing on 9/1/08	$3,500,000

The interest accrued on the outstanding note has been capitalized as a cost of land in the amount of $96,165 from inception through December 31, 2007.

Note 4: **Related Party Transactions:** Certain management services are provided to the Company by an affiliate having common owners.

As of December 31, 2008, $108,606 of interest is due to the Company's major equity contributor.

Note 5: **Concentrations:** All Company-owned real estate is concentrated north of Eagle, Idaho.

The Company is limited to a single major equity contributor for the funding of land purchases, entitlement, development and operations.

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* Licensed in New York and Washington DC

March 23, 2007

David R. Tuthill, Jr., P.E.
Interim Director
Idaho Department of Water Resources
322 East Front Street
P.O. Box 83720
Boise, ID 83720-0098

Re: M3 Eagle Planned Community
GP File No. 8526-1

Dear David:

Thanks for meeting March 22, 2007 with Gerry Robbins and Jeff Davis of my client, M3 Eagle, our hydrogeologist, Ed Squires of Hydro Logic, Inc., and me concerning M3-Eagle's water right application that was filed with the Idaho Department of Water Resources in November 2006. Also in attendance were Jeff Peppersack, Phil Rassier, and Steve Lester. The purpose of this letter is to memorialize the discussions.

Processing of M3 Eagle's water right application. The primary focus of the meeting was to discuss when the Department might process M3 Eagle's municipal water right application, and how the process might be organized. You noted that currently the Eastern Snake Plain water issues are the Department's top priority, but that the North Ada water applications and issues are the second priority. You and Steve explained that, in light of the Department's other obligations and the processing slowdowns that have occurred in the past year due to the SRBA, M3 Eagle could expect its application to be processed, at least to publication, within a number of months, and almost certainly by fall 2007. You noted that the Dry Creek planned community water right application is among those that are ahead of M3 Eagle, and that you anticipate a hearing in that matter. You confirmed that the processing of M3 Eagle's application would not be held up pending the completion of any of the Department's studies planned for this area.

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Aquifer studies. We discussed the Department's intent to conduct or participate in studies of ground water hydrogeology in the North Ada County area in the coming couple of years. You explained that the Department expects to submit an aquifer study budget in August 2007, and carry out the study in FY 2009. We explained that we intend to cooperate fully with any study the Department pursues. We agree with your comment that water supply is unlikely to be a limiting factor for growth in the Treasure Valley in the foreseeable future, but it is important to understand the development's likely effects on local aquifer areas. You observed that the existing Treasure Valley Aquifer Study did not evaluate this region, although it may be useful in defining boundary conditions for the North Ada hydrogeology. I explained that that M3 Eagle is well underway (beginning in March 2006) with conducting a significant study of the subsurface hydrogeologic setting beneath the entire Eagle, Star, Emmett area, and that we intend to continue providing information from these studies to the Department and other interested parties. You noted that you have confidence in our water consultants, and confirmed that the Department will use the M3 Eagle Study in its deliberations and consider it in any study the Department conducts.

The concept of phasing. While you agreed that the Department needs to process M3 Eagle's water right application within a reasonable timeframe, you raised the question whether the application might be considered in phases. Basically, we were opposed to the phasing idea. You commented that the instantaneous diversion rate needed for the M3 Eagle development is large, but we noted this is the peak diversion on a peak day at full buildout, and that overall the annual diversion from the aquifer requested in the application is only about 8,000 acre-feet. Jeff Davis explained that phased water approvals would be difficult in light of the need to represent to buyers within a planned community setting what they can expect at buildout. In addition, we pointed out that M3 Eagle has filed a municipal water right application with planning horizon and future needs components to address the entire project's water needs at one time, as the 1996 Act directs. We stated that we anticipate this water right will be conveyed, and the project annexed, to the City of Eagle. However, I recognize that this issue was left for potential further discussion. Phil noted, and we agree, that if some type of phasing were used, it would have to protect the application's overall priority in the context of the municipal statute.

Stakeholder advisory group. You noted that you intend to convene a stakeholder group to help the Department shape its study of the area. M3 Eagle committed to be a participant in this, but again noted that it will continue with its own aquifer study, on which it expects to spend at least $1 million. Ed noted that this effort has included our providing the North Ada County Foothills Association with all of the information it sought in its original letter to Karl Dreher. Based on your comments, we will anticipate the stakeholder advisory group to begin meeting in May 2007.

Aquifer test. We stressed the importance of conducting an aquifer test using a municipal-sized well, and we seek to do this before the water right is approved. You noted that there is precedent for doing this, provided that interested parties can be notified and allowed to comment. You noted that, given the staff's comments about likely processing schedule, it is conceivable that approval for a test well could occur by fall 2007. We concur with the need to allow existing water right owners to participate in any large scale test, we would have a lot of work ahead of us to be able to conduct such as test, including the siting, drilling, construction, and development of a suitable test well. We expressed the desire that M3 Eagle would be able to move forward with

these preparations in a timely manner, which we hope could include construction of the well prior to processing of the application.

Thanks again to you and your staff from both offices for taking time to meet. We recognize that neither M3 Eagle nor the Department has made any firm commitment on any issue discussed. Please understand that we are considering these matters and likely will come back to the Department with additional information or requests as our studies and planning develop. We look forward to working with the Department as the M3 Eagle project moves forward.

Sincerely,

Jeffrey C. Fereday

JCF/LLA

cc: Bill Brownlee
Jerry Robbins
Ed Squires
Phil Rassier
Steve Lester
David Head, NACFA

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Terri R. Yost

RETIRED
Kenneth L. Pursley
Raymond D. Givens
James A. McClure

September 24, 2007

Via E-Mail and U.S. Mail

David R. Tuthill, Jr., P.E.
Director
Idaho Department of Water Resources
322 East Front Street
P.O. Box 83720
Boise, ID 83720-0098

Re: M3 Eagle Amended Water Right Permit Application

Dear Director Tuthill:

Thank you for taking the time to meet with Ed Squires and me on September 20, 2007 regarding the M3 Eagle, LLC Amended Water Right Permit Application, which was submitted to the Department on August 27, 2007. We also appreciated having Jeff Peppersack and John Westra in attendance. The purpose of this letter is to memorialize what we discussed.

Ed and I described the M3 Eagle permit application amendments in general terms, and noted that the project's housing units have been reduced from about 12,000 to 8,160. This change allowed the overall peak diversion rate to be reduced substantially, from about 42 cfs to about 27 cfs. We noted that the annual volumes do not show these same levels of decrease, in part due to the significant reductions in the amount of sewage effluent produced that can be reused to irrigate ball fields, common areas, and golf courses. In any case, it is a smaller water right application than the original.

We agree with your observation, which you have made to Eagle area groups before, that water availability generally should not be seen as the limiting factor for growth in the Valley. You observed that some view the water right application process as a means of guiding or limiting growth, regardless of what the merits might be on the subject of available water. We

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agree that local land use decisions should remain with local governments and that the public should expect the Department to focus on processing permit and transfer applications for water development.

We discussed the role of the Technical Committee that has been organized, with the Department's leadership, to evaluate hydrogeologic questions in the North Ada area. M3 Eagle intends to be a full contributing member in the Technical Committee, and to support its work. Ed and his staff at Hydro Logic, Inc. will continue to be active participants, and will bring their findings to the Committee for comment. Ed explained that he soon will have two additional M3 Eagle-funded studies ready to present to the Committee—an analysis of earlier pump tests in the area and an aquifer water level analysis. We expect to present additional information to the Committee as it is developed in the next few months and to post the reports to the Department's newly created North Ada County web site.

We are pleased to hear that you expect the Legislature to fund the Department-sponsored hydrogeologic study of the north Ada area, and that it should be ready to begin in mid-2008. We also were pleased to hear you again confirm that pending water right applications, such as M3 Eagle's, will not be delayed by the commencement or outcome of that effort. We agree with your position on this point, of course, especially given the great amount of hydrogeologic study that M3 Eagle already has completed and provided for public review. We sincerely hope that processing of M3 Eagle's water right application can get underway this fall, a point we underscored at the meeting and in our previous meeting on M3 Eagle.

You stated that you will meet with your staff to evaluate how to proceed with processing the M3 Eagle application as well as other applications pending for this area. We look forward eagerly to a response on the processing issue so that M3 Eagle can begin to plan accordingly for any administrative hearing that might be necessary.

We discussed the question of how any approval of M3 Eagle's application might be structured or conditioned. We agreed that it would be reasonable, and within the bounds of the municipal water rights statute, for the Department to approve the application but impose a condition requiring periodic reporting on well production, aquifer pressure levels, and similar information. The purpose of such a condition would be to allow your agency to ensure that adequate water supplies exist for the level of development involved at any given stage of the approved planning horizon.

As you know, we sincerely hope the Department can authorize the construction of large bore supply wells in advance of water right approval to make possible meaningful aquifer testing. Ed brought up the point that our existing studies of the Pierce Gulch Sand Aquifer underlying M3 Eagle are at a relatively mature point (as evidenced by the report submitted with the amended application), and that, in his opinion, the next significant contribution to knowledge about the aquifer would be a high-quality, long-term aquifer test using a large-yield water supply well in the foothills area. Of course, we would anticipate constructing the supply well so that it

can be used later as a municipal production well, and M3 Eagle would need to proceed with the understanding that, until a permit is granted, M3 Eagle does so entirely at its own risk.

Finally, we pointed out that there is a state-supported movement in the wine-making industry to establish an "appellation" region in North Ada and Canyon Counties, and that M3 Eagle is seriously considering committing some of its hillside open space to vineyards in support of these efforts. I believe we agree that a commercial-scale vineyard operation (e.g., a few hundred acres) would require an agricultural irrigation water right that likely would be seen as outside the definition of "municipal use" under the statute. Consequently, we are considering filing a separate irrigation ground water right for that purpose, and we wanted to make the Department aware of this possibility. We also may seek to acquire additional surface water supplies that could be delivered through the Farmer's Union Canal, although we are just at the initial stages of this idea. In any event, we will keep the Department informed of our plans for any commercial-scale vineyards that M3 Eagle may pursue.

Thanks again for meeting with us. It means a lot to us to be able to receive this type of guidance as we work toward the long-term development of a water supply for the M3 Eagle planned community.

Sincerely,

Jeffrey C. Fereday

JCF/lla
cc: Bill Brownlee, Managing Partner, M3 Companies
Gerry Robbins, Project Manager, M3 Eagle, LLC
John Westra, Manager, IDWR Western Regional Office
Jeff Peppersack, Chief, Water Allocations Bureau
Ed Squires, Hydro Logic, Inc.

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APPENDIX 2: MAPS

MAP 1.1 HIGHWAY 16 CORRIDOR

MAP 1.2 AREA OF CITY IMPACT

MAP 2.1 WESTERN AREA VISIONING MAP

MAP 4.1 SCHOOL FACILITIES

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MAP 6.1 FUTURE LAND USE MAP

MAP 6.2 NORTH EAGLE FOOTHILLS LAND USE MAP

MAP 6.3 PLANNING AREAS

MAP 6.4 FOOTHILLS OPPORTUNITIES AND CONSTRAINTS MAP

MAP 6.5 EAGLE WINE DISTRICT OVERLAY

MAP 6.6 CONCEPTUAL FOOTHILLS ARTERIAL ALIGNMENTS

MAP 6.7 VISUAL SENSITIVITY MAP

MAP 6.8 BROOKSIDE PLANNING AREA

MAP 8.1 TRANSPORATION/PATHWAY NETWORK MAPS 1

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MAP 8.3 TRANSPORATION/PATHWAY NETWORK MAPS 3

CHAPTER 1 - OVERVIEW

1.1 City of Eagle Statement of Purpose

The purpose of the Eagle Comprehensive Plan is to develop a set of guidelines that the City will use to promote the health, safety, and general welfare of the residents who live in the City of Eagle and its Area of City Impact (AOI). To achieve that purpose, the City of Eagle will strive:

a. To protect property rights and enhance property values.

b. To ensure that adequate public facilities and services are provided to the people at reasonable cost.

c. To ensure that the economy of the City of Eagle and its AOI is protected and enhanced.

d. To ensure that the important environmental features of the City and its AOI are protected and enhanced.

e. To encourage urban and urban-type development within the incorporated city.

f. To avoid undue concentration of population and overcrowding of land.

g. To ensure that the development of land is commensurate with the physical characteristics of the land.

h. To protect life and property in areas subject to natural hazards and disasters.

i. To protect fish, wildlife, and recreation resources.

j. To encourage local school districts to participate in the community planning and development process so as to address public school needs and impacts on an ongoing basis.

1.2 Why Plan?

From the year 2000 to 2006, the population of the City of Eagle grew by over 50%, increasing the City's population by more than 1,000 residents per year. This rate of growth resulted in the development approvals for over 11,000 acres of land within the City and the area of city impact (AOI) in just 3 years.

Understanding the need for the City to look forward and plan for the next 20-years, City leaders began a review of the 2007 Comprehensive Plan and future development areas. The City realized that planning for additional growth to the west, south and east was limited by the existing City of Star, Meridian City limits and Boise City limits, respectively. The City began looking to the north into the area that was once considered severely constrained by the Boise Foothills and groundwater limitations.

As a part of the review of the Comprehensive Plan by the City of Eagle in 2004, the City completed a full scale review of the economic sustainability of the existing area of city impact and future growth areas for the city. This study

found that the City of Eagle, though stable and solidified in its vision to develop a city with a uniquely rural character, did not look at the long term sustainability of the city as it approached build out. To remedy this the City proposed a new mix of uses to help stabilize the City mix of uses, long-term tax funding and encourage a more sustainable City.

Table 1.1 Distribution of Uses

Land Use	% of total
Commercial	4%
Mixed Use	7%
Mixed Use Village	5%
Business/Tech	3%
Industrial	1%
Residential	75%
Parks/open space	5%

From an extrapolation based upon the ten year annual average growth rate of 10.2% per year (significantly higher than COMPASS' estimate of 2.4% per year and the 4.5% uses during the Western Area Plan), the City will hit the build-out population by 2014 and will run out of vacant land in approximately by 2018. A significant factor in determining the successful redevelopment of vacant land within the City is the cost availability of vacant land in adjacent cities and the county. Unless these land supplies are constrained, it is likely that high levels of redevelopment will not occur

1.2.1 Idaho Code:

Understanding the constraints of the existing AOI, the City of Eagle began to look at the requirements for establishing an expanded area of city impact. Under Idaho Code §67- 6526(b), the following three factors are paramount in establishing an area of city impact:

a. **Trade Area**: Trade area is the area that is needed to provide a city with an economic base that supports the city. This economic base comprises not only the city limits and the AOI but also includes the areas that surround a city and bring people into the city for services. Historically, the City of Eagle has been directly associated with a large trade area including properties extending north into Gem County and west into eastern Canyon County. Further, ACHD traffic counts and the existing transportation network support the claim of this area being within the City of Eagle's economic trade area.

b. **Geographic Boundaries:** The Idaho Transportation Department (ITD) has released plans to improve State Highway 16 from a two (2) lane roadway to at least a nine (9) lane system (including right-of-way) in excess of one quarter (1/4) mile wide. This creates an enormous and significant landmark or geographic boundary separating the properties east of State Highway 16 from those on the western side. This new transportation corridor will be a significant east-west barrier between Eagle and Star that will create an impediment for pedestrians, bicyclists, youth and the elderly or anyone unable to use motorized transportation. In addition, it is unlikely that property owners east of the new highway corridor will feel identified with a city center that is entirely cut off to the west. (See Map 1.1) Historically in Ada County, state highways have been used as area of impact boundaries. For example, State Highway 44 forms portions of the respective common

boundaries between Boise and Garden City. State Highway 55 forms portions of the respective common boundaries between Meridian and Boise as well as Boise and Eagle. State Highway 20/26 forms a boundary between Meridian and Eagle.

c. **Annexation in the Future:** At the time of this planning effort, the City of Eagle had received numerous requests for annexation from properties reaching to the State Highway 16 corridor and north into the Eagle Foothills. If these applications are approved, Eagle's city limits would be bordered to the West by State Highway 16, to the South by State Highway 20/26 and to the North into Boise and Gem County substantiating the City's ability to annex throughout this area.

1.3 The City of Eagle Vision Statement

In 1999, City of Eagle citizens envisioned their future town as a well-planned community that encourages diversified living and housing opportunities, fosters economic vitality that offers jobs for residents, and provides places for people to recreate and enjoy Eagle's natural beauty.

We envision that in the future Eagle will be:

a. known as a highly livable town that successfully balances growth with many of the rural elements of its heritage;

b. interconnected with user-friendly pathways and roadways;

c. economically strong with a distinct downtown economic center;

d. providing diversified employment and housing opportunities for all economic groups;

e. an environmentally aware community with distinctive open space, parks and outdoor recreation;

f. an economically strong city, that fosters local businesses and clean industry;

g. a community committed to its support for children and families; and

h. a unique community that maintains its rural residential feel in the midst of the Treasure Valley.

Similarly as in 1999, the 2004 Soaring 2025 plan, and the Foothills Plan: the City of Eagle outlined an extensive public visioning process to guide the plan. The visioning sessions

discussed potential growth areas and goals to guide the long term development of the City. From these visioning sessions, the following four broad goals were identified for the western AOI and the foothills:

a. Sustainability at buiĺd out: Ensure the ability for the city to continue to fund, improve and support itself, including infrastructure and parks, without the use of building permit fees, impact fees and zoning fees.

b. Identify "Activity Centers": Identify areas that, due to the nature of existing uses, future uses and/or transportation corridors, will lend themselves to increased activity and non-residential use to preserve larger areas as primarily residential neighborhoods and sensitive areas as open space.

c. Preserving Regional Transportation Corridors (State Highway 16 & 44): Preserve the function of regionally significant roadways through the City while ensuring compatibility with land uses and design standards of the City.

d. Increased Employment Opportunities: Identify areas that will provide significant employment opportunities to the residents of the City of Eagle thereby allowing the City to be a desirable place to live, work, and recreate.

These goals combined with the current growth rate and the factors set forth in Idaho Code§67-6526(b), have led the City of Eagle to establish an expanded planning area west of Linder Road to the centerline of State Highway 16, south of the Gem County Line, and north of the centerline of Chinden Boulevard/State Highway 20-26, Ord. 475. (See Map 1.2)

1.4 Plan Organization

The Comprehensive Plan is divided into chapters that generally correspond to the requirements of the Local Planning Act. It should be noted that the policies in the various chapters are interrelated and together create the City's policy framework for land use and development.

1.5 Relationship to the City of Eagle Zoning Ordinance

Idaho Code §67-6511 states that "zoning districts shall be in accordance with the adopted plan." In general this means that zoning must be "in keeping" with a comprehensive plan if one exists. Further, the Eagle City Zoning code requires consistency between the comprehensive plan and affected zones at the time of rezoning. Additional zoning classifications may be needed to ensure the accurate implementation of this sub-area plan.

1.6 Relationship to Ada County Planning

The goals and policies of this plan are intended to be applied within the Eagle City limits and the negotiated Eagle Area of City Impact. The City acknowledges that the county may not have all the tools and codes necessary to implement this plan and will, upon transmittal and review, recommend to the county which county codes and appropriate conditions should be implemented to best implement and meet the intent of the Eagle Comprehensive Plan. It is the desire of the City of Eagle to have all urban development that occurs in the Area of City Impact to be under the jurisdictional authority of the City and connected to municipal services.

CHAPTER 2 - PROPERTY RIGHTS

2.1 Background

Private property rights encompass not only the right to develop, invest, achieve and profit from property, but also the right to hold and enjoy property. As the population increases and a greater number of people live nearer to each other, the opportunities for land use conflicts become greater. Property rights must balance the individual's desire to "do whatever I want with my land" with a respect for the property rights of neighboring owners.

The 5th Amendment of the United States Constitution as well as Article 1§14 of the Idaho Constitution ensure that private property, whether it be land or intangible property rights, shall not be taken by the government absent just compensation. The Idaho State Legislature has also enacted statutory provisions requiring state and local government to ensure that planning and zoning land use policies do not result in a taking of private property without just compensation. The statutory provisions include, among other things, a takings checklist generated by the Idaho Attorney General. The takings checklist must be used in reviewing the potential impact of regulatory or administrative actions on private property.

Land use policies, restrictions, conditions and fees of the City of Eagle should not violate private property rights, adversely impact property values or create unnecessary technical limitations on the use of property as prescribed under the declarations of purpose in Chapter 80, Title 67, Idaho Code and its subsequent amendments.

2.2 Goal

All land use decisions made by the City of Eagle pursuant to this Comprehensive Plan shall protect fundamental private property rights.

2.3 Objectives

a. Private property shall not be taken for public use without just compensation.

b. Property rights of landowners shall be protected from arbitrary and discriminatory actions.

c. No person shall be deprived of private property without due process of law.

2.4 Implementation Strategies

a. Land use development regulations should be designed to protect the health, safety and welfare of the community, and to avoid any unnecessary conditions, delays and costs.

b. The protection and preservation of private property rights should be a strong consideration in the development of land use policies and implementation standards and regulations and as required by law.

c. The Comprehensive Plan and implementing ordinances should strive for stable and consistent policies regarding development densities and requirements.

d. All changes in the comprehensive plan and land use entitlement should be reviewed in compliance with this plan and the visioning plan for the western area. (Map 2.1)

CHAPTER 3 - POPULATION

3.1 Background

Past and current population patterns of Eagle, Ada County, and the State of Idaho help in understanding the anticipated demands on the community's resources through 2025.

3.2 Existing and Future Conditions

Since the incorporation of Eagle on February 26, 1971, the population of Eagle has more than tripled. From a small country agricultural village of 2,260 residents in 1980, the vigorous community had grown to approximately 7,500 residents in 1999.

Households are described as "occupied dwelling units." The number of households has a direct relationship to the number of persons in Eagle. While the population of Eagle increased by 27% from 1980 to 1990, the total number of households grew by 43%.

For purposes of the comprehensive plan the City of Eagle's growth rate is forecasted at 4% opposed to the 1.1% used for the long range transportation plan (Communities in Motion).

TABLE 3.1

Total Households & Population at 2030

Year	2007	2010	2015	2020	2025
Households	7,909	8,897	10,824	13,169	16,022
Population	22,144	24,901	30,296	36,860	44,846

The Treasure Valley economy is expected to demand a greater labor force, thereby increasing the demand for housing throughout Ada and Canyon Counties, which will include the City of Eagle and its Area of City Impact.

Historic and projected households and population for the City of Eagle and the Eagle Planning Area can be obtained from the Ada Planning Association, U.S. Census and Idaho Power Company.

3.3 Goal

To promote a high quality of life and livability in the community.

3.4 Objective

To plan for anticipated populations and households that the community can support with adequate services and amenities.

3.5 Implementation Strategy

Monitor population growth and employment data to detect significant trends that will affect the Comprehensive Plan goals, objectives and policies.

CHAPTER 4 - SCHOOLS, PUBLIC SERVICES AND UTILITIES

4.1 Background

Public utilities, facilities, and services are necessary for the overall welfare of the public and are generally available to Eagle residents. The City and special districts provide the basic services of water, sewer, school, police, fire and library to residents. With Eagle's growing population comes the need for increased public services and the necessity to improve existing service delivery systems.

Policies concerning the manner in which public utilities and services are expanded play an important role in the location and intensity of future housing, commercial and industrial development. Since the City of Eagle depends on outside providers, it must be involved in any plans that will affect the community. Service providers currently include:

a. The City of Eagle which provides administrative services, library services, and a portion of the water service.

b. The Eagle Sewer District which provides sewer service within a designated sewer service area. Larger lot homes have wells and septic systems and must comply with Central District Health Department requirements.

c. The Meridian and Boise School Districts which provide K-12 education.

d. United Water, Eagle Water Company, and the City which provide water to Eagle residents. Some private water systems and wells are also used.

e. Ada County Sheriff's Office which provides police services on a contract basis.

f. The Eagle Fire District which provides fire and emergency services.

g. Private canal companies and drainage districts which provide irrigation water and drainage water management.

4.2 Schools

4.2.1 Schools - Existing Conditions

Eagle students attend schools in both the Meridian and Boise School Districts.

4.2.2 School Goals

Support the safe maintenance and construction of the public school system emphasizing quality school facilities that serve as a focal point for family and community activities and that provide a healthy, pleasant environment where

students can concentrate on advancing their education and teachers are given the tools to help the students achieve that goal.

4.2.3 School Objectives

a. Support the effort of the school district to ensure adequate school sites are provided and the intended capacity of the schools is not exceeded.

b. Support school district efforts to provide school sites and facilities that accommodate student enrollment.

4.2.4 Schools Implementation Strategies:

Request that the school district prepare a future facilities map based on the City's Land Use Plan and include it in the Comprehensive Plan. (See Map 4.1) To accomplish this objective, the City should:

a. Work co-operatively to develop student generation factors to be considered when analyzing the impact of new projects on the school district.

b. Prohibit the development of schools on sites that present a hazard, nuisance or other limitation on normal functions of the school.

c. Locate elementary and middle schools in residential neighborhoods to facilitate walking and reduce busing costs for the district. Elementary and Middle schools may be located on collector roadways as defined by the Regional Functional Classification Map~~s~~. High Schools may be located on arterials.

d. Work with the school district, ACHD and developers to establish access options for Eagle Schools via pathways and/or streets.

e. Encourage the joint siting of schools and parks whenever possible.

f. Encourage High Schools to reduce traffic impacts by providing limited/reduced student parking, developing alternative transportation, and/or establishing closed campuses.

g. Encourage the school district to continue to make schools available for civic functions when classes are not in session.

h. Encourage regular communication and meetings between City and School District Officials.

i. Encourage school districts to develop and report current projections to assess the impact of new development on school enrollment and facilities.

j. Explore legally suitable opportunities for developers to assist in donating or purchasing school sites identified in the district(s) master facilities plan, according to student demand created by future land use development.

k. Encourage the City and school district(s) to coordinate school site selection to ensure the availability of public services.

l. Encourage land use development to reduce street hazards by developing access to elementary and secondary schools on local streets and/or pathways.

m. Encourage the use of schools as an integral part of the community by making joint agreements with the school district to allow community uses of school facilities.

n. Consider density incentives for the location/dedication of public school sites.

o. Consider allowing the non-building portion of school sites to be counted as required open space when school sites are dedicated.

4.3 Police Protection

4.3.1 Police - Existing Conditions

Ada County Sheriff's Office currently provides contract police services to Eagle. While maintaining law and order, the Ada County Sheriff is also active in sponsoring and participating in community involvement programs.

4.3.2 Police Goals

Demographic and economic conditions will have tremendous influence on the demand for police services. The primary goal of the City should be to maintain and support law enforcement services to accommodate the increasing demands imposed by a growing population, additional recreational facilities, increased traffic volumes, expanded City limits, and new businesses.

4.3.3 Police Objectives

Work with the City of Eagle police to implement the three pillars of their strategic Plan:

To prevent and solve crime
Create safe places and roads
Intelligently manage emergencies

4.3.4 Implementation Strategies

a. Locate and construct satellite police office as a function of the development process to ensure efficient and prompt response times. .

b. Locate satellite police offices within neighborhood and community centers within the foothill.

c. Promote the co-location of civic and emergency service facilities within the foothills

d. Strive to achieve and maintain a standard of one full time office per 1,000 population.

e. Work to encourage an implement a community outreach and education program within the schools.

4.4 Fire Protection

4.4.1 Existing Conditions

The mission of the Eagle and Star Fire Protection Districts ("Districts") is to provide diversified emergency services in a competent and caring fashion with dedication through progressive thinking, training, technology, public education, and superior public service and to ensure a safe environment for the Eagle community of today and tomorrow.

4.4.2 Fire Protection Goals

Provide fire stations, equipment and trained fire and EMS personnel in geographic locations that minimize emergency services response time.

4.4.3 Fire Protection Objectives

Provide needed resources to respond to and mitigate all hazard risks to the community.

4.4.4 Fire Protection Strategies

a. Work with the School District, land owners, developers and the City to fund site acquisition and construction of fire stations

b. Communicate with neighboring emergency service providers to coordinate locations of facilities to enhance each others capabilities.

c. Work with the City and developers on standards that increase buildings' ability to withstand wildfires.

d. Work with other City, County, State and Federal agencies to mitigate all hazard risks.

e. Encourage and support ongoing employee training and education.

4.5 Library

4.5.1 Library – Existing and Future Conditions

The City of Eagle currently funds and operates a municipal library district serving the incorporated City Limits and, through an Open Access agreement, individual patrons living within the LYNX! Library Consortium of southwest Idaho. The Library is governed by a Library Board of Trustees and is guided by a five-year Strategic Plan. The Eagle Public Library has one of the highest per capita and per item circulations of any library in the State. This is due, in large part, to the lack of branch development by adjacent library systems. Over one-third of Eagle's library patronage is from outside of the City Limits. The City of Boise reimburses Eagle for the excess service it provides to Boise residents through an Open Access agreement negotiated biennially.

4.5.2 Library Goal

Maintain a library system of a full-service main library and full-service branches that offer safe, efficient, and attractive environments for individual, family, and community activities. "Full-service" is defined as providing collections and access to circulation, reference, technical lab, and programming services to all patron age groups during open hours.

4.5.3 Library Objective

a) Support the efforts of the Library to ensure that adequate facilities are provided to the citizenry of Eagle. "Adequate Facilities" is defined as a minimum of 1.0 square feet of library space per capita and 3.5 collection items per capita.

b) Develop a City library system in which no Eagle resident is more than a five-mile driving distance from a full-service library facility.

4.5.4 Library Implementation Strategies:

a) Ensure that new development funds necessary expansions of the municipal library.

b) Work to establish a system for developer funded expansions to the library system that would maintain adopted facilities standards. This may include: land donation, construction, or service fees.

c) Work with the development community to secure commercial space for "store-front" library facilities in developing planning units under 10,000 population.

d) Land acquisitions and siting standards should include:

1) A size sufficient to house a minimum stand-alone branch of 10,000 square feet;

2) A location within high-density commercial and service centers; and

3) Easy access to major transportation routes.

e) Branch sites for Planned Unit Developments projected to have build-out populations larger than 10,000 or more than 3,700 housing units should be of a size to accommodate facilities that will serve the build-out populations.

f) Seek opportunities to develop cooperative or joint use branch facilities in conjunction with other public service providers or neighboring libraries.

g) Encourage adjacent library systems to develop branches in locations that would mitigate excessive use of Eagle Public Library by outside residents. Negotiate individual reimbursement contracts with neighboring library jurisdictions under the terms of the LYNX! Consortium's Open Access agreement.

4.6 Domestic Water

4.6.1 Domestic Water - Existing and Future Conditions

Eagle Water Company (EWC), United Water Idaho (UWI) and the City of Eagle (City) are the major domestic water providers in and around the City. A few residential subdivisions own and operate their own water systems and individual domestic wells are also used in the City. UWI provides backup fire and emergency storage to the eastern portion of the City's service area through an agreement approved by the Public Utilities Commission.

In 2005, the City adopted a Water System Master Plan that defines existing and future service areas. The Master Plan identifies major infrastructure requirements in the service area including storage tanks and water transmission mains from Linder Road to Highway 16 and from Homer Road to Highway 20/26. The Master Plan called for the City to create a Public Works Department including hiring a Public Works Director. Subsequently, the City has undertaken efforts to budget for and hire staff to begin the process realizing that goal.

The City has also implemented other aspects of the Plan including applying for water rights and obtaining approval for wells for its western growth area. Construction of a one million gallon reservoir, a new city well and a SCADA control system will be completed in the fall of 2007.

4.6.2 Domestic Water Goals

a. Provide safe, reliable and cost-efficient water service to the residents of the City by constructing water supply, distribution system and storage facilities that will meet the water demands of current and future water customers who will be residing in the Area of City Impact as outlined in the Eagle Comprehensive Plan and any foothill plan adopted by the City.

b. Recognize the water needs within the Eagle Foothills will be different than those within the rest of the City and that a City managed/owned System may not be interconnected with the existing city system.

c. Develop groundwater supply, water transmission and water storage facilities to provide for domestic, emergency and fire flows that meet federal, state and local standards and the service demands of development.

d. Protect municipal wells through land use decisions and best management practices in keeping with the 2002 Source Water Assessment and the Wellhead Protection Plan.

e. Protect domestic wells through sound land use planning and best management practices.

f. Develop a long term groundwater monitoring system to accumulate historical data on the status of the groundwater supply.

g. Investigate the options and opportunities for developing surface water supplies to augment municipal groundwater supplies.

h. Develop water policies and plans for the foothill region that recognize the unique nature and challenges of foothill

development while preserving the ability to serve the valley from existing groundwater sources.

i. Develop a plan to provide fire protection to homes and businesses that are in the City limits and the Area of City Impact but are not served by a public water purveyor.

4.6.3 Domestic Water Objectives

a. Develop an interconnected water system owned and operated by the City of Eagle to create an efficient and safe water supply and delivery system as identified in the Water Master Plan. (See Map 4.2)

b. Protect groundwater quality by requiring when feasible the use municipal wells constructed to federal, State, and City standards.

c. Promote groundwater conservation through the use of surface water sources and treated wastewater effluent for irrigation and through the development of water rates that encourage conservation.

d. Ensure that municipal water facilities provide water pressure and flows that meet or exceed State and local requirements.

e. Promote the utilization and reuse of surface water sources for non-potable uses such as irrigation and water amenities to decrease reliance on groundwater and to preserve the resource.

f. Require new developments to pay for new and upgraded water facilities to minimize impacts of growth on existing users.

g. Limit groundwater use in shoulder seasons to essential public landscaped areas such as schools, playgrounds, parks and pathways.

h. Investigate surface water supply options to meet potable needs for the expanded foothills area while protecting the water sources supplying existing water users.

i. Develop separate irrigation and water reuse requirements for the foothills areas including the use of native and drought-tolerant vegetation and low water use landscaping options.

j. Develop policies and procedures to create local improvement districts to fund a centralized distribution/fire protection system that will extend fire protection to developed areas that are served by individual wells.

4.6.4 Implementation Strategies

a. Update the Water Master Plan to delineate the requirements for trunk lines, booster stations, pressure reducing stations and storage tanks that include connections to the foothills for redundancy of storage and supply.

b. Acquire additional lands sufficient for the construction of two 1.5 million gallon water storage tanks for the western service area.

c. Develop well construction standards and guidelines to assist developers with cost-effective means of meeting water demands for individual systems.

d. Assist with funding options to provide developers with various means of meeting standards for water supply systems.

e. Require a separate water system for use of non-potable water, where available, for irrigation and water amenities and to minimize reliance on groundwater for these uses.

f. Promote low water use irrigation practices and drought-tolerant landscape options in areas that rely on groundwater for irrigation.

g. Develop policies and procedures for assuring that flowing artesian groundwater wells are controlled within the City boundaries.

h. Require groundwater monitoring wells and easements sufficient to monitor groundwater levels in the service area.

i. Work with other water service providers to maintain a safe and sufficient water supply across jurisdictional boundaries.

j. Establish and maintain a Water Department and trained staff to meet the demands of water system operation in accordance with the State of Idaho Department of Environmental Quality requirements and applicable federal rules and regulations.

k. Protect current residents from paying for facilities that principally benefit new development.

l. Ensure that the administration of the water systems for all new development within the Western Planning Area (west of Linder Road) and any foothill areas annexed by the City be managed by the City of Eagle municipal water facilities, though this would not necessarily be a completely integrated system..

m. Periodically review the costs and benefits of the City water system to insure that rates and fees are sufficient to provide adequate capital to fund needed improvements including a reserve fund for infrastructure replacement and evaluation of local groundwater trends.

n. Evaluate future water system needs and develop an operating budget for operation and maintenance and a capital budget for water infrastructure improvements for the City-owned water facilities.

o. Require the construction of dry-line water facilities and fire hydrant stub-outs in developments anticipated to be served by the municipal system as identified in the Water Master Plan and the Comprehensive Plan.

p. Provide public education on water conservation.

4.7 Sewer

4.7.1 Sewer Existing and Future Conditions

The Eagle Sewer District (ESD), was established in 1963 as a public entity separate from the City of Eagle. The ESD service area generally corresponds to the area within the Eagle City limits. Extensions of the ESD service area are accomplished by actions of the ESD Board of Directors, and for the most part match annexations to the City. However, the extensions do not have to match annexations to the City either in location or in time.

ESD serves all of the residential and commercial users in the City that are receiving central sewer service. In addition to users served by central sewer, many homes in the District's service area utilize individual septic tanks and drain fields for on-site wastewater treatment and disposal. The District currently treats the wastewater to secondary standards and discharges the treated effluent to the City of Boise wastewater treatment facilities for ultimate treatment and disposal under a long-term agreement between the District and the City of Boise. (See Map 4.3)

Due to total pollutant loading limitations for the Boise River, standards for treated wastewater effluent discharges to the Boise River may become far more stringent in the future than they are at present. Treated wastewater disposal for waste generated by future development may at some time require alternatives to stream discharge.

ESD will continue to plan for consequences of such potential intensification of stream discharges to meet the needs for central sewer in areas within the City. ESD is committed to providing central sewer service to areas within the City of Eagle.

It is the City of Eagle's policy to accommodate orderly and appropriate development at a pace that does not unreasonably impede or burden the development process. Timely extension of sewer service is an essential feature of orderly development. Hence, in the future the City of Eagle will take an active interest in sewerage and wastewater issues.

4.7.2 Sewer Goals

a. Ensure that Eagle Sewer District extends its wastewater collection system and expands and upgrades its wastewater treatment and disposal facilities to keep pace with new developments in the Area of City Impact & the Eagle Foothills.

b. Ensure that the ESD expands its sewerage and disposal facilities at a rate that will stay ahead of and thus not impede orderly development as envisioned in other sections of this Comprehensive Plan.

4.7.3 Sewer Objective

Provide assurance of Eagle's capability to sustain orderly and appropriate growth by maintaining awareness of Eagle Sewer District's plans for expansion and schedules for extension, and reviewing how these plans fit with the known plans of the development community in Eagle.

4.7.4 Sewer Implementation Strategies

The City of Eagle should:

a. Consult at regular intervals with Eagle Sewer District regarding its expansion and extension plans.

b. Compare ESD expansion plans with the City's information regarding planned development within the Area of City Impact & the Eagle Foothills.

c. Develop a list of City-approved sewerage extension and disposal expansion alternatives that developers can use to accommodate orderly and appropriate development in areas where ESD is unwilling or unable to provide central sewer service.

d. Establish requirements for developments that propose on-site systems to provide the City with the name(s) and emergency phone numbers of the certified operating personnel who will be in charge of the on-site collection and treatment facilities.

e. Require developments that propose on-site systems to develop long-range depreciation schedules and capital replacement funding mechanisms that will insure the on-site collection and treatment facilities will be properly operated and maintained and provide the City with copies of the information.

f. Continue to work with the ESD to coordinate urban development based upon the Land Use component of the Comprehensive Plan and the Eagle Sewer District's master plan.

g. Work with the Eagle Sewer District to establish a long-range plan for the distribution of treated effluent for irrigation.

h. Work with the City Council to establish policies requiring the use of treated effluent for use in common areas within developments.

i. Work with the development community and the Eagle Sewer District to determine if there is a need and desire to treat effluent to a class "A" standard for direct application to individual home lots.

j. Work with the Eagle Sewer District and Developers to promote the consolidation of treatment facilities and sewer collection systems. The design system design should be based on larger drainage areas rather than individual developments.

4.8 Storm Drainage and Flood Control

4.8.1 Storm Drainage and Flood Control Existing Conditions

Storm Drainage: The increase in construction in the Area of City Impact will result in an increase in impermeable surfaces such as rooftops, asphalt streets and concrete drives. An increase in impermeable surface area increases the volume and alters the location of storm water which must be controlled and managed to protect public health and safety. In addition, many receiving streams have

abundant fish and other aquatic life which must be protected from pollutants that the storm water may carry into the receiving stream. The City of Eagle has made significant progress in setting standards for storm water discharge by developing standards for surface and subsurface discharge. The Standards are designed to protect receiving streams by requiring new developments to utilize onsite subsurface treatment facilities for storm water runoff.

Flood Control: River-front property provides a unique setting for homeowners and is an amenity that is highly sought after by Eagle residents. The construction of homes along the fragile and potentially dangerous river front presents challenges for the City. Continued development and infill of the floodplain decreases the river's response time and increases the duration and intensity of flood events to downstream residents. The City of Eagle has taken the lead in establishing a "no net loss" policy and set-back standards for protection of residents so that continued development in river front areas will not jeopardize the health and safety of property owners.

4.8.2 Storm Drainage and Flood Control Goals

a. Define efficient, cost effective and environmentally sound storm water, storm drain, and flood control measures to protect existing and future land uses, preserve public safety, protect surface and groundwater quality, and insure compliance with federal and state requirements.

b. Support and promote water quality standards for surface water and groundwater protection.

4.8.3 Storm Drainage and Flood Control Objectives

a. Establish design standards for onsite storm water treatment and disposal facilities that will be effective over the life of the facility.

b. Ensure that adequate flood control facilities are provided and maintained to protect citizens from a 100-year storm event as defined by the National Flood Insurance Program.

c. Protect major investments in infrastructure by requiring that vulnerable assets such as roads and sewer facilities are constructed above the designated base flood elevation.

d. Ensure that the cost of improvements to storm drain and flood control facilities are borne by those who benefit from the improvements.

e. Ensure that storm drainage facilities are designed to discourage mosquito breeding.

f. Work with landowners, the City's floodplain expert, FEMA, and the Army Corp of Engineers to accurately define floodways and floodplains within the City.

4.8.4 Storm Drainage and Flood Control Implementation Strategies

a. Establish standards that require the construction of adequate on-site storm drain, flood-control and storm water treatment and disposal facilities are an integral part of every new development.

b. Periodically review ordinances and standards for adequacy as development intensifies and densities increase in critical areas.

c. Routinely inspect constructed active and passive facilities for continued maintenance where such maintenance is vital for the function of the facility. Pursue enforcement of protective covenants or jurisdictional responsibilities to insure that the responsible parties maintain their facilities.

d. Continue to support public education in matters of pollution control, sensitive habitat, and public safety along receiving streams.

e. Establish storm water standards and ordinances unique to the foothills in coordination with the appropriate entities and regulatory authorities.

4.9 Other Services and Utilities Existing Conditions:

a. Electricity: Idaho Power Company (IPC) provides electrical service throughout the City of Eagle and the Eagle AOI. IPC is a public service company regulated by the Idaho Public Utilities Commission (IPUC).

b. Pressure Irrigation: The City of Eagle currently requires developers to install pressurized irrigation systems for the irrigation of landscaping when new development is within an irrigation district and water rights are available.

c. Solid Waste: A private contractor currently provides household and business trash collection and recycling services to Eagle residents. The City of Eagle plans to continue using these services for the foreseeable future.

d. Natural Gas: Intermountain Gas currently provides natural gas services to the Eagle area.

e. Telephone and Telecommunications: Local telephone service is currently provided by Qwest to a majority of city residents. Computer networking, teleconferencing, telecommuting, internet and wireless communications are rapidly evolving. This trend is affecting how people make a living and where they work in the community.

f. Chevron Pipeline: The Chevron Pipeline is a portion of an interconnected bulk gasoline transport system that fans out across the United States from Alaska. A section of the pipeline crosses through the Area of City Impact from northwest to southeast (See Map 4.5) At the time that the pipeline was constructed, most of the Eagle area was rural and the pipe was installed at relatively shallow depths of less than 20 feet. As the area develops, it is important to identify the Chevron right-of-way, provide significant seatbacks and buffers and encourage inspection of the line to ensure development is not encroaching on this facility.

4.9.2 Other Services and Utilities Goals

a. **General**: Require developments to connect to existing public utilities wherever feasible.

b. Work to ensure that all utilities are under grounded at the time of development, up to 135KV. (See Map 4.4)

c. **Electricity Goals:**

1. Designate the general locations and visual impacts of existing and proposed electric facilities.

2. The City of Eagle's plan for electric utility facilities will be formulated, interpreted, and applied in a manner consistent with and complementary to the serving utility's public service obligations.

3. Decisions made by The City of Eagle regarding electric utility facilities within the city and AOI will be made in a manner consistent with and complementary to regional electrical demands and resources.

4. Planning by the City of Eagle for electric utility facilities development will be coordinated with planning by other jurisdictions for electric utility facility development.

5. Work to encourage communication and cooperation on landscape, design and locating future facilities to limit visual impacts.

d. **Pressure Irrigation**: Utilize alternative water sources for irrigation and develop an infrastructure to provide pressure irrigation to existing and future development wherever possible and feasible.

e. **Solid Waste:** Continue the practice of using a private service for solid waste collection and disposal.

f. **Natural Gas:** Ensure that a sufficient quantity of natural gas is available to meet the needs of existing and future development in the AOI and the areas that are being proposed for development in the foothills.

g. **Telephone and Telecommunications**: Provide existing and future residents in the City of Eagle, the AOI and the foothills with uninterrupted access to up-to-date, state-of-the-art telephone and telecommunication service.

h. **Chevron Pipeline**: Protect the health and safety of residents in the vicinity of the pipeline.

4.9.3 Other Services and Utilities Objectives

a. Discourage overlapping service areas and/or illogical service boundaries.

b. Strive for continued cooperation between service providers, utility providers and the City of Eagle.

c. Ensure that access to services and utilities is readily available in the City, the AOI and the foothills so that access issues do not create conflicts with the overall goals and objectives of this Comprehensive Plan.

d. Review Idaho Power's long-range plan to ensure cooperation in future planned efforts.

4.9.4 Other Services and Utilities Implementation Strategies

a. General:

1. The City Council should consult with service providers and the Planning and Zoning Commission to develop an Urban Services Planning Area map depicting individual utility service area boundaries.

2. The City should work with utilities to allow placement of utility facilities in public rights-of-way, including underground.

3. The City should encourage the joint use of utility corridors.

4. Where appropriate, the City and utilities should discuss and resolve areas where context-sensitive setbacks should be used.

5. The City should provide utilities with periodic updates of population, employment, and development projections.

6. The City and utilities should seek to jointly evaluate actual patterns and rates of growth and compare such patterns and rates to the utility's demand forecasts.

b. Electricity:

1. The City should encourage Idaho Power Company (IPC) to follow the relevant implementation strategies recommended in section 4.9.3.a above.

2. IPC should establish sites for new electric facilities before development occurs and should provide sufficient buffers and setbacks from residential use.

3. The City should encourage IPC to locate facilities outside of scenic corridors, the Central Business District and the Village Center, and may give consideration to locating facilities within other commercial areas.

4. The City should work with IPC to designate the general locations of existing and proposed electric facilities.

5. The City of Eagle should work with IPC to formulate, interpret and apply Eagle's electric utilities facilities plan in a manner consistent with and complementary to IPC's ability to meet its public service obligations. (See Map 4.4)

6. Designate the general location of electric utility facilities of a nominal voltage of 55,000 volts or greater by the Comprehensive Plan Map.

7. The City should take into account regional electrical demands and resources when making recommendations and decisions regarding electric utility facilities.

8. The City should coordinate and cooperate with other municipal jurisdictions for planning of electric utility development and expansion.

c. Pressure Irrigation:

1. Where applicable, the City should follow the relevant implementation strategies recommended in section 4.9.3.a above when exploring the creation of a pressure irrigation utility in the AOI.

2. The City should investigate the feasibility of creating a pressure irrigation municipal utility whose purpose would be to alleviate stress on the ground water resource by acquiring surface water rights and, where feasible, extending pressure irrigation infrastructure to existing and proposed developments in the City of Eagle, the AOI and the foothills.

d. Solid Waste:

1. The City should continue to retain the services of a third-party solid waste collection service.

2. The City should encourage recycling efforts by expanding the availability of drop-off centers for residents who wish to recycle their solid waste.

3. The City should continue the monthly hazardous waste collection program to help in the effort to protect the ground water resources.

e. Natural Gas:

1. The City should encourage Intermountain Gas to follow the relevant implementation strategies recommended in section 4.9.3.a above.

2. The City should work with Intermountain Gas to encourage new development to include natural gas service in the development plans.

f. Telephone and Telecommunications:

1. The City should encourage telephone and telecommunications companies to follow the relevant implementation strategies recommended in section 4.9.3.a above.

2. The City should work with telephone and telecommunications utilities to encourage new development to include in the development plans advanced services such as fiber optic and WiFi.

3. Establish policies for the expansion of broadband serves to the City.

g. Chevron Pipeline: The City should strive to remind developments and utilities of the presence of the Chevron Pipeline if the developments or utilities are planning work in the vicinity of the pipeline.

CHAPTER 5 – ECONOMIC DEVELOPMENT

5.1 Background

The economic development component of the Comprehensive Plan presents a discussion of the economics and employment in Eagle. The city encourages appropriate economic development while retaining those attributes that give Eagle its special living and working environment.

5.2 Existing and Future Conditions

Eagle is home to a wide range of businesses. Within the City and Area of City Impact (AOI), employment is divided among retail trade, services, construction, government and agriculture.

The City of Eagle has taken great care in preserving the downtown and central business district as the economic hub of the city. The 2000 Eagle Comprehensive Plan designated 1930 acres (11%) of the AOI with commercial, mixed use, business or industrial uses. In 2002, Eagle had 0.57 jobs per household compared to Boise at 1.7 and Meridian at 1.2, as calculated by COMPASS.

Over the next 20 years, employment in Eagle is projected to grow at 65 percent, which is a higher rate than the population is projected to grow over the same period. The economic development goal is to promote the City of Eagle to grow beyond a bedroom community. The expansion of the AOI to State Highway 16 and north to the Planning Boundary Line provides additional opportunities to expand the employment options and capture the additional tax base associated with these uses. The distribution of land uses within the western impact area will shift the non-residential uses from 11% to 25% of the City's AOI and will provide additional land to promote employment options within the City.

Projected employment in Eagle is expected to continue to grow. Eagle's recent highway improvements (e.g. SH 44 and five lane Eagle Road) will encourage new development opportunities.

5.3 Economic Development Goals

Encourage an economic base complementary to Eagle's rural identity

Ensure the ability for the City to continue to fund, improve and support itself, including infrastructure, without the use of building permit fees, impact fees and zoning fees.

Identify areas that will provide significant employment opportunities to the residents of the City of Eagle thereby allowing the City to be a desirable place to live, work, and recreate.

Identify areas that, due to the nature of existing uses, future uses and/or transportation corridors, will lend themselves to increased business activity and nonresidential use so as to preserve larger areas as primarily residential neighborhoods.

Increase available jobs within the City of Eagle to levels comparable with adjacent communities.

5.4 Economic Development Objectives

a. To preserve the economic integrity of the Central Business District (CBD) and to encourage business and industry that have minimal environmental impact to move their operations into Eagle.

b. Provide additional economic sustainability to the City of Eagle by encouraging the location of stable employment based industries that bring a balance of residential, recreational and economic values to the City.

5.5 Economic Development Implementation Strategies

a. Encourage signage promoting the Central Business District.

b. Expand the existing historic style lighting and beautification efforts throughout the Central Business District.

c. Encourage a diversity of uses in the Central Business District.

d. Provide adequate parking for downtown businesses.

e. Encourage the interconnection of pedestrian/bikeway systems between the Central Business District and Boise River Greenbelt.

f. Seek new commercial development that will complement the Central Business District and Eagle's rural residential identity to locate adjacent to but outside the Central Business District.

g. Encourage commercial growth adjacent to the Central Business District and discourage isolated commercial development in outlying areas.

h. Promote additional employment opportunities and expand the economic base by:

   1. Encouraging growth and expansion of existing businesses and industry, and

   2. Attracting additional business and industry so residents will be provided with adequate commercial services and facilities.

i. Encourage the balancing of commercial uses throughout the City, the western planning area, and the Foothills to avoid overloading key intersections and individual planning areas.

j. Enforce the sizing and scaling of commercial and mixed use areas as specified in the land use chapter.

k. Encourage the interconnectivity of residential and nonresidential areas within the western planning area and the Foothills to the existing CBD and greenbelt system.

l. Discourage isolated or strip commercial uses.

m. Promote and recruit additional employment opportunities that allow Eagle residents to live and work within the City of Eagle.

n. Limit the development of excessively large single entity businesses that would jeopardize the competitive business environment of the downtown and CBD to areas within the regional commercial centers that are planned for the northeast corner of U.S. Highway 44 (State Street) and the future extension of State Highway 16, the northeast corner of State Highway 44 & State Highway 55, and Community Centers within the Foothills Planning Area.

o. Encourage the location of corporate and business uses to the Village Center and the Moon Valley & State, and Foothills Planning Areas.

p. Encourage context sensitive design of business and employment centers to complement Eagle's rural identity.

q. Encourage Community Scale Commercial use to locate along State Highway 55 & 16 within the Foothills to promote trip capture along the regional roadway system.

r. Encourage Community Commercial areas within the Foothills to use grade separated interchanges and berming to provide a campus type feeling to the development.

CHAPTER 6 – LAND USE

6.1 Background

Managing growth and channeling it into orderly community development is the key element of land use planning. Unplanned growth results in undesirable land use patterns. Areas within the City and within the City's planning areas are given land use designations which are depicted on the Comprehensive Plan Land Use Map, hereinafter referred to as the "Land Use Map".(See Map 6.1 & 6.2))

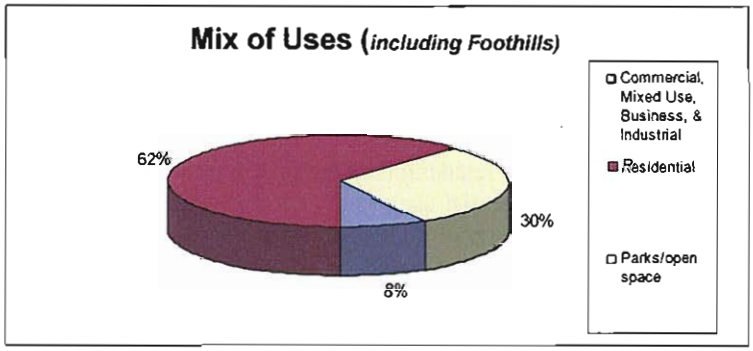
The Land Use Map is an integral part of the Comprehensive Plan. It serves as a planning policy document and planning tool that will assist the City in sustaining responsible growth and development to ensure that evolving land use patterns remain consistent with goals, objectives and strategies of the Plan.

Land use designations as reflected on the Land Use Map are based on the existing land use pattern, existing natural physical features such as the Boise River, Dry Creek and the foothills, floodplain areas, capacity of existing community facilities, projected population and economic growth, compatibility with other uses of the land, transportation systems, and the needs of local citizens.

As a part of the review of the 2000 Comprehensive Plan, the City completed a land capacity analysis of the economic sustainability of the existing AOI and future growth areas for the City. This study found that the City of Eagle, though stable and united in its vision to develop a city with a uniquely rural character, did wish to establish long term sustainability for the City as it approached build out.

The 2000 Comprehensive Plan detailed the following uses for the incorporated City and the AOI:

Table 6.1



Nearly 90% of the City's 2000 AOI was designated for residential uses which, coupled with the third lowest tax levy rate in the State of Idaho, severely limits the long-term sustainability of the City of Eagle. The land capacity analysis further outlined that over 50% of the residential land within the existing AOI was developed to the density described in the 2000 Comprehensive Plan. The analysis also showed that only 20% of the land available for residential development is vacant and suitable for uncomplicated development. Understanding the current rate of development (300 acres per year), the city will run out of vacant land in approximately 6 years. However, residential build-out

could be extended if underdeveloped property became available for redevelopment in the future. A significant factor in determining the successful redevelopment of vacant land within the City is the cost and availability of vacant land in adjacent cities.

6.2 Future and Existing Land Use Conditions

Residents of Eagle and its AOI have a strong desire to maintain the rural "feel" of the community. The area of impact is primarily rural in nature; the majority of the area is currently divided into 10+ acre tracts and limited 1 acre lots developed within the County. The vision for the area focused on identifying activity centers and the regional transportation corridors while preserving the rural character of the City of Eagle. These areas are the final development area for the City as lands to the east, south and west begin to be incorporated into other municipalities. In order to ensure the quality of life that is desired by Eagle residents, it is necessary to maintain a tax base that is adequate for providing expected public services.

6.3 Land Use Designations

Development density shall be calculated by project. Unused density for undeveloped or underdeveloped land adjacent to or within the same land use designation will not be transferred or used to "balance" or "maximize" densities with in an area. Clustering will only be allowed as specified in the "Parks, Recreation, and Open Spaces" chapter of the Comprehensive Plan.

For the purposes of this comprehensive plan, the density shall be defined as the ratio of the total number of dwelling units within a project divided by the total project area. Should that number be a fraction, it shall be rounded up to the nearest whole number, except where the comprehensive plan details a fractional density, and then the density shall not exceed the number described in the comprehensive plan.

The land use designations on the Comprehensive Plan Land Use Map, and as may be referred to within the text of the Comprehensive Plan, are defined on the Land Use Designation Matrix, Table 6-1, and the Zoning Compatibility Matrix, Table 6-2, and are as follows:

6.3.1 Residential Rural

Suitable primarily for single family residential development on large acreages which may be in transition from agricultural to residential use or may combine small scale agricultural uses with residential uses. An allowable density of up to 1 unit per 5 acres.

6.3.2 Residential Estates

Suitable primarily for single family residential development on acreages may be in transition from agricultural to residential use or may combine small scale agricultural uses with residential uses. An allowable density of up to 1 unit per 2 acres.

6.3.3 Residential One

Suitable primarily for single family residential development within areas that are rural in character. An allowable density of up to 1 unit per 1 acre.

6.3.4 Residential Two

Suitable primarily for single family residential development within areas that are rural in character. An allowable density of up to 2 units per 1 acre.

6.3.5 Residential Three

Suitable primarily for single family residential development within an urbanized setting. An allowable density of up to 3 units per 1 acre.

6.3.6 Residential Four

Suitable primarily for single family residential development within an urbanized setting. An allowable density of up to 4 units per 1 acre.

6.3.7 Residential Six Plus

Suitable primarily for multi-family housing including apartments, town homes and duplexes within the urbanized setting adjacent to designated transit corridors. An allowable density of up to 10 units per 1 acre.

6.3.8 Residential Transition

Residential development that provides for a transition of density within the planning area while keeping in context the density, scaling and lot sizes of existing or proposed uses. Commonly requires changes in lot dimensions and scaling, see specific planning area text for a complete description.

6.3.9 Mixed Use

Suitable primarily for a variety of uses such as limited office, limited commercial, and residential developments. Uses should complement uses within the Central Business District (CBD). Development within this land use designation should be required to proceed through the PUD and/or Development Agreement process, see specific planning area text for a complete description. An allowable density of up to 10 units per 1 acre

6.3.10 Commercial

Suitable primarily for the development of a wide range of commercial activities including offices, retail and service establishments. Uses should complement uses within the Central Business District (CBD).

6.3.11 Central Business District

Suitable primarily for development that accommodates and encourages further expansion and renewal in the downtown core business area of the community. A variety of business, public, quasi-public, cultural, residential and other related uses are encouraged. The greatest possible concentration of retail sales and business is to occur in this land use designation. Pedestrian friendly uses and developments are encouraged. Land within this district requires a CBD zoning designation upon any rezone.

6.3.12 Village Center

Suitable for development that accommodates the development of an employment center with supporting residential, commercial, quasi-public, and business uses. All uses should be within walking distance from the employment center and are intended to service the immediate area not to distract from the central business district.

6.3.13 Professional Office

Suitable for professional office uses. Retail may be permitted as an ancillary use within the office project. Smaller medical uses such as dentist offices and other outpatient clinics are encouraged.

6.3.14 Business Park

Suitable primarily for the development of technical park/research and development facilities, offices and office complexes, and limited manufacturing activities, including small-scale production, distribution, and storage of goods. Support activities may also be permitted.

All development within this land use shall be designed to be within a landscaped setting and be free of hazardous or objectionable elements such as noise, odor, dust, smoke, or glare. Such development should be operated entirely within enclosed structures and generate minimal industrial traffic. Development within this land use designation should be required to proceed through the PUD process.

6.3.15 Industrial

Suitable primarily for heavy and light manufacturing, warehousing, mini-storage and open storage, multi-tenant industrial park and similar uses. Limited office and commercial uses may be permitted as ancillary uses.

All development within this land use shall be free of hazardous or objectionable elements such as noise, odor, dust, smoke, or glare.

6.3.16 Public/Semi Public

Suitable primarily for the development of such uses as golf courses, parks, recreation facilities, greenways, schools, cemeteries, and public service facilities such as government offices. Support activities may also be permitted.

All development within this land use is encouraged to be designed to accommodate the different needs, interests, and age levels of residents in matters concerning both recreation and civil activities.

The public/semi public land use designation is not a residential land use designation. When a project or development is designed that contains or is adjacent to land holding a public/semi public land use this land will not be included when calculating the allowable residential density. Projects that hold a residential designation that want to provide amenities similar to those allowed in the public/semi public designation may transfer density within the development only when using the standards established in the Planned Unit Development as defined in the comprehensive plan.

6.3.17 Head of Eagle Island – Special Use Area

The head of the Eagle Island possesses a recognized function as a wildlife habitat, floodway and scenic natural resource reflective of Eagle's rural character. This area is to remain open to the sky and to the mountains to protect the unique environmental and natural features, wildlife habitat and natural lay of the land. The development of streets, buildings and other covered structures within this area should be prohibited.

6.3.18 Floodway

Floodway areas are defined as specifically shown on the newest edition of the Federal Emergency Management Administration maps along the Boise River and Dry Creek (Generally shown on the Land Use Map which is a part of this Plan). These areas are to remain open space because of the nature of the floodway which can pose significant hazards during a flood event. Also, the floodway areas shall not be considered as a part of the minimum area of open space required (as required within the zoning ordinance) unless developed as noted within this paragraph. Floodway areas shall be excluded from being used for calculating permitted residential densities. Any portion of the floodway developed as a substantially improved wildlife habitat area open to the public, or useable public open space, such as a pathways, ball fields, parks, or similar amenities as may be approved by the City Council, may be credited toward the minimum open space required for a development.

When discrepancies exist between the floodway boundary shown on the Land Use Map and the floodway boundary shown on the Federal Emergency Management Administration maps such that the floodway area is smaller than that shown on the Land Use Map the adjacent land use designation shown shall be considered to abut the actual floodway boundary.

When new floodway boundaries are approved by FEMA and/or the City, the floodway area on the Comprehensive Plan Land Use Map should be revised to reflect any new floodway line.

6.3.19 Scenic Corridor

An Overlay designation that is intended to provide significant setbacks from major corridors and natural features through the city. These areas may require berming, enhanced landscaping, detached meandering pathways and appropriate signage controls.

This designation includes the Willow Creek Scenic Corridor that is to provide increase setbacks and buffering of development including natural vegetation and restoration, regional trail and connectivity.

6.3.20 Foothills Residential

A unique combination of land uses within the Eagle Foothills that strives to balance residential, non-residential, and open space (developed and natural) use to create unique hamlets of development that place urban development within the natural environment without overcrowding or significantly altering the natural features found on the site.

The overall density in the foothills should be approximately 1 unit per two acres. Residential densities should be calculated to be commensurate with the existing land conditions. Priorities for open space areas should be lands with slopes of 25% or greater and important habitat areas. No

residential density should be granted for areas located within the Floodway. Units should be arranged in accordance with the transect plan as described in the Foothills planning area.

Table 6-1

Eagle City Zoning Compatibility Matrix[1]

Land Use Designations

City Zones	Residential Rural	Residential Estates	Residential One	Residential Two	Residential Three	Residential Four	Residential Six Plus	Residential Tansition
Agricultural (A)	X	X	X	X	X	X	X	X
Agricultural Residential (A-R)	X	X	X	X	X	X	X	X
Residential Estate (R-E)		X	X	X	X	X	X	X
Residential Districts			X	X	X	X	X	X
R-1			X	X	X	X	X	X
R-2				X	X	X	X	X
R-3					X	X	X	X
R-4						X	X	X
R-5							X	X
R-6 to R-10~~25~~							X	X
Limited Office (L-O)								
Commercial Airport (C-A)								
Neighborhood Business (C-1)								
General Business (C-2)								
Highway Business (C-3)								
Central Business (CBD)								
Light Industrial (M-1)								
Industrial Park (M-1A)								
Heavy Industrial (M-2)								
Extractive Industrial (M-3)								
Public/Semi-Public (PS)								
Mixed Use (MU)								X
County Zones								
Rural Preservation								
RUT Standard	X	X	X	X	X	X	X	X
RUT Cluster[3]								
Estate Residential (R1)		X[4]	X	X	X	X	X	X
Low Density residential (R2)				X	X	X	X	X
Medium Low Density Residential (R4)						X	X	X
Medium Density Residential (R6)							X	X
Medium High Density Residential (R8)							X	X
High Density Residential (R12)							X	X
Very High Density Residential (R20)							X	X

NOTE:

1: See Land Use policies for further clarification of these uses and potential need for development agreements

2: May require annexation prior to development

3: Prohibited under Title 8 of ACC

4: May develop in the R1 zone with development agreement requiring lots to be a minimum of 1.8 acres. If municipal services are not avalible alternative sewer treatment may be allowed if approved by the Central Disrtict Health Department.

Table 6-1

Eagle City Zoning Compatibility Matrix [1]

Land Use Designations								
City Zones	Foothills Residenital	Mixed Use [1]	Commercial [2]	Community Center	Neighborhood Center	Central Business	Village Center [1&2]	Professional Office
Agricultural (A)	X						X	
Agricultural Residential (A-R)	X						X	
Residential Estate (R-E)	X						X	
Residential Districts	X							
R-1	X						X	
R-2	X						X	
R-3	X						X	
R-4	X				X		X	
R-5	X				X		X	
R-6 to R- 10	X	X		X	X		X	
Limited Office (L-O)		X	X	X	X		X	X
Commercial Airport (C-A)			X					
Neighborhood Business (C-1)			X	X	X			
General Business (C-2)			X	X			X	
Highway Business (C-3)			X	X				
Central Business (CBD)						X		
Light Industrial (M-1)				X				
Industrial Park (M-1A)				X				
Heavy Industrial (M-2)				X				
Extractive Industrial (M-3)				X				
Public/Semi-Public (PS)			X	X	X		X	X
Mixed Use (MU)		X	X	X	X		X	X
County Zones								
Rural Preservation								
RUT Standard		X	X			X	X	
RUT Cluster [3]								
Estate Residential (R1)		X					X	
Low Density residential (R2)							X	
Medium Low Density Residential (R4)							X	
Medium Density Residential (R6)		X					X	
Medium High Density Residential (R8)		X					X	
High Density Residential (R12)		X					X	
Very High Density Residential (R20)		X					X	

NOTE:

1: See Land Use policies for further clarification of these uses and potential need for development agreements

2: May require annexation prior to development

3: Prohibited under Title 8 of ACC

4: May develop in the R1 zone with development agreement requiring lots to be a minimum of 1.8 acres. If municipal services are not avalible alternative sewer treatment may be allowed if approved by the Central Disrtict Health Department.

Table 6-1

Eagle City Zoning Compatibility Matrix[1]				
Land Use Designations				
City Zones	Business Park[2]	Industrial[2]	Public/Semi Public	Eagle Island[1]
Agricultural (A)				X
Agricultural Residential (A-R)				
Residential Estate (R-E)				
Residential Districts				
R-1				
R-2				
R-3				
R-4				
R-5				
R-6 to R-1025				
Limited Office (L-O)	X			
Commercial Airport (C-A)		X		
Neighborhood Business (C-1)				
General Business (C-2)				
Highway Business (C-3)				
Central Business (CBD)				
Light Industrial (M-1)		X		
Industrial Park (M-1A)	X	X		
Heavy Industrial (M-2)	X	X		
Extractive Industrial (M-3)		X		
Public/Semi-Public (PS)			X	
Mixed Use (MU)				
County Zones				
Rural Preservation				X
RUT Standard	X	X	X	
RUT Cluster[3]				
Estate Residential (R1)				
Low Density residential (R2)				
Medium Low Density Residential (R4)				
Medium Density Residential (R6)				
Medium High Density Residential (R8)				
High Density Residential (R12)				
Very High Density Residential (R20)				

NOTE:

1: See Land Use policies for further clarification of these uses and potential need for development agreements

2: May require annexation prior to development

3: Prohibited under Title 8 of ACC

4: May develop in the R1 zone with development agreement requiring lots to be a minimum of 1.8 acres. If municipal services are not avalible alternative sewer treatment may be allowed if approved by the Central Disrtict Health Department.

Table 6-2
Definitions of Land Use Designations

Land Use	Description	Allow Uses and/or Limitations
Residential Rural	Transition from agricultural to rural residential uses may contain active agricultural uses.	4.7 acre lots, maximum density of one unit per five acres, mixture of large lot residential and agricultural uses with ancillary commercial uses.
Residential Estates	Slightly higher transitional density with limited agricultural uses.	1.8 acre lots, maximum density of one unit per two acres, mixture of large lot residential and agricultural uses. Some ancillary agricultural commercial is appropriate.
Residential One	Primarily single family development.	37,000 square foot lots, maximum density of 1 unit per acre, single family residential uses with clustering allowed through the Planned unit development process.
Residential Two	Transitional density from rural residential to urban areas, primarily single family residential.	17,000 square foot lots, maximum density of 2 units per acre, PUD's may allow higher densities on specific project within the city's jurisdiction.
Residential Three	Standard urban density, primarily applies to areas north and east of the central business district.	10,000 square foot lots, maximum density of 3 units per acre, PUD's may allow higher densities on specific project within the city's jurisdiction.
Residential Four	Moderately higher urban density primarily located north and east of the central business district.	8,000 square foot lots, maximum density of 4 units per acre, PUD's may allow higher densities on specific project within the city's jurisdiction.
Residential Six Plus	Suitable primarily for multi-family housing including, apartments, town homes, and duplexes within the urbanized setting adjacent to designated transit corridors/facilities.	Provide a mixture of housing options ranging in densities and lot dimensions that provide alternative housing options, open space and trails without negatively impacting neighboring and existing uses.
Residential Transition	Residential development that provides for a transition of density within the planning area while keeping in context the density, scaling and lot sizes of existing or proposed uses. Commonly requires changes in lot dimensions and scaling, see specific planning area text for a complete description	Provide a transitions between uses and densities to ensure compatibility with existing development may require open space, compatible lot sizes or scaling.
Mixed Use	Suitable for a variety of uses that are implemented through the planned unit development code.	Provides a mixture of uses similar to the central business district with an increased residential presences that compliments the central business district.
Commercial	Standard retail commercial development.	A variety of retail and commercial development that compliments the central business district.
Central Business	A variety of use intended to provide expansion and renewal of the central business district.	Variety of uses including business, governmental, office, retail, residential, and cultural that compliments and preserves the historic character of the district and promote pedestrian circulation.
Business Park	Variety of office and commercial uses.	Professional office uses that include technical and business uses that have limited hazardous and object ional elements.
Industrial	Standard industrial land uses.	Includes heavy and light manufacturing, mini-storage, open storage, warehousing and extraction.
Village Center	Suitable for development that accommodates the development of an employment center with supporting residential, commercial, quasi-public, and business uses. All uses should be within walking distance from the employment center and are intended to service the immediate area not to distract from the central business district.	Allowed use include office, corporate park, commercial, hospitality, semi-public and residential uses. Scaling and intensity of uses must be compatible with section 6.8.3.
Foothills Residential	Suitable for a mixture of development types clustered into small hamlets of development spatially separated from each other by open space topography and design. Most intensive uses should be located within the Urban Transects of the plan. Overall density should be approximately 1 unit per 2 acres.	Allowed use include office, corporate park, commercial, hospitality, semi-public and residential uses. Scaling and intensity of uses must be compatible with section 6.8.11. Development should be focused into unconstrained areas.
Professional Office	Suitable for professional office uses. Retail may be permitted as an ancillary use within the office project. Smaller medical uses such as dentist offices and other outpatient clinics are encouraged.	Allowed uses include a variety of office use but does not include drive through and or vehicle oriented uses.
Public/Semi Public	Public service facilities including parks and Government offices.	Allowed uses include government offices/services, park and recreation facilities and golf courses.
Head of Eagle Island	Protection of wildlife habitat and recreational opportunities associated with Eagle Island.	Limited development. Structures and site obscuring development prohibited. Allowed use include parks, habitat and floodway protection.

6.4 Land Use Goals

a. Preserve the rural transitional identity of the City of Eagle.

b. Ensure the ability for the city to continue to fund, improve and support itself (including infrastructure) without the use of building permit fees, impact fees and zoning fees.

c. Identify areas that, due to the nature of existing uses, anticipated uses, and/or transportation corridors, will lend themselves to increased activity and non-residential use while preserving larger areas as residential neighborhoods.

d. Preserve the function of regionally significant roadways transecting the City while ensuring compatibility with land uses and design standards of the City.

e. Identify areas that will provide significant employment opportunities to the residents of the City of Eagle, thereby supporting the City as a desirable place to live, work, and recreate.

6.5 Land Use Objectives

a. To encourage the conservation and preservation of open spaces, sensitive habitat for plant and wildlife species, and unique areas based on diverse values within the City of Eagle

b. To encourage development with decreasing density radiating out from the CBD as shown on the Land Use Map.

c. To discourage lot splits in approved platted subdivisions.

d. To establish the land use map and associated policies as the official guide for development in the City of Eagle

e. To implement the land use map and associated policies through the zoning and development review process.

6.6 Land Use Implementation Strategies

a. Conserve the natural features and resources of Eagle.

b. Establish land use patterns and zoning districts that do not exhaust available services such as sewer, water, police, fire, recreational areas, highways and transportation systems.

c. Provide for a broad spectrum of housing types including apartments, townhouses, condominiums, single family attached, manufactured homes, affordable and subsidized housing and large acreage developments.

d. Discourage strip commercial type development.

e. Signage for non-residential uses should be incorporated as a master sign plan rather than individual signs when located along State Highways and entry corridors.

f. Encourage the development of technical park/research and

development facilities, offices and office complexes, and limited manufacturing activities.

g. Locate higher-density residential development closest to the Central Business District (CBD) and activity centers as shown on the Comprehensive Plan Land Use Map.

h. Encourage mixed use in the area shown along both sides of Eagle Road between Ranch Drive and Floating Feather Road to allow development such as higher density residential dwelling units and/or facilities such as senior assisted housing, nursing homes and convalescent homes. Commercial uses in this mixed use area are not permitted.

i. Require residential subdivisions outside the City limits but within the Impact Area to comply with the Land Use Map. Cluster developments located outside the City limits but within the Impact Area shall not be permitted. Furthermore, residential subdivisions outside the City limits but within the Impact area shall be developed with lot sizes consistent with the respective land use designation as stated in Section 6.3 within this Chapter.

j. Allow cluster development only after properties are annexed into the city.

k. Institute a PUD ordinance to facilitate and regulate cluster development.

l. Protect gravity flow irrigation systems including canals, laterals and ditches to assure continued delivery of irrigation water to all land serviced by such systems, to protect irrigation systems as a long range economical method for water delivery and to coordinate surface water drainage to be compatible with irrigation systems.

m. Protect farm- related uses and activities from land use conflicts or from interference created by residential, commercial, or industrial development. Promote the Idaho Right To Farm Act.

n. Promote commercial service and retail development within the Central Business District that contributes to a pedestrian friendly environment.

o. Preclude industrial developments that may overburden public services and facilities and will result in increased public expenditures.

p. Encourage the development of environmentally-friendly technical park/research and development facilities, offices and office complexes, and limited manufacturing activities.

q. Support City of Eagle flood and storm drainage regulations to achieve protection of property rights, environmental protection and flood damage reduction for community residents.

r. Consider annexing any parcels of land allowed to be annexed by Idaho Code 50-222.

s. Encourage a variety of housing through such mechanisms as PUD's in subdivisions including large lot subdivisions.

t. Encourage development of high density residential units of up to 10 dwelling units per acre in the vicinity of the existing intersections of State Highway 44 and Ballantyne Lane and State Highway 44 and State Street if the intersections are eliminated and a new intersection is

constructed approximately 800–feet west of the existing State Highway 44/Ballantyne Lane intersection. If the relocation of the intersections occurs, then the mixed use area shown along the north side of State Highway 44 from Van Engelen Estates to the Mixed Use area's west boundary may be developed with uses which the City will rezone and control through the use of Development Agreements. High density residential units of up to 10 dwelling units per acre will be encouraged in this area. However, if the existing intersection modifications outlined above are not completed, the Mixed Use area referenced above shall be developed as residential with densities of up to a maximum of two dwelling units per acre.

u. Maintain a Vision Map that depicts opportunities for creating and enhancing activity centers and linkages between planning areas and the existing City. (See Map 2.1)

v. Maintain a Future Land Use Map that encourages higher densities around activity centers and transit routes but also provides for large residential areas that continue to promote the rural character of the City of Eagle. (See Map 6.1 & 6.2)

w. Use smaller planning areas to help guide development in the western planning area. (See Map 6.3)

x. Limit non-residential uses to designated areas, with scaling and intensity paramount to the approval of these uses.

y. Require design treatments to provide compatibility of new development with existing development by considering such issues as building orientation, increased setbacks, height limitations, size restrictions, design requirements, fencing, landscaping or other methods as determined through the development review process.

z. Subject to all commercial and subdivision development within the City to Design Review.

aa. Discourage the creation of single use commercial and office districts.

bb. Encourage the development of districts that serve a variety of uses.

cc. Discourage mid-block commercial development along arterial and collectors unless it is specified in the plan.

dd. Encourage high-tech and research and development uses to locate in the Moon Valley Planning Area.

ee. Encourage corporate and institutional uses to locate in the Village Planning Area.

ff. Work with the County and land owners to obtain dedications of a trail network from the Foothills and proposed Eagle Regional Park through the foothills and connecting south into the existing City to the Boise River.

gg. Encourage and request current residents and landowners in the Foothills to provide easements and/or right-f-way dedications for trail networks to tie into the Ridge to Rivers trail system and connect downtown Eagle to the Foothills.

6.8 Land Use Sub Areas

6.8.1 Park Lane Planning Area

The Park Lane Planning Area is designated as mixed use combining community commercial, professional office, and a variety of residential densities. The vision for the area is to recognize the activity center created by Eagle High School and existing development approved by Ada County and to provide compatible land uses at densities that accommodate pedestrian scale design and future mass transit.

a. Uses

The land use and development policies specific to the Park Lane Planning Area include the following:

1. Parcel specific community commercial shall be allowed at the NE and SW corners of Linder Road and State Highway 44 as designated in the 2000 Comprehensive Plan.

2. The area located along Old Valley Road should be a mixture of residential and Professional Office with Limited Service Commercial. All uses along Old Valley should be designed to be oriented to take access from Old Valley Road and to encourage pedestrian movement through the area.

3. Flint Drive shall be preserved primarily as a residential street while properties abutting State Street should include a mix of residential uses, limited retail and office uses that promote trip capturing.

4. The roadway network along State Street east of Park Lane should be designed to provide internal circulation with no individual lot access to State Street. A cross access agreement with limited access points at Park Lane and at State Street, in alignment with the future Eagle Island State Park entrance, is necessary to provide access to the retail uses.

5. The land uses for the properties north of Flint Estates and extending to Floating Feather Road is Transitional Residential to ensure compatible residential lot sizing adjacent to the Colony Subdivision. Extending east to west, ensuring compatibility with the 1 acre lots in the Colony Subdivision, densities in the area will increase to a maximum of 3 units per acre near the high school.

6. The area located on the northwest corner of State Highway 44 and Park Lane is designated Mixed Use for the southern 17-acres, transitioning to residential, 3 units per acre for the northern portion of the property. The transition area between the mixed use and the residential area shall be reviewed and conditioned by the City through the use of a development agreement at the time of rezone

7. The area located west of Linder Road and State Street shall provide for high density residential including apartments, town homes and patio homes, and transitioning northward to 1-2 units per acre. Internal circulation is essential to the

development of this area; a loop/frontage road similar to Old Valley Road should be created. Uses should focus on this roadway (not State Street) with berming and wide setbacks to be used to buffer any residential use from the regional transportation network.

8. Residential Transition should be allowed south of the mixed use area along Old Valley Road and north of the Boise River

b. Design

1. Old Valley Road Area:

The design of this area should capitalize on the existing Old Valley Road and bring activities and uses closer to the road, creating a pedestrian friendly area that encourages walking as well as servicing auto traffic.

The Old Valley Road area should include street trees, benches and sidewalks.

Common parking areas at the sides of buildings and joint parking agreements should be encouraged to minimize walking distances between buildings and provide a pedestrian scale to the area.

On-street parking should be encouraged where sufficient right-of-way is available.

Signage for non-residential uses should be incorporated as a master sign plan rather than individual signs located along State Highway 44/State Street.

2. Flint Estates Area:

The Flint Estates area adjacent to State Highway 44 should be designed to provide limited retail uses that encourage pedestrian circulation from the residential and high school areas, and to complement the existing mixed use areas at State Street and Park Lane (Camille Beckman).

Street trees, benches and sidewalks are encouraged within the Park Lane Planning Area.

Common parking areas at the sides of buildings and joint parking agreements should be encouraged so walking distances between buildings are minimized and provide a pedestrian scale to the area.

Activity and building orientation should focus on internal circulation roads rather than the regional transportation network. Flint Drive is to remain primarily a residential roadway.

On-street parking should be encouraged where sufficient right of way is available.

Signage should be done as a master sign plan rather than individual signs located along State Highway 44/State Street.

Transitional residential densities and design elements (berms, fences, etc.) should be used to

provide buffering to residential areas to the east and north of the mixed use area.

c. Access

Access to and through should be limited to existing roads (Old Valley Road, Park Lane and Linder Road); no direct access from State Street/ Highway 44 shall be permitted unless a new access point is designated by the State of Idaho for Eagle Island State Park.

The area to the north of State Highway 44 should require the construction of a frontage road (similar to Old Valley Road) that removes individual property access to State Highway 44. This high density area shall provide internal circulation and connectivity to the residential areas to the north.

Cross-access agreements and shared service roads should be encouraged throughout the area.

Linkage roads through the area east of Eagle High School should provide connectivity to Floating Feather Road to the north, Park Lane to the west, and Breanna Drive to the east.

Right-of-way should be preserved for a future connection to State Highway 44 in alignment with the future State Highway 44 entrance to Eagle Island State Park.

d. Issues

If individual lot access is allowed to State Highway 44, the ability to function as a node, encouraging both pedestrian and vehicular traffic, will be lost. The city should establish phasing criteria for the north and south portions of the mixed use area to ensure that they area not over saturating the market before the supporting residential development occurs.

6.8.2 Village Planning Area

The Village Planning Area is designed to provide flexibility of design while also ensuring compatibility to existing large lot residential uses and transitional density as development approaches Homer Road and the Foothills. This area is not intended to be master planned but does require great care in planning to ensure that uses are compatible and that the Village Center serves as an anchor of the area and is not taken over by residential uses.

a. Uses/Design

The land use and development policies specific to the Village Planning Area include residential, commercial, retail, civic, research and development park, corporate and/or educational campus, hospitality and office uses. Non-residential uses will be focused in the Village Center.

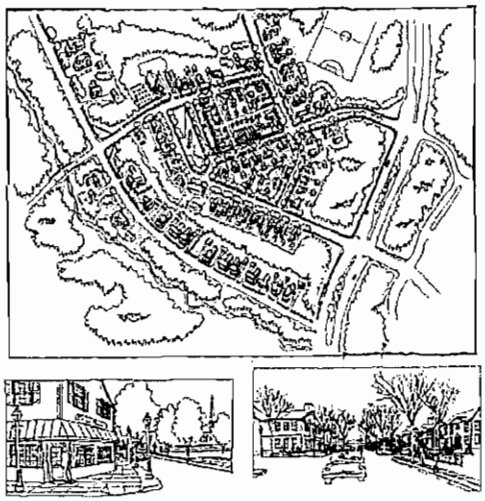
1. Village Center: The Village Center encompasses approximately 600-acres and is generally located along Beacon Light Road, bounded by Palmer Lane to the west and Lanewood Road to the east, and is more specifically described on the Future Land Use Map (Map 6.1). All Non-residential uses will be focused in the Village Center.
This area is comprised of three key components:

(a) A research and development/educational campus and/or corporate park area designed to provide sufficient space for corporate headquarters in a park-like setting near ancillary commercial uses located in the village center; and

(b) A village center providing ancillary retail commercial, hospitality and civic uses;

(c) A potential high school and/or middle school site located near the village center and higher density residential areas. This location allows for the transfer of density into an appropriate residential area which minimizes busing costs and the traffic concerns of placing schools in residential areas because the schools will be within walking distance to services that the students would typically use.

Illustration 6.2



Village Center Concept

2. Residential Areas:

New developments that are proposed near the Village Center shall be encouraged to include apartments, town homes, condominiums, patio homes, bungalows and live/work units ranging in densities from 5 to up to 10 units per acre.

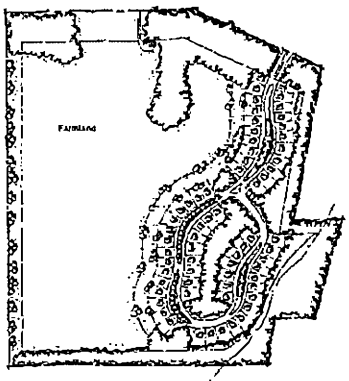
Decreasing densities should be allowed as the area radiates out of the village center. The overall densities in the Village Planning Area outside of the village center shall average 1-2 units per acre to the south of Beacon Light Road. Residential densities north of Beacon Light should be 1-2 units per acre transitioning (feathering and clustering) to the north and east ensuring compatibility with existing residential and foothills development.

Lot sizing and compatibility will be paramount as residential development reaches the existing 2 and 5-acre lots in the area east of Linder Road and north of Floating Feather Road.

Special care should be given to the feathering and clustering of residential units as development reaches the foothills/ Farmers Union Canal.

All Commercial use beyond Neighborhood Commercial should be directed to the commercial center at State Highway 16 & 44 or to the Village Center.

Illustration 6.3:



Farmland Cluster Example

b. **Access**

The Village Planning Area will promote the construction of an east/west boulevard that will include planted medians, sidewalks and limited signalization. This road design shall be similar to Harrison Boulevard and Park Center Boulevard in Boise.

This area will also include the extension of Homer Road from Linder Road to the village center and the realignment of Beacon Light Road to slow the flow of traffic between Hwy 16 and Hwy 55.

The Village Planning Area will be dependent upon the interconnectivity of local roads as the area develops.

Access to the area from State Highway 16 should be limited to the mile between Beacon Light Road and Floating Feather.

Commercial and retail uses should be discouraged from fronting on State Highway 16. Non-residential use should be focused internally to the Village Center and the residential uses and located along local/collector roads.

ITD should be discouraged from constructing frontage roads along the eastern side of Hwy 16 and landscape berms should be used to continue a gateway feeling to the city along the eastern side of Hwy 16.

The design of the area should incorporate non-motorized pathways linking residential areas to the village center, foothills and the existing Eagle Downtown.

6.8.3 Floating Feather Residential Area

The Floating Feather Residential Area is designated as residential with limited ancillary uses to be incorporated as allowed by the planned unit development standards. This area should provide trails, open space, and parks in conjunction with varied housing options. The overall density of the area is up to 1-2 units per acre.

a. Uses

The land use and development policies specific to the Floating Feather Residential Area include the following:

1. Integration of mixed residential lot sizes at an overall density of 1-2 units per acre;
2. Ancillary neighborhood commercial and retail uses that focus on serving the immediate Floating Feather Area;
3. Setbacks from streams, irrigation and drains for trails and open space;
4. Use of transitional lot sizes and clustering when new development abuts existing subdivisions, business and office use to the south;
5. Siting of schools in areas with higher densities to decrease busing concerns. Preference will be given to siting elementary schools in this area.

b. Access

Access to the area from Highway 16 shall be limited to Floating Feather Road and the ½ mile ring road to be located to the south of the area.

All uses shall rely on internal local road circulation and a proper street hierarchy to safely and efficiently move traffic through the area without forcing local trips onto the regional roadway network.

Floating Feather Road is identified as an urban collector from Highway 16 to Linder Road. Special consideration should be made for the improvement and realignment of Floating Feather Road. Design standards should include separated sidewalks and street trees similar to Old State Street west of Eagle Road.

The Highway 16 corridor should be designated as a scenic corridor requiring berming and landscaping within the City of Eagle.

At the western edge of this area, Linder Road will merge with the proposed east/west boulevard. The boulevard should be designed to include street trees, separated sidewalks and landscaped medians. Sufficient rights-of-way and setbacks should be preserved to facilitate the construction of this roadway.

c. Design

This area should be recognized as the signature residential area for the Western Planning Area. The integration of varying lot sizes and uses should be seamless with continuity of street design, open space, trails and housing throughout that area.

Floating Feather Road and State Highway 16 is designated as a minor gateway to the City of Eagle with appropriate landscaping, entry features and place-making features integrated into the design of the area.

Lot configuration and housing sizes should be mixed throughout the area to provide a variety of housing options within a single neighborhood or development.

d. Issues

The main concerns in the development of the area are the integration of varying lot sizes and housing styles. The vision for the area is contingent on the integration of uses and providing a flow of housing units throughout the area to avoid creating defined separation from estate areas and patio home areas, for example. Further, the provision of open space and trails through the area should be a key element in the approval process for developments that are proposed in the area.

6 8.4 River Plain Residential Area

The River Plain Residential Area is designated as residential and open space. This area should provide trails, open space, and parks in conjunction with transitional residential densities. The overall density of the area is up to 1-2 units per acre. The area of higher densities of up to 2-3 units per acre will be located north of the rim and will transition into clustered large lot residential use (1 acre lots) in the areas adjacent to the river.

a. Uses

The land use and development policies specific to the River Plain Residential Area include the following:

1. Overall residential density of up to 1-2 units per acre south of the Boise River.

2. Higher densities (up to 2-3 units per acre) beneath the rim transitioning into clustered large lot residential use (up to 1 unit per 1-2 acres) adjacent to the river.

3. Open space and trail located adjacent to the river in conjunction with the continuation of the regional trail system;

4. Setbacks from streams, irrigation and drains for trails and open space;

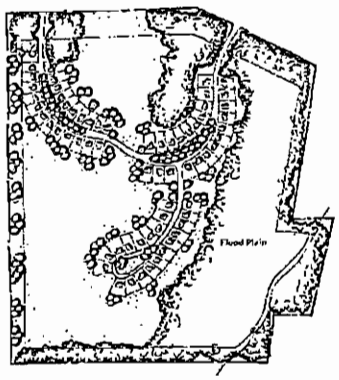
5. Use of transitional lot sizes and clustering when new development abuts existing subdivisions, business and office use to the north;

6. Feathering of lots sizes as densities transition north from the rim to the river;

7. North of the Boise River the lot patterns shall be a continuation of the large lot clusters found in Moon Valley Ranch; up to 1 unit/2 acres.

8. Cluster subdivisions should provide permanent dedicated open space.

Illustration 6.4 (From Rural by Design):



Floodplain Cluster Example

b. Access

Access to the area from Highway 16 shall be limited to 1 mile intervals with separated access points south of Moon Valley Road along the Highway 16 extension.

All uses shall rely on internal circulation and a proper street hierarchy to safely and efficiently move traffic through the area without forcing local trips onto the regional roadway network.

A pathway and trails network should be encouraged to provide pedestrians/bicycle access along the Boise River corridor and from that corridor north into the Moon Valley Area and south into the higher density residential area.

The Highway 16 corridor is designated as a scenic corridor requiring berming and landscaping within the City of Eagle.

Moon Valley Road to the north of this area will be a mixed use pedestrian scale street that will be designed to include pedestrian and bicycle access from the River Plain Residential Area.

c. Design

The River Plain Residential Area should be recognized as uniquely "Eagle" residential area providing large lot residential uses (up to 1 unit per 1-2 acres) with views of the Boise River combined with moderate density residential areas (up to 2-3 units per acre) north of the rim.

The integration of lot sizes and densities should be seamless with continuity of street design, open space, trails and housing throughout the area.

All access points along Highway 16 should be designated as minor gateways to the City of Eagle with appropriate landscaping, entry features and place-making features integrated into the design of the area.

Design of lots and homes sites should take into consideration the scenic, wildlife, and river corridor and provide sufficient setback and buffering to sensitive habitat and floodway areas.

d. Issues

The main concerns in the development of the area are the integration of lot sizes and housing styles. The vision for the area is contingent on the integration of uses and providing a flow of housing units throughout the area to avoid creating defined separation between estate areas and moderate density areas, for example. Further, the flow and provision of open space and trails through the area should be a key element in the approval process for developments that are proposed in the area. This residential area should greatly limit commercial, retail and office uses. Commercial, retail and office uses desiring to locate along the Highway 16 corridor should be located in the Chinden Road Planning Area or the Moon Valley & State Planning Area. Special concern shall be made for the floodway and floodplain to limit uses that are not consistent with the delicate nature of these areas.

6.8.5 Eagle Island Planning Area

The Eagle Island Planning Area is designated as open space, recreation and limited residential. This area should provide trails, open space, and parks in conjunction with limited residential densities of up to 1 unit per 1-2 acres. The visioning for this area is to complete a pathway and recreation connection across Eagle Island.

a. Uses

Eagle Island State Park is under the jurisdictional authority of the State of Idaho and is not subject to this plan.

The land use and development policies specific to the Eagle Island Planning Area include the following:

1. Clustered large lot residential use: An allowable density of up to 1 unit per 2 acres;

2. Open space and trail located adjacent to the river in conjunction with the continuation of the regional trail system;

3. Setbacks from streams, irrigation ditches and drains for trails and open space; and

4. Large regional park and recreational presence.

b. Access

The primary access to the Eagle Island Area is Linder Road. Future access may be available from State Highway 44 through Eagle Island State Park.

Linder Road will continue to be the western Boise River crossing for the area until the Highway 16 extension is completed. This area should look to designing consolidated access points along Linder Road to help limit the impacts to the Linder Road river crossing.

Alignment of east/west access points along Linder Road, especially with the Eagle Island State Park entrance, will help to preserve the efficient flow of traffic along Linder Road.

A pathway and trails network should be encouraged to provide pedestrian access along the Boise River corridor and from that corridor north into the Park Lane Planning Area and south into the South Linder Planning area.

c. Design

This area should be recognized as a uniquely "Eagle" residential area providing large lot residential uses (up to 1 unit per 1-2 acres) with views of the Boise River, combined with a high level of open space, trails and parks.

Design of lots and homes sites should take into consideration the scenic, wildlife, and river corridor, and provide sufficient setback and buffering to accommodate sensitive habitat and floodway areas.

The integration of lot sizes and densities should be seamless with continuity of street design, open space, trails and housing throughout the area.

d. Issues

The main concern in the development of this area is the ability of the City to obtain funding to acquire additional park land as designated on the visioning plan map. If the city is unable to obtain additional park land, the Eagle Island Planning Area should be allowed to develop with similar densities as adjacent residential lands in the planning area.

The City plans to acquire park land west of Linder Road on Eagle Island if and when the land becomes available for acquisition either through purchase, donation or land swap.

6.8.6 Moon Valley & State Planning Area

The focus of the Moon Valley & State Planning Area is to identify areas that by nature of the existing or proposed roadway and transportation network will support uses other than residential. The Moon Valley and State Planning area is at the crossroads of two State Highways (State Hwy 16 and State Hwy 44). The intensity of the use of these roads and the regional scale of the transportation patterns dictate that the area will include some community commercial and a possible employment center through the placement and scaling of a business and technical park.

a. Uses

The land use and development policies specific to the Moon Valley & State Planning Area include the following:

1. Community Commercial area at the NE intersection of State Street and the Emmett Highway, not to exceed 15-20 acres. This Community Commercial is intended to primarily serve the community of Eagle and the western planning area.

2. This area may allow for a limited square foot grocery or retail component but not a big box development. Regional commercial uses should be directed to the Chinden Road Planning area.

3. A business/technical park should be encouraged at the NE intersection of State Street and Highway 16, south and west of the proposed ½ mile ring road. This area should be designed to capitalize on the existing drainage and irrigation canals in the area as amenities by providing trails and open space throughout the park. For this reason, the city should discourage the piping of these waterways.

4. Along Moon Valley Road, south of State Street, a professional office use area should be established with a mixture of limited retail uses.

5. Along Moon Valley Road, uses should be designed to allow safe and efficient pedestrian and bicycle access in addition to vehicular circulation. These neighborhood uses should be scaled and designed to be compatible with the residential uses located south of Moon Valley Road in the River Plain Planning area.

b. Access

Access to the Moon Valley & State Planning Area will be limited to the existing access points at the intersection of Moon Valley and State Street, the ½ mile ring road at both State Street and Highway 16.

The business and commercial area to the north shall gain access from a ½ mile ring road connecting along State Street at Palmer Lane and looping north and west to connect with Highway 16 a ½ mile north of the intersection of Highway 16 and Highway 44. No other full access points should be allowed in the area without approval from ITD.

Internal circulation shall be used to move traffic within the area.

Access to the Moon Valley Area shall be at the intersection of Highway 16 and Moon Valley and at the intersection of State Street and Moon Valley Road, unless otherwise approved by the City, ACHD and ITD. All single parcel access points should be eliminated during the development process.

A pathway and trails network should be encouraged to link pedestrian access from the Boise River north to the Moon Valley area and across State Street to the commercial/business areas as well as the village center to the north.

c. Design

1. Moon Valley Area:

The design of the Moon Valley Area should capitalize on the existing Moon Valley Road and bring activity and uses to the road by creating a pedestrian friendly area that encourages walking in addition to serving auto traffic.

The area should include street trees, plazas, benches and sidewalks.

Common parking areas to the sides of buildings with joint parking agreements should be encouraged to minimize walking distance and give a welcoming feel to pedestrians and bicyclists entering the area from the Boise River pathway.

On-street parking should be encouraged where sufficient right-of-way is available. Signage should be done as a master sign rather than individual signs located along Highway 44/State Street.

2. State Highway 44 Business Area:

The commercial/business area should be designed to be internally focused, capturing some trips from Highway 16 and Highway 44 into the area from a ½ mile ring/loop road.

The design should provide interconnectivity of roadways and consistency of architectural design.

Parking should be cooperative when possible but on-street parking should be avoided along the loop road.

Signage should be regulated to ensure that the highway rights-of-way are not cluttered with individual and monument signs.

Landscape berms should be required along the loop road to provide a transition to the residential uses to the north and east.

The intersection of Hwy 44 (State Street) and Hwy 16 should be identified as a gateway to Eagle with appropriate monuments and landscape designs.

d. Issues

One of the main concerns in developing this area for a variety of uses is the need to maintain a balance among the various employment opportunities that this type of mixed use affords. The goal is to create an environment where a broad range of employment opportunities is available. To achieve this goal, commercial development must not be allowed to overwhelm business/technical park development. To ensure the integrity of the plan, combined commercial uses in the area must be limited to 15-20 acres in size and all

regional scale commercial uses should be directed to the Chinden Road Planning Area.

Another concern is the access to the Moon Valley Road Area; currently Short Road crosses the area connecting State Street and Moon Valley Road. If this access point is not removed, it is likely that development pressure may become very high to force commercial uses to front on State Street. This would create a strip commercial area north of Moon Valley and south of State Street that is not consistent with the intent of the plan.

6.8.7 Rim View Planning Area

The Rim View Planning Area contains a large amount of existing residential uses that have been developed as one-acre and five-acre lots through the Ada County development process. The future land uses in the area are predicated on Linder Road being the only Eagle City river crossing between Eagle Road and Star Road, and the need to buffer and preserve the existing residential developments.

a. Uses

The land use and development policies specific to the Rim View Planning Area include the following:

1. Community Commercial located at the northeast intersection of Chinden Boulevard and Linder Road is not to exceed 5-10 acres in size. This commercial area is intended to serve the Eagle community as a convenient stop on the way into town before crossing the river. Access to the site would not be signalized and would be limited to right in/right out turning movements from both Chinden Boulevard and Linder Road.

2. To the north and east of the commercial area will be office uses that provide an effective buffer to residential areas.

3. The residential density of new residential uses in the area is up to 1-2 units per acre which provides for transitional lot sizes to ensure compatibility of new residential uses to existing residential use and the commercial and office uses located at Linder Road and Chinden.

4. Patio home styles and alternative lot sizes may be allowed in conjunction with exiting open space and recreation areas located in the Rim View Area. The patio homes and townhouse should be located near the Spur Wing Golf Course.

b. Access

Access to the area should focus on new internal linkages.

Though ITD allows for access at ½ mile intervals along Chinden Boulevard, these access points should only be granted if the internal roadway allows traffic to flow through the area. Connecting Meridian Road to Linder Road provides the opportunity of internal linkage to the Community Commercial area at the intersection of Linder Road and Chinden Boulevard.

Internal circulation shall be used to move traffic within the area, limiting the number of local vehicle trips

entering State Highway 20/26 to access commercial/services use along Linder Road.

Chinden Boulevard should be recognized as a gateway corridor to the City of Eagle and proper berming, landscape and wide setbacks should be adhered to.

Proper setbacks and berming should be used to protect the regional transportation corridor, Chinden Boulevard, from increasing residential uses.

c. Design

Design of this area should be compatible to the existing residential and recreational uses currently present in the area.

Design of commercial and office uses should be compatible with the existing residential uses and contain significant landscaped buffers and design elements. Scale of the commercial development should be similar to the Eagle Marketplace and provide for pedestrian linkages to the residential areas adjacent to the site.

Both Chinden Boulevard and Linder Road should be developed with a detached sidewalk and planting strip adjacent to the back of curb further solidifying the gateway corridor of Chinden Boulevard.

d. Issues

One of the main concerns in the development of this area is the ability to properly scale the commercial uses to prevent the use from overpowering the office and residential uses. To ensure the integrity of the plan, regional scale commercial use should be directed toward the Chinden Road Planning Area.

6.8.8 Eagle Middle School Planning Area

During the public visioning process, the densities around the Eagle Middle School site were reviewed and an increase in residential density was recommended. Though these changes are not contained within the Western Planning Area, the ultimate development densities in this area have long term impacts on the expansion of the city water system.

a. Uses

Land use designations in the Eagle Middle School Planning Area are Transitional Residential, allowing up to 3-units per acre adjacent to the school site and transitioning to compatible lot sizes and scaling adjacent to the large lots at the perimeter of the area.

b. Access

Access to the area should focus on new internal linkages.

Proper setbacks and berming should be used to protect the arterials from increasing residential uses.

c. Design

Overall residential density of the area should be up to 1 unit per acre transitioning into clustered and/or compatible lots adjacent to the existing subdivisions at the perimeter.

Development in the Eagle Middle School Planning Area should be required to be submitted as a planned unit development and/or through a development agreement.

Open space and trails should be developed throughout the development thus providing connectivity to the school site.

All uses should include setbacks from streams, irrigation ditches and drains for use as trails and open space;

Use of transitional lot sizes and clustering should be required when new development abuts existing subdivisions, business and office uses.

The City would like to acquire approximately 15 acres of park land and/or floodway protection areas for Dry Creek northwest of the intersection of Floating Feather Road and Eagle Road.

d. Issues

The main concerns in the development of the area are the integration of lot sizes and housing styles. The vision for the area is contingent on the integration of uses by providing a flow of housing units throughout the area to avoid creating defined separation between estate areas and moderate density area, for example. Further, the flow and provision of open space and trails through the area should be key elements in the approval process for developments that are proposed in the area. Special concern shall be made for the Dry Creek floodway and floodplain to limit uses that are not consistent with the delicate nature of these areas.

6.8.9 Chinden Terrace Planning Area

The Chinden Terrace Planning Area is a neighborhood in transition. The area is located at the northeast corner of Eagle Road and Chinden Boulevard and fronts on Chinden for approximately 3/4 of a mile. The current uses in this area are commercial located on the northeast corner of Eagle Road and Chinden Boulevard (Hwy. 20/26), including a small portion of the Lakemoor Development while the remaining property is Residential. The south side of the Chinden corridor is in Boise City limits and developed as a combination of big-box commercial, retail and office with second tier residential uses. Over the past 10 years the demand for an alternative east-west commuter route has increased and development in the west Boise and north Meridian areas has increased making the corridor less residential in nature.

The Chinden Terrace Planning Area is designated for mixed use combining residential; office, limited retail and community commercial uses. Parcels specific commercial shall located at the northeast corner of Eagle Road and Chinden Boulevard.

a. Uses

Uses in the Chinden Terrace Planning Area should be sensitive to the topography and access limitations of the site as well as to the surrounding residential uses to the

south and west. The area is seen as a true mixed use area providing a combination of residential, office and community commercial to service the incorporated residential and neighboring residential uses.

The rim of the bench should retain a residential use capitalizing on the views of the Foothills, Boise River and the City of Eagle. Consideration should be given to transition uses from residential to office and commercial. The use of lofts or second story residential may be used in the office areas to capture some vehicle trips generated for the development.

The eastern edge of the bench near Discovery Lane is greatly limited due to topography and uses in this area should be limited to office and residential only.

Single use commercial should be discouraged in this area.

The future land uses in the Chinden Terrace Planning Area are contingent on working with ITD, ACHD and the City of Eagle to resolve access limitations to the State Highway (Chinden Boulevard) and the phasing of development. Changes of use for a single unit/lot will be limited due to the topography and transportation constraints it the area.

Master planning for the entire bench is encouraged and small lot re-zones should be discouraged unless the access and design issues are acceptable to the City and ITD.

b. Design

The Chinden Terrace Planning Area should be mastered planned as much as possible to provide innovative solutions to the access limitation issues in this planning area.

The design of the area should be internally focused capturing some trips from Chinden Boulevard (Hwy 20/26) and Eagle Road through a limited access frontage road but providing a mixture of residential uses to allow pedestrian circulation and vehicle trip capture.

Parking should be cooperative, when possible, to achieve additional parking for patrons using the area and reduce the visual impact of individual parking lots.

Signage should be regulated to ensure that the highway rights-of-way are not cluttered with individual monument signs.

The area between the frontage road and existing highway should be landscaped and treated as an entry corridor to the City of Eagle.

The Chinden Terrace Planning Area should be designed with a frontage/internal access road connecting from east to west, parallel to Chinden Boulevard (Highway 20/26).

c. Access

The future land uses in the Chinden Terrace Planning Area are contingent on working with ITD, ACHD and the City of Eagle to resolve access limitations to State Highway 20/26 (Chinden Boulevard). Zoning and land use changes of use for a single unit/lot should be

discouraged due to the topography and transportation constraints. It is unlikely a single parcel will be able to achieve alternative access alone.

Access to Chinden Boulevard (Highway 20/26) should be limited to the existing signal at Discovery Lane, a single right in/right out access ¼ mile east of Eagle Road. If possible, a joint access agreement with Eagle Marketplace may provide additional access to Chinden Boulevard.

A frontage/backage road should be development from Discovery Lane to Eagle Road to allow visibility from Highway 20/26 but direct access to the State system should be restricted.

Alterative access points to Eagle Road north of the existing Eagle Marketplace should be pursued to allow a right in/right out access from the area onto Eagle Road.

Access should be encouraged to the Lakemoor Development to the north of this site providing access to the signal on Eagle Road.

d. Issues

Due to topography constraints and the limited access allowed under the ITD Class Four Access Restrictions, the area must be reviewed as a whole to ensure that individual lot access points are removed and alternative access is provided for as redevelopment occurs.

All the property owners in the area are encouraged to coordinate and cooperate to address site limitations (topography and access) with the affected agencies (ITD, ACHD, Eagle) to avoid a situation where the Chinden Terrace Planning Area may be limited to existing residential land uses.

The 2030 Long Range Transportation Plan identifies that the Chinden Boulevard (Highway 2026) would be at capacity. Intensification of the development along this corridor could further congest this route.

6.8.10 North Eagle Foothills Planning Area

For over 30 years the Eagle Community has placed significant value on the North Foothills providing contrast to the green flat land of the Boise River corridor. For years private land owners, have provided access for horsemen, hikers, hunters and recreation enthusiasts through an informal trail and recreation system. In 1999 the Foothills were designated as an area of special concern in the City's Comprehensive plan.

Over 80% of the Eagle Foothills is held in private ownership by less than 10 families or groups. Over the last five years the ranch families who historically have lived in the Foothills have begun looking for new options for the land with many pursuing development options. This desire to change the historic use of their land coupled with Ada County's significant shift in focus from a rural preservation agency to promoting urban development outside of cities resulted in the urging by landowners, neighborhood groups and citizens for the City of Eagle to engage in a planning process to bring the Foothills into the City's planning area.

With limited access and transportation options the Eagle Foothills are intimately linked to the City and the Eagle downtown.

Willow Creek Road is the only improved internal road to the area with Highway 55 on the east and Highway 16 on the west establishing a clear planning area. As the City worked through the planning of the foothills a larger geography was noted with large land holdings crossing east of Highway 55 and north into Gem and Boise Counties.

In 1997 and 2007 the City of Eagle requested Ada County to include the area north of Homer Road into the City's AOI both times Ada County requested a full comprehensive Plan for the area. The North Eagle Foothills Planning Area and associate amendments is the result of the City's planning efforts in this area.

In late 2006, the City of Eagle entered into a scenario building process to look at the opportunities and constraints within the Foothills. During this scenario building process the City used existing data from public agencies and private groups to analyze the potential of the Foothills for development. During this review the City looked at land ownership, existing recreational uses, land cover, slope, hydrology resident and migratory big game and other wildlife habitat and potential migration paths, sensitive plant locations, and potential distribution visibility, landscape quality, distance zones, and overall visual sensitivity. The result of these maps was an overall constraints map (See Map 6.4).

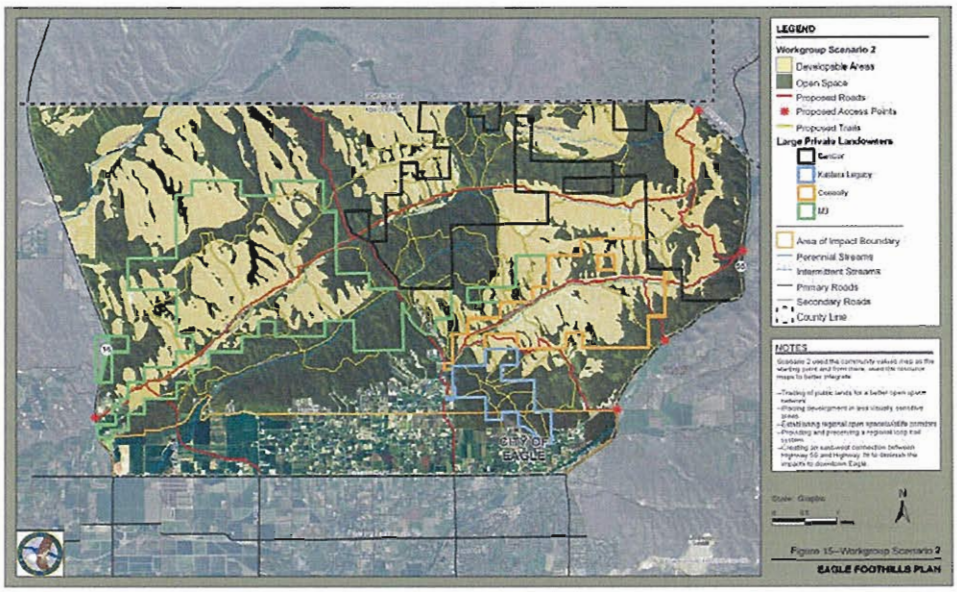
Table 6.3

Foothills Constraints		
Feature	**Acres**	**% of area**
Slopes 25%+	9,163	19%
Floodway	210	1.0%
Habitat	12,964	26%
BLM	5,398	11%
Total	**27,735**	**57%**

Once the constraints mapping was completed the City worked with a work group comprised of local and state agencies, land owners, and citizens to discuss and model potential development scenarios. The final scenario balanced the natural features of the land with the following values:

- The transfer/trade of public lands for a better open space network
- Establishing open space/wildlife corridors
- Providing/preserving a regional recreation system
- Focus development into less visible areas, or ideally non-visible areas (see the City's Foothills Visual Sensitivity Analysis).
- Primary access to the area from Highway 55 & Highway 16 limiting or diminishing access to the southern part of Willow Creek & Eagle Road

Illustration 6.5



Though these scenarios provided the City an overview of the opportunities and constraints of development it did not prescribe land use densities or intensities that are needed to determine infrastructure needs, transportation impacts, build out/absorption, or population. With Comprehensive plan amendments being requested totaling over 20,000 acres both inside and adjacent to the planning area the City felt it necessary to begin the process of a specific area plan for the North Eagle Foothills.

The City's focus was to establish recommendations and guidelines in order to identify those areas that could best sustain urban development and those areas which should be prioritized to best maintained open space based on the vision of the community and the actual constraints of the land.

Due to the number of existing and potential applications at the city and county, the interest by both large and small landowners to provide a detailed build out plan for the area that provides predictability in long-term land uses, and the City's concerns about downstream effects from county development the City agreed to begin planning for the Foothills through a series of workgroups using the scenario building process as the backbone of the process associated with a plan for development within the foothills.

During the drafting of the plan the City of Eagle engaged over 500 participants through a series of weekly work groups that discussed the foothills transportation, habitat and open space, infrastructure and facilities, water, activity centers, and landscape and design review for development of the Foothills. This sub-area text is based upon the work of those individual who were committed to finding workable solutions and long-term development options for the Foothills.

The intent of the North Eagle Foothills sub-area plan is to be a guide for future development as it is integrated into the Eagle Community and part of the City of Eagle. This will be accomplished through incorporation of the area into the jurisdictional boundaries but also be creating a

unique sense of place that is clearly identifiable as the City of Eagle. It is expected that specific area plans (Planned Unit Development) will be drafted by land owners at the time of development that provide specific implementation measures for the broad community policies of this plan. The North Eagle Foothills encompass nearly 49,000 acres north of Beacon Light Road.

All land is not equal. Overall, it is agreed that portions of the Eagle Foothills are more suitable for standard urban development due to the existing land uses, location to regional transportation corridors and overall site characteristics. Conversely, the foothills are not the flat irrigated farmlands that the City has historically developed. The complex fabric of existing constraints (topography, erosion potential, location of wetlands, existing sensitive plants and animal communities, riparian areas, and visual impacts) must be considered when urbanization is proposed. It is the vision of the community that development within the Eagle Foothills will be in a series of small hamlets providing areas of urbanized development nestled into the natural environment; establishing development areas that are unique and spatially separated by larger natural areas and open spaces that create great living /urbanizing areas but also contribute to a larger interconnected regional open space network. Land use designs should ensure that each development area fits into the natural systems of the Foothills (topography, habitat, and drainage) oppose to the natural systems being significantly altered to allow for development. These principles are in keeping with the designs styles of Randall Arendt in "Rural by Design".

Table 6.4

Foothills Land Uses		
	Acres	**% of Area**
Unconstrained	12,089	25%
Residential Rural	2,080	4%
Slopes 25%+	16,259	33%
Floodway	210	0%
Habitat	12,964	26%
BLM	5,398	11%
Total	**49,000**	
Community & Neighborhood Centers Adjustment factor:	**690**	**1%**

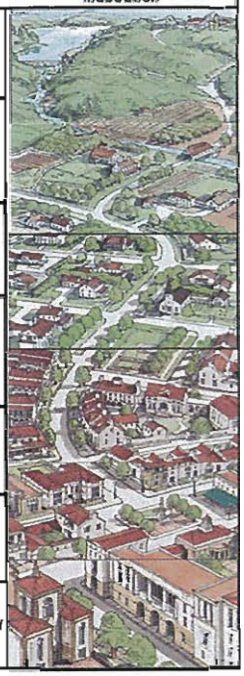
The build out of the Foothills will be unlike any other area of the City. Environmentally sensitive areas, public lands and unique features will affect the overall density and development potential in the foothills. The overall density of the foothills should remain rural (1 unit per 40 acres and/or 1unit per 10 acres as currently allowed in Ada County) until annexed to the City of Eagle at which time development should be reviewed for compliance with the Eagle Foothills Plan and for the provision of adequate public facilities. The overall density of the foothills should remain rural (1 unit per 2 acres) with options for clustering the base density into transects and density bonuses for the creation of activity centers and significant open space areas.

Transects are a pre-described guideline or pattern for constructing the built environment. Transects help establishes a flow from

activity centers into natural open space areas. In transect planning density is anticipated to be high in activity centers and decrease as the distance from the centers increases. The mixture of land uses also change from mixed use areas including commercial, office and housing to more traditional homogeneous single family detached units on the fringe. Within the Eagle Foothills seven (7) transects have been developed to guide the overall development potential into a pattern that promotes regional open space connections and discreet community and neighborhood centers.

Table 6.5

North Eagle Foothills Transects

Transect	Description	Density	Illustration
Regional Open Space Permanent (mapped)	Consists of lands that have a higher value for regional open space and are owned by public entities or have been preserved in perpituity. Consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation. This includes existing BLM ownership and floodways.	0	
Rural Lifestyle	Consists of lands most suitable for approximating or reverting to a wilderness condition but held in private ownership. Development options in this area should include cluster and conservation developments, as well as the ability to transfer units to more suitable development areas within he foothills. Developments in this area should that include a minimum of 50% open space.	1 unit per 40 acres	
Rural Estates	Consists of low density large lot residential areas. Planting is naturalistic and set-backs relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions. Lots may be cluster onto 1/2 acre lots or fencing restrictions may be used to provide a better open space pattern and protection of natural features.	1 unit per 2 acres	
Suburban	Primarily suburban residential pattern. Primarily a single family detached housing type. Setbacks and landscaping are variable. Streets define medium-sized blocks. Generally located within a 1 mile of community/neighborhood centers but may vary according to the natural features of the foothills. Clustering may be used to ensure saignificant regional and neighborhood open space.	2.5 units per 1 acre	
Urban Transition	Consists of a mixed-use but primarily residential urban fabric. It has a wide range of building types: single, sideyard, and rowhouses. Setbacks and landscaping are variable. Streets define medium-sized blocks. Generally located within a 1/2 mile of community/neighborhood centers but may vary according to the natural features of the foothills.	4 units per 1 acre	
Neighborhood Centers (unmapped)	40-60 acres in sizes these centers are located at key intersections between arterial and collector roadways. Consists of higher density mixed-use building types that accommodate retail, offices, rowhouses and apartments. It has a light network of streets, with wide sidewalks, steady street tree planting and buildings set close to the frontages. (See Specific Definition)	Min.of 6 and Max. of 10 units per acre for a minimum of 50% of the area.	
Community Centers (mapped)	Approximately 100-150 acres in size consists of the highest density, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; streets have soonsitent and evenly spaced planting and buildings set close to the frontages. No minimum lot sizes. (See Specific definition)	Min. of 8 and Max. of 10 units per acre for max. of 25% of the area.	

a. Goals

1. Design a future land use plan that is rooted in the lands capability to sustain development while preserving the natural features that brought people to the area.

2. Establish a significant regional open space network in order to formalize the existing recreational uses, environmentally sensitive area and connections between them through creative design, voluntary dedications, incentive and governmental acquisition or exchange.

3. Create a uniquely identifiable community that blends with the existing city and balances local land uses with regional growth and services while preserving the uniqueness of the Eagle Foothills.

b. Uses

1. Recognizing that the foothills are a complex land form the overall density of the foothills should be limited while encouraging clustering of the available units into a transect plan that includes regional activity centers with urban type densities transitioning into permanent open space areas.

   A. The base residential density for all lands within the Foothills Planning Area should be 1 unit per 40 acres and 1 unit per 10 acres until annexed into the City of Eagle and the provision of adequate public facilities is secured or demonstrated.

   B. Lands with slopes in excess of 25%, floodways due to their sensitive nature and the potential impacts to the health safety and welfare of the general public, and key habitat areas as identified by State and Federal agencies should be priority areas for open space and sending area for units being developed in less constrained area as described in the land use transects of this plan.

   C. Governmental lands (BLM) that are to be managed for the general use and enjoyment of the public should be designated as public/semi-public with no residential density.

2. Provide incentives to create development areas that are unique to the foothills, opposed to standard suburban development patterns, providing for walk-ability to services, schools, and employment within distinct development areas; establishing a series of hamlets that are spatially separated by distance, open space, and/or topography but are pedestrian scaled and designed so to maintain connection to the overall community.

   A. Provide incremental increases to the base density commensurate with the provision of open space, adequate public facilities, and the protection of environmentally sensitive areas, public lands and unique features.

   B. Allow for the transfer of densities within a project/development to create and locate community and neighborhood centers as described in this plan.

   C. Density incentive/bonus should be considered for the following:

      1) The establishment of a permanent non-city funding source to offset the annual operation and maintenance of the open space areas. This may include endowment funds, use of land trusts and institutes, transfer fees or other mechanisms.

      2) Designing the open space to function on both a neighborhood and regional level providing both internal and external connectivity for multiple user groups including pedestrians/hikers, bicyclists and equestrians.

      3) Working with adjacent land owners to design and dedicate open space on a large scale in

compliance with the goals of this plan.

4) For the clustering of units into centers and the construction of the land use transect as describe within this plan.

5) Providing open space greater than 20% of the gross site area.

D. Allow for the waiver of the maximum height requirements when a site specific visual site analysis shows no impact to the visually sensitive areas described in the visual impact Study Commissioned by the City.

E. Establish new architectural and site design standards that are unique to the foothills.

3. Use a regional open space overlay to establish areas that clustering and conservation development should be used opposed to standard large lot development in order to provide for habitat and a regional open space network connecting the Eagle/BLM land to points in and outside the area including Rocky Canyon, Stack Rock, Montour, the Boise Front and the Boise National Forest.

4. Development should be designed to fit within the natural features of the area. To maximize the preservation of these features development should be clustered so to preserve as much open space as possible.

A. Open space should be designed to capitalize on and expand the open spaces areas around natural feature and environmentally sensitive areas Priorities for preservation should include:

1) The most sensitive resources on the property – Floodways (including riparian and wetland areas), slopes in excess of 25%, locally significant features, & scenic viewpoints.

2) Fragmentation of open space areas should be minimized so that resource areas are able to be managed and viewed as an integrated network. This can be accomplished through various engineering and design tools, i.e. super pads, hillside engineering, and others.

3) Open space areas should be designed as part of the larger continuous foothills area and regional open space network. Where possible open space should be located to be contiguous to public lands and existing open space areas.

5. Work with landowners and developers to establish a structure for funding the long-term stewardship and maintenance of large areas of open space.

6. Work with the BLM to leverage the exchange of discontinuous tracts of public land for equal or larger tracts of contiguous ownership within the regional open space overlay that will build onto the existing public ownerships.

7. Use the Foothills Land Use Transect to help provide scaling and a pattern to clustering within

large tracts of land as well as to provide a diversity of housing opportunities within the Foothills including apartments, town homes, condominiums, and small and large lot single family versus the homogeneous large lot development.

8. Develop Community and Neighborhood scale centers on the principles of mixed use; variety in form and image; pedestrian orientation; higher density; a focus on transit; and economic diversity that reflects the patterns of a small town.

A. **Community Centers:** These are the highest intensity use areas in the foothills. They should act as density magnets to begin building the transects as described in this section. These are areas for the clustering of densities from more rural and open space areas.

These centers are the most intensive development that should occur in the Foothills planning area. There may be several types of mixed use community centers including commercial, educational, and research.

Community Centers are approximately 100-150 acres in size and are the highest density, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; streets have uniform street tree planting and buildings set close to the frontages. No minimum lot sizes.

These centers are characterized by the following:

1) Limited in total number due to the need for high connectivity to the state highway system and regional trip capture.

2) Community centers should be designed to aide in the location, design and construction of grade separated interchanges along the state highway system. At a minimum Community Centers should be designed to provide for the right-of-way preservation of these facilities.

3) Compact and mixed use in nature these centers should integrate a combination of uses including office, retail, commercial, institutional, civic, residential, hotel and recreation while focusing on the paramount community function.

4) These centers should be pedestrian oriented developments that contain elements of a live, work and play environment. Walkable communities should have all key amenities or facilities within a ¼ mile distance of the majority of the developed units.

5) Mixed Use Community Centers should be approximately 100-150 acres in size and allow up to 350,000 square feet of gross leaseable retail space.

6) If residential uses are provided they should account for no more than 25% of the gross total area

of the Community Center with allowable densities of up to 8 to 10 units per acres.

7) Community Centers should be designed to integrate and promote the expansion of public transportation along major regional corridors providing alternatives between communities in the region.

8) As a guideline for planning urban transition and suburban density patterns should be located with ½ to 1 mile of these centers. This standard allows for the implementation of the land use transect and ensure that the overall desired land use pattern of the foothills is implemented.

B. **Neighborhood Centers:**

Neighborhood Centers are approximately 40-60 acres in size and have higher density mixed-use building types that accommodate retail, offices, row houses and apartments. It has a tight network of streets, with wide sidewalks, uniform street tree planting and buildings set close to the frontages.

These centers, though not mapped, should be located in areas with the following characteristics:

1) New Mixed Use Neighborhood Centers should be approximately 40-60 acres in size and allow up to 150,000 square feet of gross leaseable commercial space, though their shape is subject to terrain, access, and other site variables.

2) Mixed use in nature, these centers will integrate a combination of uses including office, retail, institutional, civic, residential and recreation while serving as a focal point for the overall development

3) Neighborhood centers are located at key collector and arterial intersections within the residential areas of the foothills.

4) Neighborhood Centers are to include residential with allowable densities of up to 6 to 10 units per acres. This clustering/massing adds interest and serves as a magnet for the base density (from more constrained areas or open space dedications) for the overall project and implements the land use transects units.

5) These centers should be sized and scaled to be compatible with the surrounding single family uses ensuring a transition of intensities and massing at the edges.

6) Residential uses should account for 50% of the neighborhood centers.

7) Located on level areas of the foothills that can be developed

with the least disturbance of the sensitive hillsides, natural drainage area and important open space and habitat areas.

8) The boundaries of these areas normally follow the existing terrain of the immediate surroundings.

9) Neighborhood centers are spatially separated from each other by rural residential uses and/or significant open space areas that allow for each neighborhood center to be independent and avoid the unintentional over-intensification of the neighborhood centers into Community Centers or something more intensive.

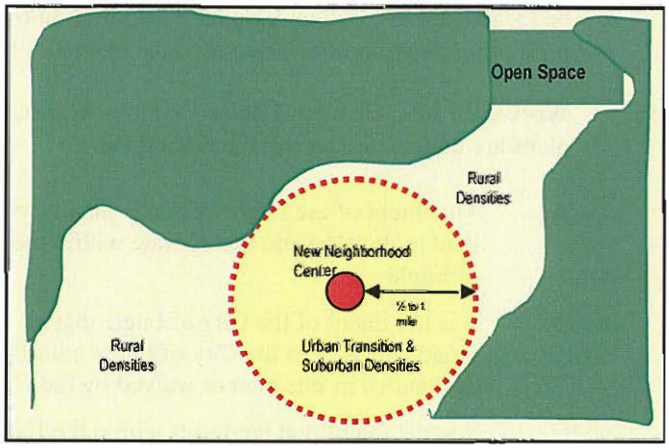
10) Neighborhood centers area normally open-air shopping areas often sharing a central plaza.

11) Neighborhood centers should have a central focal point that may include open spaces, plazas, schools, recreational facilities, or civic uses.

12) Buildings in the neighborhood centers should be oriented to the street or public plazas to encourage pedestrian scaling and access, to promote a neighborhood feel.

13) As a guideline for planning urban transition and suburban land uses should be located with ½ to 1 mile of these centers or as topography allows. This standard allows for the implementation of the land use transect and ensure that the overall desired land use pattern of the foothills is implemented.

Illustration 6.6



9. Create an overlay district to highlight a discreet geographic region within Eagle's Comprehensive Plan that showcases the emerging viticulture industry unfolding in this area.(See Map 6.5)

A. Consider modification of the City Code to allow ancillary uses (Bed & Breakfasts, tasting rooms, bistros, etc.) to be easily applied for and achieved.

B. Consideration in this area should include: uniform signage, modified roadway design, limits on conflicting land uses including massing and scaling of buildings and structures (including cell towers), increased limitations on building coverage.

C. Establish City signage and promotion of this emerging agricultural industry.

D. Research how industrial revenue bonding may further the establishment of this region.

10. Due to the unique feature of the foothills and the Eagle Wine Region additional hospitality, resort and tourist uses may be developed in the foothills. These uses should be sited so not to deteriorate prime habitat or environmentally sensitive area and should be exchanged for the underlying residential densities in the specific area.

11. Due to the unique scenic and economic value of the agricultural/viticulture uses these uses should be reviewed as a component of the overall open space design.

12. Work with ACHD to establishment a unique road cross section for the district that may include: wider shoulders for parking, gravel driveways and limited use of side walks.

13. Design a community that is the pinnacle of water conservation promoting limited use/extraction, reuse and innovative irrigation and landscape design. If necessary land uses entitlements may be limited until sufficient potable and irrigation water is established.

14. Establish a land use patterns that promotes large scale and regionally significant service be located along existing regional transportation routes (State Highway16 & 55) while promoting neighborhood scale services internally to the area.

15. Work with Ada, Gem, and Boise Counties to ensure that the intent of City of Eagle plans are understood by these jurisdictions.

A. The intent of the Eagle Foothills plan is to provide direction and incentive for land to develop and incorporate within the jurisdictional boundaries of the City of Eagle.

B. It is the intent of the City of Eagle that all development using this plan as a guide connects to the City of Eagle municipal water system or be other wise designated in this plan or waived by the City of Eagle.

C. It is the intent that land uses within the Eagle Area Of City impact remain rurally zoned (RP & RR) until they are annexed to the City of Eagle.

c. Access

1. Design a Foothills transportation network that is sized appropriately for the demands of development in the foothills. (See Map 6.6)

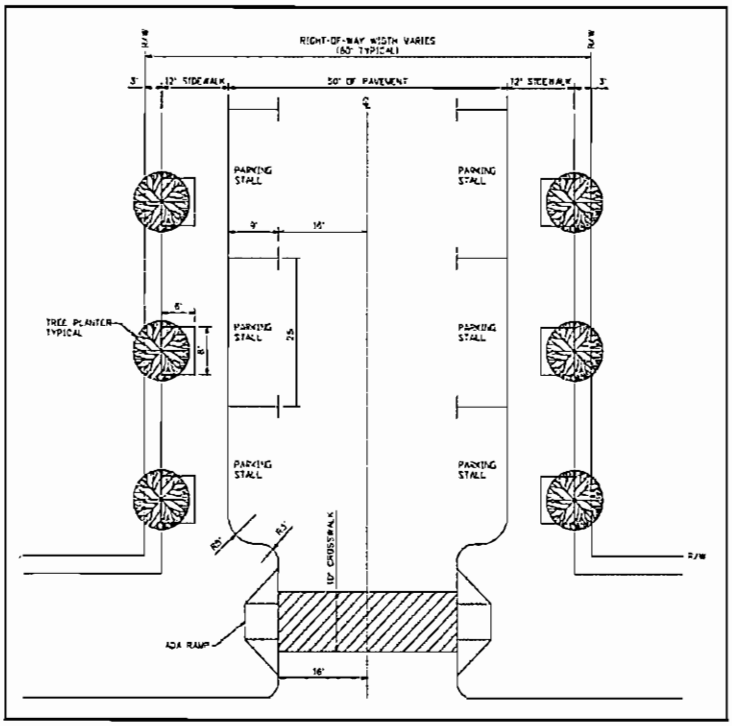
   A. Promote the use of roundabouts, multi-purpose trails and water efficient boulevard treatments through out the area. (See the Foothills Arterial Plan)

   B. Promote the use of the following road cross sections within the centers within the foothills.

   C. Work with the development community, ACHD and ITD to design the following roadways as gateway corridors for the Foothills and the City of Eagle:

      1) Willow Creek Road
      2) State Highway 16
      3) State Highway 55

Illustration 6.7



2. Promote internal City connections to the foothills to limit the use of the regional transportation system for local trips, provide connections within the fabric of the overall City, and provide alternatives for emergency services when needed.

   A. Promote Linder Road and Hartley Road as the main north/south internal connections.

B. Work with land owners, developers and ACHD to assess the best alignment and connection of N. Eagle Road/Willow Creek Road into the Foothills.

C. Limit, when possible, road crossing across major open space areas.

1) Establish design criteria for the crossing and the potential separation of vehicular and pedestrian/equestrians at major roadways.

2) Ensure that development plans include both motorized and non-motorized circulation.

3. Establish a mechanism to ensure that transportation impacts are planned for and funded while multi-modal options are integrated into the design of the overall system.

A. Work with the appropriate transportation agencies to establish an achievable means for the funding and construction of new rights of way in a previously under served area. Consideration may include extra-ordinary impact fees, concurrency ordinances, local improvement districts and latecomer's fees.

4. Design a foothills transportation network that provides for an east/west roadway connection between State Highway 16 & 55 to provide internally generated regional trips to move safely and efficiently to/through the regional system.

5. Work with the Idaho Transportation Department to limit access to the State Highway system through the development process and to establish thresholds for improvements to the system, including grade separated interchanges, to limit the impacts on the regional traffic flow.

6. Work with the ITD, ACHD and land owners to ensure that a regional roadway system is developed to serve both the proposed development and the City at large.

7. Work with ACHD, ITD, Idaho Fish and Game, and land owners to establish locations and standards for animal and recreation crossings and signage to ensure safe migration and recreation throughout the Eagle Foothills and the region.

A. Locate potential animal and recreational crossings on the transportation and open space maps within the comprehensive plan.

B. Establish standards for recreation and habitat crossing and signage standards as port of the wildlife mitigation plan and preliminary plat process.

d. Design

1. The design and development of the Eagle Foothills should include: water efficiency, fire resistance, native plants and drought tolerance plants and, respect the rural foothills character.

A. **Water Efficiency**: Develop an ordinance for water efficiency in the foothills that includes:

1) Establishes appropriate irrigation criteria for the Foothills including maximum irrigated area, plants types and evapotranspiration rates.

2) The implementation of water efficient automatic irrigation systems for landscape areas that include:

   a. Moisture sensor

   b. Automatic controller capable of multiple start times/zones

   c. Limit spray heads to turf/flower beds only

   d. Encourage the use of reclaimed water for irrigation

   e. Limits/regulate the use of outdoor water features (fountains/pools)

3) Encourage the use of water efficient fixtures and appliances within buildings.

B. **Landscaping:** Develop landscape criteria, guidelines, ordinances and a community education program appropriate to Foothills that includes the following:

1) A plant list of recommended/prohibited plants

2) Encourage the use of drought resistant native plants

3) Prepare a list of recommended plants that are native to the Eagle Foothills

4) Limit/regulate the use of turf (define maximum percentage of total landscape area that can be turf) with adjustments based on the type of turf used, i.e. a greater percentage for lawns utilizing drought tolerant fescue and rye turf rather than more water dependent Kentucky bluegrass

5) Encourage public education on progressive landscape principles

6) Establish policies for the revegetation of disturbed areas in the Foothills

7) Establish policies for use of native plants on non-irrigated slopes

C. **Architecture and Design:** Develop a Foothills specific architecture and site design book that includes the following:

Architectural styles appropriate to foothills
Regulates Colors/materials
Ensure that development relates to surroundings
Promote high quality of design and workmanship
Provide incentives for Green buildings/water efficiency
Establish criteria for individual building siting
Clustering/range of densities and housing types

Forms/massing/scale
Roofs below significant ridgelines
Fire Resistant Materials
Utilization of best practices for defensible space, fire protection and suppression

1) Develop guidelines for development in the foothills that includes the following:

   a. Establish a pattern language for the Eagle Foothills that gives particular attention to the use of appropriate forms, massing and scale that relates to the Foothills landscape and topography.

   b. Encourage progressive, creative, high quality and environmentally sensitive development within a range of product types through the use of appropriate materials, colors and design.

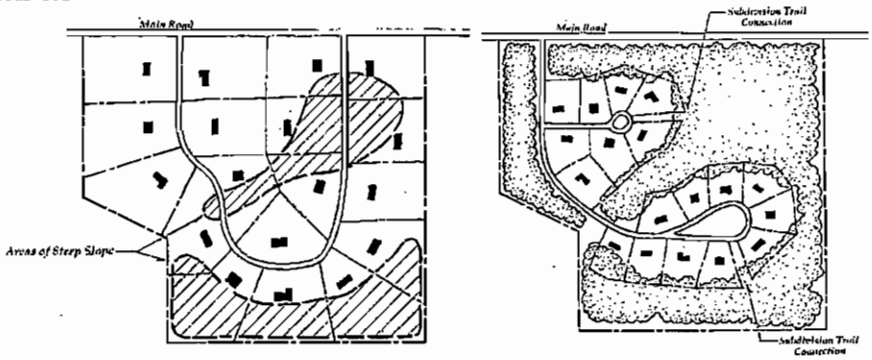
   c. Develop standards that through out this process promote efficient clustered varied and significant architectural projects.

   d. Establish a foothill's residential design review board that is composed of highly qualified informed citizens and that all projects submitted to the board be required to be designed by an Idaho registered architects.

D. **Site Planning Criteria:** Develop site development plans sensitive to existing foothills characteristics including visually sensitive area, open space and existing/sensitive land forms (See Map 6.7)

   1) Encourage clustered development to ensure quality open space is provided.

Illustration 6.8



Standard Development Cluster Development

2) Establish policies for road design and building placement sensitive to topography and view sheds.

3) Establish policies for grade adaptive structure placement to mitigate the visual impact of development.

Illustration 6.9

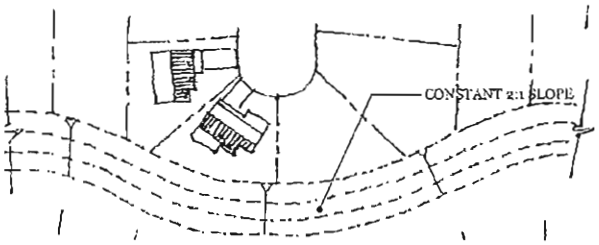
25% Up Slope Lot

25% Down Slope Lot

Swale Condition

4) Encourage contour grading that blends with existing landforms

Illustration 6.10



5) Require lateral and structural to be conducted by licensed engineers.

6) Buffer and plantings in Foothills should be sensitive to foothills characteristics and should not include uniform beams with mass plantings. Berms, if used, should be shaped to blend in with the existing topography.

e. Issues:

1) The City recognizes that the placement of development within the foothills will create the need for significant improvements both internally and externally to the area. These impacts should be adequately assessed and distributed among the land owners within the foothills.

A) The City and land owners should work with ACHD and ITD to establish a mechanism for the review and assessment of the transportation costs associated with the development of the Eagle Foothills and the implementation of this plan.

1) Work with ACHD, ITD and/or other transportation authorities to pursue the collections and dedication of impact fees for improvements specific to the Eagle Foothills.

B) All development in the foothills should be limited until the provision of basic municipal services can be established these include: sewer municipal water, and transportation.

1) All development within the Foothills Sub-area should connect to the City of Eagle Municipal water service unless otherwise indicated by the City of Eagle.

C) Development in the Foothills should be evaluated for the impacts it will have to the existing city.

6.8.10.A Brookside Sub-Area

The Brookside Planning Area is an area in transition with the development of the Eagle Foothills to the north of the site and the need to provide efficient access to the State Highway system. The alignment and location for the northern and western portion of Brookside Lane is ideal for and new and consolidated access point to State Highway 55. Due to the intensity of the transportation impacts to this site it is important to t look at a new mix of land uses in the area the address the impacts to the intersection of State Highway 55 and Brookside while buffering and transitioning to the west and the established large lot development along Beacon Light.

The Brookside Planning Area is designated for mixed use combining residential; office, limited retail and a community center as designated in the Foothills Sub-area Plan. Transitioning and buffering to the area immediately to the west of the planning will be paramount in the approval process for development in this planning area. The Brookside planning area is subject to both the policies of this sub-area and the policies of the Foothills sub-area. (See Map 6.8)

a. Uses

Uses in the Brookside Planning Area should be sensitive to the topography and limitations of the site as well as to the surrounding residential uses to the south and west. The area is seen as a true mixed use area providing a combination of residential, office and community commercial to service the incorporated residential and neighboring residential uses.

The western portion of the planning area should retain a residential use transitioning for the existing 5 acre lots

along Brookside into a mixed use center at the northern intersection of Brookside Lane and State Highway 55. The use of lofts or second story residential may be used in the office areas to capture some vehicle trips generated for the development.

The existing 5 acres lots along State Highway 55 that take direct access to the highway should be limited in development option until a parallel collector road can be established to remove access to the highway.

Single use commercial should be discouraged in this area.

The future land uses in the Brookside Planning Area are contingent on working with ITD, ACHD and the City of Eagle to resolve access limitations to the State Highway 55 and promoting the construction of an internal access road connecting north to Brookside Lane and South to Beacon Light. Changes of use for a single unit/lot should be limited due to the transportation constraints in the area.

Master planning for the individual lots along State Highway 55 is encouraged and small lot re-zones should be discouraged unless the access and design issues are acceptable to the City and ITD.

b. Design

The Brookside Lane Planning Area should be mastered planned as much as possible to provide innovative solutions to the access limitation issues in this planning area.

The design of the area should be internally focused capturing some trips from Highway 55, the Foothills and Beacon Light Road through a limited access frontage road but providing a mixture of residential uses to allow pedestrian circulation and vehicle trip capture.

Parking should be cooperative, when possible, to achieve additional parking for patrons using the area and reduce the visual impact of individual parking lots.

Signage for non-residential uses should be incorporated as a master sign plan rather than individual signs when located along State Highways and entry corridors.

The area between the frontage road and existing highway and at the northern intersection of Brookside Lane and Highway 55 should be landscaped and treated as an entry corridor to the City of Eagle.

The Brookside Lane Planning Area should be designed with a frontage/internal access road connecting from the northern intersection of Brookside Lane and State Highway 55 to a newly cul-de-saced and re-aligned Brookside Lane and Beacon Light Road intersection.

The design of the Brookside planning area should capitalize on Dry Creek providing significant open space and place making ability within the planning area.

Pedestrian and equestrian connections should be encouraged along Dry Creek including a wildlife and recreation crossing at State Highway 55.

c. Access

The future land uses in the Brookside Lane Planning Area are contingent on working with ITD, ACHD and the City of Eagle to resolve access limitations to the State Highway 55 and the future need for an interchange at this location. Changes of use for a single unit/lot will be should be discouraged due to the transportation constraints it is unlikely a single parcel will be able to achieve alternative access alone. (See the Conceptual Access Plan below)

Access to State Highway 55 should be limited to the existing northern intersection at Brookside Lane and Highway 55 and a realignment of the southern intersection of Brookside Lane to connect with Beacon Light Road.

A frontage/backage road should be development from the northern intersection of Brookside Lane and Highway 55 to the new intersection of Brookside Lane and Beacon light.

A western extension of the northern alignment of Brookside lane should be developed to provide access to the foothills sub-area.

A grade separated interchange should be encouraged at the northern intersection of Brookside Lane and State Highway 55.

d. Issues

Due to the limited access allowed under the ITD Class Four Access Restrictions, the area must be reviewed as a whole to ensure that individual lot access points are removed and alternative access is provided for as redevelopment occurs.

All the property owners in the area are encouraged to coordinate and cooperate to address site limitations with the affected agencies (ITD, ACHD, Eagle) to avoid a situation where the Brookside Lane Planning Area may be limited to existing residential land uses.

The 2030 Long Range Transportation Plan identifies that Highway 55 would be at capacity. Intensification of the development along this corridor could further congest this route.

CHAPTER 7 – NATURAL RESOURCES AND HAZARD AREAS

7.1 Topography

The City of Eagle is located approximately 8 miles northwest of downtown Boise. The City rests upon the relatively flat fluvial floodplain of the Boise River, at an elevation of 2,555 feet above mean sea level. The topography of the Eagle impact area is one of slight elevation differences across the valley floor. From a point two miles south of Eagle near Highway 20 to another point one mile north of Eagle along Dry Creek, the land's elevation varies by only 45 feet. The northeastern corner of the impact area skirts the lower reaches of the Boise Front foothills where more pronounced topographical differences can be noted.

The valley floor immediately south of Eagle is dissected by both the north and south channels of the Boise River. Approximately 3/4 of a mile to the north of the river is a bench that rises about 40 feet above the valley floor. This bench divides the City of Eagle into two distinctive physical units. The land below the Bench consists of low lying floodplain sediments with a tabletop elevation form. The lands upon the bench are representative of older, more dissected deposits from the Boise Front. These lands have a more rolling topographic appearance.

Because of the Boise River channels and Dry Creek, several flood plain areas exist.

7.2 Soils

The soils of the region consist of at least nine (9) major series with numerous subsidiaries of each soil type as defined by the U.S. Soil Conservation Service. While numerous minerals are lacking, there are deposits of sand and gravel.

7.3 Climate

Precipitation in the Eagle area averages between 8-12 inches per year. December and January are typically the months of maximum fog or low stratus cloud conditions.

7.4 Geology

The primary geology of the Eagle area consists of material from the Idaho Batholith. The City of Eagle is situated within the defined Broadway Terrace, thus making Eagle one of the prime locations for sand and gravel extraction.

7.5 Water Resources

7.5.1 Surface Water:

The Boise River carries water for irrigation and provides fishing, water-fowl hunting (not permitted in city limits), and recreation.

Dry Creek is an intermittent stream which joins the Boise River immediately west of the Eagle town site.

The Eagle planning area is crossed by eight irrigation systems: the Farmers Union Canal, New Dry Creek Canal, New Union Ditch, Breshears Lateral, Ballantyne Canal, the Mason Catline Canal, Capital View Canal and the Boise Valley Canal.

7.5.2 Groundwater:

In the area north of the Boise River, the flow is generally in a southwest direction towards the Boise River.

The City of Eagle is heavily dependent on groundwater and its recharge for drinking water and for industrial purposes.

7.6 Air Quality

The Treasure Valley area, where Eagle is located, is the most highly populated area in Idaho and may experience significant emissions from automobiles. During certain times of severe inversions and fires, some reduction in air quality may be experienced.

7.7 Plants and Wildlife

A wide variety of plant and animal species live in the City and Area of City Impact (AOI) ranging from big game, game birds, large and small mammals, birds, reptiles, amphibians and fish. Of these, some are of special concern to federal and state agencies, either due to game management considerations or to risks to the species locally or regionally. The people in Idaho actively participate in outdoor related recreation on a regular basis (US Department of the Interior, Fish and Wildlife Service and US Department of Commerce, US Census Bureau. 2001 National Survey of Fishing, Hunting and, and Wildlife-Associated Recreation.). These numbers demonstrate the importance of wildlife to Idaho residents.

Idaho Participation in Wildlife Related Activities in 2001, from the *2001 National Survey of Fishing, Hunting and, and Wildlife-Associated Recreation.*

Table 7.1

type of activity	participation (# people involved)	dollars spent on activity
hunting	151,000	$153,175,000
fishing	261,000	$218,485,000
wildlife watching	388,000	$137,857,000

Plant and wildlife populations must be considered during planning processes to comply with federal and state laws, and:

- To ensure that the important environmental features of the City and its AOI are protected and enhanced.

- To protect plant, fish, wildlife, and recreation resources. (Eagle CP p.3)

Species of concern include plants, as well as game and non-game species. Some of the game animals found within the City of Eagle or the Area of City Impact (AOI) include mule deer, elk, California quail, chukar, Hungarian partridge, and the ring-necked pheasant. A number of species have been identified by federal, state and local agencies as being of special concern due to decreasing numbers or loss of habitat. Non-game species of concern that may occur within the City of Eagle or the AOI include:

- Two amphibians; the northern leopard frog, and Woodhouse's toad;
- Two snakes; the ground snake, and longnose snake;
- Five raptors; the bald eagle, peregrine falcon, ferruginous hawk, merlin and western burrowing owl;
- Four other birds; the mountain quail, long-billed curlew, loggerhead shrike, and lesser goldfinch;
- Four bats; the long-legged myotis, pallid bat, and Townsend's big-eared bat, and western small-footed myotis;
- Two other mammals, the southern Idaho ground squirrel and Merriam's shrew, and
- Two plant species, slick spot peppergrass (*Lepidium papilliferum*) and Aase's Onion (*Allium aasea*).

None of these species have Federal protection, and only one, the southern Idaho ground squirrel, is a candidate for Threatened and Endangered Species classification.

Wildlife in the City of Eagle and the AOI also include the more common and much watched animals typically observed while living, working and recreating here. These include diverse songbirds, waterfowl, ospreys, foxes, coyotes, badgers, raccoons, beaver, otters and muskrats. Watching the activities of these animals deepens the daily and recreational experiences in Eagle.

7.7.1 Wildlife Habitat

Plant and wildlife populations rely on available habitat for the requirements of life, i.e. food, shelter, water, and space/ territory. In Southwest Idaho, a region of limited moisture, these species have either adapted to low water conditions or are found in areas with available water. There are two primary types of native habitat present within and adjacent to the City and AOI of Eagle, riparian/wetland habitats and upland habitats. However, existing habitat in the area has generally been altered over time and exhibits limited pre-European conditions. Alteration of habitat in the area has generally been associated with historic human uses, such as residential and commercial development, farming, grazing, and recreation. These activities have resulted in the establishment and expansion of exotic non-native species and increased wildfire frequency. Changes in vegetation over time have adversely affected the overall diversity of native species present, as well as their populations.

Riparian communities generally make up the smallest percent of the area, but support the greatest diversity of plant and wildlife

species. Since water is a limited commodity in the Treasure Valley, these areas are very important to consider for protection as Eagle development progresses. In contrast, uplands make up the largest amount of area, but with fewer dependent species. However, this does not mean it is unimportant, because the animals using these lands are highly adapted to the native conditions and most thrive best within these communities. In addition, these areas are required for migratory paths and connectivity between riparian communities. Upland habitat is crucial for big game winter range, as well as the unique species that utilize the sagebrush/grasslands native to this area.

Riparian vegetation consists of the plants (grasses, sedges, rushes, forbs, shrubs and trees) found along perennial and ephemeral bodies of water. Typically these species include black cottonwood, choke cherry, willow species, red-osier dogwood, golden currant, Wood's rose, and numerous grasses, sedges, rushes, and herbs. This vegetation provides habitat for songbirds, otters, beaver, foxes, raccoons, big game, various amphibian species, insects, and numerous other wildlife species. Osprey, bald eagles, hawks, and other raptors use these areas for nesting and foraging. Riparian areas are currently found within the Boise River and Dry Creek floodplains, with a patchwork of smaller, fragmented riparian communities found in unnamed drainages through out the area. In addition to these areas, degraded creek and drainage areas that currently do not support riparian vegetation may be appropriate for habitat improvement, and should not be disregarded.

Native upland vegetation in the City of Eagle and the AOI consists of the plant communities generally associated with higher elevation shrub steppe/grassland communities throughout the Snake River Plains. Typically the canopy of these communities include some combination of mountain, Wyoming or Great Basin big sagebrush, green or gray rabbit brush, or antelope bitterbrush. Species composition is generally dependent on site conditions and historic use of the area. Grasses found in these communities include bottlebrush squirrel tail, Idaho fescue, basin wild rye, bluebunch wheatgrass, Sandberg's bluegrass, needle and thread, three-awn, sand dropseed, Indian rice grass, prairie June grass, and others.

However, most of the habitat found in this area has been degraded over time, resulting in wide-spread changes in the composition and structure of the communities. These communities are generally dominated by invasive and noxious weed species, including cheatgrass, medusa head wild rye, crested wheat grass, intermediate wheatgrass, witch grass, fox-tail barley, purple loosestrife, whitetop, Canada thistle, poison hemlock, puncture vine, rush skeletonweed and other invasive and noxious weed species. The establishment of these species generally results in the reduction or elimination of native species unless strong rehabilitation measures are taken. Such measures include mechanical, chemical, or biological treatments to potentially control/manage the establishment of new populations and spread of existing populations. The use of seeding and planting native grasses, forbs and shrubs can also be used to control invasive and noxious weed species by increasing the community's resiliency after a disturbance, such as fire, and to resist the establishment of invasive species.

Therefore, areas with residual native communities are extremely valuable for native seed sources and wildlife species. However, even those areas with significant disturbance, dominated by invasive non-natives can still provide habitat for wildlife. The native areas in the Boise Foothills, particularly in the eastern part of the AOI, are important foraging areas for resident mule deer herds, as well as residual migratory populations of pronghorn antelope, mule deer, and elk. In the winter these areas are critical to the survival of these species when snow covers the mountains and foothills to the north.

Rare plants are also of concern in the City of Eagle and the AOI. Populations of two rare species found in the Foothills are Aase's onion and Slickspot peppergrass. Neither, currently has federal

protection on private lands, but development is encouraged to protect these species for if conservation measures are not undertaken to protect these populations, listing as threatened species may occur.

Connectivity between areas of habitat is critical to maintain healthy populations. Many wildlife populations in the AOI rely on the ability to move from one area to another in order to take advantage of different habitat requirements. For example, deer and elk summer in the mountains northeast of the City of Eagle, but require low elevation habitat to forage in when snows cover the high ground. Wildlife populations also move between patches of habitat for dispersal, as when conditions become adverse in one patch of habitat, or when young animals are leaving their birth area. This is best achieved by establishing small concentrated areas of human impact, gradually decreasing in concentration the further from the center, to the periphery which should be surrounded by large contiguous stands of undeveloped open space. Undeveloped open space can include wildlands and agricultural fields in some instances. However, manicured parks and golf courses provide limited habitat for only a few species. Therefore, these types of communities should not be considered as a method of connectivity for wildlife.

7.8 Hazard Areas

The Floodplains of the Boise River and Dry Creek constitute the only hazard areas within the Eagle AOI. Future areas may be added to the Comprehensive Plan when deemed necessary.

Areas of flooding consist of two parts: (1) the floodway which is the most severe area of flooding characterized by deep and fast moving water; and (2) the floodplain which is less severe than the floodway and is characterized by shallower and slower moving waters at the time of flooding.

The Dry Creek floodplain has a potential for flash flooding while the Boise River would probably flood due to seasonal weather conditions.

A natural state, such as a greenbelt, a wildlife habitat, an agricultural area, an open space area, a recreational area and/or a nature area, may be encouraged in the 100-year floodplain of the Boise River and Dry Creek.

The floodway is shown as a generalized area only on the Land Use Map. The Federal Emergency Management Administration (FEMA) maps show specifically where the floodway and floodplain boundaries are located. (Also, see Eagle City Code for definitions of terms relating to the floodplain areas.)

7.9 Goal

Special concern and attention should be given to the preservation of fish, wildlife, water resources, air quality, agriculture, open space and recreation/nature areas when implementing planning and zoning decisions.

To provide special concern and attention to the preservation of native wildlife, fish and plants, water resources, air quality, agriculture, open space and recreation/natural areas when implementing planning and zoning decisions.

Recognize the importance of wildlife habitat, and plan development to maintain and enhance native wildlife.

7.9.1 Objectives

To provide and protect riparian habitat that provide crucial food, shelter and water for resident and migratory wildlife by protecting existing and rehabilitating degraded riparian corridors.

To provide upland wildlife with adequate open space to minimize the disturbance of human actions.

To provide large areas of connectivity between areas of wildlife usage for the seasonal migration and dispersion of big game, migrating birds, and other species.

To protect unique and important features such as rare plant populations, colonial wildlife features, rare species, springs and high quality native plant communities.

To integrate development into the landscape in order to avoid destruction of habitat.

7.9.2 Policies

Encourage development with a small footprint on the land, leaving large contiguous areas of open space in perpetuity.

Link protected habitat areas with each other using areas of limited development.

Encourage the City to develop working relationships with Idaho Department of Fish and Game.

Consider wildlife issues when developing housing and transportation corridors.

Encourage water conservation and wildlife habitat through the use of native vegetation in developments and transportation corridors.

Encourage innovative water resource protections; use gray water for landscape and limit uses of fertilizer and pesticides.

Encourage control of invasive and noxious weed species throughout AOI.

7.9.2 Implementation Strategies

Establish a detailed environmental review process and approval process that recognizes the importance of plant and wildlife habitat, including the following features:

- Emphasizes connectivity between areas;
- Development of a rapid environmental review template for use in all foothill areas and
- Clear description of additional assessments needed if there are issues of concern, such as the presence of rare plants or a raptor nest;
- Process to provide all species inventory information to the Idaho Conservation Data Center (CDC).

- Process to consult with State and Federal Wildlife Agencies on big game impacts for all Foothills development.
- Process to develop a community recreation plan in conjunction with a regional plan; and
- A process to design and incorporate an integrated pest management plan for the AOI and each individual development.

Require developers to complete an environmental assessment and mitigation plans prior to final plan submittal. This will include a species inventory and report on any species of concern, and will incorporate wildlife habitat in transportation considerations.

Require developers in sensitive areas (Foothills or riparian areas) to retain at least 40% of the gross acreage as open space in large contiguous blocks.

Require developers to demonstrate funding for long term habitat mitigation projects, including habitat rehabilitation, resident education, weed control, water project development, and others as necessary.

Establish a process to review transportation corridors for wildlife impacts; traffic speeds may be limited in areas adjacent to riparian corridors, in seasons of high wildlife use, or at night to avoid collision. This avoids the necessity of faunal crossings; these bridges or tunnels provide access across the roadway to all species. Of particular problems are fences and barricades. These should be avoided if possible.

CHAPTER 8 - TRANSPORTATION

8.1 Background

Transportation planning and land use planning should be compatible with Eagle's transportation system and should take into account projected land use as depicted on the Eagle Land Use Map.

The City's existing network of roadways represents only a portion of the transportation system needed to serve future growth and development. The Western Planning Area and the North Foothills Planning Area contain very few local or collector roads and rely on section line roads for the primarily agricultural uses and rural residential uses. As the City continues to experience growth, population will increase and the number of vehicles using the transportation system will increase. A viable public transit system and a dedicated pathway system are parts of the overall transportation system development.

In addition to adding new streets and roadways, modifications and extensions to the existing routes will be necessary in order to create a fully integrated, modern, efficient transportation system that will effectively serve the residents of the City, the business community and the traveling public.

The City of Eagle Transportation/Pathway Network Maps #1, #2, and #3, illustrate various proposed classifications of roadways that are included in the Eagle City limits and Eagle Area of Impact. Network Map #4 depicts the proposed Pathway Plan. Map #5 illustrates the Foothills Planning Area.

8.2 Street Classifications

A roadway system must include a number of streets, each of which are designated to handle a particular type and amount of traffic. The Community Planning Association (COMPASS) Functional Street Classification Map illustrates the various classifications of roadways that are included in the Ada County roadway system. The Eagle section of the COMPASS Functional Street Classification Map and Regional Transportation Plan should consider the City of Eagle Transportation/Pathway Network Maps #1 and #2.

In general, there are several types of streets in the street hierarchy.

- **Principal arterials** provide major circulation and movement through urban areas and to connect with major activity centers and freeways outside the City of Eagle. Principal arterials are regional roadways and provide travel routes for longer trips. On-street parking is prohibited.
- **Minor arterials** are similar to principal arterials but serve to carry through traffic by connecting with and augmenting the principal arterial system. Minor arterials are typically section line roads. On-street parking is prohibited.
- **Foothills arterials** are another type of arterial that provides primary circulation and movement within rural low-density areas (i.e.: one unit per two-acre and lower). They connect with major activity centers within the Foothills regions and provide access routes to the principal arterials. Foothills arterials vary from other arterials by the specific design standards and not by their function. On-street parking is prohibited.
- **Collector streets** intercept traffic from local streets and carry the traffic to the nearest arterial street. Collector streets may extend for one or more miles and serve to connect the developed areas within a section

to the arterial roadway network. Collectors may provide access to larger parcels or developments with high trip generation. On-street parking is typically prohibited.

- **Residential collector** streets intercept traffic from local streets and minor numbers of abutting parcels and carry the traffic to a standard collector or arterial street. Residential collectors typically extend less than one-half mile in length. Residential collectors may provide access to local streets, multi-family developments or planned unit developments. On-street parking may be permitted under special circumstances.
- **Local streets** serve to provide direct access to the abutting properties, individual homes or small traffic generators. On-street parking is typically permitted.

8.2.1 Principal Arterial

Mobility Function:
The primary function of a principal arterial is to provide major circulation and movement through urban areas and to connect with major activity centers and freeways. A principal arterial may serve motorized and non-motorized transportation needs and may include up to seven vehicular traffic lanes. On-street parking is prohibited.

Access Function:
Access from other roadways is controlled and subordinate to traffic on the principal arterial street. Direct lot access is prohibited or severely restricted. Combined access points are encouraged. The City's Access Management Plan should be the final determination of any site access plan.

Right-of-Way:
As shall be determined by the Highway District having jurisdiction with recommendations by the City and seriously considered by the Highway District.

8.2.2 Foothills Principal Arterial

Foothills Principal Arterials is similar to other principal arterials with specific design standards unique to the Foothills region.

Mobility Function:
The primary function of the Foothills arterials is to provide major circulation and movement within developing areas of the Foothills region. The Foothills arterials will connect with major activity centers and existing and proposed principal arterials.

Special design characteristics may be considered for Foothills arterials as a means to mitigate topographic, environmental, noise and lighting impacts. A rural/foothills arterial may serve motorized and non-motorized transportation with center turn lanes only at driveways and/or street intersections that are expected to generate a minimum of 500 vehicle trips per day, or where determined to be necessary for safety by ACHD. On-street parking is typically prohibited.

Access Function:
Access to Foothills arterials is typically less restrictive than principal arterials. Direct lot access is typically restricted. Direct lots access may be considered in Foothills regions with large lots and topographic constraints. Combined access points are normally combined. The City's Access Management Plan should be the final determination of any site access plan.

Right-of-Way:
The Highway District having jurisdiction shall determine the minimum right-of-way. The City may establish a larger right-of-way based consideration for topography, visual impacts, the planned pathway system and other design considerations. Any special right-of-way requirements shall be communicated and considered by the Highway District.

8.2.3 Minor Arterial

Mobility Function:
The primary function of a minor arterial is to carry through traffic by connecting with and augmenting the principal arterial system. A minor arterial may serve motorized and non-motorized transportation needs, be designed with the minimum street section needed to accommodate projected traffic volume, and in conformance with the Long Range Transportation Plan of COMPASS. On-street parking is prohibited.

Access Function:
Access to other roadways is less restrictive than principal arterials. Direct lot access is restricted prohibited or severely restricted. Combined access points are encouraged. The City's Access Management Plan should be the final determination of any site access plan.

Right-of-Way:
As shall be determined by the Highway District having jurisdiction with recommendations by the City and seriously considered by the Highway District.

8.2.3 Foothills Minor Arterials

Foothills Minor Arterials are similar to other minor arterials with specific design standards unique to the Foothills region.

Mobility Function:
The primary function of the Foothills arterials is to provide major circulation and movement within developing areas of the Foothills region. The Foothills arterials will connect with major activity centers and existing and proposed principal arterials.

Special design characteristics may be considered for Foothills arterials as a means to mitigate topographic, environmental, noise and lighting impacts. A rural/foothills arterial may serve motorized and non-motorized transportation with center turn lanes only at driveways and/or street intersections that are expected to generate a minimum of 500 vehicle trips per day, or where determined to be necessary for safety by ACHD. On-street parking is prohibited.

Access Function:
Access to Foothills arterials is typically less restrictive than principal arterials. Direct lot access is typically restricted. Direct lots access may be considered in Foothills regions with large lots and topographic constraints. Combined access points are normally combined. The City's Access Management Plan should be the final determination of any site access plan.

Right-of-Way:

The Highway District having jurisdiction shall determine the minimum right-of-way. The City may establish a larger right-of-way based consideration for topography, visual impacts, the planned pathway system and other design considerations. Any special right-of-way requirements shall be communicated and considered by the Highway District.

8.2.4 Collectors

Mobility Function:
The primary function of a collector street is to intercept traffic from local streets and carry the traffic to the nearest arterial street. A secondary function is to service abutting property. The collector street may serve motorized and non-motorized transportation needs, and be designed with the minimum street section to accommodate the projected vehicle volume and in conformance with the current Long Range Transportation Plan of COMPASS. On-street parking is typically prohibited.

Access Function:
To provide limited and controlled access to commercial and industrial areas and to residential neighborhoods. Direct lot access is typically restricted. The City's Access Management Plan should be the final determination of any site access plan.

Right-of-Way
As shall be determined by the Highway District having jurisdiction with recommendations by the City and seriously considered by the Highway District.

8.2.5 Residential Collectors

Mobility Function:
The primary function of a residential collector street is to intercept traffic from local streets and minor numbers of abutting parcels and carry the traffic to a collector or arterial street. A secondary function is to service abutting property. The ACHD allowed length and number of vehicle trips per day on residential collectors is less than collectors. The residential collector street may serve motorized and non-motorized transportation needs, and be designed with the minimum street section to accommodate the projected vehicle volume. On-street parking may be prohibited.

Access Function:
To provide limited and controlled access to residential neighborhoods. Direct lot access is typically restricted.

Right-of-Way
As shall be determined by the Highway District having jurisdiction with recommendations by the City and seriously considered by the Highway District.

8.2.6 Local Roadways

Mobility Function:
The primary function of a local street is to serve abutting property. Local streets are to be designed to allow on-street parking and discourage continuous or unobstructed flow of traffic through residential neighborhoods.

Access Function:

To normally provide abutting properties with unrestricted access to the local street unless the street is a local commercial street, in which case access restrictions may apply.

Right-of-Way:
As shall be determined by the Highway District having jurisdiction with recommendations by the City and seriously considered by the Highway District.

All roadways not classified as arterials or collectors are considered local roadways.

8.3 City of Eagle Functional Pathway Classifications

An effective pathway system should include a combination of Paths and Lanes. The City of Eagle Transportation/Pathway Network Maps (See Maps 8.1, 8.2, 6.6, & 8.3) illustrate the various classifications and locations that are included in the pathway system and described as follows:

8.3.1 Bike Lanes

Function:
Primarily used as a lane for bicycles and other non-motorized uses.

Location:
Bike Lanes usually exist on the same pavement surface as motorized lanes. Arterials and collectors should be provided with bike lanes on each side of the roadway. Bike lanes may be required on rural and Foothills arterials if no parallel pathway is available.

8.3.2 Paths

Function:
To provide for recreation and alternative transportation; important to provide safe continuous thoroughfares with minimal cross flow of vehicular traffic.

Location:
Unlike the bike lanes that are part of roadways, Paths are routes that are not directly part of an established roadway. Paths could be located on their own corridors and separated from roadways. This could include utility easements, irrigation canals, adjacent to rivers or creeks, or on established recreational routes. Paths could also be located along roadway right-of-ways and would usually be separated from vehicle travel lanes and the paved section of the roadway by a median or sidewalk.

8.4 Goals

Roadway System Goals

Develop a transportation system to serve the planned land uses of the City of Eagle and its Area of Impact. The transportation system should provide regional connectivity to neighboring cities and regions.

Maintain the functional and connectivity of the street system for current users, emergency response efforts, and for use by future generations.

Using sound land use and transportation relationships, develop alternate routes or corridors for ACHD planners to evaluate that best emphasize the needs of developing areas while lessening the potential for congestion. This is typically implemented through the development review process.

Protect and buffer homes, businesses, sidewalks and pathways, parks and opens spaces from the adverse impacts of roadways and traffic. Reasonable design measures should include narrower street sections, medians, alleys, landscaping, pathways and trails, and the design of bridges and other structures.

Develop an access management plan for the arterial, collector and local street system. Communicate the access management plan to the ITD, the ACHD and the local development community.

Work regionally to develop a new east-west principal arterial in the Foothills region north of the SH-44 Corridor. The goal of this new arterial is to improve east-west connectivity between northern Canyon County and the Downtown Boise region. This route may involve more than one County Government. This route would complement the current planning efforts by COMPASS and ACHD to enhance the Beacon Light Road/Purple Sage Road and Hill Road corridors. Other east-west routes are becoming increasingly congested.

Work regionally to support a new east-west connection between SH-16 and SH-55 within the Foothills region. This route would complement the current planning efforts by COMPASS and ACHD to enhance the Beacon Light Road/Purple Sage Road and Hill Road corridors.

Develop transportation strategies for the North Foothills area. The plan should be consistent with the balanced, long-term goals of the existing street system within the City of Eagle.

Develop a citywide plan and policy on measuring and implementing a means of concurrently improving the transportation and public transit systems with the approval of new developments. Create a concurrency ordinance to ensure the adequate funding of transportation and transit system improvements at the time of development.

Protect and support the existing and planned roadway system connecting the City of Eagle to the area south of the Boise River. Protect the operational integrity of the existing river crossings at Eagle Road and Linder Road. Support the current regional plans to develop two new river crossings in the SH-55 and SH-16 alignments.

To the extent possible, roadway and pathway designs shall conform to the natural terrain and contours of the land.

Protect community identity and values of important roads from unnecessary expansion by adopting specific designs and cross sections for these roads (ie: North Eagle Road).

Public Transit Goals

Encourage the development of a local and regional public transit system. The public transit system is to provide basic mobility for some, alternative transportation for others, and a non-drive alone mode for everyone.

Optimize the effectiveness of public transit through supporting land use decisions.

Promote land use changes and redevelopment plans in key areas that provide densities and activities that promote the use and efficiency of a public transit system.

Work regionally with COMPASS and Valleyride to plan for the potential of a regional rail or bus rapid transit system. The SH-44, SH-16, SH-55 and US 20-26 corridors have the greatest potential.

Evaluate concepts to fund the operation and expansion of the regional public transit system and facilities.

Coordinate with the Land Use Elements of the Comprehensive Plan to establish potential transit nodes in the future transit corridors.

Pathway System Goals

Encourage the development of a local and regional pathway system. The design of the pathway system should be coordinated with other elements of the City's Comprehensive Plan. The pathway system is to provide basic mobility for some and a non-drive alone mode for everyone.

Work regionally to integrate the pathway system with the ongoing planning and design efforts for the SH-44, SH-16, SH-55 and US 20-26 corridors

Support the concept and goals of demand management strategies, such as telecommuting, ride-sharing, park-and-ride facilities, etc. to reduce overall travel demand.

8.5.1 Objectives

8.5.2 Encourage completion of the existing street system and creation of new links, within reasonable constraints, as the transportation system develops.

8.5.3 Encourage the preservation of right-of-way for future grade-separated intersections where appropriate within the SH-44, SH-55, US 20-26 and SH-16 corridors.

8.5.4 Maintain a land use decision-making process that is supportive of the operational characteristics identified in the most recent Regional Transportation Plan for Ada County of record, and which is protective of living environments along streets. Balance the regional need for connectivity with the local needs of accessibility.

8.5.5 Ensure that corridor planning, roadway route selection and other transportation system development consider the impact on the development potential of adjacent and under-developed lands.

8.5.6 Promote land use policies that limit access as necessary to maintain safe and efficient operation of the existing street system while allowing reasonable access to individual development parcels.

8.5.7 Maintain safe and comfortable neighborhoods by minimizing speeding and cut-through traffic while avoiding cul-de-sac streets that isolate individual neighborhoods.

8.5.8 Coordinate with the Community Planning Association (COMPASS), Ada County Highway District (ACHD), Valley Regional Transit (VRT), and the Idaho Transportation Department (ITD) to ensure consistency between transportation system improvements and the land use plans and decisions of the City of Eagle and surrounding city and county governments.

8.5.9 Develop transportation strategies for the North Foothills area. The Foothills Area Plan should consider the follow planning elements:

- Coordinate the land use plans and the roadway system to ensure that build out traffic levels conform to the established levels of service determined with an Adequate Public Facilities Plan.
- Consider the traffic impacts generated by traffic and buffer any new developments within the North Foothills Area on the developed areas of Eagle.
- Develop typical street cross sections for local collector, arterial and limited access roadways. The City shall work with ACHD and ITD to ensure that the approved street sections are implemented in projects in the North Foothills area.
- Integrate roadway design measures to mitigate or buffer the abutting land uses from the adverse impacts of roadways and traffic volumes and noise.
- Balance the design needs of the expanded regional roadway system with the potential impacts on the new developments and the redevelopment of surrounding lands.
- Review development standards and planning goals by acknowledging that roadway systems and development and increased traffic volumes affect traffic operations.
- Adapt the roadway and pathway plans to the natural terrain and contours of the abutting lands.
- Assess the feasibility of a transit system expansion based upon allowed development densities, development phasing, and available financing.
- Integrate a pathway system for appropriate pedestrian, bicycle and equestrian access to neighborhoods, activity centers, public facilities, existing pathways and the Ridge To Rivers Pathway Plan.

8.5.10 Provide the opportunity for transportation system design alternatives in the Foothills as a means to minimize environmental impacts and foster the unique characteristics of the Foothills.

8.5.11 Encourage alternative transportation forms such as walking biking and carpooling. Create opportunities for walking and biking between neighborhoods. Provide pedestrian and bicycle routes to

all elementary and middle schools. Develop and maintain a safe-route-to school program.

8.5.12 Promote alternative forms of transportation to minimize travel demand, reduce congestion, maintain accessibility and promote health and fitness.

8.6 Implementation Strategies

8.6.1 Roadway Strategies

a) Work in conjunction with the Ada County Highway District (ACHD), Idaho Transportation Department (ITD), and Community Planning Association (COMPASS) to classify roadways on the City of Eagle Transportation/Pathway Network Maps #1, #2, #3 incorporated into this Comprehensive Plan by reference. The Maps are to assure conformity to designations as delineated on the Land Use Map. The maps shall be provided to the Community Planning Association for input into the Community Planning Association's Functional Street Classification Map and Regional Transportation Plan.

b) Continue to participate in regional transportation planning (as is currently done through the Community Planning Association) to develop and update long-range transportation plans and provide a foundation for major project selection by ACHD and ITD in the City of Eagle and Ada County.

c) The most recently adopted Regional Transportation Plan for Ada County of record is adopted by reference as part of the City of Eagle Comprehensive Plan.

d) The City should participate in regional or long-range transportation and public transit planning efforts that impact the City.

e) Periodically review the street classification system and work with ACHD and the Community Planning Association to amend the street classification system as needed. Any street reclassifications shall be contingent upon an analysis of existing street configuration, existing land uses, lotting patterns, location of structures, impact on neighborhoods and area-wide transportation needs. Upgrading of residential streets to collector and arterial status shall be discouraged and shall only occur where a significant community-wide need can be identified as part of the adopted Regional Transportation Plan.

f) Integrate all modes of travel to reduce travel and support air quality improvement measures.

g) Encourage roadway design standards and roadway classifications that are consistent with the Idaho Transportation Department (ITD), Ada County Highway District (ACHD), Community Planning Association COMPASS, and other agencies that may be responsible for roadway planning and design.

h) Review the City's transportation priorities including roadway widening, signalization and other improvements in concert with the Transportation Improvement Program (TIP) within the City limits and Impact Area.

i) Evaluate the impact to the City of all roadway improvements and roadway extensions.

j) Accelerate the development of the extension of Highway 55and State Highway 16 across the east end of Eagle Island to Chinden Boulevard generally as shown on the City of Eagle Transportation/Pathway Network Map #1 and within the Community Planning Association long range transportation plan.

k) Work regionally to integrate the pathway system with the ongoing planning and design efforts for the SH-44, SH-16, SH-55 and US 20-26 corridors

8.6.2 Specific Design Strategies

a) Encourage sidewalks that are separated from the curb on all streets, except for areas where Eagle City Code requires sidewalks to abut the curb and where existing buildings, inordinate environmental impacts, or other impacts make setting the sidewalk back infeasible. Meandering sidewalks should be required if permitted under the Americans With Disabilities Act (ADA) and where space permits. A planter strip of sufficient width for street trees between the sidewalk and roadway should be required. Where adequate facilities exist, efforts should be made to provide a canopy effect over the roadways. The type of street trees used should be those that have root systems that have proven to not cause sidewalk or curb damage when in close proximity to such improvements. Root barriers should be required.

b) Design and/or align roads to preserve significant existing trees wherever practical; safety shall not be compromised.

c) Support the access restriction policies of the Ada County Highway District and the Idaho Transportation Department at a minimum. The access restrictions shall be based upon the most stringent future use of the roadway. Temporary accesses may be considered in areas with a developing regional roadway network.

d) Limit access to all arterial streets.

e) Discourage direct lot access to parcels abutting arterial and collector streets.

f) Encourage shared driveways on collector streets and streets in the Central Business District.

g) Develop methods, such as cross-access agreements, frontage and backage roads, to reduce the number of existing access points onto arterial streets.

h) Work with adjacent jurisdictions to develop more restrictive access limitations than presently exist for arterials and highways of regional transportation importance.

i) "Cut-through" traffic or "traffic routed through" a neighborhood on local streets from arterial streets shall be discouraged through the development review process, through the provision of an adequate arterial and collector system and through the use of appropriate traffic calming and traffic control strategies. Avoiding cul-de-sac streets that isolate individual neighborhoods.

j) Encourage planning of local roadway systems that will provide for intra-neighborhood connectivity. The connecting roadways should be designed to not become

collectors and to discourage traffic from cutting through neighborhoods to go from a collector or arterial to another collector or arterial. Such intra-neighborhood connectivity is for emergency and delivery vehicles and for local intra-neighborhood access.

k) Encourage traffic calming in a way that minimizes adverse effects on adjacent streets.

l) Work with Ada County Highway District, local developers and neighborhoods in the operation of a local traffic-calming policy that balances the needs of the roadway, the drivers, pedestrians, bicyclists, and the traveling public.

m) A collector street system shall be pursued within each square mile of development adequate to serve the density of development. Special requirements may be considered in the rural and Foothills development areas or other places where topographic constraints or low traffic volumes limit the need for the mid-mile collector road system. Suggestions shall be forwarded to ACHD for long range planning purposes.

n) Develop grid systems at commercially zoned arterial intersections, where feasible, in order to support increased traffic.

o) Encourage arterial and collector center turn lanes only at driveways and/or street intersections that are expected to generate a minimum of 500 vehicle trips per day, or where determined to be necessary by ACHD or ITD, and to encourage landscaping within any portion of a center turn lane which is not used for such a driveway or intersection. Such landscaped medians would need to be maintained by the City, homeowners' association, or another responsible entity and would require a license agreement with the highway district having jurisdiction.

p) A Master Plan for the Highway Districts having jurisdiction to consider regarding the re-construction of the intersections of State Highway 44 and Ballantyne Lane and State Highway 44 and State Street is incorporated herein by reference (See Ballantyne/Hwy 44/State Street Master Plan dated March 2, 2000, or updated version as approved by the Eagle City Council, the Idaho Transportation Department and the Ada County Highway District.).

If the Master Plan is approved by the Highway Districts the phasing of construction should be as follows:

- Upon development of the land abutting Ballantyne Lane to the west, right-of-way should be provided for and the roadway should be constructed to the west generally as shown as Item #1 on the Master Plan. The unimproved right-of-way (connecting State Street to Ballantyne Lane) should be improved as shown as Item #2 on the Master Plan. The intersections of State Highway 44 and Ballantyne Lane and State Highway 44 and State Street should be eliminated as shown as Items #3 and #4 respectively on the Master Plan.

- The section of roadway as shown as Item #5 shall not be improved and right-of-way shall not be acquired unless development is proposed for that site. If development is proposed right-of-way should be obtained and the roadway should be constructed generally as shown as Item #5 on the Master Plan. At that time the roadway shown as Item #2 on the Master Plan should be eliminated.

q) Preserve North Eagle Road as a three lane road north of Floating Feather Road.

r) Financial obligations for the above referenced right-of-way acquisition and the Highway Districts having jurisdiction should determine roadway improvements.

s) Encourage arterial and collector roadway design criteria consistent with the rural nature of planned and existing developments generally within the areas designated on the Land Use Map as Residential Rural (one dwelling unit per five acres maximum) and Residential Estates (one dwelling unit per two acres maximum).

For purposes of this section, roadways should include, but are not limited to:

- Homer Road
- Beacon Light Road
- Park Lane
- Meridian Road
- Ballantyne Road
- Eagle Road (from Floating Feather Road north to the Impact Area boundary),
- Linder Road (from Beacon Light Road north to the Impact Area boundary),
- Palmer Road,
- New arterial and collector roadways within the Foothills region that have forecast daily traffic volumes of less than 18,000 vehicles.

Such designs should include the following:

- ADA (Americans With Disabilities Act) permitting, sidewalks and/or pathways should meander and be separated from any roadway edge or curb to allow for added pedestrian safety. Topography, trees, ditches and/or similar features may limit the distance between sidewalks and/or pathways and the roadway edge. Easements may be needed if portions of the sidewalk and/or pathway are to be located outside of the right-of-way.
- Unless otherwise determined by ACHD to be necessary for public safety, roadways should be a maximum of two lanes with a center turn lane only at driveways and/or street intersections that are expected to generate a minimum of 500 vehicle trips per day, or where determined to be necessary for safety by ACHD. Any portion of a center turn lane that is not used for such a driveway or intersection should contain a landscaped median. Such landscaped medians would need to be maintained by the City, homeowners' association or other responsible entity and would require a license agreement with the highway district having jurisdiction.
- The roadways should be constructed with a bike lane on both sides of the roadway. Special designs may be considered in Foothills regions, along principal arterials, and in roadway corridors with parallel pathway systems.

8.6.3 Transit Strategies

a) Encourage park and ride lots within the City and Impact Area as development occurs or as part of a major corridor plan. The SH-44, SH-16, SH-55 and US 20-26 corridors have the greatest potential. Impacts to existing or planned neighborhoods should be considered.

b) Coordinate with ACHD and the regional transit authority to encourage the development of transit system amenities

(shelters, bus turnouts, etc.) within the any major activity centers along major arterial corridors and in others areas as the need develops.

c) Encourage the development of transit system amenities (shelters, bus turnouts, etc.) within the Village Center, along major arterial corridors and in others areas as the need develops.

d) Support alternative funding methods, including the concept of a local options sales tax, as a means of funding the expansion of the regional public transit system and facilities.

e) Develop transit supportive corridors along SH-44, SH-16, SH-55 and US 20-26.

8.6.4 Pathway Strategies

a) Encourage new development to provide for pedestrian, equestrian, and bicycle circulation in accordance with the City of Eagle Transportation/Pathway Network Maps #, #2, #3, adopted local and regional pathway plans, as may be needed for intra-neighborhood connectivity and to ensure that bike and pedestrian traffic is not unnecessarily pushed out onto arterials and collectors.

b) Encourage the provision of equestrian, pedestrian and bicycle safety and comfort with enhanced pedestrian crossings of the State Highways (Highway 44 and Highway 55). Pedestrian/bicycle overpass or underpass crossings should be considered. Also, at grade intersection enhancements, such as landscaping, crosswalk pavers and signage, for pedestrian/bicycle safety and comfort should be considered.

8.6.5 Land Use and Parking Strategies

a) The City of Eagle may require a traffic study even if the Highway District or ITD do not require traffic impact studies for new development, The traffic impact study shall include, but not limited to, potential impacts to existing traffic patterns, suggested roadway widths, access to existing and proposed roadways, signalization, location and need for intersections, turn lanes, bus stops, on-street parking and pedestrian facilities.

b) The City shall work with ACHD and COMPASS to establish legally defensible standards relating to traffic impacts of new development on existing residential streets.

c) Encourage off-street parking sites and facilities on arterial streets and discourage on-street parking on arterial streets, with the exception of existing on-street parking on segments of State Street.

d) Alley abandonment shall be discouraged.

e) Establish and require minimum setbacks between developments and roadways and to encourage installation of berms and landscaping for all developments to enhance safety, provide noise attenuation and to enrich the roadway or community appearance. Special considerations may be required for Foothills developments.

f) Establish a system to review the accumulative effect of the impacts to the transportation system from development.

g) When reviewing land use amendments, zone changes, master plans, conditional uses and other significant entitlement requests, take into consideration the impact of the project on street levels of service. The City's preferred standards shall be those identified for new streets in ACHD's Development Policy manual, or its successor. Service level impacts shall be minimized through project modifications, traffic management plans, street improvement plans or other means.

h) Historic district streets shall be managed in such a manner that the flavor and character of the historic districts are preserved and enhanced while maintaining the livability of these neighborhoods and preserving the functionality of the street system. The use of traffic management strategies as described above shall be given priority over street widening, land additions and removal of on-street parking as a means of resolving traffic flow problems.

i) Implement, in conjunction with ACHD and the City of Eagle Fire Department, alternative street standards related to specific design features within the City. Allow use of these standards in conjunction with specific design standards described in the Community Quality Chapter and the land use sub-areas.

j) Motorized traffic may have to experience some inconvenience in order to preserve neighborhoods.

k) All new developments shall be reviewed for appropriate opportunities to connect to local roads and collectors in adjacent developments.

l) New developments shall be required to stub access to adjacent underdeveloped parcels, where appropriate.

8.6.6 Multi-purpose Strategies

a) Ensure that transportation and regional transit improvements are constructed or funded in coordination with land developments. This may be accomplished with direct funding, extraordinary impact fees, local option sales tax and other funding arrangements.

b) Require that safety systems be integrated into all school sites and recreation areas, including such items as signalization, sidewalks, pathways, and alternate traffic patterns for secondary access.

c) Encourage street lighting design and layout that provides for roadway and neighborhood safety while preserving a rural environment free of any unnecessary lighting and supporting the City's existing dark-sky standards.

d) The City will take the lead responsibility for design and installation of sidewalks. The City will continue to work with ACHD and ITD to resolve issues concerning sidewalks within the City of Eagle.

e) Work with the development community, ACHD and COMPASS to construct the following roadway projects:

Homer Road Extension- Extension of Homer Road south and west to connect with the east/west boulevard near the village center. This is a lower priority project. The extension is located urban/rural transition area as density begins to decrease as development approached Farmers Union Canal and the Foothills.

State Highway 16 Extension: An extension of State Highway 16 across the Boise River aligning with McDermott and Chinden. This extension will provide access to the Chinden (US 20-26) Planning Area and the River Plain Planning Area. This route would complement the current planning efforts by COMPASS and ACHD to enhance the Beacon Light Road/Purple Sage Road and Hill Road corridors: An extension of State Highway 55 across the Boise River providing access to the Chinden (US 20-26) Planning Area.

Work regionally to develop **a new east-west principal arterial in the Foothills region** north of the SH-44 Corridor. This route would complement the current planning efforts by COMPASS and ACHD to enhance the Beacon Light Road/Purple Sage Road and Hill Road corridors. The goal of this new arterial is to improve east-west connectivity between northern Canyon County and the Downtown Boise region. This route would complement the current planning efforts by COMPASS and ACHD to enhance the Beacon Light Road/Purple Sage Road and Hill Road corridors: This is a developer built road that provides internal circulation for high density residential uses located north of State Street. The intent is to direct this traffic to Linder Road; a signalized intersection or an alignment with Moon Valley Road oppose to creating a new high impact access point along State Street.

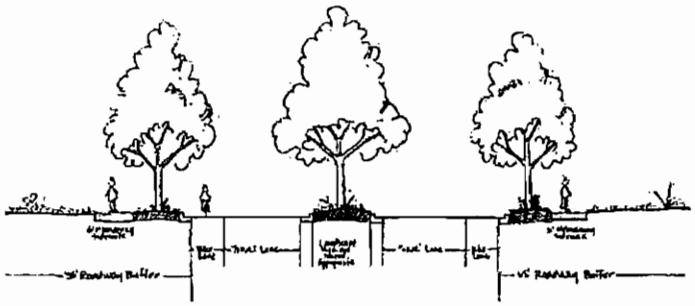
State Highway 44 & State Highway 16 Ring Road: A new access road to primarily serve the commercial and business park use proposed at the intersection of State Highway 16 and State Highway 44. Transitional residential uses to the north and east of this road will also access from this road. This road provides an alternative to the frontage roads proposed by ITD along Hwy 16. This road should include significant landscaping and a detached meandering pathway.

Beacon Light: Proposed realignment of Beacon Light Road through the Village Center. During our visioning and out reach great concerns from residents were expressed about the intensity of traffic moving along Beacon Light Road through the existing residential development east of Linder Road. This was a proposal to reduce this through traffic. Further, a desire was expressed to provide a "greener" feel to this road way through the city. The proposed cross section includes planting strips and a detached meandering trail.

Floating Feather: This is a proposal to smooth out the alignment of Floating Feather at Palmer Road. The city has heard from developers south of this intersection looking to abandon Palmer Road south of Floating Feather that may help facilitate this realignment. Similarly to Beacon Light Road, a desire was expressed to provide a "greener" feel to this road way through the city. The proposed cross section includes planting strips and a detached meandering trail.

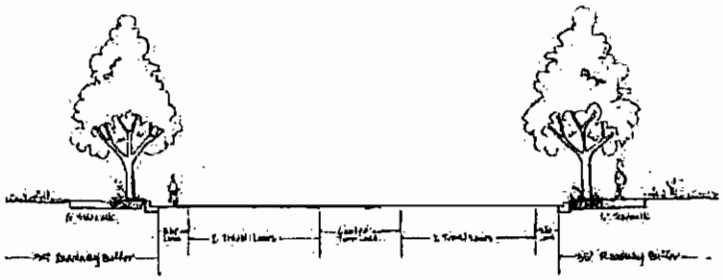
Illustration 8
Proposed Collector and Arterial Roads

Two Lane Roadway:



6 to 10-ft sidewalk/pathway
8 to 10-ft planter strip
1 travel lane
center turn lane (where appropriate) or a landscaped median
1 travel lane
8 to 10-ft planter strip
6 to 10-ft sidewalk/pathway

Four Lane Roadway:



6 to 10-ft sidewalk/pathway
8 to 10-ft planter strip
2 travel lanes
center turn lane (where appropriate) or a landscaped median
2 travel lanes
8 to 10-ft planter strip
6 to 10-ft sidewalk/pathway

CHAPTER 9 – PARKS, RECREATION AND OPEN SPACES

9.1 Background

As a relatively young City, Eagle's public park facilities are just beginning to be planned and built. Strong community support exists for pathways and parks of varying sizes, design, and function to meet the needs of the community. The recently completed Heritage Park adds recreation opportunities and an activity center for the downtown. Other park projects are in the design stage and a network of safe and accessible pathways connecting neighborhoods to parks and open space are proposed. Eagle's natural features, the foothills, floodplains of the Boise River, Dry Creek and other natural areas are treasured by the community and require protection. These natural open-space features help buffer floods, purify air and water, provide recreational and educational opportunities and reinforce the distinctive character of the community.

Due to the complexity of the Eagle Foothills additional discussion and policies are contained in section 9.7 of this chapter.

9.2 Existing Conditions

In the Eagle area, public and private organizations play a role in providing recreational opportunities. Recreation providers include City, County, and State agencies as well as educational institutions. The City of Eagle has six (6) developed parks and the Eagle Parks Committee is refining plans for the 80+ acre Boise/Eagle Park expected to be completed in 2008. Ada County, in cooperation with the City of Eagle, is working on developing an 85-acre community park. The Idaho Department of Parks and Recreation operates Eagle Island Park, a 535-acre regional park designed primarily for wildlife appreciation and swimming. Playground equipment and picnic facilities can be found at the small neighborhood parks and various public school sites. A private recreation center offers swimming, basketball and day care. Public recreation programs are limited, as the City does not have a recreation department. The Boise River and the foothills are major recreation and open-space assets for the City.

9.3 Future Conditions

The National Recreation and Park Association (NRPA) has developed standards for communities to use for planning, developing and acquiring park and recreation lands (see Table 1 below).

TABLE 9.1

NRPA Recommended Standards for Recreational Areas

	Mini-Parks	Neighborhood Parks	Community Parks	Regional Parks
STANDARDS				
Optimum Size	1 Acre or Less	3 – 15 Acres	10 – 25 Acres	125 + Acres
Radius Served	0.25 Miles	0.5 Miles	2 Miles	5.0 Miles
GUIDELINES				
Acres/1,000 Population	0.25 – 0.5 Acres	1 – 1 Acres	5 – 8 Acres	5 – 10 Acres

As the City of Eagle grows, new parks and facilities will be needed to meet the recreation needs of the community. There will be a demand for more parkland including pathways, practice fields and ball fields as well as a skateboard park. The completion of Reid Merrill Sr. Park, Ada County Sports Park and the new entrance to Eagle Island State Park may meet current needs. Land acquisition for future park sites and pathways is vital in order to develop land for pathways and neighborhood parks. There will also be a need for indoor facilities and recreation programs. One cost effective method available to the City is to pursue joint venture development and use opportunities with the school district. The City of Eagle values its river, creeks, canals, and foothills. Opportunities for the City include maintaining drainage and canal corridors and rights-of-way to establish a pathway system. New development projects will provide for pathway circulation in accordance with adopted local and regional pathway plans. A Pathways Committee would review development proposals to ensure pathway continuity. Maintaining these corridors will add community identity and ensure the quality of recreation in Eagle. These areas are the habitat of a variety of species (e.g., fish, eagle, etc.) and play an important role in the community's ecology.

Expansion of the City's park system may dictate the need for a City Parks Department to operate and maintain the park system. The system could be guided by the Eagle Parks Committee. A mechanism requiring all users of the City recreation facilities to help pay for these facilities should be considered to assist the City in maintaining and developing a recreation system that is satisfying to all. Options include, but are not limited to, charging impact fees and/or a fee schedule and reservation system for users of all parks.

9.4 PARKS

9.4.1 Goal

To create ample areas and facilities for our residents' diverse indoor and outdoor park and recreational interests.

9.4.2 Objectives

a. To develop parks and recreational programs which meet the different needs, interests, and age levels of our residents in both the rural and urban areas.

b. To plan and design parks for sustainability and conservation of natural resources.

c. To provide a system of neighborhood parks where safe and convenient access is available to residents.

d. Provide a system of interconnected parks, trails and open spaces through out the City.

e. To dedicate and develop areas for parks in new residential developments.

9.4.3 Policies

a. Acquire land for future parks in neighborhood and community settings at a rate that meets or exceeds the national standards.

b. Seek innovative funding sources for acquisition, planning, design, construction, and maintenance of parks.

c. Ensure all City parks are managed and maintained in a cost effective manner for the enjoyment of the public.

d. Encourage City to develop working relationships with other agencies/entities to develop parks and recreational opportunities within the community.

e. Involve public in park planning and development.

f. Utilize and support existing council-approved park development committee.

9.4.4 Implementation Strategies

a. Develop policy to preserve, in perpetuity, established parks and land acquired for parks.

b. Develop parks maintenance and recreational programming budget.

c. Develop parks system management plan which includes recreational programming as well as maintenance.

d. Aggressively follow the Capital Improvement Plan to acquire system improvements to provide the level of service adopted in the Eagle development impact fee ordinance.

e. Aggressively explore public/private or intergovernmental agreements to assist in park acquisition, development, and recreational opportunities.

f. Identify dedicated funding source for park maintenance (e.g., utility franchise fee, etc).

g. Create an ordinance that requires developers to dedicate and establish parks in new developments.

9.5 PATHWAYS AND GREENBELTS

Pathways are non motorized multi-use paths that are separate features from bicycle and pedestrian lanes constructed as a part of a roadway.

Greenbelts are typically land areas that border scenic features or hazard areas (i.e. the Boise River and Dry Creek) and are designed to prevent undesirable encroachment. Greenbelts may include pathways and/or bike lanes.

9.5.1 Goal

To create a pathway system that provides interconnectivity of schools, neighborhoods, public buildings, businesses, and parks and special sites.

9.5.2 Objectives

a. To create a pathway system that reflects desire to have a pedestrian and bicycle friendly community.

b. To provide a network of central and neighborhood paths where residents are able to safely access and utilize pathways for alternative forms of transportation.

c. To create and preserve non-motorized, multi-use pathway corridors in public and private lands within the Eagle foothills.

d. Continue to revise and update the Eagle Transportation and Pathway Network Maps #1 and #2 including defining pathway uses.

e. Require all development to provide developed pathways for connection to Eagle's public pathway system and/or adjoining development's public pathway system.

f. Seek innovative funding sources for planning/design/construction of pathway system.

g. Improve/provide access to greenbelt/pathway east of Eagle Road on the south side of the North Channel of the Boise River.

h. Acquire pathway easements on the north side of the North Channel.

i. Consider the pathway easements along drainage ditches.

j. Identify connections between trail sections and existing and future parks and open spaces.

k. Provide adequate parking and public facilities along greenbelts and pathway systems.

l. Link existing isolated pathway segments (e.g., North Channel Center and by-pass path).

m. Provide public information on safety, current location, nearest public facility location, and emergency telephone system along greenbelts and pathway systems (i.e., milepost markers).

n. Work to involve Ada County in implementation process of greenbelts and pathway systems.

o. Provide separate and safe pathway crossings for Highways 55 and 44 at key pathway intersections.

p. Preserve Dry Creek Floodway Corridor to secure greenbelt and pathway easements, and initiate pathway construction.

q. Consider multiple use of canal corridors for incorporation into pathway system.

r. Work with the BLM, state, developers and private landowners to preserve a pathway corridor within the Eagle Foothills.

s. Work with ACHD to provide a detached pathway on North Eagle Road to connect the Dry Creek Pathway Corridor with the Eagle Foothills Pathway Corridor.

9.5.3 Implementation Strategies

a. Create ordinances that require developments to provide improved pathway systems with links to adjoining pathway systems, parks, and open spaces.

b. Secure the services of a professional grant writing consultant to assist with funding.

c. Identify dedicated funding source for greenbelt and pathway maintenance (e.g., utility franchise fee, etc.).

d. Construct bridges to provide access to existing and future greenbelt and pathway system easements.

e. Consider overlay pathway easements for section of canal system in urbanized segment of canal corridor for cooperative multi-use (e.g., section of Farmer's Union Canal between Horseshoe Bend Road and Floating Feather).

f. Prioritize greenbelt and pathway development: 1) greenbelt/pathway system along the Boise River; 2) greenbelt/pathway system along the Dry Creek; 3) corridor preservation along future planned pathways and irrigation features; and 4) road crossings.

g. Encourage Eagle City Council to expand the Impact Area boundary and annex land to control development and pathway implementation within the Eagle Foothills.

9.6 OPEN SPACE

Open space is land which is not used for buildings or structures and offers opportunities for parks, recreation, water amenities, greenbelts, river trails and pathways, tourism, leisure activities, viewpoints, and wildlife habitat.

9.6.1 Goal

To provide wherever possible open space and natural features such as natural river frontage, greenbelts, river trails and pathways, creeks, flood plains and flood ways, drainage ways and canals, development buffers, wooded areas, grasslands, foothills, and viewpoints for public use and enjoyment.

9.6.2 Objectives

a. To establish open space to protect the finite resource base of Eagle's natural environment - air, ground water, surface water, soil, forested areas, plant and wildlife habitats, agricultural lands, and aquifer recharge, watersheds, and wetlands.

b. To provide an open space setting for active and passive recreation for all age groups throughout the community.

c. To protect against hazards that are inherent to flood plains, flood ways, steep slopes, and areas of geological instability.

d. To protect the natural lay of the land (e.g., minimize land disturbance).

e. To protect such unique environmental areas as historical, geological, and archaeological sites and monuments, natural areas, and wildlife habitat.

f. To protect important views, vistas, and panoramas of the community's natural setting and environment.

9.6.3 Policies

a. To encourage cluster development within the City limits so as to retain open space in perpetuity. Cluster developments located outside the City limits but within the Impact Area shall be prohibited.

b. To encourage the City to develop working relationships with other agencies/entities to establish and protect open space.

9.6.4 Implementation Strategies

a. Require developers to utilize open space for above-ground, on-site storm water management (i.e., grassy swales, constructed wetlands, and water features).

b. Explore public/private or intergovernmental agreements to set aside and protect open space (i.e., land trusts, conservation easements, and memorandums of understanding).

c. Create an ordinance that requires developers to include set asides for open space.

d. Establish guidelines for open space set asides.

e. Develop a comprehensive beautification plan that includes but is not limited to open space such as road rights-of-way, abandoned road segments, and City entryways.

f. Develop a storm water management plan to include utilization of onsite open space for storm water management features.

g. Create an ordinance that requires developers to dedicate and establish open space/parks in new developments. Encourage developers to identify and preserve wildlife mitigation corridors.

9.7 FOOTHILLS TRAILS AND OPEN SPACE

9.7.1 Existing Conditions

Open Space enhances our quality of life, allowing us to escape from the hectic pace of urban living and provides balance in our lives. For that reason it is critical to preserve opportunities for

current and future generations to experience and connect with habitat, natural open spaces, recreation opportunities, parks, trails and open spaces of all types.

Within the Foothills there are two forms of open space, natural and developed, that should be pursued to achieve the goals of the Eagle Foothills sub area:

Natural open space should be viewed as a spectrum that manages human involvement based upon the specific use, habitat quality, and sensitivity. Habitat sensitivity is unique to each circumstance and must be weighed to ensure that irreparable damage is not done. Highly sensitive habitats should be protected from damage, while lower sensitivity habitats allow for greater human involvement and interaction.

Natural open space lands are preserved, enhanced and managed in a manner that improves the ecological integrity of the landscape. Management activities are based on sound sustainable ecological functions, considering the needs of the native biological community and soils at each site in concert with recreation access and use.

Developed Open Space is designated for a wide variety of recreational activities and is normally contained within a plat or approved development.

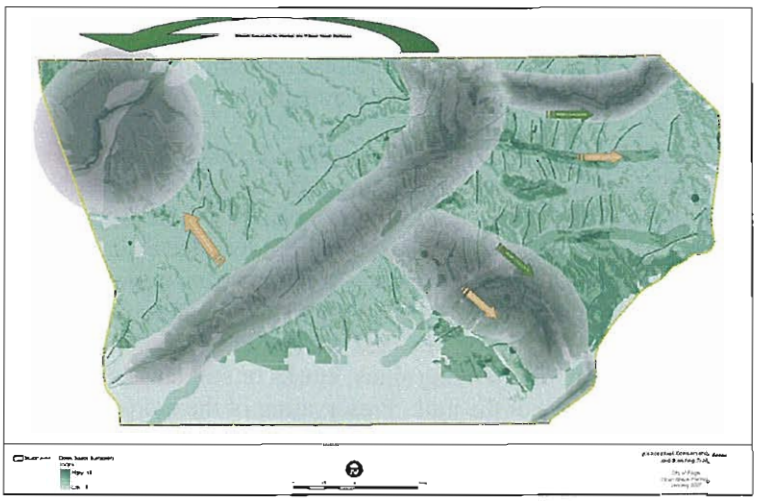
Natural Open Space: Land primarily left in its native or wild state in perpetuity, and is generally ungroomed and unirrigated. This may include wetlands; wildlife habitat; stream corridors; unique, rare or sensitive native plant species; scenic ridgelines; and unique geologic features. Steep hillsides may be included in this definition just by virtue of the sensitivity and erosion potential. Not included are golf courses, drainage basins that do not provide other open space values, boulevards and planting strips.

Natural Open Space (Habitat): These areas may contain sensitive habitats, and emphasize habitat protection for plant and animal species. They typically have a lower concentration of human use and are separated from development, and management goals should be habitat improvement. The development of facilities and associated infrastructure should be limited. The use of these areas for recreation should be limited due to the overall habitat sensitivity.

Natural Open Space (Recreation): These areas emphasize recreation activities and scenic qualities. They provide more intensive recreational opportunities, allow a greater concentration of human use, and may require the development of facilities and associated infrastructure. Management actions should emphasize education with more passive enforcement.

Priority areas for natural open space are delineated below:

Illustration 9.1



Developed Open Space: Unoccupied lands that may be altered for human uses, primarily recreational or agricultural, which provide permanent scenic or recreational opportunities for the public. They are typically managed specifically for human uses. They may be groomed and irrigated and may include developed recreational areas such as parks, sports fields, and golf courses, and other non-natural open spaces such as agricultural fields, sod farms, and vineyards. This land may provide some habitat requirements for some wildlife species, but habitat quality is often low. These areas are either publicly owned lands permanently designated as some type of open space, or private lands with deed restrictions or conservation easements providing permanent protection of the open space qualities. Developed Open Space is typically open to the general public.

Potential Open Space: Unoccupied lands which have no permanent protection of open space qualities. They may be cultivated or natural, and may provide wildlife habitat, recreational opportunities, and scenic vistas. These areas may be in public or private ownership, and may be converted to some other type of land use over time. These areas may or may not be open to the public without permission. Infrastructure is typically limited. These areas may be considered for conversion to permanent Developed or Natural Open Space by some protective mechanism based on special habitat criteria, special recreational opportunities, or the desire of the landowner to maintain the existing land use over time. Consideration should be given to feasibility of restoration potentials of degraded natural areas prior to purchase as Natural Open Space.

The Foothills planning area consists of a mix of public and private land. The vision for the open space within the foothills is to retain significant open space areas and provide connectivity to ensure that exiting habitat continues to function and prospers within the foothills as development occurs. The intent of the foothills plan is to place development into the unconstrained areas of the foothills and allow constrained areas (slopes in excess of 25%, floodways and key habitat areas to be retained. The vision for the Eagle Foothills Trails system is that it would be located primarily, but not exclusively, within natural open space areas.

The starting point for the open space areas will be the public lands identified by the City of Eagle as an open space preserve. Other public lands will need to be assessed for their potential of adding to the regional open space system. Certain State Lands could greatly add to the open space system by implementing potential land exchanges or land acquisition efforts. It is hoped that private lands that have high public or natural resource values could be added to the open space system by landowners/developers using a variety of tools and techniques as part of the development process or through voluntary exchange, acquisition or donation

There are several historic roads and routes within the planning area. Goodale's Cutoff is the most well-known (part of Oregon Trail) and is an important cultural and historical feature of the planning area. Throughout the Eagle Foothills, most of the Goodale's Cutoff and portions of the 1870 Bayse Lumber Haul Road are still visible. While its location is known, the extent to which the remnants of the trail itself are evident, primarily in the form of ruts, varies from non-existent to near pristine. Because of this landowners are encouraged to provide appropriate recognition of its existence. Recognition will vary depending on the nature of the private land use and the condition of the trail but may include simple marking of the location, or providing signs, kiosks or similar features giving public recognition of and information on the history of the trail. Preservation of the more pristine sections of the trail and adjacent viewsheds will be encouraged on all lands.

The Foothills Future Land Use Map includes the Conceptual open space and habitat connectivity overlay which is intended to include the importance naturals areas, as identified above, as well as the potential developed open space that may occur through the development or platting of property within the Foothills Sub-area creating a regional open space network of both natural and development open space that will convert through the development process from potential open space into a permanent regional open space network.

Trails Goals

1. Create an environmentally sensitive, perpetually dedicated public trail system designed for non-motorized uses such as hiking, bicycling and horse-back riding; (See Map 8.3)

2. Utilize best management practices for trail system design, management and maintenance;

3. Provide a "stacked loop" system that allows for various types of distances and experiences allowing departure from a point, and return to the same point without significant repeat of the trail used;

4. Work with developers and the City to establish trail heads varying in size, in the level of improvements and facilities provided.

    a. Primary Trail Heads- Provide designated parking for eight cars or more as well as up to 35 horse trailers. The number of parking facilities will vary depending on the type and level of anticipated use. May include restroom facilities, signs and map information, and garbage receptacles. May be landscaped.

    b. Secondary Trail Heads May not have dedicated off-street parking areas. Have limited facilities including information signs and garbage receptacles.

5. Regionally connected (beyond the impact area, like to the Boise Ridge to River Trail system)

and accesses neighborhoods, public lands and open spaces;

6. Incorporate trail heads that allow direct public access to the regional trail system from multiple locations throughout the Eagle foothills.

7. Provides the foundational north/south and east/west linkages and loops through the planning area,

8. Provide protection and interpretation of culturally important historic trails as well as a natural buffer or view shed on each side of a preserved historic trail segment.

9. Develop and adopt a city wide trails plan that includes connections to the existing city for bicycle, equestrians, ad pedestrians focusing on connecting the Boise Rive and the Foothills and establishes standards for different trails.

10. Work with ITD and ACHD to identify and establish standards for road and trail crossings.

A) **Core Trail System**:

The foundation to the system is referred to as the Core Trail System. The vision for this "core" system of trails would:

1) Allow multidirectional travel through the planning area
2) Provide connections from the planning area to other trail systems and regional attractions (Stack Rock, Dry Creek, Prospect Peak and Montour Wildlife Management Area, etc)
3) Establish the start of north/south and east/west linkage.
4) Become the foundation for the Expanded Stacked Loop Trail System envisioned in the second part of the trail system within the planning area.
5) Provide "non-paved" trails suitable to hiking, mountain biking and equestrian users

B) **Stacked Loop Trails System:**

The second part of the trail system is the "Expanded Stacked Loop Trail System". It is anticipated that future development will see the value to their communities and to the overall community, and expand the trail system with a network of stacked loop trails that provide connectivity to the core system and to a broader range of experiences within the planning area. These stacked loops will be located both in protected open space and within planned developments and will provide a variety of distances and experiences for various non-motorized users allowing departure from a point, and return to the same point without significant repeat of the trail used.

An example of the Expanded Trails is shown in pink on the Conceptual Trail System Map to depict how this system might be located. The pink trail locations are not intended to be inclusive of the entire planning area rather is an example covering an area that is popular today. These loops follow existing trail locations and are illustrative of the type of system we visualize. While these trails

are only an example, they are a starting point for further assessment and provide a broad foundation for potential trail connectivity.

Open Space Goals:

Natural open space should be viewed as a spectrum that manages human involvement based upon the specific use, habitat quality, and sensitivity. Habitat sensitivity is unique to each circumstance and must be weighed to ensure that irreparable damage is not done. Highly sensitive habitats should be protected from damage, while lower sensitivity habitats allow for greater human involvement and interaction.

Natural open space lands are preserved, enhanced and managed in a manner that improves the ecological integrity of the landscape. Management activities are based on sound sustainable ecological functions, considering the needs of the native biological community and soils at each site in concert with recreation access and use.

Developed Open Space is designated for a wide variety of recreational activities.

1. Open Spaces with in the Eagle Foothills should include both natural and developed open space.

2. Work with developers and land owners to shift densities within the Foothills and specific projects to achieve a minimum of 40% open space with natural open space being the highest priority for preservation.

3. A portion of the required open space should be located as separators between developments and should be primarily natural open space with the potential of a regional trial.

4. Work with developers to identify key natural areas prior to beginning the lotting and platting process so that the most important areas are preserved.

    a. Encourage the use of Randall Arendt's "Conservation Subdivision Design" or "Rural by Design" books as a guide for foothill development.

    b. Work with developers to ensure permanent preservation of opens space areas.

    c. Work with developers to provide long-term funding of the operations and maintenance of regional open space through the uses of transfer fees, endowments or other mechanisms.

    d. Work with developers to include areas of visual sensitivity, as established by the Foothills Visual Analysis, into the natural open space areas

5. Establish standards that require a minimum of 10% of the site be "developed open space".

    a. Work with developers to ensure that "developed Open Space is maintained by homeowners associations.

    b. Ensure that developed open space address both active (ball fields, pathways and tot lots) and passive areas (entry

areas, ponds, and development separators).

CHAPTER 10 – HOUSING

10.1 Background

The Eagle area is transitioning from primarily agricultural land uses to residential and commercial land uses. Eagle's quiet charm and agricultural roots have made the community a mecca for those seeking larger lots for open space and gentleman farming. Over the last years much of the agricultural land has been divided into a variety of parcel sizes which are highly sought after by many urban residents. Density options that reconcile quality of life and costs of services issues must be balanced and will require compromise by all parties.

10.2 Goal

Encourage a variety of housing so that all residents can choose sound, affordable homes that meet individual needs.

10.3 Implementation Strategies

a. Encourage a wide diversity of housing types and choice between ownership and rental dwelling units so that adequate, affordable housing is available for all income groups.

b. Coordinate the location of all housing with the ability to be served by adequate public facilities and services.

c. Encourage residential development near employment and business centers so that all income groups can afford to live close to the places where they engage in business and do business.

d. Explore incentives that will encourage the private sector to provide affordable housing.

e. Encourage compliance with federal fair housing laws and discourage all forms of discrimination.

f. Encourage housing which complies with local building codes and provides for energy-saving design.

g. Encourage the use of materials and techniques that will maintain a high level of quality while lowering cost and speeding construction.

CHAPTER 11 – SPECIAL AREAS AND SITES

11.1 Background and Vision

"Special Areas and Sites" are defined as areas, sites or structures of historical, archaeological, architectural, ecological, or scenic significance. Special areas or sites should be analyzed according to their defined function. Whenever possible, these sites should be preserved and conserved as open spaces or for educational and cultural centers. Development of Special Areas or Sites should take place in a manner that reflects harmony with their natural environment and recognizes qualities which render them distinctly unique.

The Boise River Floodplain, the Head of Eagle Island, the Dry Creek Floodplain, and the North Foothills each possess a recognized function as a wildlife habitat, floodway and scenic natural resource reflective of Eagle's rural character.

Eagle has a rich architectural heritage. This legacy is evident in many of the City's downtown buildings and homes. The purpose of this chapter in part is to identify unique areas or sites for conservation or protection. It is a vision of the Comprehensive Plan to sustain those elements of the City's heritage and culture which contribute to the appeal of the City for both residents and visitors.

Much of the character of Eagle lies with its historic buildings. These buildings enhance the quality of life and help make Eagle unique. It is important to continue to re-use these buildings to maintain a sense of historic continuity and link with the past. Unless the City takes steps to protect historically significant buildings, that lend character to Eagle, the buildings may be subject to insensitive, renovation, restoration or demolition.

These special areas will require comprehensive and specific planning to ensure that such topographical, hydrological, ecological, architectural and scenic concerns have been thoroughly addressed and incorporated into any engineering and development plans. The special review process should include, but not be limited to the following:

- Area wide drainage including hillsides, foothills and gulches
- Water quality
- Sanitation
- Area-wide traffic plans
- Pathways and trail access
- Wetlands issues
- Fish and wildlife habitat
- Existing trees and natural features
- River and creek greenbelt areas
- Potential for permanent open space and natural preserves including steep hillside terrain, rock outcroppings and foothill gulches.

11.2 Recognized Special Areas and Sites

Boise River Floodplain

The Boise River Floodplain is designated as a special area due to its ecological and scenic significance. The area comprises the two channels of the Boise River, the island formed by the two channels and the land immediately adjacent to the channels as generally depicted on the Comprehensive Plan Land Use Map.

Dry Creek Floodplain

The Dry Creek Floodplain is designated as a special area due to its ecological and scenic significance. This area comprises the length of the Dry Creek Floodplain through the Area of City Impact.

North Foothills

The North Foothills area is designated as a special area due to topographic, ecological and scenic significance. This area comprises all of the planning areas north of Beacon Light Road as depicted on the Comprehensive Plan Land Use Map.

Eagle Island State Park

The Eagle Island State Park is designated as a special area due to its ecological, historical, recreational and scenic significance. The park is further reviewed in the parks and recreation section.

Head of Eagle Island

The head of the Eagle Island possesses a recognized function as a wildlife habitat, floodway and scenic natural resource reflective of Eagle's rural character. It is a vision of the Comprehensive Plan to sustain these elements, which contribute to a distinctly unique area that appeals to both residents and visitors of the City.

Drainages and Canals

Special natural and manmade features of Eagle are the drainages and canals. The main purpose of the canals and drainage ditches is that of distributing and moving water.

Central Business District (CBD)

The Central Business District is recognized as a special area due to its historical and architectural significance. It is recognized as the commercial hub of the community. The Central Business District is depicted on the Comprehensive Plan Land Use Map.

Emphasis should be given to encouraging new housing in and adjacent to the CBD. Use of existing houses within the CBD for both residential and commercial purposes should be encouraged.

State Street/Eagle Road Corridor:

The State Street/Eagle Road Corridor is designated as a Special Area due to its historical, architectural and scenic significance. This area is depicted on the Comprehensive Plan Land Use Map.

11.3 Goal

To promote the conservation and efficient management of all Special Areas and Sites.

11.4 Implementation and Strategies

a. Protect and improve natural and man-made waterways.

b. Continue to develop and improve City design guidelines to encourage preservation of Eagle's historic buildings and guide new development to reinforce the town's special quality and "turn of the century" character.

c. Research other opportunities to enhance the viability of the CBD such as strengthening cultural activities for Eagle.

d. Consider development of a community center to support multiple uses as well as to encourage special events and gatherings that focus activity in the CBD.

e. Expand the existing historic style lighting & beautification efforts throughout the CBD

f. Create a vibrant CBD and encourage the preservation of downtown Eagle as a special and unique place.

g. Preserve existing trees and establish appropriate landscaping as a part of new developments.

h. Encourage the preservation of habitat areas which provide for fish and wildlife.

i. Establish ordinances requiring developers to prepare and submit environmental assessments and any such additional reports as the City may from time to time require, for any development on land within an area designated as a Special Area or Site or for any development impacting a designated Special Area or Site.

j. Require a plan for the restoration of land which shall be made available to the Planning and Zoning Commission and City Council for each parcel of land that is located within a special Area or Site and that is proposed for the extraction of sand, gravel, rock, or other mineral resource.

CHAPTER 12 - COMMUNITY DESIGN

12.1 Background and Vision

As a part of the review of the 2004 Comprehensive Plan, the City of Eagle held three public visioning sessions during which City Council and staff asked the public to evaluate the "Built City" concept and to tell the City what they, the public, were doing to help manage and guide development as envisioned in the 2000 AOI. This study found that the City of Eagle, though stable and solidified in its vision to develop a city with a uniquely rural character, did not look to integrate alternative housing options within the AOI. This Chapter will present a discussion of the goals, objectives and implementation strategies related to Community Design, Neighborhoods and housing options.

Over the next 20 years, the City of Eagle is forecasted to experience high growth rates that without proper management and planning will impact the quality of life and housing options available to its residents. Rather than ignore the growth pressures that are currently shaping most Treasure Valley communities, the City of Eagle is looking at options that will embrace housing alternatives and transit density but will also preserve the rural nature of the City.

Community design is the organized fashion in which a community is developed in order that a general mood or theme is established and maintained. Elements of the Eagle community design include: (a) a rural transitional community with a shopping district functioning as the hub of the community; (b) the Boise River and its floodplain with wildlife, trees, and recreation opportunities; (c) the rolling hills north of the river; and, (d) a network of canals and natural waterways which crisscross the community.

Entryway corridors are arterial roadways that introduce both visitors and residents to Eagle. City entryways include State Highways 44 (State Street and Alternate Route), State Highway 16, and 55 (Eagle Road). The landscaping (or lack thereof), commercial signage and building character of these entrances provide the first, and often the most lasting, impressions of the entire community. The City of Eagle has the opportunity to improve the appearance of the entryways by establishing guidelines for development and redevelopment that occurs along these entryway corridors.

Development will occur in the downtown as well as along arterials. City growth and increased traffic levels on Highway 44 and Highway 55 will stimulate demand for new development along these entrances. These same corridors have great potential for more intensive mixed-use development.

12.2 Goals

Protecting the City's character: Strive to create an aesthetically pleasing community and protect the unique natural beauty and small town character of the City.

Maintaining a functioning City at build out: Ensure that the City can continue to fund, improve and support itself, including its infrastructure and parks, at build-out when building permit fees, impact fees and zoning fees are no longer available.

Preserving Regional Transportation Corridors (State Highway 55, 20/26, 16 & 44): Preserve the function of regionally significant

roadways through the City while ensuring compatibility with land uses and design standards of the City.

Identifying "Activity Centers": Identify areas that, due to the nature of existing uses, future uses and/or transportation corridors, will lend themselves to increased activity and non-residential use and will therefore allow the City to preserve larger areas as primarily residential neighborhoods.

12.3 Objectives

Enhance the appearance of the City's entry corridors. Design review procedures should guide future development and redevelopment of existing uses. Depending on land uses and buildings, more extensive landscaping and fewer points of access may be required. The design review process will enable the City to address the special features of each property and facility in a manner that will best address the overall intent of enhancing Eagle's entryways. Eagle's entrance corridors may take on the look of landscaped berms like those built adjacent to the Banbury and Lexington Hills Subdivisions.

Work to accommodate the projected Eagle Planning Area population and the Northwest Rural Demographic population, located in the Eagle AOI, by 2025.

Provide residents of the City of Eagle and the Area of City impact with opportunities to seek housing in a neighborhood of their choice.

Create a clearly identifiable community.

12.4 Implementation Strategies

a. Establish and maintain development patterns and design criteria in keeping with the rural transitional identity of Eagle.

b. Discourage or preclude the establishment of other City centers with the Area of City Impact.

c. The City limits shall be that area as defined by ordinance of the City of Eagle.

d. Preserve the floodway in its natural state for such uses as greenbelt, wildlife habitat, recreational open space agriculture.

e. Update the Eagle Architecture and Site Design book and establish landscape and review standards for development in the Eagle Foothills.

f. Implement a residential design review requirement for residential uses within visually sensitive areas within the Eagle Foothills as detailed by the City's visual impact analysis.

g. Include in the City Design Review Ordinance criteria for building design, landscaping, signage and other aesthetic standards. Development along State Street within the Impact Area and outside the City limits shall be encouraged to comply with the Design Review Ordinance.

h. Reject any development that would establish or tend to establish another City center outside of the Central Business District.

i. Discourage excessively large single entity businesses that would jeopardize the competitive business environment.

j. Require new residential, commercial, and industrial development to meet minimum design standards as specified by City Ordinances.

k. Encourage the integration of historic structures within new developments.

l. Develop buffer and transition zones between conflicting types of land use.

m. Develop ordinances that will establish the Urban Service Planning Area as the prime urban development area of the City and Area of City Impact. Development should be allowed in the area on the condition that sewer and domestic water facilities would be provided to such development as described by the Water Supply and Sewer Policies of the Public Services Facilities and Utilities section of this Comprehensive Plan.

n. Encourage the preservation of natural resources such as creeks, drainages, steep slopes, and ridgelines as visual amenities.

o. Encourage the use of native and drought tolerant plants and landscaping within the Eagle Foothills.

p. Work to establish and water reuse system to irrigate public and common areas within the Eagle Foothills.

q. Encourage the development of pathways and open-space corridors throughout the City.

r. Encourage the development of a strong community identity through urban design standards, downtown revitalization, cultural activities, and visual gateways to the City.

s. Prepare and adopt design guidelines and development standards to be the basis for design review of architectural, landscaping, signage and other visual impacts of development projects.

t. Encourage the planting and preservation of trees that will create beauty and add to the healthy environment of downtown (see Eagle Tree Plan below).

u. Protect and enhance the small town character of the City by requiring signage which is creative and distinctive, compatible with its surroundings, and an integral component of the style and character of the building to which it relates.

v. Maintain the rural residential character and open space environment in and around the City.

w. Consider development of an ordinance or other suitable measures to stimulate redevelopment in areas determined by the City Council to be in need of renewal.

s. Provide increased residential density along the State Highway 44 and State Highway 20/26 corridors when accompanied by alternative access plans.

t. Focus Community Centers to the State Highways (16 &55) so to capture trips along these regional routes and to diminish

the siting of high intensity use within the more residential areas of the foothills.

u. Maintain a Vision Map that encapsulates the intent and opportunities contained in the Comprehensive Plan. (See Map 2.1)

v. Provide housing opportunities within walking distance of future transit corridors.

w. Create a City composed of neighborhoods in which basic amenities (schools, utilities, parks, and services) are accessible, visually pleasing, and properly integrated to encourage walking and cycling.

x. Ensure that all commercial uses are designed to be compatible with, and context sensitive to, residential uses and environmentally sensitive areas.

y. Encourage the preservation and public access to open space through developments and as a rural design element of urbanizing areas.

z. Ensure that commercial development is scaled appropriately to the intended regional, community and neighborhood use.

aa. Limit non-residential uses to designated areas and make scaling and intensity of use paramount criteria during the review and approval process.

bb. Ensure that gateways are properly delineated and incorporated into development through the use of approved landscaping, entry markers and place making features.

cc. Provide a variety of housing opportunities ranging from large lot residential to multi-family apartment uses.

dd. State Highway 44, State Highway 55, State Highway 20/26, State Highway 16 and the proposed east west collector are designed as scenic corridors requiring landscaped setback and separated meanderings sidewalks, modified standards may be necessary within the Eagle Foothills.

Illustration 12.1

Berming along Eagle Road (State Highway 55)

ee. Require that private and public open space be included in new multi-family developments and that they are large enough to be used by all residents.

ff. Recognize the following gateways:

1. State Street and State Highway 16
2. Chinden Boulevard and the future State Highway 16 extension
3. State Highway 16 and the proposed east/west collector
4. State Highway 16 and the gem County line
5. State Highway 55 and the Boise County line
6. Chinden Boulevard and Linder Road

gg. Locate elementary and middle schools in residential neighborhood to facilitate walking and reduce busing costs for the district. Elementary and Middle schools may be located on collector roadways as defined by the Regional Functional Classification Map, High School maybe located on arterials.

hh. Prohibit the development of schools on sites that present a hazard, nuisance or other limitation on normal functions of the school.

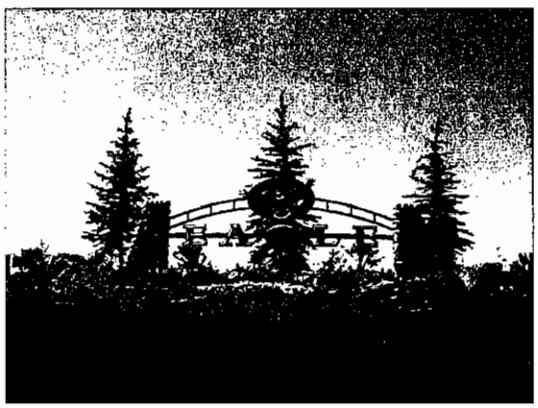
ii. Establish a policy requiring annexation or a consent to annexation by the City of Eagle prior to development within the Eagle area of city impact.

jj. Identify a utility transmission corridor for all above ground utility transmission lines in the City of Eagle. (See Map 4.4)

kk. Require all non-transmission utility distribution within the City of Eagle to be installed underground.

ll. Require that all urban development shall occur under the jurisdictional authority of the City and shall be connected to municipal services.

Illustration 12.2



Gateway Markers

12.5 Eagle Tree Plan

12.5.1 Goal

To establish and enhance areas of tree growth that will create beauty, add to a healthy environment and increase economic stability.

12.5.2 Objectives

a. To create an urban forest that will help reduce air and noise pollution, conserve water, reduce soil erosion, assist in modifying the local climate, increase property values, and improve Eagle's economy by providing a pleasant and more comfortable place to shop and live.

b. To encourage economic growth by establishing a more inviting atmosphere for locations of business.

c. To establish a Parks Committee with at least one City official to perpetuate the plan.

d. To adopt an ordinance to provide for the future care and maintenance of the trees and the potential use of bonding for tree replacement within new development.

e. To establish guidelines for types and sizes of trees to be planted.

12.5.3 Implementation Strategies

a. Establish an inventory plan to keep track of tree location, age, and desirable planting locations.

b. Establish a recommended maintenance program.

c. Provide a plan to plant 300 or more trees over the years in the downtown core area, in City parks and along residential streets. The plan should be implemented in several phases over a specified timetable.

CHAPTER 13 – IMPLEMENTATION

13.0 Implementation

Implementation is the phase of the planning process which the goals, objectives, and policies that are presented in this Comprehensive Plan.

There are several important planning tools which help implement this Comprehensive Plan.

13.1 Zoning and Subdivision Ordinance and Zoning Map

The policies of the Comprehensive Plan establish a framework for the zoning and subdivision ordinances and for the zoning map. Idaho State law requires that all zoning districts be in accordance with the adopted Comprehensive Plan. Existing zoning may be able to adequately implement the Comprehensive Plan. New zoning categories need to be considered in areas where the City's existing zoning is inadequate. The ordinances establish the conditions under which land may be used and future land use development patterns may change in the City of Eagle. Existing uses of land and buildings are permitted to continue even if they are not in conformance with the Plan policies, and the associated land use ordinances.

The Planning and Zoning Commission is responsible for reviewing all new development proposals to insure compatibility with the zoning and development ordinances and the Comprehensive Plan and for forwarding recommendations to the City Council. The City Council is then responsible for conducting the same review, with benefit of the Commission's recommendations, and for making the final decision on a particular development issue.

Subdivision regulations establish various standards for the subdivision of property in conformance with the Comprehensive Plan.

13.2 Capital Improvement Plan

A Capital Improvement Plan is a multi-year schedule for the construction of public improvements. The schedule is based on studies of available fiscal resources and the choice of specific capital improvements. The Plan is enacted as a guideline for spending and each year a capital improvements budget may be authorized by ordinance.

13.3 Special Implementation Techniques for Development within the City Limits

Clustering is useful when trying to protect sensitive natural resources, avoid hazardous areas or preserve natural sites. Clustering involves assessing the natural characteristics of a site and grouping the buildings or lots through the on-site transfer of density rather than distributing them evenly throughout the project as in a conventional subdivision. Not only do cluster developments help preserve open space, they also tend to minimize the visual impacts associated with development, reduce costs of building and maintaining public roads, and decrease grading in environmentally sensitive areas.

Development Agreements allow the City to enter into a contract with a developer upon rezoning. The Development Agreement may provide the City and the developer with certain assurances regarding the proposed development upon rezoning.

A Planned Unit Development Ordinance (PUD) is one of many devices used to implement a comprehensive plan. A developer of a PUD may be allowed variations in development requirements, if it is in the City's interest to encourage such a development.

PUD regulations are intended to encourage innovations in land development techniques so that the growing demands of the community may be met with greater flexibility and variety in type, design, and layout of sites and buildings and by the conservation and more efficient use of open spaces and of other natural environmental features which enhance the quality of life.

13.4 Community Involvement

Citizen involvement and support is very important. The public should be aware and involved in the City's planning decisions. Based on public input, the Planning and Zoning Commission and City Council make their decisions. The City incorporates public input in its decisions to:

a. Coordinate all local plans with the planning efforts of area cities;

b. Review, monitor and update land uses within the Area of City Impact;

c. Update all development regulatory ordinances;

d. Provide information regarding environmental problems or hazard areas to citizens;

e. Review, monitor and analyze local and regional transportation systems;

f. Support design review to promote quality land development;

g. Investigate alternative financing approaches to reduce tax burden and provide quality public utilities and services.

13.5 Comprehensive Plan Amendments

From time to time, changing conditions will result in a need for comprehensive plan amendments.

The Land Use Planning Act provides for amendment to the Comprehensive Plan. The City Council or any group or person may petition the City Planning and Zoning Commission for a plan amendment at any time. On its own initiative, the City Planning and Zoning Commission may also originate an amendment to the Comprehensive Plan. However, the City Planning and Zoning Commission may recommend amendments to the Comprehensive Plan to the City Council not more frequently than every six (6) months; however text amendments may be recommended at any time.

13.6 Goal

The Eagle Comprehensive Plan and related ordinances are working documents used by citizens and City leaders to shape the future of Eagle.

13.7 Implementation Strategies

a. Update the zoning and subdivision ordinances to be in conformance with the adopted Comprehensive Plan as required by state law.

b. Charge the Planning and Zoning Commission to be responsible to review the status of the implementation actions and critique the relevance of the Comprehensive Plan, including recommending any amendments to City Council on an as-needed basis.

c. Require any person applying for a Comprehensive Plan amendment to submit a justification letter for the amendment which letter shall include the following:

1. A specific description of the change being requested.

2. Specific information on any property involved.

3. A description of the condition or situation which warrants a change being made in the Plan.

4. A description of the public benefit(s) that would occur from such a change in the Plan and an explanation of why the public would need any such benefit(s).
5. An explanation of why no other solutions to the condition or situation which warrants a change in the Plan are possible or reasonable under the current policies of the Plan.

6. A proposed development plan for any land involved if a specific development is planned at the time the request for the amendment is being made.

7. An analysis showing the estimated impact that the proposed change is expected to have on existing and planned infrastructure.

8. Any other data and information required by the City for their evaluation of the request.

APPENDIX 1

GLOSSARY

ACHD Ada County Highway District

Adequate Public Facilities
The evaluation of development and applications to ensure that development mitigates its proportionate share of the impacts on a specified public facilities and/or services (including but not limited to municipal water, sewer, and transportation) and that the mitigation is available at the time when the development's impacts are felt on a specific facility/service.

Basic Municipal Services
Basic municipal services are necessary for the development of rural property into urban patterns (including but not limited to municipal water, sewer, and transportation)

Buildable Lands Land that are not defined as constrained (AKA: "Unconstrained") or have been reviewed and removed from the constrained areas as allowed under Eagle City Code, State or Federal Statutes.

CDHD Central District Health Department

CLOMAR/LOMAR
Conditional Letter of Map Revision/Letter of Map Revision- amendments to the Federal Emergency Amendment Agency's Flood Insurance Rate Maps.

Centers

Neighborhood Centers unique to the Foothills these centers are intended to serves as density magnets to cluster units and non-residential uses into areas that can serve their immediate surrounding without losing context and scaling of primarily residential areas. Specific policies area contained in the Foothills Sub-area.

Community Centers unique to the Foothills these centers are located along state highways with high efficiency interchanges and access points. Limited in number and size these areas are intended to serve the employment, institutional, entertainment and retail needs of the foothills and regional rip from the north including Gem and Boise Counties. Specific policies area contained in the Foothills Sub-area.

Central Business District (CBD)
Land Use district located in downtown Eagle intended to serve as the primary economic base for the City of Eagle.

Centers Design A form of development in which a range of housing product types and supporting commercial services are near one another and are designed to be pedestrian-oriented. Such developments typically feature, at least in part; gridded local streets with alley loaded housing, narrow lot patterns, low to mod-rise commercial which are built up to the sidewalk with parking located behind them with residential uses built over commercial uses,

narrow streets with tight turn radii, on street parking, sidewalks separated by landscape strips, and street furniture.

Clustering A provision under the planned unit development standards to allow reduced lot sizes in exchange for open space, floodway protection or buffering of less intensive uses.

Commercial **Neighborhood Commercial** A moderate sized shopping area that features a grocery store but may also include a drug store or variety of services such as stationary, clothes, restaurants, dry cleaners, real estate, gardening and other similar uses. A neighborhood commercial area may have a total of 15,000 to 30,000 square feet but no single buildings in excess of 25,000 square feet.

Community Commercial A large shopping area that may feature a grocery store as well as department stores or volume discount retail outlet as an anchor. It may also include a variety of uses such as restaurants, office and entertainment. A community commercial area may have a total of 80,000 to 120,000 square feet but no single building in excess of 50,000 square feet.

Regional Commercial A very large shopping area that features a variety of major retailers as well as a variety of fast food, and full service restaurants, entertainment uses, hotels, office and similar uses. A regional commercial area may have a total of 250,000 square feet or more and occupy an area greater that 25 acres.

Constrained Lands Constrained lands area within the Eagle Comprehensive Plan lands that area impacts by floodways, key habitat as identified by state and federal agencies, have slopes in excess of 25%, or as otherwise defined by Eagle City Code.

Context Sensitive Design
Context sensitive design (CSD) is a collaborative, interdisciplinary approach that involves all stakeholders to develop land uses and transportation facilities that fit its physical setting while preserving the scenic, aesthetic, historic, and environmental resources.

Cross Access Agreement
An agreement between adjacent property owners in which internal connections are provided between parking areas in order to improve traffic flow on the streets by minimizing the number of access points needed. Cross access agreements are typically incremental as a condition of approval for new development. The first one to develop will be required to make an irrevocable offer of cross access and design their site to accommodate future connections. When adjacent owners develop, they will be conditioned to reciprocate with similar cross access agreements.

DEQ Idaho Department of Environmental Quality

Ecological functions Refers to the presence and integrity of ecological processes (energy flow, water cycling, and nutrient cycling) being within the range of expectations for the ecological site.

Ecological integrity The overall ability of a site to carry out and maintain functional processes. Changes in

condition are generally in comparison to reference condition taking into consideration state and transition models (see NRCS ecological site descriptions).

Ecological Site A kind of land with specific physical characteristics which differs from other kinds of land in its ability to produce distinctive kinds and amounts of vegetation and in its response to management. Apparently synonymous with ecological type used by USDA Forest Service. Syn. rangeland ecological condition.

FEMA Federal Emergency Management Agency

Feathering The process of transitioning density within a development while providing compatible lots sizes and lot boundaries.

Gateway A major corridor or entry into the City of Eagle that will tend to create an initial positive impression of the City for visitors. Gateway streets should be subject to enhanced design review standards such as signage, landscaping, architecture, and vehicular access.

Habitat Areas identified by State and Federal agencies as holding value for the existing plant and animal species.

IDWR Idaho Department of Water Resources

IDF&G Idaho Department of Fish and Game

ITD Idaho Transportation Department

Internal Circulation The movement of traffic into and out of properties and local roadway systems without the need to enter onto arterials and regional roadway networks.

Limited Service Commercial
Uses that accommodate retail sales and services for the daily self sufficiency of local communities, ensuring that the intensity of limited commercial development is compatible with the character of the area with special concern to adjacent residential uses.

Limited Retail Establishments providing retail services, occupying facilities of 10,000 square feet or less. Typical establishments provide for specialty retailing or retailing oriented to the surrounding vicinity.

Minor Gateway A collector or local street entering from an arterial into the City of Eagle that gives visitors a sense of place and feeling of entering Eagle. Minor gateways should provide limited elements to create a sense of place through landscaping, signage, or other design elements.

Municipal Services Services, such as water facilities and library, which are owned and/or managed by the City of Eagle and are available to property owners within or adjacent to the city.

Open Space

Developed Open Space: Unoccupied lands that may be altered for human uses, primarily recreational or agricultural, which provide permanent scenic or recreational opportunities for the public. They are typically managed specifically for human uses.

Natural Open Space (Habitat): These areas may contain sensitive habitats, and emphasize habitat protection for plant and animal species.

Natural Open Space (Recreation): These areas emphasize recreation activities and scenic qualities. They provide more intensive recreational opportunities, allow a greater concentration of human use, and may require the development of facilities and associated infrastructure.

Potential Open Space: Unoccupied lands which have no permanent protection of open space qualities. They may be cultivated or natural, and may provide wildlife habitat, recreational opportunities, and scenic vistas. These areas may be in public or private ownership, and may be converted to some other type of land use over time.

Professional Office Uses providing for administration, professional services, and associated activities. These uses often invite public clientele but are more limited in external effects than commercial uses.

Regional Functional Classification
The grouping of highways, roads and streets by the character of service they provide. Regional Functional Classification was developed for transportation planning purposes. Basic to this process is the recognition that individual routes do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

Regional Transportation Corridors
Roadways that link communities across the region; normally these are state highways and major arterials but may include minor arterials in rural areas.

Street Hierarchy See Chapter 8 of this Plan

Strip Commercial A variety of unrelated retail, service and fast food use located at mid block, oriented to take advantage of passing automobile traffic. Connectivity between strip commercial is usually poor, and each use will tend to have its own curb cut onto the arterial.

Transitional Density The shifting of density within a development to allow compatibility with existing uses adjacent to or within a site.

Trip Capturing The design of transit, commercial, retail and office areas so that patrons are able to accomplish multiple daily tasks with one vehicle trip as opposed to having to use multiple vehicle trips to go to several single use areas. This is opposite of trip generation which is a use that creates a new independent vehicle trip for a specific use or a use that is a single destination site.

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APPLICANT'S PROPOSED PRE-ANNEXATION AND DEVELOPMENT AGREEMENT

ADA COUNTY RECORDER J. DAVID NAVARRO AMOUNT 399.00 133
BOISE IDAHO 12/27/07 04:42 PM
DEPUTY Patti Thompson
RECORDED-REQUEST OF
Spink Butler

107170114

Recording Requested By and
When Recorded Return to:

Planning & Zoning Administrator
City of Eagle
P.O. Box 1520
Eagle, Idaho 83616

For Recording Purposes
Do Not Write Above This Line

PRE-ANNEXATION AND DEVELOPMENT AGREEMENT

by and between

CITY OF EAGLE

and

M3 EAGLE L.L.C.

M3 EAGLE LLC
EXHIBIT
58

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LIST OF EXHIBITS:

Exhibit A Legal Description of the Property
Exhibit B M3 Eagle Planning Area Map
Exhibit C M3 Eagle Zoning Map
Exhibit D Conceptual Outline of PUD Standards
Exhibit E Intentionally Deleted
Exhibit F M3 Eagle Master Plan
Exhibit F1 Big Gulch Planning Area
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Exhibit K Master Parks, Trails and Public Facilities Plan
Exhibit L Intentionally Deleted
Exhibit M Constrained Lands
Exhibit N BLM Land Exchange Map
Exhibit O Conceptual Outline of Restrictive Covenants (CC&Rs)
Exhibit P Conceptual Outline of Design Guidelines
Exhibit Q Potential Vineyard Locations

DEFINITIONS

"**ACHD**" is the Ada County Highway District.

"**ACHD Traffic System**" is roadways under the jurisdiction of Ada County Highway District.

"**Additional Property**" is all or any portion of real property now owned, or which may become owned, by Developer and which is adjacent to or proximate to the Property.

"**Agreement**" is this Pre-Annexation and Development Agreement inclusive of all Exhibits, as may be amended from time to time.

"**Annexation Ordinance**" is, or shall be, the City ordinance that duly annexes the Property into City.

"**Base Project Density**" is the total gross residential density for the Project, as set forth in **Table 6**, prior to mitigation of slope, floodway, and habitat constraints and application of Bonus Density Provisions. The Base Project Density is 0.5 dwelling units/acre or 3,003 dwelling units, but in no case may exceed the Pre-Mitigation Density for the Property. Developer will be allowed to develop the density and intensity of uses set forth in Tables 1-6 prior to mitigation of slope, floodway, and habitat areas. Base Project Density is sometimes referred to herein in terms of the number of dwelling units and/or dwelling units per acre.

"**BLM**" is the U.S. Bureau of Land Management.

"**BLM Lands**" are the lands in the Foothills Planning Area owned by BLM.

"Bonus Density" is additional density allocated for compliance with the 2007 Eagle Comprehensive Plan. Bonus Density granted to Developer is set forth in **paragraph 1.3** below.

"**CC&Rs**" are the Covenants, Conditions and Restrictions, that shall encumber the Property and which shall govern the Project through one or more Owners' Associations that shall establish quality control through the Property both during development and during maturing of the community. A conceptual outline of the CC&Rs is attached as **Exhibit O**.

"**City**" is the City of Eagle, Idaho.

"**City BLM Lands**" are the approximately 1,915 acres contained in the two BLM-owned parcels contiguous to the southern border of the Project that City has made application to acquire through long-term lease or purchase for the Eagle Regional Park, through the Federal Recreation and Public Purpose Act.

"**CLOMR**" is the Conditional Letter of Map Revision issued by FEMA signifying its intent to revise its floodway maps to remove areas from designated floodways.

"**Community Center**" is a site approximately 100-150 acres in size with up to 350,000 square feet of Non-Residential Use and contains the highest density and greatest variety of uses and civic buildings of regional importance. It may have larger blocks; streets have uniform street tree planting and buildings set close to the frontages. A Community Center may include a mix of office, retail, commercial, institutional, civic, residential, hotel and recreation uses.

"**Community Open Space**" is land which is set aside for recreation, agriculture, habitat, vegetation, scenic or similar uses primarily to serve the M3 Eagle Community and as shown on **Exhibit K**. Community Open Space may be owned and maintained by the Owners' Association, a private landowner, or other entity.

"**Community Park**" is a park containing 8 or more acres that will include active and passive areas designed to serve the M3 Eagle community.

"**Community Trail**" is a public trail designed to serve M3 Eagle. Some community trails will connect to Regional Trails and Open Space.

"**COMPASS**" is the Community Planning Association of Southwest Idaho.

"**Constrained Lands**" are those lands within the Property with slopes in excess of 25%, lands within a FEMA-identified floodway, and lands defined as habitat areas of special concern as set forth on **Exhibit M**.

"**Date of Application**" is the date Developer's applications to City for annexation, comprehensive plan amendment and rezoning in connection with the Property (collectively, the "**Application**") were deemed complete by City. The Date of Application is August 23, 2006.

"**Design Guidelines**" are the planning, engineering, architectural, and landscape design guidelines applicable to new construction and later modifications to the Project. A conceptual outline of the Design Guidelines is attached as **Exhibit P**.

"**Developer**" is M3 Eagle L.L.C., a Texas limited liability company, and all successors in title and interest to Developer who undertake development of the Property.

"**Development Plan**" is the overall plan for the Project, which Development Plan is depicted on **Exhibit G**.

"**Development Rights**" is development allowed to be undertaken by Developer in accordance with this Agreement.

"**Drainage System**" is a drainage and flood control system and facilities for collection, diversion, detention, retention, dispersal, use and discharge of drain water.

"**EASD**" is the Eagle Architecture and Site Design Book.

"**Eagle Comprehensive Plan**" is, collectively, Eagle's 2007 Comprehensive Plan, as may be amended from time to time.

"**Eagle Fire District**" is the Eagle Fire Protection District.

"**Eagle Regional Park**" is the lands City seeks to acquire from BLM (City BLM Lands), which, when combined with land presently owned by Developer, as more fully provided herein, would comprise the Eagle Regional Park site, as depicted on **Exhibit K**.

"**Economic Impact Analysis**" is that certain Economic Impact Analysis & Demographic Forecast, dated October 25, 2006, and revised July, 2007 by Idaho Economics as may be amended from time to time. An update to the Economic Impact Analysis shall be provided to City in connection with each Planning Unit Master Plan.

"**Effective Date**" is the date of execution of the resolution adopted by City at a City Council meeting approving this Agreement and authorizing the Mayor of City or other City Council Member(s) to execute such resolution.

"**FEMA**" is the U.S. Federal Emergency Management Agency.

"**Fiber Optics Easement**" is an easement within public streets for the installation, operation, and maintenance of any public or private fiber optics or telecommunications facilities.

"**Final Development Plan**" is the development plan for all or a portion of a Planning Unit, which Final Development Plan is the basis for construction and is developed based on, and consistent with, the Planning Unit Master Plan.

"**Hotel/Resort**" is an establishment providing lodging, food and beverage services, meeting rooms, exercise and spa services and other related facilities. Hotel/Resort rooms are not considered residential dwelling units within the context of any density calculations or allowable densities set forth in this Agreement.

"**IDEQ**" is the Idaho Department of Environmental Quality.

"**IDFG**" is the Idaho Department of Fish & Game.

"**IDWR**" is the Idaho Department of Water Resources.

"**ITD**" is the Idaho Transportation Department.

"**ITD Traffic System**" is roadways under the jurisdiction of ITD.

"**Infrastructure Assurance**" is a letter of credit or such other security acceptable to City to assure complete installation of Public Infrastructure directly related to requested building permit or permits.

"**Infrastructure Plan**" is the Infrastructure Plan developed through coordinated planning, design, engineering, construction, acquisition, installation, and/or provision of Public Infrastructure as set forth in this Agreement and as contemplated by the Planning Unit Master Plan process.

"**M3 Eagle**" is the approximately 6,005 acres located in Ada County, Idaho, legally described on **Exhibit A**, plus any Additional Property that may later be added to M3 Eagle. M3 Eagle is also sometimes referred to herein as the "**Project**" or the "**Property.**"

"**M3 Eagle Planning Area**" is that certain document or documents designating the planning goals and uses for the Property as provided further in this Agreement. The M3 Eagle Planning Area Map is depicted on **Exhibit B** and the M3 Eagle Planning Area text is set forth in **Exhibits F, F1, F2, F3, F4** and **F5.**

"**Master Drainage Study**" is that certain Preliminary Master Drainage Study, dated June 14, 2006, by Stanley Consultants Inc., as may be amended from time to time.

"**Master Habitat Study**" is that certain Final Habitat Study and Natural Features Analysis, dated June 2006, by URS Corporation as may be amended from time to time.

"**Master Phasing Plan**" is the phasing plan depicted on **Exhibit H.**

"**Master Traffic Study**" is that certain Traffic Impact Study, dated June 26, 2006, by Stanley Consultants Inc., as may be amended from time to time.

"**Master Wastewater Study**" is that certain Preliminary Master Wastewater Study, dated June 14, 2006, by Stanley Consultants Inc., as may be amended from time to time.

"**Master Water Study**" is that certain Preliminary Master Potable Water Study, dated June 14, 2006, by Stanley Consultants Inc., as may be amended from time to time.

"**Maximum Density**" is the total maximum gross residential density for the Project as provided in this Agreement after conversion of Constrained Lands to Unconstrained Lands and application of Bonus Density provisions. The Maximum Density is approximately 1.19 dwelling units/acre or 7,153 dwelling

units and 245 acres of Non-Residential Uses. Maximum Density is sometimes referred to herein in terms of the number of dwelling units and/or dwelling units per acre.

"**Maximum Planning Area Density**" is the maximum gross residential density for each Planning Area subject to the limitation on the placement of the density within each Planning Area after conversion of Constrained Lands to Unconstrained Lands, application of Bonus Density provisions and the reassignment of dwelling units from other Planning Area(s). Maximum Planning Area Density is sometimes referred to herein in terms of the number of dwelling units and/or dwelling units per acre.

"**Mitigation**" is the process of converting Constrained Lands as described herein to Unconstrained Lands by City approval of grading standards and Habitat Mitigation Plan(s) and issuance of the CLOMR by FEMA (as referenced in **paragraph 2.7(d)**). Mitigation may occur on a Planning Unit by Planning Unit basis or may occur on a Project-wide basis.

"**Mortgage**" is any lien placed upon the Project, or any portion thereof, including the lien of any mortgage or deed of trust, as a pledge of real property to a creditor as security for performance of an obligation or repayment of a debt.

"**Municipal Water Right Application**" is that certain application dated November 22, 2006 and amended August 27, 2007 and filed by Developer with the Idaho Department of Water Resources.

"**Neighborhood Center**" is a site approximately 40-60 acres in size with up to 150,000 square feet of Non-Residential Use and has higher density mixed-use building types that accommodate retail, offices, row houses and apartments. It has a tight network of streets, with wide sidewalks, uniform street tree planting and buildings set close to the frontages. The shape of Neighborhood Centers is subject to terrain, access, and other site variables containing up to 150,000 square feet of gross leasable commercial space. Neighborhood Centers are planned to accommodate local retail uses such as grocery stores; drug stores; restaurants; neighborhood service tenants as well as civic, institutional, residential, hotel and recreation uses; and office uses for local and major employers.

"**Neighborhood Park**" is a park containing 3 or more acres that will include active and passive areas designed to serve individual neighborhoods or a combination of neighborhoods within M3 Eagle.

"**Neighborhood Trail**" is a trail designed to serve a neighborhood or combination of neighborhoods and may connect to a Regional Trail, Community Trail, and Open Space. Neighborhood Trails may be public or private.

"**Non-Residential Use**" may include retail and office related uses. Non-Residential Use does not include public and/or civic uses.

"**North Eagle Foothills Planning Area**" is the area generally set forth in the Eagle Comprehensive Plan.

"**Open Space**" is land which is set aside for recreation, agriculture, habitat, vegetation, scenic or similar uses. Open Space may be developed or natural and may include: (i) public and private parks, sports fields, and trails; (ii) golf courses; (iii) equestrian centers; (iv) vineyards and other agricultural lands; (v) landscape easements or common areas inside or outside of public rights of way; (vi) floodplains and floodways; (vii) the lesser of 50 percent of school sites or the area of playfields, (viii) scenic corridors; (ix) undeveloped hillsides; (x) wetlands, wildlife habitat, drainage areas, and unique or sensitive plant areas; and (xi) conservation easements or permanent open space on private lands or lots subject to deed restriction. Open Space may be publicly or privately owned and may be accessible or inaccessible to the public. The minimum Open Space within the Project shall be 20% of the Project area or 1,201 acres. The minimum amount of Open Space within any Planning Area shall be 15% of the total gross acres of the Planning Area.

"**Ordinances**" are ordinances or resolutions enacted by City as more particularly referenced herein, including the Annexation Ordinance and Rezoning Ordinance.

"**Owners' Association**" is one or more non-profit entities created or to be created by Developer, that shall be responsible for, without limitation, the perpetual management of the Common Area, as such is defined in CC&Rs encumbering or to encumber the Property, which management is at the expense of the ultimate owners of the Project.

"**P & Z Commission**" is Eagle City Planning & Zoning Commission.

"**Party or Parties**" is, individually or collectively, the parties to this Agreement.

"**Planning Areas**" are the five individual Planning Areas that make up M3 Eagle as further described in **Exhibit(s) F, F1, F2, F3, F4** and **F5**.

"**Planning Unit**" is a distinct parcel of land, or combination of parcels within the Property that is linked to other Planning Units throughout the Property through an integrated circulation system and overall thematic character that defines the Project.

"**Planning Unit Developer**" is the developer of all or a portion of a Planning Unit.

"**Planning Unit Master Plan**" is the guide to development of all or a portion of a Planning Unit and includes, individually and collectively, a Planning Unit Master Drainage Plan, Planning Unit Master Street & Circulation Plan, Planning Unit Master Potable Water Plan, Planning Unit Master Wastewater Plan, Planning Unit Master Parks, Trails & Open Space Plan, Planning Unit Master Facilities Plan, and Planning Unit Master Environmental Design Plan applicable to a particular Planning Unit or portion thereof, and which is developed based on, and consistent with, the Project Master Plan. Planning Unit Master Plans can represent one or more phases within a Planning Area.

"**Post-Mitigation Density**" is the gross density allocated to the Project after conversion of Constrained Lands to Unconstrained Lands. The Post-Mitigation Density is calculated by multiplying the total acres of Unconstrained Lands after conversion by 1.7 units/acre and shall not exceed 7,153 dwelling units.

"**Pre-Annexation Ordinance**" is, or shall be the City ordinance that duly adopts this Agreement.

"**Pre-Mitigation Density**" is the gross density allocated to the Project before conversion of Constrained Lands to Unconstrained Lands. The Pre-Mitigation Density is calculated by multiplying the total acres of Unconstrained Lands before conversion by 1.7 units/acre and is 5,127 dwelling units.

"**Project**" is the approximately 6,005 acres located in Ada County, Idaho, legally described on **Exhibit A**, plus any Additional Property that may later be added to the Project. The Project is also sometimes referred to herein as "**M3 Eagle**" or the "**Property.**"

"**Project Master Plan**" is the guide to development of the Project as a whole and includes, individually and collectively, the Master Phasing Plan, Master Drainage Plan, Master Street & Circulation Plan, Regional Circulation Plan, Master Potable Water Plan, Master Wastewater Plan, Master Parks, Trails & Open Space Plan, Master Public Facilities Plan, and Master Environmental Design Plan.

"**Property**" is the approximately 6,005 acres located in Ada County, Idaho, legally described on **Exhibit A**, plus any Additional Property that may later be added to the Project. The Property is also sometimes referred to herein as "**M3 Eagle**" and/or the "**Project.**"

"**Public Infrastructure**" is infrastructure facilities and services improvements, including, without limitation, on-site roads, sewer, water and irrigation facilities, pathways and underlying lands that are owned or to be owned by City or third-party public service providers.

"**PUD**" is planned unit development.

"**PUD Standards**" are the M3 Eagle Planned Unit Development Standards that govern the Property, as may be amended from time to time. A conceptual outline of the PUD Standards is attached hereto as **Exhibit D**.

"**Regional Hydrogeologic Study**" is that certain Regional Hydrogeologic Characterization North Ada, Canyon and Gem Counties, Idaho, Year One Progress Report, dated May 4, 2007, which may be amended from time to time.

"**Regional Open Space**" is land which is set aside for Open Space uses by the general public and which is adjacent to or provides connection to large scale Regional Open Space within the North Eagle Foothills Planning Area and as shown on **Exhibit K**. Regional Open Space may be owned and maintained by City, Owners' Association, land trust or conservation group, or other entity.

"**Regional Trail**" is a public trail that will serve the entire north foothills area and beyond and connect to public lands.

"**Rezoning Ordinance**" is, or shall be, the City ordinance that duly attaches that certain R-1-DA zone to the Property.

"**School District**" is the Joint School District #2.

"**Sewer District**" is the Eagle Sewer District.

"**Star Fire District**" is the Star Joint Fire Protection District.

"**Term**" is the duration of this Agreement as set forth herein.

"**Treatment Facility(ies)**" is the sewage treatment facility and delivery system that also produces treated effluent to use for irrigation.

"**Unconstrained Lands**" are those lands within the Property with slopes under 25%, lands not within a FEMA-identified floodway, and lands not defined as habitat areas of special concern as set forth on Exhibit M. Some Unconstrained Lands may have been Constrained Lands at one time, but have undergone Mitigation as approved by City.

"**Wastewater System**" is a wastewater collection, storage, treatment, and disposal system to treat and dispose of wastewater generated at the Property that includes, without limitation, Treatment Facility(ies), major sewer lines and wastewater pumping stations, where required.

"**Water System**" is a water production, storage, treatment, and delivery system to serve all uses on the Property and that includes, without limitation, wells, reservoirs, pumps, diversion structures, water transmission and distribution pipes and related plumbing, pump houses, well houses, water treatment facilities, water storage tanks, and pressurized irrigation systems, together with all water rights and permits pursuant to which water, both potable and non-potable, will be diverted and used by means of the Water System. The Water System also shall include those portions of the Wastewater System used for the storage and delivery of treated sewage effluent for beneficial uses on the Property, and any additional water rights or permits that may be associated with such uses.

"**Zoning Administrator**" is the administrator of the Eagle Planning & Zoning Department.

"**Zoning Ordinance**" is the zoning ordinance of City adopted and in effect on the Date of Application.

PRE-ANNEXATION AND DEVELOPMENT AGREEMENT

THIS PRE-ANNEXATION AND DEVELOPMENT AGREEMENT (this "**Agreement**") is entered into by and between the CITY OF EAGLE, a municipal corporation organized and existing under the State of Idaho, by and through its Mayor ("**City**") and M3 Eagle L.L.C., a Texas limited liability company ("**Developer**").

RECITALS

A. Developer owns the Property, legally described and depicted on **Exhibit A**, which Property consists of approximately 6,005 acres located north of the existing City in the western portion of the north foothills area of Ada County, Idaho.

B. Developer and City are entering into this Agreement pursuant to the provisions of: Idaho Code, Sections 50-222; 50-301; 67-6508; 67-6511; 67-6512; and 67-6511A; and Eagle City Code, Title 8, in order to facilitate the annexation, comprehensive planning, zoning designation, adoption of Ordinances and development of the Property by providing for, among other things: (i) conditions, terms, restrictions and requirements for the annexation of the Property; (ii) conditions, terms, restrictions and requirements for the construction and installation of Public Infrastructure; (iii) permitted uses for the Property; (iv) density and intensity of such uses; and (v) other matters related to the development of the Property.

C. Developer and City are entering into this Agreement for the purpose of providing assurances to City that the Property shall be developed substantially similar to the provisions as provided herein, for the purpose of providing important protection to the natural environment, for the purpose of providing a viable tax base and long-term financial stability to City, and for the purpose of providing assurances to Developer that Developer may proceed with the Development Plan substantially under the terms hereof. City and Developer shall act in good faith when undertaking their respective obligations and covenants contained herein.

D. The development of the Property pursuant to this Agreement is intended to result in significant planning and economic benefits to City and Developer by, without limitation: (i) encouraging investment in and commitment to comprehensive planning for efficient utilization of municipal and other public resources to secure quality planning, growth and protection of the environment; (ii) requiring development of the Property consistent with the Eagle Comprehensive Plan, Ordinances and this Agreement; (iii) providing for the planning, design, engineering, construction, acquisition, and/or installation of Public Infrastructure to support anticipated development of both the Property and the larger land area that includes mitigation of impacts by and to the Property; (iv) increasing tax and other revenues to City based on private and Public Improvements to be constructed on and in reasonable proximity to the Property; (v) creating employment through development of the Property consistent with this Agreement; and (vi) creating quality housing, employment, recreation and other land uses on the Property.

E. This Agreement shall promote and encourage the development of the Property by providing Developer and Developer's creditors with general assurances of Developer's ability to timely and economically complete development of the Project. The benefits to be received by City and Developer pursuant to this Agreement and the rights granted by City and secured to Developer hereunder constitute sufficient consideration to support the covenants and agreements of City and Developer. City recognizes and acknowledges that Developer might be subject to substantial liability if City were to default in City's obligations in connection with this Agreement.

F. The development of the Property, which is a largely vacant area lacking in necessary Public Infrastructure, requires the construction of substantial Public Infrastructure early in the development process, which Public Infrastructure shall provide regional as well as local benefits.

G. Prior to annexation, Developer may participate in the provision of such Public Infrastructure described in this Agreement earlier than otherwise necessary for Developer's development

of the Property at Developer's own risk and sole expense. Developer shall be able to complete development of the Property as provided in this Agreement.

H. Developer and City desire that the Property be annexed into the corporate limits of City and be developed as an integral part of City as set forth in this Agreement. Developer has submitted to City a duly executed application requesting and consenting to annexation of the Property into City. City and Developer acknowledge that as of the Effective Date the Property does not have a common boundary with City nor is the Property contiguous with City's jurisdictional boundary.

I. Once the Property is contiguous with City's jurisdictional boundary annexation proceedings will be commenced as described in Recital L and paragraph 1.8(a), subject to the terms and conditions set forth in this Agreement. City shall not take any action or enter into any agreement with any state or local governmental entity and/or public agency and/or private entity that would limit City's ability or authority to annex and rezone the Property and City shall take actions reasonably necessary to ensure that City's authority to annex the Property is not limited or prohibited in any manner.

J. Developer and City desire that the Property be zoned R-1-DA in accordance with the Eagle Comprehensive Plan and the M3 Eagle Zoning Map, attached hereto as **Exhibit C**. Developer has submitted to City a duly executed application requesting an amendment to City's Zoning Ordinance text and map in connection with the Property. Upon annexation of the Property, City shall take steps reasonably necessary to rezone the Property subject to the terms and conditions set forth in this Agreement, including publication of the Rezoning Ordinance. City shall take actions reasonably necessary to ensure that City's authority to rezone the Property is not limited or prohibited in any manner.

K. The zoning designation of R-1-DA contained in the Rezoning Ordinance is the appropriate zoning designation for the Property and, as subject to this Agreement, is designed to establish proper and beneficial land use designations and regulations, densities, provisions for Public Infrastructure, design regulations, procedures for administration and implementation and other matters related to the development of the Property.

L. Developer's consent to annexation and rezone of the Property is contingent on contiguity of the Property with City's jurisdictional boundary within 24 months of the Effective Date and City's commencement of annexation proceedings within 90 days of City's receipt of notice of contiguity from Developer and completion of annexation proceedings in a timely manner. In the event that contiguity with City's jurisdictional boundary is not reached within such 24-month time period, or if contiguity with City's jurisdictional boundary is reached and City fails the timely completion of annexation proceedings commenced within 90 days of City's receipt of written notice of contiguity from Developer, this Agreement shall terminate. If contiguity of the Property with City's jurisdictional boundary is not reached within such 24-month period Developer and City may, by mutual agreement, extend such 24-month period by at least an additional 12 months.

M. Prior to the Effective Date of this Agreement, all duly noticed and necessary meetings and public hearings have been held and City has received public comment and has otherwise duly considered all such matters in connection with: the annexation of the Property into City the annexation and rezoning of the Property; and this Agreement.

N. Developer and City desire that the Property be planned for development as a PUD, which PUD shall be guided by the Ordinances, this Agreement, Eagle City Code and the PUD Standards.

O. Developer has submitted to City a topical outline of the PUD Standards, which PUD Standards, attached hereto as **Exhibit D**, shall provide for, without limitation, the land use and development standards for the zoning designation of R-1-DA for the Property. The final PUD Standards shall be approved by City prior to Developer's submission to City of the first Planning Unit Master Plan. City shall not unreasonably withhold its approval of the final PUD Standards provided that the final PUD Standards are generally conforming to the attached **Exhibit D.** Where a conflict occurs between the City of Eagle PUD Standards and the PUD Standards, the PUD Standards shall prevail.

P. The terms and conditions of this Agreement have undergone extensive review by City and have been found to be fair, just and reasonable and City concludes that the public health, safety and welfare of City's citizens shall be best served by entering into this Agreement.

Q. The annexation, zoning and development of the Property as contemplated by this Agreement allows City to provide for high-quality development and ensure orderly, controlled and quality growth in City. City's approval of this Agreement does not exceed City's authority under any existing multi-jurisdictional agreements. In the event of conflict between this Agreement and the Rezoning Ordinance, this Agreement shall control.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and agreed, and in consideration of the recitals and definitions above, which are incorporated below, and in consideration of the premises and the mutual representations, covenants and agreements hereinafter contained, City and Developer represent, covenant and agree as follows:

1. MASTER PLANS; PLANNING UNIT PLANS.

1.1 Conditions of Development. Developer shall develop the Property subject to the conditions and limitations set forth in this Agreement. Further, Developer shall submit such applications regarding design review, preliminary and final plat reviews, condominium plat reviews, PUD and/or any conditional use permits, as and if applicable, and any other applicable applications as may be required by the Zoning Ordinance, except as otherwise provided within this Agreement.

1.2 Planned Unit Development. Upon the annexation of the Property, Developer shall be authorized to implement the types of uses, densities and intensities of uses as set forth in this Agreement and shall be accorded all approvals necessary to permit Developer to implement this Agreement, subject to City's review and reasonable approvals described herein, including, but is not limited to the following: Planning Unit Master Plans, Final Development Plans, site plans, subdivision plats, grading plans, construction plans and other similar requests in accordance with the notice and hearing procedures of Eagle City Code; provided, however, in the case of any conflict between such applicable code and this Agreement, the terms of this Agreement shall control.

City hereby authorizes Developer to include in Planning Unit Master Plans the types of uses that are the same as or similar to (as reasonably determined by City's Zoning Administrator), and densities and intensities of uses equal to or less than, those set forth in this Agreement. Development of the Property may include, without limitation, the planning, design, engineering, construction, acquisition, installation, and/or provision of improvements of any sort or nature, including private infrastructure and Public Infrastructure related to development of the Property, whether located within or outside the Property. City, having exercised City's discretion in approving this Agreement, shall cooperate reasonably in administratively-processing the approval or issuance of such permits, plans, specifications, plats and/or other development approvals of or for the Property as may be requested by Developer in order to implement the Project, and which are reasonably consistent with this Agreement.

Notwithstanding anything to the contrary herein, prior to annexation, Developer may submit to City Planning Unit Master Plans, Final Development Plans, site plans, subdivision plats and other similar requests, which requests shall be processed in accordance with the notice and hearing procedures of Eagle City Code.

1.3 Planning Concept. The Project consists of approximately 6,005 acres located north of City. The Project is a comprehensive master planned community planned to provide a variety of housing, jobs, recreational, educational, equestrian, wildlife, Open Space and cultural opportunities integrated into City. In addition, in keeping with City's resolution to promote viticulture in the City of Eagle, City encourages the development of vineyards, viticulture industries and services and associated hospitality and tourism uses in or associated with the Project. Developer shall be entitled to investigate the

opportunities for establishing vineyard and viticulture industries and services and associated hospitality and tourism uses on the Property, which vineyards and/or viticulture industries and services and associated hospitality and tourism uses may be located in any Planning Area. City encourages Developer's efforts to establish vineyards and to obtain suitable water rights or supplies for irrigating vineyards. See potential vineyard locations as depicted on **Exhibit Q**.

The Project is planned for a Base Project Density of 0.5 units per gross acre, or 3,003 dwelling units, and 245 acres for Non-Residential Use. Through conversion of certain Constrained Lands to Unconstrained Lands and application of Bonus Density provisions, the Maximum Density will be 1.19 units per gross acre, or 7,153 dwelling units, and 245 acres for Non-Residential Use. In the event that any of the Non-Residential Use lands within a Planning Area are developed as residential, Developer may allocate any unused acres for Non-Residential Use to another Planning Area as provided in **paragraph 1.6** below. In the event Additional Property is annexed as provided in **paragraph 1.7** below, then the Maximum Density may be increased in accordance with **paragraph 1.7.**

Developer is granted a Density Bonus in accordance with the following standards:

- 2.5 units for each acre of a Community Center.
- 10 units for each acre of a Neighborhood Center.
- 1 unit for each acre of Regional Open Space over and above the 20 percent Open Space minimum requirement.
- 0.5 units for each acre of Community Open Space over and above the 20 percent Open Space minimum requirement.
- 10% of the total units for a Regional Open Space funding mechanism.

M3 Eagle is being planned as five different Planning Areas, as set forth in **Exhibit B** and **Exhibit(s) F, F1, F2, F3, F4 and F5**. Each Planning Area represents a unique design based upon: (i) topography; (ii) location within the Development Plan; (iii) existing and planned transportation corridors; (iv) a balance of commercial, employment and residential uses resulting in trip capture within the Project; (v) a wide array of housing and employment options to create a true live/work environment; (vi) regional and community Open Space; and (vii) dedication or donation of public facility sites for schools, police and fire, library, parks, public and civic uses. The Conceptual Development Plan for the Project is depicted on **Exhibit G**.

Within all Planning Areas a minimum of 50% of all dwelling units, and 65% of all single-family detached lots less than 5,000 square feet, and 50% of all single-family detached lots less than 8,000 square feet shall abut some form of Open Space.

Big Gulch Planning Area

The Big Gulch Planning Area contains 1,891 dwelling units and 95 acres of Non-Residential Use land for a gross density of 2.97 units/acre based on Bonus Density provisions and reassignment of dwelling units as set forth in **Table 1** below. The gross density of 2.97 may be increased to a Maximum Planning Area Density of 5.24 units/acre, or 3,335 dwelling units, but would require the reassignment of additional dwelling units from other Planning Area(s) to this Planning Area or conversion of Non-Residential Use lands to residential lands in accordance with **paragraph 1.6**, below so long as the Maximum Density for the Property is not exceeded.

Table 1: Big Gulch Planning Area Density Allocation			
	Acres	*Density (units/acre)*	*Units*
Base Density	636	0.5	318
Community Center	–	2.5	–
Neighborhood Center	120	10	1,200
Regional Open Space	–	1	–
Excess Community Open Space	60	0.5	30
Subtotal:			1,548
Funding Bonus (10%)			155
Density Reassignment			188
		Units	1,891
		Gross Density (units/acre)	2.97
		Maximum Planning Area Density (units/acre)	5.24
		Non-Residential Use Acreage	100

The Big Gulch Planning Area contains 636 acres (approximately 11% of the total Property) and is more fully described in **Exhibit F1.** Topographically, over 95% of this area is less than 25% slope.

The Planning Area contains approximately 116 acres of Constrained Lands of which 75 acres will be mitigated. The maximum Pre-Mitigation Density for this Planning Area is 1,634 dwelling units. This Planning Area is the heart of the community and is planned for a mix of residential, Non-Residential Uses, civic and public uses with 120 acres of Neighborhood Centers that are planned for a mixture of commercial and/or office uses and residential uses.

Two Neighborhood Centers, each comprised of 60 acres and planned for a mixture of commercial and/or office and residential uses, are located near the center and western end of the Planning Area with the highest intensity of mixed-use development located in the center. The central Neighborhood Center may be increased to a maximum of 95 acres and 300,000 Non-Residential Use square feet to promote and recruit additional employment opportunities that allow Eagle residents to live and work within the City of Eagle with intensity and density of use based upon Eagle City Code. This Planning Area may also contain resort or hotel uses and a medical office campus with a clinic or hospital.

Residential neighborhoods are anticipated to contain single and multi-family homes with densities ranging from 2-20 units/acre. Housing options will include apartments, townhouses, condominiums, patio homes, and high-density single-family detached and attached homes.

The Big Gulch Planning Area will have an urban feel at the Neighborhood Centers with appropriate landscape, monumentation, signage and place-making features integrated into the design of the area. Housing, commercial/office uses, roadways and landscape will tend to be arranged in formal patterns with tree-lined boulevards and pedestrian scale amenities. Buildings along the main arterial roadway may be close to the roadways to create pedestrian-friendly areas with sidewalks, street trees and benches. Shared surface parking areas and parking garages will be encouraged at the sides and rear of buildings or within building clusters, to reduce large areas of paving. On-street parking will be provided where sufficient right-of-way exists. Design Guidelines will be established as set forth in this Agreement, and in conjunction with City's design review regulations and enforced through the Owners' Association and recorded CC&Rs as well as appropriate City enforcement mechanisms. Clustered housing designs and placement of homes and other structures on individual lots will be carefully integrated into the topography, and sensitive hillside grading techniques will be used to ensure, to the greatest extent possible, that visual impacts of development on slopes and ridgetops is mitigated. Renderings showing examples of

the placement of homes or structures are found in **Exhibit F3**. On a Planning Unit by Planning Unit basis, Developer shall provide City with grading guidelines and hillside development standards for City review and approval, in accordance with the notice and hearing procedures of Eagle City Code, as part of the submittal of any preliminary plat within this Planning Area.

The center of the Big Gulch Planning Area contains a Neighborhood Center which will be designed using a main street concept, with an approximate 8-acre community park around which the highest density of commercial and residential development will be located. This area will have businesses, restaurants, civic uses and residential lofts fronting out onto the central park. The central boulevard will split into 2 two-lane roadways through this area.

The Big Gulch Planning Area is planned to have four community parks as well as regional, community and neighborhood trails. This area is also anticipated to contain a combined high school and middle school, a separate elementary school, and a police and fire station. Big Gulch is the primary drainage area within the M3 Eagle community. Big Gulch will be reshaped and redesigned, in accordance with an approved CLOMR, to create a flood management system as well as a 55-acre linear park through the center of M3 Eagle. The Big Gulch floodplain will become the Big Gulch Community Park, containing both improved and native areas, lakes and ponds with wetlands, play and picnic areas, and a regional trail.

Northern Residential Planning Area

The Northern Residential Planning Area contains 4,547 dwelling units, for a gross density of 1.65 dwelling units/acre, and 80 acres of Non-Residential Use land based on Bonus Density provisions and reassignment of dwelling units, as set forth in **Table 2** below. The gross density of 1.65 dwelling units/acre may be increased to a Maximum Planning Area Density of 2.14 units/acre, or 5,917 dwelling units, but would require the reassignment of additional dwelling units from other Planning Area(s) to this Planning Area or conversion of Non-Residential Use lands to residential lands in accordance with **paragraph 1.6**, below so long as the Maximum Density for the Property is not exceeded.

Table 2: Northern Residential Planning Area Density Allocation

	Acres	*Density (units/acre)*	*Units*
Base Density	**2,760**	**0.5**	**1,380**
Community Center		**2.5**	
Neighborhood Center	**80**	**10**	**800**
Regional Open Space	**20**	**1**	**20**
Excess Community Open Space	**261**	**0.5**	**131**
Subtotal			**2,331**
Funding Bonus (10%)			**233**
Density Reassignment			**1,983**
		Units	**4,547**
		Gross Density (units/acre)	**1.65**
		Maximum Planning Area Density (units/acre)	**2.14**
		Non-Residential Use Acreage	**40**

The Northern Residential Planning Area contains 2,760 acres (approximately 46% of the total Property) and is more fully described in **Exhibit F2**. Topographically, 67% of this Planning Area, or 1,849 acres, is less than 25% slope.

This Planning Area contains approximately 916 acres of Constrained Lands of which 556 acres will undergo Mitigation. The maximum Pre-Mitigation Density for the Planning Area is 3,206 dwelling units. This Planning Area is anticipated to encompass predominantly residential use with two Neighborhood Centers totaling approximately 80 acres. Acreage that is planned for Neighborhood Center uses will also include residential uses at an average density of 10 dwelling units per acre.

Residential neighborhoods are anticipated to contain single-family homes with densities ranging from 1 to 10 units/acre and multi-family homes with densities of 4 to 20 dwelling units/acre (approximately 97.5% single-family will be detached or attached and 2.5% of the homes will be multi-family).

Land use intensity will generally decrease from south to north as development moves away from the Big Gulch Planning Area toward the northern, eastern and western boundaries of the Planning Area. Custom lots or lower-density neighborhoods with an average density of 1 unit per acre will be located in a transitional zone approximately 300-1,000 feet wide at the northern perimeter of the Planning Area. The one-acre average density should be achieved through clustering. This zone will provide a transition between the low-density neighborhoods within the Planning Area and the even lower-density adjacent lands outside of the Property. Clustered housing designs and placement of homes and other structures on individual lots will be carefully integrated into the topography, and sensitive hillside grading techniques will be used to ensure, to the greatest extent possible, that visual impacts of development on slopes and ridgetops is mitigated. Renderings showing examples of the placement of homes or structures are found in **Exhibit F3**. Homes will be located on moderate slopes with many steeper, non-graded slopes left as Open Space. Design Guidelines will be enforced through the Owners' Association and recorded CC&Rs as well as City enforcement through the notice and hearing procedures of Eagle City Code. On a Planning Unit by Planning Unit basis, Developer shall provide City with grading guidelines and hillside development standards for City review and approval, in accordance with the notice and hearing procedures of Eagle City Code, as part of the submittal of any preliminary plat within this Planning Area.

The Northern Residential Planning Area is anticipated to have two community parks, nine neighborhood parks and three elementary schools. Two golf courses are also planned. The Planning Area will also be served by non-motorized multi-use trails (separated or combined) that will link neighborhoods with the rest of the community and planned regional Open Space. Trails through neighborhoods not adjacent to public rights-of-ways or connecting to public parks may be private.

Southern Residential Planning Area

The Southern Residential Planning Area contains 126 dwelling units, for a gross density of 0.06 dwelling units/ acre, and no Non-Residential Use land. The maximum number of dwelling units for this Planning area is 2,109, based on Bonus Density provisions as set forth in **Table 3** below, however it is projected that 1,983 dwelling units will be reassigned to other Planning Areas in accordance with **paragraph 1.6**, below. The resultant density for this Planning Area would be 0.06 units/acre or 126 units.

Table 3: Southern Residential Planning Area Density Allocation			
	Acres	*Density (units/acre)*	*Units*
Base Density	2,114	0.5	1,057
Community Center	-	2.5	-
Neighborhood Center	-	10	-
Regional Open Space	860	1	860
Excess Community Open Space	-	0.5	-
Subtotal			1,917
Funding Bonus (10%)			192
Density Reassignment			(1,983)
		Units	126
		Gross Density (units/acre)	0.06
		Maximum Planning Area Density (units/acre)	0.06
		Non-Residential Use Acreage	0

The Southern Residential Planning Area contains 2,114 acres (approximately 35% of the total Property) and is more fully described in **Exhibit F3.** Topographically, 61% of this Planning Area is less than 25% slope.

The Planning Area contains approximately 1,614 acres of Constrained Lands of which 145 acres will undergo Mitigation. The maximum Pre-Mitigation Density for this Planning Area is 100 dwelling units. The majority of the Planning Area is planned as Regional Open Space and residential clusters with custom home lots at .2 unit/acre, but may also contain single-family detached homes with densities up to 3 units/acre. Higher density, single-family detached homes and single-family attached homes may also exist where topography allows.

The Southern Residential Planning Area has the highest concentration of steep slopes of any of the five Planning Areas. Design and placement of homes and other structures shall be carefully integrated into the topography, and sensitive hillside grading techniques shall be used to ensure, to the greatest extent possible, that visual impacts of development on slopes and ridgetops is mitigated. Renderings showing examples of the placement of homes or structures are found in **Exhibit F3**. Residential units and ancillary improvements within custom lots will be restricted to development within designated building envelopes which will increase the amount of Open Space within the community. Privacy walls will be minimized in favor of open or no fencing to preserve vistas and allow wildlife movement. The Design Guidelines will dictate special standards to minimize disturbance to the environment. The Design Guidelines will be enforced through the Owners' Association and recorded CC&Rs, as well as City enforcement through the notice and hearing procedures of Eagle City Code. On a Planning Unit by Planning Unit basis, Developer shall provide City with grading guidelines and hillside development standards for City review and approval, in accordance with the notice and hearing procedures of Eagle City Code, as part of the submittal of any preliminary plat within this Planning Area.

Amenities are anticipated to include one neighborhood park and community and regional Open Space, regional equestrian and pedestrian trails, and a public equestrian center on the west side of Willow Creek Road. One elementary school is also planned. The Planning Area will also be served by non-motorized multi-use trails (separate or combined) that will link neighborhoods with the rest of the community and planned regional Open Space for public access. Trails through neighborhoods not adjacent to public right-of-way or connecting to public parks may be private. Trails through low-density neighborhoods may be on one side of the street. A public trailhead will be located on the east side of Willow Creek Road.

The public equestrian center, as envisioned, would be a full-service training facility with professional management and training services. The center would be on approximately 30 to 40 acres and would contain a covered riding arena, and turn-outs, and would provide resident and non-resident boarding facilities for 80 to 160 horses. The facility would be owned and operated by the Owners' Association or an affiliate of the community.

Developer is designating 800 acres of the Planning Area for the planned Eagle Regional Park and 80 acres located along Willow Creek Road for the Willow Creek Road Regional Open Space Corridor. As provided further below in **paragraph 2.6(c)**, Developer desires to, and shall work toward the exchange of the 800 acres for 815 acres of BLM Lands located near State Highway 16 as set forth in **Exhibit N**. The exchange would be subject to BLM designating the M3 Eagle 800 acres as Open Space. If the exchange is completed, the 815 acres would become part of the Highway Mixed-Use/Business Park Planning Area upon receiving the appropriate approvals from City in accordance with **paragraph 1.7**, below. If the BLM exchange is not successful within 10 years from the date of this Agreement, Developer will donate the 800 acres to City for a public park. The 800 acres will be available for public use during the exchange period with BLM as if it were part of the Eagle Regional Park. The 80-acre Willow Creek Regional Open Space Corridor (60 acres of which is in this Planning Area) will be owned and maintained by the Owners' Association, City, or other entity and will contain regional trails for public use.

Southwestern Residential Planning Area

The Southwestern Residential Planning Area contains 300 dwelling units, for a gross density of 0.74 dwelling units per acre, and 10 acres of Non-Residential Use land. The Maximum Planning Area Density is 0.74 units/acre or 300 units based on Bonus Density provisions as set forth in **Table 3** below, however, it is projected that up to 188 dwelling units may be reassigned to other Planning Areas in accordance with **paragraph 1.6**, below.

Table 4: Southwestern Residential Planning Area Density Allocation

	Acres	*Density (units/acre)*	*Units*
Base Density	407	0.5	204
Community Center	0	2.5	-
Neighborhood Center	40	6	240
Regional Open Space	0	1	-
Excess Community Open Space		0.5	-
Subtotal			444
Funding Bonus (10%)			44
Density Reassignment			(188)
		Units	300
		Gross Density *(units/acre)	0.74
		Maximum Planning Area Density (units/acre)	0.74
		Non-Residential Use Acreage	17

The Southwestern Residential Planning Area is planned as the first phase of M3 Eagle and consists of 407 acres (approximately 7% of the total Property) and is more fully described in **Exhibit F4**. Topographically, 99% percent of this Planning Area is less than 25% slope.

The Planning Area contains approximately 375 acres of Constrained Lands of which 305 acres will undergo Mitigation. The maximum Pre-Mitigation Density for this Planning Area is 81 dwelling units. On a Planning Unit by Planning Unit basis, Developer shall provide City with grading guidelines and hillside development standards for City review and approval, in accordance with the notice and hearing procedures of Eagle City Code, as part of the submittal of any preliminary plat within this Planning Area.

This Planning Area is anticipated to contain a Neighborhood Center and rural and estate-type custom homes on 1 to 10-acre lots, and single-family detached homes at a density of 4 to 6 units/acre. This is intended to be an equestrian-themed community. The equestrian lots will have irrigated pastures and open fencing to give the area a rural feel. Development adjacent to the planned Regional Park will provide for larger setbacks.

A private equestrian center (with resident and limited outside boarding) is planned to be part of this Planning Area along with a ranch camp. The equestrian center is planned for covered and uncovered riding arenas, paddocks and 80 to 100 stalls. The ranch camp is planned for a park-like setting with recreational amenities such as, without limitation, outdoor play equipment with a western theme, camp sites for residents, tree forts and tree swings and community play fields. The equestrian center will be professionally managed. All costs associated with the maintenance and operations of these areas will be borne through the Owners' Association.

This Planning Area will also be served by a regional park and the Big Gulch Community Park, located mainly in the Big Gulch Planning Area and a separate neighborhood park. In addition, ponds and small lakes holding treated effluent water will be located throughout this Planning Area with some located along Big Gulch Park. These water bodies will serve as irrigation reservoirs, community amenities, and wildlife habitat. In addition, there will be extensive Open Space on lots due to restricting development to building envelopes which will be controlled through the CC&Rs for M3 Eagle.

This Planning Area will also include non-motorized multi-use trails that will link the neighborhoods with the rest of the community and with regional trails within the Eagle Regional Park for public use. Trails through neighborhoods not adjacent to public right-of-way or connecting to public parks may be located on only one side of the street and may be private.

Highway Mixed-Use/Business Park Planning Area

The Highway Mixed-Use/Business Park Planning Area contains 290 dwelling units, for a gross density of 3.30 dwelling units/acre and 88 acres of Non-Residential Use land based on Bonus Density provisions and reassignment of dwelling units, as set forth in **Table 5** below. The gross density of 3.30 may be increased to a Maximum Planning Area Density of 5.68 units/acre, or 500 dwelling units based upon this Planning Area being a Community Center, but would require the reassignment of dwelling units from other Planning Area(s) to this Planning Area in accordance with **paragraph 1.6**, below so long as the Maximum Density for the Property is not exceeded.

Table 5: Highway Mixed Use Planning Area Density Allocation			
	Acres	*Density (units/acre)*	*Units*
Base Density	88	0.5	44
Community Center	88	2.5	220
Neighborhood Center	0	10	-
Regional Open Space	0	1	-
Excess Community Open Space		0.5	-
Subtotal			264
Funding Bonus (10%)			6
Density Reassignment			
		Units	290
		Gross Density (units/acre)	3.30
		Maximum Planning Area Density (units/acre)	5.68
		Non-Residential Use Acreage	88

The Highway Mixed-Use/Business Park Planning Area contains 88 acres (approximately 2% of the total Property) and is described in **Exhibit F5**. Topographically, over 93% of the Planning Area is less than 25% slope. On a Planning Unit by Planning Unit basis, Developer shall provide City with grading guidelines and hillside development standards for City's review and approval, in accordance with the notice and hearing procedures of Eagle City Code, as part of the submittal of any preliminary plat within this Planning Area. Design and placement of structures shall be carefully integrated into the topography, and sensitive hillside grading techniques shall be used to ensure, to the greatest extent possible, that visual impacts of development on slopes and ridgetops is mitigated. This Planning Area contains approximately 6 acres of Constrained Lands of which 4 acres will undergo Mitigation. The maximum Pre-Mitigation Density for this Planning Area is 48 dwelling units.

The Planning Area is planned for community retail and business space and a fire station and will retain an existing cellular tower site. This Planning Area will combine highway-oriented commercial, retail, office and business park uses to capitalize on its adjacency and visibility from the regional transportation corridor, the planned interchange on State Highway 16, and the State Highway 16 to State Highway 55 arterial roadway. The site may also include high density single- and multi-family homes and hotel uses. Eventually, this area will be the gateway to M3 Eagle with appropriate landscape, entry and place-making features integrated into the design of the area with appropriate buffering along State Highway 16.

Access to this area will be by a future grade-separated interchange on State Highway 16 which will be two miles north of a planned future interchange on State Highway 16 and Beacon Light Road. This access will also serve as a primary entry into the community as well as connect to the primary five-lane arterial that is proposed to serve as a connection between State Highway 16 and State Highway 55.

Developer desires to exchange 800 acres of land within the Property, as set forth in **Exhibit N**, for 815 acres of BLM Lands located along the western border of the Project adjacent to this Planning Area. As provided further in **paragraph 1.7**, below, if Developer is successful in the BLM exchange, Developer will file an amendment to this Agreement to incorporate such Additional Property into the Project and this Planning Area may be expanded to include such Additional Property. In addition, the Bonus Density for the corresponding amount of Regional Open Space that was designated in the Southern Planning Area shall be reduced commensurately. It is envisioned that this Additional Property would contain approximately 2.0 dwelling units per gross acre for Unconstrained Lands, and 0.2 dwelling units per gross acre for Constrained Lands, and no density for lands within a floodway. The area would also contain civic and educational uses and up to 25% of the area as mixed-use development and a minimum of 25% of the

area as Open Space. This Additional Property would expand upon the commercial and employment center in this Planning Area and at the primary entry to the community and provide easy access and visibility from the highway corridor.

Table 6: Project Density Allocation Summary

	Acres	*Density (units/acre)*	*Total Units*	Big Gulch	Northern Residential	Southern Residential	Southwestern Residential	Highway Mixed Use
Base Density	6,005	0.5	3,003	318	1,380	1,057	204	44
Community Center	88	2.5	220	-		-		220
Neighborhood Center	240	9.3	2,240	1,200	800		240	
Subtotal Units			5,463					
Required Open Space (20%)	1,201							
Regional Open Space	880	1	880		20	860	-	-
Excess Community Open Space	321	0.5	161	30	131	-	-	-
Open Space Funding Bonus (10%)			650	155	233	192	44	26
Total Open Space (40%)	2,402							
Reassigned Units			-	188	1,983	(1,983)	(188)-	-
Sub-Total Bonus Units			4,151					
Total Units:			7,153	1,891	4,547	126	300	290
Gross Density (units/acre)			1.19	2.97	1.65	0.06	0.74	3.30

Note: The total area designated for Non-Residential Uses in the project is 245 acres.

1.4 **Master Phasing Plan.** The development planned for the Property, including the Public Infrastructure, is contemplated to progress in phases (that may be non-contiguous) and accomplished over an estimated 20 years as described in the Master Phasing Plan for the Project attached as **Exhibit H**. The 20-year estimate is based on the COMPASS model, however, Project build-out may occur sooner based on the historical growth within Eagle. The Master Phasing Plan is designed to accommodate the development of the Property from the west to the east, which will initially concentrate the movement of traffic toward State Highway 16. The Master Phasing Plan may be modified by Developer based upon changing residential and Non-Residential Use real estate market conditions, industry factors, and/or business considerations and the subjugation of Additional Property to this Agreement. The exact boundaries of each phase shall be established in the Planning Unit Master Plan process set forth in this Agreement. Any such modification(s) shall not necessitate a formal amendment to this Agreement, but shall be retained in City's official file for the Property. The following table is an example of the timing for each phase of development using the COMPASS growth model:

Phase	Planning Area	Projected Start Date
1	Southwestern, Northern	2010
2	Northern, Big Gulch	2012
3	Northern, Big Gulch, Highway	2018
4	Northern, Southern, Big Gulch, Highway	2023
5	Northern, Southern, Big Gulch, Highway	2028

1.5 **Planning Unit Master Plan; Final Development Plan**. Each Planning Unit Master Plan shall be based on the Planning Area plans set forth in **Exhibit(s) F, F1, F2, F3, F4 and F5** and the Conceptual Development Plan set forth in **Exhibit G**. The Conceptual Development Plan will be updated when necessary to reflect modifications or to refine phasing within the respective Planning Unit Master Plans. It is not necessary for Planning Unit Master Plans to encompass the same geographical area as a Planning Area. A Planning Unit Master Plan should reflect the area within the Project that the Planning Unit Developer is proposing to subdivide through a Final Development Plan. The Planning Unit Master Plan may address a portion of a Planning Area or Planning Unit, a complete Planning Area or Planning Unit, or more than one Planning Area or Planning Unit. The Planning Unit Master Plan shall be filed with the Zoning Administrator for review as to completeness and compliance with the requirements of this Agreement. Thereafter, the Planning Unit Master Plan and Final Development Plan shall be reviewed by the Planning & Zoning Commission for recommendation to City Council in accordance with the notice and hearing procedures of Eagle City Code. If the Planning Unit Master Plan and Final Development Plan are substantially in conformance with this Agreement and Eagle City Code, the Planning & Zoning Commission and City Council shall not unreasonably withhold approval.

1.6 **Allocation; Density**. This Agreement provides for a Maximum Density of 1.19 units/acre, or 7,153 dwelling units, and a maximum of 245 acres of Non-Residential Uses within the Property. The density shall not exceed the Post-Mitigation Density of 7,153 dwelling units for the entire Project. Table 7 below sets forth an estimate of the Unconstrained Lands by Planning Area. Based on this estimate, the Maximum Base Project Density prior to conversion of Constrained Lands to Unconstrained Lands is 0.85 units/acre or 5,127 dwelling units. Notwithstanding anything to the contrary herein, Developer shall have the right to develop the Property in accordance with the Pre-Mitigation Density of 5,127 dwelling units prior to conversion of Constrained Land to Unconstrained Lands. Developer shall also have the right to allocate residential density and/or Non-Residential Use acreage as set forth on **Tables 1-7**, and the Development Rights associated with such residential density and/or Non-Residential Use acreage, from Planning Area(s) or Planning Unit(s) to other Planning Area(s) or Planning Unit(s) at any time, and Developer may allocate any unused residential density or Non-Residential Use acreage originally allocated to a Planning Area or Planning Unit to another Planning Area or Planning Unit in the event that the preliminary or final platting of a Planning Area or Planning Unit results in unused residential density and/or unused Non-Residential Use acreage, provided such allocation: (i) does not exceed the Maximum Planning Area Density; (ii) does not exceed the Maximum Density for the Property; (iii),does not exceed the maximum Non-Residential Use acreage allowed for the Property; (iv) does not alter or waive the PUD Standards; (v) does not allow a use otherwise prohibited; or (vi) cause a material change to this Agreement without prior amendment to this Agreement as required by Eagle City Code and compliance with the notice and hearing requirements thereof. The allocation of residential density and/or Non-Residential Use acreage between Planning Areas and Planning Units is consistent with City's planning efforts to encourage planning flexibility based on physical and market conditions while protecting private property rights. Developer shall deliver notice to City that an allocation of residential density or Non-Residential Use acreage shall be made from one Planning Area or Planning Unit to another Planning Area or Planning Unit and shall provide City with a statement of the number of residential units per gross acre and/or Non-Residential Use acreage being allocated. Any such allocation shall not necessitate a formal amendment to this Agreement, but shall be retained in City's official file for the Property.

Table 7: Pre- and Post-Mitigation Density						
	Big Gulch	Northern Residential	Southern Residential	Southwestern Residential	Highway Mixed Use	Totals
4 Total Acres	636	2,760	2,114	407	88	6,005
PRE- MITIGATION						
Total Pre-Mitigation Unconstrained Acres	520	1,844	500	70	82	3,016
Maximum Density Per Unconstrained Acre Multiplier						1.7
Constrained Acres	116	916	1,614	337	6	5,127
Pre- Mitigation Maximum Units						5,127
Pre-Mitigation Density (units/acre)						0.85
Acres Mitigated by Planning Area	75	556	251	305	4	1,191
POST-MITIGATION						
Total Post-Mitigation Unconstrained Acres	595	2,400	751	375	86	4,207
Maximum Density Per Unconstrained Acre Multiplier						1.7
Post-Mitigation Maximum Units						7,153

1.7 **Additional Property.** Recognizing the uniqueness of each Planning Area herein, Eagle City Code, Title 8, Chapter 6 allows for the inclusion of Additional Property into a PUD, thus providing for its expansion in area. The Additional Property does not need to be contiguous to the Property. In the event Developer owns or acquires Additional Property which is not subject to this Agreement, including, without limitation, Additional Property that will serve to make the Property contiguous with City's jurisdictional boundary, and desires to subject such Additional Property to the benefits and obligations of this Agreement, Developer may request that City annex the Additional Property into the corporate boundaries of City (if such Additional Property is not already within City's corporate boundaries). Upon such request, the Parties will commence annexation proceedings for such Additional Property which will subject such Additional Property to this Agreement and address, additional residential density and/or Non-Residential Uses and intensities of such Additional Property or, if requested by Developer, add such additional residential density and/or Non-Residential Uses of such Additional Property may increase the Pre-Mitigation Density, Post-Mitigation Density, and Maximum Density (including the Additional Property) and alter other development parameters in connection with the Property by the amount of dwelling units and Non-Residential Use acreage allowed pursuant to the existing entitlement on the property to be annexed based on any formula for density calculations included herein. Upon annexation of said Additional Property, Developer shall apply to City for any necessary land use approvals for the Additional Property, including any necessary amendment to this Agreement. The amendment to this Agreement may include alternative plans and land use designations. Developer may apply for the allocation of residential density and/or Non-Residential Use acreage, and the Development Rights associated with such residential density and/or Non-Residential Use acreage, from existing Planning Areas or Planning Units to the Additional Property in the manner set forth in **paragraph 1.6**, above.

1.8 **Term.**

(a) **Initial Term.** The initial term of this Agreement shall commence on the Effective Date and shall end on that date of publication of the Annexation and Rezone Ordinance (the "**Initial Term**"). In no event shall the Initial Term extend past 24 months of the Effective Date unless extended by the Parties. Annexation proceedings shall be commenced within 90 days of City's receipt of notice of contiguity of the Property with City's jurisdictional boundaries from Developer and shall be timely completed. City shall not unreasonably withhold its approval of annexation that is in substantial

compliance with the Eagle Comprehensive Plan and this Agreement. Notwithstanding the first sentence of this paragraph, in the event that contiguity of the Property with City's jurisdictional boundary is not reached within such 24-month time period, or if contiguity with City's jurisdictional boundary is reached and City fails to timely complete annexation proceedings commenced within 90 days of City's receipt of written notice of contiguity from Developer, unless such 24-month period is extended as provided further herein, the Initial Term shall automatically terminate and this Agreement shall terminate. Notwithstanding anything to the contrary herein, at any time prior to the commencement of the Extension Term, defined below, if City: (i) acts in bad faith in contravention of this Agreement; or (ii) the City fails to take actions to annex the Property consistent with the terms and conditions outlined herein, Developer may withdraw Developer's consent to annexation and rezone of the Property and this Agreement shall automatically terminate. Any expenditures by Developer prior to annexation shall be at Developer's risk and at Developer's sole cost and expense.

(b) Extension Term. Provided annexation and rezone of the Property has occurred as provided immediately above, the extension term of this Agreement shall commence on the date of publication of the Annexation and Rezone Ordinances(s) of the Property and shall automatically terminate on the 30th anniversary of the first day of the extension term (the "**Extension Term**") without the necessity of any notice, agreement, or recording by or between the Parties. However, if any of the Property has not yet been developed as contemplated by this Agreement before such 30th anniversary, this Agreement shall automatically extend, without the necessity of any notice, agreement, or recording by or between the Parties, for an additional 10 years, for a total of 40 years, at which time this Agreement and the Extension Term shall automatically terminate as to the Property without the necessity of any notice, agreement, or recording by or between the Parties. The Initial Term and the Extension Term are sometimes individually or collectively, as context may dictate, referred to herein as the "**Term.**"

If Developer has proceeded in good faith but has been prevented from developing the Property, in whole or in part, within the Extension Term by circumstances beyond Developer's control, including, without limitation, failure of City to annex all or a portion of the Property, judicial injunctions, inclement weather, delays due to strikes, inability to obtain materials, civil commotion, terrorism, fire, acts of God, or delays caused by City, or other local, state or federal agencies, the Term shall be extended for an additional period of time equal to the period of such delay(s). Nothing in this Agreement shall be interpreted to preclude the Parties from extending the Term by mutual agreement or from entering subsequent development agreements or extensions thereof.

2. INFRASTRUCTURE AND SERVICES.

The Parties acknowledge that a general intent of this Agreement is for Developer to provide for its proportionate share of the Public Infrastructure which will be set forth by coordinated planning, design, engineering, construction, acquisition, installation, and/or provision of Public Infrastructure as contemplated by the Planning Unit Master Plan process and as otherwise described herein. Various public facilities and services as identified in this Agreement and to be identified in the Planning Unit Master Plan(s) shall be sited, provided, maintained and operated in accordance with this Agreement or in accordance with separate agreements with other governmental or quasi-governmental entities. City and Developer recognize that a proportionate share of the costs associated with the development of the Property and Public Infrastructure shall be borne by Developer and third-party owners of Property within the development and that many necessary elements of Public Infrastructure should be provided and/or maintained by other governmental or quasi-governmental entities, and not by City, and that Developer may enter into separate agreements with such other entities. For clarification, the Parties make specific note of and acknowledge the following:

2.1 Traffic & Circulation.

(a) Ada County Highway District; Idaho Transportation Department. Improvements to the ACHD and/or ITD Traffic System, as applicable, within the Project shall be provided at the direction of ACHD, ITD or some other legally-constituted entity with jurisdiction over the ACHD Traffic System and/or the ITD Traffic System. Unless City has such jurisdiction, City shall not be

responsible for any approvals or access permits required or construction or maintenance costs associated with the ACHD Traffic System and/or the ITD Traffic System, within the Project.

(b) Regional Circulation Plan; Master Traffic Study; Master Streets & Circulation Plan. Conceptual locations of major roadways within the Property and the North Eagle Foothills Planning Area are provided in the Regional Circulation Plan, attached hereto as **Exhibit I**. Developer is working with City, ACHD, ITD, BLM and adjacent property owners to adopt a regional roadway network plan to serve as a template to guide the Master Streets & Circulation Plan, to be developed based on the Master Traffic Study, the Planning Unit Master Plans and construction of the arterials generally along the alignments shown in the Regional Circulation Plan or as determined by the Agency having jurisdiction. Developer will work with the aforementioned agencies and others to determine the appropriate funding mechanisms to provide future funding to mitigate the proportionate impact of the development of the Property on the existing ACHD Traffic System and/or ITD Traffic System. Developer and City shall cooperate to achieve approval by ITD and/or ACHD of the circulation interrelationship between the ACHD Traffic System and the ITD Traffic System, such as the location of highway interchanges and/or roundabouts, as reflected in the proposed Master Streets & Circulation Plan attached hereto as **Exhibit J**. The western primary entry may be proposed as an interchange or roundabout on State Highway 16.

(c) ACHD Traffic System. Prior to and following annexation, Developer, with consultation with ACHD, will design, engineer, construct, acquire, install, permit and dedicate the ACHD Traffic System within and/or proportional to the Project's impacts in accordance with the Master Streets & Circulation Plan, Planning Unit Master Streets & Circulation Plans and the Phasing Plan and all planning and study documents of ACHD. Any expenditures incurred by Developer prior to annexation shall be at Developer's risk and at Developer's sole cost and expense.

(d) ITD Traffic System. Prior to and following annexation, Developer, with consultation with ITD, will design, engineer, construct, acquire, install, permit and dedicate the ITD System within and/or adjacent and/or proportional to the Project's impacts in accordance with the Master Streets & Circulation Plan, Planning Unit Master Streets & Circulation Plans and Phasing Plan and all planning and study documents of ITD. City and Developer shall cooperate in pursuit of funding from or authorized by the State of Idaho for the construction of Developer's proportionate share of necessary improvements to the ITD System (which improvements may include, without limitation, interchanges, roundabouts, traffic signals, turning lanes and frontage roads) required to implement this Plan. Any expenditures by Developer prior to annexation shall be at Developer's risk and at Developer's sole cost and expense.

(e) Planning Unit Master Streets & Circulation Plan. A detailed analysis of the ACHD Traffic System within the Project and the ITD Traffic System within and/or adjacent to the Project and the ultimate design and locations of streets and circulation improvements shall be consistent with the Master Streets & Circulation Plan and further defined in each Planning Unit Master Streets & Circulation Plan, which analysis shall be submitted and approved by ACHD and/or ITD, as appropriate. Each Planning Unit Master Streets & Circulation Plan shall be prepared and approved by City taking into account the Master Streets & Circulation Plan, and any amendments thereto and the recommendations of ACHD and/or ITD, as applicable. Each Planning Unit Master Streets & Circulation Plan shall address any increase or decrease in traffic volumes from other Planning Unit Master Plans and the particular Planning Unit being planned that may occur as development progresses and densities and intensities are rearranged.

(f) Phased Construction. Developer and/or ACHD and/or ITD shall construct or arrange for the construction of, in phases, and in accordance with the Master Streets & Circulation Plan and the Planning Unit Master Streets & Circulation Plan: streets, roadways and sidewalks to be used for motorized vehicular traffic for ingress and egress to, through, within and from the Project; parking; pedestrian, bicycle and/or other facilities to be used for non-motorized vehicular traffic for ingress and egress to, through, within and from the Property; street lighting with underground electric service distribution; all striping, traffic signals, street sign posts, street name signs, stop signs, speed limit signs, and all other directional/warning/advisory traffic signage as may be reasonably required. City shall not

issue certificates of occupancy for any phase prior to adequate on-site roads being constructed to the capacity required for full build-out of that phase.

(g) **Private Roads.** All private roads and/or rights-of-way within the Property shall be constructed by Developer to ACHD and/or ITD, as applicable, standards and maintained by Developer and/or an Owners' Association; provided, however, in certain areas, Developer may seek approval on a phase by phase basis from City to install private roads which are not to ACHD standards or are not paved to preserve a rural character. Developer reserves the right to seek approval to limit access through access control structures, to private roads within the Property, and to determine the location of curb cuts, provided a qualified engineer determines that their location does not present a significant hazard. Developer shall have the right to retain ownership of private roads and/or rights-of-way. Some or all of private roads and/or rights-of-way may be conveyed to one or more Owners' Associations. Developer may seek City approval to install access control structures within the medians of the private roads and/or rights-of-way at any portion of the Property. Developer shall grant to the appropriate service providers license for police, fire, ambulance, garbage collection, water or sewer line installation and repair, and other similar public purposes, over such private roads and/or rights-of-way. Application for private streets shall be made to City as allowed under Eagle City Code Titles 8 and 9 at the same time as a preliminary plat application is filed which includes one or more private road(s).

(h) **Fiber Optics Easement.** Developer shall reserve, prior to dedication to ACHD and/or ITD, as applicable, in any public street on the Property, a non-exclusive Fiber Optics Easement reasonably acceptable to Developer and ACHD and/or ITD as applicable. Such facilities may connect to facilities external to the Property. Developer shall have the exclusive right to select providers of fiber optics and telecommunications services in connection with the Project.

2.2 Water.

(a) **Water Provider**. As provided in **paragraph 2.2(c)**, an addition to City's Municipal Water System, hereinafter referred to as the Water System, shall be constructed by Developer sufficient to serve the Project. The Water System shall include all water rights necessary to serve the Project as it is being developed. As provided further herein, City shall be responsible for the operation and maintenance of the Water System. City shall provide water service to the Property from the Water System on the same basis as City provides water to other residents and businesses in the City of Eagle under ordinances in place at the time of this Agreement.

(b) **Regional Hydrogeologic Study; Master Water Plan**. Developer is conducting a Regional Hydrogeologic Study to determine the extent and sustainability of water sources that may be used to serve the Property. The Regional Hydrogeologic Study is intended to provide a basis for a Master Water Plan. The Master Water Plan will identify the various components of the Water System and all water rights necessary for and to be used to provide water service to the Property through the Water System. As provided further herein, Developer will develop water conservation criteria for landscaping and irrigation and the criteria will be included in the Design Guidelines.

(c) **Water System**. Prior to annexation, Developer may and, following annexation, Developer shall design, engineer, construct, install, permit and then convey the Water System to City in accordance with the terms of this Agreement, the Master Water Plan and any necessary Planning Unit Master Water Plans and applicable federal, state and local laws. In designing and constructing the Water System, Developer shall consult regularly with City and, construct the Water System to City's standards. Developer and City shall cooperate to the greatest extent practicable to ensure that all necessary water rights are secured by Developer for the Water System, and that the Water System can be permitted and operated in conjunction with existing and planned water facilities of City. Wherever feasible, Developer and City agree to cooperate as appropriate on development and operation of facilities such as storage reservoirs, emergency back-up power generators, and similar facilities. The phasing of the Project's development shall dictate the location and construction of the Water System components. City shall not issue any building permits for any phase prior to Developer's completion of the components of the Water System sufficient to provide fire protection for that phase of the Project. City shall not issue any certificates

of occupancy for any phase prior to Developer's completion of the Water System and irrigation facilities for service of that phase. As part of the conveyance of any phase or portion of the Water System to City, Developer shall provide City with all applicable as-built drawings, operation and maintenance manuals, operation records, and water right records and other necessary information.

(d) **Planning Unit Master Water Plan.** A detailed analysis of the Water System for each Planning Unit shall be completed and submitted to City.

(e) **Assured Water Supply.** For each Planning Unit Master Water Plan, Developer shall submit evidence that Developer has secured adequate surface and/or ground water right(s) for the Water System, sufficient for all irrigation, aesthetic, amenity, potable and/or recreational use in connection with the development of each Planning Unit (unless Developer is entitled to a waiver as provided by City Code). As part of the construction of the Water System and conveyance to City, Developer shall transfer, convey or assign (on a phase by phase basis) ground water right(s) to City for inclusion in City's municipal water supply system; provided however, Developer shall not convey or assign more ground water right(s) than necessary to serve the Project as it is being developed and City shall not use any of the water transferred under such rights to serve any other properties unless City demonstrates to Developer that City has obtained adequate water rights to serve the Project and such other properties. City shall cooperate with Developer, at no cost to City, to assist Developer in Developer's obtaining all permit(s) and licenses for water rights sufficient to serve the Property as the Property is developed in accordance with this Agreement. If any transfer, amendment or other proceedings are required under Idaho Code or IDWR rule or policy for the water rights necessary to serve the Project, City shall cooperate with developer in Developer's efforts to obtain all necessary permits and approvals from IDWR, including, without limitation, approvals in connection with Mitigation that may be required. Developer shall have the right to file for a municipal water right prior to the annexation. As set forth in this Agreement, it is City's and Developer's intent to have City be the water service provider and not have a PUC regulated provider serve the Property.

(f) **Reimbursement.** If Developer, at Developer's cost and expense, develops major water facilities, such as major production wells, water storage tanks or reservoirs (but excluding local service and distribution lines) for the Project, which reasonably has been determined by City to benefit properties other than the Property, or if City requires Developer to develop a portion of the Water System in excess of that necessary to serve the Project so as to allow City to serve other properties, City and Developer shall, in good faith, enter into an agreement to the effect that the portion of the costs in connection with such development of the Water System for properties other than the Property shall be reimbursed to Developer from the service connection charges collected from such other benefited property owners who otherwise have not paid or contributed their proportionate share toward development of the Water System ("**Water Reimbursement Agreement**"). Such Water Reimbursement Agreement shall have a duration of sufficient time following completion of the portion of the Water System for which reimbursement is sought with such time to be mutually agreed between Developer and City but in no event less than ten (10) years. Such Water Reimbursement Agreement shall provide, in part, that: (i) interest be paid to Developer at the then applicable municipal bond rate; (ii) City shall charge an administrative fee for handling the accounting, auditing, and payment of the reimbursement payments to be made to Developer; (iii) the Water Reimbursement Agreement shall be binding on Developer and City and their respective successors and assigns; and (iv) the Water Reimbursement Agreement may be recorded as an encumbrance against the benefited property(ies).

(g) **Water User Charges.** Upon development and conveyance of the Water System to City of the Water System and compliance with **paragraph 2.2(c)** above, City shall provide water service to the Property in quantity and quality sufficient to satisfy the potable water needs of the Project as and when required in connection with the development of the Property, subject to any water disruption or degradation of water quality or quantity that is outside the control of City and further subject to City's reasonably enacted and imposed standard terms and conditions of delivery. All water service using the Water System shall be metered. City shall receive no fee for water service until, and only if, City accepts ownership of and operational responsibility for the Water System, after which time City shall be entitled to collect such fees for water service.

(h) **Alternative Water Service.** It is the purpose and intent of City and Developer for Developer to develop a Water System (on a phase by phase basis) and convey same to City so City can provide water service to the Project. Developer has explored, and is continuing to explore, in conjunction with the Regional Hydrogeologic Study and Master Water Plan, several alternatives for the securing of water for use in the Water System, including the primary alternative for the use of ground water from on-site and off-site wells. The Parties, for a period not to exceed 36 months from the commencement of the Extension Term, shall, in good faith, explore developing the source(s) of supply for the Water System. If Developer fails to obtain adequate source(s) of supply to serve the Property within such 36-month time period (unless such period of time is extended by Developer and City by mutual agreement on or before the last day of such 36-month time period), City and Developer shall meet to evaluate other alternative sources of supply, including temporary source of supply, to provide a source of water for the Water System. The alternative source of supply can include use of surface water or water secured from other providers while Developer attempts to secure a permanent water supply for the Water System. , Only in the event City fails to perform under Section 2.2 or, if City refuses to cooperate with Developer in providing for City to be the water service provider to the Property as set forth in Section 2.2, Developer may seek alternative potable water service from other capable providers or may create a private water system for the Project.

(i) **Irrigation Study.** Developer shall secure sufficient water for irrigation and aesthetic needs of the Project. The method of providing irrigation water shall be at the discretion of Developer so long as an adequate system and source of supply is provided, including a source of supply consistent with **paragraph 2.3(f)** below. If Developer so requests, City will give good faith consideration to establishing a municipal irrigation system to maintain and serve irrigation water to the Project.

2.3 **Wastewater Treatment and Disposal.**

(a) **Eagle Sewer District.** Sanitary sewer collection, treatment and disposal shall be provided by Sewer District or some other legally constituted public or private provider allowed to operate in City. Following annexation, Developer agrees to annex to Eagle Sewer District and further agrees not to seek other sewer treatment services unless or until Eagle Sewer District refuses to serve the Project. City shall not be responsible for any treatment, maintenance or costs associated with sanitary sewer collection, treatment and disposal in connection with the Project unless Eagle Sewer District refuses to serve and City and Developer enter into a separate agreement regarding Wastewater Treatment and disposal.

(b) **Master Wastewater Study; Master Wastewater Plan.** Developer has completed the Master Wastewater Study and Master Wastewater Plan which shall be submitted to Eagle Sewer District for approval. The Master Wastewater Plan, to be developed based on the Master Wastewater Study shall provide general locations of the major wastewater infrastructure needed to provide service for the Property.

(c) **Assured Treatment Facilities.** In connection with each Planning Unit Master Wastewater Plan, concurrently with the submittal of a Final Development Plan in connection with each Planning Unit or portion thereof, Developer shall submit evidence that the Wastewater System is adequate to satisfy all proposed uses in connection with the development of such Planning Unit or portion thereof. A letter of approval shall be provided to City from the Eagle Sewer District, Idaho Department of Environmental Quality and/or Central District Health, and/or other applicable governmental agency, prior to issuance of any certificate of occupancy as required by law.

(d) **Re-use Water.** City acknowledges Developer's intention to retain rights, title and interest in any and all of its re-use water (for irrigation or aquifer recharge purposes) which is generated from any Wastewater System constructed by Developer. City acknowledges that Developer will be using the re-use water for irrigation of its Open Space and potentially recharging the aquifer, both of which uses will be subject to applicable governmental agency approvals.

2.4 Storm Water Drainage.

(a) Ada County Highway District. Post-development storm water management includes drainage collection, diversion, detention, retention, dispersal, use and discharge, which shall be provided by ACHD or some other legally-constituted public or private provider allowed to operate in City entity with jurisdiction over the Drainage System. Unless City has such jurisdiction, City shall not be responsible for any approval, construction, collection, conveyance or maintenance costs associated with the Drainage System within the Project.

(b) Master Drainage Study; Master Drainage Plan. Developer shall complete the Master Drainage Plan, based on the Master Drainage Study to describe pre-development drainage characteristics of the Property and a conceptual hydrologic and hydraulic analysis of the Property's existing and proposed Drainage System. In connection with such Planning Unit Master Drainage Plan, Developer shall determine the applicable 100-year floodway elevations for the Property and shall obtain from FEMA a Conditional Letter of Map Revision ("CLOMR") that adjusts the floodway boundaries as and if appropriate. City shall use all good faith efforts to cooperate with Developer in connection with Developer's applications to FEMA to modify relevant flood maps to reflect actual conditions.

(c) Assured Drainage. In connection with each Planning Unit Master Drainage Plan, concurrently with the submittal of a Final Development Plan in connection with each Planning Unit or portion thereof, Developer shall submit evidence that the Drainage System is adequate to satisfy all proposed uses in connection with the development of such Planning Unit or portion thereof.

(d) Drainage Re-use. City acknowledges Developer's intention to retain rights, title and interest in any and all of drainage on the Property (for irrigation or aquifer recharge purposes). City acknowledges that Developer may be using drainage water for irrigation of Open Space and potentially recharging the aquifer, both of which uses will be subject to applicable governmental agency approvals.

2.5 Public Facilities.

(a) Police. Police protection is provided to City under contract with Sheriff of Ada County ("**Sheriff**") through contractual arrangement between Ada County and City. City shall provide police protection services to the Property as developed on the same basis as is provided to other residents and businesses within City. Following annexation, Developer shall contribute 1 site (not to exceed 1 acre) for the construction of a police station in accordance with the Master Parks, Trails and Public Facilities Plan, attached as **Exhibit K**, which defines a general location. Such site shall be combined with a fire station site. The final location is subject to Developer, Sheriff, and Fire District approval. Such police station shall be identified on the Final Development Plan in connection with the applicable Planning Unit Master Plan or portion thereof. Developer shall cooperate with City and Sheriff in determining Developer's proportionate share of funds in connection with construction of such site, facility equipment, personnel and operations, but not to exceed $1,000,000.00 unless Developer's proportionate share exceeds such monetary amount, said additional amount shall be paid by Developer (the "**Police Fees**"); provided however, City and Developer acknowledge and agree that such Police Fees paid in connection with non-capital improvements are intended to be and shall be a one-time payment meant to cover that initial period of time when *ad valorem* taxes have not yet been collected to cover the costs of such non-capital improvements. Any contribution by Developer shall be contingent upon: (i) review and approval of construction; (ii) 180 days notice provided to Developer by City or the Sheriff; and (iii) evidence that the demand for such facility is based upon the demand created by the Project. Such buildings shall be designed to be consistent with the requirements necessary to provide service to the Project. Design of the facility shall be consistent with the EASD and the Design Guidelines, and shall be reviewed for approval by Developer and City in accord with the notice and hearing procedures of Eagle City Code. In the event that impact fees are implemented in connection with police service, Developer shall receive a credit against such impact fees equal to that portion of the Police Fees paid for capital improvements (as defined in Idaho Code § 67-8203).

(b) **Fire and Emergency Services.** Fire and emergency services are now provided to City by Eagle Fire District and Star Fire District (individually, the "**Fire District**" and collectively, the "**Fire Districts**"). Unless City becomes the entity responsible, City shall not be obligated to provide fire services to the Property. Fire water flows shall be provided by the Water System and all fire protection infrastructure will be designed and constructed in conjunction with each Fire District and in accord with all applicable governmental regulations and adopted uniform fire codes. Hydrant locations will be determined following consideration of, without limitation, accessibility, obstructions, building proximity, driveway entrances, signs and light poles. Developer, in consultation with the Fire Districts, and prior to submittal of a Final Development Plan in connection with the first Planning Unit Master Plan or portion thereof, shall develop a wildfire management plan for implementation within such Fire Districts. Following annexation, Developer shall contribute 1 site (not to exceed 1 acre of land per site and in addition to the fire station site combined with the police station site referenced in **paragraph 2.5(a)** above) for construction of the fire station in accordance with the Master Parks, Trails and Public Facilities Plan, attached as **Exhibit K**, which defines a general location. The final location is subject to Developer, applicable Fire District and Sheriff approval. Such fire station shall be identified on the Final Development Plan in connection with the applicable Planning Unit Master Plan or portion thereof. Developer shall cooperate with City and the Fire Districts in determining Developer's proportionate share of funds in connection with construction of such site, facility equipment, personnel and operations, not to exceed $1,000,000.00 unless Developer's proportionate share exceeds such monetary amount said additional amount shall also be paid by Developer (the "**Fire Fees**"); provided however, City and Developer acknowledge and agree that such Fire Fees paid in connection with non-capital improvements are intended to be and shall be a one-time payment meant to cover that initial period of time when *ad valorem* taxes have not yet been collected to cover the costs of such non-capital improvements. Any contribution by Developer shall be contingent upon: (i) review and approval of construction budgets; (ii) 180 days notice provided to Developer by City or Fire District(s); and (iii) evidence that the demand for such facility is based upon the demand created by the Project. Such buildings shall be designed to be consistent with the requirements necessary to provide service to the Project. Design of the facility shall be consistent with the EASD and the Design Guidelines, and shall be reviewed for approval by Developer and City in accord with the notice and hearing procedures of Eagle City Code. In the event that impact fees are implemented in connection with fire service, Developer shall receive a credit against such impact fees equal to that portion of the Fire Fees paid for capital improvements (as defined in Idaho Code § 67-8203).

(c) **Schools**. Public education is provided by the School District. City shall not be obligated to provide public education service to the Property. Developer has, and shall continue to work diligently with School District to ensure that the educational needs of Property residents are met. In furtherance of meeting educational needs, Developer may participate with School District in enhancing the technology in one or more schools constructed by School District on the Property. Developer generally has identified potential school sites within the Project, as depicted on the Master Parks, Trails and Public Facilities Plan, attached as **Exhibit K**, to accommodate the needs of students generated as a result of the development of the Property using School District's student generation rates to determine the probable number of sites. The specific location, specific number of school sites and types of schools (i.e., elementary, middle and high schools) will be subject to approval by Developer and School District. The school sites will be shown as being dedicated to School District on an applicable Planning Unit Master Plan by Planning Unit Master Plan basis.

Following annexation, Developer shall use good faith efforts to enter into an agreement with School District to contribute the necessary school sites to School District to accommodate for the development of schools in accordance with the Master Public Facilities Plan and applicable Planning Unit Master Plan. Developer shall coordinate a demographic study with School District to determine the demonstrated need for a school site caused by students generated from households within the Property. Developer shall contribute the school sites pursuant to the findings of such demographic study. Provided such a need is demonstrated and that such school site would predominantly serve students generated from the Property, Developer shall offer a site (or sites) for donation to School District on a free and clear basis in the appropriate number of acres, typical for a particular type of school (e.g., high school, middle school or grade school) and utilities stubbed to the site to accommodate the development of the type of public school planned. The site or sites shall contain the acreage needed to locate a public school or schools

within the Property consistent with the typical acreage for such schools presently found in School District. The final number of school sites, the type of schools and their locations shall be identified in the appropriate Planning Unit Master Plan. Developer shall identify the site(s) on a plat or scaled drawing at the time the site(s) is offered to School District. If School District does not accept the offered site(s) within 2 years of the original offer, the offer shall terminate and Developer shall have no further obligation to offer property to School District thereafter. Design of any school and school grounds shall be consistent with the EASD and the Design Guidelines, and shall be reviewed for approval by Developer. Notwithstanding the above, Developer may also provide sites for private school facilities which may or may not affect the number of public school sites needed on the Property in connection with the Project.

(d) **Library and Other Municipal Services**. Library and other municipal services presently are provided by City. City shall provide library and such other municipal services to the Property on the same basis as is provided to other residents and businesses within City. The Eagle Public Library Strategic Plan, FY 2005/06 to FY 2009/10, adopted by City Council in 2005, plans for City to secure a West End branch library site in FY 2009/10. Developer shall offer to City up to a four-acre site (subject to actual needs and based upon an approved site plan) for donation to City, with utilities stubbed, or to be stubbed, to such site to accommodate the development of the type of library and other municipal services necessary to serve the community at a location to be mutually agreed upon between City and Developer, or Developer shall have the right to incorporate the space necessary to accommodate these uses into buildings built by Developer within the Property. As of the Effective Date, it is planned that such site would be located within the Big Gulch Planning Area. Design of any library shall be consistent with the EASD and the Design Guidelines, and shall be reviewed for approval by Developer.

2.6 Parks, Trails and Open Space.

(a) **Master Parks, Trails and Open Space Plan.** The Project will contain Open Space, totaling a gross minimum acreage of 20% of the Project area with an overall goal of providing 40% or more of the Project area as Open Space in exchange for Bonus Density described in **paragraph 1.3**, above. Developer shall receive a density bonus equal to 1 unit per gross acre of Regional Open Space and .5 units per gross acre of Community Open Space for each acre of Open Space provided over and above the minimum requirement. Each Planning Area shall contain a minimum of 15% of its total gross acres as Open Space. A Master Parks, Trails and Open Space Plan for the Project is shown on **Exhibit K**, which depicts the intent to link neighborhoods and Planning Areas to various common areas and recreational uses. The pathways and trails will be within and through Planning Areas and may be located along Open Space corridors and near or adjacent to community streets and roads. Pathways and trails may also utilize drainage ways and dry gulches between common areas and neighborhoods or may be combined with the drainage system for the Project. The parks, trails and Open Space Plan shown on **Exhibit K** will be either owned by the Owners' Association City, or another entity, or a combination of all three. Developer will submit to City a more detailed Master Parks, Trails and Open Space Plan concurrently with the submittal of the Final Development Plan for the first Planning Unit Master Plan or portion thereof.

(b) **Planning Unit Master Parks, Trails and Open Space Plan.** A Planning Unit Master Parks, Trails and Open Space Plan shall be submitted as part of the Planning Unit Master Plan that generally conforms to the Master Parks, Trails and Open Space Plan and will address roadway crossings, habitat and trails within the Eagle Regional Park.

(c) **Eagle Regional Park and Willow Creek Open Space Corridor.** City has applied to acquire 1,915 acres of BLM Lands for the proposed Eagle Regional Park, which 1,915 acres are contiguous to the southern border of the Project. The purpose of City's acquisition of BLM Lands is to create a regional park that would preserve Open Space in the vicinity for trails and other recreational enjoyment, buffer neighboring properties, and create and/or improve wildlife habitat by providing a wildlife mitigation corridor in and through the vicinity. Subject to: (i) City completing City's acquisition of BLM Lands; (ii) annexation of the Project; and (iii) failure of Developer to complete the BLM Exchange as described below in **paragraph (d)**, immediately below, Developer will donate approximately 800 acres of private land to City, as set forth in **Exhibit N**, which when combined with City BLM Lands, would create the

Eagle Regional Park totaling 2,715 acres. Those 800 acres contain important wildlife habitat and vegetative communities and are located adjacent to that portion of the Project planned for low-density residential neighborhoods and Open Space. The two portions of the Park (that is the 1,915 acres and the 800 acres) would be connected by Open Space at least 100 feet in width. In addition, Developer will create a tract to be maintained by the Owners' Association of approximately 80 acres of private land as part of the Willow Creek Open Space Corridor. Developer will work with and assist City on City's planning of the Park and Open Space Corridor with such improvements as trailheads, trails, lookouts and fencing along this boundary, including providing, at no expense to City, underlying topographical data, planning data and biological and wildlife studies.

(d) BLM Exchange. In an attempt to consolidate lands and prevent fragmentation of Open Space, Developer has filed a request with BLM to exchange approximately 800 acres of Developer's lands for 815 acres of BLM Lands. The exchange would be subject to BLM designating the M3 Eagle 800 acres as Open Space. The Parties acknowledge the appraised value of the Developer-owned 800 acres may be less than the appraised value of the BLM-owned 815 acres. In the event the BLM-owned 815 acres is appraised at a higher value than the Developer-owned 800 acres, Developer shall include additional, contiguous acres of Developer-owned land with such 800 acres to bring the appraised value of the Developer-owned lands to roughly the appraised value of the BLM-owned 815 acres. In the event that the exchange is completed, the 815 acres presently owned by BLM would become Additional Property as defined herein and become a part of the Highway Mixed-Use/Business Park Planning Area upon receiving the appropriate approvals from City. In the event that the exchange does occur Developer shall not receive any Bonus Density for such 800 acre parcel. In the event that the BLM exchange is not completed within 10 years from the date of this Agreement, Developer will donate the 800 acres to City for use as a regional park. The M3 Eagle 800 acres will be available for public use during the pending exchange as if it were a part of the Eagle Regional Park. City agrees that it will reasonably cooperate as necessary to accommodate this transaction.

(e) Reimbursement. If Developer, at Developer's cost and expense, develops and/or constructs and dedicates to City any portion of Developer's land for community or regional public park(s), Regional Open Space regional trails or publicly dedicated regional equestrian center or contributes to the improvements to the Eagle Regional Park, City, upon approval of the improvement costs ("**Approved Park Costs**"), shall either credit or reimburse Developer from park impact fees collected at the time of a building permit (or similar funding mechanisms) from each home that is permitted within the Project ("**M3 Eagle Park Impact Fees**"). City and Developer shall work to mutually track such Approved Park Costs and receipt and repayment of the M3 Eagle Park Impact Fees on a quarterly basis ("**Park Reimbursement Agreement**"). Such Park Reimbursement Agreement shall have a duration that ends the earlier of: (i) 10 years following completion of the portion of the applicable Park System for which reimbursement is sought; or (ii) when Developer has been fully reimbursed for costs in connection with development of any portion of the applicable Park System that benefits properties other than the Project. As an alternative to the reimbursement of Approved Park Costs, City and Developer may enter into an agreement whereby Developer is credited for park impact fees if Developer develops any of the park, Open Space or trail improvements listed above within a timeframe acceptable to City. Reimbursement shall be consistent with the Eagle Park Impact Fee Ordinance.

(f) Maintenance of Regional Open Space. Developer acknowledges the significance of the public Regional Open Space being created in the foothills and agrees to cooperate with City to establish an ongoing funding mechanism which is applicable to all residential and Non-Residential Use lands, homes or buildings within the North Eagle Foothills Planning Area and/or City limits. This funding mechanism shall be solely for the Regional Open Space Associated with this Project and identified in Exhibit K of this Agreement.

(g) Mutual Cooperation. City and Developer shall each use all good faith efforts to support each and every exchange of lands between Developer and BLM and/or City and BLM.

2.7 Planning Unit Master Environmental Design Plan.

(a) Landscape. All development of the Property shall be landscaped and meet or exceed the landscape requirements in the PUD Standards and/or Design Guidelines and shall, if necessary, include a threatened or endangered plant relocation program and revegetation guidelines. A landscape plant list shall be included in the Design Guidelines. Developer shall identify an Owners' Association or other entity to accept the ownership and maintenance of landscaping and irrigation systems. All Landscape guidelines shall be reviewed and approved by the Eagle Design Review Board prior to adoption by the City of Eagle.

(b) Signage. Signage shall be coordinated throughout the entire Property, with different areas within a Planning Unit potentially having particular signage themes. These areas may include urban, mixed-use entertainment areas, employment and commercial areas, parks and recreation areas, residential villages, residential hillsides, resort areas, pathways and trails, public and private roadways, and areas for temporary directional signage. Although there may be individual signage themes within different areas of the Property, continuity in appearance shall be recognizable through the use of color, material, form and character. All signage design shall conform to the regulations and procedures contained in the PUD Standards and/or the Design Guidelines. All Sign Standards shall be reviewed and approved by the Eagle Design Review Board prior to adoption by the City of Eagle.

(c) Lighting. A Lighting Plan shall incorporate "Dark Sky" design principles to reduce excessive light levels, light trespass and glare and to promote dark skies, to the extent possible. Lighting criteria will be established through the Design Guidelines. All lighting standards shall be reviewed and approved by the Eagle Design Review Board prior to adoption by the City of Eagle.

(d) Habitat Mitigation Plan. A Habitat Mitigation Plan that addresses development within Constrained Lands, as generally identified on Exhibit M as Habitat Areas of Special Concern, shall be prepared by Developer in cooperation with City. The Habitat Mitigation Plan shall identify areas where Mitigation is required, the type of Mitigation actions, if any, required, and the rationale for such actions. City and Developer may coordinate, cooperate, and consult with other agencies in the development and review of the Habitat Mitigation Plan, but approval authority for the Habitat Mitigation Plan shall rest solely with City based on standards commensurate with such Habitat Mitigation Plan(s) and based on findings that demonstrate a rational nexus. Nothing in the Habitat Mitigation Plan may be construed as either incorporating state and/or federal standards and/or regulations that are not applicable to the Property or otherwise conferring any approval authority for the Habitat Mitigation Plan to any state or federal agency. The Habitat Mitigation Plan shall be submitted to City prior to Developer's submission to City of the first Planning Unit Master Plan. Implementation of such Habitat Mitigation Plan shall be on a Planning Unit by Planning Unit basis. The Pre-Mitigation Density for any Planning Area shall not be increased until such Mitigation Plans are approved.

2.8 Construction. To the extent Developer develops the Property, the Parties shall have the right and the obligation, at any time after the commencement of the Extension Term, to dedicate land, subject to City's or other applicable governmental jurisdiction's acceptance, and/or construct or cause to be constructed and installed any or all portions of the Public Infrastructure that relates to the segments of the Property developed by Developer. All such construction performed by Developer shall be performed to minimize disturbance to native and existing plant cover outside of areas being developed. Developer shall comply with all applicable requirements, standards, codes, rules, or regulations of City and in compliance with all applicable permit requirements, standards, codes, rules or regulations of: (a) the State of Idaho; (b) the United States of America; and (c) other applicable governmental agencies. Developer shall have the right, upon receipt from City (or other applicable governmental jurisdiction, as may be applicable) of an appropriate encroachment permit, to enter and remain upon and cross over any City-held (or other applicable governmental jurisdiction, as may be applicable) easements or rights-of-way to the extent reasonably necessary to facilitate such construction, or to perform necessary maintenance or repairs of such Public Infrastructure, provided that Developer's use of such easements and rights-of-way shall not impede or adversely affect City's use and enjoyment thereof and provided that Developer shall substantially restore such easements and rights-of-way to their condition prior to Developer's entry

upon and completion of such construction, repair or maintenance. To the extent permitted by law and subject to obtaining an encroachment permit from City (or other applicable governmental jurisdiction), the prior dedication of any easements or rights-of-way shall not affect or proscribe Developer's right to construct, install, and/or provide Public Infrastructure thereon or thereover. City, as necessary to implement the installation of Public Infrastructure, shall cooperate reasonably with and assist in: (a) the abandonment of any unnecessary public rights-of-way or easements currently located on the Property and not otherwise used or required by other members of the public; (b) the acquisition of any necessary public rights-of-way or easements not currently located on the Property and required to be consistent with the Planning Unit Master Plans or provide access to the Property pursuant to the Planning Unit Master Plans except on lands currently filed with and under review by the City of Eagle for development approvals; and (c) submitting requests or filing applications, or entering into intergovernmental agreements with appropriate governmental entities regarding the abandonment or acquisition of public rights-of-way or easements necessary to develop the Property.

2.9 **Infrastructure Assurance.** It shall be a condition to the issuance of a building permit or permits that City shall have been provided with bonds or letters of credit sufficient to ensure completion of Public Infrastructure in connection with the applicable Planning Unit, in accordance with City's existing policies or ordinances for the amount of such bonds or letters of credit. The Infrastructure Assurance(s) shall be reduced accordingly as construction of the infrastructure subject to such assurance is completed. Within 30 days from City's approval of the particular completed Public Infrastructure for which City has required and Developer has provided Infrastructure Assurance, City shall release (or, in the case of a letter of credit, accept a substitute letter of credit) such assurance, in whole or in part as may be appropriate under the circumstances.

2.10 **Public Infrastructure Development Fee Credit; Reimbursement.** Notwithstanding anything to the contrary herein, the Public Infrastructure to be provided by Developer shall confer a benefit on the Property and, in certain instances, may confer a benefit on land areas outside the Property. In recognition of such benefits to the Property, in connection only with the Public Infrastructure under the jurisdiction of City, City shall take into account and credit and/or reimburse Developer against the sum total of all applicable public infrastructure development fees, under City's jurisdiction and control, now existing or adopted by City in the future, owed by Developer or anticipated builders/residents on the Property. In recognition of such benefits to land areas outside of the Property, City shall take into account and reimburse Developer against the sum total of all of Developer's costs and expenses associated with constructing, acquiring, and/or installing such Public Infrastructure benefiting such other land areas. This paragraph shall survive the termination of this Agreement.

3. REGULATION OF DEVELOPMENT.

3.1 Regulation of Development.

(a) Applicable Rules. The ordinances, rules, regulations, permit requirements, development fees, other infrastructure fees, exactions, other requirements, and/or official policies however denominated, applicable to and governing the development of the Property shall be those that are existing and in force as of the Date of Application, as may be mutually amended by amendment to this Agreement. City shall not amend this Agreement without written approval of Developer as set forth herein.

(b) Permissible Additions to the Applicable Rules. Except as otherwise provided in this Agreement City may enact the following provisions, and take the following actions, which shall be applicable to and binding on the development of the Property provided, however, City shall provide Developer with an opportunity to suggest methods of enacting and implementing such provisions to the Property:

(i) future land use ordinances, rules, regulations, permit requirements, other requirements and official policies of City that are consistent with the express provisions of this Agreement, and not contrary to the existing land use regulations applicable to and governing the development of the Property, provided that such land use ordinances,

rules, regulations, permit requirements, other requirements, and official policies shall, to the extent applicable, not involve the modification of any factual determinations of City memorialized in this Agreement and shall not materially impair Developer's ability to develop the Property in the manner provided in this Agreement. In the event of conflict between this Agreement and such future land use ordinances, rules, regulations, permit requirements, other requirements and policies of City, this Agreement shall control;

(ii) other future land use ordinances, rules, regulations, permit requirements, development fees, other requirements, and/or official policies that Developer may agree, in writing apply to the development of the Property;

(iii) future land use ordinances, rules, regulations, permit requirements, other requirements and official policies of City enacted as necessary to comply with this Agreement or mandatory requirements imposed on City by state or federal laws and regulations, court decisions, and other similar superior external authorities beyond the control of City; provided, however, that in the event any such mandatory requirement prevents or precludes compliance with this Agreement, such affected provisions of this Agreement shall be modified as may be necessary to achieve the minimum permissible variance from the terms of this Agreement in order to achieve compliance with such mandatory requirement. To the extent such compliance requires any discretionary factual determination by City, such determinations shall be consistent with City's findings memorialized in this Agreement;

(iv) future land use and other ordinances, rules, regulations, permit requirements, other requirements and official policies of City of uniform application throughout City and reasonably necessary to alleviate legitimate threats to public health and safety, provided that such land use ordinances, rules, regulations, permit requirements, other requirements and official policies shall, to the extent applicable, not involve the modification of any material factual determinations of City memorialized in this Agreement; and

(v) future updates of, and amendments to, existing building, fire, plumbing, mechanical, electrical, dangerous buildings, drainage, and similar construction and safety related codes, such as the International Building Code, which updates and amendments are generated by a nationally recognized construction/safety organization, such as the International Conference of Building Officials, or by the state or federal governments.

3.2 Amendment. City and Developer acknowledge that amendments to this Agreement may be necessary or appropriate from time to time. When the Parties agree that an amendment is necessary or appropriate, the Parties shall, unless otherwise required by applicable law as established in this Agreement or by state or federal statute, effectuate minor amendments administratively approved by the Zoning Administrator which include: (i) Any minor alteration to the list of permitted uses of the Property set forth in the PUD Standards and/or this Agreement; and (ii) Any reallocation of residential density or Non-Residential Use acreage between Planning Areas so long as the Maximum Planning Area Density or Maximum Density allowed per this Agreement is not exceeded. The approval of such minor amendments shall not necessitate formal amendment of this Agreement, but shall be retained in City's official file for the Property. All amendments to this Agreement shall be reviewed and approved by City Council in accord with the notice and public hearing procedures of Eagle City Code. The Parties shall cooperate in good faith to agree upon and use reasonable efforts to process any amendments to this Agreement.

For the Extension Term of this Agreement, no moratorium, future ordinance, resolution or other land use rule or regulation imposing a limitation on the development or the rate, timing or sequencing of the development, of the Property or any portion thereof shall apply to or govern the development of the Property whether affecting land use permits, subdivision plats, building permits, occupancy permits or other entitlements to use issued or granted by City, except as otherwise provided in this Agreement. Nothing in this paragraph shall prohibit City from withholding the issuance of Certificates of Occupancy for

a structure to be occupied if the Public Infrastructure improvements set forth in this Agreement, Planning Unit Master Plans, and Final Development Plans required to serve the applicable portion of the Property on which a structure to be occupied is to be located are not in place prior to occupation of such structure.

3.3 Changes to Zoning, PUD Standards and Development Program. For the Extension Term of this Agreement, any requests for changes or modifications to the PUD Standards, this Agreement or the zoning designations applicable to the Property shall be processed in the manner then set forth by Eagle City Code and/or this Agreement and/or other applicable law. Any such requests that are initiated by City shall become effective only upon Developer's written consent. Nothing in this paragraph shall be deemed to require City approval of requested changes to the zoning or land use designations applicable to this Property after annexation. The approval of any Planning Unit Master Plan(s) or Final Development Plan(s) which contain less density than is allocated to that Planning Unit Master Plan shall not have the effect of reducing the Project's overall Maximum Density but Developer shall be able to reallocate such density in accordance with this Agreement.

3.4 Vested Rights. As set forth in this Agreement, Developer shall have a vested right to develop the Property in accordance herewith. This section shall survive termination of this Agreement. The determinations of the Parties memorialized in this Agreement, together with the assurances provided to the Parties in this Agreement, including this section, are bargained for and in consideration for the undertakings of the Parties set forth herein and contemplated by this Agreement, and are intended to be and have been relied upon by the Parties to the Parties' detriment in undertaking the obligations of the Parties under this Agreement.

4. PROJECT GOVERNANCE.

4.1 Governance Entities. Developer shall create appropriate entities including, without limitation, a non-profit Owners' Association, and record CC&Rs consistent with this Agreement which bind all present and future owners within the Project and provide for the perpetual support and maintenance of the Project's governance entities, processes and common areas and to establish quality control throughout the Property both during development and during maturing of the community after the last house is built. A conceptual outline of the CC&Rs for the Project is attached as **Exhibit O**. Developer shall provide City with a draft set of CC&Rs concurrently with the submittal of the Final Development Plan for the first Planning Unit or portion thereof.

4.2 PUD Standards. Enforceable planning standards shall be applicable to all development within the Property, including both new construction and later modifications. The general elements to be addressed in the PUD Standards for the Project are described in **Exhibit D**. The PUD Standards shall be distinct to the foothills area that comprises the Project, and shall meet and enhance the PUD standards set forth in City Code, Chapter 6. Developer shall provide City with a draft set of PUD Standards within 18 months of the Effective Date of this Agreement, which PUD Standards shall be reviewed by the P & Z Commission and approved by the City Council in accord with the notice and hearing procedures of Eagle City Code. Such PUD Standards may be reviewed and approved separately or in connection with the Final Development Plan for the first Planning Unit or portion thereof. Upon approval, this Agreement shall be amended to include the PUD Standards, as approved. In the event of any conflicts between the PUD Standards and the City Code, Chapter 6, the PUD Standards shall prevail. In the event that City fails to approve the PUD Standards then Developer shall have the right to develop the Property in accordance with the adopted City Code, Chapter 6, as may be amended from time to time.

4.3 Design Guidelines. Enforceable planning, engineering, architectural and landscape design guidelines, including, without limitation, mass grading guidelines and water and native plant conservation techniques, shall be applicable to all development within the foothills area that comprises the Property, including both new construction and later modifications. The general elements to be addressed in the Design Guidelines for the Project are described in **Exhibit P**. The Design Guidelines shall be distinct to the Project, but shall meet and enhance the design standards set forth in the EASD and City Code, Section 8-2A-5. Developer shall provide City with a draft set of Design Guidelines within 18 months of the Effective Date of this Agreement, which Design Guidelines shall be reviewed by the

Design Review Board prior to review by the P & Z Commission and approved by the City Council in accord with the notice and hearing procedures of Eagle City Code. Such Design Guidelines may be reviewed and approved separately or in connection with the Final Development Plan for the first Planning Unit or portion thereof. Upon approval, this Agreement shall be amended to include the Design Guidelines, as approved. In the event of any conflicts between the Design Guidelines and the EASD and/or City Code, Section 8-2A-5, the Design Guidelines shall prevail. In the event that City fails to approve the Design Guidelines then Developer shall have the right to develop the Property in accordance with the adopted EASD or City Code, Section 8-2A-5, as may be amended from time to time.

5. COOPERATION AND ALTERNATIVE DISPUTE RESOLUTION.

5.1 Compliance Reviews. As long as Developer owns any of the Property, Developer's Representative shall meet with City's Representative at least once per year during the Term, to review development completed in the prior year and the development anticipated to be commenced or completed in the ensuing year. Developer shall be required to provide City with such information as may reasonably be requested including: acreage of the Property sold in the prior year; acreage of the Property under contract; the number of certificates of occupancy issued in the prior year; the number of certificates of occupancy anticipated to be issued in the ensuing year; and Development Rights allocated in the prior year and anticipated to be allocated in the ensuing year.

5.2 Agreement to Cooperate. In the event of any legal or equitable action or other proceeding instituted by a third-party or other governmental entity or official challenging the validity of any provision of this Agreement, the Parties hereby agree to cooperate in defending such action or proceeding. City and Developer may agree to select mutually agreeable legal counsel to defend such action or proceeding with the parties sharing equally in the cost of such joint counsel, or each party may select its own legal counsel at each party's expense. All other costs of such defense(s) shall be shared equally by the parties. Each party shall retain the right to pursue its own independent legal defense.

5.3 Default. Failure or unreasonable delay by either Party to perform or otherwise act in accordance with any term or provision of this Agreement for a period of 30 days following written notice thereof from the other Party (the "**Cure Period**"), shall constitute a default under this Agreement; provided, however, that if the failure or delay is such that more than 30 days would reasonably be required to perform such action or comply with any term or provision hereof, then such Party shall have such additional time as may be reasonably necessary to perform or comply so long as such Party commences performance or compliance within such 30-day period and diligently proceeds to complete such performance or fulfill such obligation (the "**Extended Cure Period**"). The written notice provided for above shall specify the nature of the alleged default and the manner in which said default may be satisfactorily cured, if possible. In the event a default of Developer is not cured within the Cure Period or the Extended Cure Period, if applicable, the zoning of that portion of the Property related to such default shall convert to the A-R (Agricultural-Residential) zoning designation. In the event a default of City is not cured within the Cure Period or the Extended Cure Period, if applicable, upon written notice from Developer, City shall take all steps to immediately de-annex the Property and this Agreement shall automatically terminate.

5.4 Dispute Resolution/Remedies.

(a) Process. Notwithstanding anything to the contrary herein, if an event of default is not cured within the Cure Period or the Extended Cure Period, if applicable, the non-defaulting Party may initiate the process by providing written notice initiating the process to the alleged defaulting Party. Within 15 days after delivery of such notice, each Party shall appoint one person to act as mediator on behalf of such Party and notify the other Party. Within 15 days after delivery of such notice, the persons appointed shall themselves appoint one person to serve as the sole mediator. The mediator shall set the time and place of the mediation hearing and shall give reasonable notice of the hearing to the Parties. The Parties may agree to hold the hearing by telephone.

(b) Hearing. The Parties have structured this dispute resolution process with the goal of providing for the prompt and efficient resolution of all disputes falling within the purview of this process. The hearing of any dispute shall commence as soon as practicable, but in no event later than 30 days after selection of the mediator. This deadline can be extended only with the consent of both Parties. Proceedings shall be under the control of the mediator and as informal as practicable. In order to effectuate the Parties' goals, the mediation, once commenced, shall proceed from business day to business day until concluded, absent a showing of unforeseen or emergency circumstances. If those receiving a request for mediation fail to appoint a mediator within the time above specified, or if the result of such mediation is unsatisfactory to one or more Parties, then any Party may avail itself of any legal or equitable remedy available under Idaho law.

(c) Fees. Each Party shall pay one-half of all fees and costs associated with the mediation process.

(d) Condemnation. The process and remedies set forth herein shall not apply to an action to condemn or acquire by inverse condemnation all or any portion of the Property, and in the event of any such action, Developer shall have all rights and remedies available to it at law or in equity.

5.5 Prevailing Party. In the event that either party to this Agreement shall file suit or action at law or equity to interpret or enforce this Agreement, the unsuccessful party to such litigation agrees to pay to the prevailing party all costs and expenses including reasonable attorneys' fees incurred by the prevailing party. Similarly, all fees and costs associated with an appeal to any appellate court thereafter, including, without limitation, the prevailing Party's attorneys' fees, shall be paid by the non-prevailing party.

6. NOTICES AND FILINGS.

6.1 Manner of Serving. All notices, filings, consents, approvals and other communications provided for herein or delivered in connection herewith shall be validly delivered, filed, made, or served if in writing and delivered personally or delivered by a nationally recognized overnight courier or sent by certified United States Mail, postage prepaid, return receipt requested, if to:

City:

City Clerk
City of Eagle
660 E. Civic Lane
P.O. Box 1520
Eagle, ID 83616

with a copy to:

Susan E. Buxton
Moore Smith Buxton & Turcke, Chtd.
950 W. Bannock, Suite 520
Boise, ID 83702

Developer:

M3 Eagle L.L.C.
4222 E. Camelback Road, #H100
Phoenix, AZ 85018
Attn: William Brownlee

with a copy to:

Dana Stagg Belknap
Gallagher & Kennedy
2575 E. Camelback Road, Suite 1100
Phoenix, AZ 85016

and a copy to:

JoAnn C. Butler
Spink Butler, LLP
251 E. Front Street, Suite 200
PO Box 639
Boise, ID 83701

or to such other addresses as either Party hereto may from time to time designate in writing and delivery in a like manner.

6.2 **Mailing Effective**. Notices, filings, consents, approvals and communication given by mail shall be deemed delivered immediately if personally delivered, 24 hours following deposit with a nationally recognized courier, or 72 hours following deposit in the U.S. mail, postage prepaid and addressed as set forth above.

7. MISCELLANEOUS.

7.1 **Operations During Construction**. Developer intends to, and hereby does, reserve mineral and/or royalty rights on minerals located on or under the Property. Mining (for purposes of on-site material usage), blasting and batch plant operations shall be allowed on-site during construction of the Project in accordance with Eagle City Code and this Agreement. The location of such operations shall be subject to reasonable regulation and approval by the appropriate governmental agencies that have jurisdiction over such operations. Portions of the Property not currently under development may be used for agricultural purposes.

7.2 **Termination Upon Sale to Public**. Except as otherwise provided herein, this Agreement is not intended to and shall not create conditions or exceptions to title or covenants running with the Property beyond the development of the Property. Therefore, in order to alleviate any concern as to the effect of this Agreement on the status of title to any portion of the Property, this Agreement shall terminate without the necessity of any notice, agreement or recording by and/or between the Parties in connection with any lot that has been finally subdivided and individually (and not in "**bulk**") leased (for a period of longer than one year) or sold to the end-purchasers or users thereof (a "**Public Lot**") and thereupon such Public Lot shall be released from and no longer be subject to or burdened by the provisions of this Agreement.

7.3 **Termination Upon Completion of Development**. City shall, upon written request of Developer, execute appropriate and recordable evidence of termination of this Agreement if City has determined reasonably that Developer has fully performed Developer's obligations under this Agreement in connection with all or a portion of the Property. Upon final approval of any detailed phase of the Property, or portion thereof, by City, and the recordation of the final plat in connection therewith, City shall, as soon as practicable, execute and record an appropriate instrument of release of the Agreement in connection with such phase of development of the Property.

7.4 **Status Statements**. Any Party may, at any time, and from time to time, deliver written statement to any other Party requesting that such other Party provide in writing that, to the knowledge of such other Party: (a) this Agreement is in full force and effect and a binding obligation of the Parties; (b) this Agreement has not been amended or modified, and if so amended, identifying the amendments; (c) the requesting Party is not in default in the performance of its obligations under this Agreement, or if in

default, to describe therein the nature and amount of any such defaults. A Party receiving a request hereunder shall execute and return such statement within a reasonable time following the receipt thereof. City acknowledges that such statement hereunder may be relied upon by transferees and mortgagees. City shall have no liability for monetary damages to Developer, and transferee or mortgagee, or any other person in connection with, resulting from or based upon the issuance of any statement hereunder.

7.5 Mortgage Provisions.

(a) Mortgagee Protection. This Agreement shall be superior and senior to any future lien placed upon the Property, or any portion thereof, including the lien of any Mortgage. However, no breach hereof shall invalidate or impair the lien of any Mortgage made in good faith and for value, and any acquisition or acceptance of title or any right or interest in or with respect to the Property, or any portion thereof, by a mortgagee (herein defined to include a beneficiary under a deed of trust), whether under or pursuant to a mortgage foreclosure, trustee's sale or deed in lieu of foreclosure or trustee's sale, or otherwise, shall be subject to all of the terms and conditions contained in this Agreement. No mortgagee shall have an obligation or duty under this Agreement to perform Developer's obligations or other affirmative covenants of Developer hereunder, or to guarantee such performance; except that to the extent that any covenant to be performed by Developer is a condition to the performance of a covenant by City, the performance thereof shall continue to be a condition precedent to City's performance hereunder.

(b) Bankruptcy. If any mortgagee is prohibited from commencing or prosecuting foreclosure or other appropriate proceedings in the nature thereof by any process or injunction issued by any court of competent jurisdiction or by reason of any action by any court having jurisdiction of any bankruptcy or insolvency proceeding involving Developer, the times specified above for commencing or prosecuting foreclosure or other proceedings shall be extended for the period of the prohibition, provided that such mortgagee is proceeding expeditiously to terminate such prohibition and in no event for a period longer than 2 years.

8. GENERAL.

8.1 Waiver. No delay in exercising any right or remedy shall constitute a waiver by either Party thereof, and no waiver by City or Developer of the breach of any covenant or condition of this Agreement shall be construed as a waiver of any preceding or succeeding breach of the same or any other covenant or condition of this Agreement.

8.2 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts and such signature pages all attached to a single document so that the signatures of all Parties may be physically attached to a single document.

8.3 Headings. This Agreement shall be construed according to its fair meaning and as if prepared by both Parties hereto. Titles and captions are for convenience only and shall not constitute a portion of this Agreement. As used in this Agreement, masculine, feminine or neuter gender and the singular or plural number shall each be deemed to include the others wherever and whenever the context so dictates.

8.4 Exhibits and Recitals. Any exhibit attached hereto shall be deemed to have been incorporated herein with the same force and effect as if fully set forth in the body hereof. The Recitals set forth above shall be deemed to have been incorporated herein with the same force and effect as if fully set forth in the body hereof. The Definitions set forth prior to the Recitals shall be deemed to have been incorporated herein with the same force and effect as if fully set forth in the body hereof.

8.5 Further Acts. Each of the Parties shall promptly execute and deliver all such documents and perform all such acts as reasonably necessary, from time to time, to carry out the matters contemplated by this Agreement.

8.6 **Time of Essence.** Time is of the essence in implementing the terms of this Agreement.

8.7 **Successors and Assigns.** The burdens of this Agreement are binding upon, and the benefits inure to, all successors in interest of the Parties to this Agreement and constitute covenants that run with the land. Developer's rights and obligations hereunder shall only be assigned to a person or entity that has acquired the Property, or a portion thereof, and shall be assigned by a written instrument, recorded in the official records of Ada County, Idaho, expressly assigning such rights and obligations. In the event of a complete or partial assignment of Developer's rights and obligations hereunder, except an assignment for collateral purposes only, Developer's liability under this Agreement shall terminate. Nothing in this Agreement shall operate to restrict Developer's ability to assign less than all of Developer's rights and obligations under this Agreement to those persons or entities that acquire any portion of the Property. Notwithstanding the foregoing, the ongoing ownership, operation and maintenance obligations in connection with this Agreement may be assigned to an Owners' Association. Developer shall provide City with written notice of any assignment of Developer's rights or obligations to such Owners' Association within a reasonable period of time following such assignment. Notwithstanding any other provisions of this Agreement, Developer may assign all or part of Developer's rights and duties under this Agreement as collateral to any financial institution from which Developer has borrowed funds for use in developing the Property.

8.8 **No Partnership; Third Parties.** It is hereby specifically understood, acknowledged and agreed that neither City nor Developer shall be deemed to be an agent of the other for any purpose whatsoever. It is not intended by this Agreement to, and nothing contained in this Agreement shall, create any partnership, joint venture or other arrangement between Developer and City. No term or provision of this Agreement is intended to, or shall, be for the benefit of any third-party, person, firm, organization or legal entity not a party hereto, and no such other third-party, person, firm, organization or legal entity shall have any right to cause of action hereunder.

8.9 **Entire Agreement.** This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter hereof. All prior and contemporaneous agreements, representations and understandings of the Parties, oral or written, are hereby superseded and merged herein. No modification or amendment to this Agreement of any kind whatsoever shall be made or claimed by Developer or City shall have any force or effect whatsoever unless the same shall be endorsed in writing and signed by the Party against which the enforcement of such modification or amendment is sought, and then only to the extent set forth in such instrument. Such approved amendment shall be recorded in the Official Records of Ada County, Idaho. Any alteration or change to this Agreement shall be made only after complying with the notice and hearing provisions of Idaho Code Section 67-6509, as required by City Code Section 8-10-1.

8.10 **Construction.** All Parties hereto have either been represented by separate legal counsel or have had the opportunity to be so represented. Thus, in all cases, the language herein shall be constructed simply in accord with its fair meaning and not strictly for or against a Party, regardless of whether such Party prepared or caused the preparation of this Agreement.

8.11 **Names and Plans.** Developer shall be the sole owner of all names, titles, plans, drawings, specifications, ideas, programs, designs and work products of every nature at any time developed, formulated or prepared by or at the request of Developer in connection with the Property and the Project; provided, however, that in connection with any conveyance of portions of the Property to City, such rights pertaining to the portions of the Property so conveyed shall be assigned to City to the extent that such rights are assignable.

8.12 **Severability.** If any provision of this Agreement is declared void or unenforceable, such provision shall be severed from this Agreement, which shall otherwise remain in full force and effect. If any applicable law or court of competent jurisdiction prohibits or excuses one Party from undertaking any contract commitment to perform any act hereunder, then the other Party may, at such other Party's sole discretion, terminate this Agreement or proceed with that portion of the Agreement not prohibited by law. It is the Parties' express intention that the terms and conditions be construed and applied as provided

herein, to the fullest extent possible. It is the Parties' further intention that, to the extent any such term or condition is found to constitute an impermissible restriction of the police power of City, such term or condition shall be construed and applied in such lesser fashion as may be necessary to not restrict the police power of City.

8.13 Choice of Law. This Agreement shall be construed in accordance with the laws of the State of Idaho in effect on the Date of Application. Any action brought in connection with this Agreement shall be brought in a court of competent jurisdiction located in Ada County, Idaho.

8.14 Recordation. After its execution, this Agreement shall be recorded in the office of the Ada County, Idaho Recorder at the expense of Developer. Each commitment and restriction on the Project shall be a burden on the Property, shall be appurtenant to and for the benefit of the Property and shall run with the land. This Agreement shall be binding on Developer and owners, and their respective heirs, administrators, executors, agents, legal representatives, successors, and assigns; provided, however, that if all or any portion of the Project is sold, the sellers shall thereupon be released and discharged from any and all obligations arising under this Agreement in connection with the portion of the Property sold. The new owner of the Property or any portion thereof (including, without limitation, any owner who acquires its interest by foreclosure, trustee's sale or otherwise) shall be liable for all commitments and other obligations arising under this Agreement with respect to the Property or portion thereof.

8.15 No Developer Representations. Nothing contained herein shall be deemed to obligate Developer to complete any part or all of the development of the Property in accordance with this Agreement, the Development Plan or any other plan, and this Agreement shall not be deemed a representation or warranty by Developer of any kind whatsoever.

8.16 Good Standing; Authority. Each of the Parties represents to the other that: (a) Developer is a Texas limited liability company duly qualified to do business in Idaho; (b) City is a municipal corporation duly qualified to do business in the State of Idaho; and (c) the individual(s) executing this Agreement on behalf of the Parties are authorized and empowered to bind the Party on whose behalf each such individual is signing.

IN WITNESS WHEREOF, the Parties hereto, having been duly authorized, have executed this Pre-Annexation and Development Agreement to be effective on the Effective Date.

CITY:

CITY OF EAGLE, IDAHO, a municipal corporation organized and existing under the laws of the State of Idaho

By:_____
Nancy C. Merrill, Mayor

Attest:

_____
Sharon K. Bergmann, City Clerk

CITY OF EAGLE CORPORATE SEAL INCORPORATED 1971 STATE OF IDAHO

M3 EAGLE:

M3 Eagle L.L.C., a Texas limited liability company

By: M3 BUILDERS, L.L.C., an Arizona limited liability company, its Manager

By: The M3 Companies, L.L.C., an Arizona limited liability company, its sole member

By:_____
William I. Brownlee, Member

STATE OF IDAHO)
) ss.
County of Ada)

On this 27 day of December, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared Nancy C. Merrill, known or identified to me to be the Mayor of the City of Eagle, the municipal corporation that executed the instrument or the person who executed the instrument on behalf of said municipal corporation, and acknowledged to me that such municipal corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Tracy E. Osborn
Notary Public for Idaho
Residing at Kuna, Id.
My commission expires: 12/22/08

TRACY E. OSBORN NOTARY PUBLIC STATE OF IDAHO

ARIZONA
STATE OF ~~IDAHO~~)
.) ss.
County of ~~Ada~~ Yavapai)

On this 19 day of December, 2007, before me, the undersigned, a Notary Public in and for said State, personally appeared William I. Brownlee, member of The M3 Companies, L.L.C., an Arizona limited liability company, known or identified to me to be the Manager of M3 Eagle L.L.C., the limited liability company that executed the instrument, or the person who executed the instrument on behalf of said limited liability company, and acknowledged to me that such limited liability company executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Judith E. Brummett-Bowie
Notary Public for ~~Idaho~~ ARIZONA
Residing at PRESCOTT, AZ
My commission expires: 2/22/2011

OFFICIAL SEAL
JUDITH E. BRUMMETT-BOWIE
Notary Public - State of Arizona
YAVAPAI COUNTY
My Comm. Expires Feb. 22, 2011

EXHIBIT A
LEGAL DESCRIPTION AND DEPICTION OF THE PROPERTY

DESCRIPTION FOR
M3 PROPERTIES

September 13, 2007

PARCEL 1

A PARCEL OF LAND BEING A PORTIONS OF SECTIONS 10, 11, 12, 13, 14, 15, 22, 23, 24, 26, 27, 28 AND 33, TOWNSHIP 5 NORTH, RANGE 1 WEST, B.M. AND SECTIONS 7, 17, 18, 19 AND 20, TOWNSHIP 5 NORTH, RANGE 1 EAST, B.M., ADA COUNTY, IDAHO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SECTION 33, T.5 N., R.1 W., B.M., THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE S 51°51'16" W 1038.72 FEET TO A POINT;

THENCE S 08°04'51" E 54.22 FEET TO A POINT;

THENCE S 63°02'18" W 382.31 FEET TO A POINT;

THENCE S 67°11'38" W 254.57 FEET TO A POINT;

THENCE S 52°16'06" W 535.08 FEET TO A POINT;

THENCE S 38°40'25" W 715.30 FEET TO A POINT;

THENCE S 21°05'40" W 84.42 FEET TO A POINT;

THENCE N 88°57'16" W 182.70 FEET TO A POINT ON A CURVE ON THE EAST RIGHT OF WAY OF HIGHWAY 16;

ALONG THE EAST RIGHT OF WAY OF HIGHWAY 16 THE FOLLOWING:

THENCE 283.91 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 1859.86 FEET, A DELTA ANGLE OF 8°44'47", A TANGENT OF 142.23 FEET AND A CHORD BEARING N 13°10'27" W 283.63 FEET TO A POINT OF SPIRAL CURVATURE;

THENCE 355.29 FEET ALONG A SPIRAL CURVE, HAVING A RADIUS OF 1897.44 FEET, A THETA ANGLE OF 5°21'51" AND A CHORD BEARING
N 05°11'06" W 355.15 FEET TO A POINT OF TANGNECY;

THENCE N 03°23'51" W 455.37 FEET TO A POINT;

LEAVING THE EAST RIGHT OF WAY OF HIGHWAY 16:

THENCE S 89°01'44" E 1121.29 FEET TO A POINT;

THENCE N 00°00'35" W 1132.12 FEET TO A POINT;

THENCE S 50°24'32" W 361.44 FEET TO A POINT;

THENCE N 88°44'12" W 75.41 FEET TO A POINT;

THENCE S 58°25'55" W 467.45 FEET TO A POINT;

THENCE N 00°37'49" E 303.23 FEET TO A POINT;

THENCE S 67°20'45" E 25.66 FEET TO A POINT OF CURVATURE;

THENCE 167.31 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 140.00 FEET, A DELTA ANGLE OF 68°28'28", A TANGENT OF 95.28 FEET, A CHORD BEARING N 78°25'01" E 157.53 FEET TO A POINT OF TANGENCY;

THENCE N 44°10'47" E 140.31 FEET TO A POINT OF CURVATURE;

THENCE 25.96 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 250.00 FEET, A DELTA ANGLE OF 05°57'01", A TANGENT OF 12.99 FEET, A CHORD BEARING N 41°12'17" E 25.95 FEET TO A POINT ON A CURVE;

THENCE N 81°23'04" E 27.32 FEET TO A POINT;

THENCE S 68°29'37" E 45.40 FEET TO A POINT;

THENCE N 65°02'00" E 50.04 FEET TO A POINT;

THENCE N 23°32'44" E 64.53 FEET TO A POINT;

THENCE N 20°06'56" E 67.97 FEET TO A POINT;

THENCE N 48°34'57" E 51.57 FEET TO A POINT;

THENCE N 78°24'30" E 51.93 FEET TO A POINT;

THENCE S 86°36'10" E 58.11 FEET TO A POINT;

THENCE S 79°22'07" E 63.34 FEET TO A POINT;

THENCE N 68°30'06" E 48.40 FEET TO A POINT;

THENCE N 55°37'43" E 50.14 FEET TO A POINT;

THENCE N 03°55'40" W 113.44 FEET TO A POINT;

THENCE N 55°04'43" E 50.18 FEET TO A POINT;

THENCE S 60°15'33" E 99.46 FEET TO A POINT;

THENCE N 80°09'11" E 33.37 FEET TO A POINT;

THENCE N 56°26'36" E 395.71 FEET TO A POINT;

THENCE S 01°06'40" E 119.64 FEET TO A POINT;

THENCE N 75°37'00" E 356.02 FEET TO A POINT;

THENCE N 01°07'57" W 597.00 FEET TO A POINT;

THENCE S 88°42'53" E 660.70 FEET TO THE NORTHEAST CORNER OF THE SE ¼ OF THE SE ¼, SECTION 28;

THENCE N 00°30'21" E 1315.63 FEET TO THE NORTHWEST CORNER OF THE SW ¼, SECTION 27;

THENCE S 89°21'49" E 1316.18 FEET THE SOUTHWEST CORNER OF THE SE ¼ OF THE NW ¼, SECTION 27;

THENCE N 00°28'47" E 1316.75 FEET TO THE NORTHWEST CORNER OF THE SE ¼ OF THE NW ¼, SECTION 27;

THENCE S 89°24'56" E 1315.09 FEET TO THE NORTHEAST CORNER OF THE SE ¼ OF THE NW ¼, SECTION 27;

THENCE S 89°24'55" E 1321.60 FEET TO THE NORTHEAST CORNER OF THE SW 1/4 OF THE NE 1/4; SECTION 27;

THENCE N 00°06'10" E 1319.18 FEET TO THE SOUTHWEST CORNER OF THE NE ¼ OF THE NE ¼, SECTION 27;

THENCE S 89°28'02" E 1314.00 FEET TO THE SECTION CORNER COMMON TO SECTIONS 22, 23, 26 AND 27;

THENCE N 01°29'36" E 1317.12 FEET TO THE NORTHWEST CORNER OF THE SW ¼ OF THE SW ¼, SECTION 23;

THENCE N 89°24'31" W 1319.64 FEET TO THE SOUTHWEST CORNER OF THE NE ¼ OF THE SE ¼, SECTION 22;

THENCE N 01°14'51" E 1318.39 FEET TO THE NORTHWEST CORNER OF THE NE ¼ OF THE SE ¼, SECTION 22;

THENCE N 01°14'53" E 2631.45 FEET TO THE NORTHWEST CORNER OF THE NE ¼ OF THE NE ¼, SECTION 22;

THENCE N 89°27'52" W 1336.59 FEET TO THE SOUTHWEST CORNER OF THE SE 1/ 4, SECTION 15;

THENCE N 89°12'37" W 2642.31 FEET TO THE SECTION CORNER COMMON TO THE SECTION 15, 16, 21 AND 22;

THENCE N 00°27'13" E 2630.95 FEET TO THE NORTHWEST CORNER OF THE SW 1 /4 OF SECTION 15;

THENCE S 89°29'08" E 3967.38 FEET TO THE SOUTHWEST CORNER OF THE SE 1/ 4 OF THE NE 1/ 4 SECTION 15;

THENCE N 00°09'50" E 2626.90 FEET TO THE NORTHWEST CORNER OF THE NE 1/ 4 OF THE NE 1/ 4, SECTION 15;

THENCE N 00°16'02" E 2629.59 FEET TO THE NORTHWEST CORNER OF THE NE 1/ 4 OF THE SE 1/ 4 OF SECTION 10;

THENCE S 89°18'05" E 1306.55 FEET TO THE NORTHEAST CORNER OF THE NE 1/ 4 OF THE SE 1/ 4 OF SECTION 10;

THENCE N 00°43'51" E 1313.10 FEET TO THE NORTHWEST CORNER OF THE SW 1/ 4 OF THE NW 1/ 4 OF SECTION 11;

THENCE S 88°48'23" E 2640.93 FEET TO THE NORTHWEST CORNER OF THE SW 1/ 4 OF THE NE 1/ 4 OF SECTION 11;

THENCE S 88°48'22" E 1322.75 FEET TO THE NORTHEAST CORNER OF THE SW ¼ OF THE NE ¼, SECTION 11;

THENCE S 00°08'01" W 1315.07 FEET TO THE SOUTHEAST CORNER OF THE SW 1/ 4 OF THE NE 1/ 4 OF SECTION 11;

THENCE S 88°46'53" E 1328.84 FEET TO THE NORTHEAST CORNER OF THE SE 1/ 4 OF SECTION 11;

THENCE S 88°41'55" E 1300.16 FEET TO THE SOUTHWEST CORNER OF THE SE 1/ 4 OF THE NW 1/ 4 OF SECTION 12;

THENCE N 00°14'37" E 1310.85 FEET TO THE NORTHWEST CORNER OF THE SE 1/ 4 OF THE NW 1/ 4 OF SECTION 12;

THENCE S 88°29'38" E 1308.82 FEET TO THE NORTHEAST CORNER OF THE SE 1/ 4 OF THE NW 1/ 4 OF SECTION 12;

THENCE S 88°54'05" E 2618.91 FEET TO THE NORTHEAST CORNER OF THE SE 1/ 4 OF THE NE 1/ 4 OF SECTION 12;

THENCE S 00°38'47" W 2630.61 FEET TO THE NORTHWEST CORNER OF THE SW 1/ 4 OF THE SW 1/ 4 OF SECTION 7, T.5N., R.1E.,OF THE B.M.;

THENCE N 89°27'42" E 1320.99 FEET ALONG THE NORTH LINE OF THE SW 1/ 4 OF THE SW 1/ 4 TO A POINT ON THE CENTERLINE OF WILLOW CREEK ROAD;

ALONG THE CENTERLINE OF WILLOW CREEK ROAD THE FOLLOWING;

THENCE S 17°08'49" E 211.69 FEET TO AN ANGLE POINT;

THENCE S 21°38'20" E 468.10 FEET TO A POINT OF CURVATURE;

THENCE 170.12 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 365.00 FEET, A DELTA ANGLE OF 26°42'14", A TANGENT OF 86.63 FEET, A CHORD BEARING S 08°17'13" E 168.58 FEET TO A POINT OF TANGENCY;

THENCE S 05°03'53" W 109.20 FEET TO A POINT OF CURVATURE;

THENCE 190.35 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 310.00 FEET, A DELTA ANGLE OF 35°10'52", A TANGENT OF 98.28 FEET, A CHORD BEARING S 12°31'32" E 187.37 FEET TO A POINT OF TANGENCY;

THENCE S 30°06'58" E 168.08 FEET TO AN ANGLE POINT;

THENCE S 34°03'01" E 298.62 FEET TO AN ANGLE POINT;

THENCE S 10°42'30" E 414.87 FEET TO A POINT OF CURVATURE;

THENCE 220.70 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 225.00, A DELTA ANGLE OF 56°12'00", A TANGENT OF 120.14 FEET, A CHORD BEARING S 38°48'30" E 211.96 FEET TO A POINT OF TANGENCY;

THENCE S 66°54'30" E 1186.00 FEET TO A POINT OF CURVATURE;

THENCE 243.68 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 1000.00 FEET, A DELTA ANGLE OF 13°57'43", A TANGENT OF 122.45 FEET, A CHORD BEARING S 59°55'39" E 243.08 FEET TO A POINT OF TANGENCY;

THENCE S 52°56'47" E 351.88 FEET TO A POINT OF CURVATURE;

THENCE 214.22 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 635.00 FEET, A DELTA ANGLE OF 19°19'45", A TANGENT OF 108.14 FEET, A CHORD BEARING S 44°01'28" E 213.21 FEET TO A POINT OF TANGENCY;

THENCE S 34°21'35" E 166.76 FEET TO A POINT OF CURVATURE;

THENCE 205.28 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 480.00 FEET, A DELTA ANGLE OF 24°30'13", A TANGENT OF 104.23 FEET, A CHORD BEARING S 24°11'03" E 203.72 FEET TO A POINT OF TANGENCY;

THENCE S 11°55'56" E 513.68 FEET TO A POINT OF CURVATURE;

THENCE 177.05 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 395.00 FEET, A DELTA ANGLE OF 25°40'56", A TANGENT OF 90.04 FEET, A CHORD BEARING S 24°46'24" E 175.58 FEET TO A POINT OF TANGENCY;

THENCE S 37°36'51" E 2385.77 FEET TO A POINT OF CURVATURE;

THENCE 470.67 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 720.00 FEET, A DELTA ANGLE 37°27'17", A TANGENT OF 244.09 FEET, A CHORD BEARING S 18°53'13" E 462.33 FEET TO A POINT OF TANGENCY;

THENCE S 00°09'34" E 210.78 FEET TO A POINT ON THE NORTH LINE OF SAID SECTION 20;

LEAVING SAID CENTERLINE:

THENCE N 89°58'31" E 4450.01 FEET TO THE SECTION CORNER COMMON TO SECTION 16, 17, 20 AND 21;

THENCE S 00°15'26" E 1316.05 FEET TO THE SOUTHEAST CORNER OF THE NE ¼ OF THE NE ¼, SECTION 20;

THENCE S 00°13'25" E 1316.49 FEET TO THE SOUTHEAST CORNER OF THE NE ¼, SECTION 20;

THENCE N 89°57'10" W 1326.37 FEET TO SOUTHWEST CORNER OF THE SE ¼ OF THE NE ¼ OF SECTION 20;

THENCE S 00°18'35" E 1314.75 FEET TO SOUTHEAST CORNER OF THE NW ¼ OF THE SE ¼ OF SECTION 20;

THENCE N 89°57'26" W 827.46 FEET TO A POINT ON THE WESTERLY RIGHT OF WAY OF WILLOW CREEK ROAD;

ALONG THE WESTERLY RIGHT OF WAY OF WILLOW CREEK ROAD THE FOLLOWING:

THENCE N 41°13'22" W 186.71 FEET TO A POINT OF CURVATURE;

THENCE 208.60 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 949.44 FEET, A DELTA ANGLE OF 12°35'19", A TANGENT OF 104.72 FEET, A CHORD BEARING N 47°31'02" W 208.18 FEET TO A POINT OF A REVERSED CURVATURE;

THENCE 204.80 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 1297.79 FEET, A DELTA ANGLE OF 9°02'30", A TANGENT OF 102.61 FEET, A CHORD BEARING N 49°17'26" W 204.59 FEET TO A POINT OF TANGENCY;

THENCE N 44°46'11" W 411.88 FEET TO AN ANGLE POINT;

THENCE N 42°05'07" W 231.38 FEET TO A POINT OF CURVATURE;

THENCE 331.68 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 1899.41 FEET, A DELTA ANGLE OF 10°00'18", A TANGENT OF 166.26 FEET, A CHORD BEARING N 37°04'58" W 331.25 FEET TO A POINT OF TANGENCY;

THENCE N 32°04'49" W 223.05 FEET TO A POINT OF CURVATURE;

THENCE 234.81 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 1040.80 FEET, A DELTA ANGLE OF 12°55'34", A TANGENT OF 117.90 FEET, A CHORD BEARING N 25°37'02" W 234.31 FEET TO A POINT OF REVERSE CURVATURE;

THENCE 200.60 FEET TO A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 573.50 FEET, A DELTA ANGLE OF 20°02'27", A TANGENT OF 101.33 FEET, A CHORD BEARING N 29°10'29" W 199.58 FEET TO A POINT OF TANGENCY;

THENCE N 39°11'42" W 233.00 FEET TO A POINT OF CURVATURE;

THENCE 476.94 FEET ALONG A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 970.55 FEET, A DELTA ANGLE OF 28°09'20", A TANGENT OF 243.39 FEET, A CHORD BEARING N 25°07'02" W 472.15 FEET TO A POINT OF TANGENCY;

THENCE N 11°02'22" W 144.76 FEET TO A POINT OF CURVATURE;

THENCE 113.94 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 400.40 FEET, A DELTA ANGLE OF 16°18'14", A TANGENT OF 57.36 FEET, A CHORD BEARING N 19°11'29" W 113.55 FEET TO A POINT OF TANGENCY;

THENCE N 27°20'36" W 62.21 FEET TO A POINT ON THE NORTH LINE OF THE SE ¼ OF THE NW ¼, SECTION 20;

LEAVING THE WESTERLY RIGHT OF WAY OF WILLOW CREEK ROAD:

THENCE N 89°59'20" W 9.92 FEET TO THE NORTHEAST CORNER OF THE SW ¼ OF THE NW ¼ OF SECTION 20;

THENCE S 00°32'40" E 3941.70 FEET TO THE SOUTHEAST CORNER OF THE SW ¼ OF THE SW ¼ OF SECTION 20;

THENCE N 89°52'12" W 1321.63 FEET TO THE SECTION CORNER COMMON TO SECTIONS 19, 20, 29 AND 30;

THENCE S 89°36'15" W 2663.86 FEET TO THE SOUTHWEST CORNER OF THE SE ¼ OF SECTION 19;

THENCE N 00°25'12" W 2625.76 FEET TO THE NORTHWEST CORNER OF THE SE ¼ OF SECTION 19;

THENCE S 89°33'40" W 2335.42 FEET TO THE SOUTHEAST CORNER OF THE NE ¼ OF SECTION 24;

THENCE S 00°22'27" W 1312.13 FEET TO THE SOUTHEAST CORNER OF THE NE ¼ OF THE SE ¼ OF SECTION 24;

THENCE N 89°08'33" W 3934.61 FEET TO THE SOUTHWEST CORNER OF THE NE ¼ OF THE SW ¼ OF SECTION 24;

THENCE N 00°43'27" E 1309.91 FEET TO THE SOUTHEAST CORNER OF THE SW ¼ OF THE NW ¼ OF SECTION 24;

THENCE N 89°10'27" W 1309.03 FEET TO THE SOUTHWEST CORNER OF THE NW ¼ OF SECTION 24;

THENCE S 00°50'15" W 1309.18 FEET TO THE SOUTHEAST CORNER OF THE NE ¼ OF THE SE ¼ OF SECTION 23;

THENCE N 88°41'36" W 1322.58 FEET TO THE SOUTHWEST CORNER OF THE NE ¼ OF THE SE ¼ OF SECTION 23;

THENCE S 01°00'18" W 1311.15 FEET TO THE SOUTHEAST CORNER OF THE SW ¼ OF THE SE ¼ OF SECTION 23;

THENCE N 88°46'46" W 2652.80 FEET TO THE SOUTHEAST CORNER OF THE SW ¼ OF THE SW ¼ OF SECTION 23;

THENCE S 00°08'13" W 1318.99 FEET TO THE SOUTHEAST CORNER OF THE NW ¼ OF THE NW ¼ OF SECTION 26;

THENCE N 88°50'07" W 1318.00 FEET TO THE SOUTHWEST CORNER OF THE NW ¼ OF THE NW ¼ OF SECTION 26;

THENCE S 00°13'35" E 1320.46 FEET TO THE SOUTHEAST CORNER OF THE SE ¼ OF THE NE ¼ OF SECTION 27;

THENCE N 89°21'49" W 1329.19 FEET TO THE SOUTHWEST CORNER OF THE SE ¼ OF THE NE ¼ OF SECTION 27;

THENCE S 00°43'20" W 1316.23 FEET TO THE SOUTHEAST CORNER OF THE NW ¼ OF THE SE ¼ OF SECTION 27;

THENCE N 89°24'53" W 1322.53 FEET TO THE SOUTHEAST CORNER OF THE NE ¼ OF THE SW ¼ OF SECTION 27;

THENCE N 89°19'29" W 1317.26 FEET TO THE SOUTHWEST CORNER OF THE NE ¼ OF THE SW ¼ OF SECTION 27;

THENCE S 00°28'44" W 1316.52 FEET TO THE SOUTHEAST CORNER OF THE SW ¼ OF THE SW ¼ OF SECTION 27;

THENCE N 89°17'09" W 1317.43 FEET TO THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION.

EXCEPT THE FOLLOWING PARCEL:

A PARCEL OF LAND BEING THE SE ¼ OF THE SE ¼ OF SECTION 14, TOWNSHIP 5 NORTH, RANGE 1 WEST OF THE BOISE MERIDIAN, ADA COUNTY, IDAHO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SECTION 14, T.5N., R.1W., B.M., THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE N 88°25'48" W 1311.65 FEET TO THE SOUTHWEST CORNER OF THE SE ¼ OF THE SE ¼;

THENCE N 00°11'03" W 1312.45 FEET TO THE NORTHWEST CORNER OF THE SE ¼ OF THE SE ¼;

THENCE S 88°17'02" E 1305.96 FEET TO THE NORTHEAST CORNER OF THE SE ¼ OF THE SE ¼;

THENCE S 00°26'15" E 1309.31 FEET TO THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION.

PARCEL 2

A PARCEL OF LAND LOCATED IN THE SE 1/4 OF SECTION 21 AND THE NE ¼ OF SECTION 28, TOWNSHIP 5 NORTH, RANGE 1 WEST OF THE BOISE MERIDIAN, ADA COUNTY, IDAHO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SECTION 21, T.5N., R.1W., B.M., THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE N 88°39'16" W 1325.31 ALONG THE SOUTH LINE TO THE SOUTHWEST CORNER OF THE SE ¼ OF THE SE ¼ OF SAID SECTION 21;

THENCE S 00°26'35" W 2632.13 FEET TO THE SOUTHEAST CORNER OF THE SW ¼ OF THE NE ¼ OF SECTION 28;

THENCE N 88°41'42" W 933.28 ALONG THE SOUTH LINE OF SAID SW ¼ OF THE NE ¼ TO A POINT ON THE RIGHT-OF-WAY OF HIGHWAY 16;

ALONG THE RIGHT-OF-WAY OF HIGHWAY 16 THE FOLLOWING:

THENCE N 12°48'04" E 1004.84 FEET TO A POINT;

THENCE N 13°45'48" W 22.36 FEET TO A POINT;

THENCE N 12°48'04" E 1748.40 FEET TO A POINT OF SPIRAL CURVATURE;

THENCE 208.46 FEET ALONG A SPIRAL CURVE HAVING A RADIUS OF 3342.70, A THETA ANGLE OF 1°47'12" AND A CHORD BEARING N 12°12'20" E 208.45 FEET TO A POINT;

THENCE N 37°30'45" E 108.57' FEET TO A POINT OF TANGENCY;

THENCE 946.18 FEET ALONG A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 2401.85 FEET, A DELTA ANGLE OF 22°34'16", A TANGENT OF 479.31 FEET AND A CHORD BEARING N 02°14'04" W 940.08 FEET TO A POINT ON A CURVE ON THE NORTH LINE OF THE SOUTH 1/ 2 OF THE SE 1/4 OF SAID SECTION 21;

LEAVING THE RIGHT-OF-WAY OF HIGHWAY 16;

THENCE S 88°48'04" E 1619.66 FEET TO THE NORTHEAST CORNER OF THE SOUTH 1/2 OF THE SE 1/4 OF SAID SECTION 21;

THENCE S 00°49'56" W 1322.34 FEET TO THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION.

PARCEL 3

A PARCEL OF LAND LOCATED IN THE SW ¼ OF SECTION 15, THE NORTH ½ OF SECTION 21 AND THE NW ¼ OF THE NW ¼ OF SECTION 22, TOWNSHIP 5 NORTH, RANGE 1 EAST OF THE BOISE MERIDIAN, ADA COUNTY, IDAHO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE CORNER COMMON TO SECTIONS 15, 16, 21 AND 22, T.5N., R.1E., B.M., THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION;

THENCE N 00°26'10" E 2637.96 FEET TO THE NORTHWEST CORNER OF THE SW ¼; SECTION 15;

THENCE S 89°13'00" E 2637.98 FEET TO THE NORTHEAST CORNER OF THE SW ¼; SECTION 15;

THENCE S 00°04'45" W 2611.85 FEET TO THE SOUTHEAST CORNER OF THE SW ¼; SECTION 15;

THENCE N 89°47'01" W 1326.69 FEET TO THE NORTHEAST CORNER OF THE NW ¼ OF THE NW ¼; SECTION 22;

THENCE S 00°11'26" E 1318.17 FEET TO THE SOUTHEAST CORNER OF THE NW ¼ OF THE NW ¼ OF SECTION 22;

THENCE N 89°49'56" W 1324.65 FEET TO THE SOUTHWEST CORNER OF THE NW ¼ OF THE NW ¼; SECTION 22;

THENCE N 89°52'48" W 3978.22 THE SOUTHWEST CORNER OF THE NE ¼ OF THE NW ¼; SECTION 22;

THENCE N 00°17'22" W 1318.61 FEET TO THE NORTHWEST CORNER OF THE NE ¼ OF THE NW ¼; SECTION 21;

THENCE S 89°53'23" E 3977.62 FEET TO THE **REAL POINT OF BEGINNING** OF THIS DESCRIPTION.

EXHIBIT B
M3 EAGLE PLANNING AREA MAP

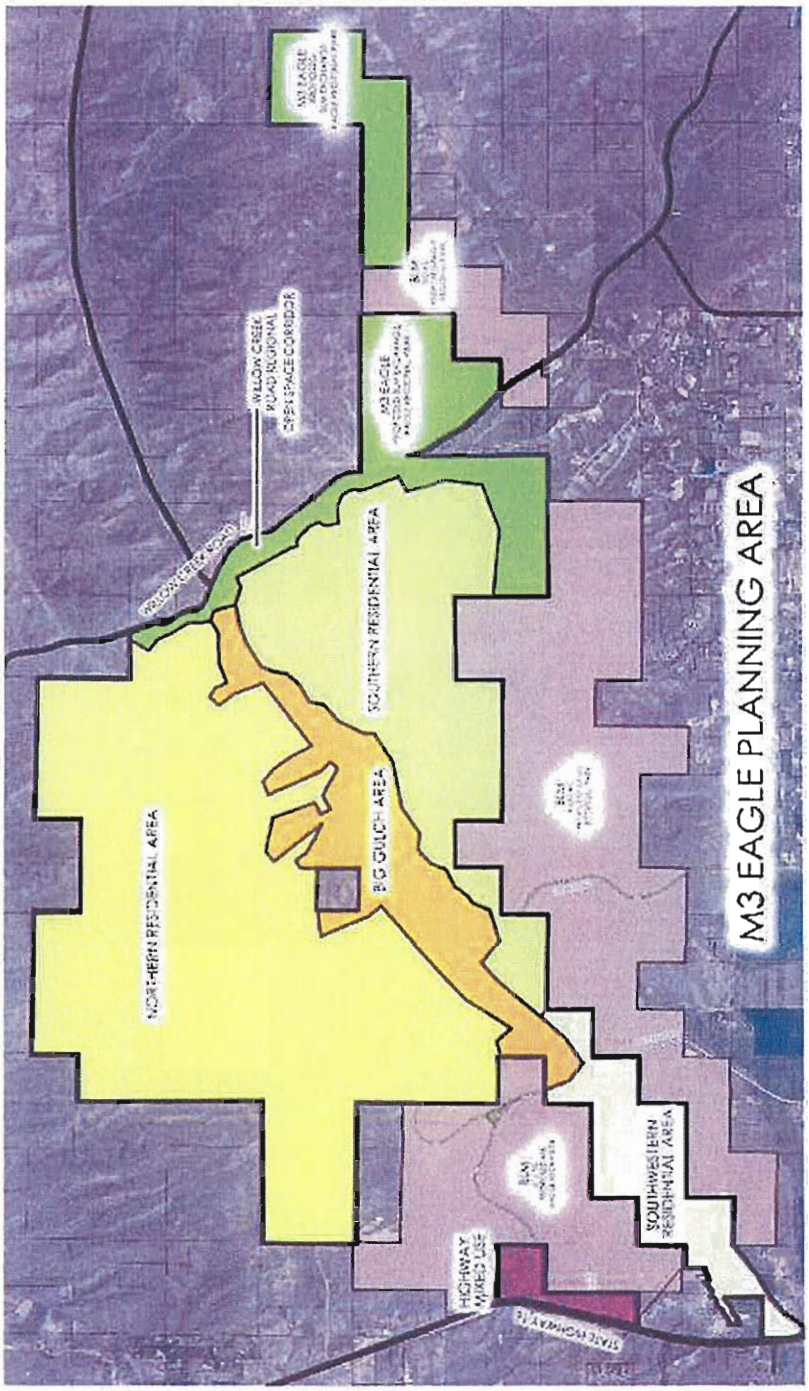

EXHIBIT C
M3 EAGLE ZONING MAP

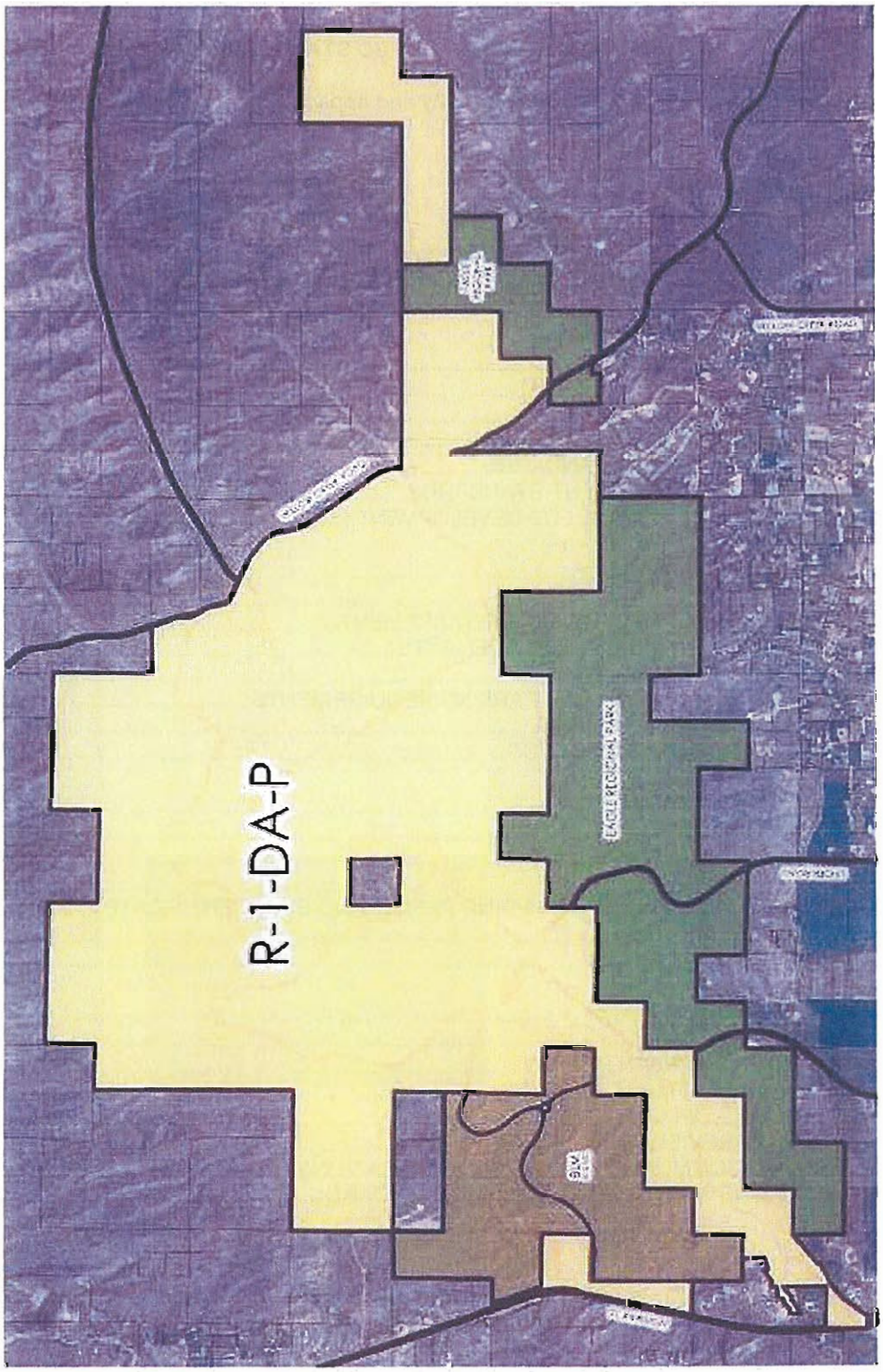

EXHIBIT C
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EXHIBIT D
CONCEPTUAL OUTLINE OF PUD STANDARDS

[Conceptual outline only; draft will be drafted by City and applicant in connection with the first phase.]

SECTION 1: INTRODUCTION .....
- 1.1 PURPOSE .....
- 1.2 RELATIONSHIP TO THE CITY'S ZONING ORDINANCE .....
- 1.3 RELATIONSHIP TO M3 EAGLE DESIGN GUIDELINES & CC&RS .....
- 1.4 DEFINITIONS .....

SECTION 2: LAND USE STANDARDS .....
- 2.1 LAND USE DISTRICTS .....
- 2.2 LAND USE REGULATIONS .....
- 2.3 USES NOT PERMITTED .....
- 2.4 SPECIFIC LAND USE STANDARDS .....
- 2.5 PROPERTY DEVELOPMENT STANDARDS .....
- 2.6 SINGLE FAMILY SPECIAL LOT DEVELOPMENT (SFSD) STANDARDS AND CRITERIA ...

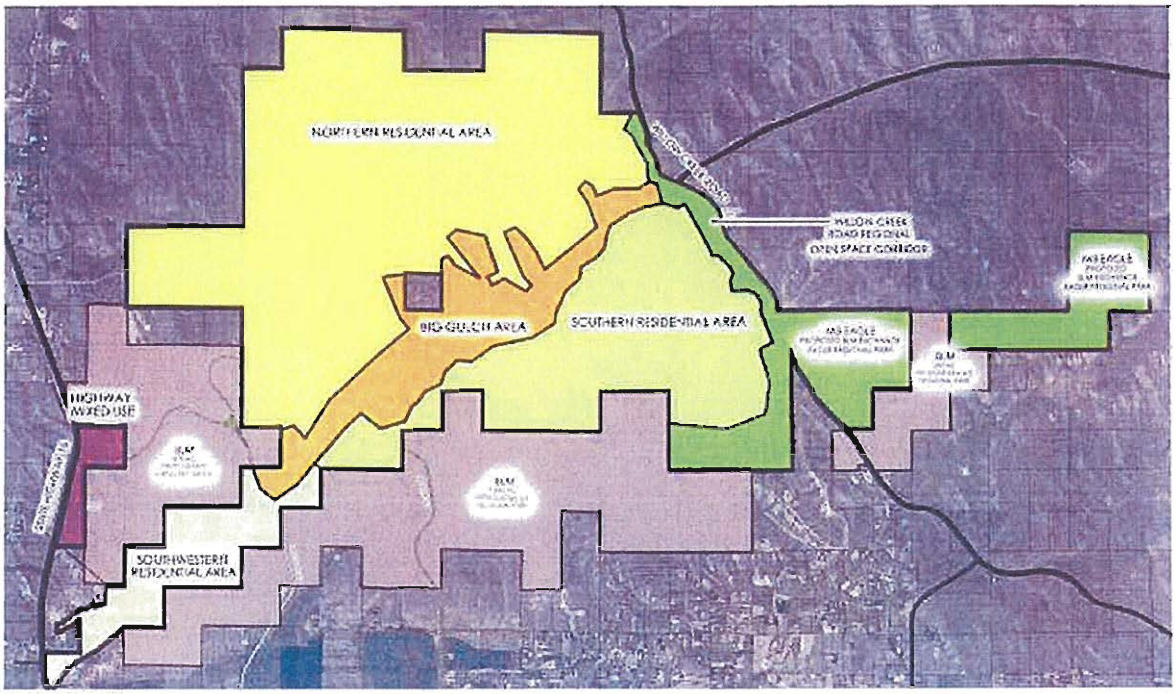
SECTION 3: PARKING STANDARDS .....
- 3.1 GENERAL STANDARDS .....
- 3.2 COMPUTING ON-SITE PARKING REQUIREMENTS .....
- 3.3 HANDICAPPED PARKING REQUIREMENTS .....
- 3.4 PARKING ALTERNATIVES .....
- 3.5 HOTEL/RESORT MIXED-USE PARKING REQUIREMENTS .....
- 3.6 DESIGN OF PARKING AREAS .....
- 3.7 ON-SITE LOADING STANDARDS .....

SECTION 4: SIGNAGE STANDARDS .....
- 4.1 PURPOSE .....
- 4.2 M3 EAGLE APPROVAL .....
- 4.3 PERMIT APPLICATION .....
- 4.4 SIGNS NOT REQUIRING A BUILDING PERMIT AND SIGN CERTIFICATE .....
- 4.5 PROHIBITED SIGNS .....
- 4.6 GENERAL PROVISIONS .....

SECTION 5: REVIEW PROCESS .....
- 5.1 ADMINISTRATION .....
- 5.2 DEVELOPMENT PLAN REVIEW .....
- 5.3 PLANNING UNIT MASTER PLANS .....
- 5.4 FINAL DEVELOPMENT PLANS .....
- 5.5 SITE PLAN REVIEW REQUIREMENTS .....
- 5.6 PLANNED COMMUNITY PROGRAM MODIFICATIONS .....
- 5.7 DEVIATIONS TO THE DEVELOPMENT STANDARDS .....

EXHIBIT E
[INTENTIONALLY DELETED]

EXHIBIT F
M3 EAGLE MASTER PLAN



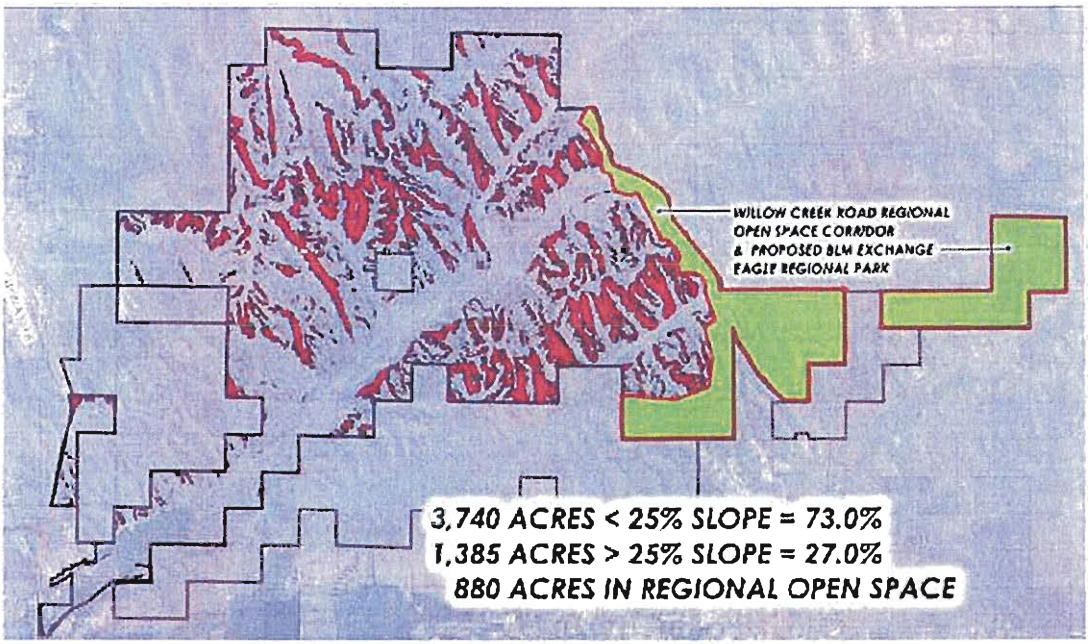
M3 EAGLE

M3 Eagle is located north of Beacon Light Road, between State Highway 16 and Willow Creek Road, and within the North Eagle Foothills Planning Area, comprised of approximately 49,000 acres. M3 Eagle (the "Property") contains 6,005 acres, which represents approximately 12% of the foothills area. M3 Eagle will reflect the planning principles, regional roadway network, regional utility corridors, and regional open space and trail network of the Eagle Comprehensive Plan Amendment for the North Eagle Foothills Planning Area.

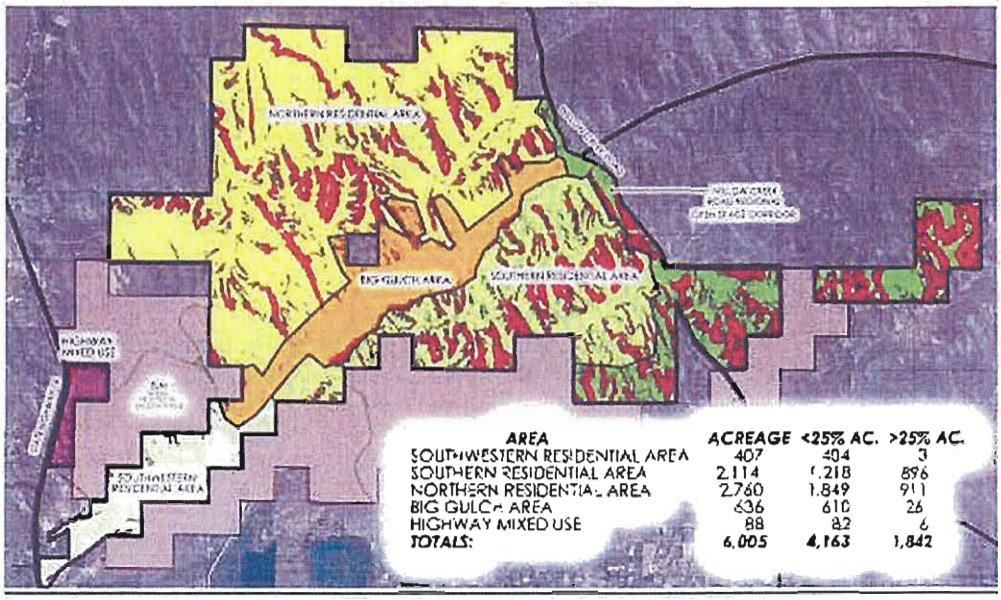
TOPOGRAPHY

M3 Eagle has a wide variation of topography. Approximately 31% of the Property contains slopes 25% or steeper. The M3 Eagle Master Plan is designed to work with the land, placing highest intensity of development in areas of the property which can best accommodate it, either by using existing gradients or with sensitive grading techniques. Over 73% of M3 Eagle will have less than 25% slope, excluding the 880 acres for the Eagle Regional Park and the Willow Creek Road Regional Open Space Corridor.

M3 Eagle will use special design standards to accommodate development on hillsides. Design and placement of homes and other structures shall be carefully integrated into the topography and sensitive hillside grading techniques shall be used as appropriate.



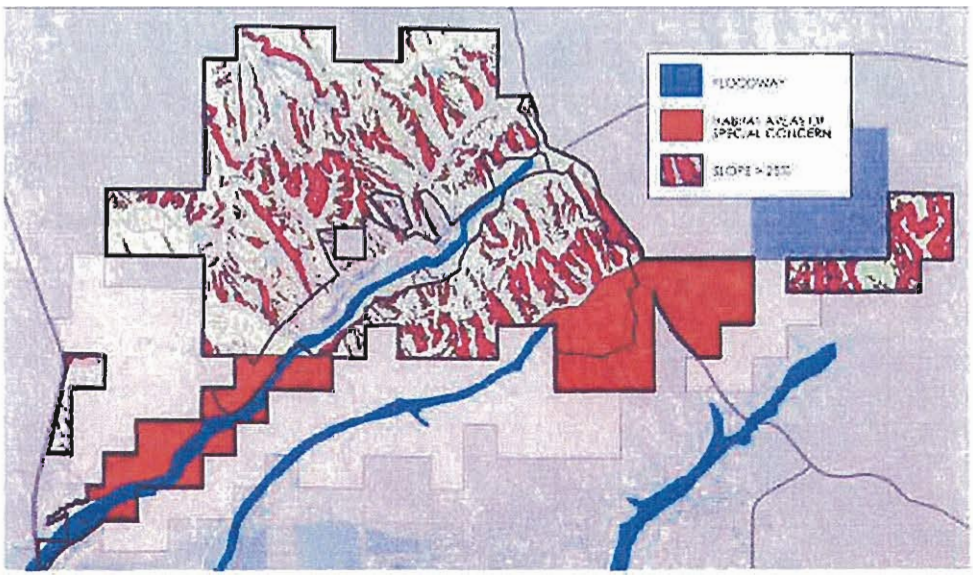
M3 Eagle Planning Area with Topography.



Topography over the five Planning Areas within M3 Eagle including the 880 acres of lands designated as regional open space.

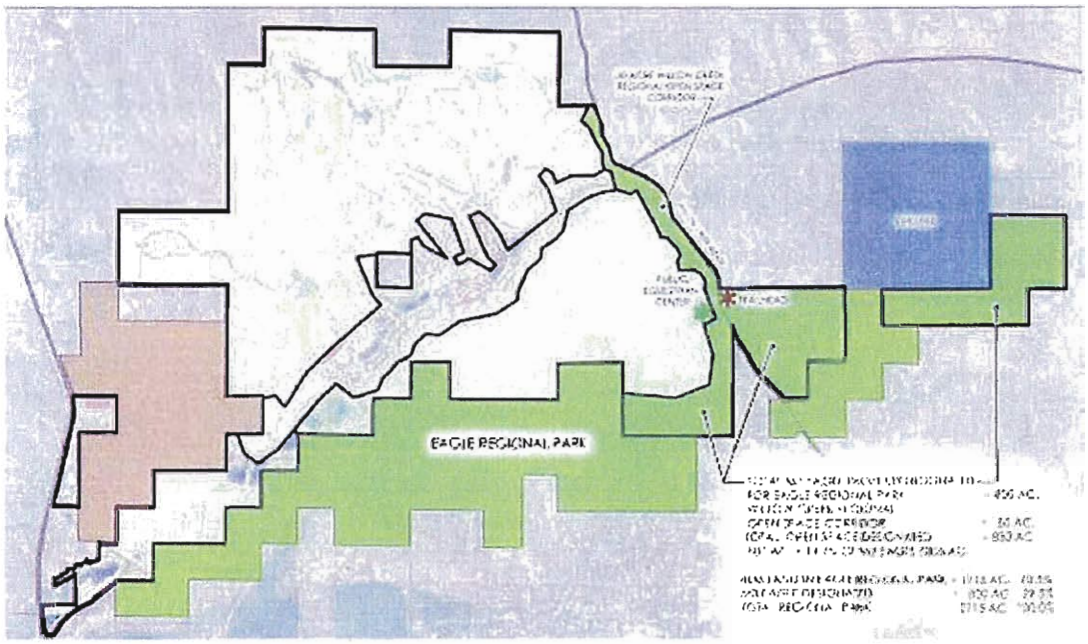
AREAS OF CRITICAL CONCERN

Eagle City Code 9-5-8 designates the North Eagle Foothills as an Area of Critical Concern for topographic, ecological and scenic significance. M3 Eagle will submit grading guidelines and hillside development standards to the City for approval prior to project development. M3 Eagle contains approximately 264 acres that are designated within a floodplain. M3 Eagle will obtain a CLOMR and construct drainage improvements to remove areas proposed for residential and commercial development from the floodplain. M3 Eagle also contains two habitat areas of special concern (as identified by URS and IDFG) located in the Southern Planning Area (predominately southeasterly of the Little Gulch Area), and the Southwestern Planning Area west of the proposed Palmer Lane alignment. M3 Eagle will submit a habitat mitigation plan for both areas to the City prior to M3 Eagle's submission of the first Planning Unit Master Plan.



REGIONAL OPEN SPACE

The Eagle Comprehensive Plan Amendment for the North Eagle Foothills proposes a regional open space network for recreation and preservation of wildlife and other biological resources. The cornerstone of this network will be the proposed Eagle Regional Park on 1,915 acres of existing BLM land south of the Property. M3 Eagle proposes to convey 800 acres of its land for regional open space either through 1) exchange with the BLM for the 815-acre BLM parcel located adjacent to State Highway 16 and then BLM working with the City of Eagle for inclusion into the Eagle Regional Park or 2) M3 Eagle's donation of the land to the City for the Eagle Regional Park. M3 Eagle proposes to convey an additional 80 acres of land as regional open space along Willow Creek Road for the Willow Creek Road Regional Open Space Corridor. The Regional Open Space Plan for the foothills will build upon the framework created by the planned Eagle Regional Park and the proposed conveyances. Open space dedications from private landowners should be encouraged (through contributions of land for tax credits, density bonuses, or reassignment of dwelling units and concentration of development in suitable areas) and appropriate public lands should be acquired through public financing to create a regional open space plan that is a hallmark for planning in the region. The conveyance of regional open space by M3 Eagle to the City shall be in accordance with the Development Agreement and is subject to (i) completion of the annexation of the M3 Eagle lands to the City, and (ii) City approval of zoning and entitlements for M3 Eagle by a binding ordinance which is acceptable to both parties.



CIRCULATION

The Eagle Comprehensive Plan Amendment for the North Eagle Foothills contains a regional circulation plan which generally defines corridors and roadway types (e.g. arterial or collector streets). This plan is designed to move traffic efficiently throughout the Planning Area, provide a connection between State Highway 16 and State Highway 55, extend planned arterial and collector streets, minimize the impact on existing neighborhoods to the south, and minimize the impacts to the regional open space network.

Roadways developed within M3 Eagle will incorporate appropriate design standards and amenities, such as medians, traffic calming devices, bike paths, sidewalks and landscaping, to accommodate projected traffic flow at community build-out. A primary goal of the foothills

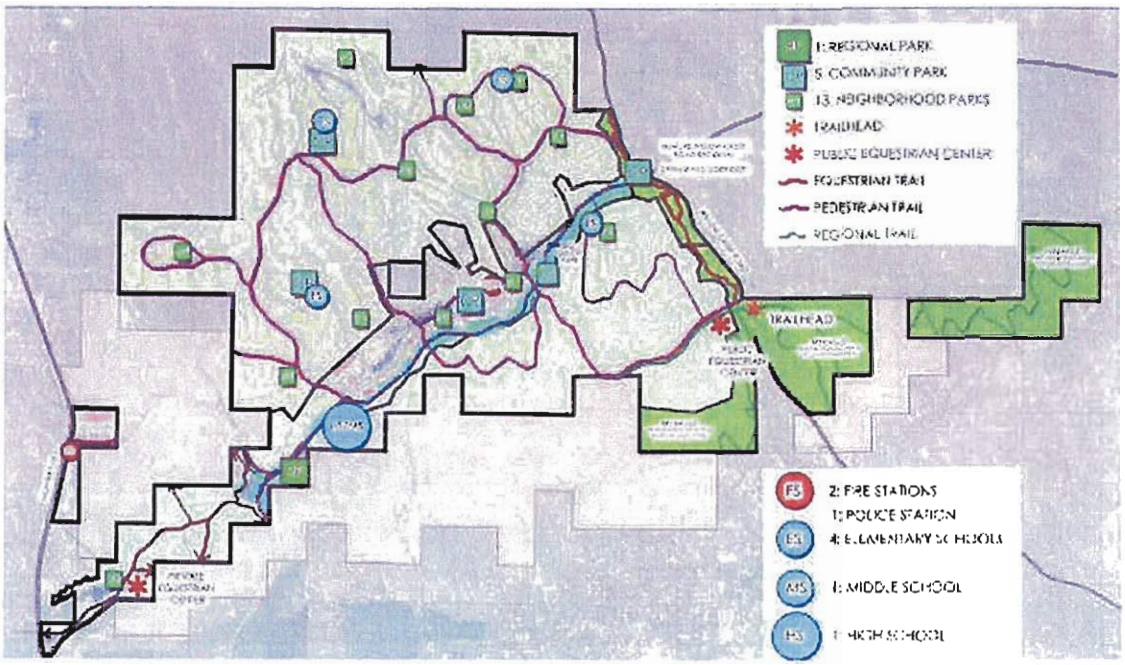
development is to create effective activity centers to capture as many vehicle trips as possible within the foothills area for office, retail, schools and civic uses to lessen the impact on existing roadways to the south and State Highway 16 and State Highway 55. M3 Eagle is planned with a goal of capturing a minimum of 25% of the daily vehicle trips generated by the community. In addition, the M3 Eagle activity centers will capture vehicle trips from surrounding developments within the North Eagle Foothills Planning Area thereby reducing downstream traffic impacts into Eagle.

M3 EAGLE PARKS, TRAILS, AND PUBLIC FACILITIES

M3 Eagle is planned to provide a mix of regional, community and neighborhood parks and trails and other community open space and recreation areas. The overall goal is to provide a variety of recreational opportunities and a network of open space and non-motorized pedestrian, cycling and equestrian trails in appropriate locations throughout the community. In addition, the parks and trails system will be connected to the regional open space and trails network being developed within the North Eagle Foothills Planning Area. The parks and trails system shown on the map immediately below are planned as public parks and trails. Community open space within M3 Eagle, including parks, golf courses, trails, and other open spaces, will total 1,522 acres or 25.3% of the property. The 800 acres for the proposed Eagle Regional Park and the 80 acres for the Willow Creek Road Regional Open Space Corridor represent another 14.7% of the property designated as regional open space. Collectively, these account for 2,402 acres of open space, or 40% of the M3 Eagle Master Plan.

A public equestrian center and trailhead are proposed on Willow Creek Road and Little Gulch. The equestrian facility is envisioned to be a full-service, 80-160-stall facility with covered riding arenas, training facilities, paddocks and boarding facilities. This facility would be owned and operated by the M3 Eagle Owners' Association or other entity. The proposed location would accommodate trail access at the center of the planned Eagle Regional Park.

The Master Plan contains 2 fire stations and 1 police station, 4 elementary schools, 1 middle school and 1 high school, the numbers of which are subject to change depending on demand.



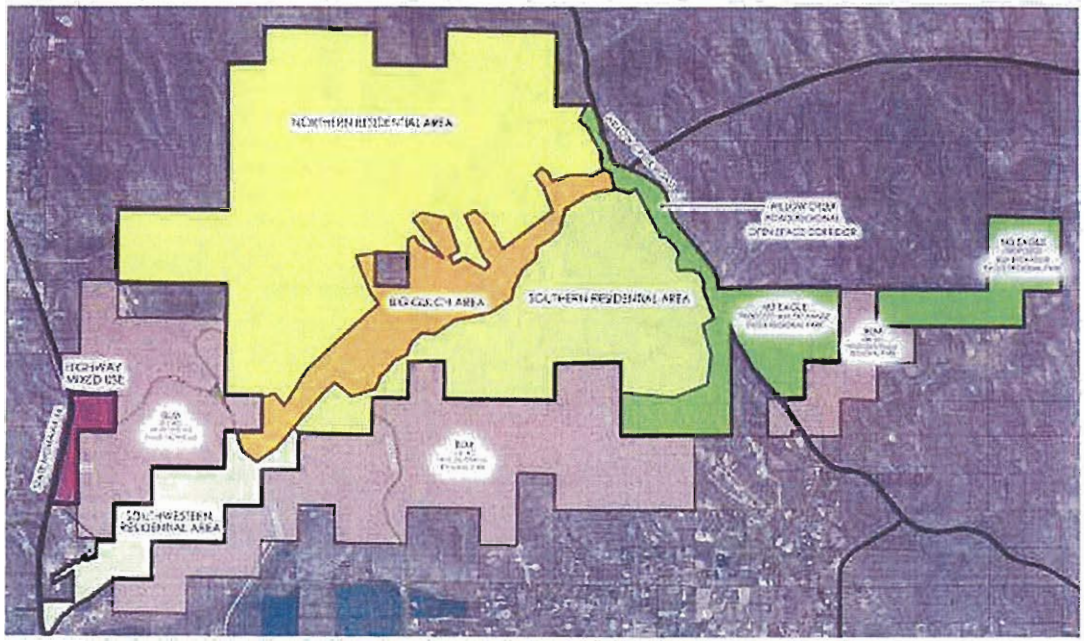
M3 Eagle Parks, Trails, and Public Facilities Plan.

M3 EAGLE PLANNING AREAS

M3 Eagle is divided into five distinct but interrelated Planning Areas. These reflect the variation in topography across the property, sensitivity to regional open space planning, and the transition of uses and land use intensities from the south to the north. These Planning Areas provide for a diversity of housing types, employment, office, retail, lodging, viticulture, recreational, civic and educational uses. The densities and intensity of uses transition from highest in the Big Gulch Planning Area at the center of the property to lowest at the boundaries of the community.

BASE PROJECT DENSITY AND MAXIMUM DENSITY

M3 Eagle will have a Base Project Density of 0.5 dwelling units per gross acre or 3,003 dwelling units. The density may incrementally increase to a Maximum Density of 1.19 dwelling units per gross acre or 7,153 dwelling units, upon City approval of the following: 1) a habitat mitigation plan for habitat areas of special concern located in the Southern and Southwestern Planning Areas; 2) a reduction of the existing floodplain by obtaining a CLOMR; 3) approval of a grading plan and hillside design guidelines; and 4) bonus provisions for community and neighborhood centers, providing open space over and above the City's PUD requirement of 20%, and providing a funding mechanism for maintenance of regional open space. M3 Eagle is also planned for 245 acres of commercial and mixed-use development, which uses are further set forth in the M3 Eagle PUD. Each Planning Area will also have a Base and Maximum Density. M3 Eagle shall be allowed to reassign dwelling units between Planning Areas so long as the Maximum Density for any Planning Area, as set forth on the Planning Area Master Plan, and the Property are not exceeded.



Development Breakdown By Planning Area	
Commercial	**Acres**
Big Gulch	100
Northern Residential	40
Southwestern Residential	17
Highway Mixed Use	88
Total	245
Residential	**Dwelling Units**
Big Gulch	1,891
Northern	4,547
Southern	126
Southwestern	300
Highway Mixed Use	290

Note: The Maximum Density is 3,335 units for the Big Gulch Planning Area, 5,917 units for the Northern Residential Planning Area, and 500 units for the Highway Mixed Use Planning Area. This is to give flexibility for reassigning dwelling units from other Planning Areas to these Planning Areas so long as the Maximum Density for the Property is not exceeded.

The Planning Areas contain several guiding principles:

1. An integrated, harmonious community will create a sense of place and high quality of life.

2. Development will be based on land suitability and topography.

3. Land use intensities will generally decrease as development moves away from the Big Gulch Planning Area at the center of the community. Low densities adjacent to existing development and planned Regional Open Space will maintain a rural feel that complements the City.

4. Roadway and pathway systems will provide efficiency of movement and interconnect neighborhoods and activity areas.

5. A hierarchy of non-motorized public trails will serve equestrians, pedestrians, hikers and cyclists. Trails and Open Space corridors will tie planned Regional Open Space with Community Open Space.

6. The Property will contain a minimum of 40% Open Space. Community Open Space (25.3% minimum) will be comprised of active recreational areas such as neighborhood, community, and regional parks and golf courses, natural Open Space and improved Open Space. Regional Open Space (14.7% minimum) will be comprised of the 800 acres for the Eagle Regional Park and 80 acres for the Willow Creek Road Regional Open Space Corridor. The 800 acres is subject to an exchange proposal with BLM. If the exchange is completed, BLM would set aside the lands as Open Space. At no time will the cumulative Open Space (community and regional) be less than 25% of the total M3 Eagle land area which is approved for development.

7. Development abutting Regional Open Space will be designed as cluster housing or larger lot single-family housing.

8. An Open Space corridor along Willow Creek Road will protect the viewshed from the road and provide a regional corridor for equestrian and pedestrian trail connections to lands north of M3 Eagle. This corridor (the "Willow Creek Road Regional Open Space Corridor") will be approximately 1.6 miles long and contain 80 acres as it runs through M3 Eagle. The Willow Creek Road Regional Open Space Corridor is designed to work with the existing topography and will provide generous setbacks (a minimum of 100 feet up to 1,000 feet), landscaping and context sensitive design to minimize viewshed intrusion and provide useable Open Space.

9. Hillside development will be based on City-approved guidelines and standards that respect existing topography and preserve sensitive viewsheds toward the City and Regional Open Space.

10. The Property is located in the Western Snake River Plain Viticultural District, which District was created by the U.S. Alcohol and Tobacco Tax and Trade Bureau in March 2007. The City, through the adoption of Resolution 07-14, has created the Eagle Wine District Overlay, which overlay extends over the Property and includes all south facing slopes. The City recognizes that the creation of the overlay complements and supports the unique qualities and economic vitality of the City, and promotes viticulture industries including crushing, distilling and associated hospitality

uses and tourism within the City and the Property. Viticulture uses may be developed in any Planning Area on the Property.

11. A mixed-use community will provide for employment and shopping opportunities and capture up to 25% of the vehicle trips generated by the community and reduce external traffic.

12. The Big Gulch Planning Area is best suited to accommodate the development of a mixed-use village given its central location within M3 Eagle, its accessibility from other development within the foothills, and its relatively flat topography. The Big Gulch Planning Area will provide a concentrated employment, shopping, civic and activities area for the entire North Eagle Foothills Planning Area.

13. Mixed-use development will reduce trip generation, spread peak hour flows on arterial roads and allow more people the option of living closer to their work. The concentration of higher density development along the planned arterial roadway connecting State Highway 16 to State Highway 55 (portions of which are planned as a six or seven lane roadway) will be compatible with traffic patterns in the area.

14. A wide variety of housing options will create a diverse community with a wide array of housing options and pricing.

15. Creation of multiple gathering places and recreational opportunities will enhance the social fabric of the community.

16. Landscape design will incorporate environmentally sensitive and drought tolerant plants and use reuse water to the fullest extent for common area irrigation to enhance the nature of the foothills and promote water conservation. The community will adopt water conservation standards which will be enforced through its Owners' Association and CC&Rs.

17. Contribution, dedication and enhancement of Regional and Community Open Space will improve wildlife habitat and create recreation opportunities.

18. Eradication of non-native and invasive plants will help protect native vegetative communities.

For the purposes of this document the following definitions shall apply:

- Neighborhood Commercial sites will contain up to 150,000 square feet of commercial space. Neighborhood Commercial sites are planned to accommodate local retail and office uses.

- Community Center sites will contain up to 350,000 square feet of commercial space. Community Center sites are planned to accommodate community employment uses and large square footage major tenants for larger retail uses.

- Regional Parks contain 20+ acres and will contain ball fields and other active areas to serve the entire North Eagle Foothills Planning Area and the City of Eagle.

- Community Parks contain 8+ acres and will contain some active and passive areas and are designed to serve the M3 Eagle Community.

- Neighborhood Parks contain 3+ acres and will contain some active or passive areas and are designed to serve individual neighborhoods or a combination of neighborhoods within M3 Eagle.

- Regional Trails are public trails that will serve the entire north foothills area and beyond and connect to public lands.

- Community Trails are public trails that are designed to serve the M3 Eagle Property. Some community trails will connect to regional trails and open space.

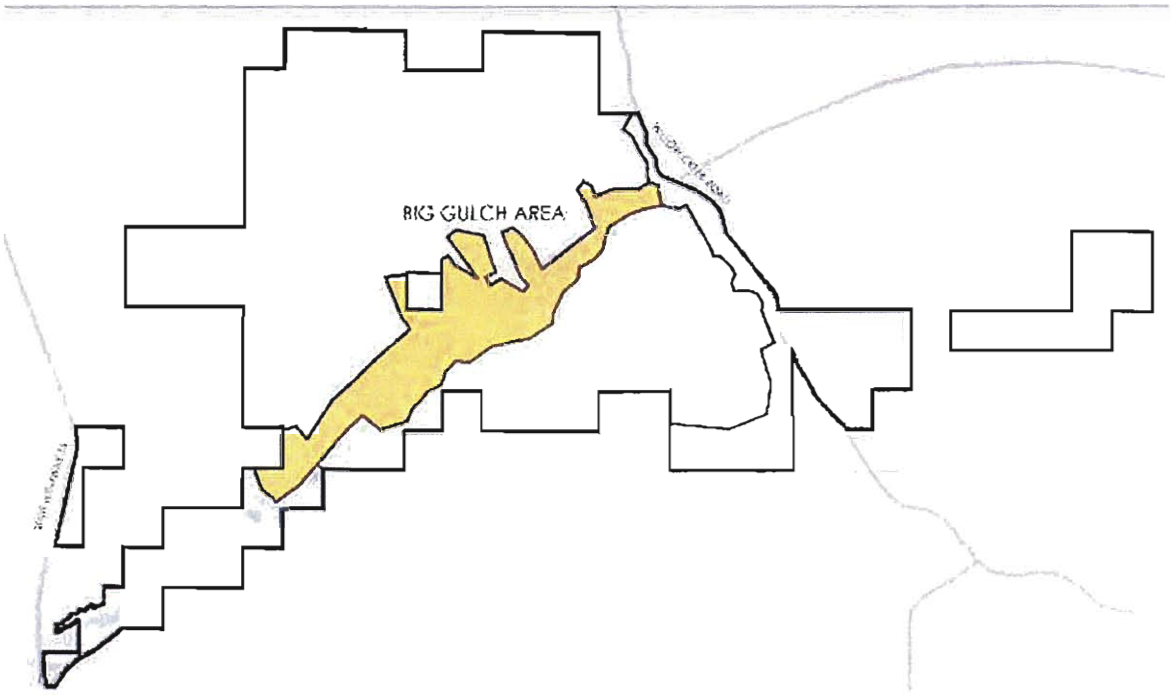
- Neighborhood Trails are trails that will serve individual neighborhoods and may connect to regional trails and open space. Neighborhood Trails will be public or private.

- Hotel and hospitality rooms are not considered residential dwelling units within the context of the Maximum Density allowed on the property, which is 7,153 units. Currently, the master plan calls for 500 hotel rooms in the Big Gulch Planning Area.

EXHIBIT F1
BIG GULCH PLANNING AREA

Big Gulch Planning Area

The Big Gulch Planning Area contains 636 acres and is located along a gently sloping valley known as Big Gulch, which runs through the center of the M3-owned Property. The Big Gulch Planning Area will be built in several phases. Topographically, over 95% of this area is less than 25% slope. This Planning Area is the heart of the community and will contain the highest intensity of uses of all of the M3-owned property. The area is planned for a mix of residential and commercial uses with a Planning Area Density of 2.97 dwelling units per gross acre, or 1,891 dwelling units, and 100 acres of commercial uses, and a Maximum Planning Area Density of 5.24 dwelling units per gross acre, or 3,335 units.



Uses

Land uses will include offices and businesses, civic uses, commercial uses, schools, and residential neighborhoods. Two Neighborhood Commercial sites totaling 100 acres are located in the Planning Area with the highest intensity of mixed-use development located in the center. The central Neighborhood Commercial site may be increased to up to 95 acres of commercial, office and business uses to promote and recruit additional employment opportunities that will allow Eagle residents to live and work within the City. This Planning Area may also contain hotel or resort uses and a medical office campus with a clinic or hospital.

Residential neighborhoods will contain single and multi-family homes with densities ranging from 2-20 units/acre. Housing options will include apartments, townhouses, condominiums, patio homes, and high-density single-family detached and attached homes.

The Big Gulch Planning Area creates a mix of commercial uses that will provide effective trip capture for employment, retail and civic-related uses. The goal is to capture 25% of all vehicle trips generated within M3 Eagle to activity centers within the community. In addition, the most affordable housing within the M3

Eagle community will be located within the Planning Area to meet the housing demands of employees who work there. This housing location will encourage walking to and from work, as well as shorter vehicle trips, further reducing traffic.

Design

The Big Gulch Planning Area will have an urban feel at the neighborhood centers with appropriate landscape, monumentation, signage and place-making features integrated into the design of the area. Housing, commercial/office uses, roadways and landscape will tend to be arranged in formal patterns with tree-lined boulevards and pedestrian scale amenities. Buildings along the main arterial roadway may be close to the roadways to create pedestrian-friendly areas with sidewalks, street trees and benches. Shared surface parking areas and parking garages will be encouraged at the sides and rear of buildings or within building clusters, to reduce large areas of paving. On-street parking will be provided where sufficient right-of-way exists. The architectural character will create an interesting visual experience as one travels through the community.

The central neighborhood center will be designed using a main street concept, with an 8-acre community park around which the highest density of commercial and residential development will be located. This area will have businesses, restaurants, civic uses and possibly residential lofts fronting out onto the central park. Parking will be located at the interior of the parcels to create a pedestrian-friendly environment. The central boulevard will split into 2 two-lane roadways through this area.

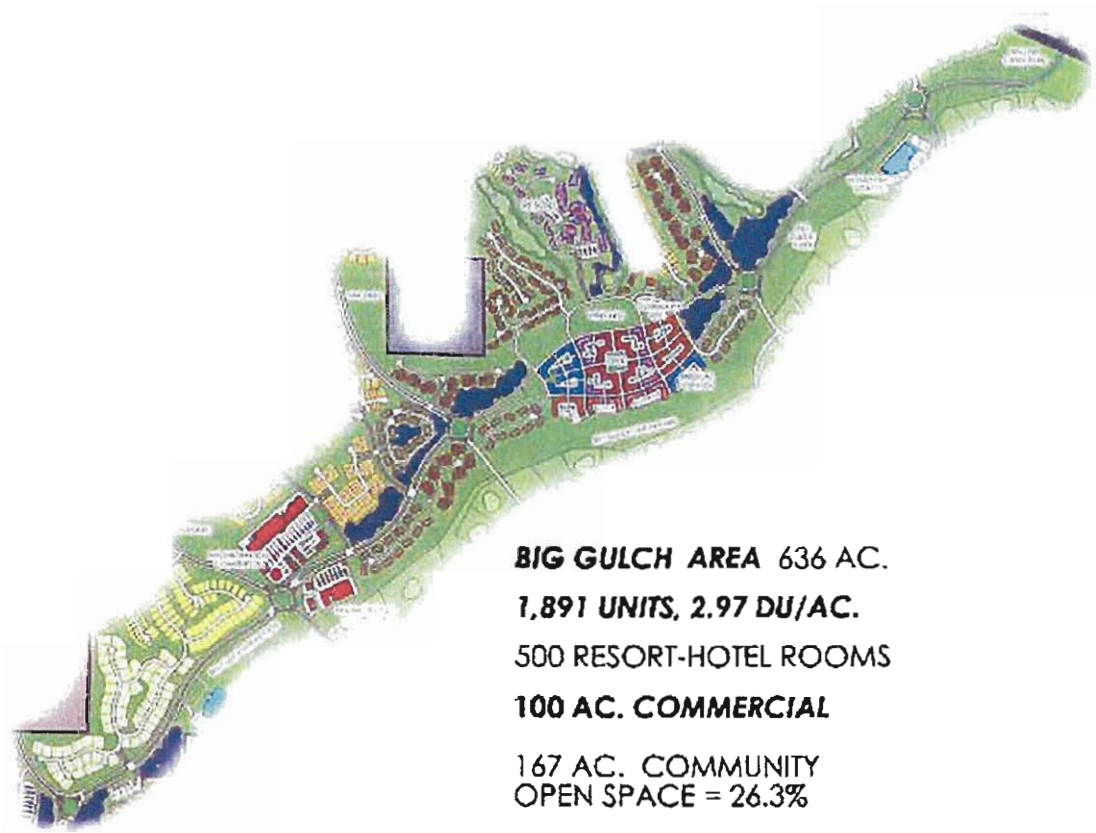


Illustration of the planned uses within the Big Gulch Planning Area. This area will serve not only M3 Eagle but other areas within the greater foothills and help reduce vehicle trips leaving the area.

This area is one of the few areas within the foothills area that can accommodate higher intensity development.

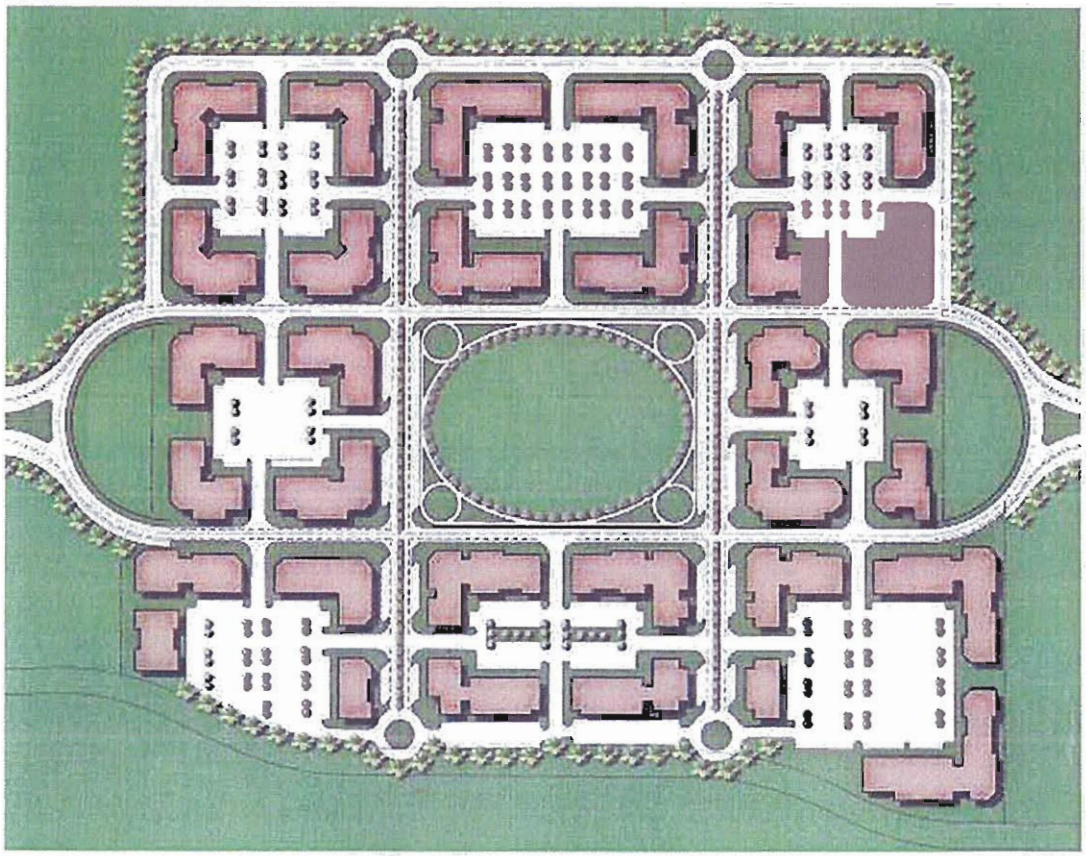


Illustration of the central Big Gulch Neighborhood Center and central park area. This will be designed to create pedestrian activity areas with interesting spaces. The intensity of commercial and residential uses increase as development moves toward the Neighborhood Center. The Neighborhood Center is envisioned to be a mix of retail, office, hotel, residential and civic uses.

Special consideration will be given to the design and placement of land uses next to Willow Creek Road, within the Willow Creek Road Regional Open Space Corridor, to promote the sense of open space. Significant setbacks from the roadway, landscape screening and context sensitive design, will all reduce visual intrusion. Assuming Willow Creek Road is used as a minor access, a community park will span the central boulevard at the intersection of Willow Creek Road to enhance that Open Space Corridor. Building setbacks within this Corridor will be a minimum of 100 feet from the edge of the right-of-way.

Parks, Trails, Schools and Public Services

The Big Gulch Planning Area is planned to have four community parks as well as regional, community and neighborhood trails. Two of the community parks will be located at the intersection of Central Boulevard and Willow Creek Road as part of the Willow Creek Road Regional Open Space Corridor. This area is also anticipated to contain an elementary school, a branch library, and a police and fire station.

The Big Gulch floodplain is the primary drainage area within the M3 Eagle community. Big Gulch will be reshaped and redesigned based upon an approved LOMR which will be the precursor to creating a flood management system as well as a 55-acre linear park through the center of M3 Eagle. The Big Gulch

floodplain will become the Big Gulch Community Park, containing both improved and native areas, lakes and ponds with wetlands, play and picnic areas, and a regional trail.

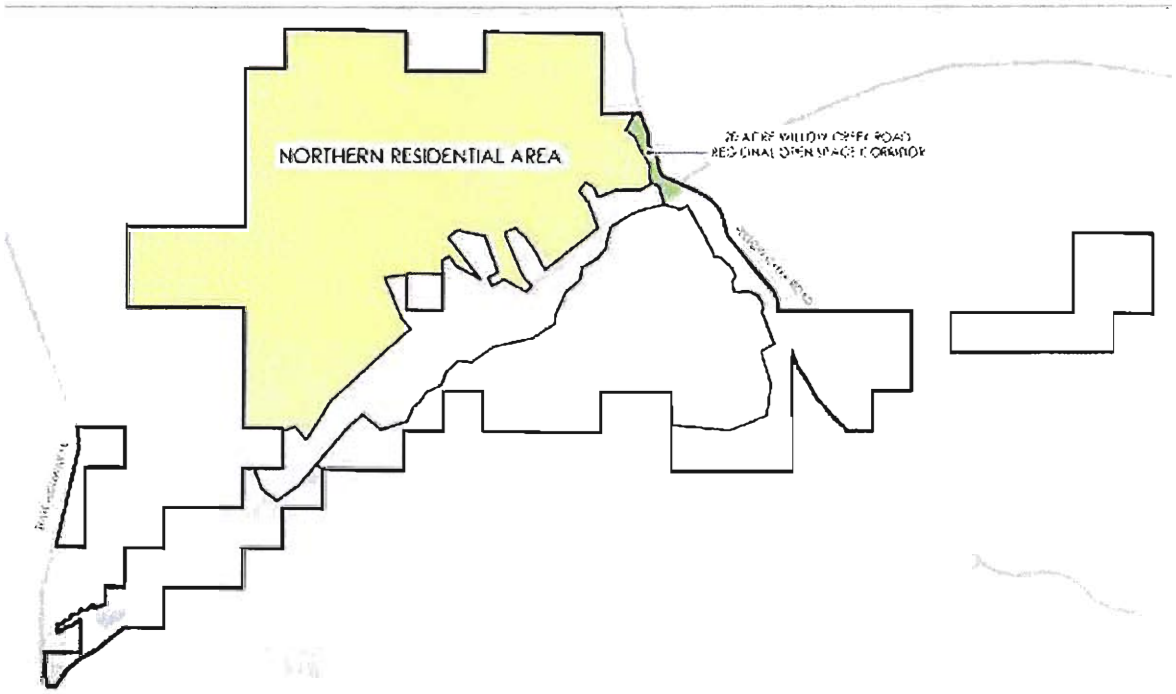
Access and Circulation

The Big Gulch Planning Area will be served by a pedestrian-friendly central boulevard that runs through the middle of the community and splits into 2 two-way couplets at the center. This boulevard is an arterial roadway that will ultimately connect State Highway 16 and State Highway 55 as additional developments to the east of M3 Eagle occur. The intersection of the boulevard and Willow Creek Road may provide a minor access to M3 Eagle. This boulevard is planned as a five-lane arterial street. Roundabouts are being proposed as traffic control devices at intersections requiring traffic control.

EXHIBIT F2
NORTHERN RESIDENTIAL PLANNING AREA

Northern Residential Planning Area

The Northern Residential Planning Area contains 2,760 acres and is located between the Big Gulch Planning Area and the northern boundary of the property. This area is planned for a Planning Area Density of 1.65 dwelling units per gross acre, or 4,547 dwelling units, and 40 acres of Neighborhood Commercial uses. The Maximum Planning Area Density is 2.14 units per gross acres, or 5,917 units. Topographically, 67% of this Planning Area, or 1,849 acres, is less than 25% slope. The Northern Residential Planning Area is designed to incorporate approximately 36% of its total acres as community open space.



The Northern Residential Planning Area contains the most homes within M3 Eagle. The overall density averages 1.65 dwelling units per acre; the commercial development is targeted for neighborhood uses.

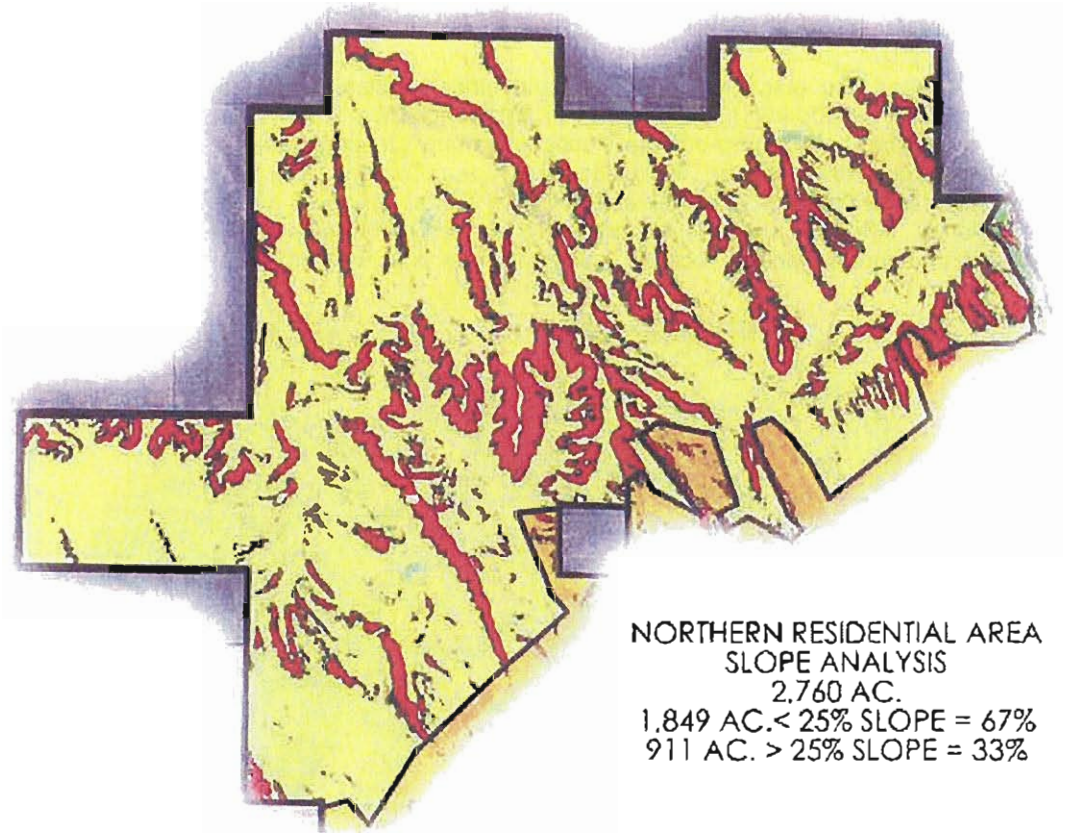


Illustration of the Northern Residential Planning Area topography. The red on the map illustrates those areas which exceed 25% slope which account for 33% of the site. The open space within the Planning Area is planned at 36%. Design of the Planning Area will incorporate hillside standards, sensitivity to viewshed, and placement of a minimum of 50% of the homes next to some form of open space.

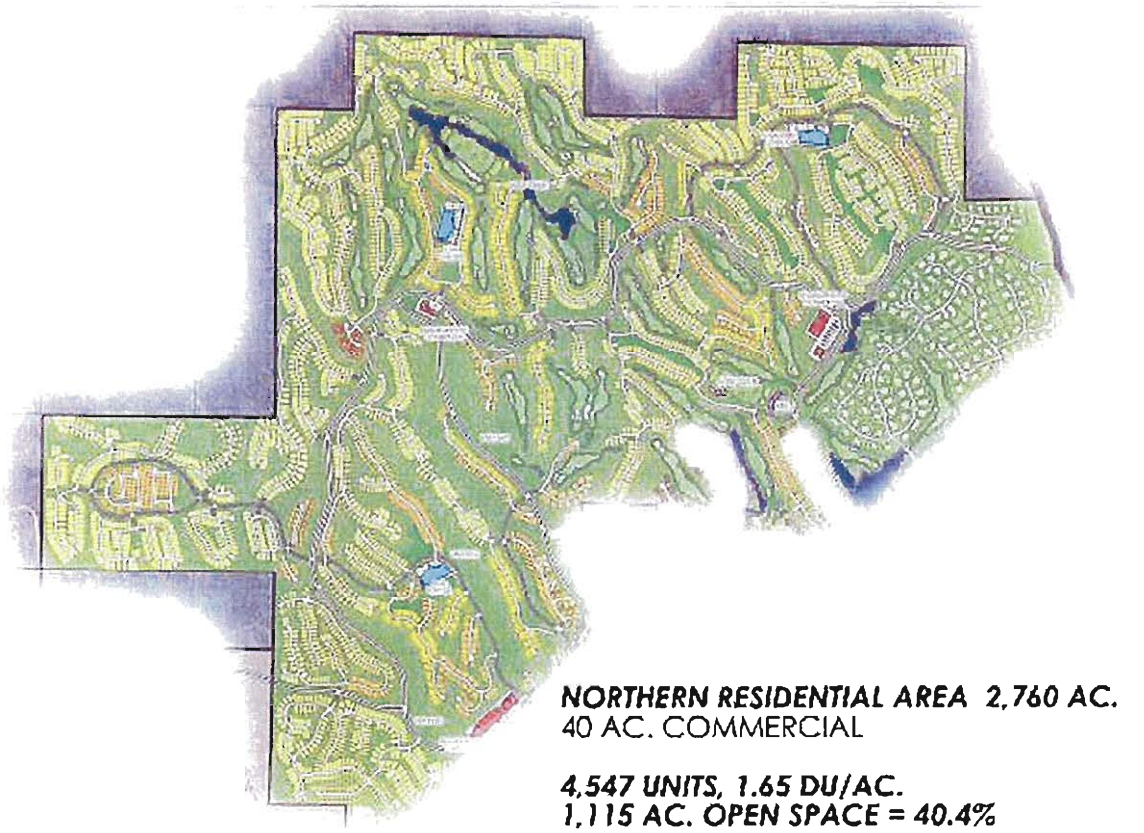
Uses/Design

The Northern Residential Planning Area will primarily consist of single family neighborhoods with densities ranging from 1-10 units/acre, and multi-family neighborhoods with densities of 4-20 dwelling units/acre. The multi-family neighborhoods will be located adjacent to the main collector roads serving the Planning Area. Approximately 97.5% of the homes will be single-family detached or attached and approximately 2.5% of the homes will be multi-family. Two Neighborhood Commercial sites totaling 40 acres are located at the intersection of collector roadways and are planned for grocery stores, neighborhood services, restaurants, automotive services, dry goods, and neighborhood offices for professional, medical and dental services. Commercial buildings will be placed in appropriate locations and will provide for buffering to residential uses.

Land use intensity will generally decrease from south to north as development moves away from the Big Gulch Planning Area toward the northern, eastern and western boundaries of the Planning Area. Custom lots or lower-density neighborhoods with an average density of 1 unit per acre, which may be achieved through clustering, will be located in a transitional zone at the perimeter of the Planning Area. This zone will provide a transition between the low-density neighborhoods within the Planning Area and the even

lower-density adjacent lands outside of the M3 Eagle property. This transition generally occurs within 300 to 1,000 feet of the boundary of the M3 Eagle property.

Clustered housing designs and placement of homes and other structures on individual lots will be carefully integrated into the topography, and sensitive hillside grading techniques will be used as appropriate. Homes will be located on moderate slopes with many steeper, non-graded slopes left as open space. Design guidelines will be enforced through the Owners' Association and recorded Covenants, Conditions and Restrictions, as well as the City of Eagle, to ensure compliance with hillside development standards. M3 Eagle shall provide grading guidelines and hillside development standards to the City for review and approval prior to receiving approval of any plats within this Planning Area.



Preliminary Lot and Community Concept for the Northern Residential Planning Area. At least 50% of the homes will be adjacent to open space.

Utilizing clustered housing and grade adaptive design techniques, this Planning Area is planned for an overall density of 1.65 dwelling units per gross acre with 36.8% acres, or 1,015 acres, of community open space. The design of the Northern Residential Planning Area creates a wide array of housing types, which adds to the affordability range of M3 Eagle and the socio-economic diversity of the community.

Special consideration will be given to the design and placement of homes next to Willow Creek Road, within the Willow Creek Road Regional Open Space Corridor. Such design and placement will promote the sense of open space and, with the use of significant setbacks from the roadway, landscape screening and context-sensitive design, will reduce visual intrusion. Building setbacks within this corridor will be a minimum of 100 feet from the edge of the right-of-way.

Parks, Trails and Schools

The Northern Residential Planning Area is designed to have two community parks and nine neighborhood parks. Two golf courses may also be located within the Planning Area. If the golf courses are located in this Planning Area, the golf courses will be placed in appropriate locations to create open space corridors that work well with native open space. The golf courses will be irrigated using treated effluent (re-use water) when available.

This Planning Area will also be served by non-motorized multi-use trails (separated or combined) that will link neighborhoods within this Planning Area, with the rest of the community, and with planned regional open space. These will also provide looping opportunities with other community and regional trails. Trails through neighborhoods not adjacent to public right-of-ways or connecting to public parks may be private.

Three elementary schools are planned for this area. These schools will be placed in locations that provide pedestrian access from adjacent neighborhoods with trails and sidewalk systems designed to accommodate walking to school by children.

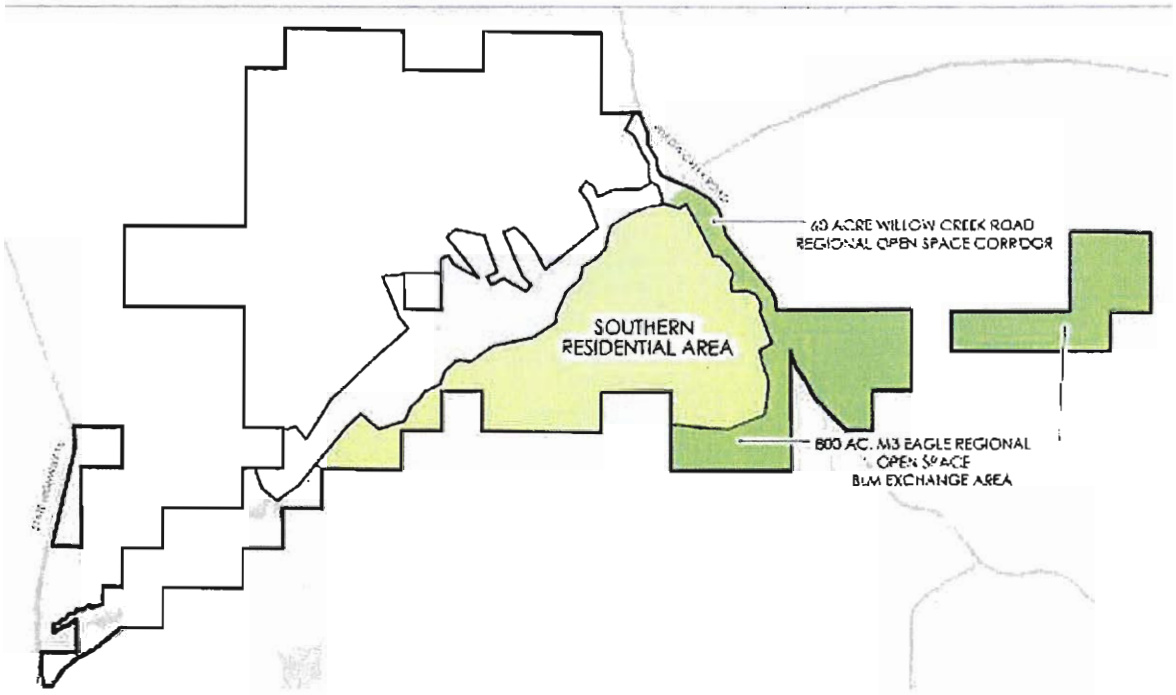
Access and Circulation

This Planning Area will be served by a series of neighborhood collector streets that radiate from the central boulevard running through the Big Gulch Planning Area. A minor access may be located on Willow Creek Road. Roads will generally curve to follow topography and provide interest. Intersections requiring traffic control will utilize roundabouts as traffic control devices.

EXHIBIT F3
SOUTHERN RESIDENTIAL PLANNING AREA

The Southern Residential Planning Area

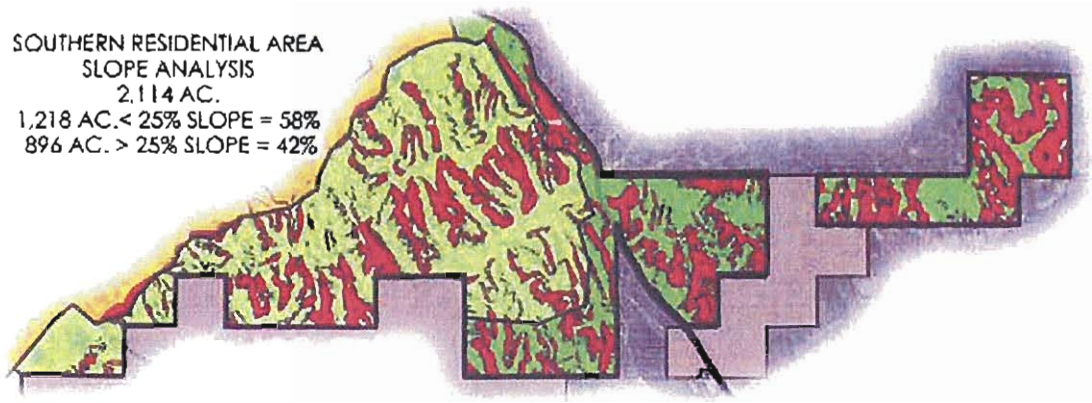
The Southern Residential Planning Area contains 2,114 acres and is located between the Big Gulch Planning Area and the southern border of the property, which abuts the proposed Eagle Regional Park. The Southern Residential Planning Area will have a Maximum Planning Area Density of 0.06 dwelling units per gross acre or 126 homes. Topographically, 61% of this Planning Area is less than 25% slope. Areas of steeper topography will contain low-density residential neighborhoods that nestle into the hillsides. Homes will generally be located along flat-to-moderate slopes while steeper, non-graded slopes will remain as open space. Subject to appropriate annexation, entitlement and/or exchange approvals with the local and federal governments, the 800 acres (shown below) in this Planning Area will either (i) be exchanged for 815 acres of BLM-owned lands located near State Highway 16 or, if the BLM exchange does not occur, (ii) be donated by M3 Eagle to the City of Eagle. The 800 acres would then become part of the Eagle Regional Park. In addition, 80 acres located along Willow Creek Road will be set aside as open space for the Willow Creek Road Regional Open Space Corridor with the management of the 80 acres being the responsibility of the M3 Eagle Owners' Association or other entity.



The Southern Residential Planning Area. The lighter green area represents the development area and the darker green represents the regional open space within the Planning Area.

Slope and Habitat

The Southern Residential Planning Area has the highest concentration of steep slopes of any of the five Planning Areas. Topographically, 39% of the Planning Area exceeds 25% slope. In addition, this Planning Area contains some of the highest concentration of suitable habitat (based upon environmental surveys by URS and as identified by IDFG) on the Property. Much of this habitat is located in the 800 acres which are being designated for regional open space use. M3 Eagle shall submit a mitigation plan to the City for approval to address this habitat.

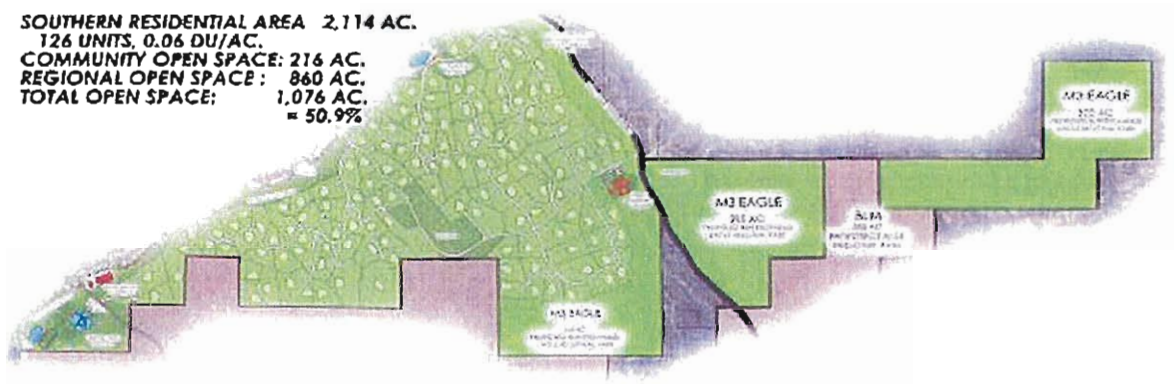


Southern Residential Planning Area illustrated with topography. The red indicates slopes which exceed 25% which comprise 482 acres or 39% of the Planning Area. This Planning Area contains the highest percentage of slopes exceeding 25% of the entire M3 Eagle master plan.

Uses/Design

The Southern Residential Planning Area will consist primarily of open space and residential clusters with custom home neighborhoods with densities averaging 0.2 units/acre. Low-density, single-family detached homes and single-family attached homes with densities up to 3 units/acre may also exist where topography allows. Residential units and ancillary improvements will be restricted to development within designated building envelopes.

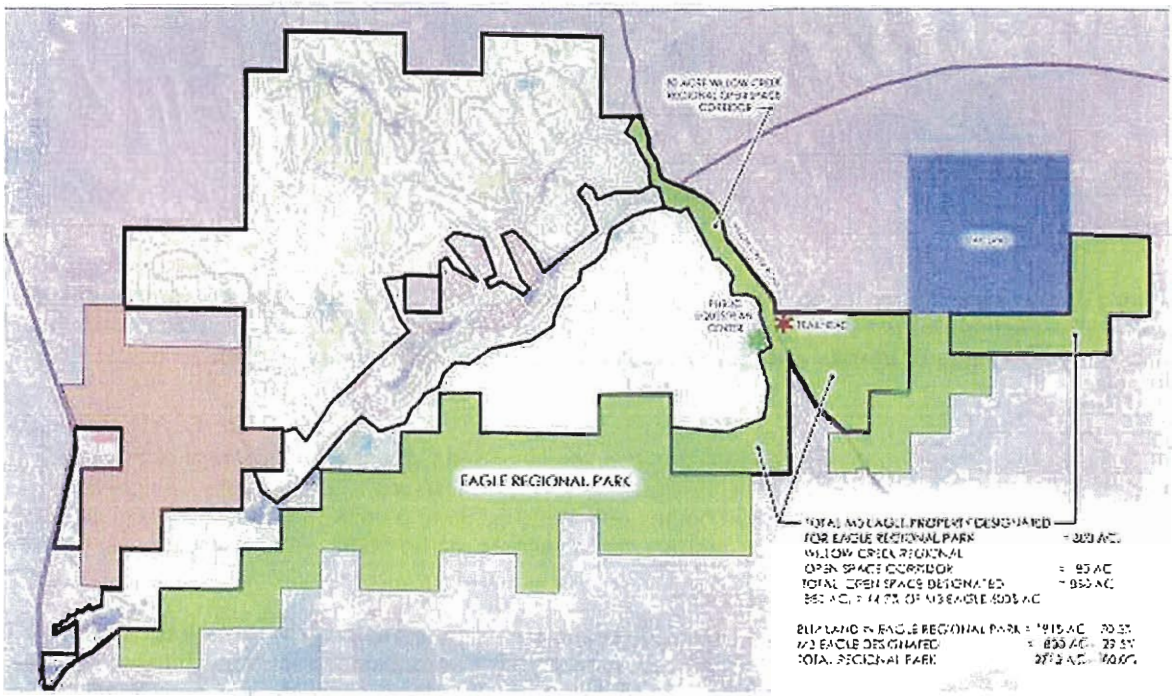
The majority of the Southern Residential Planning Area will be planned as custom home lots. Each lot will have a defined building envelope, fencing restrictions and, if an equestrian lot, a pasture and barn zone. The building envelopes will increase the amount of open space within the community, protect valuable habitat which has been identified in this Planning Area, and control viewsheds for adjacent properties inside and outside the community. Privacy walls will be minimized in favor of open or no fencing to preserve vistas and allow wildlife movement. The community design guidelines will dictate special standards to minimize disturbance to the environment. Design guidelines will be enforced through the Owners' Association and recorded Covenants, Conditions and Restrictions (CC&Rs), as well as the City of Eagle, to ensure compliance with hillside development standards.



Preliminary lot and community concept for the Southern Residential Planning Area. This illustration shows the 800 acres of M3 Eagle lands as part of the Eagle Regional Park along with the 80 acres within the Willow Creek Road Regional Open Space Corridor.

Hillside Design Standards

Design and placement of homes and other structures shall be carefully integrated into the topography, and sensitive hillside grading techniques shall be used as appropriate in accordance with City-approved hillside design guidelines.



This map illustrates the location of the 880 acres of M3 Eagle lands designated as regional open space. The 880 acres comprises 14.7% of the total lands within M3 Eagle. The planned Eagle Regional Park will have over 7 miles of boundary common with M3 Eagle.

<u>Willow Creek Road Regional Open Space Corridor</u>

M3 Eagle is establishing the Willow Creek Road Regional Open Space Corridor to provide (i) a varying corridor width based upon topography, (ii) large setbacks to reduce viewshed intrusion, and (iii) regional trail connectivity for equestrian and pedestrian users.

Special consideration will be given to the design and placement of homes within the corridor to promote a sense of open space. Significant setbacks from the roadway, landscape screening and context sensitive design will be used to reduce visual intrusion. Building setbacks within this corridor will be a minimum of 100 feet from the edge of the Willow Creek Road right-of-way.

This illustration shows the Willow Creek Road Regional Open Space Corridor in the Southern Residential Planning Area and Big Gulch Planning Area. Note the setbacks range from 260' to 1430' from the centerline of Willow Creek Road providing an excellent corridor for viewshed protection and trails.

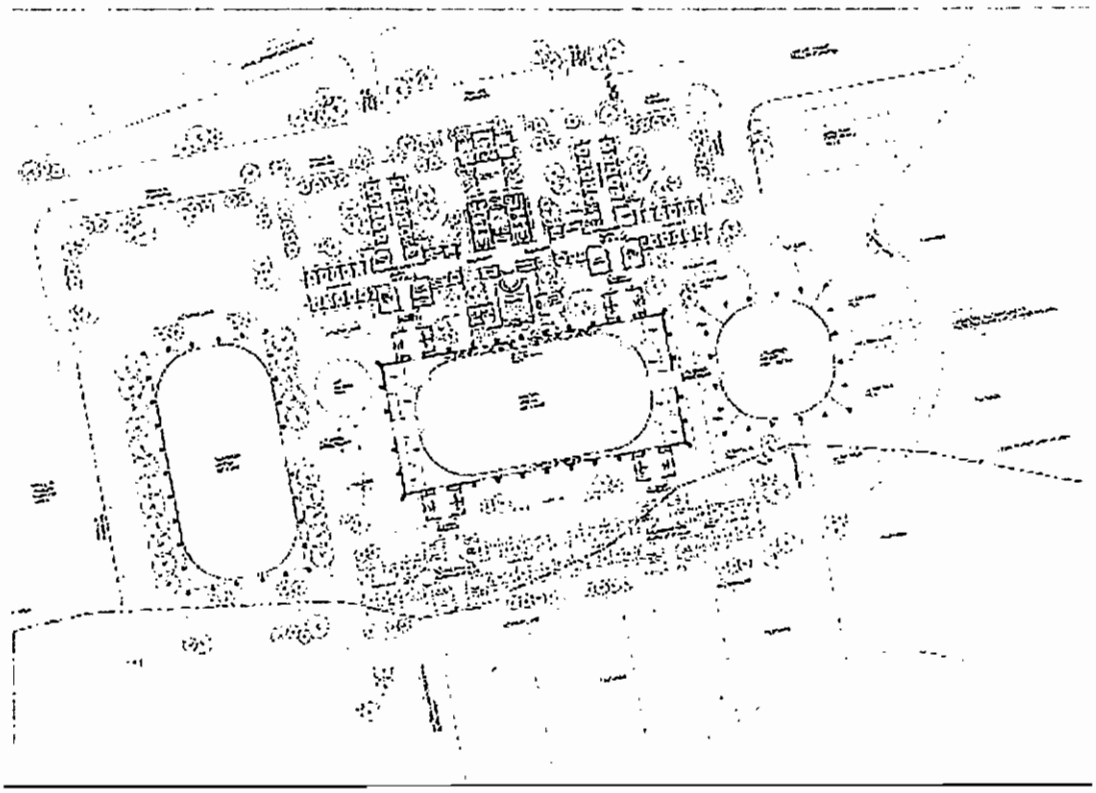
Parks, Trails and Schools

Amenities will include four neighborhood parks, community and regional open space (subject to the conditions set forth herein above), regional equestrian and pedestrian trails, and a public equestrian center on the west side of Willow Creek Road. The combination of community and regional open space will total at least 1,006 acres, or 47.6%, of the Southern Residential Planning Area.

This area will be served by non-motorized multi-use trails (separate or combined) that will link neighborhoods within this Planning Area and with the rest of the community. In turn, this will provide looping opportunities with other community trails and regional trails within the Eagle Regional Park. A public trailhead will be located on the east side of Willow Creek Road. Trails through neighborhoods not adjacent to public right-of-way or connecting to public parks may be private. Trails through low-density neighborhoods may be on one side of the street.

Equestrian Center

It is envisioned that an equestrian center would be built as part of the Southern Residential Planning Area that would provide for resident and non-resident boarding facilities. The facility would be a full-service training facility with professional management and training services. The public equestrian center will be on approximately 30 to 40 acres and is envisioned to contain a covered riding arena, turn-outs, and boarding facilities for 80-160 horses. This center would be owned and operated by the M3 Eagle Owners' Association or other entity.



Example of another M3 equestrian center which M3 is developing at its Sandstone Ranch project in Colorado. This is an 80-stall facility with a climate controlled arena, covered round pen and covered outdoor riding arena, with turnouts and paddocks.

Image of Sandstone Ranch Equestrian Center

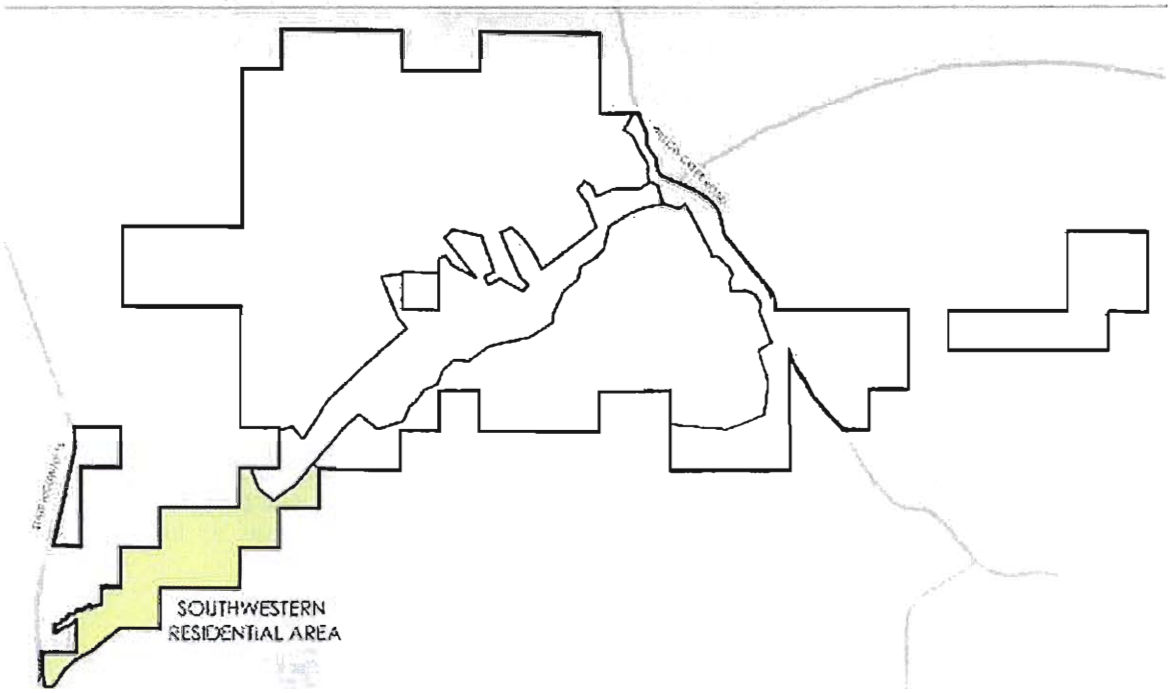
Access and Circulation

This Planning Area will be served by a series of neighborhood collector streets that radiate from the central boulevard running through the Big Gulch Planning Area. A minor access may be located on Willow Creek Road. Upon development of this phase, the connection between Willow Creek Road and State Highway 55 will need to be completed. Roads will generally curve to follow topography and be designed to provide interest. Intersections requiring control will utilize roundabouts as traffic control devices.

EXHIBIT F4
SOUTHWESTERN RESIDENTIAL PLANNING AREA

Southwestern Residential Planning Area

The Southwestern Residential Planning Area is planned as the first phase of M3 Eagle. The Planning Area consists of 407 acres and is located in a flat corridor within Big Gulch between State Highway 16 and the Big Gulch Planning Area. The Maximum Planning Area Density is 0.74 dwelling units per gross acre or 300 dwelling units. The area will also contain 17 acres of Neighborhood Commercial uses. Topographically, 99% percent of this Planning Area is less than 25% slope.



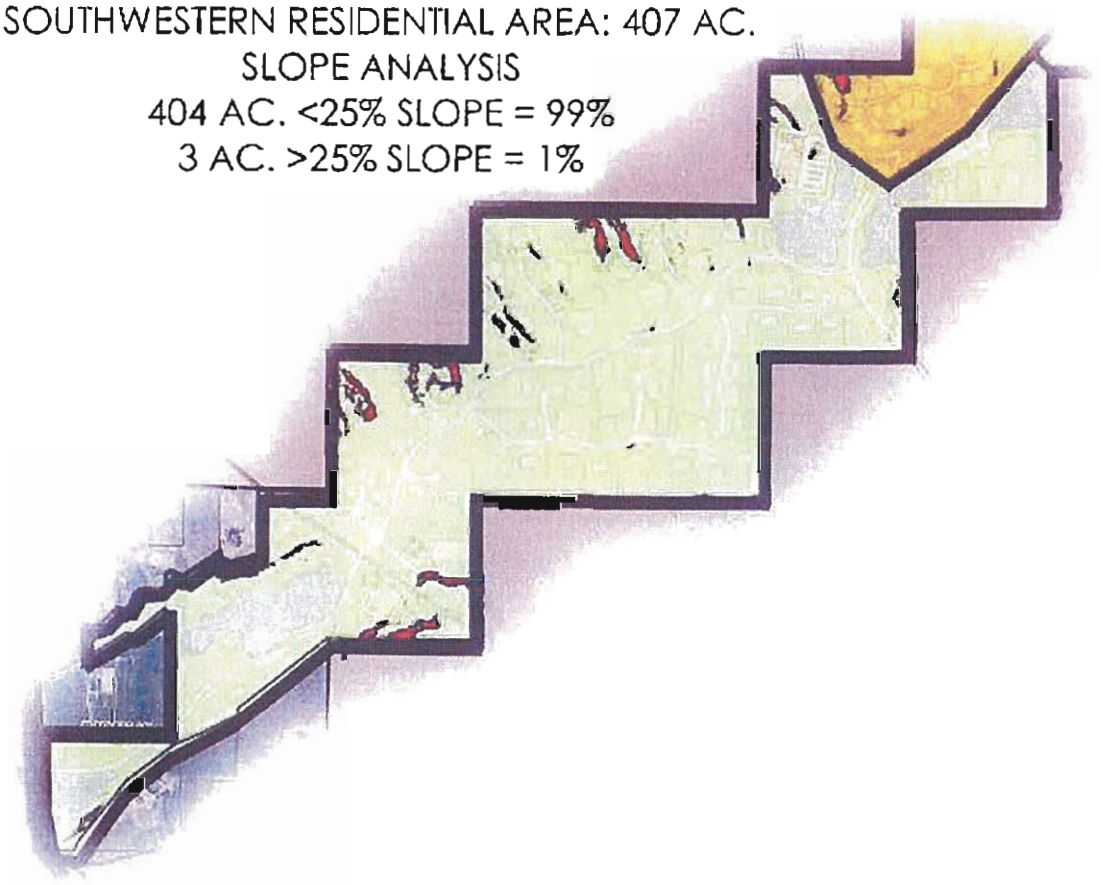
The Southwestern Residential Planning Area is located adjacent to State Highway 16 and will have access from the planned improvements to State Highway 16, Palmer/Hartley and Linder Road. This Planning Area will be in phase one of the development.

Uses/Design

This Planning Area will contain rural and estate-type custom homes on 1 to 10-acre lots, single-family detached homes for a density of 4-6 units/acre, and a 17-acre neighborhood commercial site. Homes will be clustered in areas that are closer to the Big Gulch Planning Area. The equestrian lots will have irrigated pastures and open fencing to give the area a rural feel. Irrigation will be provided by M3 Eagle's surface water irrigation rights and re-use water. Re-use water will be stored subject to receipt of a permit from IDEQ within the ponds designated on the plan. Development adjacent to the planned Eagle Regional Park will provide for larger setbacks.

The development plan for this Planning Area is geared toward an equestrian-themed community. The community design would incorporate common fencing, riding trails, irrigated pastures, restrictive building envelopes (as shown in the examples of other M3-developed communities, below), equestrian and non-equestrian trails with access to the Eagle Regional Park approved by the City. Design guidelines will include architectural, fencing, building envelopes and pasture requirements.

This Planning Area contains a significant stand of sagebrush as identified by URS and IDFG. Some of these shrubs will be preserved through site-specific planning and creation of restrictive building envelopes on large lots. A mitigation plan will also be prepared to determine what other actions, if any, would be appropriate. Until such approval is obtained, the Base Project Density for this Planning Area shall be one unit per 5 acres, or 81 residential lots.



The Southwestern Residential Planning Area is relatively flat and will incorporate an equestrian theme and larger custom residential lots. The rectangular tan shapes represent equestrian lot building envelopes and the polygon shape represents non-equestrian custom lot building envelopes.

SOUTHWESTERN RESIDENTIAL AREA 407 AC.
300 UNITS, 0.74 DU/AC.
17 AC. COMMERCIAL
44 AC. OPEN SPACE = 10.8%

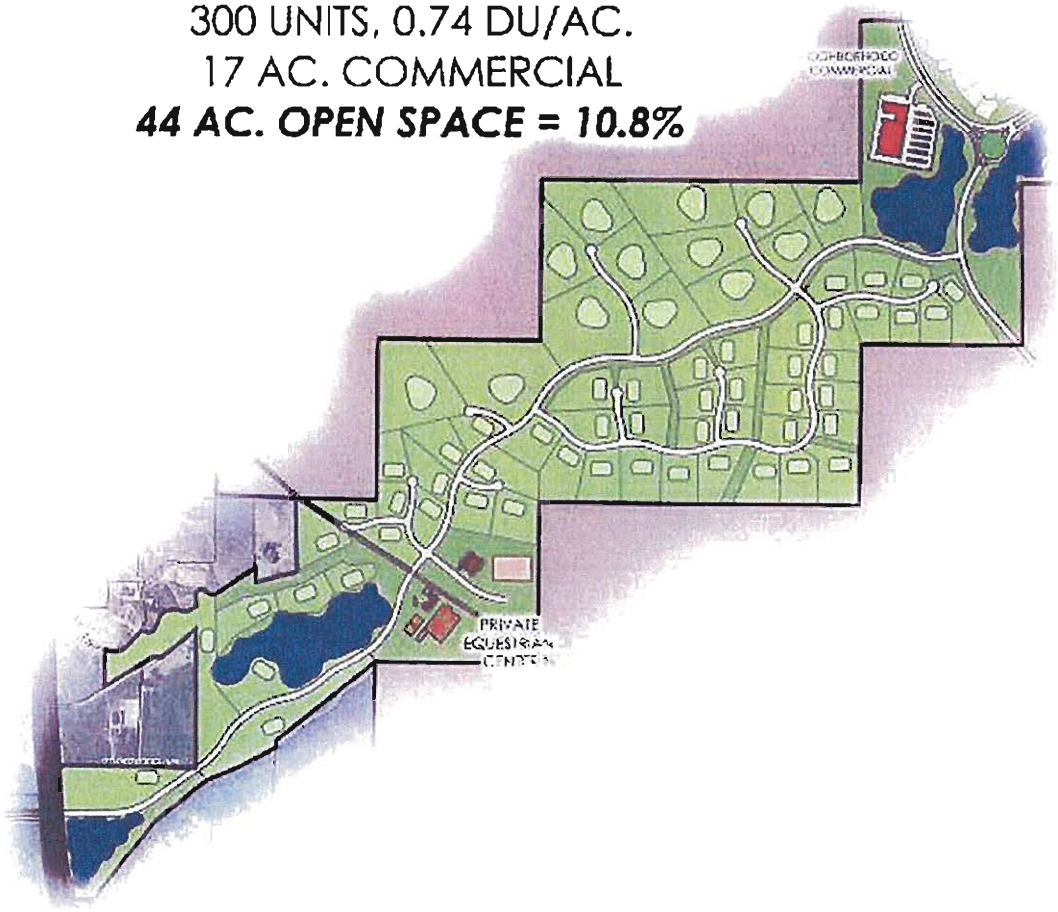
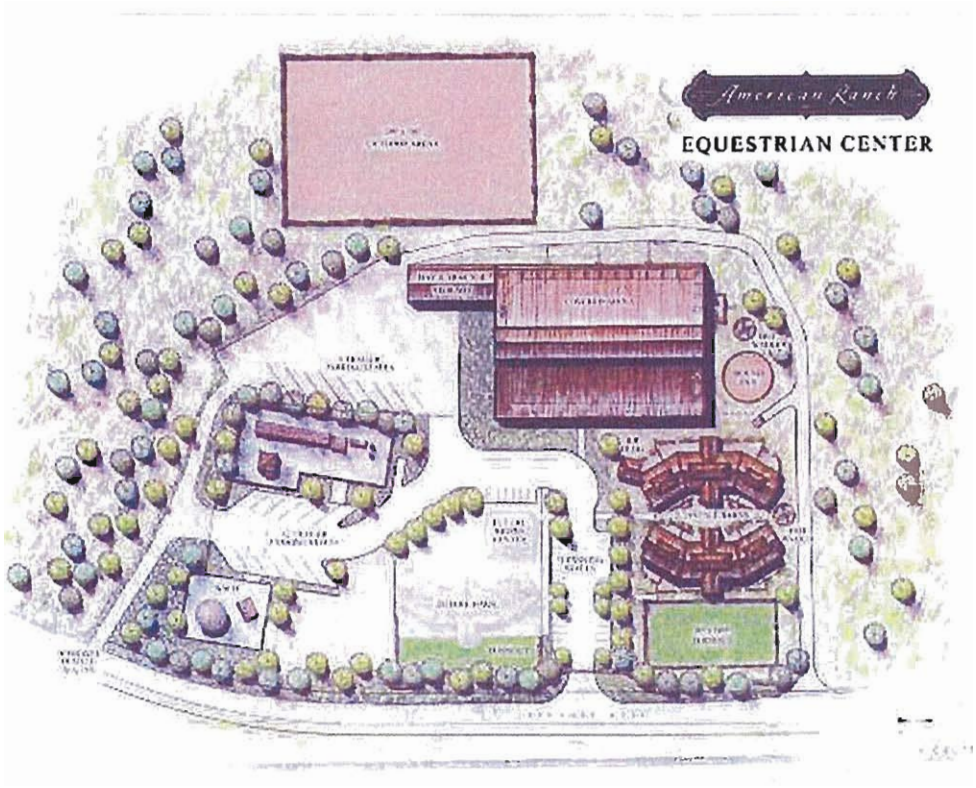


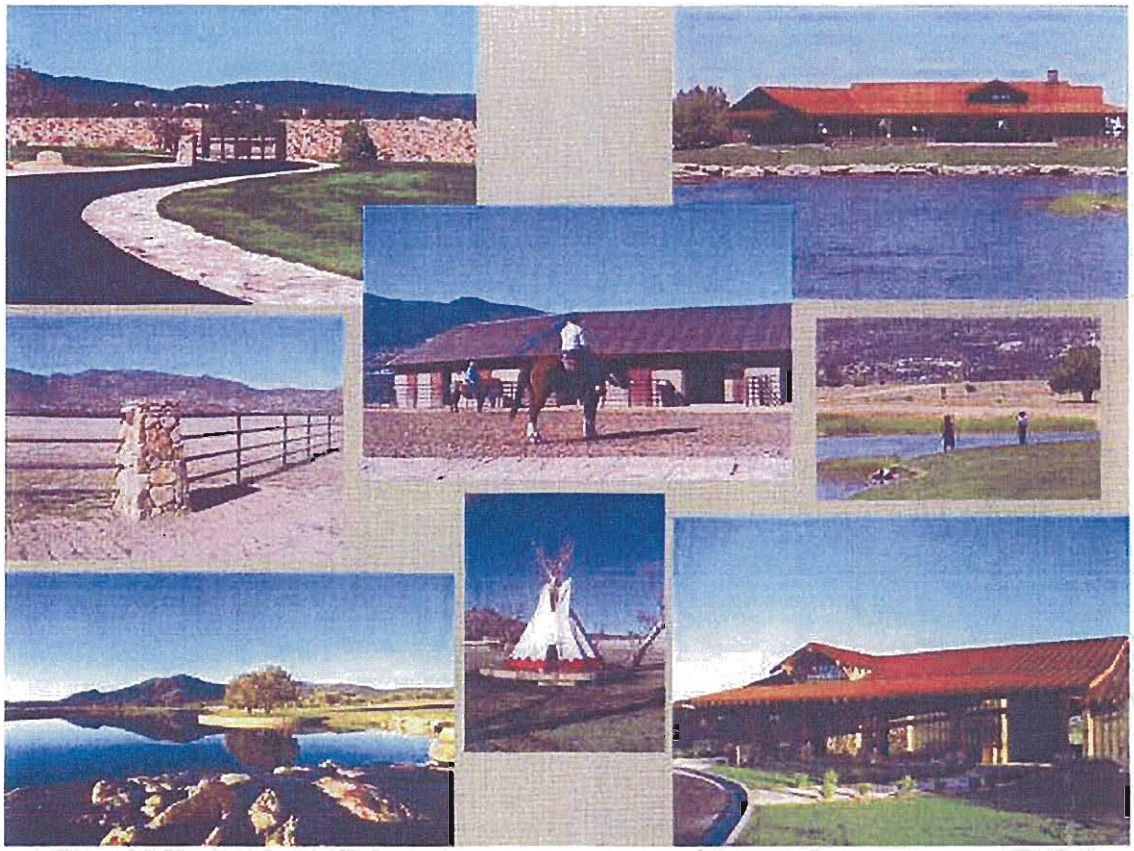
Illustration of the Southwestern Residential Planning Area. The community open space is 10.8% but a significant portion of this Planning Area will have on-lot open space which is the area on private lots outside of the building envelopes. M3 Eagle will always maintain a minimum of 25% open space inclusive of the regional and community open space.

Equestrian Center

A private equestrian center (with resident and limited outside boarding) will be part of this community along with a ranch camp. The equestrian center will be planned for covered and uncovered riding arenas, paddocks and 80 to 100 stalls. The "ranch camp" will be a park-like setting with recreational amenities such as; outdoor play equipment with a western theme, camp sites for residents, tree forts and tree swings and community play fields. All costs associated with the maintenance and operations of these areas will be borne through the M3 Eagle Owners' Association.



Example of an Equestrian Center on approximately 25 acres which includes sewer and water facilities. M3 built this facility at its American Ranch Prescott master planned community and it serves as a community amenity and gathering spot for equestrian functions and daily riding and training. The facility contains 58 stalls and is professionally managed.



American Ranch Prescott provides examples of the character and proposed feel for the Southwestern Residential Planning Area.

Parks and Trails

This Planning Area will be served by a regional park, a neighborhood park, and the private equestrian center. The Big Gulch Community Park, located mainly in the Big Gulch Planning Area will also occupy a portion of this Planning Area. In addition, ponds and small lakes holding treated effluent water will be located throughout this Planning Area with some located along Big Gulch Community Park. These water bodies will serve as irrigation reservoirs, community amenities, and wildlife habitat. This Planning Area will contain a minimum 44 acres of community open space representing almost 11% of the Planning Area. In addition, there will be extensive open space on lots. "On-lot open space" is open space which is on a private lot and remains as open space due to restrictions on development outside the building envelopes. These restrictions are enforced through the Design Guidelines and the Covenants, Conditions and Restrictions for M3 Eagle.

This Planning Area will also include non-motorized multi-use trails that will link the neighborhoods within this Planning Area and with the rest of the community, and that will provide looping opportunities, as appropriate, with community trails and regional trails within the Eagle Regional Park. Trails through neighborhoods not adjacent to public right-of-way or connecting to public parks may be located on only one side of the street and may be private.

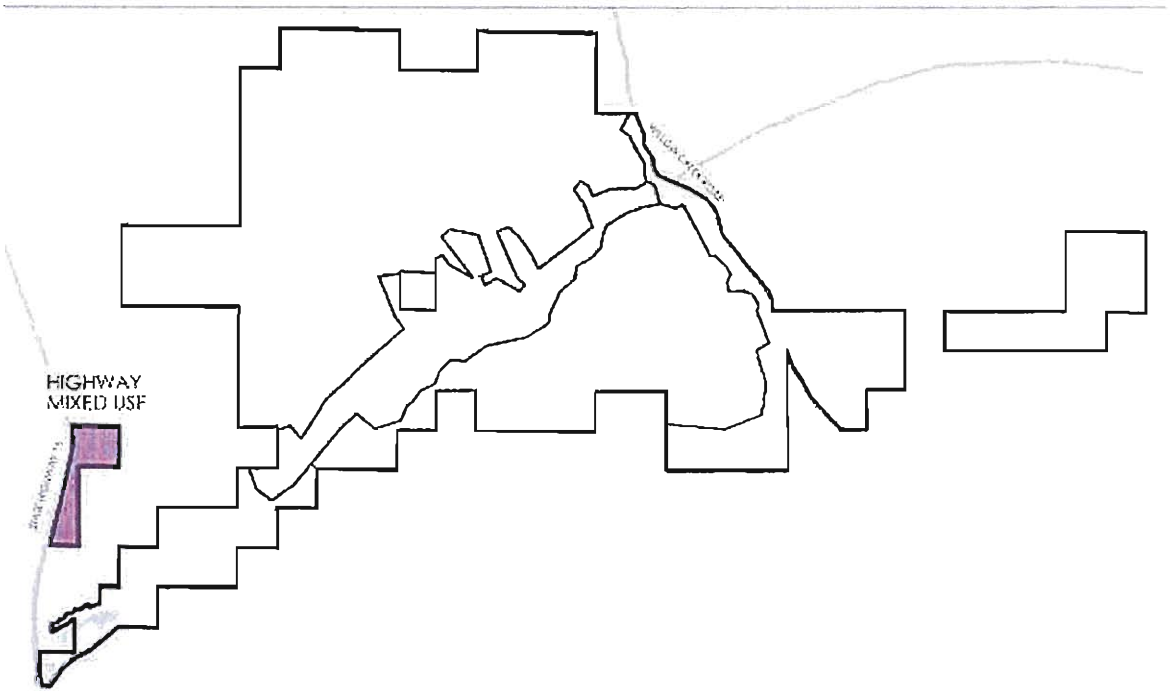
Access and Circulation

Initial access to this Planning Area will be from an extension of the Palmer Lane/Hartley Road alignment and/or the extension of Linder Road. When State Highway 16 is improved, as expected, to a limited access expressway, a new connection will be made along the highway frontage road. The provision of several north/south roadways into the project will distribute traffic to these roadways thereby reducing daily vehicle trips on a single-access roadway.

EXHIBIT F5
HIGHWAY MIXED-USE/BUSINESS PARK PLANNING AREA

Highway Mixed-Use/Business Park

The Highway Mixed-Use/Business Park contains 88 acres along State Highway 16 and is planned to be developed as a Community Center site with retail and mixed-use office, a fire station, and an existing cellular tower site. 290 residential units may also be developed into this Planning Area as well as a hotel. The Maximum Planning Area Density is 5.68 units/acre or 500 dwelling units. This area may be expanded in the future to include the adjacent 815-acre BLM parcel. This would create a commercial and employment center at the primary entry to the community and provide easy access and visibility from the highway corridor. Topographically, over 93% of the Planning Area is less than 25% slope. Uses planned for this area will require the support of a larger population base in the foothills, higher traffic on State Highway 16 and the development of a substantial residential base in M3 Eagle.



Highway Mixed-Use/Business Park is located along State Highway 16 on the western boundary of M3 Eagle.

Uses/Design

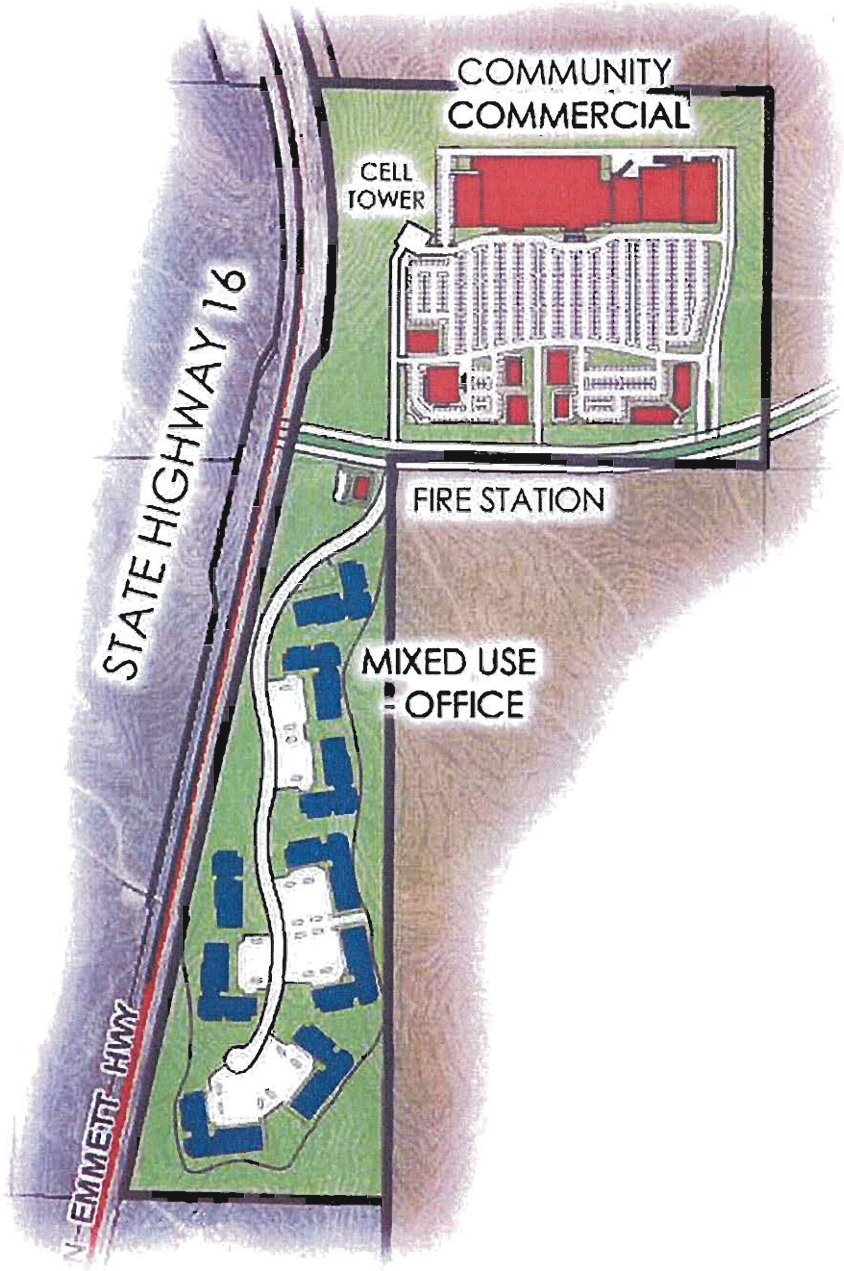
This area will combine highway-oriented commercial, retail, office and business park uses to capitalize on its adjacency and visibility from the regional transportation corridor, the planned interchange on State Highway 16, and the State Highway 16 to State Highway 55 arterial roadway. The site may also include a maximum of 290 high density single- and multi-family homes as well as hotel uses. Eventually, this area will be the gateway to M3 Eagle with appropriate landscape, entry and place-making features integrated into the design of the area.

This area may be expanded in the future to include the adjacent 815-acre BLM parcel provided the land exchange between M3 Eagle and BLM occurs. This parcel is envisioned to contain mixed-use

development (up to 50% of the land area), civic and educational uses, parks, and residential uses (at 2 units per gross acre).

HIGHWAY MIXED USE 88 AC.

290 UNITS
3.30 DU/AC.



Highway Mixed-Use/Business Park.

Access and Circulation

Access to this area will be by a future grade-separated interchange on State Highway 16 which will be two miles north of a future interchange on State Highway 16 and Beacon Light Road. This access will also serve as a primary entry into the community as well as connect to the primary five-lane arterial that is proposed to serve as a connection between State Highway 16 and State Highway 55.

EXHIBIT G
Conceptual Development Plan

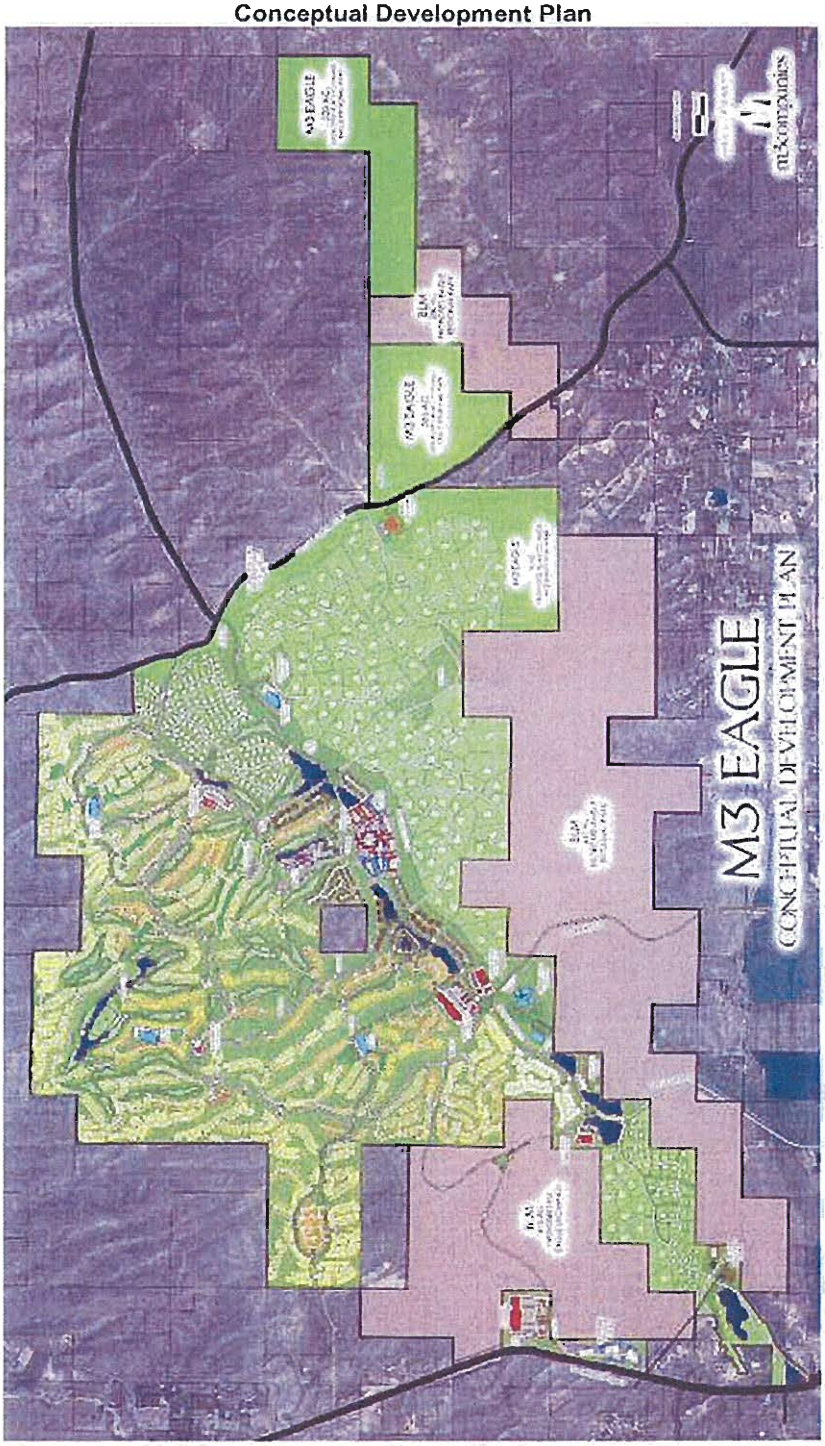
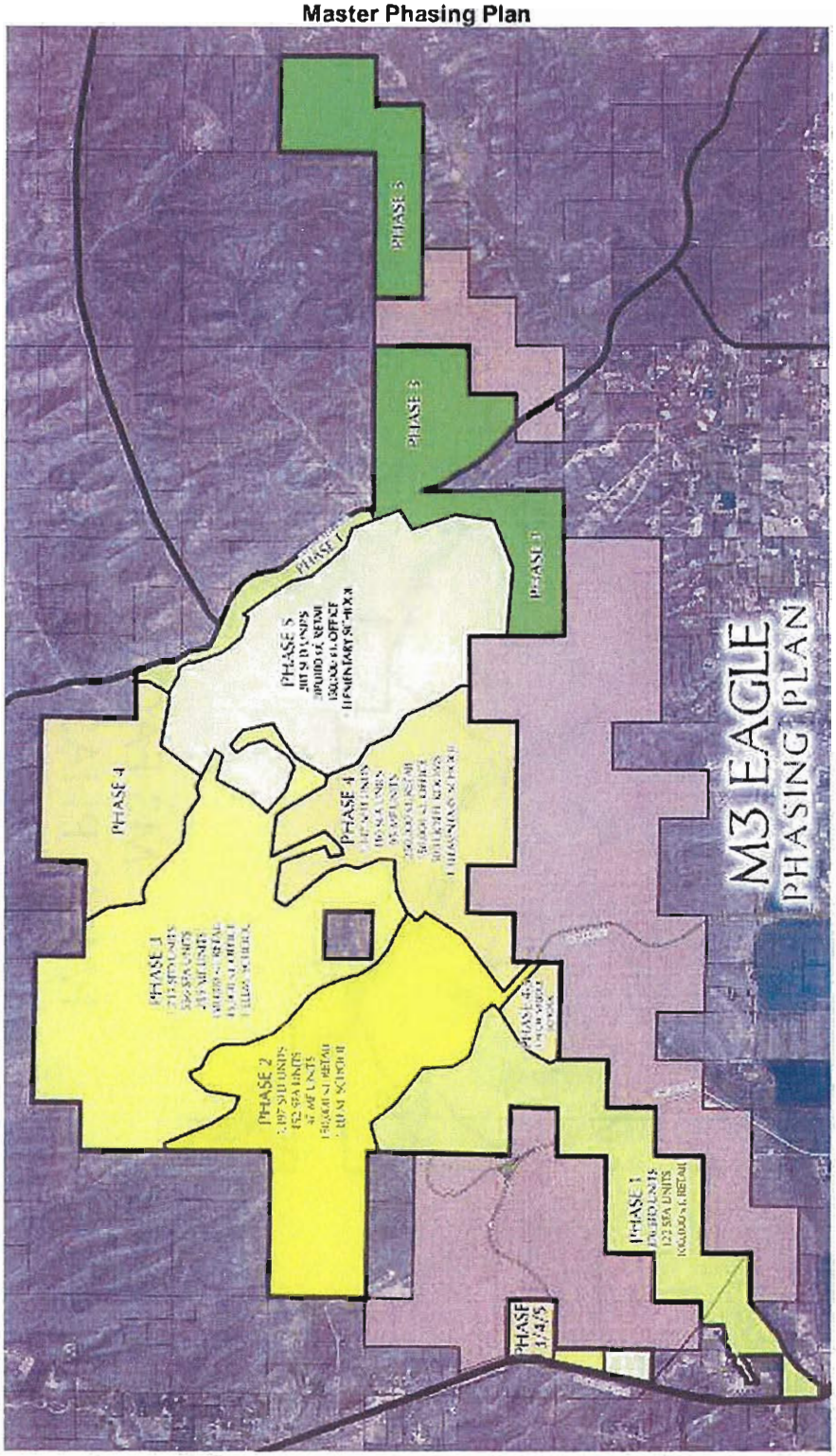
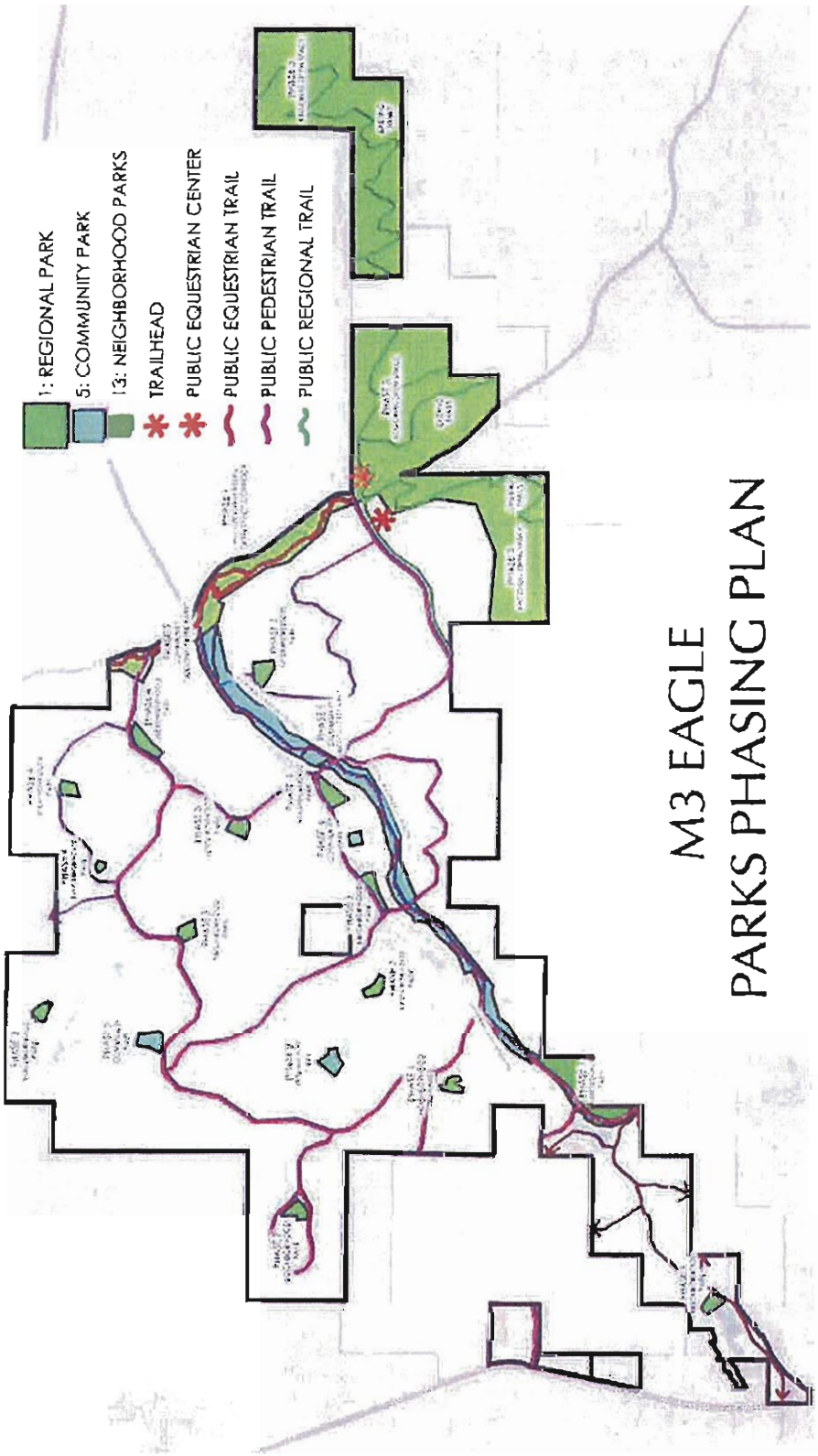


EXHIBIT H
Master Phasing Plan




1: REGIONAL PARK
5: COMMUNITY PARK
13: NEIGHBORHOOD PARKS
TRAILHEAD
PUBLIC EQUESTRIAN CENTER
PUBLIC EQUESTRIAN TRAIL
PUBLIC PEDESTRIAN TRAIL
PUBLIC REGIONAL TRAIL
M3 EAGLE
PARKS PHASING PLAN

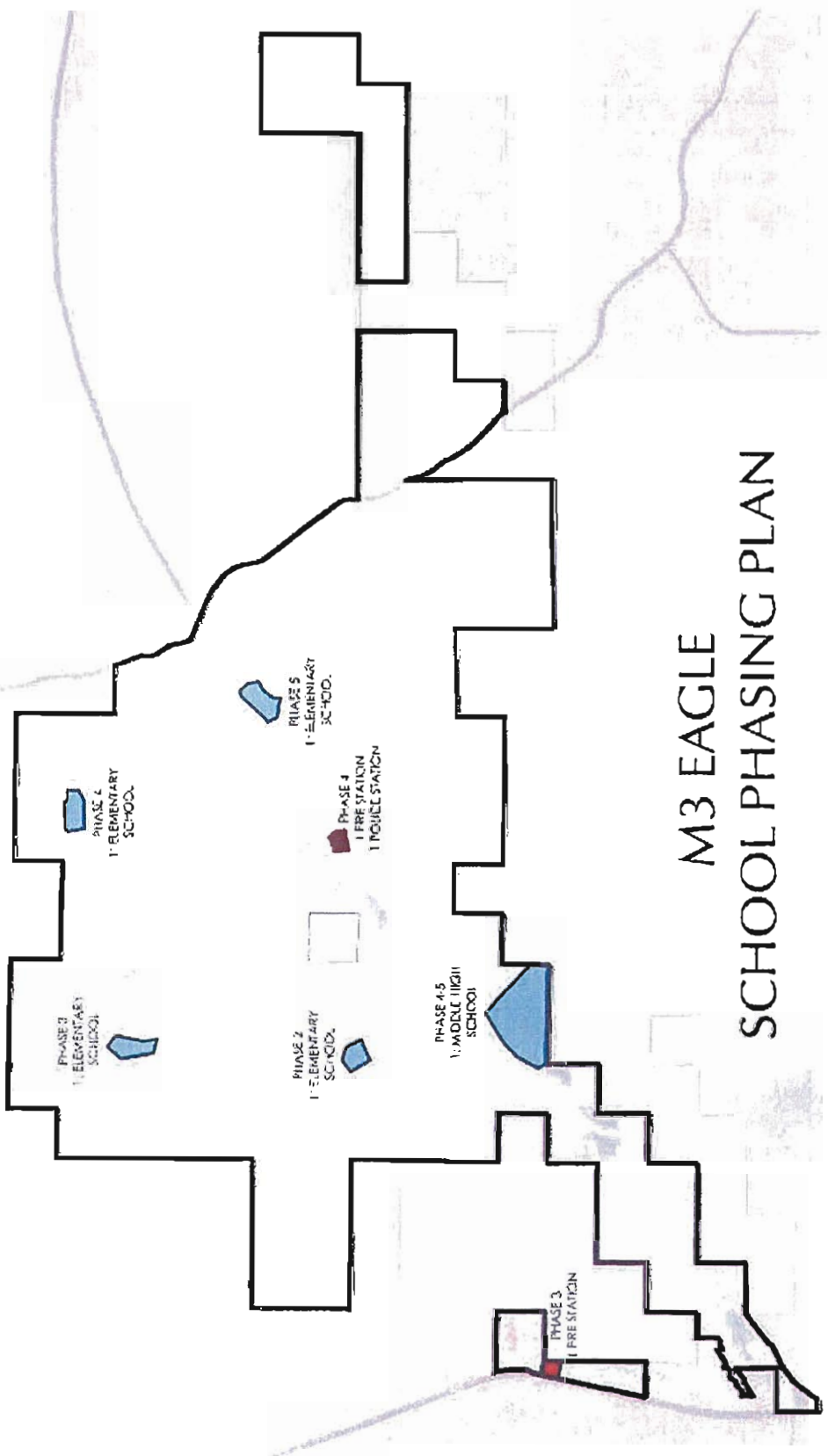


EXHIBIT H - 3

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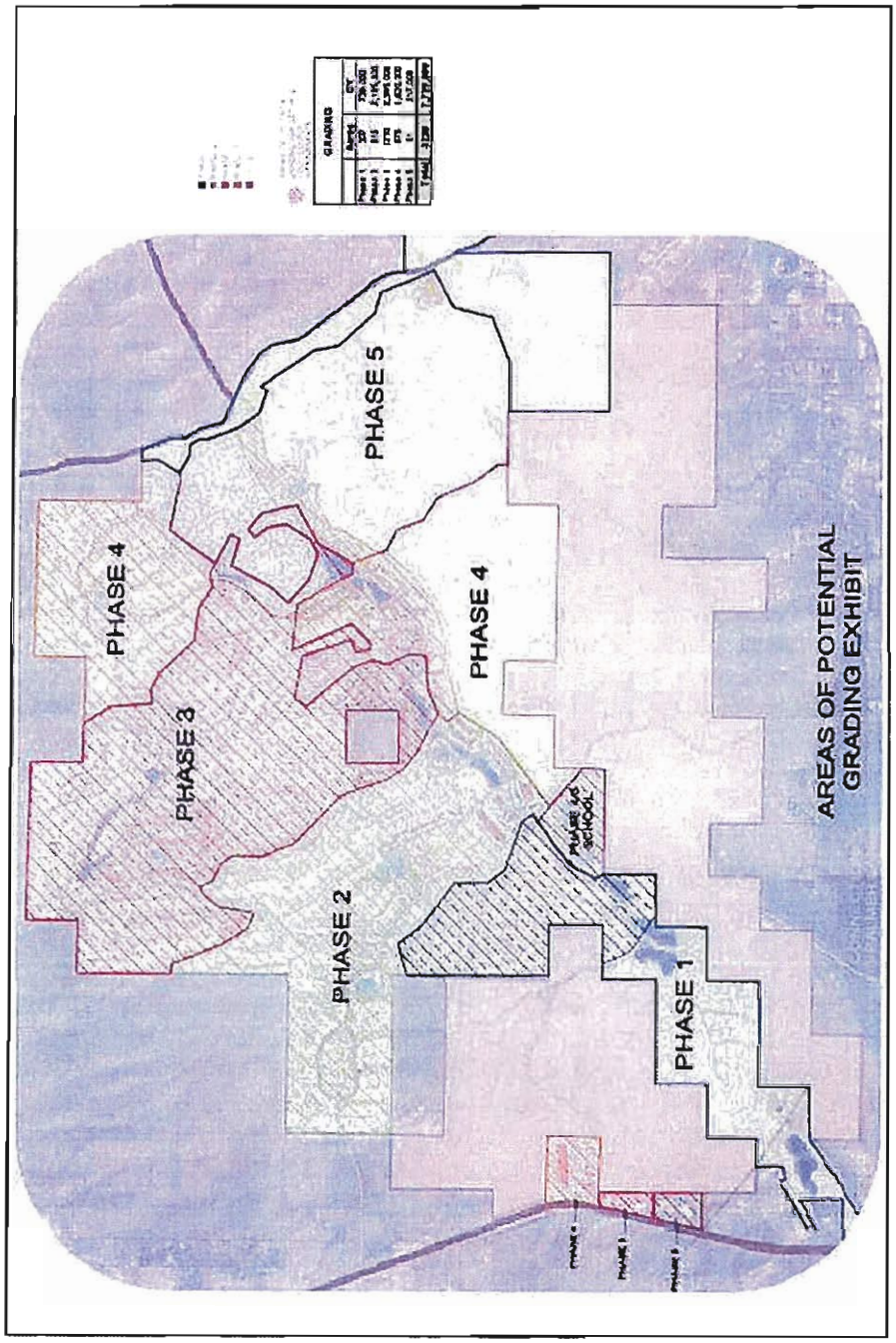
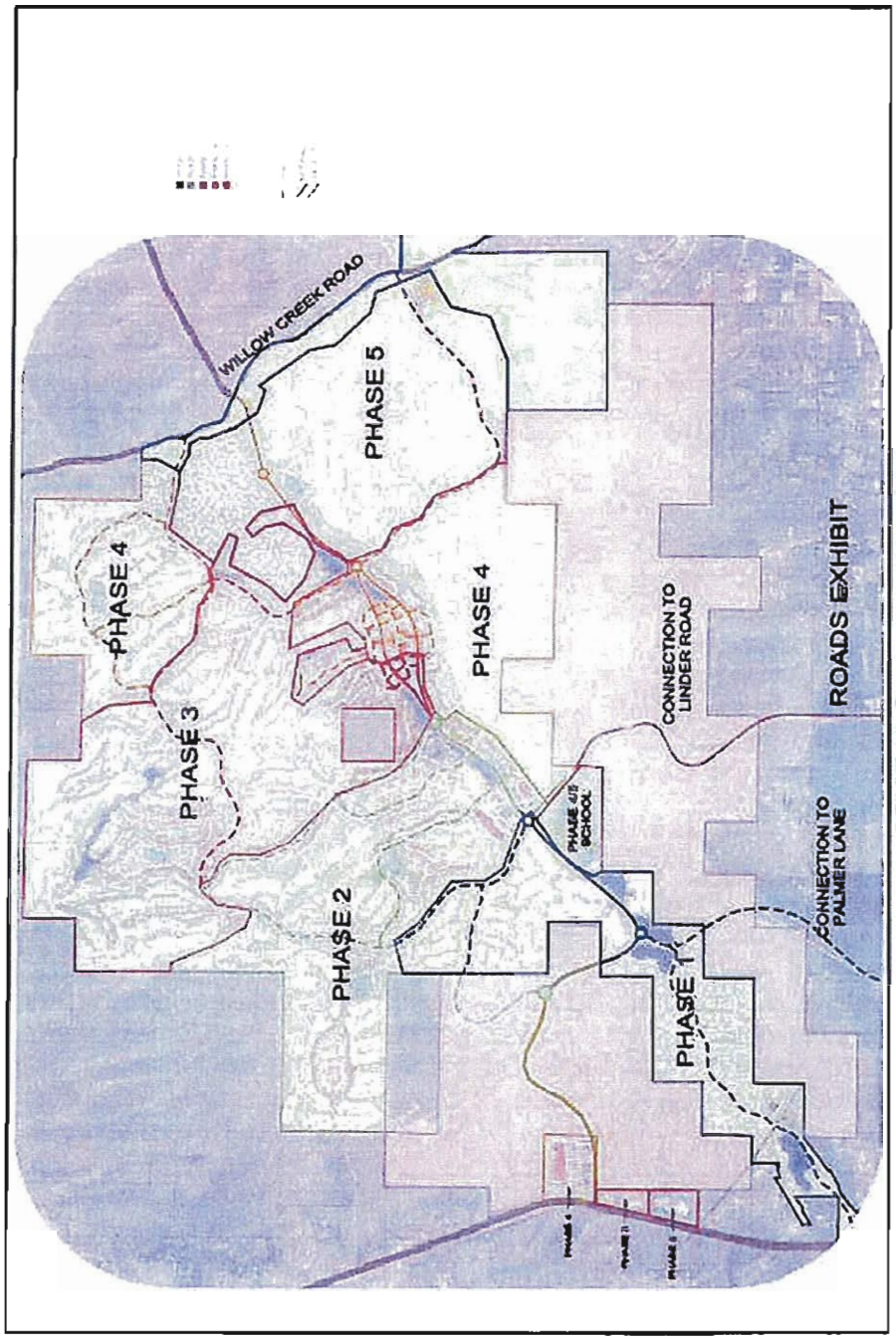
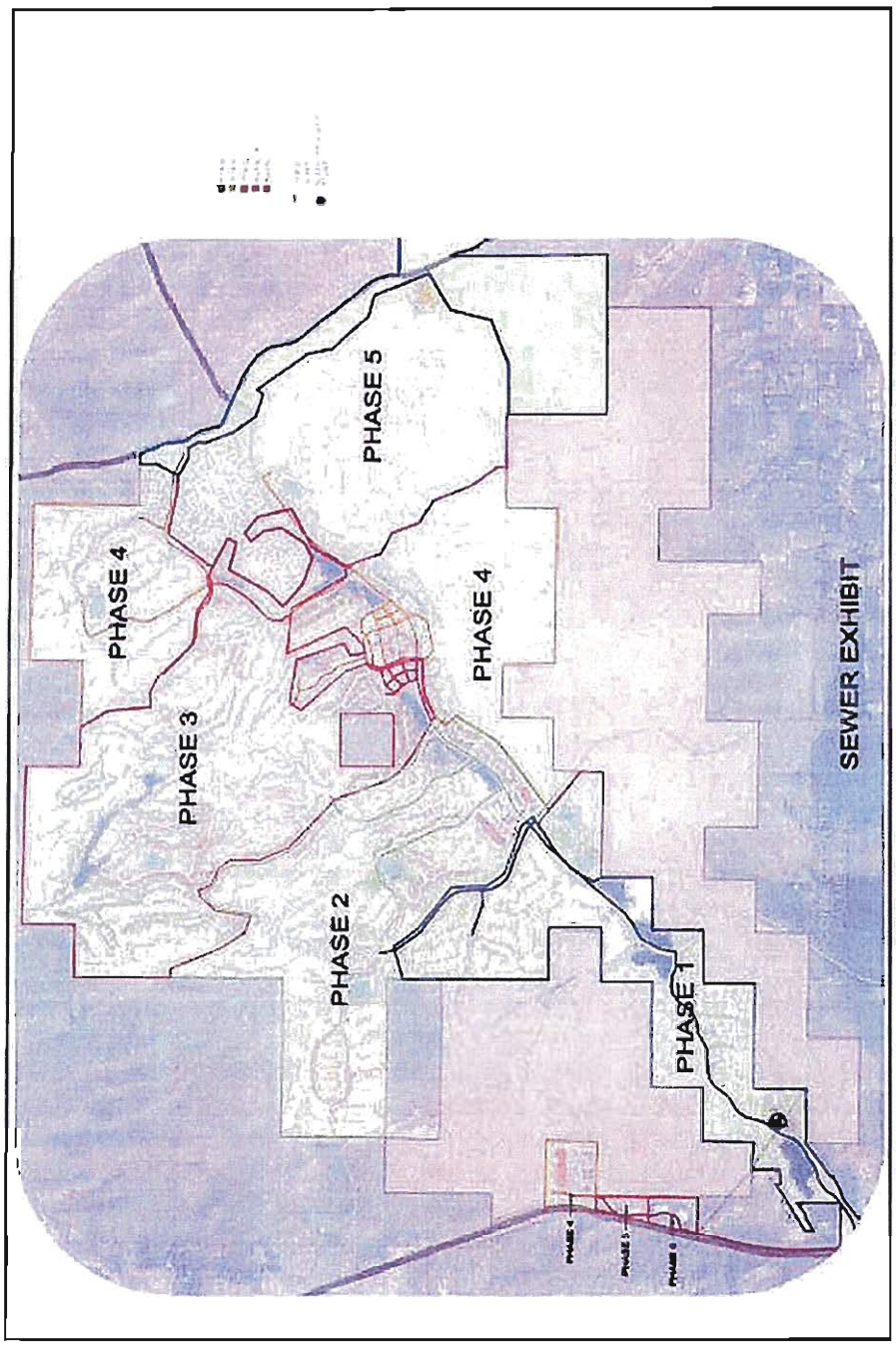
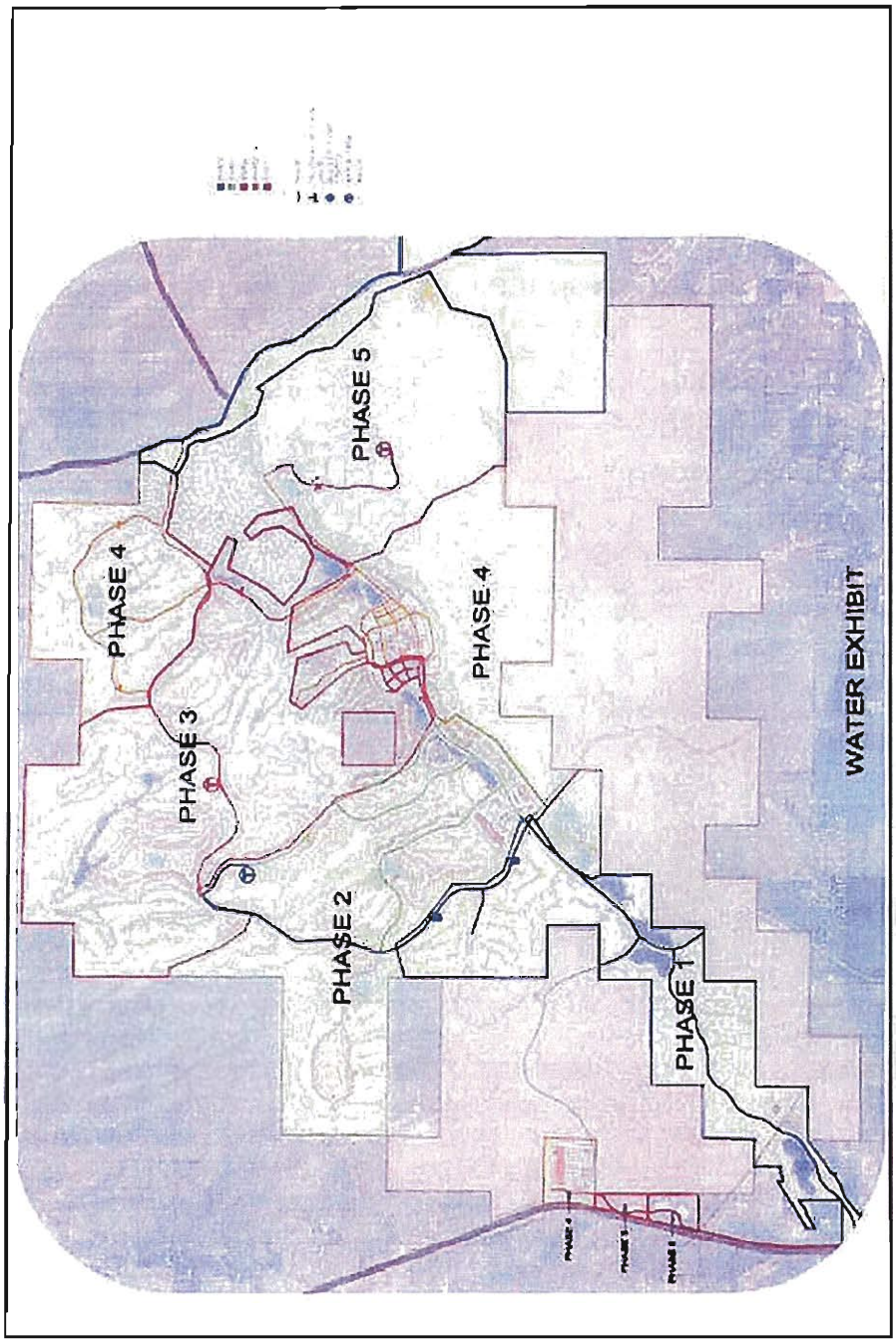
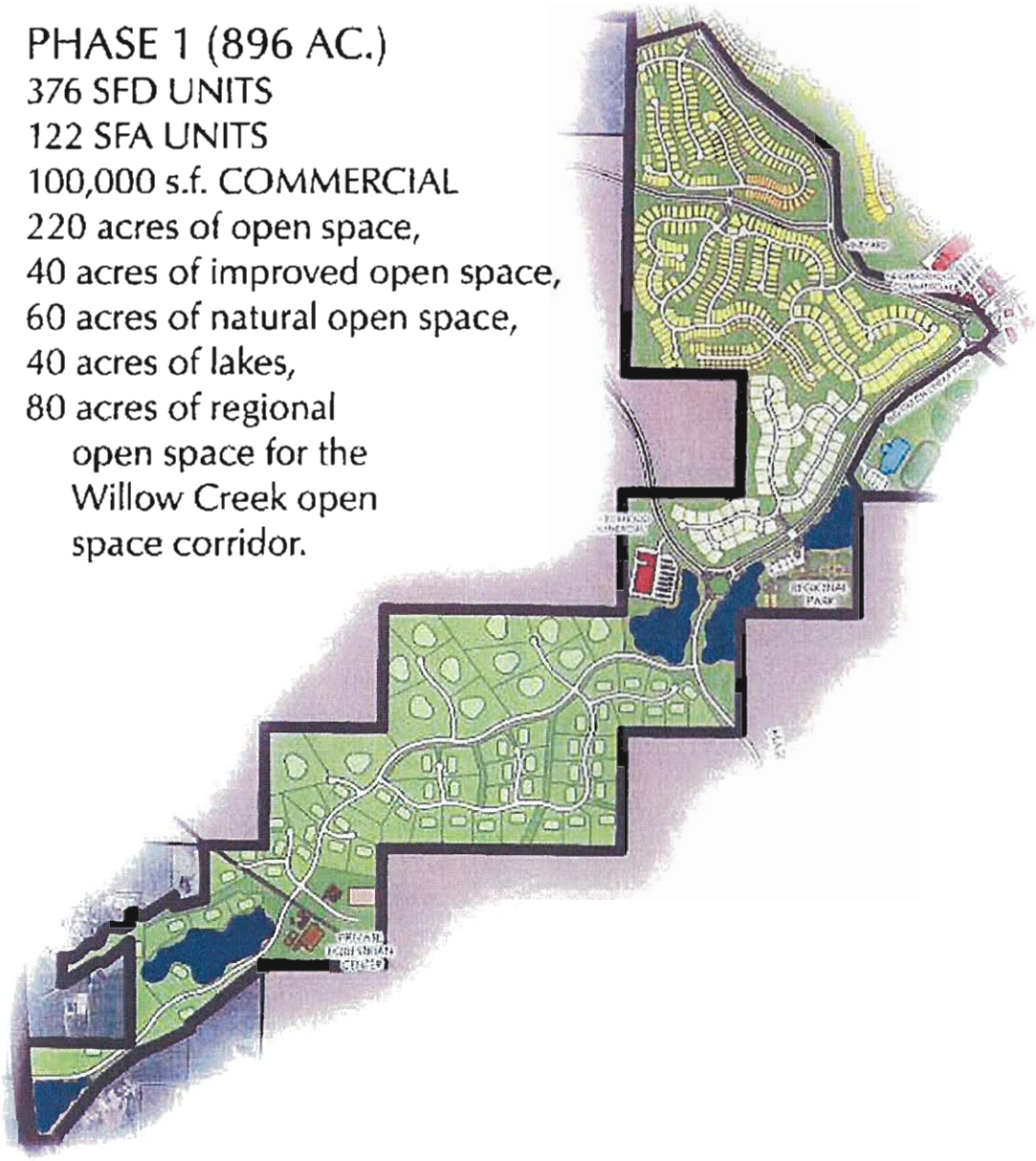

PHASE 4
PHASE 3
PHASE 5
PHASE 4
PHASE 2
PHASE 1
AREAS OF POTENTIAL
GRADING EXHIBIT


WILLOW CREEK ROAD
PHASE 5
PHASE 4
PHASE 4
PHASE 3
PHASE 2
PHASE 1
CONNECTION TO LINDER ROAD
CONNECTION TO PALMER LANE
ROADS EXHIBIT


PHASE 5
PHASE 4
PHASE 4
PHASE 3
PHASE 2
PHASE 1
SEWER EXHIBIT


PHASE 5
PHASE 4
PHASE 4
PHASE 3
PHASE 2
PHASE 1
WATER EXHIBIT

PHASE 1 (896 AC.)
376 SFD UNITS
122 SFA UNITS
100,000 s.f. COMMERCIAL
220 acres of open space,
40 acres of improved open space,
60 acres of natural open space,
40 acres of lakes,
80 acres of regional
open space for the
Willow Creek open
space corridor.



M3 EAGLE – PHASE 1
Years 1-2

Summary Narrative

Phase 1 encompasses all of the Southwestern Residential Planning Area and portions of the Big Gulch Planning Area and Northern Residential Planning Areas. Most of the Units in the Southwestern Planning Area will be rural and estate type custom Units with an equestrian theme. This Planning Area will also contain a small Neighborhood Commercial site. Infrastructure improvements will include the first arterial and collector roadways on the property, the first two municipal water wells, and the first phase of a sewage treatment plant that will also provide reuse water for irrigation. Amenities will include a private equestrian center, 140 acres of community open space (natural and improved) and 80 acres of regional open space along Willow Creek Road as part of the Willow Creek Road open space corridor. M3 will also set aside 800 acres at the eastern side of property, which is part of the M3 Eagle/BLM land exchange, for public use as part of the Eagle Regional Park.

Land Uses

Total Acreage:	896
Single Family Detached Units:	376
Single Family Attached Units:	122
Multi-Family Units:	0
Total Units:	498
Retail Space:	100,000 s.f.
Office Space:	0
Total Commercial	100,000 s.f.
Schools:	0

Parks/Open Space: 220 acres of open space consisting of 40 acres of improved open space (including 1 regional park, 2 neighborhood parks, 1 private equestrian center, and trails), 60 acres of natural open space, 40 acres of lakes, and 80 acres of regional open space for the Willow Creek open space corridor..

BLM EXCHANGE PARCEL
M3 Eagle will make available for public use the 800 acres of land designated as part of the BLM exchange in Phase 1 as regional open space as if it were a part of the Eagle Regional Park in accordance with section 2.6 (d) of the Development Agreement.

Cumulative Area:	*896 acres*
Cumulative Units:	*492 units*
Cumulative Commercial	*100,000 s.f.*
Cumulative Open Space:	*220 acres*

Cumulative Open Space as a % of Total Area: 25% (excludes the BLM Exchange Parcel)

On-Site Improvements

(Note: All descriptions of on-site improvements are preliminary and subject to change based on the final approved design.)

Roadways:

- A 2-lane collector roadway from State Highway 16 to the intersection of the central spine road (Big Gulch arterial) with a temporary improved and signalized intersection at State Highway 16

Or

- The extension of Palmer/Hartley as a 2-lane collector from the Corinthian property to the central spine road
- The central spine road as a 5-lane arterial from the Palmer/Hartley terminus to the Phase 2 boundary
- A 2-lane arterial from the central spine road to the 815-acre BLM parcel
- Two 2-lane collector roads to serve residential neighborhoods
- Roundabouts at intersections that would otherwise be signalized

Water:

- Two municipal production wells
- A 1 million gallon storage tank (to be located in the Phase 2 area)
- Two booster pump stations and two pressure reducing valves
- 12" main lines under collector and arterial roadways

Sewer:

- A minimum 0.5 mgd treatment plant, expandable in future phases to 2.4 mgd
- 8"-30" main lines under collector and arterial roadways

Drainage:

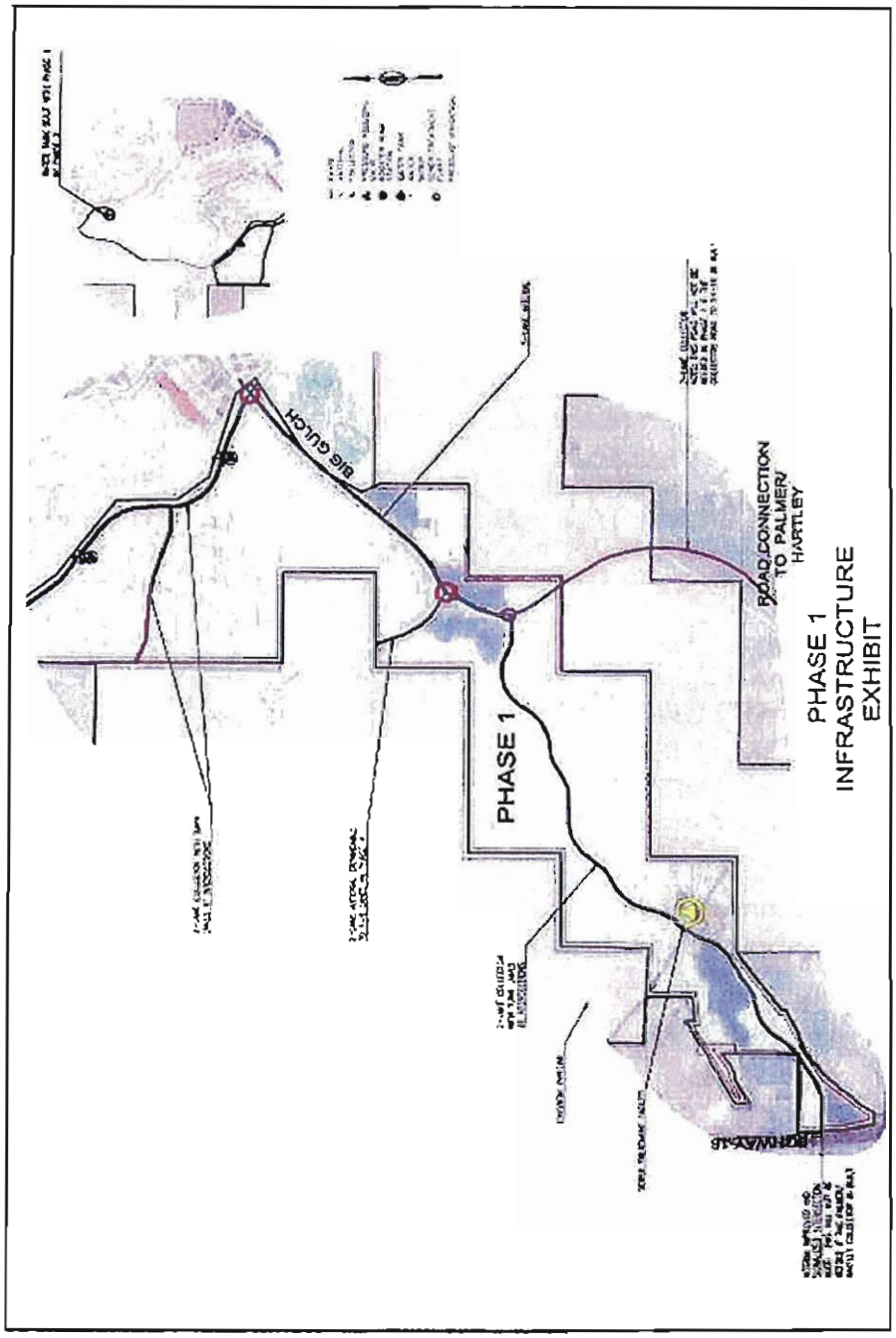
- Improvements to Big Gulch to contain flood waters and provide erosion protection
- Drainage culverts under roadways as required

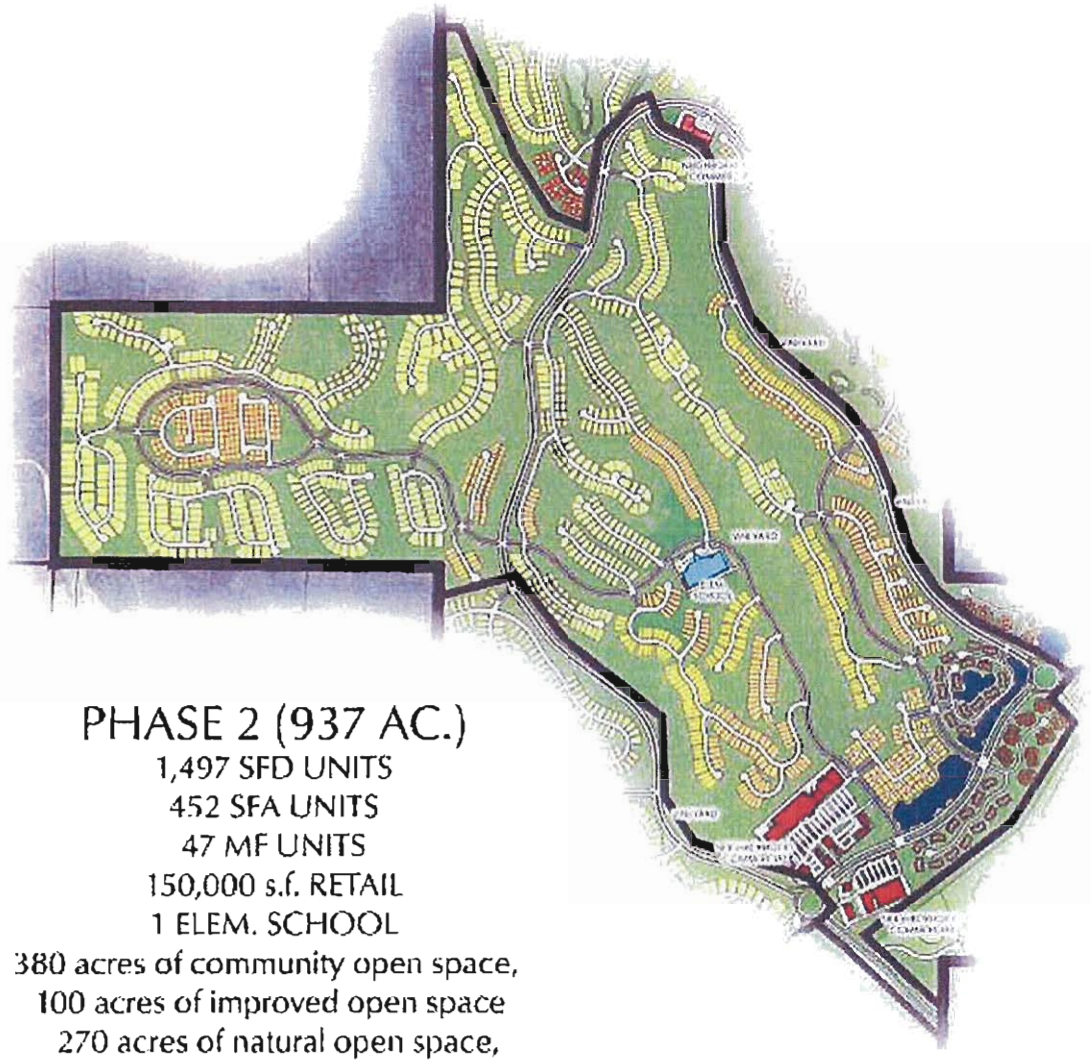
Utilities:

- Pressure irrigation system along all roadways
- Power, gas, phone and CATV lines

Off-Site Improvements

Refer to the traffic study pages 29 to 31.


PHASE 1
INFRASTRUCTURE
EXHIBIT
PHASE 1
BIG GULCH
ROAD CONNECTION
TO PALMER/
HARTLEY



PHASE 2 (937 AC.)

1,497 SFD UNITS
452 SFA UNITS
47 MF UNITS
150,000 s.f. RETAIL
1 ELEM. SCHOOL
380 acres of community open space,
100 acres of improved open space
270 acres of natural open space,
10 acres of lakes.

M3 EAGLE – PHASE 2
Years 3-7

Summary Narrative

Phase 2 encompasses the southern third of the Northern Residential Planning Area and a portion of the Big Gulch Planning Area. Phase 2 will contain 2 Neighborhood Commercial sites in the Big Gulch Planning Area and the community's first school, an elementary school subject to review and approval of the School District. This phase will also contain the community's first fire station. Infrastructure improvements will include the extension of Linder Rd. and Palmer/Hartley Rd. (if not provided in Phase1) into the property, an entry arterial off of State Highway 16 into the property (if the Palmer/Hartley connection doesn't go in), extensions of existing arterial and collector roads and two new municipal water wells. Amenities consist of 380 acres of community open space including community and neighborhood parks, the start of the Big Gulch linear open space, and other improved and natural open space.

Land Uses

Total Acreage:	937
Single Family Detached Units:	1,497
Single Family Attached Units:	452
Multi-Family Units:	47
Total Units:	1,996
Retail Space:	150,000 s.f.
Office Space:	0
Total Commercial:	150,000 s.f.
Schools:	1 elementary school
Parks/Open Space:	380 acres of community open space consisting of 100 acres of improved open space (including 1 community park, 2 neighborhood parks, Big Gulch linear open space, and trails), 270 acres of natural open space, and 10 acres of lakes.

Cumulative Area:	*1,833 acres*
Cumulative Units:	*2,494 units*
Cumulative Commercial:	*250,000 s.f.*
Cumulative Open Space:	*600 acres*
Cumulative Open Space as a % of Total Area:	*33%*

On-Site Improvements

(Note: All descriptions of on-site improvements are preliminary and subject to change based on the final approved design.)

Roadways:

- Extension of Palmer/Hartley Rd. (if not constructed in Phase 1) as a 2-lane arterial from Corinthian property boundary to central spine road

  Or
- A 2-lane arterial from State Highway 16 through the BLM 815 acres to connect to the Phase 1 two-lane arterial and intersection improvements on State Highway 16 to meet ITD requirements and a 2-lane collector within the BLM 815 acres to a Phase 1 2-lane collector
- Extension of Linder Rd. as a 2-lane arterial from Beacon Light to the central spine road
- Continuation of the central spine road through Big Gulch as a 5-lane arterial
- 2-lane collector roadways to serve residential neighborhoods
- Roundabouts at intersections that would otherwise be signalized

Water:

- Two municipal production wells (to be located in Phase 1)
- Two pressure reducing valves
- 10" and 12" main lines under collector and arterial roadways

Sewer:

- 8"-24" main lines under collector and arterial roadways

Drainage:

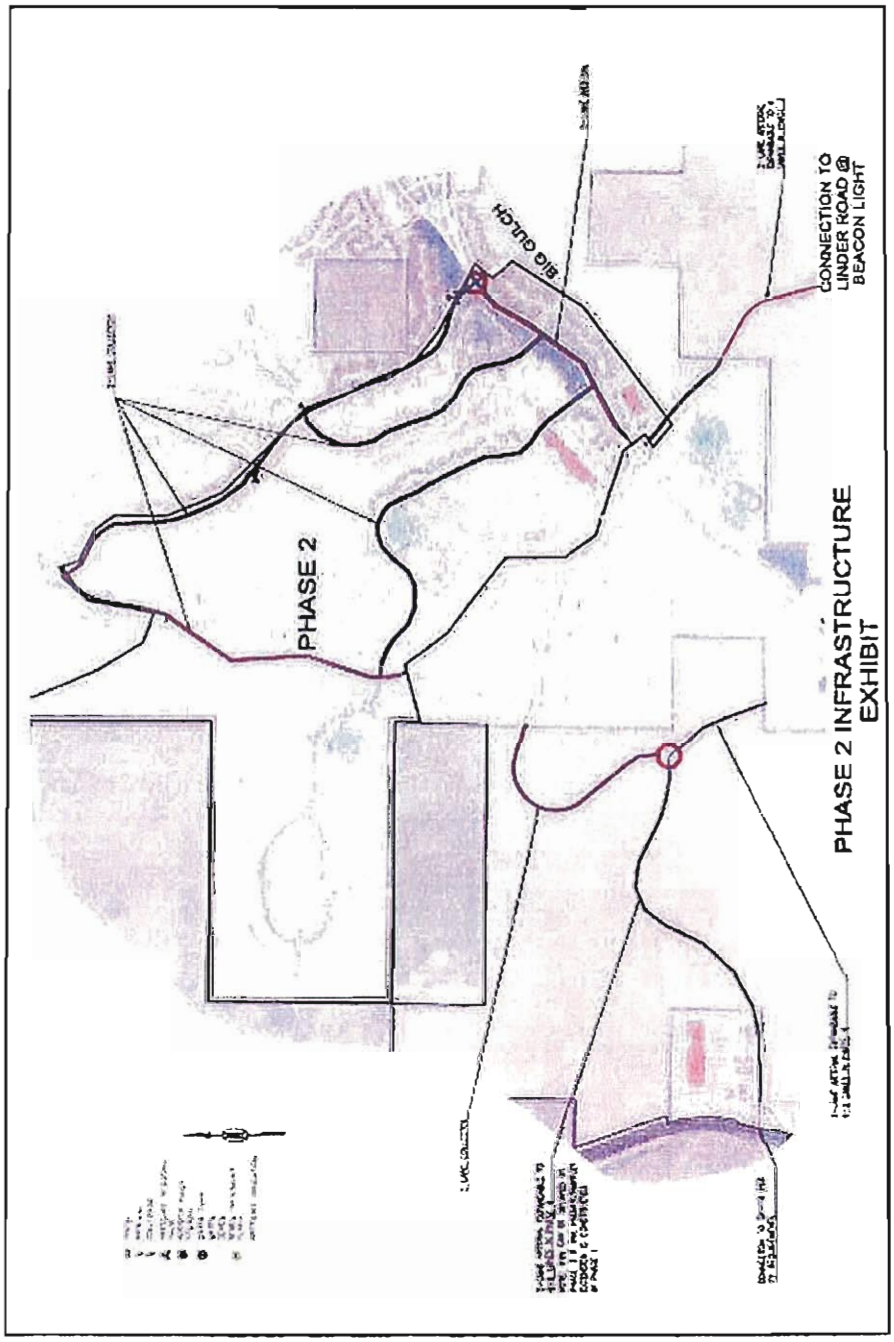
- Continuation of improvements to Big Gulch to contain flood waters and provide erosion protection and creation of Big Gulch linear open space
- Drainage culverts under roadways as required

Utilities:

- Pressure irrigation system along all roadways
- Power, gas, phone and CATV lines

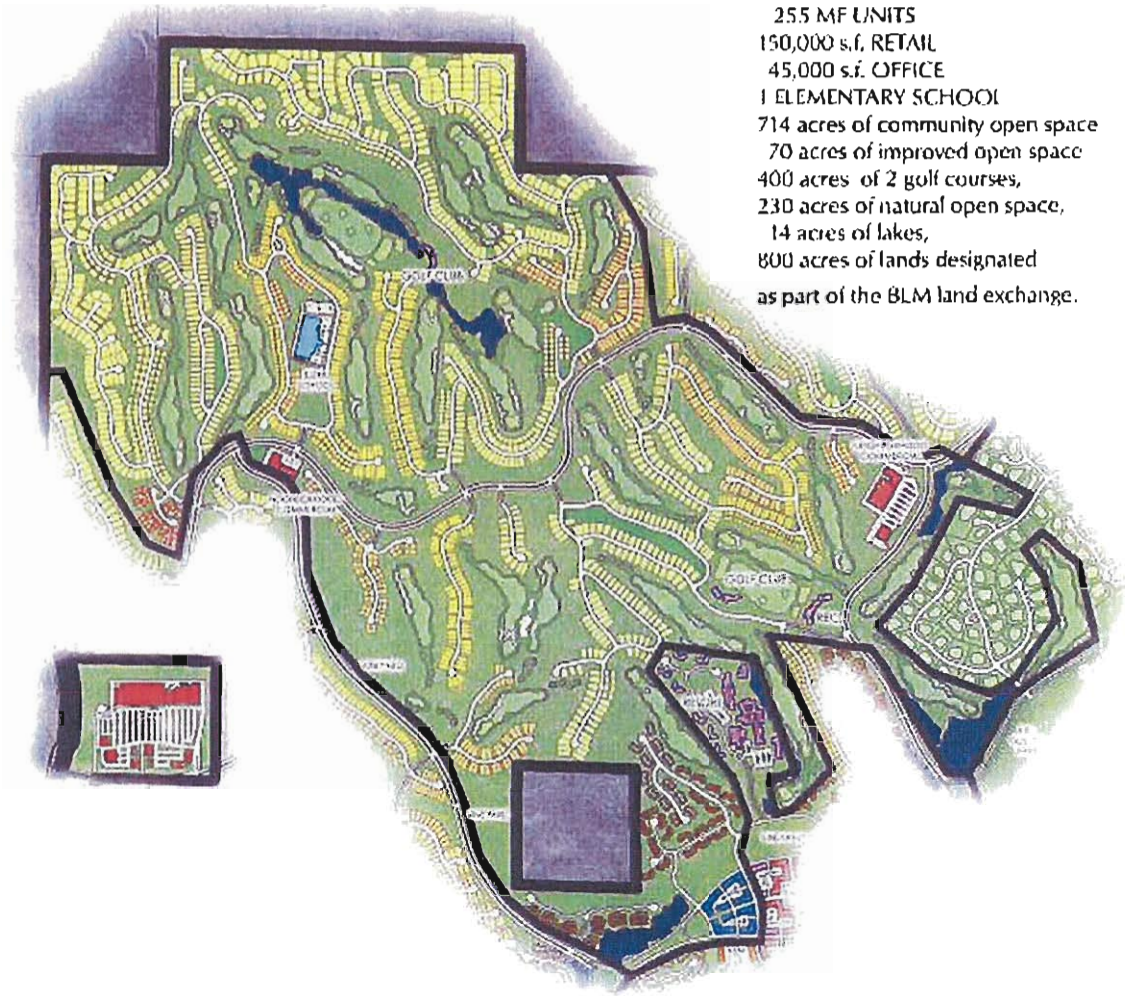
Off-Site Improvements

See the Traffic Study pages 32 to 34.


PHASE 2 INFRASTRUCTURE
EXHIBIT
PHASE 2
BIG GULCH
CONNECTION TO
LINDER ROAD @
BEACON LIGHT

PHASE 3 (2,110 AC.)

1,715 SFD UNITS
556 SFA UNITS
255 MF UNITS
150,000 s.f. RETAIL
45,000 s.f. OFFICE
1 ELEMENTARY SCHOOL
714 acres of community open space
70 acres of improved open space
400 acres of 2 golf courses,
230 acres of natural open space,
14 acres of lakes,
800 acres of lands designated
as part of the BLM land exchange.



M3 EAGLE – PHASE 3
Years 8-12

Summary Narrative

Phase 3 encompasses the middle third of the Northern Residential Planning Area and a portion of the Big Gulch Planning Area. Two Neighborhood Commercial sites are part of the Northern Residential Planning Area. This phase will also contain the middle third of the Highway/Mixed Use Planning Area, which is planned for an office park, and a primary entry to the community off of State Highway 16. One elementary school will be needed as part of this phase, subject to review and approval of the School District. Infrastructure improvements include the expansion of Linder Rd., an entry arterial off of State Highway 16 (if the Palmer/Hartley extension goes in Phase 2), the start of the village center roadway network, the extension of existing arterial and collector roads, and one new municipal water well. Amenities consist of 714 acres of Community Open Space including community and neighborhood parks, the continuation of the Big Gulch linear Open Space, two golf courses, lakes, and other improved and natural Open Space.

NOTE: During this phase, M3 has to have completed the BLM land exchange. For purposes of this phasing plan, M3 is assuming that the exchange does not occur and the 800 acres is added to Open Space and the total acreage.

Land Uses

Total Acreage:	2,110 inclusive of the 800 acres designated as part of the BLM land exchange; see section 2.6 (d) of the Development Agreement.
Single Family Detached Units:	1,715
Single Family Attached Units:	556
Multi-Family Units:	255
Total Units:	2,526
Retail Space:	150,000 s.f.
Office Space:	45,000 s.f.
Total Commercial:	195,000 s.f.
Schools:	1 elementary school
Parks/Open Space:	714 acres of community open space consisting of 70 acres of improved open space (including 1 community park, 5 neighborhood parks, the Big Gulch linear open space, and trails, 2 golf courses totaling 400 acres, 230 acres of natural open space, and 14 acres of lakes) and 800 acres of lands designated as part of the BLM land exchange.
Other:	1 fire station (in the Highway/Mixed Use Planning Area)
Cumulative Area:	*3,943 acres (including the M3 Eagle 800-acre BLM exchange parcel*

Cumulative Units:	*5,020 units*
Cumulative Commercial:	*445,000 s.f.*
Cumulative Open Space:	*2,114 acres*
Cumulative Open Space as a % of Total Acres:	*54%*

On-Site Improvements

(Note: All descriptions of on-site improvements are preliminary and subject to change based on the final approved design.)

Roadways:

- Expansion of Linder Rd. to 4 lanes from Beacon Light Rd. to the central spine road
- A 2-lane arterial from State Highway 16 through the BLM 815 acres to connect to the Phase 1 two-lane arterial and intersection improvements on State Highway 16 to meet ITD requirements (if not needed/constructed in Phase 2)
- Continuation of the central spine road through Big Gulch splitting into two 3-lane one-way couplets through the village center
- 2-lane local streets through the village center
- 2-lane collector roads servicing the residential neighborhoods

Water:

- One municipal production well (to be located in the Phase 1 area)
- One 1.5 million gallon water tank
- Two pressure reducing valves
- 10" and 12" main lines under roadways

Sewer:

- Expansion of treatment plant in Phase 1 by 0.5 - 1 mgd
- 8"-21" main lines under collector and arterial roadways

Drainage:

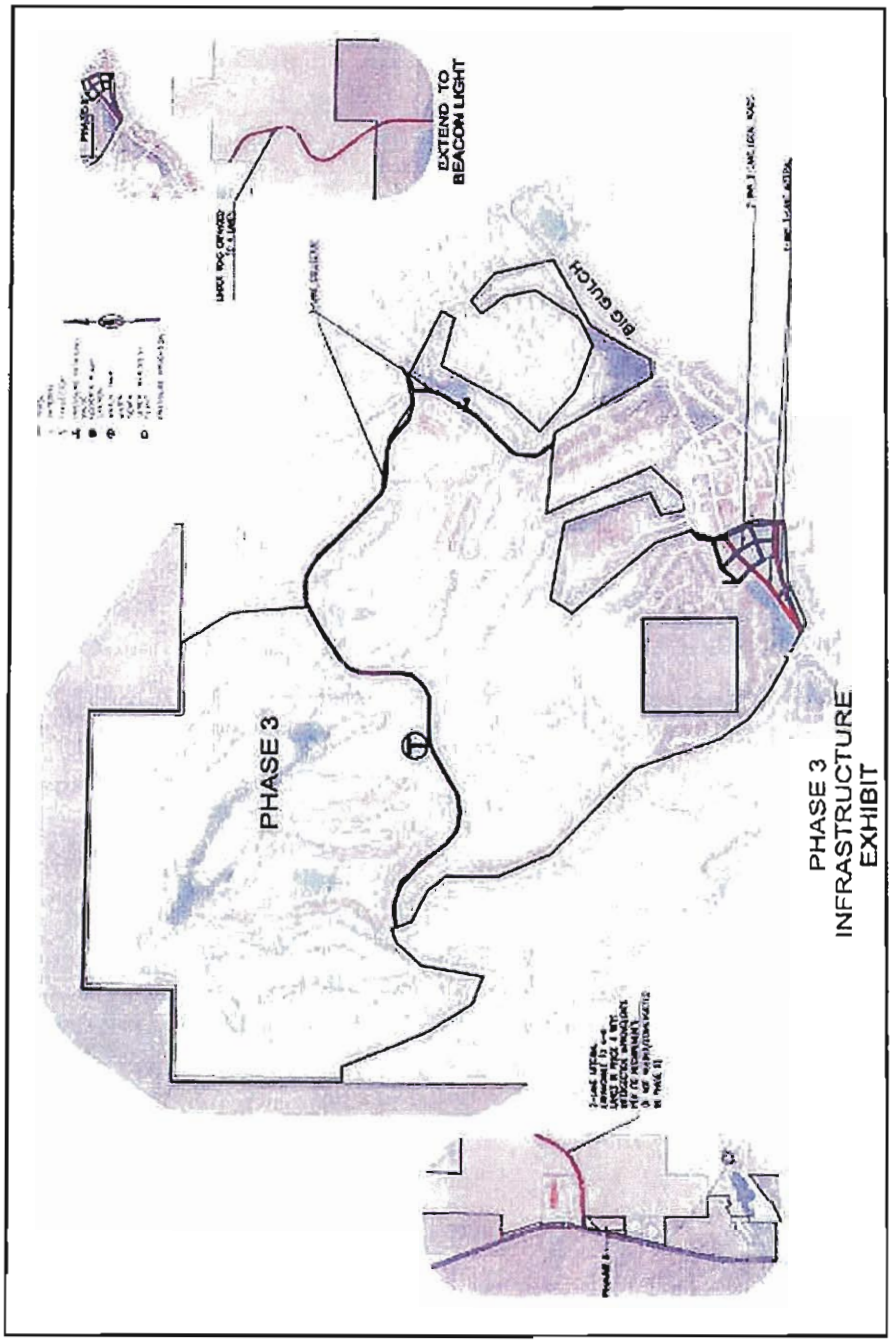
- Drainage culverts under roadways as required

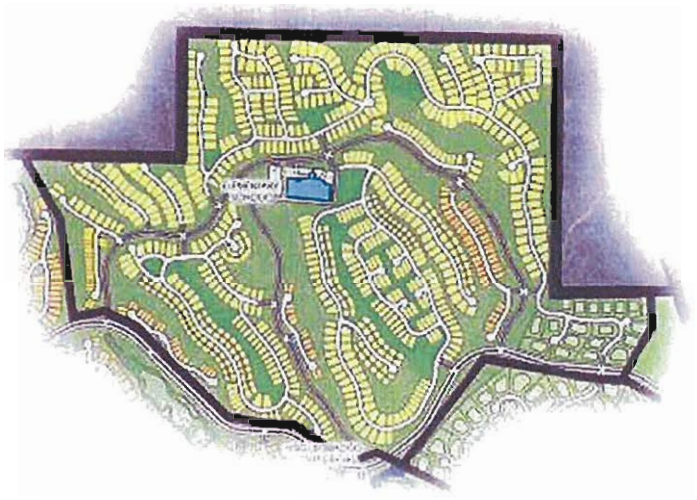
Utilities:

- Pressure irrigation system along all roadways
- Power, gas, phone and CATV lines

Off-Site Improvements

See the Traffic Study pages 35 to 37.


EXTEND TO
BEACON LIGHT
BIG GULCH
PHASE 3
PHASE 3
INFRASTRUCTURE
EXHIBIT



PHASE 4 (1,073 AC.)
1,347 SFD UNITS
410 SFA UNITS
95 MF UNITS
250,000 s.f. RETAIL
150,000 s.f. OFFICE
500 HOTEL ROOMS
1 ELEMENTARY SCHOOLS
1 MIDDLE/HIGH SCHOOL
207 acres of community open space
60 acres of improved open space
130 acres of natural open space,
17 acres of lakes.

M3 EAGLE – PHASE 4
Years 13-17

Summary Narrative

Phase 4 encompasses the western half of the Southern Residential Planning Area, the western quarter of the Northern Residential Planning Area, and the central portion of the Big Gulch Planning Area, which contains the central Neighborhood Commercial center, medical offices, a combined fire/police station, and a 500-room resort hotel. This phase will also contain the northern third of the Highway/Mixed Use Planning Area which is planned for a Community Center. Residential development in the Southern Planning Area will consist of estate type custom lots. One elementary school and one middle school will be needed in this phase with locations subject to the review and approval of the school district. Infrastructure improvements include the widening of the main entry arterial into the property off of State Highway 16 and construction of an interchange, extension of the central spine road through the village center to Willow Creek Rd and the improvement of Willow Creek Rd. through the property, and one new municipal water well. Amenities consist of 207 acres of community open space including community and neighborhood parks, continuation of the Big Gulch linear open space, and other improved and natural open space.

Land Uses

Total Acreage:	1,073
Single Family Detached Units:	1,347
Single Family Attached Units:	410
Multi-Family Units:	95
Total Units:	1,852
Retail Space:	250,000 s.f.
Office Space:	150,000 s.f.
Total Commercial:	400,000 s.f.
Schools:	1 elementary school and 1 middle school
Parks/Open Space:	207 acres of community open space consisting of 60 acres of improved open space (including 1 community park, 3 neighborhood parks, the Big Gulch linear open space, and trails), 130 acres of natural open space, and 17 acres of lakes.
Other:	500 hotel rooms and 1 combined fire/police station (in the Big Gulch Planning Area)
Cumulative Area:	*5,016 acres*
Cumulative Units:	*6,872 units*
Cumulative Commercial:	*845,000 s.f.*
Cumulative Open Space:	*2,321 acres*
Cumulative Open Space as a % of Total Area:	*46%*

On-Site Improvements

(Note: All descriptions of on-site improvements are preliminary and subject to change based on the final approved design.)

Roadways:

- Expansion of 2-lane arterial from State Highway 16 through BLM 815 acres to central spine road to 4-6 lanes
- Interchange on State Highway16
- Continuation of central spine road as two 3-lane couplets through the village center to the Phase 5 border and then as a 2-lane arterial to Willow Creek Rd.
- Intersection improvement at Willow Creek Rd. and the central spine road
- Improvement of Willow Creek Rd. as a 2-lane arterial adjacent to the property
- 2-lane local streets through the village center
- 2-lane collector and local roads servicing the residential neighborhoods and the hotel/resort
- Roundabouts at intersections that would otherwise be signalized

Water:

- One municipal production well (to be located in the Phase 1 area)
- One booster station
- One pressure reducing valve
- 10" and 12" main lines under roadways

Sewer:

- Expansion of treatment plant in Phase 1 to ultimate capacity of 2.4 mgd
- 8"-24" main lines under roadways

Drainage:

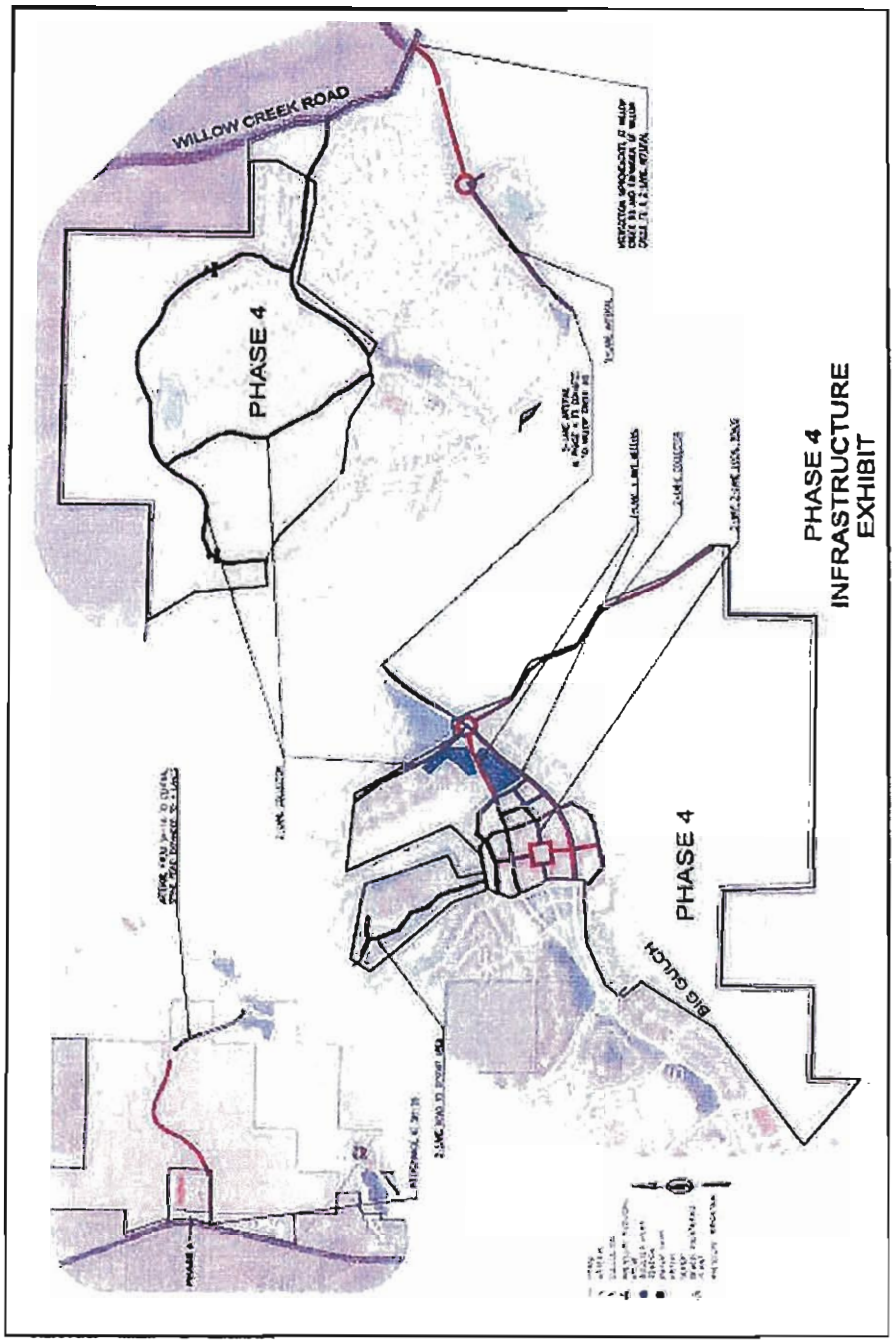
- Continuation of improvements to Big Gulch to contain flood waters and provide erosion protection and creation of Big Gulch linear open space
- Drainage culverts under roadways as required

Utilities:

- Pressure irrigation system along all roadways
- Power, gas, phone and CATV lines

Off-Site Improvements

See the Traffic Study pages 38 to 40.


WILLOW CREEK ROAD
PHASE 4
PHASE 4
PHASE 4
Big Gulch
PHASE 4
INFRASTRUCTURE
EXHIBIT

PHASE 5 (989 AC.)

281 SFD UNITS
200,000 s.f. RETAIL
150,000 s.f. OFFICE
1 ELEMENTARY SCHOOL
1 HIGH SCHOOL
81 acres of community open space
71 acres of improved open space
10 acres of natural open space

M3 EAGLE

sed
M3

EAGLE – PHASE 5
Years 18-20

Summary Narrative

Phase 5 encompasses a small portion of the Northern Residential Planning Area, the eastern half of the Southern Residential Planning Area and the easternmost portion of the Big Gulch Planning Area. This phase also contains the southern third of the Highway/Mixed Use Planning Area which is planned for an office park. This phase is planned to contain all single family units with the Southern Planning Area comprised of estate type custom lot neighborhoods. One elementary school and one high school will be needed in this phase with the location subject to the review and approval of the School District. The high school will share the same site as the middle school built in Phase 4. Infrastructure improvements include collector roads and a municipal water well. Amenities consist of 60 acres of Community Open Space including community and neighborhood parks, the completion of the Big Gulch linear Open Space, and other natural and improved Open Space. This phase will also contain the site for a public equestrian center along Willow Creek Road.

Land Uses

Total Acreage:	989
Single Family Detached Units:	281
Single Family Attached Units:	0
Multi-Family Units:	0
Total Units:	281
Retail Space:	200,000 s.f.
Office Space:	150,000 s.f.
Total Commercial:	350,000 s.f.
Schools:	1 elementary school and 1 high school (high school to be located with the middle school in the Phase 4 area)
Parks/Open Space:	60 acres of community open space consisting of 50 acres of improved open space (2 community parks, 1 neighborhood park, the Big Gulch linear open space, and trails) and 10 acres of natural open space
Other:	A public equestrian center site
Cumulative Area:	*6,005 acres*
Cumulative Units:	*7,153 units*
Cumulative Commercial:	*1,195,000 s.f.*
Cumulative Open Space:	*2,402 acres*

Cumulative Open Space as a % of Total Area: 40%

On-Site Improvements

(Note: All descriptions of on-site improvements are preliminary and subject to change based on the final approved design.)

Roadways:

- 2-lane collector road servicing the residential neighborhoods

Water:

- One well (to be located in Phase 1 area)
- One 0.5 million gallon water tank
- One booster pump station
- One pressure reducing valve
- 10" and 12' main lines under collector roadway

Sewer:

- 8" main line under collector roadway

Drainage:

- Completion of improvements to Big Gulch to contain flood waters and provide erosion protection and creation of Big Gulch linear open space
- Drainage culverts under roadways as required

Utilities:

- Pressure irrigation system along all roadways
- Power, gas, phone and CATV lines

Off-Site Improvements

See the Traffic Study pages 41 to 45.

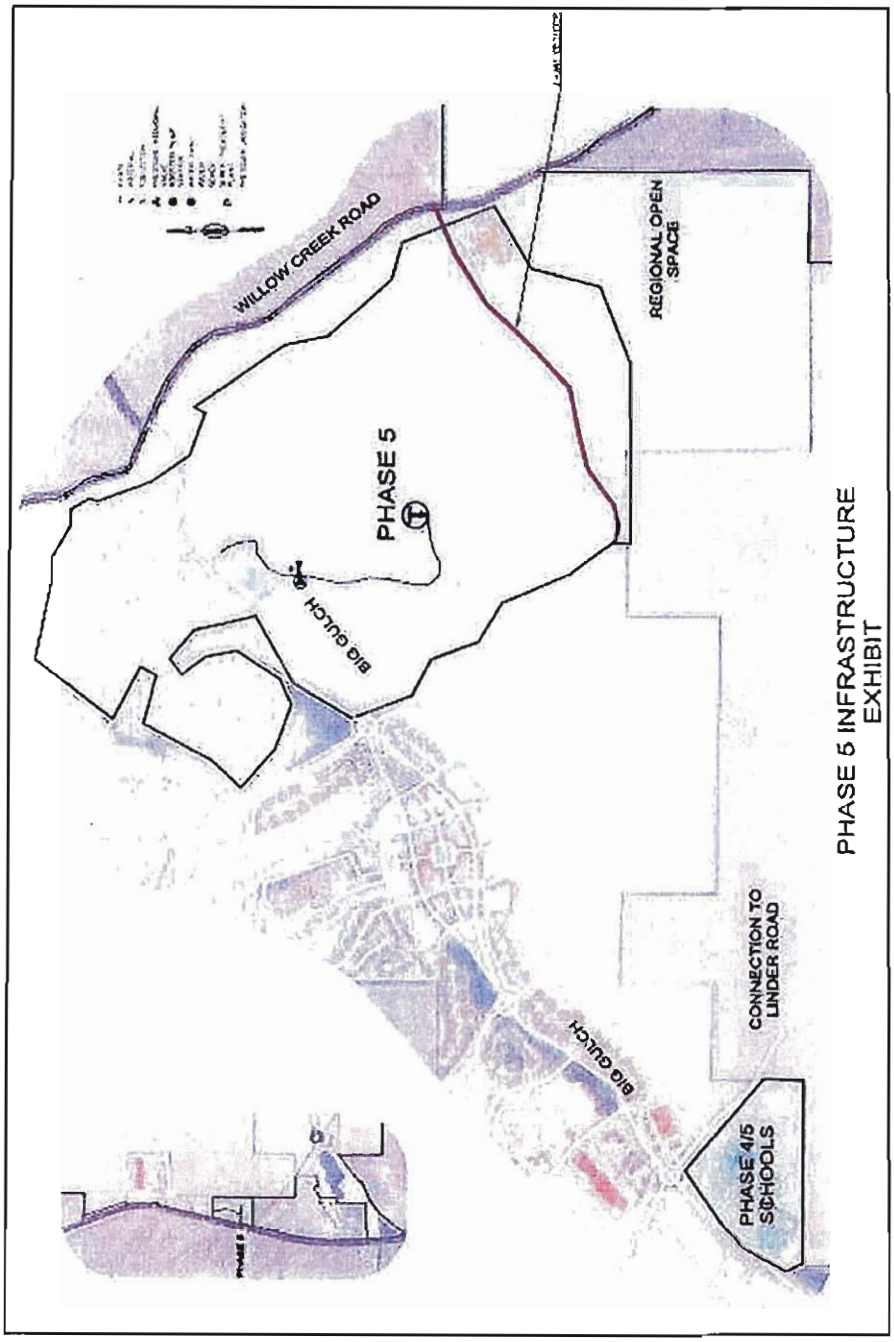

WILLOW CREEK ROAD
REGIONAL OPEN SPACE
PHASE 5
BIG GULCH
BIG GULCH
CONNECTION TO LINDER ROAD
PHASE 4/5 SCHOOLS
PHASE 5 INFRASTRUCTURE EXHIBIT

EXHIBIT I
Regional Circulation Plan

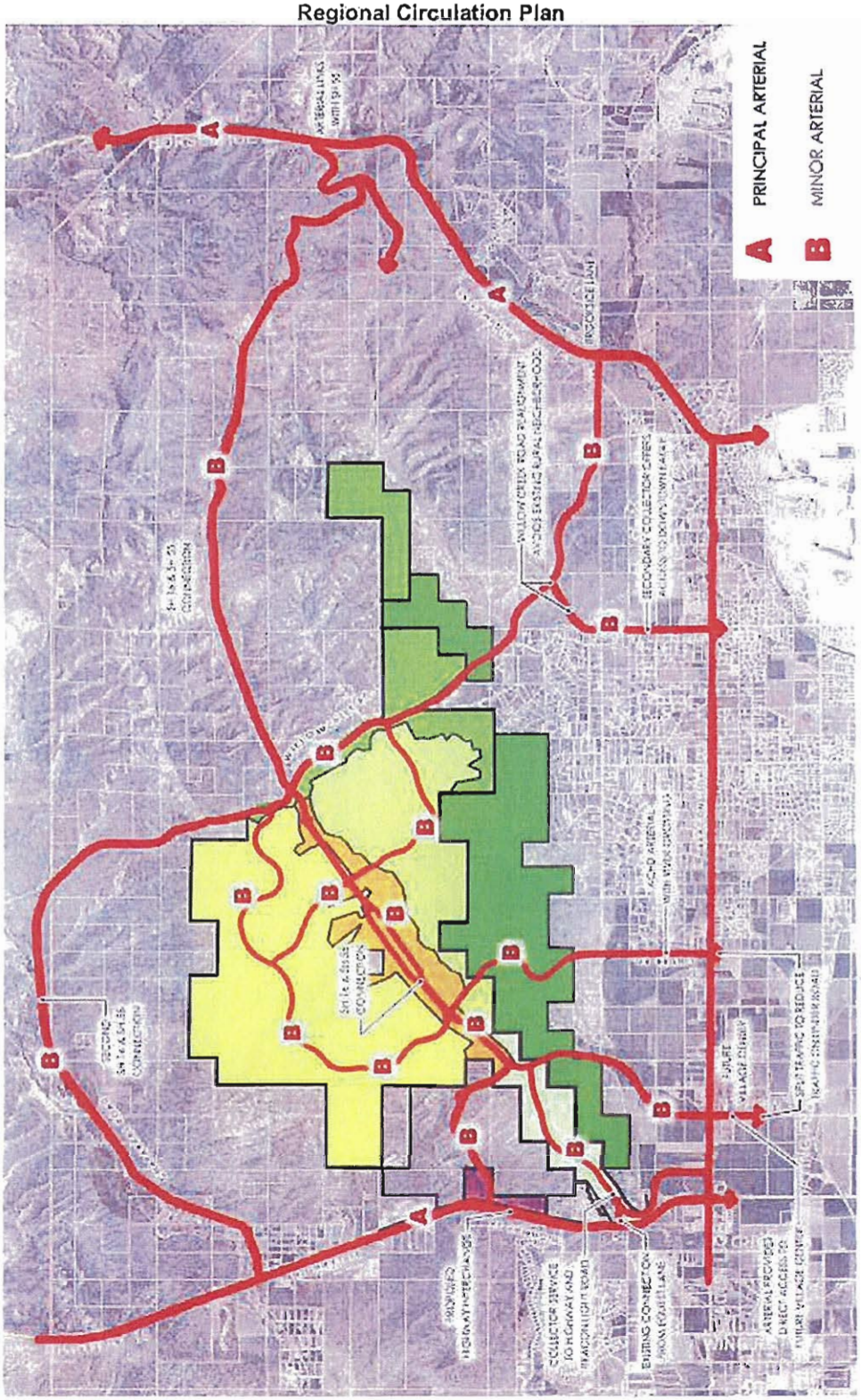


EXHIBIT J
Master Streets & Circulation Plan

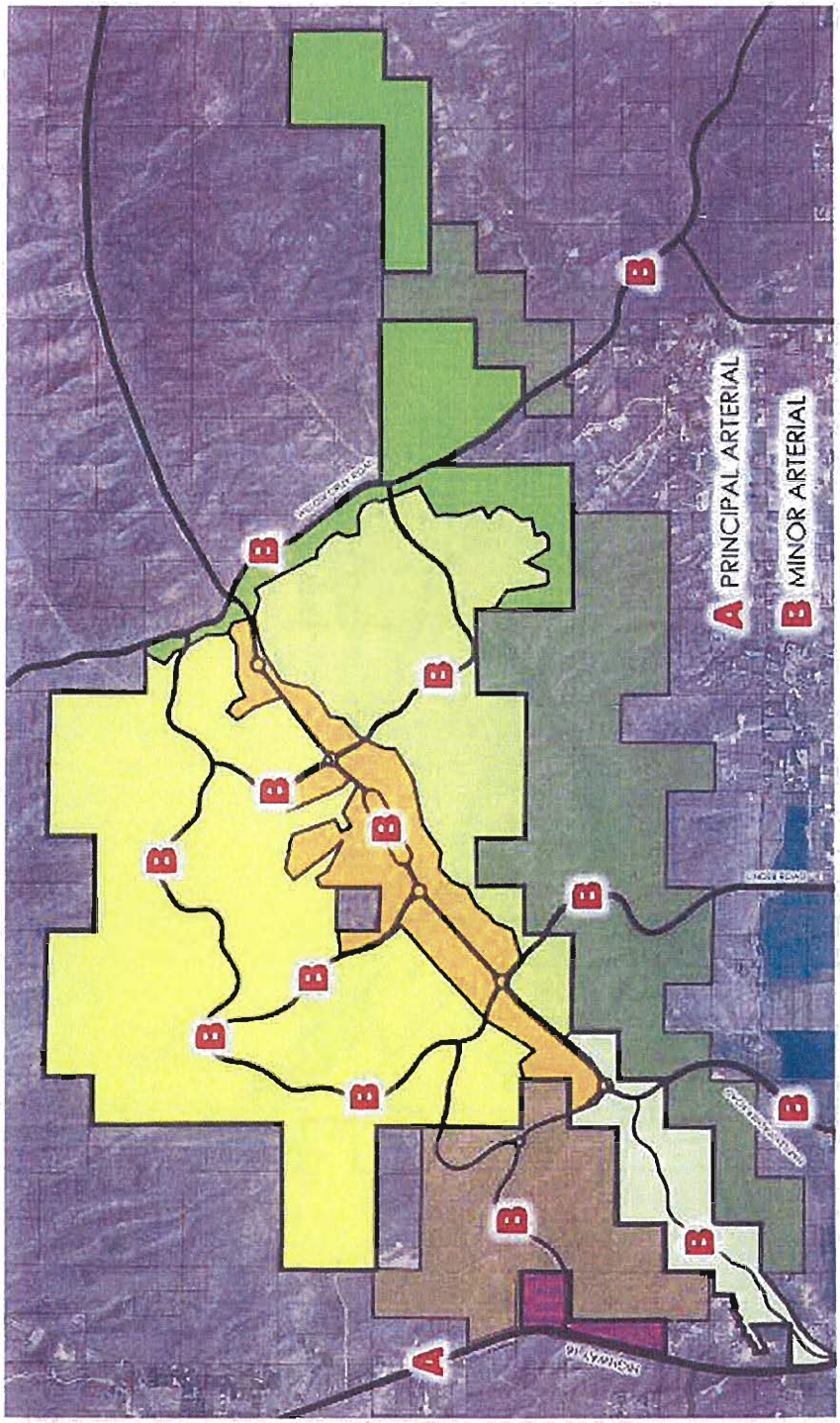


EXHIBIT K
Master Parks, Trails and Public Facilities Plan

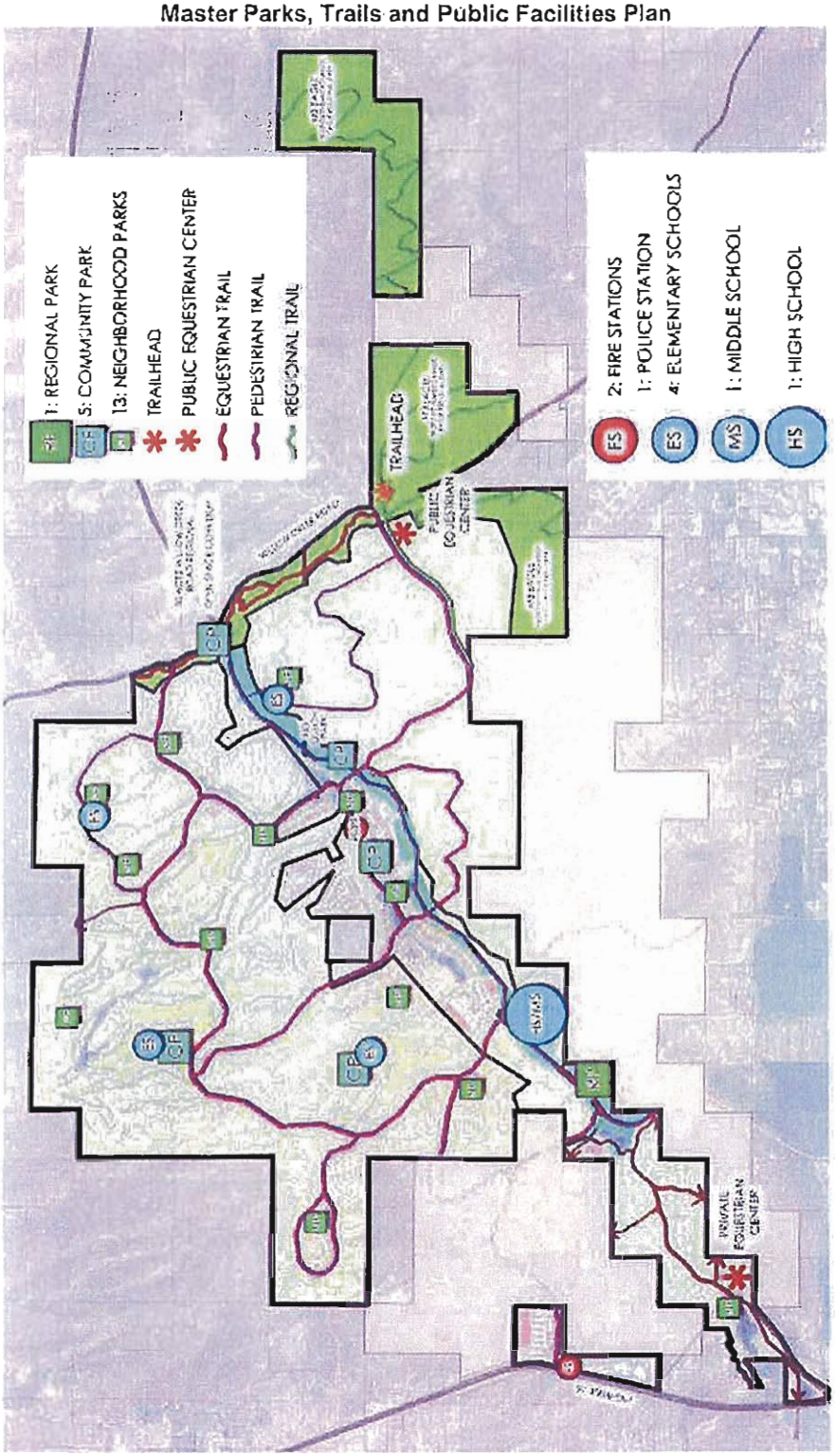


EXHIBIT L
[INTENTIONALLY DELETED]

EXHIBIT M
Constrained Lands

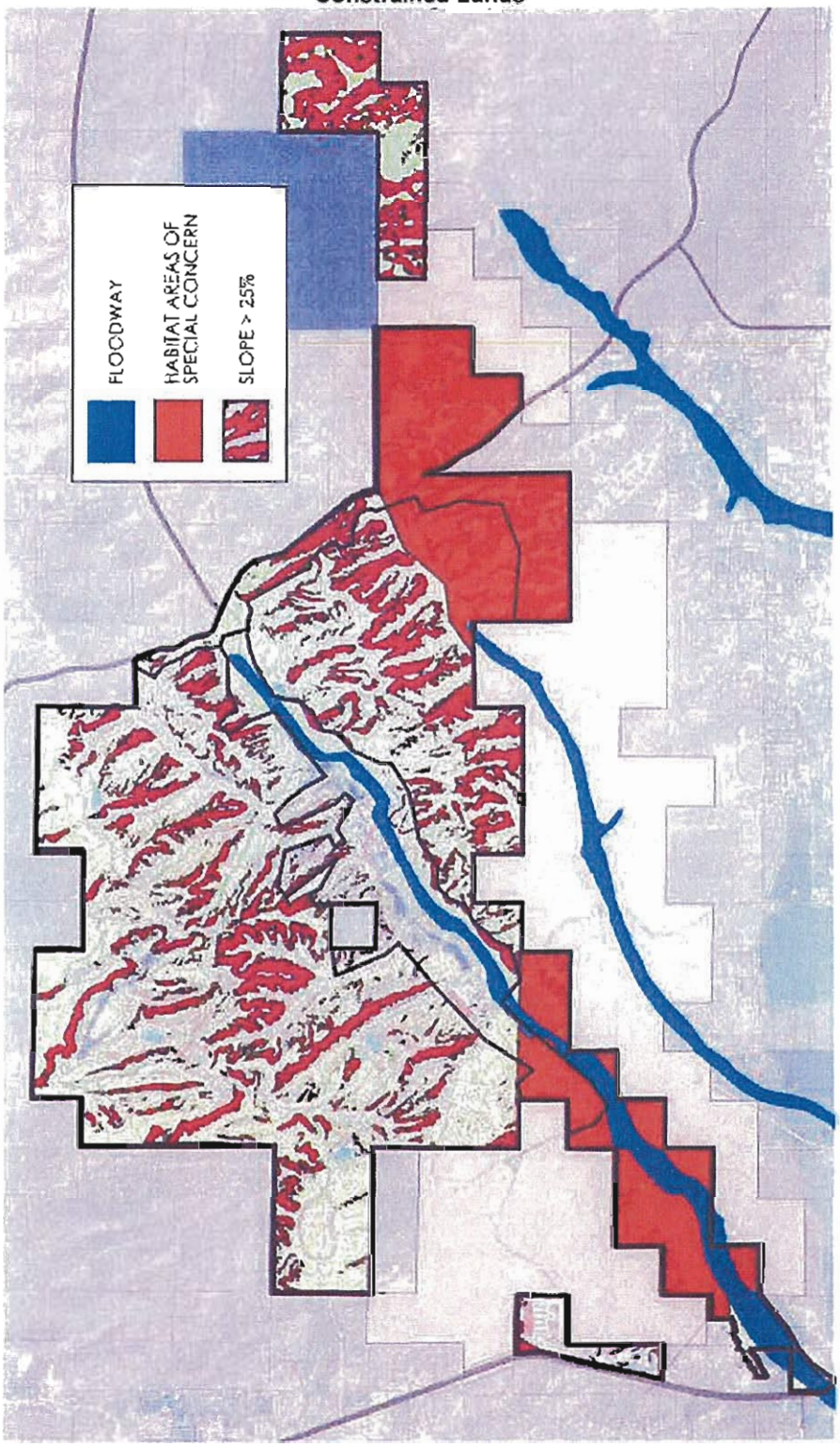
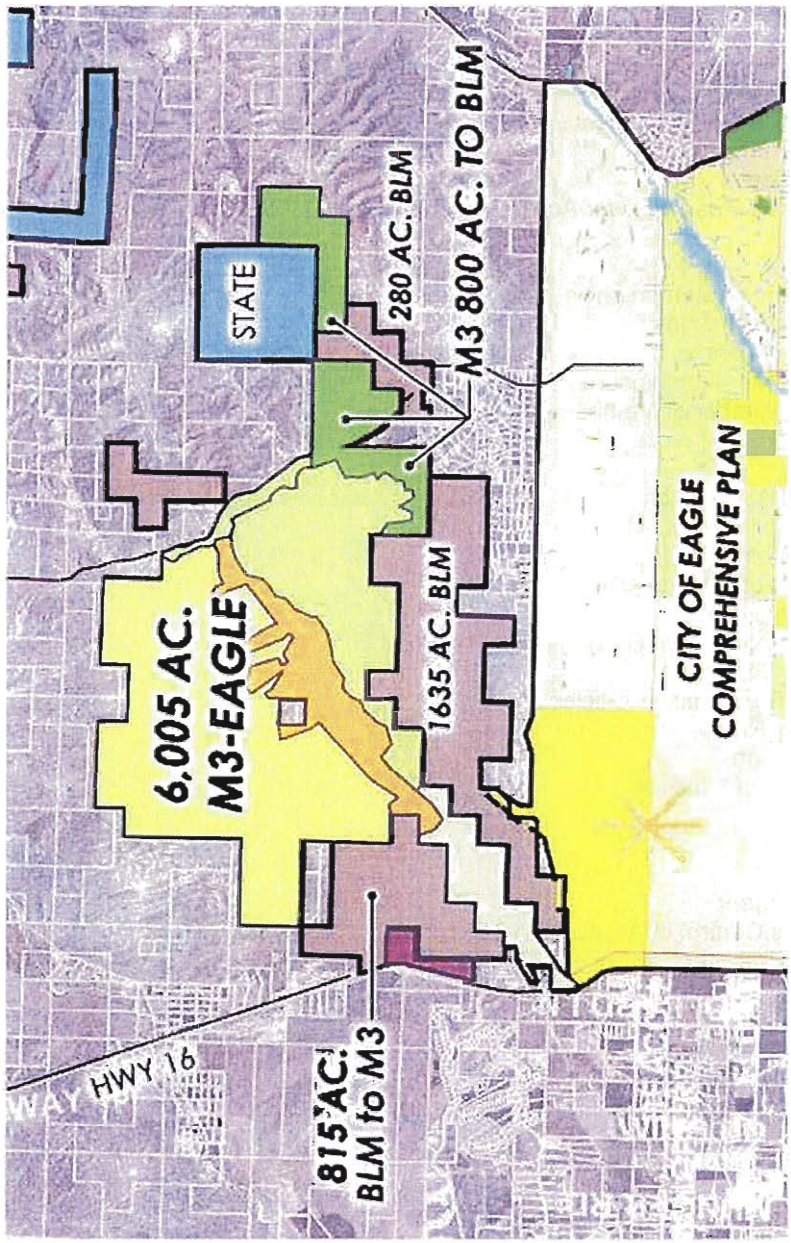


EXHIBIT N
BLM LAND EXCHANGE MAP



M3 EAGLE/BLM LAND EXCHANGE

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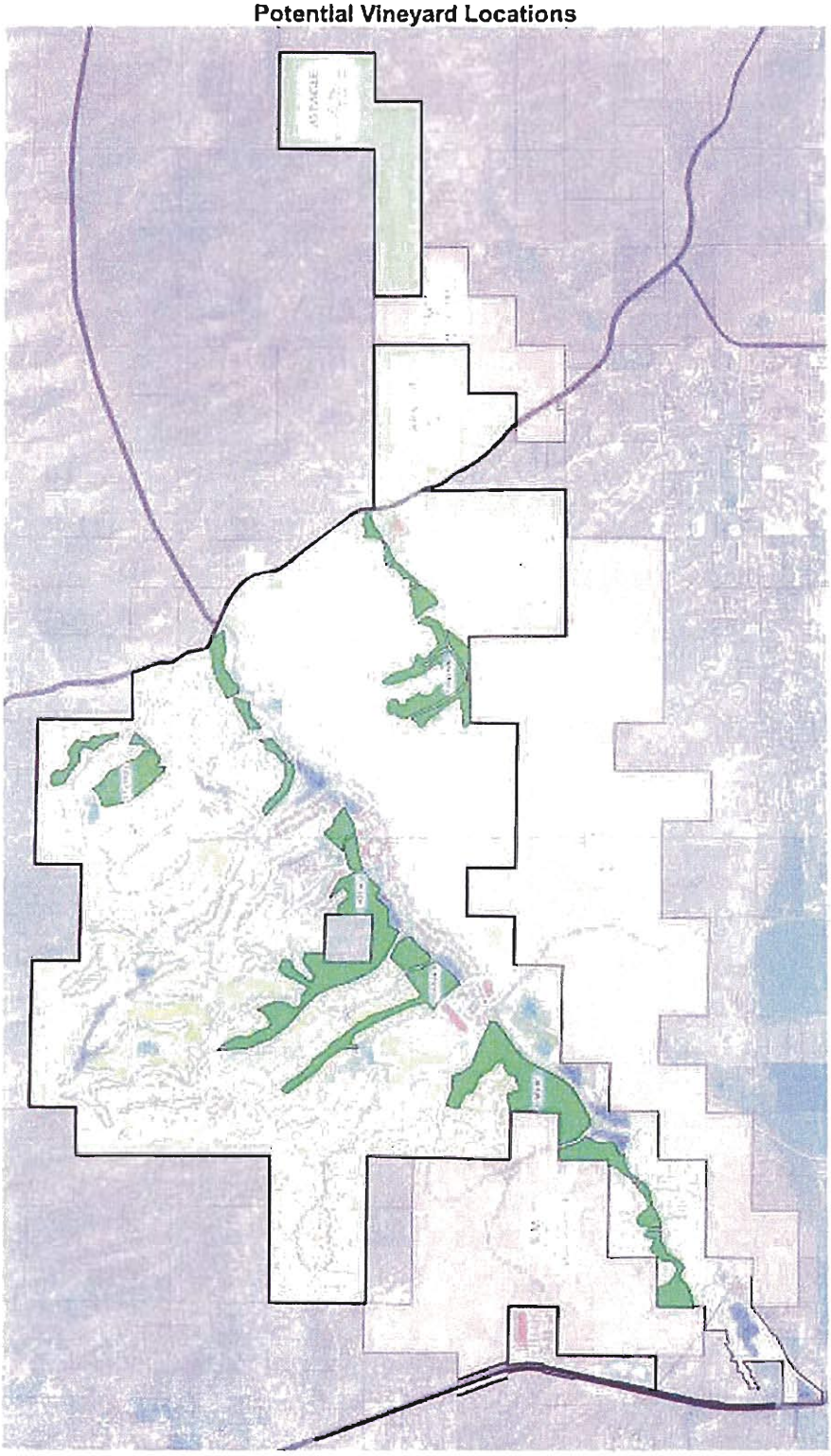
EXHIBIT Q
Potential Vineyard Locations



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Wells Fargo Bank Idaho Construction Reports: Monthly Resi[illegible]l Dwelling Unit Permits Issued in Ada and Canyon Counties

Month	Boise City Resi. Permits	Boise City Residential Valuation	Meridian Resi. Permits	Meridian Residential Valuation	Ada Uninc. Resi. Permits	Ada Uninc. Residential Valuation	Caldwell Resi. Permits	Caldwell Residential Valuation	Canyon Uninc. Resi. Permits	Canyon Uninc. Residential Valuation	Nampa Resi. Permits	Nampa Residential Valuation	Ada County Resi. Permits	Ada County Residential Valuation	Canyon County Resi. Permits	Canyon County Residential Valuation	Boise MSA Resi. Permits	Boise MSA Residential Valuation	M3-Eagle Average Monthly Residential Housing Additions as a Percent of Total Residential Permits Issued in the Boise MSA @ 20-Year Build out pace	@ 30-Year Build out pace
Jan-00	74	11,632,111	30	5,213,654	74	10,006,266	33	2,476,725	25	2,573,493	88	8,031,595	178	26,852,031	146	13,081,813	324	39,933,844	9.2%	6.1%
Feb-00	72	9,340,392	61	8,166,250	88	10,061,832	32	2,440,562	24	2,621,253	110	10,319,241	221	27,568,474	166	15,381,056	387	42,949,530	7.7%	5.1%
Mar-00	104	14,222,654	85	10,727,550	69	10,472,018	32	2,426,258	41	4,959,042	175	15,472,672	258	35,422,222	248	22,857,972	506	58,280,194	5.9%	3.9%
Apr-00	166	17,312,258	60	7,904,804	59	9,425,400	20	1,284,532	19	2,729,704	108	11,225,818	285	34,642,462	147	15,240,054	432	49,882,516	6.9%	4.6%
May-00	127	16,680,412	112	12,712,548	75	12,504,425	34	2,757,424	45	6,938,858	103	9,871,154	314	41,897,385	182	19,567,436	496	61,464,821	6.0%	4.0%
Jun-00	124	14,946,086	56	7,054,474	62	9,430,338	85	5,683,109	38	5,841,274	108	11,601,903	242	31,430,898	231	23,126,286	473	54,557,184	6.3%	4.2%
Jul-00	82	13,088,734	39	5,283,560	76	10,984,580	37	3,013,632	37	5,089,977	147	11,771,289	197	29,356,874	221	19,874,898	418	49,231,772	7.1%	4.8%
Aug-00	95	13,892,388	92	11,496,204	80	12,652,680	42	3,302,073	41	6,073,904	120	11,175,248	267	38,041,272	203	20,551,225	470	58,592,497	6.3%	4.2%
Sep-00	76	9,404,205	56	7,049,464	84	11,846,000	64	5,646,440	29	4,004,489	174	15,579,017	216	28,299,669	267	25,229,946	483	53,529,615	6.2%	4.1%
Oct-00	134	16,516,327	59	7,467,174	90	13,999,638	36	3,175,760	34	4,619,308	78	7,039,535	283	37,983,139	148	14,834,603	431	52,817,742	6.9%	4.6%
Nov-00	131	13,748,737	41	5,569,628	76	12,755,900	54	3,890,283	25	4,093,729	59	5,838,746	248	32,074,265	138	13,822,758	386	45,897,023	7.7%	5.1%
Dec-00	103	9,326,198	55	6,623,938	66	11,354,737	37	2,972,847	15	2,122,495	67	5,556,695	224	27,304,873	119	10,652,037	343	37,956,910	8.7%	5.8%
Jan-01	117	13,037,559	49	6,335,104	98	12,730,770	42	3,943,298	19	2,970,484	85	8,223,387	264	32,103,433	146	15,137,169	410	47,240,602	7.3%	4.8%
Feb-01	177	14,467,589	65	8,672,516	72	10,587,000	35	3,335,604	31	4,204,697	86	8,596,627	314	33,727,105	152	16,136,928	466	49,864,033	6.4%	4.3%
Mar-01	394	25,325,448	117	11,409,248	96	14,481,289	54	4,950,935	40	5,472,587	94	9,970,795	607	51,215,985	188	20,394,317	795	71,610,302	3.7%	2.5%
Apr-01	84	12,716,381	86	10,634,060	96	15,120,400	29	2,468,602	na	na	128	13,509,229	266	38,470,841	157	15,977,831	423	54,448,672	7.0%	4.7%
May-01	83	12,561,547	82	10,222,656	107	19,482,700	55	4,295,927	45	6,987,750	146	15,006,935	272	42,266,903	246	26,290,612	518	68,557,515	5.8%	3.8%
Jun-01	391	23,605,411	93	10,703,880	80	14,022,700	56	4,764,632	55	7,458,668	101	9,656,189	564	48,331,991	212	21,879,489	776	70,211,480	3.8%	2.6%
Jul-01	76	11,120,864	51	6,893,088	56	9,143,400	63	5,514,027	46	7,007,159	120	12,603,306	183	27,157,352	229	25,124,492	412	52,281,844	7.2%	4.8%
Aug-01	95	13,892,388	92	11,496,204	80	12,652,680	42	3,302,073	41	6,073,904	120	11,175,248	267	38,041,272	203	20,551,225	470	58,592,497	6.3%	4.2%
Sep-01	55	8,173,902	84	10,597,308	60	9,954,366	47	3,723,037	51	6,639,081	93	9,815,951	199	18,128,268	191	20,178,069	390	38,306,337	7.6%	5.1%
Oct-01	73	12,905,293	61	8,615,728	60	10,178,124	39	3,029,111	51	6,183,816	206	18,997,660	194	31,699,145	296	28,210,587	490	59,909,732	6.1%	4.1%
Nov-01	61	7,799,495	55	6,629,949	66	8,910,117	42	3,826,929	36	4,389,180	105	10,406,058	182	23,339,561	183	18,622,167	365	41,961,728	8.2%	5.4%
Dec-01	145	11,737,772	68	8,120,498	31	4,956,726	38	3,159,466	24	3,517,787	90	8,265,889	244	24,814,996	152	14,943,142	396	39,758,138	7.5%	5.0%
Jan-02	74	12,038,751	50	6,698,706	49	9,423,379	87	6,381,739	29	3,840,088	104	10,879,086	173	28,160,836	220	21,100,913	393	49,261,749	7.6%	5.1%
Feb-02	44	5,396,732	58	7,305,238	57	8,871,531	70	5,905,493	33	5,280,205	107	10,211,202	159	21,573,501	210	21,396,900	369	42,970,401	8.1%	5.4%
Mar-02	114	12,279,854	82	10,433,790	57	11,300,622	52	4,645,705	33	5,258,601	114	12,188,293	253	34,014,266	199	22,092,599	452	56,106,865	6.6%	4.4%
Apr-02	147	13,230,851	110	14,512,182	66	9,624,323	56	5,080,799	37	5,354,794	194	18,462,372	323	37,367,356	287	28,897,965	610	66,265,321	4.9%	3.3%
May-02	68	10,095,336	98	12,719,060	73	12,531,298	63	5,204,301	39	6,803,597	180	19,090,259	239	35,345,694	282	31,098,157	521	66,443,851	5.7%	3.8%
Jun-02	94	14,054,034	94	11,843,770	50	7,880,171	43	3,661,845	34	5,698,388	131	13,668,594	238	33,777,975	208	23,028,827	446	56,806,802	6.7%	4.5%
Jul-02	73	12,440,831	98	12,058,412	92	15,048,451	46	3,779,326	42	7,331,537	137	14,205,661	263	39,547,694	225	25,316,524	488	64,864,218	6.1%	4.1%
Aug-02	76	9,830,219	77	10,290,852	69	11,126,812	88	7,916,632	39	7,425,972	133	14,462,492	222	31,247,883	260	29,805,096	482	61,052,979	6.2%	4.1%
Sep-02	68	11,819,925	74	9,727,132	85	11,576,917	72	6,730,557	34	5,574,502	137	13,751,107	227	33,123,974	243	26,056,166	470	59,180,140	6.3%	4.2%
Oct-02	236	25,921,136	68	9,836,682	75	10,913,543	63	5,309,324	42	6,528,547	182	18,376,088	379	46,671,361	287	30,213,959	666	76,885,320	4.5%	3.0%
Nov-02	66	9,650,950	56	8,005,779	72	10,897,811	24	2,270,247	32	5,023,624	94	10,212,327	194	28,554,540	150	17,506,198	344	46,060,738	8.7%	5.8%
Dec-02	333	21,289,849	79	10,331,684	77	12,081,325	47	4,590,127	24	4,686,904	90	10,092,034	489	43,702,858	161	19,369,065	650	63,071,923	4.6%	3.1%
Jan-03	79	7,488,134	124	16,521,694	95	13,862,841	33	3,017,615	29	4,549,943	137	13,617,281	298	37,872,669	199	21,184,839	497	59,057,508	6.0%	4.0%
Feb-03	185	14,019,786	84	11,023,146	69	9,906,391	70	6,390,600	26	4,319,035	112	12,296,745	338	34,949,323	208	23,006,380	546	57,955,703	5.5%	3.6%
Mar-03	69	10,217,615	109	14,982,112	85	12,772,963	52	4,855,279	50	10,235,874	97	10,114,849	263	37,972,690	199	25,206,002	462	63,178,692	6.5%	4.3%
Apr-03	89	11,956,247	105	13,585,798	103	15,327,179	50	5,766,501	43	7,921,612	133	13,468,944	297	40,869,224	226	27,157,057	523	68,026,281	5.7%	3.8%
May-03	105	12,259,213	119	15,576,786	108	18,512,559	69	6,394,705	47	8,023,628	195	18,391,654	332	46,348,558	311	32,809,987	643	79,158,545	4.6%	3.1%
Jun-03	180	15,159,842	107	14,777,126	99	16,775,495	59	6,025,399	43	7,856,502	145	13,835,718	386	46,712,464	247	27,717,619	633	74,430,083	4.7%	3.1%
Jul-03	83	12,418,252	120	16,850,276	77	15,523,531	105	9,971,102	54	9,333,212	134	14,366,193	280	44,792,059	293	33,670,507	573	78,462,566	5.2%	3.5%
Aug-03	111	14,598,234	190	20,260,517	114	20,981,387	60	5,822,461	29	4,686,232	79	8,313,239	415	55,840,138	168	18,821,932	583	74,662,070	5.1%	3.4%
Sep-03	118	14,129,330	158	22,264,658	92	13,822,047	54	5,177,849	30	5,712,361	174	16,790,705	368	50,216,035	258	27,680,915	626	77,896,950	4.8%	3.2%
Oct-03	79	10,628,944	179	24,094,703	86	14,516,285	75	6,989,147	42	7,434,222	107	12,330,323	344	49,239,932	224	26,753,692	568	75,993,624	5.2%	3.5%
Nov-03	72	11,392,342	195	22,399,877	49	7,479,561	40	3,966,091	31	5,447,592	112	11,714,427	316	41,271,780	183	21,128,110	499	62,399,890	6.0%	4.0%
Dec-03	51	7,764,354	148	1'8829613	101	17,163,513	28	2,327,544	32	5,684,465	89	9,779,534	300	24,927,867	149	17,791,543	449	42,719,410	6.6%	4.4%
Jan-04	31	4,540,496	134	20,375,785	59	10,754,148	24	2,191,914	16	2,957,336	81	8,858,771	224	35,670,429	121	14,008,021	345	49,678,450	8.6%	5.8%
Feb-04	45	6,561,428	133	22,375,848	74	13,236,387	34	3,502,347	34	6,255,786	92	10,629,865	252	42,173,663	160	20,387,998	412	62,561,661	7.2%	4.8%
Mar-04	58	11,846,541	234	40,035,876	103	19,409,273	65	6,519,638	38	7,351,143	165	15,406,805	395	71,291,690	268	29,277,586	663	100,569,276	4.5%	3.0%
Apr-04	71	12,093,186	176	31,563,805	96	17,236,449	72	6,657,979	53	7,827,151	128	12,476,343	343	60,893,440	253	26,961,473	596	87,854,913	5.0%	3.3%
May-04	97	13,232,249	202	36,534,035	125	21,496,888	77	7,785,197	49	8,756,542	165	15,870,175	424	71,263,172	291	32,411,914	715	103,675,086	4.2%	2.8%
Jun-04	80	10,239,139	247	44,257,627	121	24,558,302	56	5,655,791	65	11,663,706	184	19,803,351	448	79,055,068	305	37,122,848	753	116,177,916	4.0%	2.6%
Jul-04	79	10,993,427	350	49,523,462	112	21,156,505	53	5,481,808	59	10,337,442	110	12,231,442	541	81,673,394	222	28,050,692	763	109,724,086	3.9%	2.6%
Aug-04	79	12,348,249	307	45,638,499	110	20,211,915	52	5,090,560	54	8,242,454	169	17,055,041	496	78,198,663	275	30,388,055	771	108,586,718	3.9%	2.6%
Sep-04	74	11,794,344	168	32,160,060	121	24,661,868	52	5,178,226	43	7,890,899	131	15,755,356	363	68,616,272	226	28,824,481	589	97,440,753	5.1%	3.4%
Oct-04	79	10,628,944	179	24,094,703	86	14,516,285	75	6,989,147	42	7,434,222	107	12,330,323	344	49,239,932	224	26,753,692	568	75,993,624	5.2%	3.5%
Nov-04	75	11,520,340	237	41,664,437	89	20,034,802	105	9,177,624	54	8,220,537	131	13,920,593	401	73,219,579	290	31,318,754	691	104,538,333	4.3%	2.9%

M3 EAGLE LLC
EXHIBIT

Wells Fargo Bank Idaho Construction Reports: Monthly Residential Dwelling Unit Permits Issued in Ada and Canyon Counties

Month	Boise City Resi. Permits	Boise City Residential Valuation	Meridian Resi. Permits	Meridian Residential Valuation	Ada Uninc. Resi. Permits	Ada Uninc. Residential Valuation	Caldwell Resi. Permits	Caldwell Residential Valuation	Canyon Uninc. Resi. Permits	Canyon Uninc. Residential Valuation	Nampa Resi. Permits	Nampa Residential Valuation	Ada County Resi. Permits	Ada County Residential Valuation	Canyon County Resi. Permits	Canyon County Residential Valuation	Boise MSA Resi. Permits	Boise MSA Residential Valuation	as a Percent of Total Residential Permits Issued in the Boise MSA @ 20-Year Build out pace	@ 30-Year Build out pace
Dec-04	72	11,825,508	271	49,587,579	111	20,946,628	59	6,257,098	39	5,890,556	118	9,806,878	454	82,359,715	216	21,954,532	670	104,314,247	4.4%	3.0%
Jan-05	47	8,706,589	162	31,656,875	111	22,111,243	57	6,200,042	46	8,945,584	112	12,512,397	320	62,474,707	215	27,658,023	535	90,132,730	5.6%	3.7%
Feb-05	106	17,990,735	234	42,648,784	86	17,064,443	106	10,294,024	27	4,564,582	133	15,064,057	426	77,703,962	266	29,922,663	692	107,626,625	4.3%	2.9%
Mar-05	104	15,776,557	262	48,163,475	152	28,263,372	106	11,135,284	66	11,518,825	139	18,423,157	518	92,203,404	311	41,077,266	829	133,280,670	3.6%	2.4%
Apr-05	132	16,868,188	329	61,213,894	132	27,610,900	95	10,664,642	52	8,773,775	120	14,685,468	593	105,692,982	267	34,123,885	860	139,816,867	3.5%	2.3%
May-05	118	15,575,731	322	60,503,809	164	32,787,992	64	7,313,733	56	10,299,431	177	19,406,078	604	108,867,532	297	37,019,242	901	145,886,774	3.3%	2.2%
Jun-05	112	19,588,784	277	51,820,246	127	29,376,661	94	9,679,726	65	13,143,367	130	17,816,022	516	100,785,691	289	40,639,115	805	141,424,806	3.7%	2.5%
Jul-05	175	19,771,847	352	66,710,438	100	23,477,453	84	9,927,396	62	12,902,608	114	15,592,706	627	109,959,738	260	38,422,710	887	148,382,448	3.4%	2.2%
Aug-05	159	20,026,799	403	130,590,906	192	72,981,615	111	12,474,037	78	14,630,332	167	22,848,606	754	223,599,320	356	49,952,975	1,110	273,552,295	2.7%	1.8%
Sep-05	95	17,356,342	286	531,036	158	33,926,001	78	9,214,109	63	12,121,402	132	17,471,209	539	51,813,379	273	38,806,720	812	90,620,099	3.7%	2.4%
Oct-05	102	19,107,883	222	42,940,748	171	3,751,631	86	11,159,414	54	10,775,971	140	19,990,013	495	65,800,262	280	41,925,398	775	107,725,660	3.8%	2.6%
Nov-05	94	15,869,346	202	41,103,477	137	33,154,148	58	16,625,357	51	10,083,296	106	15,548,901	433	90,126,971	215	42,257,554	648	132,384,525	4.6%	3.1%
Dec-05	65	9,900,789	202	39,085,313	113	27,255,386	57	7,990,972	41	7,115,014	85	11,831,103	380	76,241,488	183	26,937,089	563	103,178,577	5.3%	3.5%
Jan-06	65	12,741,947	252	50,257,394	141	33,277,103	108	12,693,216	50	11,643,040	132	18,270,005	458	96,276,444	290	42,606,261	748	138,882,705	4.0%	2.7%
Feb-06	108	13,481,402	247	49,369,370	94	21,482,204	131	15,561,017	39	7,675,230	118	16,807,494	449	84,332,976	288	40,043,741	737	124,376,717	4.0%	2.7%
Mar-06	125	21,759,837	177	38,191,150	186	38,046,230	109	13,344,061	53	10,508,709	129	20,001,685	488	97,997,217	291	43,854,455	779	141,851,672	3.8%	2.6%
Apr-06	89	13,197,243	231	46,461,972	94	21,447,005	144	17,362,243	43	8,320,682	103	15,641,017	414	81,106,220	290	41,323,942	704	122,430,162	4.2%	2.8%
May-06	104	18,472,823	218	39,330,472	153	38,483,786	121	17,303,429	52	10,256,620	127	18,869,208	475	96,287,081	300	46,429,257	775	142,716,338	3.8%	2.6%
Jun-06	107	18,296,745	180	30,369,784	75	18,534,932	104	13,862,994	52	13,328,487	131	17,494,130	362	67,201,461	287	44,685,611	649	111,887,072	4.6%	3.1%
Jul-06	143	16,958,400	59	17,253,878	104	23,857,656	95	13,150,145	46	9,829,740	180	21,706,602	306	58,069,934	321	44,686,487	627	102,756,421	4.8%	3.2%
Aug-06	98	15,416,024	52	12,944,570	107	25,900,162	103	14,478,347	62	12,782,853	161	23,665,996	257	54,260,756	326	50,927,196	583	105,187,952	5.1%	3.4%
Sep-06	113	14,499,182	87	16,917,781	67	14,605,299	69	9,443,966	29	5,611,907	68	9,757,207	267	46,022,262	166	24,813,080	433	70,835,342	6.9%	4.6%
Oct-06	65	15,481,161	73	17,337,902	63	17,657,117	110	15,258,931	49	11,481,091	87	12,379,645	201	50,476,180	246	39,119,667	447	89,595,847	6.7%	4.4%
Nov-06	69	12,334,928	48	10,528,838	36	10,890,169	56	7,166,452	24	5,006,541	43	7,052,078	153	33,753,935	123	19,225,071	276	52,979,006	10.8%	7.2%
Dec-06	86	10,857,297	60	15,260,750	31	7,508,695	48	6,979,100	20	4,478,916	46	7,007,488	177	33,626,742	114	18,465,504	291	52,092,246	10.2%	6.8%
Jan-07	173	16,674,748	86	20,830,099	20	5,763,882	126	18,901,576	16	2,945,691	15	1,020,000	279	43,268,729	157	22,867,267	436	66,135,996	6.8%	4.6%
Feb-07	117	14,774,389	88	21,683,157	61	15,176,863	51	7,713,279	26	6,383,810	43	5,971,874	266	51,634,409	120	20,068,963	386	71,703,372	7.7%	5.1%
Mar-07	145	2,230,568	157	36,684,262	87	22,319,662	69	9,443,082	32	8,768,953	40	5,130,232	389	61,234,492	141	23,342,267	530	84,576,759	5.6%	3.7%
Apr-07	70	12,998,699	76	18,860,487	66	17,712,093	47	7,067,781	24	4,774,441	45	7,276,247	212	49,571,279	116	19,118,469	328	68,689,748	9.1%	6.1%
May-07	55	9,652,130	90	21,109,262	60	16,931,444	91	18,168,156	25	4,979,261	31	4,531,674	205	47,692,836	147	27,679,091	352	75,371,927	8.5%	5.6%
Jun-07	75	10,792,266	93	18,313,359	32	10,130,774	55	8,143,402	30	5,887,811	37	5,702,516	200	39,236,399	122	19,733,729	322	58,970,128	9.3%	6.2%
Jul-07	52	9,004,519	49	12,266,988	45	12,087,170	41	5,893,701	24	5,212,250	28	3,929,334	146	33,358,677	93	15,035,285	239	48,393,962	12.5%	8.3%
Aug-07	65	7,759,688	37	8,905,033	38	11,510,808	131	9,923,305	33	5,892,985	35	3,191,178	140	28,175,529	199	19,007,468	339	47,182,997	8.8%	5.9%
Sep-07	50	8,018,332	44	10,365,670	32	7,705,890	30	3,410,686	21	4,544,454	32	2,843,692	126	26,089,892	83	10,798,832	209	36,888,724	14.3%	9.5%
Oct-07	21	4,388,640	39	8,896,464	27	8,414,539	60	6,900,595	15	2,744,273	38	3,523,614	87	21,699,643	113	13,168,482	200	34,868,125	14.9%	9.9%
Nov-07	111	11,283,346	50	11,579,501	67	11,955,749	34	4,308,503	11	1,433,223	23	2,628,612	228	34,818,596	68	8,370,338	296	43,188,934	10.1%	6.7%
Dec-07	150	38,311,063	44	8,986,299	34	8,146,574	26	2,822,862	16	2,927,439	8	580,775	228	55,443,936	50	6,331,076	278	61,775,012	10.7%	7.1%
Jan-08	12	3,259,866	54	11,974,184	30	5,440,426	24	2,808,379	6	969,868	13	1,329,222	96	20,674,476	43	5,107,469	139	25,781,945	21.4%	14.3%
Feb-08	25	3,649,212	53	11,391,974	33	7,318,807	40	4,164,487	17	3,683,304	29	3,299,166	111	22,359,993	86	11,146,957	197	33,506,950	15.1%	10.1%
Mar-08	23	5,134,391	90	18,447,819	38	7,928,865	64	7,293,308	19	2,416,125	59	4,876,877	151	31,511,075	142	14,586,310	293	46,097,385	10.2%	6.8%
Apr-08	32	9,229,138	69	15,341,558	59	12,495,621	77	7,387,318	19	2,857,094	38	3,972,585	160	37,066,317	134	14,216,997	294	51,283,314	10.1%	6.8%
May-08	20	4,199,633	68	15,941,803	40	8,773,219	33	4,376,538	15	2,771,542	13	1,657,211	128	28,914,655	61	8,805,291	189	37,719,946	15.8%	10.5%
Jun-08	29	5,287,660	217	27,385,896	46	10,150,067	28	2,925,406	12	2,077,523	18	1,733,639	292	42,823,623	58	6,736,568	350	49,560,191	8.5%	5.7%
Jul-08	22	4,622,762	34	8,144,712	31	8,097,019	28	3,109,500	17	2,358,756	27	2,614,853	87	20,864,493	72	8,083,109	159	28,947,602	18.7%	12.5%
Aug-08	65	7,759,688	37	8,905,033	38	11,510,808	131	9,923,305	33	5,892,985	35	3,191,178	140	28,175,529	199	19,007,468	339	47,182,997	8.8%	5.9%
Sep-08	50	8,018,332	44	10,365,670	32	7,705,890	30	3,410,686	21	4,544,454	32	2,843,692	126	26,089,892	83	10,798,832	209	36,888,724	14.3%	9.5%
Oct-08	13	2,796,718	35	6,901,995	25	4,436,756	18	2,281,988	8	949,806	8	1,124,359	73	14,135,469	34	4,356,153	107	18,491,622	27.9%	18.6%
Nov-08	19	5,022,863	30	6,013,240	10	1,011,442	12	1,636,578	7	969,158	3	458,339	59	12,047,545	22	3,064,075	81	15,111,620	36.8%	24.5%
Dec-08																				

	Boise City Resi. Permits	Boise City Residential Valuation	Meridian Resi. Permits	Meridian Residential Valuation	Ada Uninc. Resi. Permits	Ada Uninc. Residential Valuation	Caldwell Resi. Permits	Caldwell Residential Valuation	Canyon Uninc. Resi. Permits	Canyon Uninc. Residential Valuation	Nampa Resi. Permits	Nampa Residential Valuation	Ada Resi. Permits	Ada Residential Valuation	Canyon Resi. Permits	Canyon Residential Valuation	Boise MSA Resi. Permits	Boise MSA Residential Valuation
Totals -- April 2000 - November 2008																		
	9,952		13,154		8,363		6,501		3,750		10,458		31,469		20,709		52,178	

Residential Housing Units in Ada and Canyon Counties: 1960 - November 2008

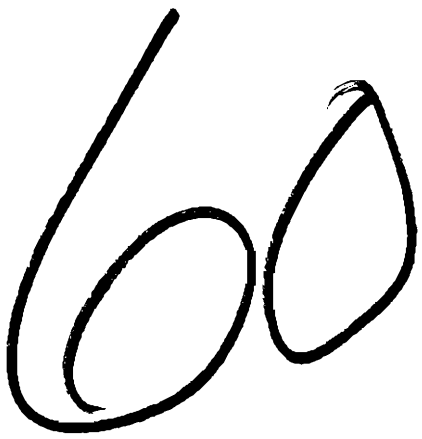
Total Housing Units:*	1960	1970	1980	1990	2000	2008**	Absolute Change 1970-2000	Absolute Change 1970-2008	Absolute Change 1960-2008
Ada County:	30,782	37,145	67,869	80,849	118,516	149,985	81,371	112,840	119,203
Boise	13,383	25,992	43,212	53,196	77,850	87,802	51,858	61,810	74,419
Eagle			1,009	1,238	4,048				
Garden City	529	799	1,975	2,724	4,590				
Kuna			612	678	1,793				
Meridian	732	955	2,894	3,746	12,293	25,447	11,338	24,492	24,715
Star					681				
Canyon County:	18,717	20,235	30,616	33,137	47,965	68,674	27,730	48,439	49,957
Caldwell	4,204	4,930	6,833	7,131	9,603	16,104	4,673	11,174	11,900
Greenleaf			234	227	284				
Melba			111	110	164				
Middleton			654	666	1,066				
Nampa	6,103	7,077	9,782	10,760	19,379	29,837	12,302	22,760	23,734
Notus			159	157	156				
Parma	475	437	714	685	676				
Wilder			379	403	421				
Ada & Canyon Counties:	49,499	57,380	98,485	113,986	166,481	218,659	109,101	161,279	169,160

Comparison of Projected M3-Eagle Residential Housing Additions:

Average Annual Housing Unit Additions in Ada and Canyon Counties:		Projected M3-Eagle Avg. Ann. Housing Unit Additions: 20 -Year Build-out	Percent of Total	30 -Year Build-out	Percent of Total
1970 - 2000	3,637	358	9.8%	238	6.6%
1980 - 2008	4,006	358	8.9%	238	6.0%

* Residential housing unit figures for the years 1960, 1970, 1980, 1990, and 2000 are from respective US Census Bureau benchmarks.

** 2008 housing unit estimates are as of November 2008 and are based upon 2000 US Census benchmark housing figures plus residential dwelling unit additions as detailed in the monthly Wells Fargo Bank Idaho Construction Reports for the period April 2000 - November 2008.



M3-Eagle: A Summary of Projected 30-Year Buildout Scenario of Residential Housing Units, Households, and Population*

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Total Residential Housing Units	161	323	484	747	1,011	1,274	1,538	1,803	2,067	2,371	2,675	2,978	3,321	3,664	4,007
Multi-family residential housing units	13	26	39	45	51	57	63	69	75	92	109	126	156	186	216
Single-family residential housing units	148	297	445	702	960	1,217	1,475	1,734	1,992	2,279	2,566	2,852	3,165	3,478	3,791
Annual Residential Housing Additions:	161	162	161	263	264	263	264	265	264	304	304	303	343	343	343
Multi-family housing additions:	13	13	13	6	6	6	6	6	6	17	17	17	30	30	30
Single-family housing additions:	148	149	148	257	258	257	258	259	258	287	287	286	313	313	313
Total Residential Housing Units	**161**	**323**	**484**	**747**	**1,011**	**1,274**	**1,538**	**1,803**	**2,067**	**2,371**	**2,675**	**2,978**	**3,321**	**3,664**	**4,007**
less Unoccupied Residential Housing Units	3	7	10	15	20	25	31	36	41	47	54	60	66	73	80
Residential Households:	**158**	**316**	**474**	**732**	**991**	**1,249**	**1,507**	**1,767**	**2,026**	**2,324**	**2,622**	**2,918**	**3,255**	**3,591**	**3,927**
Family Households:	127	255	381	589	798	1,005	1,213	1,422	1,631	1,870	2,110	2,349	2,620	2,891	3,161
Non-Family Households:	31	62	92	143	193	243	294	345	395	453	511	569	635	700	766
Average Household Size:	2.82	2.82	2.82	2.76	2.76	2.76	2.71	2.71	2.71	2.66	2.66	2.66	2.60	2.60	2.60
Average Family Household Size:	3.12	3.12	3.12	3.06	3.06	3.06	3.00	3.00	3.00	2.94	2.94	2.94	2.88	2.88	2.88
Average Non-Family Household Size:	1.58	1.58	1.58	1.55	1.55	1.55	1.52	1.52	1.52	1.49	1.49	1.49	1.46	1.46	1.46
Projected Total Population:	444	892	1,336	2,020	2,735	3,446	4,085	4,788	5,490	6,181	6,973	7,763	8,462	9,336	10,210
Estimated Number of School Age Children:	109	219	328	497	673	848	1,004	1,177	1,349	1,517	1,712	1,906	2,080	2,294	2,509
School Aged Children per Household:	0.692	0.692	0.692	0.679	0.679	0.679	0.666	0.666	0.666	0.653	0.653	0.653	0.639	0.639	0.639

	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Total Residential Housing Units	4,350	4,693	5,037	5,287	5,538	5,788	6,038	6,289	6,539	6,691	6,842	6,993	7,047	7,100	7,153
Multi-family residential housing units	246	276	306	317	328	339	350	361	372	378	384	389	389	389	389
Single-family residential housing units	4,104	4,417	4,731	4,970	5,210	5,449	5,688	5,928	6,167	6,313	6,458	6,604	6,658	6,711	6,764
Annual Residential Housing Additions:	343	343	344	250	251	250	250	251	250	152	151	151	54	53	53
Multi-family housing additions:	30	30	30	11	11	11	11	11	11	6	6	5	0	0	0
Single-family housing additions:	313	313	314	239	240	239	239	240	239	146	145	146	54	53	53
Total Residential Housing Units	**4,350**	**4,693**	**5,037**	**5,287**	**5,538**	**5,788**	**6,038**	**6,289**	**6,539**	**6,691**	**6,842**	**6,993**	**7,047**	**7,100**	**7,153**
less Unoccupied Residential Housing Units	87	94	101	106	111	116	121	126	131	134	137	140	141	142	143
Residential Households	**4,263**	**4,599**	**4,936**	**5,181**	**5,427**	**5,672**	**5,917**	**6,163**	**6,408**	**6,557**	**6,705**	**6,853**	**6,906**	**6,958**	**7,010**
Family Households:	3,432	3,702	3,974	4,171	4,369	4,566	4,763	4,961	5,159	5,279	5,398	5,517	5,559	5,601	5,643
Non-Family Households:	831	897	963	1,010	1,058	1,106	1,154	1,202	1,250	1,279	1,308	1,336	1,347	1,357	1,367
Average Household Size:	2.58	2.58	2.58	2.56	2.56	2.56	2.54	2.54	2.54	2.52	2.52	2.52	2.50	2.50	2.49
Average Family Household Size:	2.85	2.85	2.85	2.83	2.83	2.83	2.80	2.80	2.80	2.78	2.78	2.78	2.76	2.76	2.76
Average Non-Family Household Size:	1.45	1.45	1.45	1.44	1.44	1.44	1.43	1.43	1.43	1.42	1.42	1.42	1.41	1.41	1.41
Projected Total Population:	10,999	11,866	12,736	13,264	13,894	14,521	15,030	15,655	16,277	16,524	16,897	17,270	17,265	17,395	17,455
Estimated Number of School Age Children:	2,698	2,911	3,125	3,254	3,408	3,562	3,686	3,840	3,992	4,052	4,144	4,215	4,233	4,265	4,297
School Aged Children per Household:	0.633	0.633	0.633	0.628	0.628	0.628	0.623	0.623	0.623	0.618	0.618	0.615	0.613	0.613	0.613

*Estimated housing units, households, and population at year-end.

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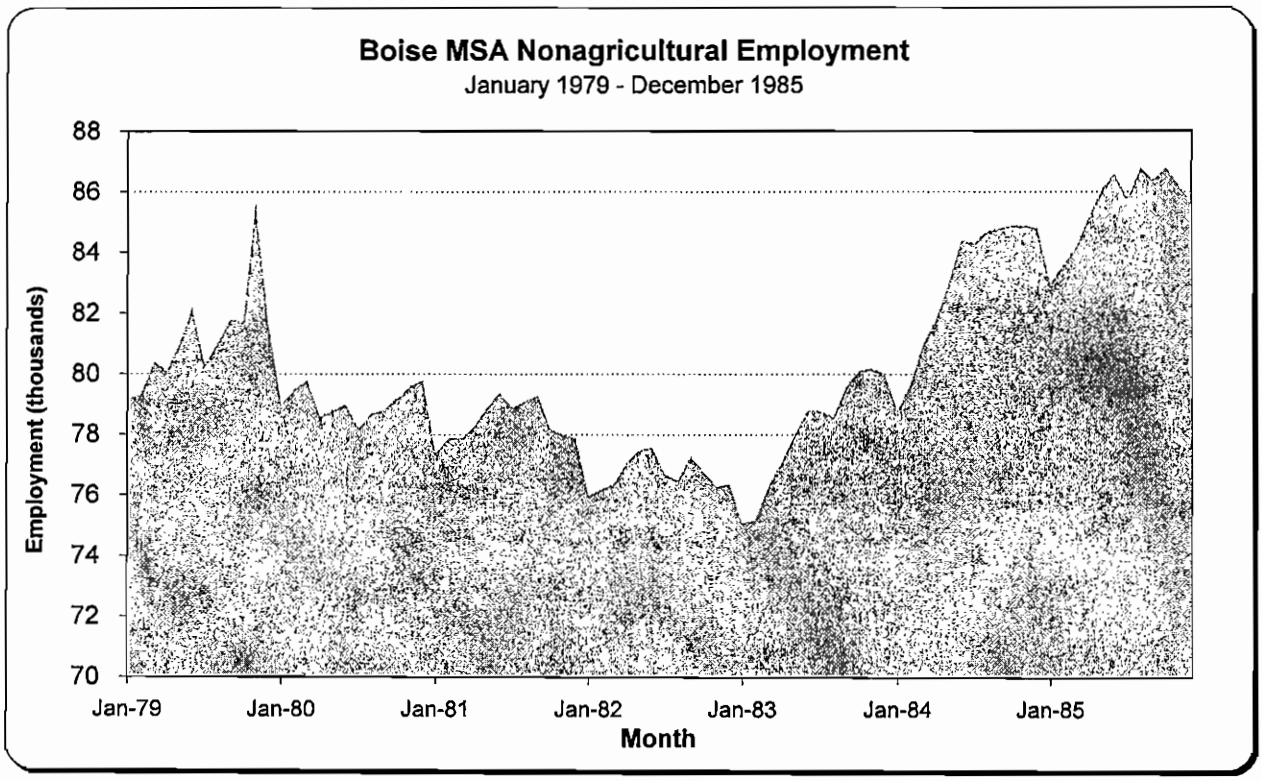
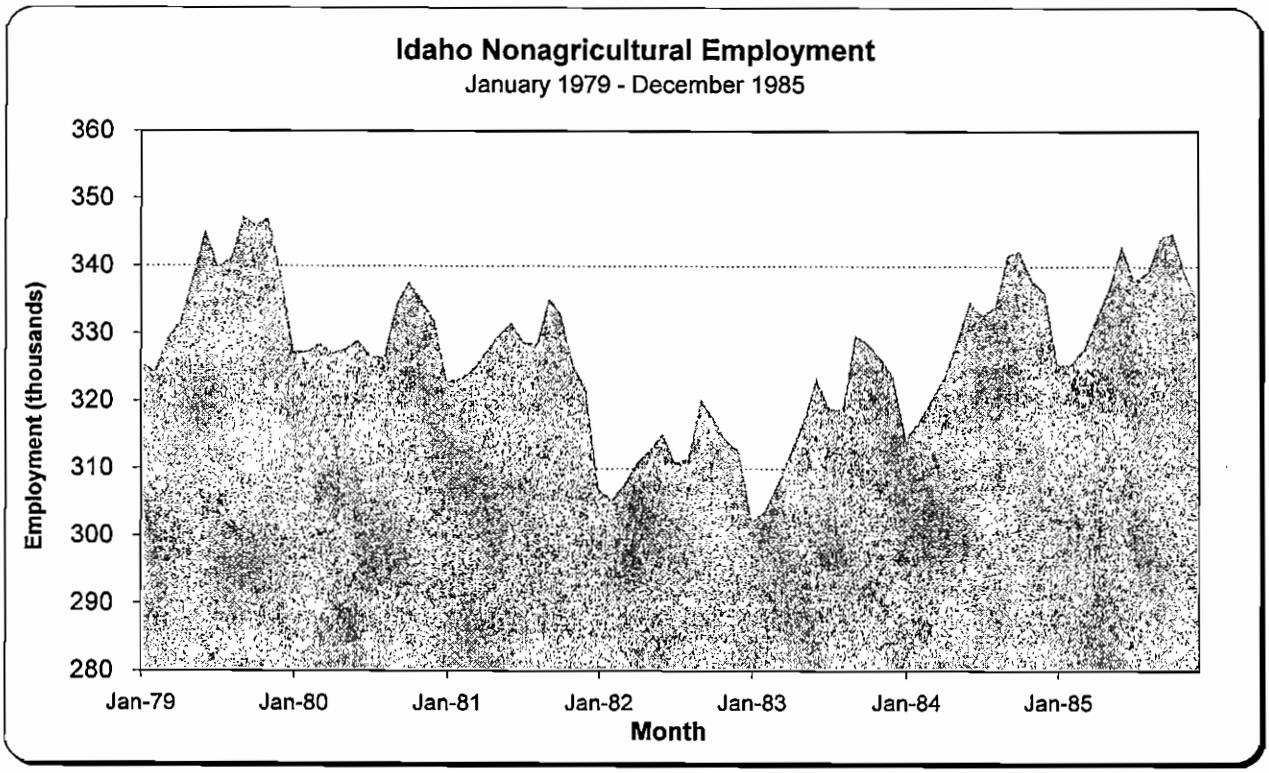
The Idaho Economy has Recovered from Severe Recessions in the Past





1980 - 1982 Recession Employment Losses Peak to Trough:

Employment in thousands. Peak to Trough - November 1979 - January 2003.

	Absolute Change	Percent Change
Boise MSA	(10.6)	-12.4%
State of Idaho	(45.0)	-13.0%

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Water Volumes Calculated Using Peak Day Water Production Overstate Annual Water Demand

United Water Idaho: Boise Service Area

	2000	2001	2002	2003	2004
Annual Total Water Production:..... (millions of gallons)	15,800	15,687	15,579	15,375	15,173
Annual Average Daily Water Production..... (millions of gallons)	59.6	59.2	58.8	58.0	57.3
Annual Peak Day Water Production:..... (millions of gallons)	84.5	89.2	93.2	92.1	95.9
Ratio of Peak Day Water Production..... **to Annual Average Daily Production**	1.42	1.51	1.59	1.59	1.67

(Water use statistics from United Water Idaho annual reports to the Idaho Public Utilities Commission.)

Water Volumes Calculated Using Peak Day Water Production Overstate Annual Water Demand

Calculated Annual Water Production Using Peak Day Water Production..... (millions of gallons)	30,853	32,568	34,027	33,604	34,990
Actual Total Annual Water Production:..... (millions of gallons)	15,800	15,687	15,579	15,375	15,173
Overstatement of Annual Water Volumes..... (millions of gallons)	15,053	16,881	18,449	18,229	19,817

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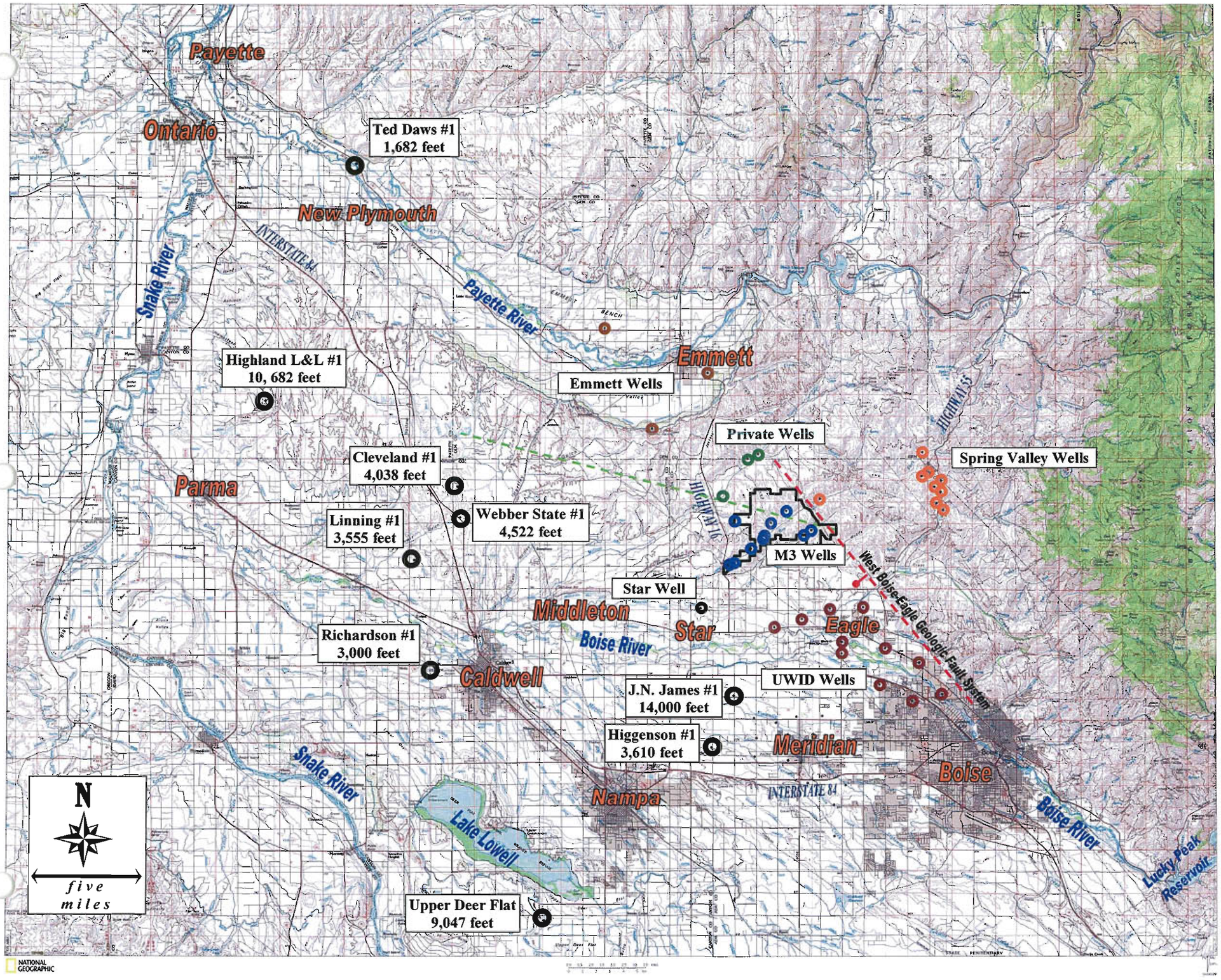
Locations of Selected Water Wells of the Boise and Payette River Valleys



KEY

- *M3 Eagle Wells*
- *UWID Wells*
- *Spring Valley Ranch Wells*
- *Star Well*
- *Private Wells*
- *Emmett Wells*
- *Deep Exploratory Test Wells*

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EXHIBIT 64 & 65

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EXHIBIT 130

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MEMO

State of Idaho
Department of Water Resources
322 E Front Street, P.O. Box 83720, Boise, Idaho 83720-0098
Phone: (208) 287-4800 Fax: (208) 287-6700

Date: February 27, ~~2006~~ 2007

To: Gary Spackman

From: Sean Vincent SV

cc: Shane Bendixsen
Rob Whitney
Rick Raymondi

Subject: **Review of Addendum to City of Eagle, Idaho 7-Day Aquifer Test Report**

Per your request, this memo summarizes my review of the subject report addendum prepared by Holladay Engineering and SPF Water Engineering and submitted to the Department as final on February 22, 2007. My general conclusion is that the Addendum adequately addresses comments made in a previous memo to you dated November 29, 2006.

Specific conclusions are as follows:

1. The water level and aquifer test data presented in the Addendum generally support the authors' primary conclusion (i.e., the deep sand layers that are targeted for production have sufficient capacity for additional withdrawals). The fact that static water levels in the deep system near the area of proposed development are above land surface and appear to be relatively stable suggests that the deep aquifer system is not currently in a state of overdraft.

2. An exception to the relatively stable water level trend described above is the hydrograph for Well 04N01W-31AAA1, which is located approximately 5 miles southwest of the area of proposed development. The water level in this well has declined by approximately 10 to 15 feet since 1970. Because the aquifer strata are dipping, however, this 462-foot deep well may not be producing from the same aquifer system that is targeted for development by the City of Eagle.

3. The inclusion of a conceptual hydrogeologic model, hydrographs for area wells, and additional analyses using the Cooper-Jacob (1946) and Theis (1935) residual drawdown

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methods, significantly improves the value of the aquifer test as a basis for evaluating the water supply.

4. As discussed in the Addendum, semilogarithmic plots of drawdown and residual drawdown suggest that both positive (recharge) and negative (finite aquifer) boundaries affected the test data. The observed behavior is consistent with the conceptual model of a finite, confined aquifer that receives recharge from the surrounding uplands. Given the available data, application of the Theis (1935) solution to estimate aquifer properties is appropriate for this hydrogeologic setting.

5. The Addendum also includes calculations for estimating potential impacts to existing wells. The calculations, which also are based on the Theis (1935) solution, are conservative in that they neglect to account for aquifer recharge but non-conservative in that they are premised on the assumption of an infinite aquifer.

6. The 1-year timeframe for evaluating impacts to existing wells is appropriate, in my opinion, and is consistent with guidance for determining yield for public drinking water supply wells (IDEQ, 2007). The ranges of transmissivity and storativity values used to estimate drawdown also are appropriate based on available information.

7. I verified that the drawdown estimates presented in Table 4 of the Addendum were calculated correctly using the series approximation of the Theis (1935) solution and the assumed input values.

8. Although the data analysis provides the basis for estimating hydraulic properties for the target aquifer system, the aquifer test was not of sufficient duration to definitively evaluate aquifer boundary conditions and long-term impacts associated with pumping. As recommended in the Addendum (Recommendations 15 and 16), a long-term water level and discharge rate monitoring program should be implemented if the water right applications are approved in order to evaluate water level trends as affected by pumping. Dedicated upgradient and downgradient monitoring wells that are completed in the deep aquifer system within the zone of influence of the aquifer test are recommended.

References

Cooper, H.H., and C.E. Jacob, 1946, *A Generalized Graphical Method for Evaluating Formation Constants and Summarizing Well Field History*, Trans. Amer. Geophys. Union, v. 27, pp. 526-534.

IDEQ – see Idaho Department of Environmental Quality

Idaho Department of Environmental Quality, 2007, *Testing Guidance for Determining Adequate Yield of New Public Drinking Water System Wells (Draft),* February, 11 pp.

Theis, C.V., 1935, *The Relation Between the Lowering of the Piezometric Surface and the Rate and Duration of Discharge of a Well Using Groundwater Storage*, Trans. Amer. Geophysical Union, v. 16, pp. 519-524.

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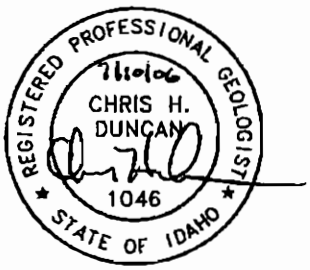
CITY OF EAGLE, IDAHO

7-Day Aquifer Test

June 2006



EG061204

Prepared By

Holladay Engineering Company
Payette, Idaho

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INTRODUCTION

In May and June of 2006, the City of Eagle conducted a 7-day constant rate aquifer pump test of the lower Treasure Valley Aquifer system to determine site specific aquifer conditions under Idaho Department of Water Resource applications for water appropriation 63-32089 and 63-32090. The aquifer test site is located in the western portion of the City of Eagle on the former Quarter Circle D. J. Ranch and Eaglefield Development properties. The test site location is shown in Figure 1.

The aquifer test plan was reviewed and approved by the Idaho Department of Water Resources in December 2005 under drilling permit no. 835987 and drilling permit no. 837870. The aquifer test plan included construction of test well no. 1 located in the proposed Legacy development and test well no. 2 located in the Eaglefield development. Well construction and testing information for the wells are included in Appendix B. Holladay Engineering Company was contracted to conduct the aquifer test and provide engineering services for the project.

The aquifer test was composed of three groundwater monitoring and testing phases. Background monitoring (starting on May 25th) was performed for 7-days prior to the pump and test to evaluate water level tends in the aquifer system. A 7-day constant rate pump test was started on June 2nd and ending on June 9th using a single pumping well and eight monitoring wells (including pumping well) conducted at a pumping rate of 1580 gpm. Seven-days of water level recovery monitoring was performed, immediately following the pump test and ending on June 15th. Additional water level recovery data was collected to June 19th. A total of eight wells (including the pumping well) were used to monitor groundwater levels during the aquifer test. The monitoring well configuration and well completion information is shown in Figure 1.

The aquifer test generated approximately 300,000 water level measurements that were used to evaluate the aquifer system response to pumping. Transmissivity and storativity values were computed using the Theis Method from drawdown and recovery datasets of monitoring wells completed in the lower aquifer zone.

This report presents data and results from the aquifer test. The following sections describe test procedures, data collection, data corrections, results and analysis.

AQUIFER TEST PROCEDURES

The aquifer test was designed as a constant rate pump test using 8 wells available at the site (including pumping well) for groundwater level monitoring. The aquifer test project was performed in three phases; background monitoring, constant rate pumping test and recovery monitoring. Each phase was conducted for a minimum duration of 7-days. Background water level monitoring was performed to determine groundwater level trends prior to pump testing. The pump test phase was conducted primarily to determine transmissivity and storativity valves in the lower aquifer zone and groundwater responses to pumping at monitoring well locations across the site. The recovery monitoring phase was conducted to determine transmissivity and storativity valves in the lower aquifer zone during water level recovery and to characterize the recovery response to pumping at monitoring well locations across the site.

The aquifer test was performed according to the approved aquifer test plan. Two changes were made prior to the start of the test. The pumping well location was moved to test well no. 2 (Eaglefield well) due to the lower capacity of test well no. 1, measured at approximately 1,300 gpm. Well capacity testing and construction information is located in Appendix D. Access to the monitoring well no. 6 (Rick's well) was lost just prior to the start of the test. The City was able to gain limited use of the well during the aquifer test. The data set for monitoring well no. 4 shows limited background and recovery water level data.

Monitoring Wells

The monitoring wells (including the pumping well) used during the aquifer test are listed below and includes a description of well completion and monitoring configuration. Monitoring well locations are shown in Figure 1. Additional well construction information, well driller's reports and other available information for each monitoring well is located in Appendix B.

1. Monitoring well no. 2 (test well no. 2 - Eaglefield): 12- to 16-inch diameter production well with 12-inch well screens at a depth of 345 ft. to 425 ft. Total well depth is 430 ft. The well is located in the SE ¼ of the NW ¼, Section 11, T.4N, R.1W and surveyed location is shown on Figure 1. Surveyed ground surface elevation of 2514.15 ft. above mean sea level (amsl). Static water level is artesian. This well was used as the pumping well during the aquifer test. A line-shaft turbine pump (Lyane 12 TLC-4 bowl) was installed for the pump test with an intake depth of 111.22 ft. below ground surface and 100 h.p. 3-phase motor. Two 1-inch diameter pvc plastic sounder tubes were installed from the bottom of the pump column assembly to monitoring ports in motor flange. Water level was monitored with a pressure transducer (Instrumentation N.W. PS-9 with 0-

100 psi sensor) in monitoring port no. 1 and measured by hand using a water level meter and 16 foot sight tube at monitoring port no. 2. A drawing of the wellhead monitoring configuration is located in Appendix B.

2. Monitoring well no. 1 (test well no. 1 - Legacy): 12- to 16-inch diameter well completed with 12-inch diameter screens from a depth of 282 ft. to 352 ft. Total well depth is 362 ft. The well is located in the SW ¼ of the NE ¼, Section 11, T.4N, R.1W and surveyed well location is shown on Figure 1. Surveyed ground surface elevation of 2512.97 ft. amsl. The distance from the pumping well is 1604.58 ft. Static water level is artesian. The wellhead was configured with two 1¼ -inch diameter monitoring ports located in the sealed flange plate cover. Water level was monitored with a pressure transducer (Instrumentation NW PT2X with 0-50 psi sensor) in monitoring port no. 1 and measured by hand using a water level meter and 16 foot sight tube at monitoring port no. 2. A drawing of the wellhead monitoring configuration is located in Appendix B.

3. Monitoring well no. 4 (Quarter Circle D. J. Ranch well no. 4): 6-inch diameter irrigation production well completed with an open interval from 235 to 260 feet below ground surface. Total well depth is 260 feet. There is no pump present in the well. The IDWR well driller's report is not available. The well was video inspect using a down-hole camera to determine well completion. Well casing leaks at a constant rate measured at 11.8 gpm at the wellhead surface. Well is located in the SE ¼ of the SW ¼, Section 3, T.4N, R.1W and surveyed well location is shown on Figure 1. Surveyed ground surface elevation of 2501.86 ft. amsl. The distance from the pumping well is 6276.65 ft. Static water level is artesian. The wellhead was configured with three 1¼ -inch diameter monitoring ports located in the flange plate cover. Water level was monitored with a pressure transducer (Instrumentation Northwest PT2X with 0-50 psi sensor) in monitoring port no. 1 and measured by hand using a water level meter and 6 foot sight tube at monitoring port no. 2. A 0-15 psi pressure gauge was installed in monitoring port no. 3. A drawing of the wellhead monitoring configuration is located in Appendix B.

4. Monitoring well no. 6 (Quarter Circle D. J. Ranch well no. 6): 16- to 10-inch irrigation production well with line-shaft turbine pump and completed with an open interval from 234 to 395 feet below ground surface. Total well depth is 406 feet. Water level is artesian. Well is located in the SE ¼ of the SW ¼, Section 2, T.4N, R.1W and surveyed well location is shown on Figure 1. Surveyed ground surface elevation of 2525.84 ft. amsl. The distance from the pumping well is 3339.80 ft. Static water level is artesian. The wellhead was configured with two 1¼ -inch diameter monitoring ports located in motor support housing. Water level

was monitored with a pressure transducer (Instrumentation N.W. PS-9 with 0-50 psi sensor) in monitoring port no. 1 and measured by hand using a water level meter and 6 foot sight tube at monitoring port no. 2. A drawing of the wellhead monitoring configuration is located in Appendix B.

5. Monitoring well no. 9 (Strata monitoring well no. 1): 1¼ - inch pvc plastic monitoring well completed from 45 to 55 feet below ground surface. Total well depth is 55 feet. Static water level is below ground surface. Well is located in the NW ¼ of the NW ¼, Section 11, T.4N, R.1W and surveyed well location is shown on Figure 1. Surveyed ground surface elevation of 2510.52 ft. amsl. The distance from the pumping well is 3450.28 ft. The measuring point is located on north side of casing. Water level was monitored with a downhole pressure transducer (Instrumentation Northwest PT2X with 0-50 psi sensor) and measured by hand using a water level meter. A drawing of the wellhead monitoring configuration is located in Appendix B.

6. Monitoring well no. 10 (Strata monitoring well no. 1B): 1-inch pvc plastic monitoring well completed from 10 to 15 feet below ground. Total well depth is 15 feet. Static water level is below ground surface. Well is located in the NW ¼ of the NW ¼, Section 11, T.4N, R.1W and surveyed well location is shown on Figure 1. Surveyed ground surface elevation of 2510.52 ft. amsl. The distance from the pumping well is 3425.35 ft. The well measuring point is located on north side of casing. Water level was monitored with a downhole pressure transducer (Instrumentation Northwest PT2X with 0-50 psi sensor) and measured by hand using a water level meter. A drawing of the wellhead monitoring configuration is located in Appendix B.

7. Monitoring well no. 11 (United Water Idaho monitoring well 1A, Hope Lutheran Church): 2-inch pvc plastic monitoring well (part of a nested monitoring well) completed at staggered screen intervals from 280 ft. to 380 ft. below ground surface. Total well depth is 380 feet. Well is located in the SE ¼ of the SE ¼, Section 11, T.4N, R.1W and surveyed well location is shown on Figure 1. Surveyed ground surface elevation of 2518.83 ft. amsl. The distance from the pumping well is 2405.02 ft. Static water level is artesian. The wellhead was configured with an open ½-inch ball valve connected to a tee fitting used as two measuring ports. Port no. 1 was configured a sealed pressure chamber which housed a pressure transducer (Instrumentation Northwest PT2X with 0-50 psi sensor). A 0-15 psi pressure gauge was installed in port no. 2. Groundwater levels were measured by pressure transducer and by pressure gauge. A drawing of the wellhead monitoring configuration is located in Appendix B.

8. Monitoring well no. 12 (United Water Idaho monitoring well 1 B, Hope Lutheran Church): 2-inch pvc plastic monitoring well (part of a nested monitoring well) completed at staggered screen intervals from 400 ft. to 500 ft. below ground surface. Total well depth is 500 feet. Well is located in the SE ¼ of the SE ¼, Section 11, T.4N, R.1W and surveyed well location is shown on Figure 1. Surveyed ground surface elevation of 2518.83 ft. amsl. The distance from the pumping well is 2405.02 ft. Static water level is artesian. The wellhead was configured with an open ½-inch ball valve connected to a tee fitting used as two measuring ports. Port no. 1 was configured a sealed pressure chamber which housed a pressure transducer (Instrumentation Northwest PT2X with 0-50 psi sensor). A 0-30 psi pressure gauge was installed in port no. 2. Groundwater levels were measured by pressure transducer and by pressure gauge. A drawing of the wellhead monitoring configuration is located in Appendix B.

Water Level Measurements

Water level measurements were computed from downhole pressure transducer data collected at each monitoring well location. Transducer pressure measurements were made using Instrumentation Northwest PT2X and PS-9 series transducers with built-in data loggers. PT2X transducers record absolute pressure using a 0-50 psi sensor. Absolute pressure measurements were converted to gauge pressure using direct barometric compensation by subtracting corresponding atmospheric pressure measurements for the same time interval. Barometric pressure was measured and recorded using an Instrumentation Northwest PT2X-BV barometric sensor and data logger unit. Barometric pressure corrections were processed with the Instrumentation Northwest Aqua4plus software. The PS-9 series transducers are designed to measure gauge pressure directly using an atmospheric pressure compensation tube built into the unit and cable assembly.

Monitoring well gauge pressure data was converted to feet of groundwater above the pressure transducer sensor. The data was then converted to depth of groundwater below the measuring point (MP) using the sensor depth setting.

Groundwater level elevation data was calculated using the measured distance of the MP from the surveyed land surface elevation at each monitoring location and depth to groundwater data below the MP. The land surface elevation and location of each monitoring well was surveyed. Survey data for monitoring wells is located in Appendix D. Groundwater measurements and data conversions are shown on the monitoring well data sheet located in Appendix A.

Water level measurements were collected on 1-minute intervals during the background monitoring phase of the test. During the pumping and recovery phases of the test, water level measurements were made on 30-second intervals for the first 2-hour period. After the second hour, measurements were made on 1-minute intervals for the remainder of the test period. Backup hand measurements were made at all monitoring well locations to provide redundancy in the event an electronic transducer failed.

Pumping Configuration and Discharge Measurements

Test well no. 2 (Eaglefield) was used as the pumping well for the aquifer test. A line-shaft turbine pump (Layne 12 TLC-4 bowl) was installed with an intake depth of 111.22 ft. below ground surface. The pump was driven by a 100 h.p. 3-phase G.E. motor powered by a Caterpillar diesel generator. Groundwater was discharged was controlled through an 8-inch diameter gate valve and piped approximately 330 feet to the northwest of the wellhead through 8-inch diameter portable aluminum irrigation pipe. Water flow was measured at the end of the pipeline using a 10-inch diameter circular orifice weir with 4-inch diameter constant discharge orifice plate and manometer tube. Water was discharged into the Middleton Irrigation Association canal system and flowed offsite.

AQUIFER TEST RESULTS

Barometric Pressure Monitoring

Barometric pressure measurement station was set up at the pumping well (test well no. 2) site. Barometric pressure measurements were performed on 1-minute intervals from May 24th to June 20th. The barometric data was use to correct PT2X transducer measurements. All barometric pressure corrections were processed with the Instrumentation Northwest Aqua4plus software.

Barometric data collected during the test is shown in the barometric data sheets located in Appendix A. A graph of barometric data collected during the test is located in Appendix C.

The pressure transducer data collected at the pumping well (test well no. 2) using an Instrumentation Northwest PS-9 gauge pressure transducer appears to be influenced by atmospheric pressure changes during the test. The water level elevation data graph of test well no. 2 shows a diurnal rise and fall in water level. The PS-9 transducer designed to operate with an atmospheric pressure compensation air tube. The transducer appears to have failed to fully compensate

for barometric pressure changes. The transducer data was not corrected and results presented as recorded.

Background Water Level Monitoring

Background water level monitoring started at 10:00 am on May 25, 2006, except at monitoring well no. 6 were the City did not gain well access until June 2, 2006. Background water level measurements were suspended at test well no. 2 during the installation of the pump on May 25th and 26th. The pump installation required discharge of artesian flow on May 26, 2006 from 12:30 am to 3:30 for a brief period at 5:15 pm to install the transducer. Artesian flow was discharged into the irrigation canal adjacent to the well site. The pumping system was also tested intermittently between 10:00 am and 12:00 pm on May 31, 2006, which affected water levels in the aquifer during this period.

Water level data collected at each monitoring well is shown on the observation well data sheets located in Appendix A. Background water level data and trends are shown in the monitoring well water level elevation graphs for individual monitoring wells are located in Appendix C.

Pump Test Water Level Monitoring

The phase of the aquifer test was started on June 1, 2006 at 10:00 am as scheduled. The pumping rate was adjusted quickly at the discharge gate valve and set to a constant flow rate of 1580 gpm during the test. The discharge flow rate was monitored continuously during start up and on a regular basis (approximately 1-hour intervals) during the later stage of the test. At 3:45 pm on June 1, pumping stopped due to a power failure. A field decision was made to restart the test on June 2 after the aquifer was allowed to recover overnight.

On June 2nd, at 10:00 am, the pump test was restarted for a 7-day period ending on June 9th at 10:00 am. At start up the pumping rate was adjusted at the discharge gate valve and set to a constant flow rate of 1580 gpm. The discharge flow rate was monitored continuously during start up and on a regular basis (approximately 1-hour intervals) during the later stage of the test. Two power failures occurred during the test on June 4th at 13:11 and June 6th at 18:51. In both cases, the pump was restarted immediately, resulting in only a few minutes of non-pumping time. Periodic flow adjustments were made at the discharge gate valve to maintain a constant flow rate of 1580 gpm. The flow rate was observed to drift up to approximately 1% before a flow adjustment was made. In the later portion of the pump test (June 8th and 9th), water levels in the well were observed to be fluctuating approximately 0.2 inches in the well while performing a hand measurements with an

e-tape. On June 9th at 10:00 am, the pump was stopped after seven continuous days of pumping.

Groundwater water level data collected during the test is shown in the observation well data sheets located in Appendix A. Water level elevation graphs for individual monitoring wells are located in Appendix C. Water level drawdown results for test well no. 1 (Legacy), test well no. 2 (Eaglefield), monitoring well 11 (UWI 1A), and monitoring well 12 (UWI 1B) are shown on semi-log plots located in Appendix C.

Recovery Water Level Monitoring

The aquifer recovery period started immediately following the end of pumping on June 9th at 10:00 am and continued for seven days to June 16 at 10:00 am. Monitoring well transducers recorded data to June 19th until the time each transducer was removed from the well, with the exception of monitoring well no. 6 (Rick's irrigation well) and the pumping well (Test well no. 2). The additional data collected from June 16th to June 19th was processed and included in the recovery data set.

Several events occurred during the recovery monitoring period. The transducer at monitoring well no. 6 was removed on June 10th at 7:39 am. Monitoring well no. 6, an irrigation production owned by Tom Rick, was pumped for irrigation on June 10th from approximately 9:15 am to 5:00 pm at an estimated flow rate of 1000 gpm. On June 13th, the artesian discharge valve at the pumping well (Test well no. 2) was opened from 10:30 am to 1:08 pm to allow removal of the line-shaft turban pump assembly. The transducer was removed and continued to record measurements while out of the well. The open artesian discharge produced approximately 1000 gpm during this period. Water was discharge into the irrigation canal adjacent to the well site.

Groundwater water level data collected during the test is shown in the observation well data sheets located in Appendix A. Water level elevation graphs for individual monitoring wells are located in Appendix C. Water level recovery results for test well no. 1 (Legacy), test well no. 2 (Eaglefield), monitoring well 11 (UWI 1B), and monitoring well 12 (UWI 1B) are shown on semi-log plots located in Appendix C.

AQUIFER TEST DATA ANALYSIS

Water level data collected from the pumping and recovery periods of the aquifer test from monitoring well no. 1 (test well no. 1), monitoring well 11 (UWI 1A), monitoring well no. 12 (UWI 1B) and the pumping well (test well no. 2) was plotted as drawdown and recovery semi-log and log-log scale graphs. Monitoring well

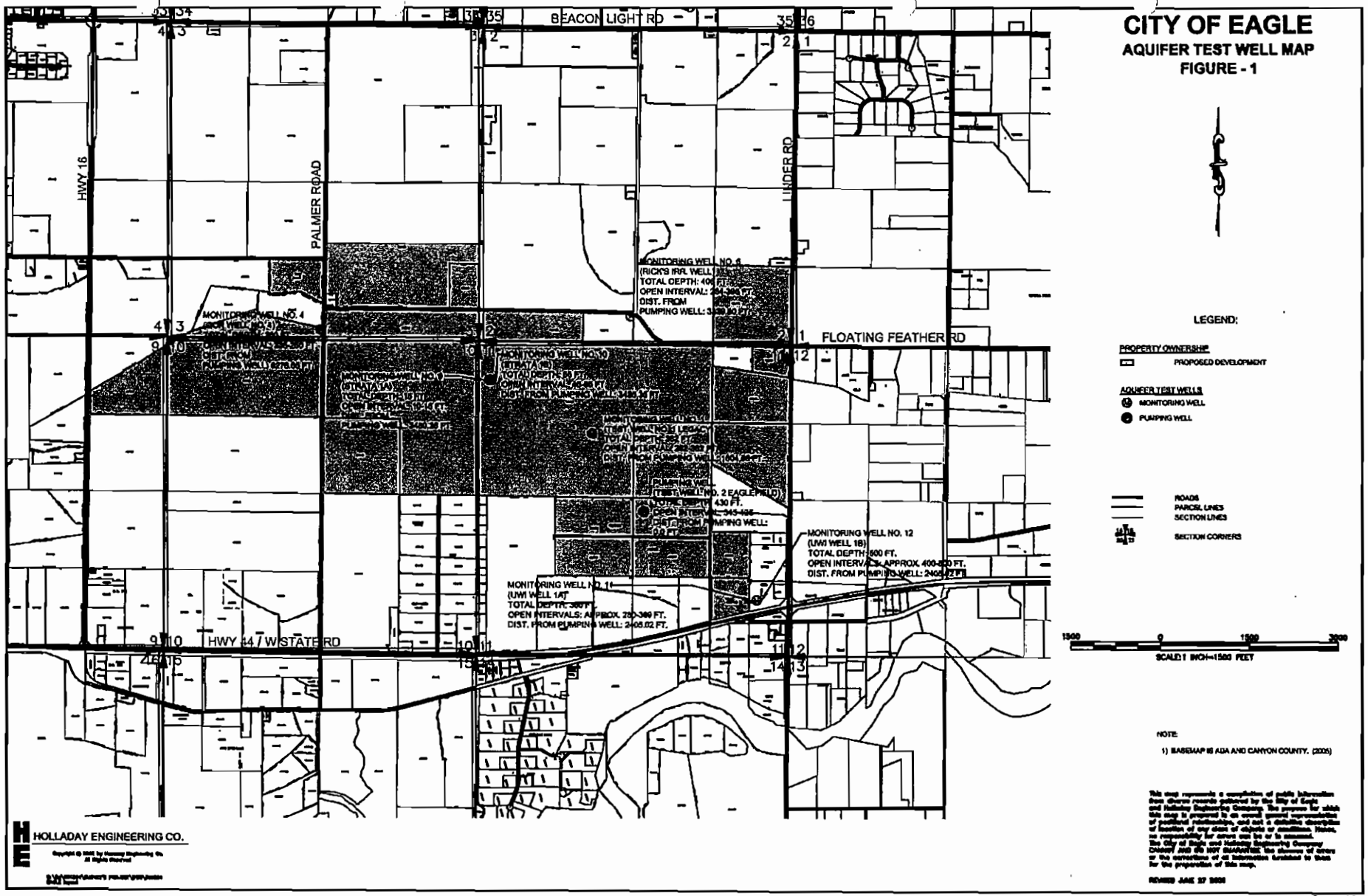
drawdown and recovery graphs are located in Appendix C. The drawdown and recovery data sets were analyzed using the Theis Method, based on a confined to semi-confined lower aquifer conceptual model for the test site. Transmissivity and storativity values computed from type curve matching of each data set using the Theis Method in AquiferTest 4.0 (Waterloo Hydrogeologic, Inc) computer software and results are listed below in Table 1.

Table 1
Computed Transmissivity and Storativity Values

Monitoring Well	Data Set	Transmissivity (ft^2/day)	Storativity
Test well no. 1 (Legacy)	Drawdown	2.01×10^4	1.30×10^{-2}
Test well No. 2 (pumping well)	Drawdown	2.00×10^4	---
Monitoring well no. 11 (UWI 1A)	Drawdown	1.85×10^4	6.62×10^{-4}
Monitoring well no. 12 (UWI 1B)	Drawdown	1.80×10^4	8.00×10^{-4}
Test well no. 1 (Legacy)	Recovery	1.95×10^4	1.58×10^{-2}
Test well No. 2 (pumping well)	Recovery	1.75×10^4	---
Monitoring well no. 11 (UWI 1A)	Recovery	1.77×10^4	7.80×10^{-4}
Monitoring well no. 12 (UWI 1B)	Recovery	1.80×10^4	7.90×10^{-4}
Average Value	Test	1.87×10^4	5.31×10^{-3}

Water level data collected from the pumping and recovery periods of the aquifer test from monitoring well no. 1 (test well no. 1), monitoring well 11 (UWI 1A), monitoring well no. 12 (UWI 1B) and the pumping well (test well no. 2) was plotted as drawdown and recovery semi-log and log-log scale graphs. Monitoring well drawdown and recovery graphs are located in Appendix C. The drawdown and recovery data sets were analyzed using the Theis Method, based on a confined to semi-confined lower aquifer conceptual model for the test site. Transmissivity and storativity values computed from type curve matching of each data set using the Theis Method in AquiferTest 4.0 (Waterloo Hydrogeologic, Inc) computer software and results are listed below in Table 1.

In the Theis analysis type curve fit, data points influenced by well interference or discharge of artesian flow were given a lower weighted valve or excluded from the data set to obtain a more representative type curve fit. The Theis analysis graphs showing calculated transmissivity and storativity valves for each data set are located in Appendix C. The computed average valve for transmissivity is 1.87×10^4 ft^2/day (139,886 gal/day/ft). The average value for storativity is 5.31×10^{-3}.

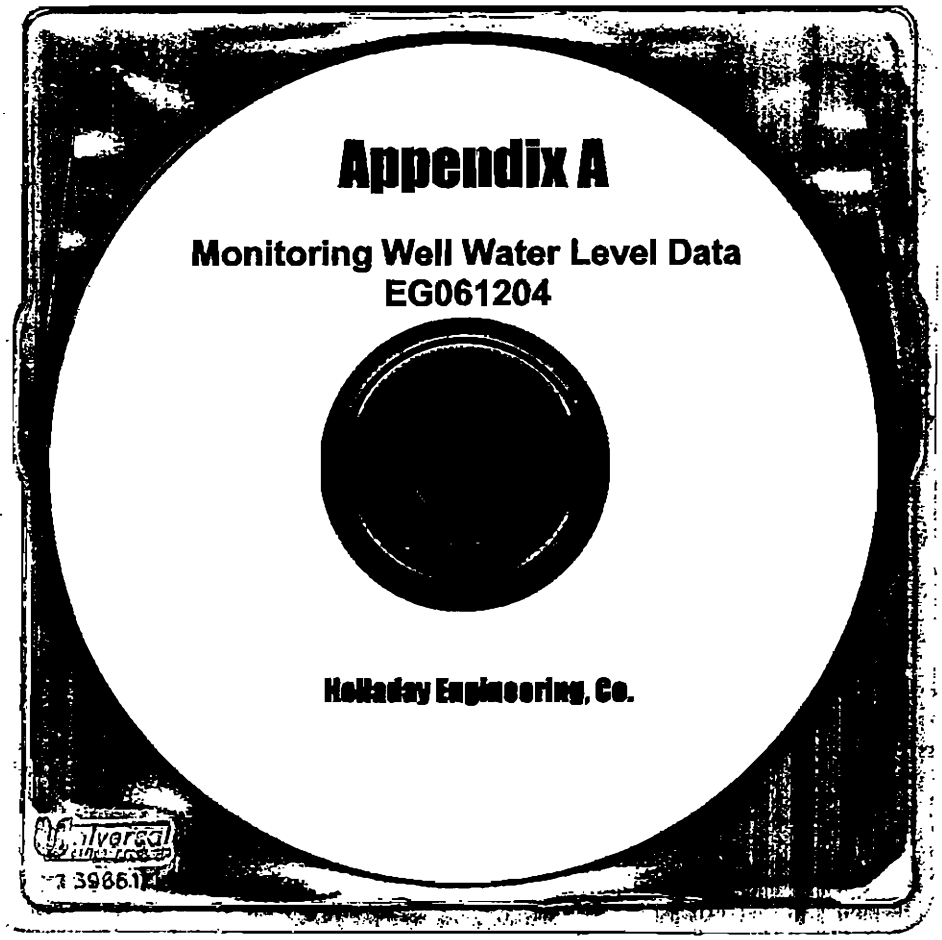

BEACON LIGHT RD
HWY 16
PALMER ROAD
LINDER RD
FLOATING FEATHER RD
HWY 44 / W STATE RD
MONITORING WELL NO. 6
(RICK'S IRR. WELL)
MONITORING WELL NO. 4
MONITORING WELL NO. 12
(UWI WELL 18)
TOTAL DEPTH: 500 FT.
OPEN INTERVALS: APPROX. 400-500 FT.
MONITORING WELL NO. 11
(UWI WELL 14)
OPEN INTERVALS: APPROX. 250-360 FT.
CITY OF EAGLE
AQUIFER TEST WELL MAP
FIGURE - 1
LEGEND:
PROPERTY OWNERSHIP
PROPOSED DEVELOPMENT
AQUIFER TEST WELLS
MONITORING WELL
PUMPING WELL
ROADS
PARCEL LINES
SECTION LINES
SECTION CORNERS
SCALE: 1 INCH=1500 FEET
NOTE:
1) BASEMAP IS ADA AND CANYON COUNTY. (2005)
HOLLADAY ENGINEERING CO.

APPENDIX A

(Computer Disk Enclosed)

MONITORING WELL WATER LEVEL DATA

1. Test Well 2 (Eaglefield)(Pumping Well)
2. Test Well 1 (Legacy)
3. Monitoring Well 4 (QCR 4)
4. Monitoring Well 6 (Rick's)
5. Monitoring Well 9 (Strata 1A)
6. Monitoring Well 10 (Strata 1B)
7. Monitoring Well 11 (UWI 1A)
8. Monitoring Well 12 (UWI 1B)
9. Barometer


Appendix A
Monitoring Well Water Level Data
EG061204
Holladay Engineering, Co.

APPENDIX B

MONITORING WELL INFORMATION

1. Test Well 2 (Eaglefield)(Pumping Well)
2. Test Well 1 (Legacy)
3. Monitoring Well 4 (QCR 4)
4. Monitoring Well 6 (Rick's)
5. Monitoring Well 9 (Strata 1A)
6. Monitoring Well 10 (Strata 1B)
7. Monitoring Well 11 (UWI 1A)
8. Monitoring Well 12 (UWI 1B)

Appendix B.1

TEST WELL 2 (Eaglefield)(Pumping Well)

Form 238-7
6/02

[redacted] OF WATER RESOURCES

WELL DRILLER'S REPORT

Office Use Only [redacted]
Inspected by _____
Twp _____ Rge _____ Sec _____
_____ 1/4 _____ 1/4 _____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0042405
DRILLING PERMIT NO. 892605 - 837870
Water Right or Injection Well No. 63-32089, 63-32090

2. OWNER:
Name CITY OF EAGLE
Address 310 E. STATE ST.
City EAGLE State ID Zip 83616

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk, Sub. or Directions to well. WELL #2 (EAGLEFIELD)
Twp. 4 North ☒ or South ☐
Rge. 1 East ☐ or West ☒
Sec. 11 1/4 NW 1/4 SE 1/4
Gov't Lot _____ County ADA
Lat: : : Long: : :
Address of Well Site 50' W of INTERSECTION of W TATLOCK AVE + N GOLDEN EAGLE HWY City EAGLE
US84 Blk 8 Sub. Name EAGLE FIELD ESTATES

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other TEST

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD:
☐ Air Rotary ☐ Cable ☐ Mud Rotary ☒ Other REVERSE

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
CEMENT GROUT	0	320	24 yds	PUMPED FROM BOTTOM TO TOP

Was drive shoe used? ☐Y ☒N Shoe Depth(s) _____
Was drive shoe seal tested? ☐Y ☐N How? _____

8. CASING/LINER: 380' 16"X13" REDUCER.

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16	+5	380	.375	STEEL	☒	☐	☒	☐
10	295	345	.365	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe 5'
Packer ☐Y ☒N Type _____

9. PERFORATIONS/SCREENS PACKER TYPE
Perforation Method _____
Screen Type & Method of Installation JOHNSON WIRE WRAP

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
345	425	.030		10	S.S.	☒	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
#16-9 CSST SAND	320	430	30,000	DRY POUR

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
_____ ft. below ground Artesian pressure 0.1 lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____
FLANGE CAP W/ 2 1/4" PIPE PLUGS

12. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
1123 gpm		45.2'	10 MIN

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
Depth first Water Encounter _____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
28	0	3	TOP SOIL		
	3	28	RIVER GRAVEL		
	28	48	TAN CLAY		
	48	56	SAND		
	56	63	RUSTY TAN CLAY		
	63	135	SAND W/SM TAN CLAY STREAKS		
	135	183	BRN CLAY W/SAND STREAKS		
	183	189	FINE - MED SAND		
	189	194	TAN CLAY		
	194	315	SAND SM GRAVEL		
	315	232	CLAY		
↓	232	290	SAND FINE - MED W/SM CLAY STREAKS		
20	290	297	SAND - FINE		
	297	329	BR. RUSTY, GREEN + GRAY CLAY		
	329	436	COARSE SAND, SOME RED GRAVEL		
	436	444	BRN RUSTY CLAY		

Completed Depth 430' (Measurable)
Date: Started 3-21-06 Completed 5-9-06

14. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name RIVERSIDE INC Firm No. 333
Principal Driller [signature] Date 5-22-06
and
Driller or Operator II Justin Clouse Date 5-22-06
Operator I _____ Date _____
Principal Driller and Rig Operator Required.
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES

SPF Water Engineering, LLC
water resource consultants

April 8, 2006

Peter Harris
Eaglefield, LLC
6951 Duncan Lane
Boise, ID 83714

Subject: Final Design for Eaglefield Well No. 1 (City of Eagle Test Well 4)

Dear Peter:

Drilling of the municipal test well borehole at Eaglefield was completed to approximately 444 feet on April 7, 2006. The borehole is nominal 20-inch diameter and was advanced using the reverse rotary method. The drill cuttings consist primarily of brown sand, tan clay, and brown clay above 438 feet. Blue-gray clay was encountered from 438 to 444 feet.

Geophysical logging was conducted on April 7. Strata Data, Inc. from Casper, Wyoming, was the geophysical contractor. Logs run include natural gamma radiation, spontaneous potential, single point resistivity, 16-inch normal resistivity, and 64-inch normal resistivity.

Drill cuttings and geophysical logs document the presence of a potentially productive sand layer from 330 feet to 433 feet. This sand layer corresponds with the target interval for this well, and we propose completing the well with screens extending from 345 to 425 feet.

The completed well will include 16-inch casing from approximately 5 feet above ground surface to 280 feet, 12-inch casing from 280 feet to 345 feet, 12-inch well screen from 345 feet to 425 feet, and 12-inch tail pipe with plate bottom from 425 feet to 430 feet. A 16-inch by 12-inch welded reducer will be used to connect the 12-inch and 16-inch casing strings. The invert of the 10-inch artesian by-pass line will be approximately 2.5 feet above existing ground surface.

No. 6-9 Colorado Silica Sand filter pack will be installed in the borehole annulus from 320 to 430 feet. Estimated volume is approximately 5 cubic yards.

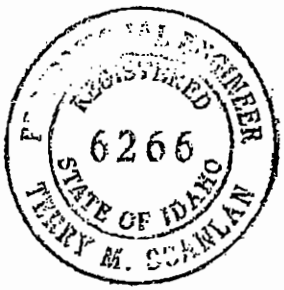
Bentonite chips will be used as surface seal material. The chips will extend from 320 feet to ground surface. Estimated volume is approximately 34 cubic yards. Prior to installation of casing and screen, the borehole from ground surface to 300 feet will be reamed to 28-inch diameter to facilitate installation of the bentonite surface seal.

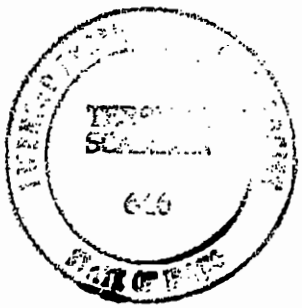
We are still discussing well development options with Riverside. Our current thinking is to develop the well initially by bailing, air lifting, or pumping until artesian flow is

achieved. After the initial artesian flow clears, development will continue by shutting in the well, pressurizing the casing with compressed air, and then releasing pressure to allow artesian flow. This procedure can be repeated until the artesian flow clears. Air pressures should start low, and gradually increase up to 100 psi. The artesian flow rate and shut-in pressure following initial development will allow a preliminary determination of well capacity as soon as possible. Final development will be completed using the test pump.

A well design schematic, drill log, and field geophysical logs are enclosed for your records.

Please contact me with any questions.





Sincerely,

Terry M. Scanlan, P.E., P.G.

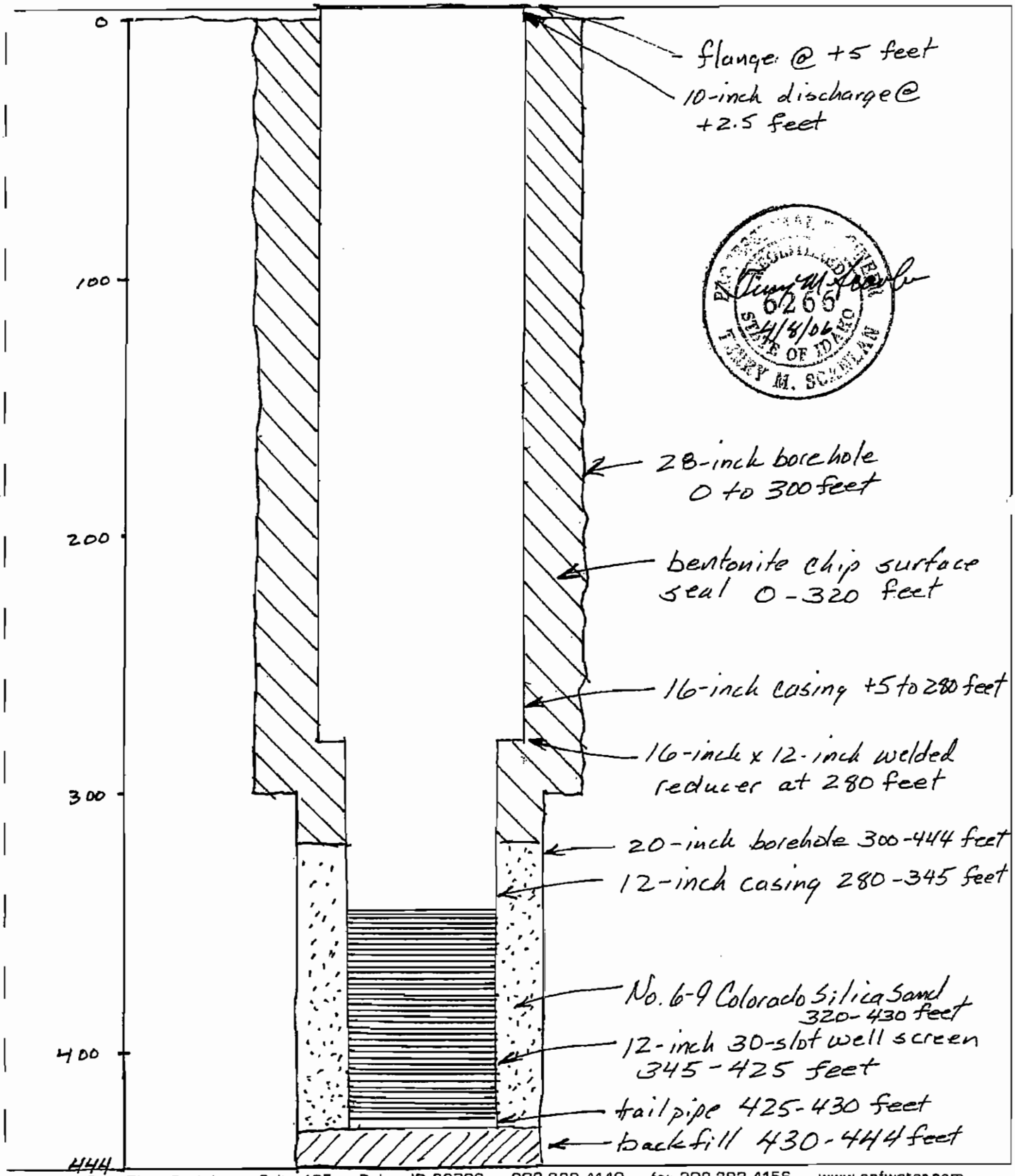
cc: Terry Daugherty – Riverside, Inc.
Rob Whitney – Idaho Department of Water Resources
Chris Duncan – Holladay Engineering

Attachments: Well Schematic
Drill Log
Geophysical Logs

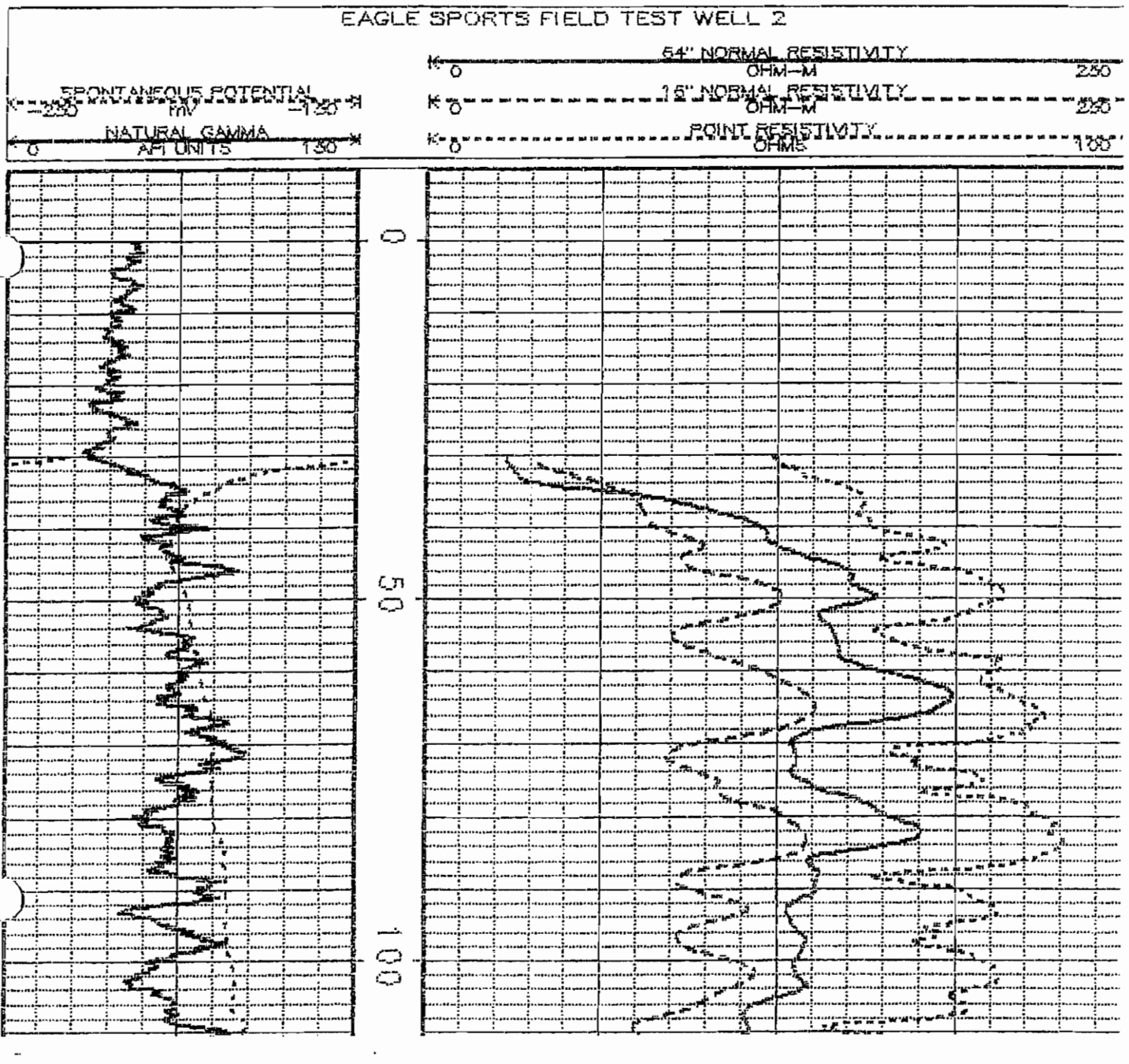
SPF Water Engineering, LLC
water resource consultants

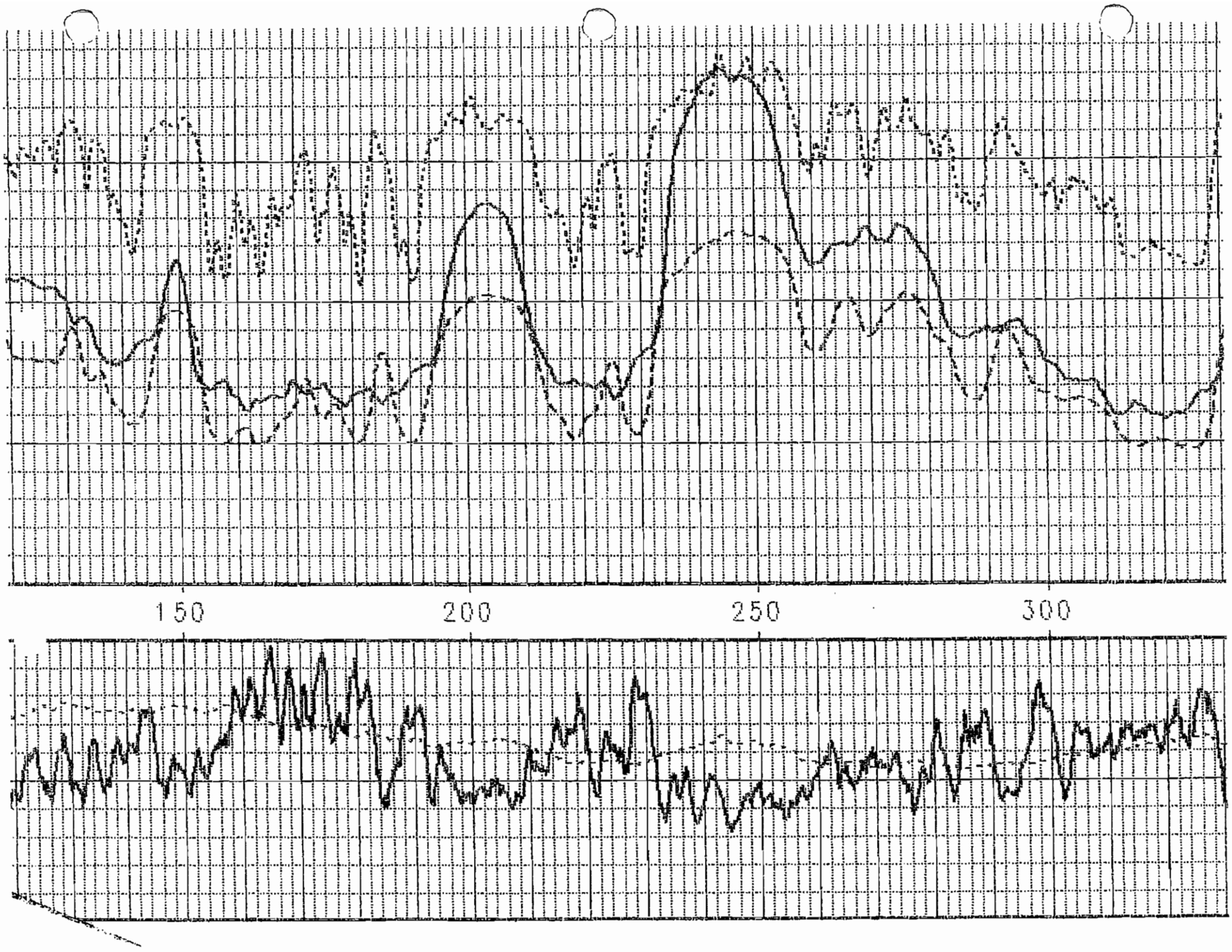
By TS Date 4/4/06 Client Eaglefield Sheet 1 of 1

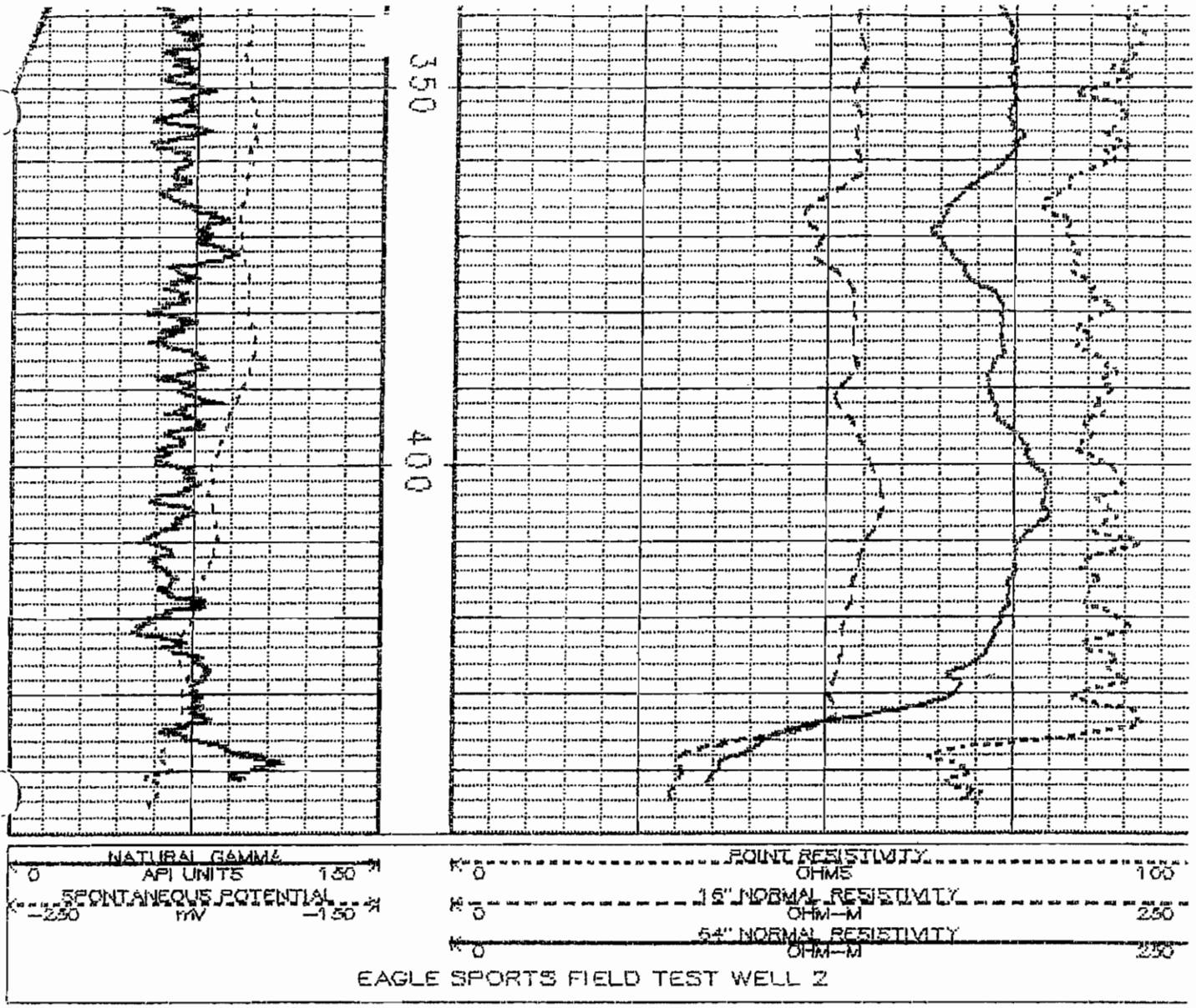
Chkd By _____ Description Final Well Design - Eagle Well #4 Job No 421.00 10



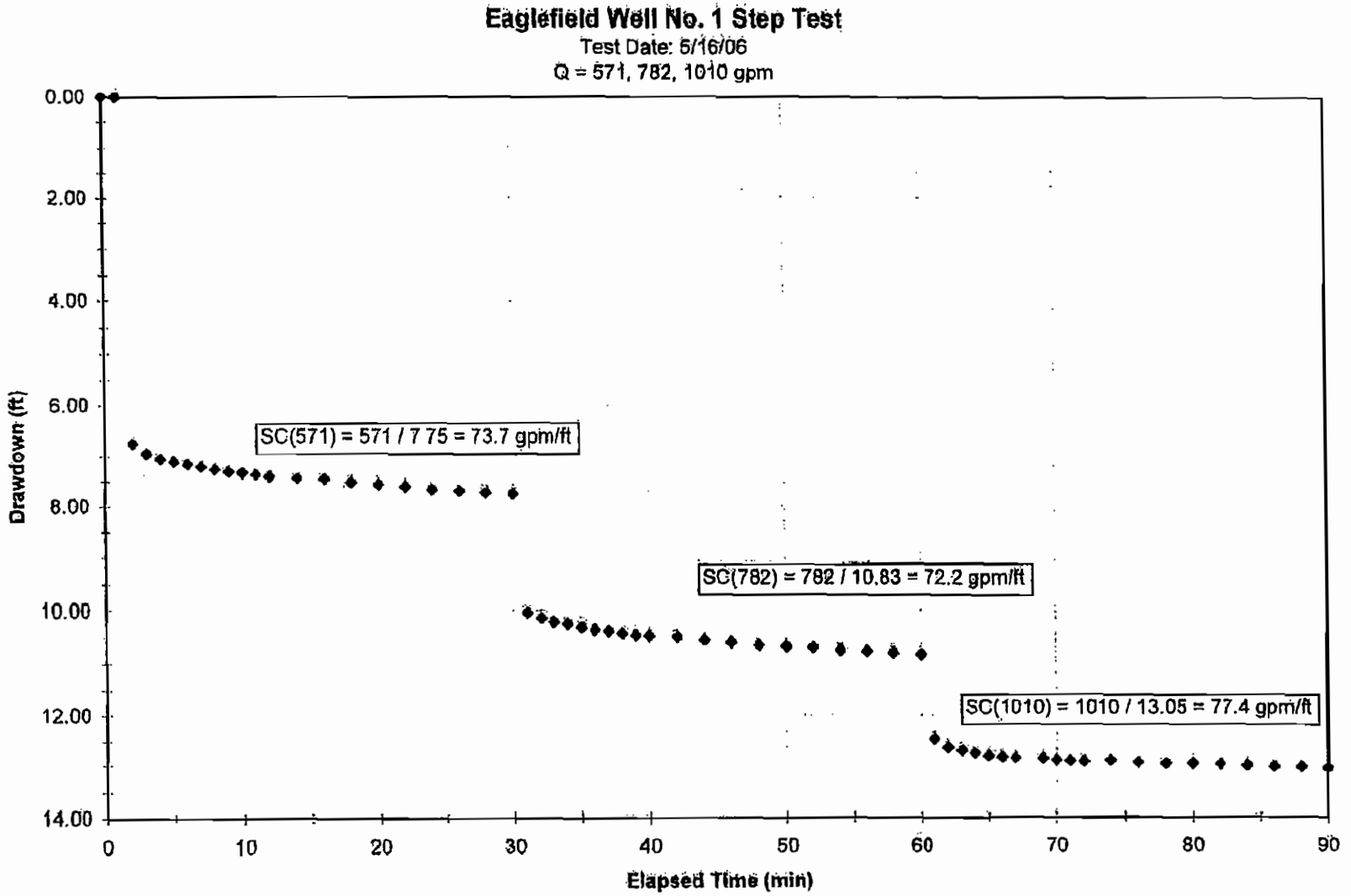
600 East River Park Lane, Suite 105 · Boise, ID 83706 · 208.383.4140 · fax 208.383.4158 · www.spfwater.com


EAGLE SPORTS FIELD TEST WELL 2
64" NORMAL RESISTIVITY
0
OHM-M
250
SPONTANEOUS POTENTIAL
-250
mV
-120
16" NORMAL RESISTIVITY
0
OHM-M
250
NATURAL GAMMA
0
API UNITS
150
POINT RESISTIVITY
0
OHMS
100
0
50
100


150
200
250
300



EAGLE SPORTS FIELD TEST WELL 2


Eaglefield Well No. 1 Step Test
Test Date: 5/16/06
Q = 571, 782, 1010 gpm
Drawdown (ft)
0.00
2.00
4.00
6.00
8.00
10.00
12.00
14.00
0
10
20
30
40
50
60
70
80
90
Elapsed Time (min)
SC(571) = 571 / 7.75 = 73.7 gpm/ft
SC(782) = 782 / 10.83 = 72.2 gpm/ft
SC(1010) = 1010 / 13.05 = 77.4 gpm/ft

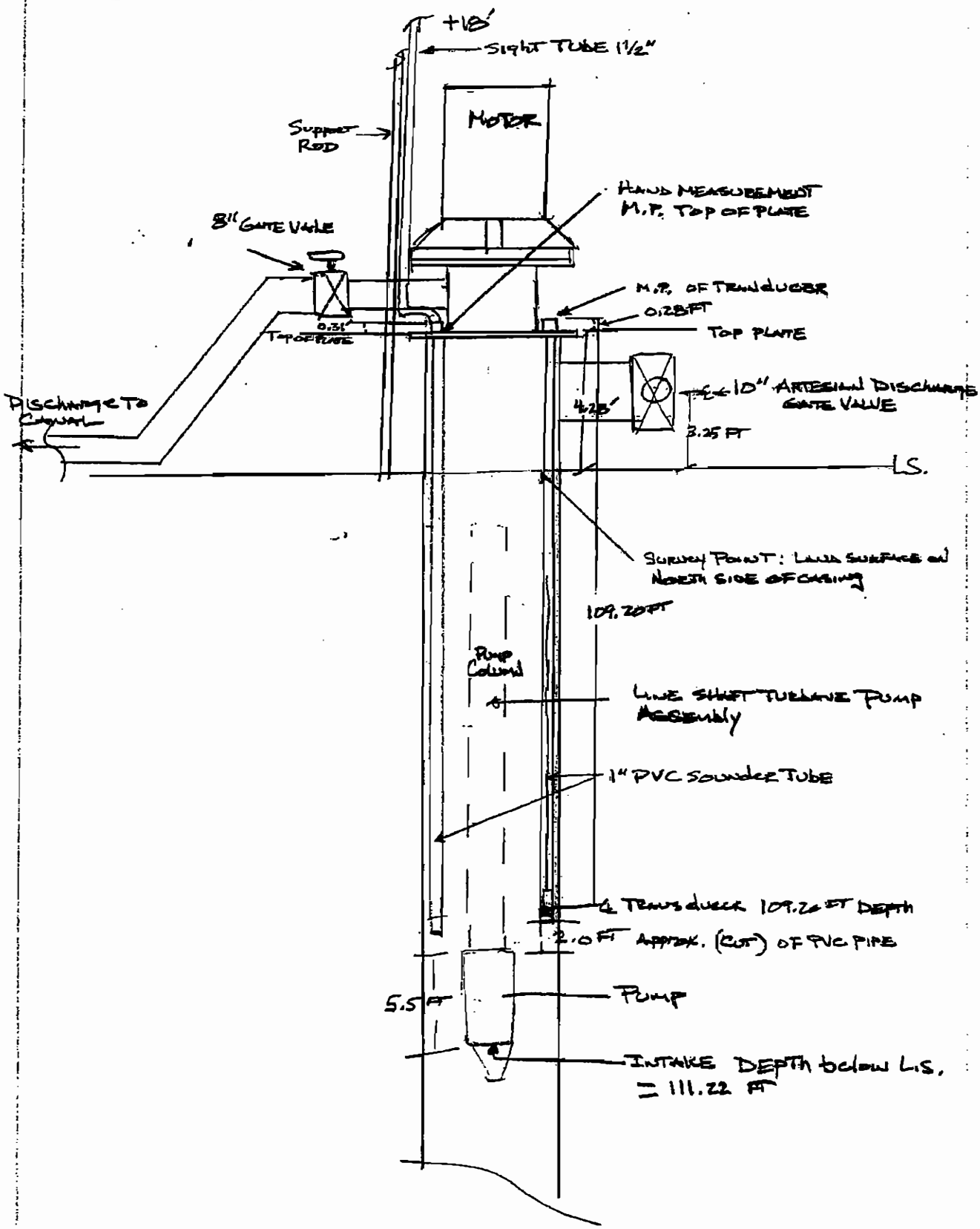
Eaglefield Well No. 1 Step Test, Q = 571, 782, 1010 gpm					
Test conducted by: SPF Water					
Flow measured by: 10x7 orifice, h = 8, 15, 25-inches					
Water level measured by: manometer, all water levels above ground surface					
Date	Time	WL (ft)	Elapsed Time (min)	DD (ft)	Remarks
5/16	12:56	18.75			static
5/16	13:00		0	0.00	open gate valve
5/16	13:01	18.75	1	0.00	adjust h=8"
5/16	13:02	12.00	2	6.75	
5/16	13:03	11.80	3	6.95	
5/16	13:04	11.70	4	7.05	
5/16	13:05	11.65	5	7.10	
5/16	13:06	11.60	6	7.15	
5/16	13:07	11.55	7	7.20	
5/16	13:08	11.50	8	7.25	
5/16	13:09	11.45	9	7.30	
5/16	13:10	11.43	10	7.32	
5/16	13:11	11.39	11	7.36	
5/16	13:12	11.35	12	7.40	T=16.3, pH=7.44, EC/SC=208.1/244.0
5/16	13:14	11.32	14	7.43	
5/16	13:16	11.30	16	7.45	
5/16	13:18	11.23	18	7.52	T=15.9, pH=7.46, EC/SC=209.9/246.4
5/16	13:20	11.19	20	7.56	
5/16	13:22	11.14	22	7.61	
5/16	13:24	11.09	24	7.66	
5/16	13:26	11.06	26	7.69	
5/16	13:28	11.03	28	7.72	T=16.1, pH=7.45, EC/SC=209.9/246.4
5/16	13:30	11.00	30	7.75	increase h=15"
5/16	13:31	8.70	31	10.05	
5/16	13:32	8.60	32	10.15	
5/16	13:33	8.53	33	10.22	
5/16	13:34	8.49	34	10.26	
5/16	13:35	8.42	35	10.33	
5/16	13:36	8.38	36	10.37	
5/16	13:37	8.35	37	10.40	
5/16	13:38	8.31	38	10.44	
5/16	13:39	8.28	39	10.47	difficult to read manometer, behind duct
5/16	13:40	8.27	40	10.48	tape
5/16	13:42	8.25	42	10.50	
5/16	13:44	8.20	44	10.55	T=16.1, EC/SC=208.8/245.6
5/16	13:46	8.15	46	10.60	
5/16	13:48	8.10	48	10.65	
5/16	13:50	8.07	50	10.68	
5/16	13:52	8.05	52	10.70	
5/16	13:54	8.00	54	10.75	T=16.0, pH=7.38, EC/SC=208.2/245.4
5/16	13:56	7.98	56	10.77	
5/16	13:58	7.95	58	10.80	T=16.0, pH=7.37, EC/SC=208.0/244.9
5/16	14:00	7.92	60	10.83	
5/16	14:01	6.28	61	12.47	increase h=25"
5/16	14:02	6.11	62	12.64	

Date	Time	WL (ft)	Elapsed Time (min)	DD (ft)	Remarks
5/16	14:03	6.05	63	12.70	
5/16	14:04	6.00	64	12.75	
5/16	14:05	5.94	65	12.81	
5/16	14:06	5.92	66	12.83	
5/16	14:07	5.90	67	12.85	check on flow along discharge channel,
5/16	14:09	5.89	69	12.86	mised reading
5/16	14:10	5.85	70	12.90	adjust gate valve couple of turns
5/16	14:11	5.84	71	12.91	
5/16	14:12	5.83	72	12.92	
5/16	14:14	5.85	74	12.90	T=16.0, pH=7.43, EC/SC=208.6/245.6
5/16	14:16	5.81	76	12.94	
5/16	14:18	5.79	78	12.96	
5/16	14:20	5.79	80	12.96	T=16.0, pH=7.42, EC/SC=208.7/245.7
5/16	14:22	5.78	82	12.97	
5/16	14:24	5.75	84	13.00	
5/16	14:26	5.73	86	13.02	
5/16	14:28	5.73	88	13.02	
5/16	14:30	5.70	90	13.05	closed gate valve

TEST WELL No. 2 (EAGLEFIED)

Pumping Well

EAGLE 7-DAY AQUIFER TEST



Appendix B.2

TEST WELL 1 (Legacy)

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Well ID No.
Inspected by
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0041980
DRILLING PERMIT NO. 890994-835987
Water Right or Injection Well No. 63-32089 + 63-32090

2. OWNER:
Name CITY OF EAGLE
Address P.O. BOX 1620
City EAGLE State ID Zip 83616

3. LOCATION OF WELL by legal description: LEGACY WELL #1
You must provide address or Lot, Blk, Sub. or Directions to well.
Twp. 4 North ☒ or South ☐
Rge. 1 East ☐ or West ☒
Sec. 11 1/4 SE 1/4 NW 1/4
Gov't Lot ____ County ADA
Lat: : : Long: : :
Address of Well Site QUARTER CIRCLE D RANCH, WEST OF EAGLE ROAD City EAGLE
Lt. ____ Blk. ____ Sub. Name ____

4. USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other TEST

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other ____

6. DRILL METHOD:
☐ Air Rotary ☐ Cable ☐ Mud Rotary ☒ Other REVERSE

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
CEMENT GROUT	0	278	24 gals	PUMPED BOTTOM TO TOP
BENTONITE	360	415	12,000	DRY POUR

Was drive shoe used? ☐Y ☒N Shoe Depth(s): ____
Was drive shoe seal tested? ☐Y ☒N How? ____

8. CASING/LINER: 16" X 12" REDUCER @ 180' TO 181'

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16	+4	180	.375	STEEL	☒	☐	☒	☐
12	181	282	.375	STEEL	☒	☐	☒	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe 5'
Packer ☐Y ☒N Type ____

9. PERFORATIONS/SCREENS PACKER TYPE
Perforation Method ____
Screen Type & Method of Installation JOHNSON WIRE WRAP

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
282	352	.030		12	S.S.	☒	☐
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method
#8-12 SAND	278	360	24,000	DRY POUR

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
____ ft. below ground Artesian pressure 6 lb.
Depth flow encountered ____ ft. Describe access port or control devices: ____
FLANGED CAP W/ 1 1/4" PIPE PLUG

12. WELL TESTS:
☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
1300 gpm	149'	135'	4 1/2 hrs

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments: ____
Depth first Water Encounter ____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
24	0	4	TOP SOIL		
	4	7	CLAY		
	7	11	SAND		
	11	28	SAND, RIVER GRAVELS		
	28	60	BRN CLAY		
	60	63	SAND		
	63	72	BRN CLAY		
	72	92	SAND		
	92	94	BRN CLAY		
	94	166	SAND W/BRN CLAY STREAKS		
	166	174	CLAY		
	174	178	SAND		
	178	181	CLAY		
	181	183	SAND, CLAY STREAKS		
	183	257	SAND		
	257	264	CLAY		
	264	274	SAND W/CLAY STREAKS		
	274	353	SAND		
↓	353	360	BLUE CLAY		
20	360	384	BLUE CLAY		
20	384	387	SAND		
	387	419	BLUE-GRAY CLAY		
	419	444	SAND		
	444	459	BLUE-GRAY CLAY		
	459	493	SAND W/ CLAY LAYERS		
	493	501	BLUE-GRAY CLAY		
	501	505	CEMENTED SAND		
↓	505	513	BLUE-GRAY CLAY		
			NOTE: BORE HOLE ABANDONMENT FROM 4/5" TO 6/3" WITH DRILL CUTTINGS		

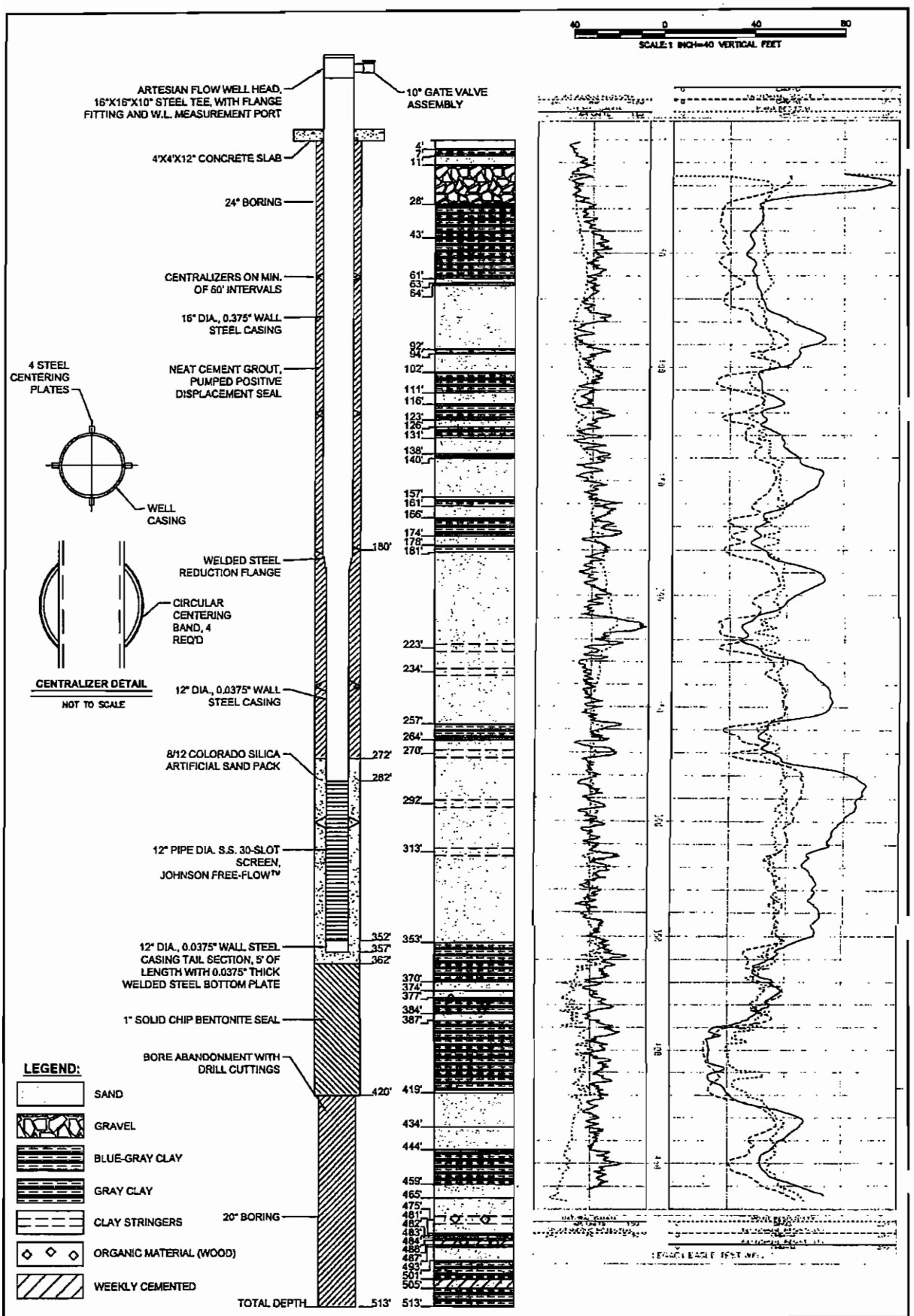
Completed Depth 351' (Measurable)
Date: Started 1-24-06 Completed 4-17-06

14. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name RIVERSIDE INC Firm No. 333
Principal Driller [signature] Date 5-15-06
and
Driller or Operator II ____ Date ____
Operator I Jeff Hash Date 5-15-06

Principal Driller and Rig Operator *Required.*
Operator I must have signature of Driller/Operator II.

FORWARD WHITE COPY TO WATER RESOURCES



AS-BUILT 2-17-06
EAGLE TEST WELL NO. 1
CITY OF EAGLE, IDAHO

CHD	DRWN	DATE	JOB NO.	DWG FILE
MJH	MON	2/10/06	061204	

HOLLADAY ENGINEERING CO.
ENGINEERS · CONSULTANTS

GEOTECHNICAL BOREHOLE LOG
HOLLADAY ENGINEERING COMPANY

BOREHOLE ID: TEST WELL No. 1 (LEGACY) PROJECT NO.: EG061204 PAGE: 1 of 6

PROJECT NAME: CITY OF EAGLE WR 67-[illegible] AND WR 67-[illegible] LOCATION: QUARTER CIRCLE DJ RANCH EAGLE, ID SITE LOCATION: SE, NW, S.11, T.4N, R.1W

COLLAR EL: _____ NORTHING: _____ EASTING: _____

HOLE DIAMETER: 18", 20" (BIT) DRILL METHOD: REVERSE ROTARY MUD DRILL MODEL: JED-A

DRILLER: RIVERSIDE, INC. LOGGER: C.D. & RIVERSIDE, INC. (JESSE HAGH) STATIC WATER DEPTH: _____

Depth (ft)	Date Time	Induration & Color	Soil or Rock Description	Graph Log	Sample format	Blows (N)	%Moisture water level	Fracture Density, Drill Notes, Gen Comment
0-4	1/20/06	Med-DK. Brown	LOAM SOIL. Approx. 40% SILT, 30% SAND, 20% CLAY AND 10% ORGANIC		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	MUD 9/3 MIX, Borrow 18" BIT, WASHED SAMPLE 8 lbs. MUD (DRILLER)
4-7	1/20/06	DK. Brown	SILTY Clay. Approx 40% SILT, 50% clay 10% SAND. SOFT		GRAB, REVERSE Fluid Discharge		UNKNOWN	Washed Sample
7-11	1/23/06	Tannish-gray	SILTY SAND. Approx. 20% SILT AND 80% U. FINE TO COARSE SAND, GRANITIC.		GRAB, REVERSE Fluid Discharge		UNKNOWN	Washed Sample
11-13	1/23/06	Tannish-gray	SANDY GRAVEL. Approx. 60% FINE-U. COARSE SAND, 20% FINE-COARSE GRAVEL AND 20% COBBLE. Angular to well Rounded.		GRAB, REVERSE Flow DISCHARGE		UNKNOWN	DIFFICULT DRILL, BIT BOUNCE, WASHED SAMPLE, Boring ENLARGEMENT; COBBLE SPINNING
13-18	1/23/06	Tannish-gray	SANDY GRAVEL. Approx. 30% Med-V. COARSE SAND, 40% F.-C. GRAVEL 20% COBBLE, Well Rounded. GRANITIC.		GRAB, REVERSE Flow DISCHARGE		UNKNOWN	DRILL BIT BOUNCE, Slow DRILLING, WASHED SAMPLE, Boring ENLARGEMENT.
18-28	1/24/06	Tannish-gray	SANDY GRAVEL, Approx. 60% Med-U. COARSE SAND 40% F.-C. GRAVEL MINOR COBBLES. Well Rounded GRANITIC.		GRAB, REVERSE Flow DISCHARGE		UNKNOWN	WASHED SAMPLE Boring ENLARGEMENT.
28-43	1/24/06	TAN	SANDY SILTY CLAY. Approx 10% FINE SAND, 30% SILT AND 60% CLAY. STICKY, Good Ribbon.		GRAB, REVERSE Flow DISCHARGE		UNKNOWN	WASHED SAMPLE
43-60	1/25/06	Tan	SILTY Clay. Approx. 30% SILT AND 70% CLAY. STICKY, Good Ribbon.		GRAB, REVERSE Flow DISCHARGE		UNKNOWN	20" BIT AT 53 FT., WASHED SAMPLE
60-63	1/26/06	Tan	CLAYEY SANDY SILT. Approx. 15% clay, 20% FINE SAND AND 65% SILT. STICKY Good Ribbon.		GRAB, REVERSE Flow DISCHARGE		UNKNOWN	WASHED SAMPLE
63-64	1/26/06	Orangish-Tan	SILTY Clay. Approx. 30% SILT AND 70% CLAY. STICKY, Good Ribbon.		GRAB, REVERSE Flow DISCHARGE		UNKNOWN	WASHED SAMPLE

GEOTECHNICAL BOREHOLE LOG
HOLLADAY ENGINEERING COMPANY

BOREHOLE ID: EAGLE TEST Well No. 1 PROJECT NO.: EG 061204 PAGE: 2 of 6

PROJECT NAME: CITY OF EAGLE (WR 63-32089, WR 63-32090) LOCATION: QUARTER CIRCLE D.T. RANCH, EAGLE, ID SITE LOCATION: SE, NW, S.11, T.4N, R.1W

COLLAR EL: _____ NORTHING: _____ EASTING: _____

HOLE DIAMETER: 18", 20" (BIT) DRILL METHOD: REVERSE ROTARY MUD DRILL MODEL: JED-A

DRILLER: RIVERSIDE, INC. LOGGER: C.D. & RIVERSIDE, INC. (JEFF HASH) STATIC WATER DEPTH: _____

Depth (ft)	Date Time	Induration & Color	Soil or Rock Description	Graph Log	Sample format	Blows (N)	%Moisture water level	Fracture Density, Drill Notes, Gen Comment
64-72	1/26/06	TAN	SILTY CLAY. APPROX. 30% SILT AND 70% CLAY. STICKY & GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE
72-74	1/27/06	TANNISH-GRAY	SILTY SAND. APPROX. 30% SILT AND 70% FINE-MED. SAND. POORLY SORTED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE, MUD TESTED AT 9 lbs. MIX.
74-92	1/27/06	TANNISH-GRAY	SAND. FINE TO COARSE GRAINED. POORLY-SORTED, GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE
92-94	1/27/06	TAN	SILTY CLAY. APPROX. 50% SILT AND 50% CLAY. STICKY. MOD. RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE
94-102	1/27/06	TANNISH-GRAY	SAND, FINE TO COARSE GRAINED, WELL SORTED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE
102-104	1/27/06	TAN	SILTY CLAY. APPROX. 60% SILT AND 40% CLAY. MOD. RIBBON. STICKY.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
104-109	1/27/06	TAN	SILTY CLAY. APPROX. 40% SILT AND 60% CLAY. GOOD RIBBON. STICKY.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
109-111	1/27/06	TAN	CLAYEY SILT. APPROX. 20% CLAY AND 70% SILT. POOR-NO RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
111-116	1/27/06	TANNISH-GRAY	SAND. FINE-V. COARSE GRAINED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
116-123	1/27/06	TAN	CLAY. APPROX. 20% SILT AND 80% CLAY. STICKY. GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.

GEOTECHNICAL BOREHOLE LOG
HOLLADAY ENGINEERING COMPANY

BOREHOLE ID: EAGLE TEST WELL No. 1 PROJECT NO.: EG06-1204 PAGE: 3 of 6

PROJECT NAME: CITY OF EAGLE WR 63-32089 WR 63-32090 LOCATION: QUARTER CIRCLE D.T. RANCH SITE LOCATION: SE, NW, S.11, T.4N, R.1W

COLLAR EL: _____ NORTHING: _____ EASTING: _____

HOLE DIAMETER: 18", 20" (BIT) DRILL METHOD: REVERSE ROTARY MUD DRILL MODEL: JED-A

DRILLER: RIVERSIDE, INC. LOGGER: C.D. & RIVERSIDE, INC. (JEFF HOWE) STATIC WATER DEPTH: _____

Depth (ft)	Date Time	Induration & Color	Soil or Rock Description	Graph Log	Sample format	Blows (N)	%Moisture water level	Fracture Density, Drill Notes, Gen Comment
123-126	1/27/06	TAN/WISH-GRAY	SAND. FINE TO V. COARSE SAND. WELL SORTED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
126-131	1/27/06	TAN	SILTY CLAY. APPROX. 50% SILT AND 50% CLAY, STICKY. GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
131-134	1/27/06	TAN/WISH-GRAY	SAND. FINE TO COARSE GRAINED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
134-140	1/27/06	TAN	SILTY CLAY. APPROX. 60% SILT AND 40% CLAY. MOD. RIBBON. STICKY.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
140-157	1/27/06	TAN/WISH-GRAY	SAND. FINE - COARSE GRAINED. GRANITIC		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
157-161	1/28/06	TAN	SILTY CLAY. APPROX. 50% SILT AND 50% CLAY. SOFT. STICKY GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
161-166	1/28/06	TAN/ISH-GRAY	SAND. FINE TO COARSE WELL SORTED; GRANITIC		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
166-174	1/28/06	TAN	CLAY. APPROX. 30% AND 70% CLAY. SOFT. STICKY. GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
174-181	1/28/06	TAN	SANDY SILTY CLAY. APPROX. 10% FINE SAND, 30% SILT AND 60% CLAY. SOFT. STICKY. MOD. RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
181-191	1/28/06	TAN/ISH-GRAY	SILTY CLAYEY SAND. APPROX. 10% CLAY, 30% SILT AND 60% SAND, V. FINE TO COARSE. POORLY SORTED.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.

GEOTECHNICAL BOREHOLE LOG
HOLLADAY ENGINEERING COMPANY

BOREHOLE ID: EAGLE TEST WELL No. 1 PROJECT NO.: EG 061204 PAGE: 4 of 6

PROJECT NAME: CITY OF EAGLE LOCATION: QUARTER CIRCLE D.J. RANCH SITE LOCATION: SE, NW, S. 11, T. 4N. R. 1W
WR 63-32089
WR 63-32090

COLLAR EL: _____ NORTHING: _____ EASTING: _____

HOLE DIAMETER: 18", 20" (B+T) DRILL METHOD: REVERSE ROTARY MUD DRILL MODEL: JED-A

DRILLER: RIVERSIDE, INC. LOGGER: C.D. & RIVERSIDE INC. (JEFF HAGEN) STATIC WATER DEPTH: _____

Depth (ft)	Date Time	Induration & Color	Soil or Rock Description	Graph Log	Sample format	Blows (N)	%Moisture water level	Fracture Density, Drill Notes, Gen Comment
191-203	1/28/06	TAN/ISH-GRAY	SAND. FINE TO COARSE GRAINED. MOD. SORTED, GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
203-221	1/28/06	TAN/ISH-GRAY	CLAYEY SILTY SAND. APPROX. 10% CLAY, 20% SILT AND 70% V. FINE TO MED. SAND, POORLY SORTED.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
221-223	1/28/06	TAN	SILTY CLAY. APPROX. 80% SILT AND 20% CLAY. MOD. RIBBON		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. NOTE: REPORT AS STRINGERS, BASED ON DRILL RATE.
223-257	1/28/06	TAN/ISH-GRAY	SAND, FINE TO MED. GRAINED SAND. WELL SORTED. SUBANGULAR, GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. NOTE: CLAY STRINGER AT 234 FT. REPORTED BY DRILLER.
257-264	1/28/06	TAN	CLAY. APPROX. 10% SILT AND 90% CLAY. SOFT, STICKY. GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE NOTE: SAND STRINGER REMARKED BY DRILLER AT 260 FT.
264-320	1/28/06	TAN/ISH-GRAY	SAND. V. FINE TO MED. GRAINED. WELL SORTED, SUBANGULAR, GRANITIC		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. NOTE: CLAY STRINGER REPORTED BY DRILLER AT 292 FT. AND 315 FT.
320-353	1/30/06	TAN/ISH-GRAY	SAND GRADING TO SILTY SAND. APPROX. 20% SILT AND 80% V. FINE TO MED. SAND. MODERATELY SORTED.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
353-370	1/30/06	BLUE-GRAY	SANDY SILTY CLAY. APPROX. 20% V. FINE SAND, 20% SILT AND 60% CLAY. SOFT. POORLY SORTED. GRANITIC		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
370-377	1/30/06	TAN/ISH-GRAY	SILTY SAND. APPROX. 10% CLAY, 20% SILT AND 70% V. FINE TO COARSE SAND. POORLY SORTED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. 9.0 LBS MUD (DRILLER)
377-384	1/30/06	BLUE-GRAY	SANDY SILTY CLAY. APPROX. 20% V. FINE TO FINE SAND, 20% SILT AND 60% CLAY. SOFT, STICKY MOD. RIBBON. 5% CARBON WOOD		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.

GEOTECHNICAL BOREHOLE LOG
HOLLADAY ENGINEERING COMPANY

BOREHOLE ID: EAGLE TEST WELL No. 1 PROJECT NO.: EG 061204 PAGE: 5 of 6

PROJECT NAME: CITY OF EAGLE WR 63-32089 WR 63-32090 LOCATION: QUARTER CIRCLE D. T. RANCH SITE LOCATION: SE, NW, S. 11, T. 4N, R. 1W

COLLAR EL: _____ NORTHING: _____ EASTING: _____

HOLE DIAMETER: 18", 20" (BIT) DRILL METHOD: REVERSE ROTARY MUD DRILL MODEL: JED-A

DRILLER: RIVERSIDE, INC. LOGGER: C.D. & RIVERSIDE INC. (JEFF HASH) STATIC WATER DEPTH: _____

Depth (ft)	Date Time	Induration & Color	Soil or Rock Description	Graph Log	Sample format	Blows (N)	%Moisture water level	Fracture Density, Drill Notes, Gen Comment
384-387	1/30/06	Tannish-gray	SAND. Approx. 90% V. Fine to Med. Sand and 10% Silt. Well Sorted. Granitic,		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE.
387-419	1/30/06	Blue-gray	CLAY. Approx 80% Clay and 20% Silt. Soft. Good Ribbon.		Grab, Reverse Flow Discharge		unknown	WASHED SAMPLE.
419-434	1/30/06	LT. Gray	SAND. Approx. 15% Silt and V. Fine to V. Coarse Sand, Minor Pebbles. Mod. Sorted.		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE.
434-444	1/30/06	LT. Gray	Clayey Silty Sand, Approx. 20% Clay, 40% Silt and 40% V. Fine to Med. Sand. Poorly Sorted.		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE.
444-459	1/30/06	Blue-gray	Silty Clay. Approx. 60% Silt and 40% Clay. Soft. Mod. Ribbon.		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE.
459-465	1/30/06	Gray	Clayey Silty Sand. Approx. 10% Clay, 20% Silt and 70% V. Fine to Med. Sand, Poorly Sorted.		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE. STOPPED DRILLING by Engineer.
465-481	1/31/06	LT. Gray	SAND. Fine to Med. Sand. Well Sorted. Granitic. Clay String 6" at 475'. Carbonized Wood (475-480').		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE. RESUMED DRILLING by Engineer. Mud 9.7 lbs (drilled)
481-482	1/31/06	Blue-Gray	Silty Clay, Approx. 60% Silt and 40% Clay. Soft. Good Ribbon.		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE.
482-483	1/31/06	LT. Gray	Clayey Silt Sand. Approx. 10% Clay, 20% Silt and 60% Fine to Coarse Sand Poorly Sorted, Carbonized Wood Frag.		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE.
483-484	1/31/06	Blue-gray	Silty Clay. Approx. 40% Silt and 60% Clay. 5-10% Carbonized Wood Frag.		Grab, Reverse Flow Discharge		Unknown	WASHED SAMPLE.

GEOTECHNICAL BOREHOLE LOG
HOLLADAY ENGINEERING COMPANY

BOREHOLE ID: EAGLE TEST WELL NO. 1 PROJECT NO.: EG061204 PAGE: 6 of 6

PROJECT NAME: CITY OF EAGLE WR 63-32089 WR 63-32090 LOCATION: QUARTER CIRCLE D.T. RANCH SITE LOCATION: SE, NW, S. 11, T. 4N, R. 1W

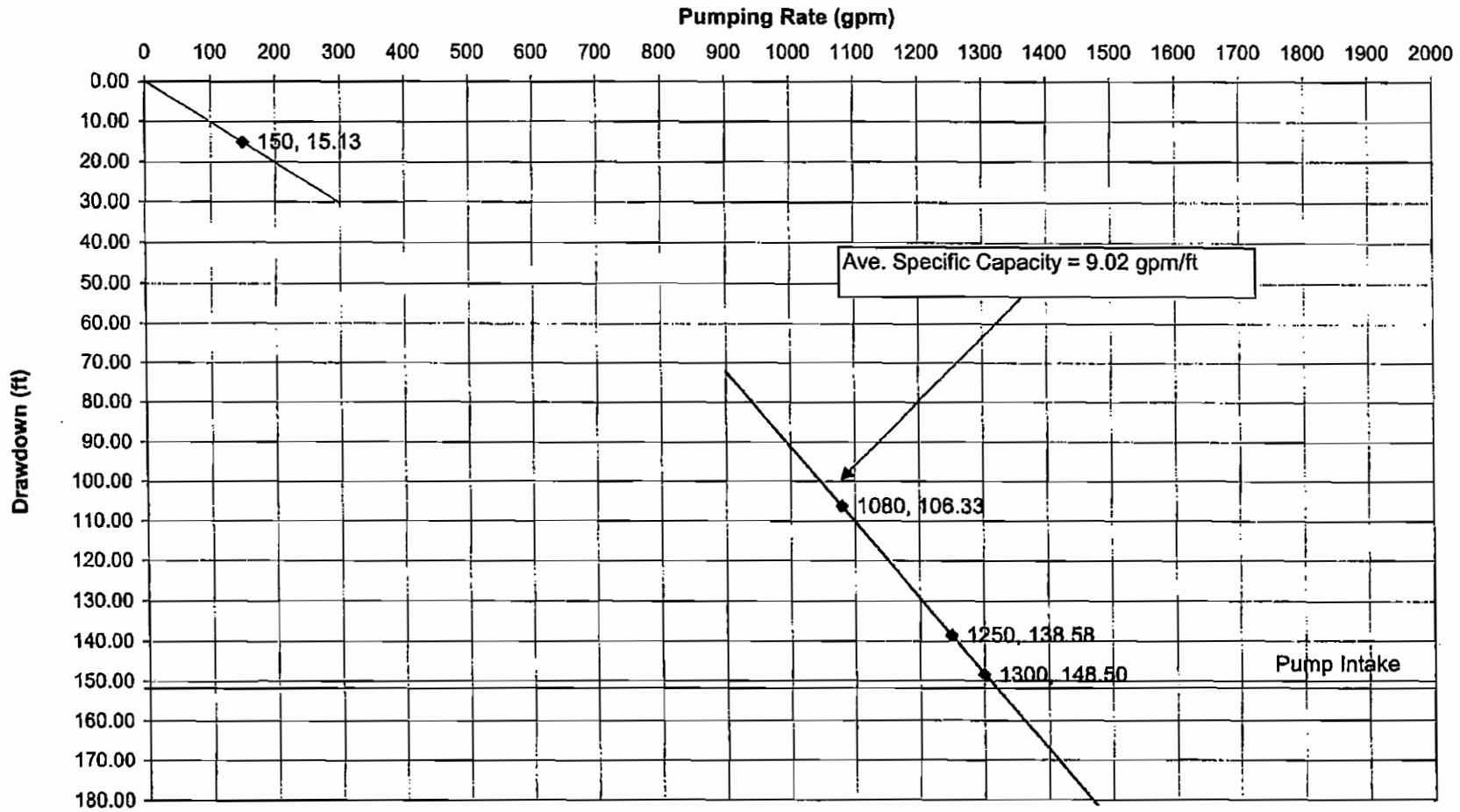
COLLAR EL: _____ NORTHING: _____ EASTING: _____

HOLE DIAMETER: 18" 20" (BIT) DRILL METHOD: REVERSE ROTARY MUD DRILL MODEL: JED-A

DRILLER: RIVERSIDE, INC. LOGGER: C.D. & RIVERSIDE INC. (JEFF HASH) STATIC WATER DEPTH: _____

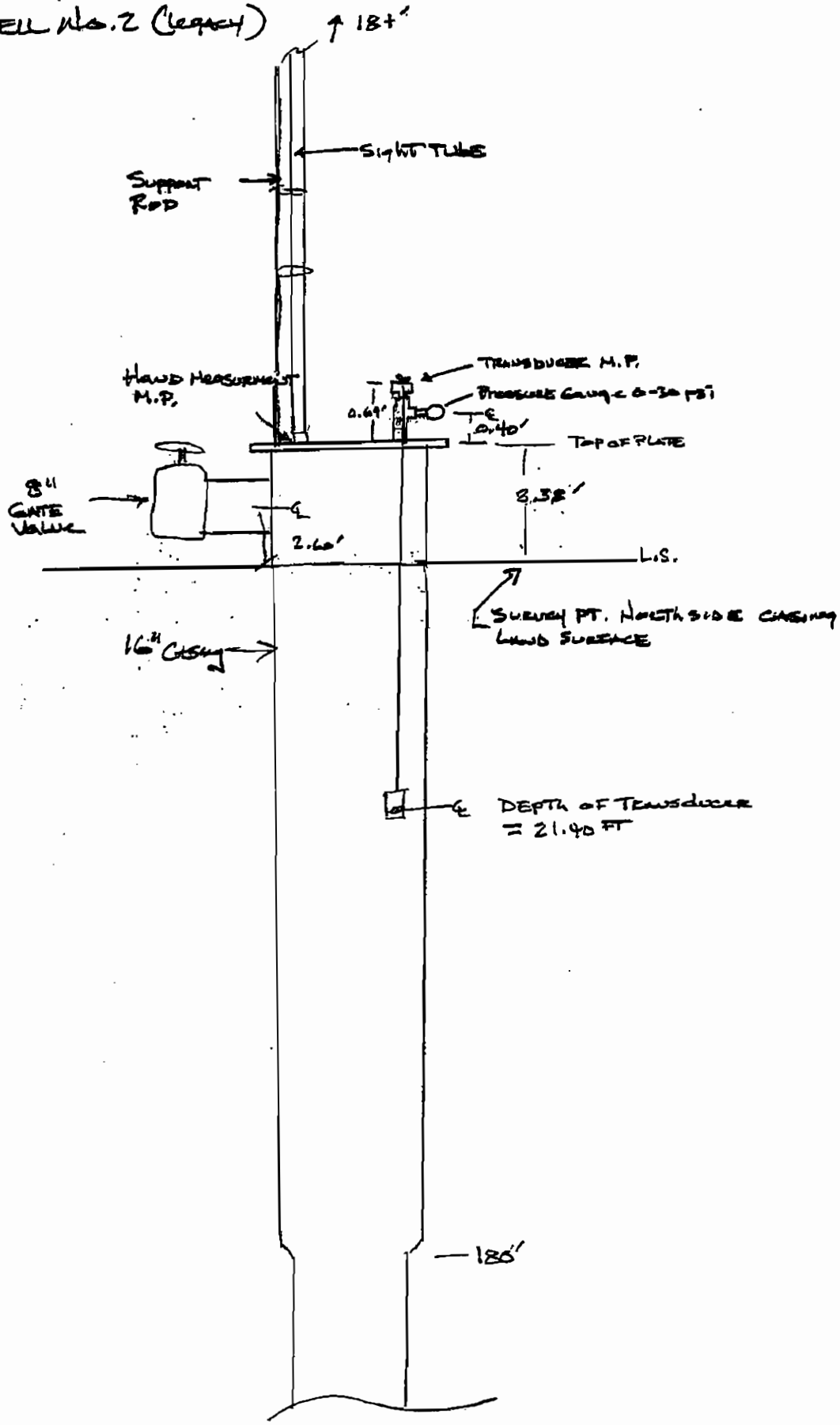
Depth (ft)	Date Time	Induration & Color	Soil or Rock Description	Graph Log	Sample format	Blows (N)	%Moisture water level	Fracture Density, Drill Notes, Gen Comment
484-486	1/31/06	LT. GRAY	SAND: FINE-MED, SAND, WELLSORTED, WEAKLY CEMENTED CARBONITE? WELLSORTED, GRANITIC, DRY/SED, FRAG CARBONATED WOOD. FRAG.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. HARDER DRILLING.
486-487	1/31/06	BLUE-GRAY	CLAY, SOFT. STICKY. GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
487-489	1/31/06	LT. GRAY	SAND, MED. TO COARSE SAND AND MINOR FINE SAND. WELLSORTED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
489-493	1/31/06	LT. GRAY	SAND, MED, TO V. COARSE SAND AND 10% PEBBLES. SUBANGULAR. MOD. SORTED. GRANITIC.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE.
493-501	1/31/06	DK. GRAY TO BLUE-GRAY	CLAY. STIFF. GOOD RIBBON. GRADING IN COLOR FROM DK. GRAY TO BLUE-GRAY.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. DRILL RIG BOUNCE.
501-505	1/31/06	WEAK BLUE-GRAY TO GRAY	CLAYEY SILTY SAND. APPROX. 10% CLAY, 40% SILT, AND V. FINE TO FINE SAND. POORLY SORTED. WEAKLY CEMENTED CARBONITE		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. HARDER DRILLING.
505-513	1/31/06	BLUE-GRAY	CLAY, MOD. STIFF. STICKY. GOOD RIBBON.		GRAB, REVERSE FLOW DISCHARGE		UNKNOWN	WASHED SAMPLE. T.D. 513' ENGINEER STOPPED DRILLING.

STEP PUMP TEST of TEST WELL No.1 (Legacy)
March 24th 9:15am to 2:30 pm
Specific Capacity



EAGLE 7-DAY AQUIFER TEST

TEST WELL No. 2 (LEGACY)



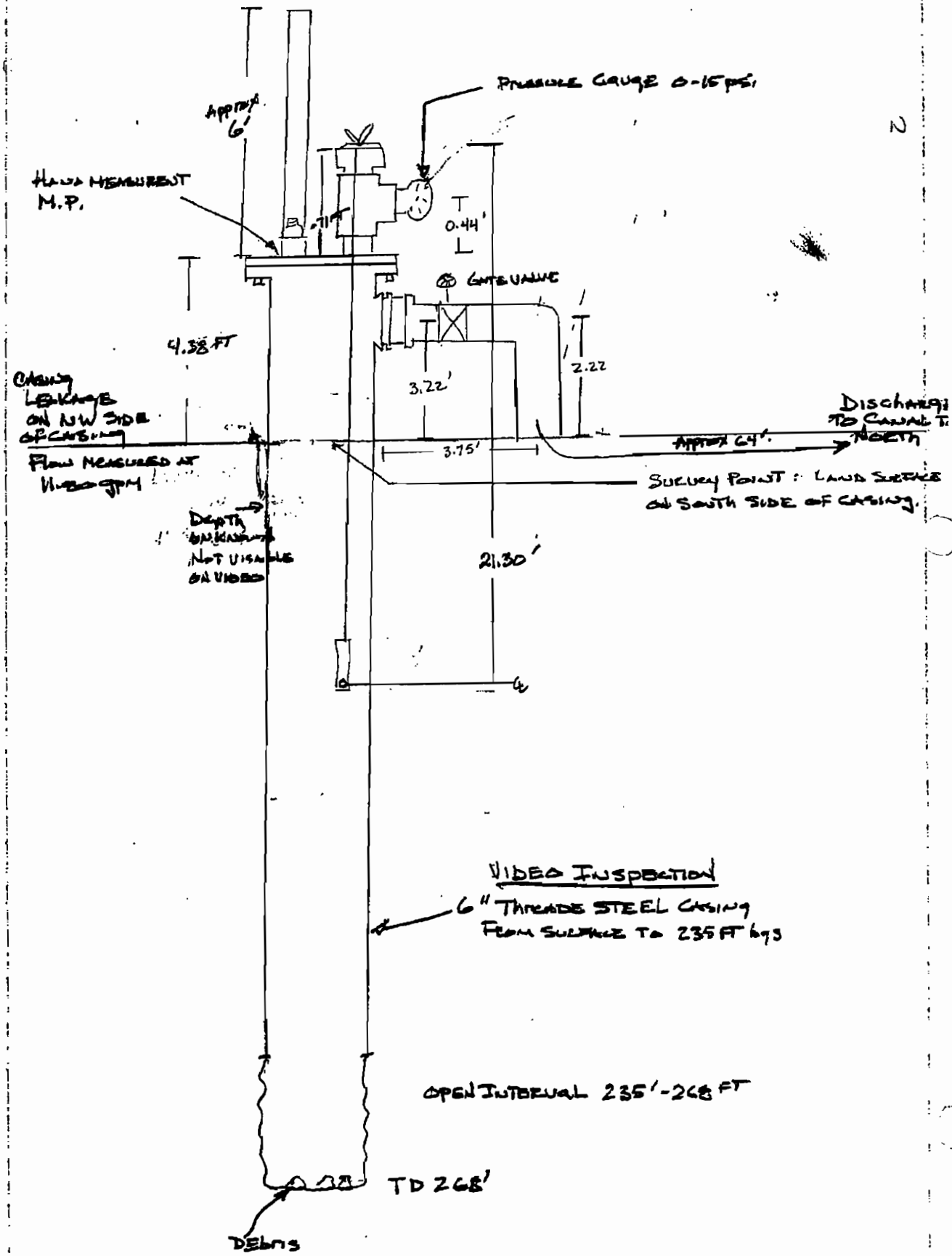
Appendix B.3

MONITORING WELL 4 (QCR 4)

CITY OF EAGLE -DAY AQUIFER TEST

QUARTER CIRCLE WELL NO. 4

MONITING WELL NO.4 (QCR4)



Appendix B.4

MONITORING WELL 6 (Rick's)

USE TYPEWRITER OR BALL POINT PEN

S. Idaho
Department of Water Administration

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Administration within 30 days after the completion or abandonment of the well.

1. WELL OWNER

Name Quarter Circle D J Ranch

Address Star, Idaho (Home Place)

Owner's Permit No.

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement

☐ Abandoned (describe method of abandoning)

3. PROPOSED USE

☐ Domestic ☒ Irrigation ☐ Test ☐ Other (specify type)

☐ Municipal ☐ Industrial ☐ Stock ☐ Waste Disposal or Injection

4. METHOD DRILLED

☒ Cable ☐ Rotary ☐ Dug ☐ Other

5. WELL CONSTRUCTION

Diameter of hole 16 inches Total depth 406 feet

Casing schedule: ☒ Steel ☐ Concrete

Thickness	Diameter	From	To
.250 inches	16 inches	0 18" feet	253 feet
.250 inches	10 inches	223 feet	406 feet
inches	inches	feet	feet
inches	inches	feet	feet
inches	inches	feet	feet

Was a packer or seal used? ☐ Yes ☒ No

Perforated? ☒ Yes ☐ No

How perforated? ☒ Factory ☐ Knife ☐ Torch

Size of perforation 3/16 inches by 3 inches

Number	From	To
5,152 perforations	234 feet	395 feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No

Manufacturer's name

Type Model No.

Diameter Slot size Set from feet to feet

Diameter Slot size Set from feet to feet

Gravel packed? ☒ Yes ☐ No Size of gravel 3/8 minus 30 yds.

Placed from 223 feet to 406 feet

Surface seal depth 22 Material used in seal ☒ Cement grout ☐ Puddling clay ☐ Well cuttings

Seeding procedure used ☐ Slurry pit ☒ Temporary surface casing ☐ Overbore to seal depth

6. LOCATION OF WELL

Sketch map location must agree with written location.

N / W / E / S

Subdivision Name

Lot No. Block No.

County Ada

S/2 ¼ S/2 ¼ Sec. 2 T. 4 N R. 1 E/W

7. WATER LEVEL

Static water level feet below land surface

Flowing? ☒ Yes ☐ No G.P.M. flow

Temperature ° F. Quality

Artesian closed-in pressure p.s.i.

Controlled by ☒ Valve ☐ Cap ☐ Plug

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Other

Discharge G.P.M.	Draw Down	Hours Pumped

9. LITHOLOGIC LOG 40055

Hole Diam.	Depth From	Depth To	Material	Water Yes	Water No
16"	0	3	Top Soil		X
"	3	12	light clay and sand		X
"	12	27	Fine sand, some clay	X	
"	27	105	Blue clay		X
"	105	240	Sand with clay binder	X	
"	240	260	Stiky brown clay		X
"	260	295	Sand, some small layers of clay	X	
				X	
"	295	318	Stiky brown clay		X
"	318	380	Sand, some small layers of clay	X	
				X	
"	380	404	Sand, some clay	X	
"	404	406	Sticky light brown clay		X
			Gravel pack		
			30 yds. of 3/8 minus gravel		
			10" shoe on top of liner		
			15" shoe on bottom of liner		
			NOT TESTED AS OF 2/20/74		

10. Work started Nov 28/73 finished Dec. 30, 73

11. DRILLER'S CERTIFICATION

Firm Name W. E. Stevens & Sons Firm No. 153

Address 3709 Hawthorne Drive Date 12/30/73

Signed by (Firm Official) Wayne E Stevens

and

(Operator)

MICROFILMED

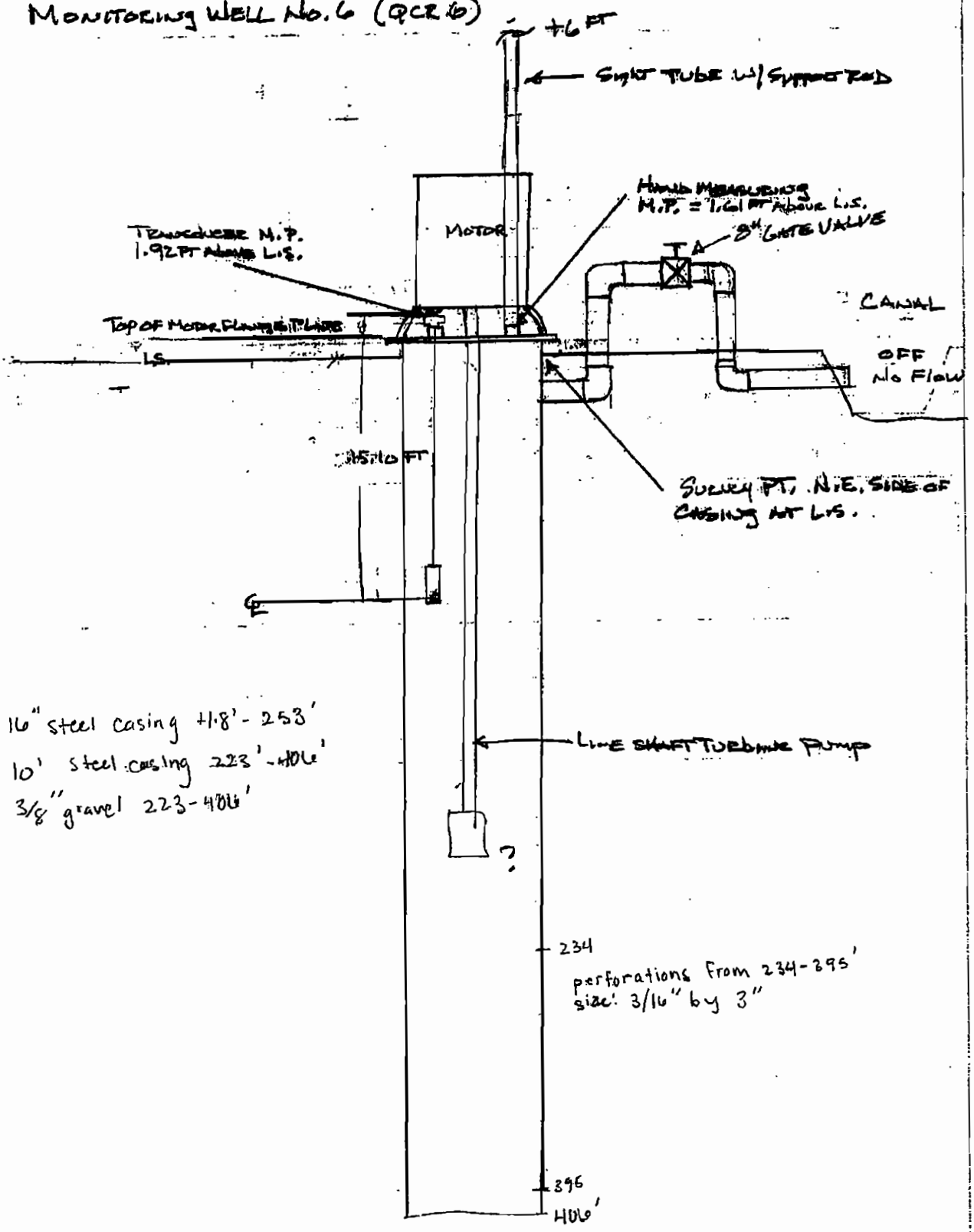
USE ADDITIONAL SHEETS IF NECESSARY FORWARD THE WHITE COPY TO THE DEPARTMENT

CITY OF EAGLE 1-DAY AQUIFER TEST

QUARTER CIRCLE WELL NO. 6

(RICK'S IRRIGATION WELL)

MONITORING WELL NO. 6 (QCR 6)



Appendix B.5

MONITORING WELL 9 (Strata 1A)

Draft

Boring No. 1a Subsurface Soil Description Top of Casing Elevation = Ground Surface Elevation =	DEPTH (In Feet)	USCS CLASS	SYMBOL	SAMPLE Type	BLOWS Per 6 Inches	SPT (Corrected) Blows Per Foot	POCKET Penetrometer(tsf)	WELL CONSTRUCTION	REMARKS Note: BGS = Below Ground Surface
Sandy SILT (Native) – tan, very stiff, moist.	1	ML							Trace vegetation and organics observed to 3 inches BGS.
CLAY with SAND – brown, soft to stiff, moist to saturated.	2 3 4 5 6	CL							Top of protective steel casing above ground = 2.8 feet. Bentonite Seal from 0 to 10 feet 1 1/4 inch ø PVC Well
Poorly-Graded GRAVEL with Sand and Cobbles – light brown, dense, saturated. *Reading on 9-7-2005 = 7.1 feet	7 8 9 10 11 12 13 14 15	GP							Sand pack from 10 to 15 feet 1 1/4 inch ø PVC screened well from 10 to 15 feet Standpipe piezometer installed to 15 feet.
Boring terminated at 15 feet BGS.	16 17 18 19 20								

File: EAGSPO	Boring Number: B-1a
Project No.: B05188A	Date Drilled: 8-30-2005
Drill Rig: BK-81	Boring Diameter: 8 inch
Depth to Groundwater: 6.5'	Logged By: AM

STRATA
GEOTECHNICAL ENGINEERING & MATERIALS TESTING
Solutions Up From the Ground Up

EXPLORATORY BORING LOGS

Sheet 1 of 1

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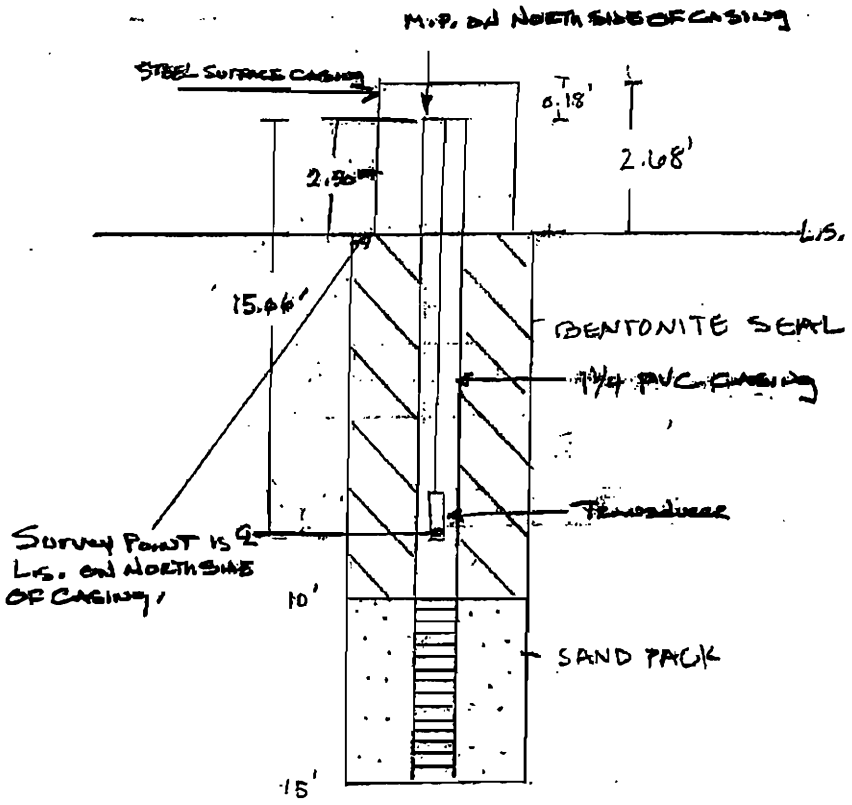
CITY OF EAGLE 7-DAY AQUIFER

MONITORING WELL NO. 9 (STRATA 1A)



Appendix B.6

MONITORING WELL 10 (Strata 1B)

Draft

Boring No. 1 Subsurface Soil Description Top of Casing Elevation = Ground Surface Elevation =	DEPTH (In Feet)	USCS CLASS	SYMBOL	SAMPLE Type	BLOWS Per 6 Inches	SPT (Corrected) Blows Per Foot	POCKET Penetrometer (tsf)	WELL CONSTRUCTION	REMARKS Note: BGS = Below Ground Surface
Sandy SILT (Native) – tan, very stiff, moist.	1	ML							Trace vegetation and organics observed to 3 inches BGS.
CLAY with SAND – brown, soft to stiff, moist to saturated.	2 3 4 5 6	CL			1 1 2 2 6 10	3 16	0.75 1.0 1.25		Top of protective steel casing above ground = 3.1 feet. Passing #200 screen = 78%. BG Liquid Limit (LL) = 30. Plastic Index (PI) = 11. Moisture Content = 24.9%. BG
Poorly-Graded GRAVEL with Sand and Cobbles – light brown, dense, saturated. *Reading on 9-7-2005 = 6.8 feet	7 8 9 10 11 12 13 14 15 16 17 18 19 20	GP			32 25 38 4 15 27	38 26			BG Bentonite Seal 1 inch ø PVC Well Heaved sand from 15 to 16 feet. BG BG

File: EAGSPO	Boring Number: B-1
Project No.: B05188A	Date Drilled: 8-30-2005
Drill Rig: BK-81	Boring Diameter: 8 Inch
Depth to Groundwater: 6'	Logged By: AM

STRATA
Integrity from the Ground Up

EXPLORATORY BORING LOGS

Sheet 1 of 3

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Draft

Boring No. 1 Subsurface Soil Description	DEPTH (In Feet)	USCS CLASS	SYMBOL	SAMPLE Type	BLOWS Per 6 Inches	SPT (Corrected) Blows Per Foot	POCKET Penetrometer (tsf)	WELL CONSTRUCTION	REMARKS Note: BGS = Below Ground Surface
Poorly-Graded GRAVEL with Sand and Cobbles – light brown, dense, saturated.	20	GP			7 39 32	43			BG Heaved sand from 20 to 21 feet.
	21								
	22								
	23								
Fat CLAY – dark gray, hard to very stiff, wet.	24	CL							
	25				26 34 42	61			BG Minimal recovery, possible rock at bottom of spoon.
	26								
	27								Passing #200 screen = 96%.
	28				11 15 26	31	>4.5 4.0 3.5		BG RG RG Liquid Limit (LL) = 58. Plastic Index (PI) = 31.
	29								
	30				10 13 20	33	3.0 3.5		BG
	31								
	32								Bentonite Seal
	33								1 inch ø PVC Well
	34								
	35				7 12 17	29	1.5 3.0		BG
...except light brown at 36.5 feet.	36								
	37								
Clayey SAND – light brown, dense, saturated.	38	SC							
	39								
	40								

File: EAGSP0	Boring Number: B-1
Project No.: B05188A	Date Drilled: 8-30-2005
Drill Rig: BK-81	Boring Diameter: 8 inch
Depth to Groundwater: 6'	Logged By: AM

STRATA
Integrity from the Ground Up

EXPLORATORY BORING LOGS

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Draft

Boring No. 1 Subsurface Soil Description	DEPTH (In Feet)	USCS CLASS	SYMBOL	SAMPLE Type	BLOWS Per 6 Inches	SPT (Corrected) Blows Per Foot	POCKET Penetrometer(tsf)	WELL CONSTRUCTION	REMARKS Note: BGS = Below Ground Surface
Clayey SAND – light brown, dense, saturated.	40	SC			27 30 41	47			Trace orange staining observed in sample. BG RG RG
	41								
	42								
	43								Bentonite Seal from 0 to 45 feet
	44								1 inch ø PVC Well
Poorly-Graded medium SAND – light brown, very dense, saturated.	45	SP			29 56 60	69			RG
	46								
	47								Sand pack from 45 to 55 feet
	48								
	49								1 inch ø PVC screened well from 45 to 55 feet
	50				33 59 62	71			RG BG
	51								
	52								
	53								
	54								
	55								Standpipe piezometer installed to 55 feet.
Boring terminated at 55 feet BGS.	56								
	57								
	58								
	59								
	60								

File: EAGSPO	Boring Number: B-1
Project No.: B05188A	Date Drilled: 8-30-2005
Drill Rig: BK-B1	Boring Diameter: 8 inch
Depth to Groundwater: 6'	Logged By: AM

STRATA

EXPLORATORY BORING LOGS

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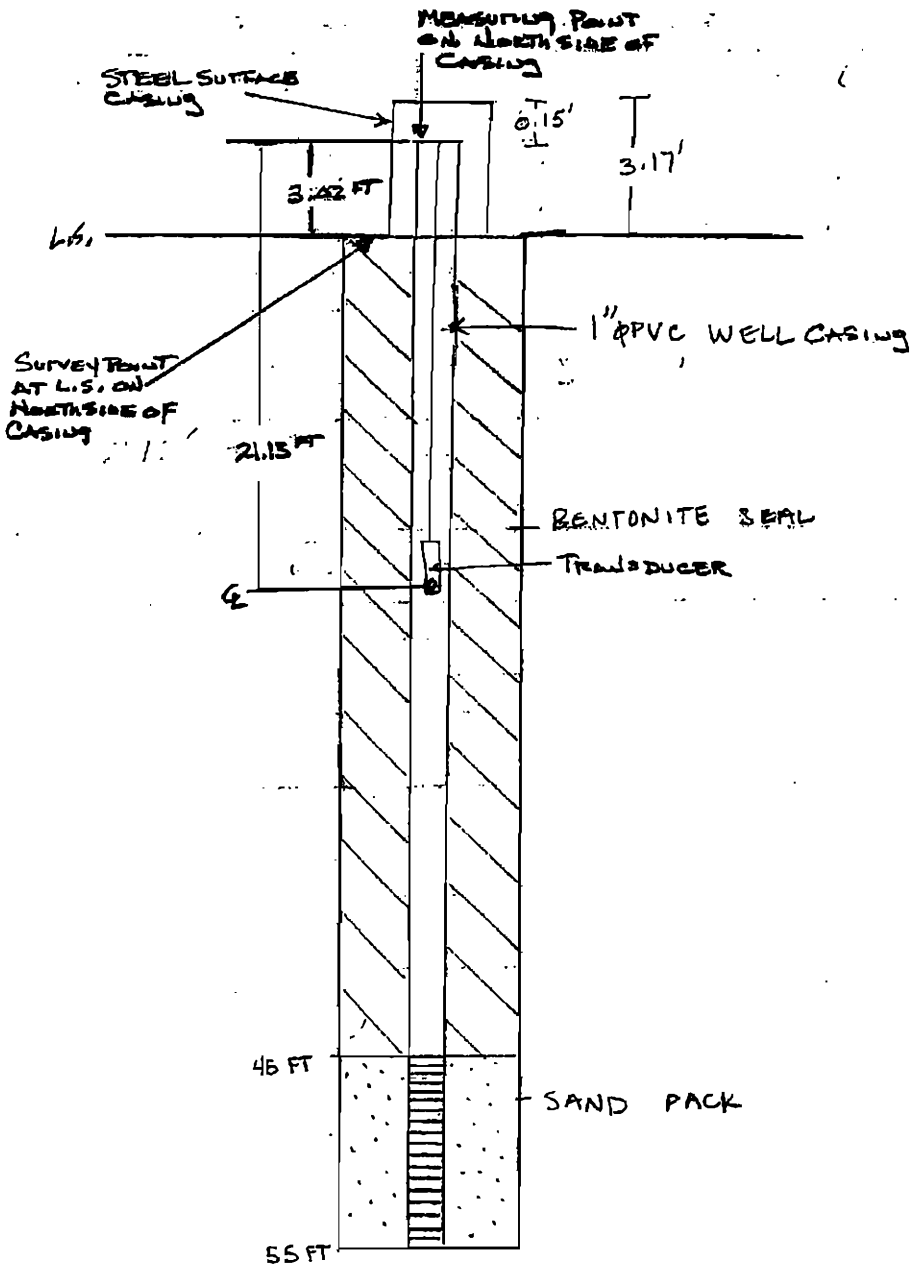
CITY OF EAGLE 7 ~~MW~~ AQUIFER TEST

MONITORING WELL NO. 10 (STRATA 1B)



Appendix B.7

MONITORING WELL 11 (UWI 1A)

RECEIVED
OCT 28 1997
Department of Water Resources

Form 238-7
3/95

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Tag #000019

67930

Office Use Only
Inspected by_____
Twp____ Rge____ Sec____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 63-97-W-0633-801
Other IDWR No._____

2. OWNER: Hope Lutheran Church
Name United Water Corp
Address PO Box 7488
City Boise State ID Zip 83707

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 4 North ☒ or South ☐
Rge. 1 East ☐ or West ☒
Sec. 11 NE 1/4 (10 acres) SE 1/4 (40 acres) ____1/4 (160 acres)
Gov't Lot ____ County Ada
Lat: : : Long: : :
Address of Well Site State St & Linder (Hope Luth Church)
City Eagle
(Give at least names of road + Distance to Road or Landmark)
Lt. 7 Blk. 1 Sub. Name Brush Acres

4. USE:
☐ Domestic ☐ Municipal ~~☒ Monitor~~ ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other Test well

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other_____

6. DRILL METHOD
☐ Air Rotary ☐ Cable ☒ Mud Rotary ☐ Other_____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

Was drive shoe used? ☐Y ☐N Shoe Depth(s)_____
Was drive shoe seal tested? ☐Y ☐N How?_____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe_____ Length of Tailpipe_____

9. PERFORATIONS/SCREENS
☐ Perforations Method_____
☐ Screens Screen Type_____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
_____ft. below ground Artesian pressure 6 lb.
Depth flow encountered 212 ft. Describe access port or control devices: caps

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☒ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time

Water Temp._____ Bottom hole temp._____
Water Quality test or comments:_____
Depth first Water Encountered _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	1	6	topsoil		X
	6	31	sand & gravel		X
8	31	43	sand & sandy clay	X	
	43	68	cemented sand	X	
	68	71	clay		X
	71	93	sand	X	
	93	103	clay		X
	103	125	sand	X	
	125	140	clay		X
	140	200	sand & clay streaks	X	
	200	205	sand	X	
	205	212	clay		X
	212	485	sand	X	
	485	513	sand & cemented sand streaks	X	
	513	540	sand	X	
	540	845	blue clay		X
			~~see drawing for pipe information~~		

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WESTERN REGION
MICROFILMED
JAN 09 1998

Completed Depth 845 (Measurable)
Date: Started 9/25/97 Completed 10/13/97

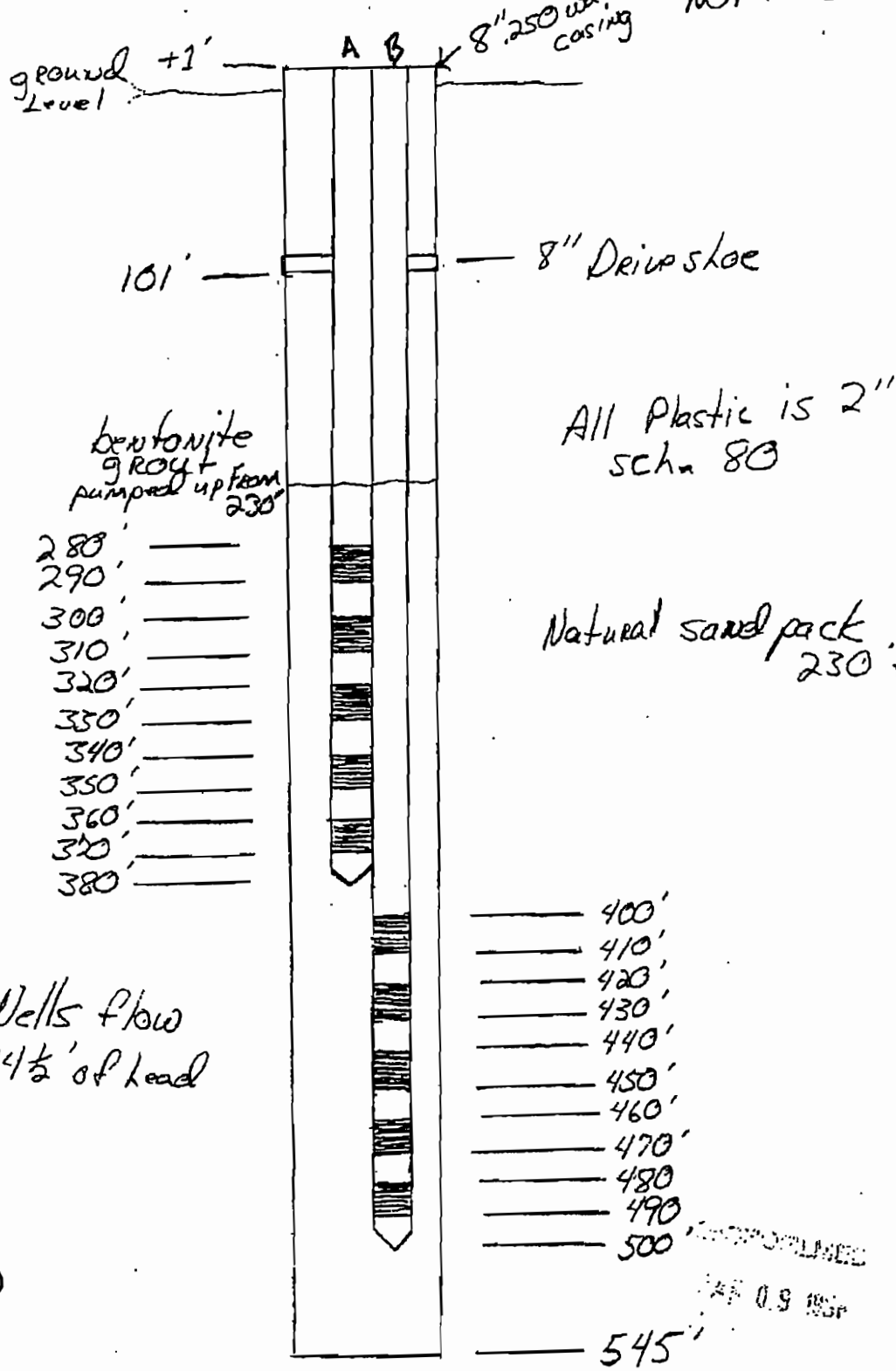
13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Stevens & Sons Firm No. 153
Firm Official Ron Stevens Date_____
and
Supervisor or Operator Ron Stevens Date 10/20/97
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Unit 2 Water State # Line e 63-97-W-0633-801
test Well #1 67931

Not to scale



All Plastic is 2" sch. 80

Natural sand pack 230' to 545

Both Wells flow under 14½' of head

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63-97-W-0633-80.1

67932

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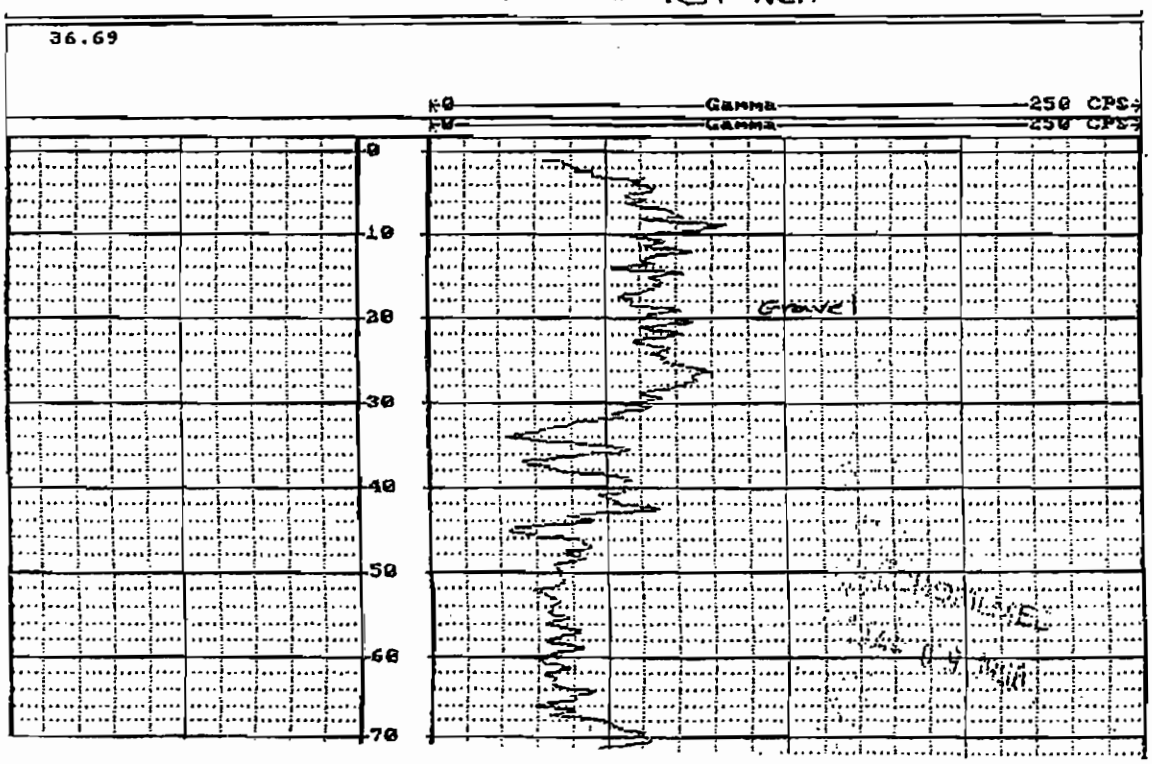
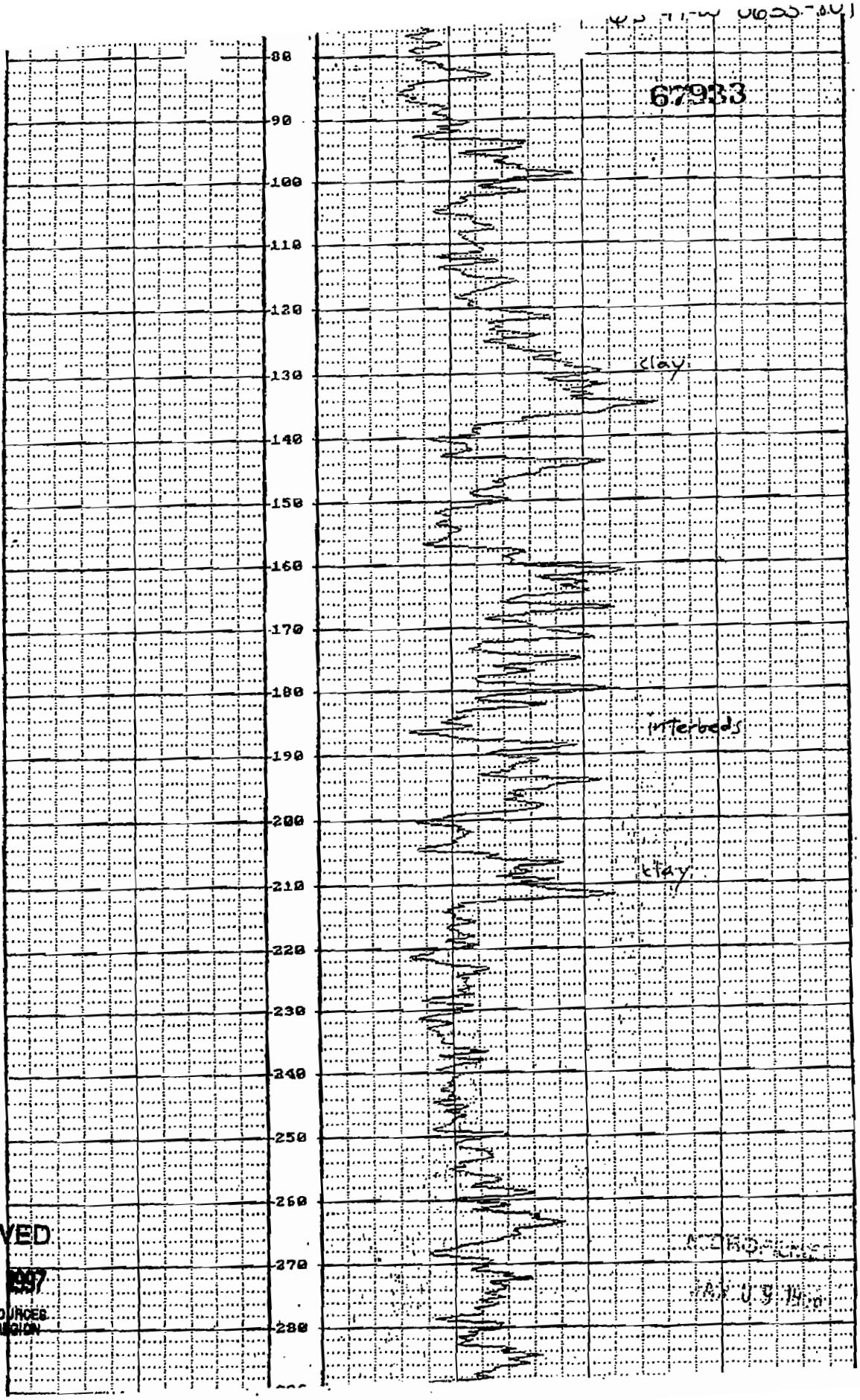
WATER RESOURCES
WESTERN REGION

State # Linder Test Well





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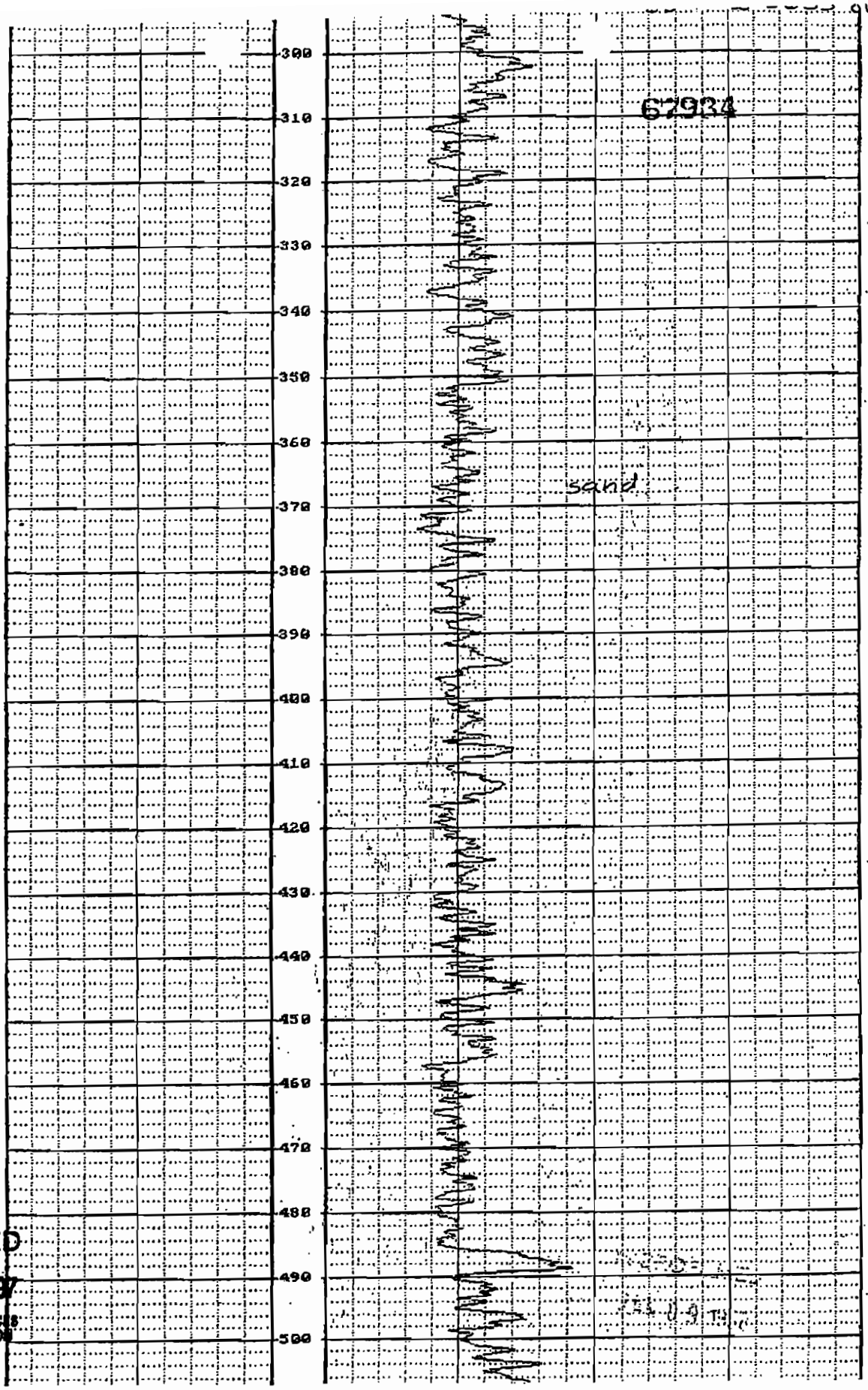
WATER RESOURCES
WESTERN REGION



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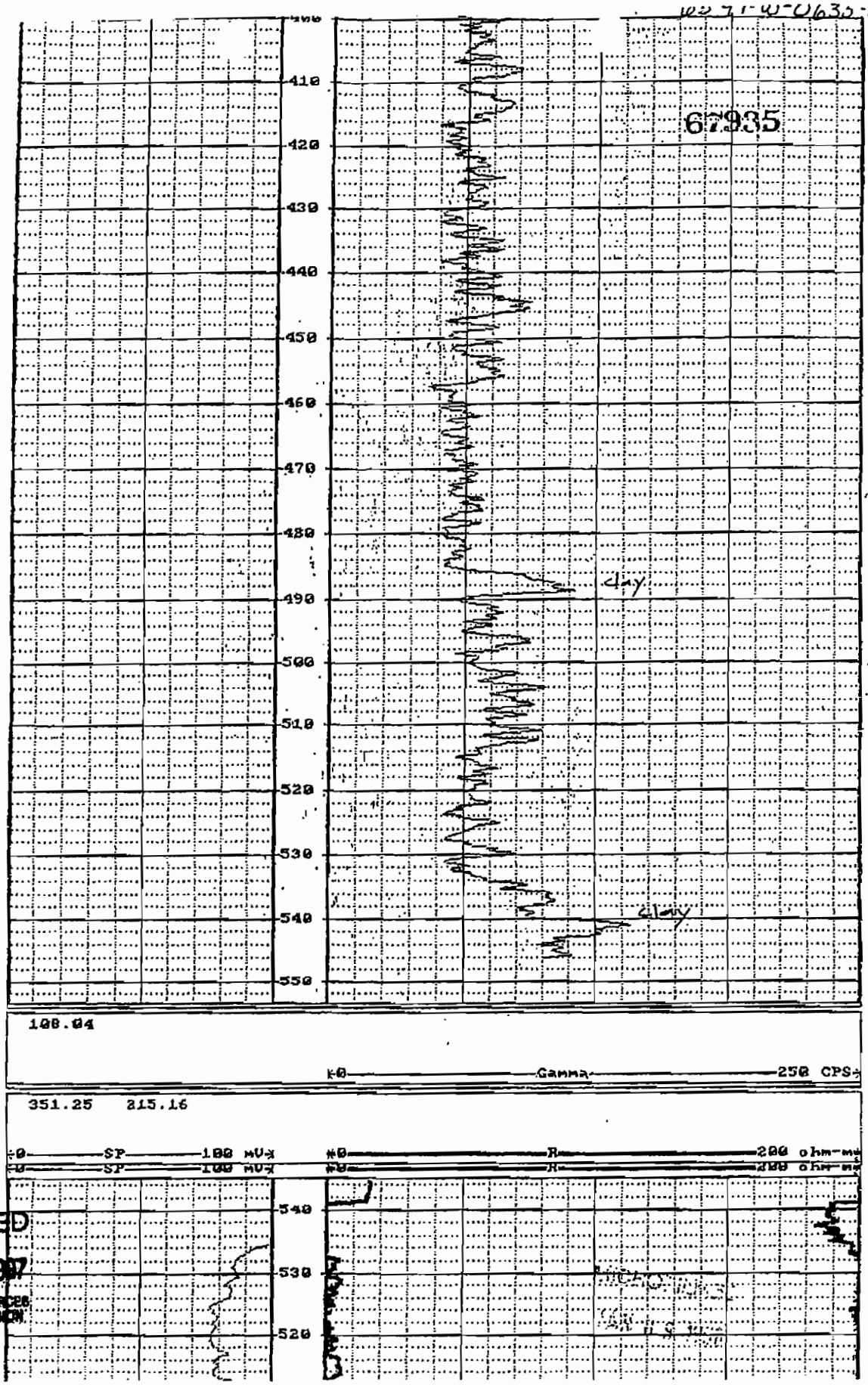
WATER RESOURCES
ERN REGION



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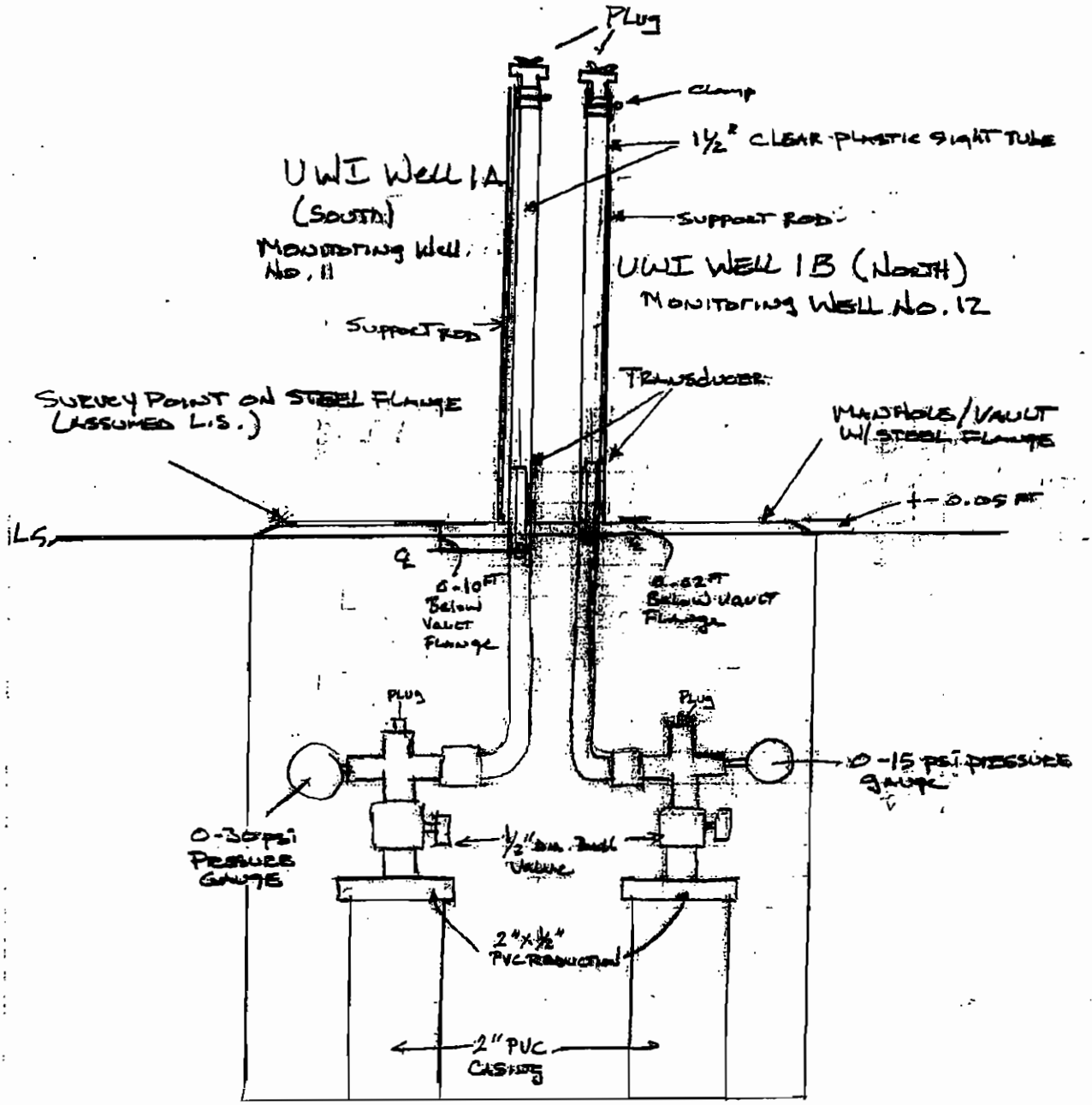
WESTERN REGION

City of Eagle 1-Day Aquifer Test

Monitoring Well No. 11 (UWI 1A) and
Monitoring Well No. 12 (UWI 1B)



Appendix B.8

MONITORING WELL 12 (UWI 1B)

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Form 238-7
3/95
OCT 28 1997
Department of Water Resources

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

Tag #000019

67930

Office Use Only
Inspected by _____
Twp____ Rge____ Sec____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 63-97-W-0633-801
Other IDWR No. _____

2. OWNER: Hope Lutheran Church
Name United Water Corp
Address PO Box 7488
City Boise State ID Zip 83707

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 4 North ☒ or South ☐
Rge. 1 East ☐ or West ☒
Sec. 11, N/E 1/4 (10 acres) S/E 1/4 (40 acres) ____ 1/4 (160 acres)
Gov't Lot ____ County Ada
Lat: : : Long: : :
Address of Well Site State St & Linder (Hope Lutk Church) City Eagle
(Give at least name of road + Distance to Road or Landmark)
Lt. 7 Blk. 1 Sub. Name Brush Acres

4. USE:
☐ Domestic ☐ Municipal ~~☒ Monitor~~ ☐ Irrigation
☐ Thermal ☐ Injection ☒ Other Test well

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☐ Air Rotary ☐ Cable ☒ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

Was drive shoe used? ☐Y ☐N Shoe Depth(s) _____
Was drive shoe seal tested? ☐Y ☐N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☐ Screens Screen Type _____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
						☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
_____ ft. below ground Artesian pressure 6 lb.
Depth flow encountered 212 ft. Describe access port or control devices: caps

11. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☒ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time

Water Temp. _____ Bottom hole temp. _____
Water Quality test or comments: _____
_____ Depth first Water Encountered _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
10	1	6	topsoil		X
	6	31	sand & gravel		X
8	31	43	sand & sandy clay	X	
	43	68	cemented sand	X	
	68	71	clay		X
	71	93	sand	X	
	93	103	clay		X
	103	125	sand	X	
	125	140	clay		X
	140	200	sand & clay streaks	X	
	200	205	sand	X	
	205	212	clay		X
	212	485	sand	X	
	485	513	sand & cemented sand streaks	X	
	513	540	sand	X	
	540	845	blue clay		X
			see drawing for pipe information		

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OCT 23 1997
WATER RESOURCES
WESTERN REGION
MICROFILMED
JAN 09 1998

Completed Depth 845 (Measurable)
Date: Started 9/25/97 Completed 10/13/97

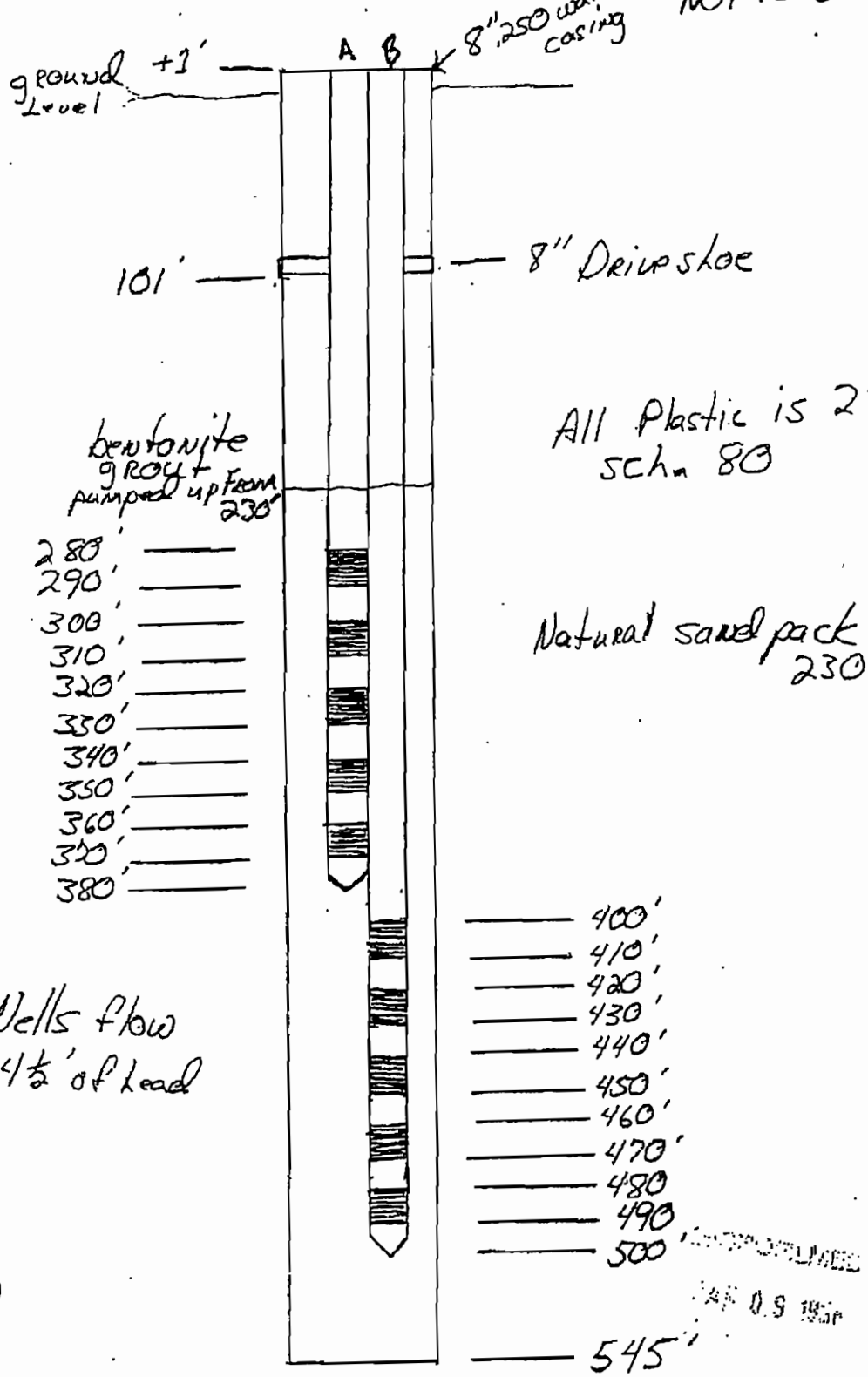
13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Stevens & Sons Firm No. 153
Firm Official _____ Date _____
and
Supervisor or Operator Ron Stevens Date 10/20/97
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

United Water State # Linc R 63-97-W-0633-801
test Well #1 67931

Not to scale



Both Wells flow under 14½' of head

RECEIVED
OCT 2 3 1997
WATER RESOURCES
WESTERN REGION

63-97-W-0633-80.

67932

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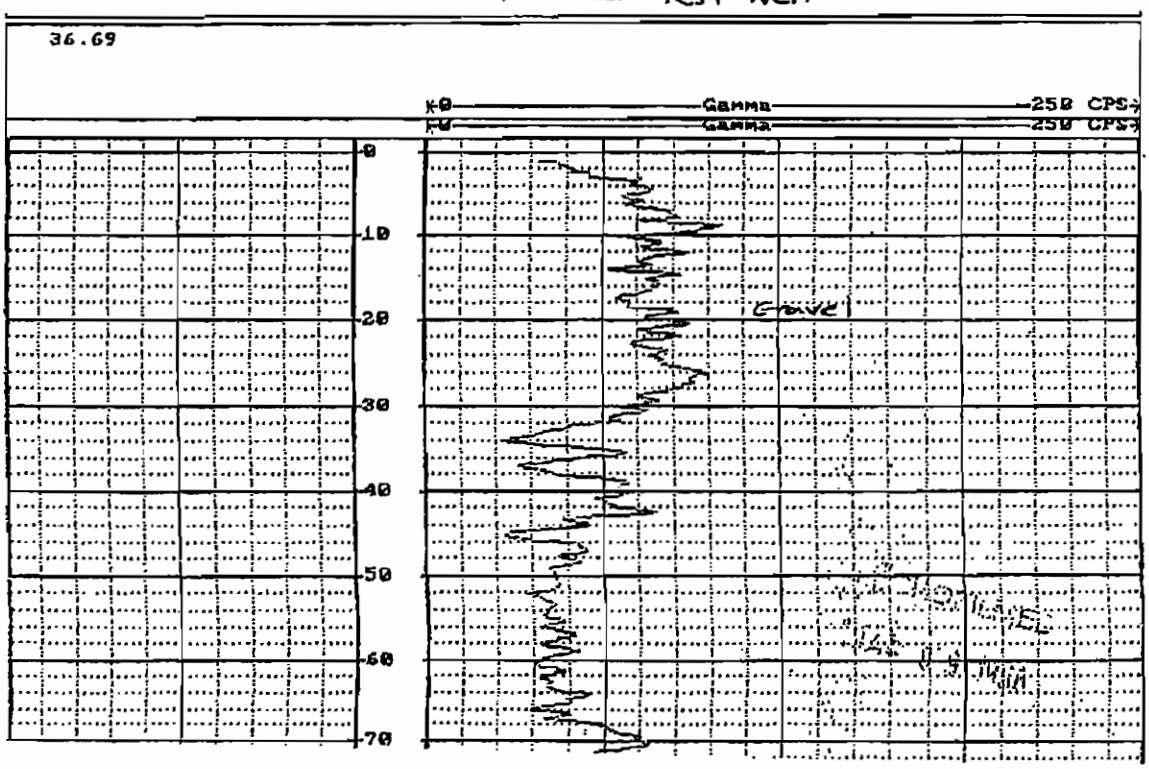
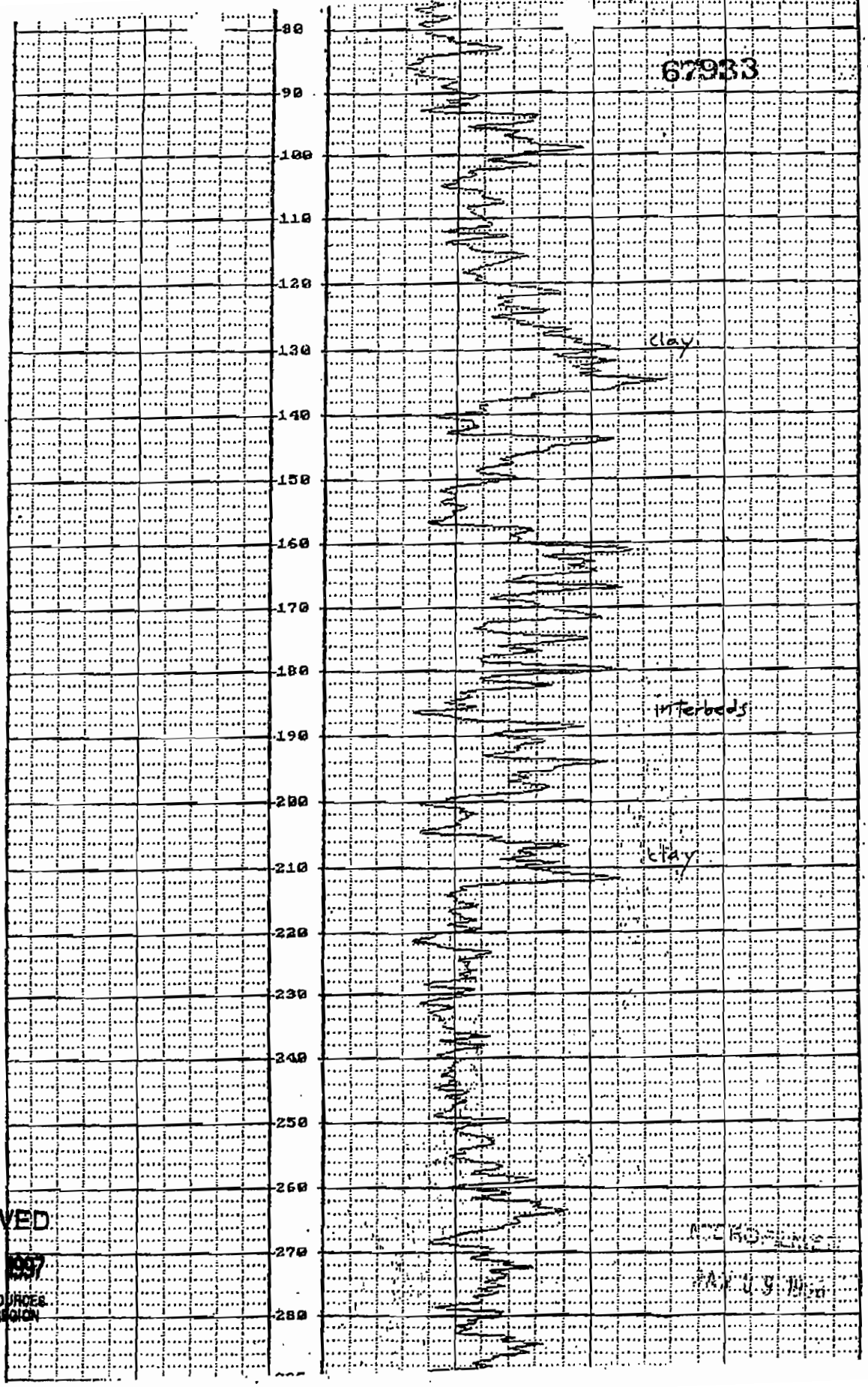
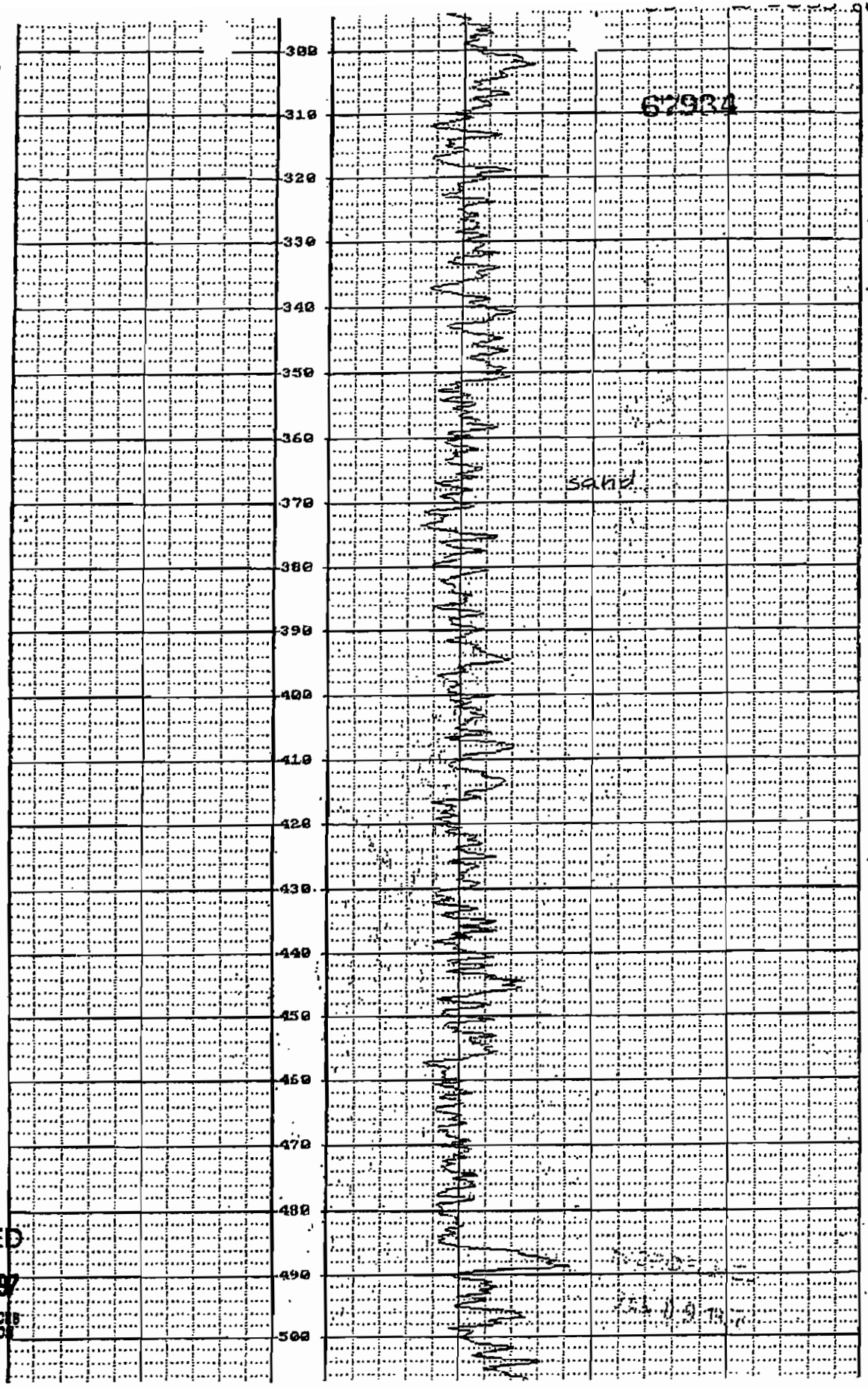
WATER RESOURCES
WESTERN REGION

State # Linder Test Well

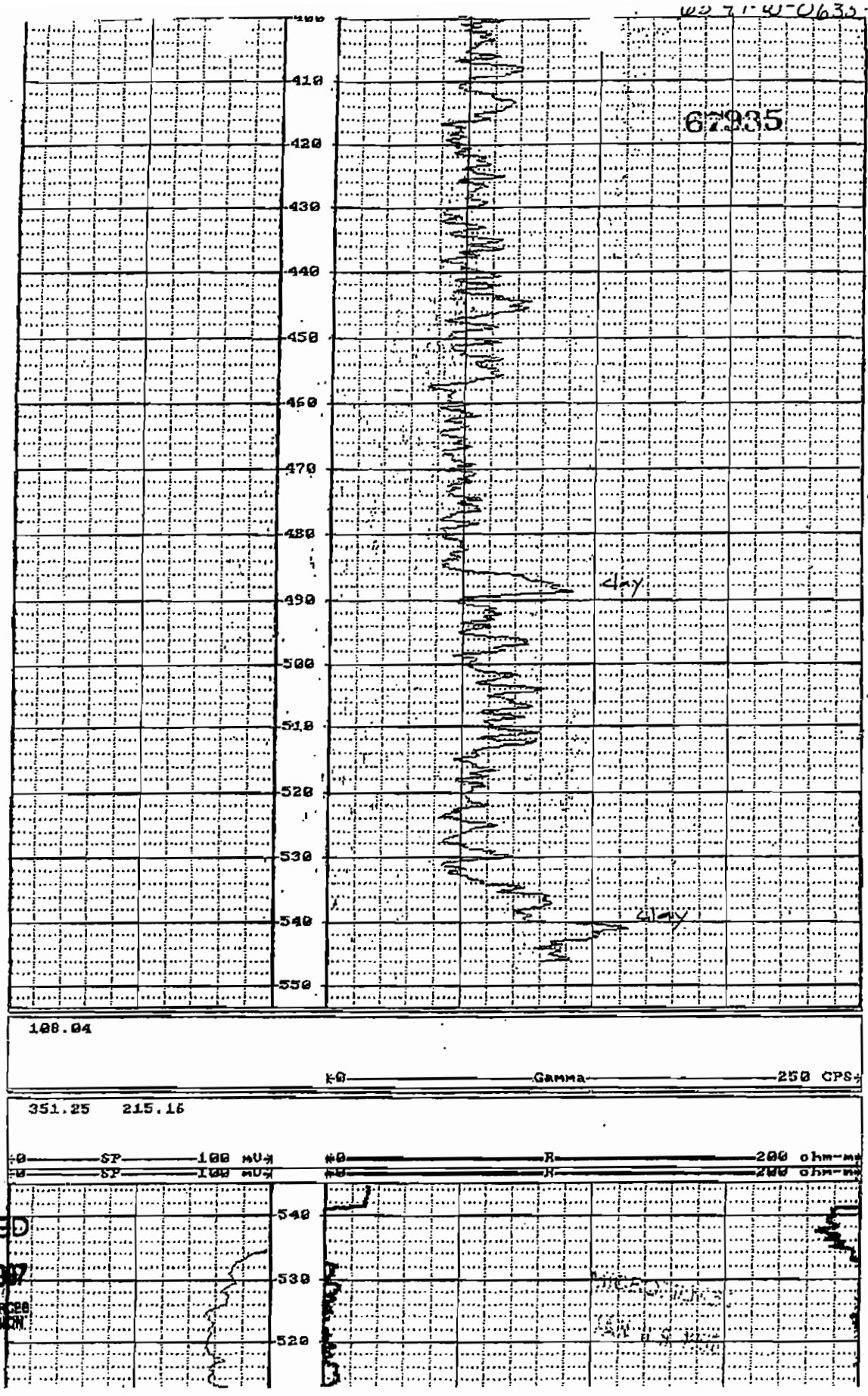




RECEIVED
OCT 23 1997
WATER RESOURCES
WESTERN REGION



RECEIVED
OCT 2 3 1997
WATER RESOURCES
ERN REGION



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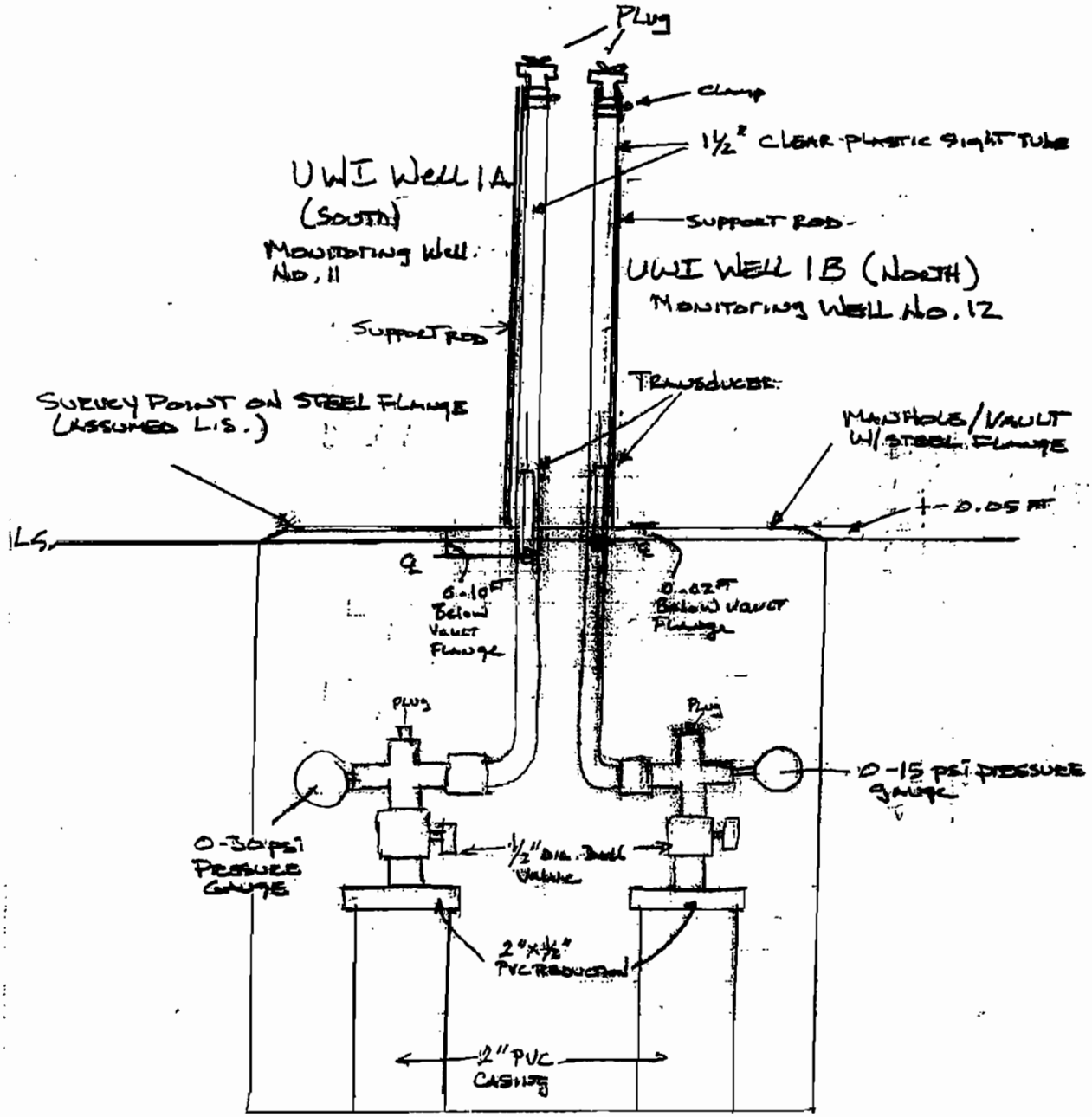
OCT 23 1997
WATER RESOURCES
WESTERN REGION

CITY OF EAGLE 7-DAY AQUIFER TEST

MONITORING WELL NO. 11 (UWI 1A) AND
MONITORING WELL NO. 12 (UWI 1B)



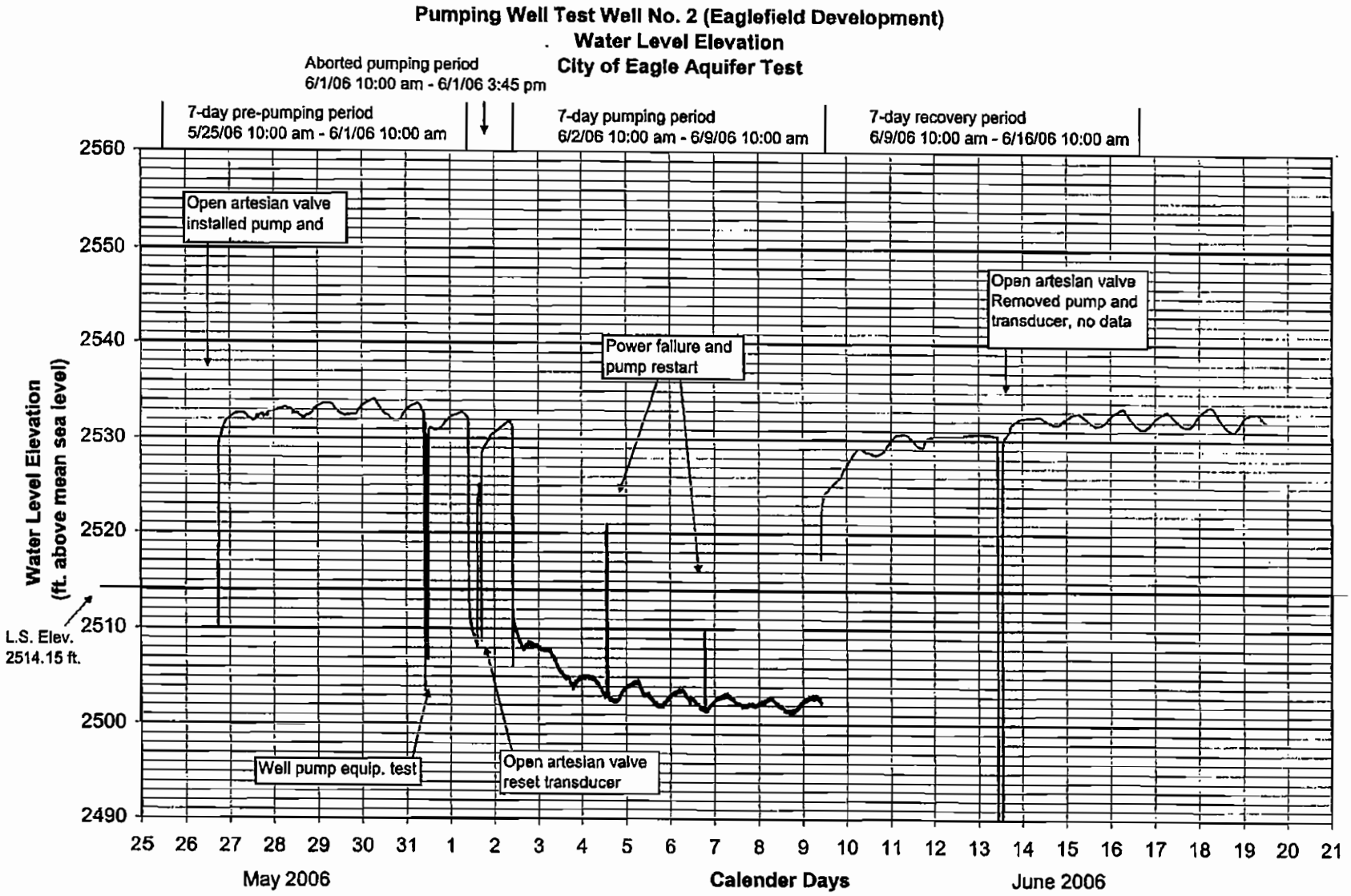
APPENDIX C

MONITORING WELL DATA GRAPHS

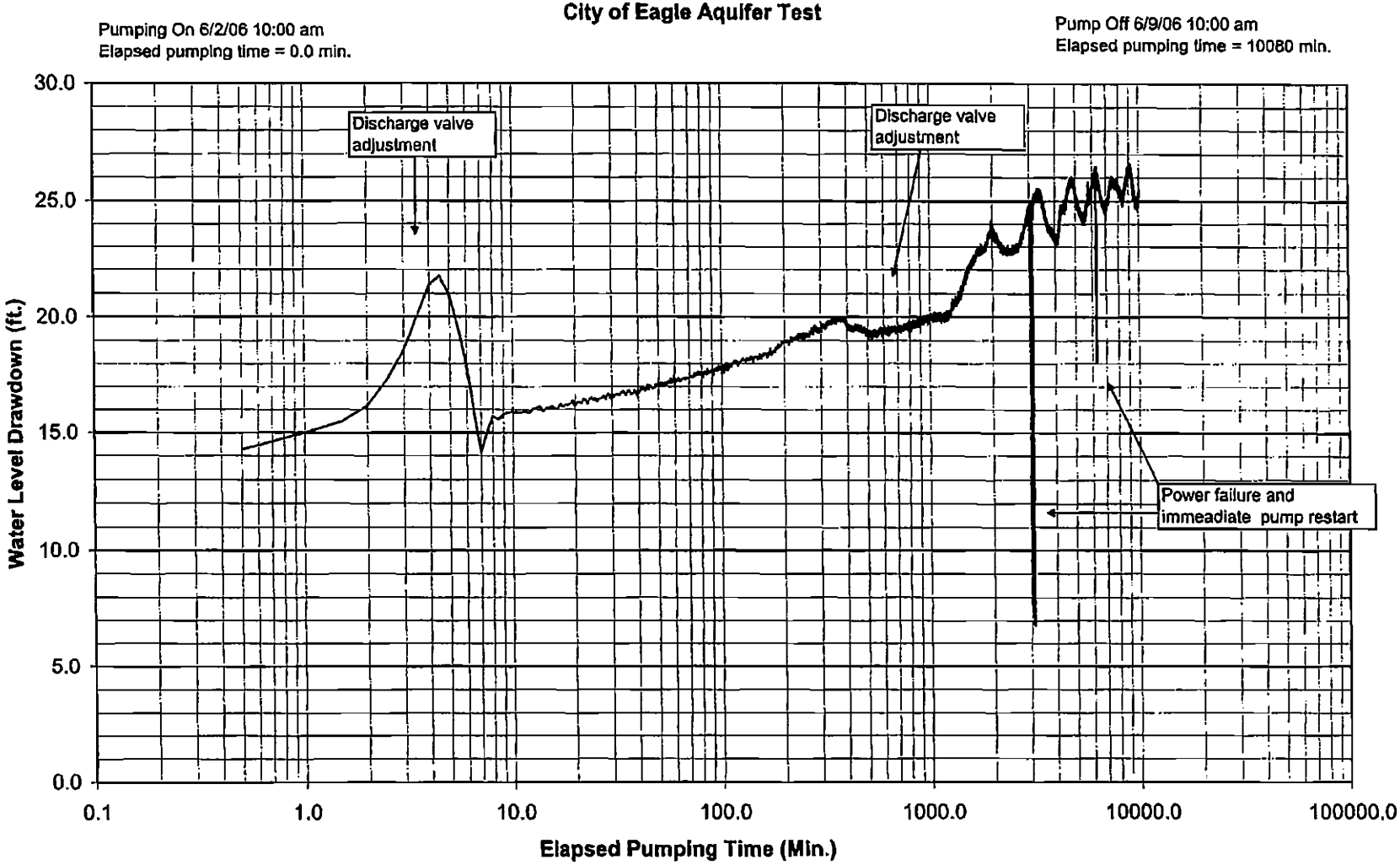
1. Test Well 2 (Eaglefield)(Pumping Well)
2. Test Well 1 (Legacy)
3. Monitoring Well 4 (QCR 4)
4. Monitoring Well 6 (Rick's)
5. Monitoring Well 9 (Strata 1A)
6. Monitoring Well 10 (Strata 1B)
7. Monitoring Well 11 (UWI 1A)
8. Monitoring Well 12 (UWI 1B)
9. Barometer

Appendix C.1

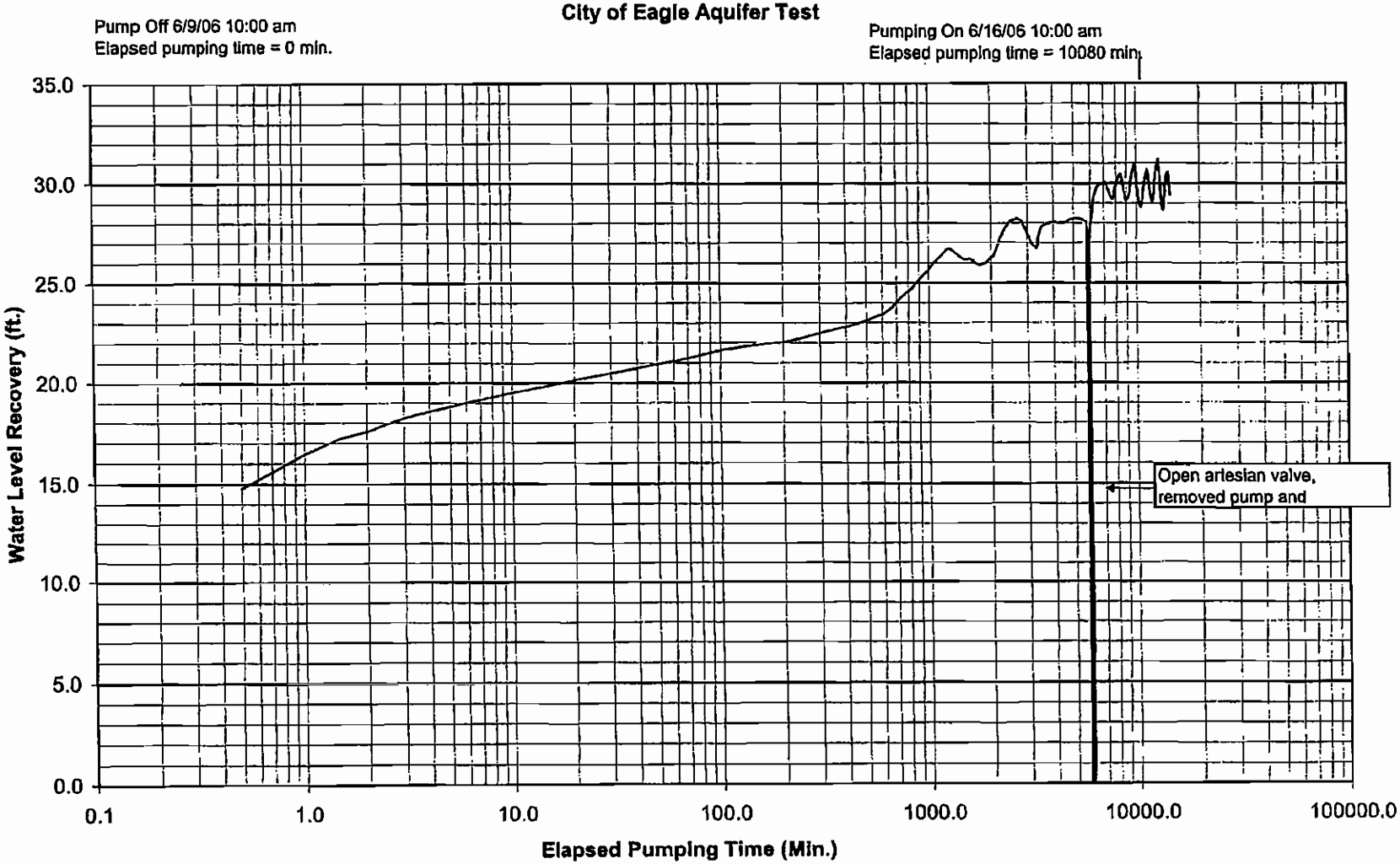
TEST WELL 2 (Eaglefield)(Pumping Well)


Pumping Well Test Well No. 2 (Eaglefield Development)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Open artesian valve installed pump and
Power failure and pump restart
Open artesian valve Removed pump and transducer, no data
Well pump equip. test
Open artesian valve reset transducer
L.S. Elev. 2514.15 ft.
Water Level Elevation (ft. above mean sea level)
2560
2550
2540
2530
2520
2510
2500
2490
25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calender Days
June 2006

Pumping Well Test Well No. 2 (Eaglefield Development)
Drawdown Semi-log Plot
City of Eagle Aquifer Test

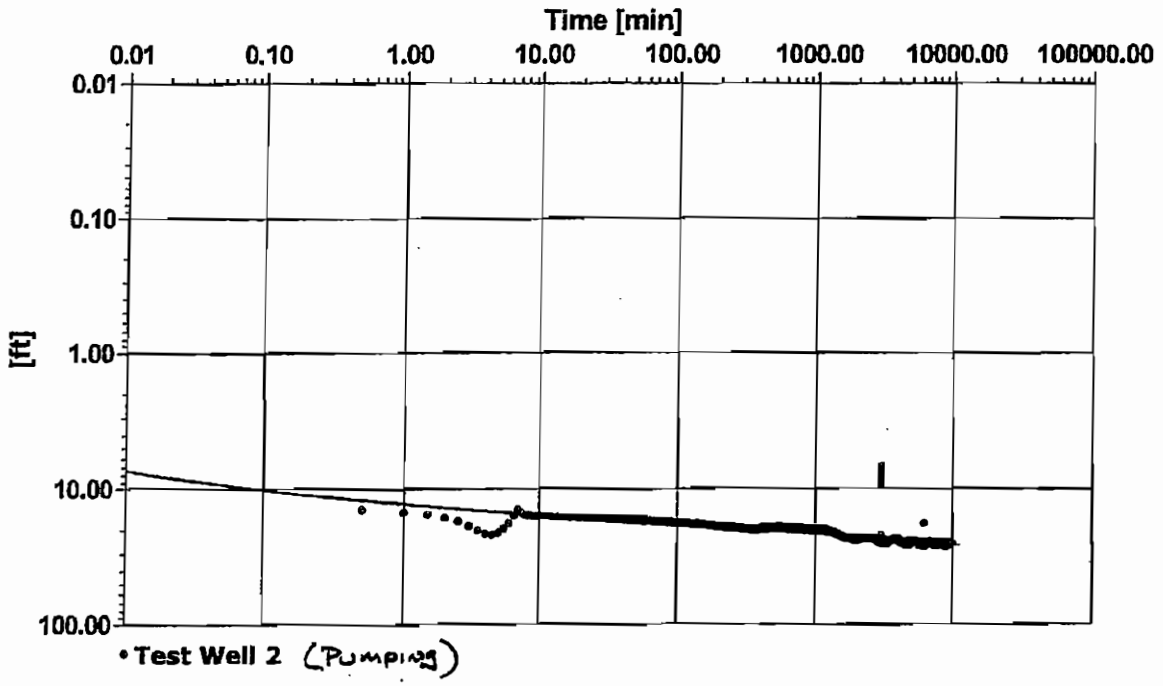


Pumping Well Test Well No. 2 (Eaglefield Development)
Recovery Semi-log Plot
City of Eagle Aquifer Test



City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report
	Project: Eagle Aquifer Test
	Number:
	Client:

Location:	Pumping Test: Pumping Test 1	Pumping well: Test Well 2
Test conducted by:		Test date: 6/29/2006
Analysis performed by:	New analysis 1	Date: 6/29/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	

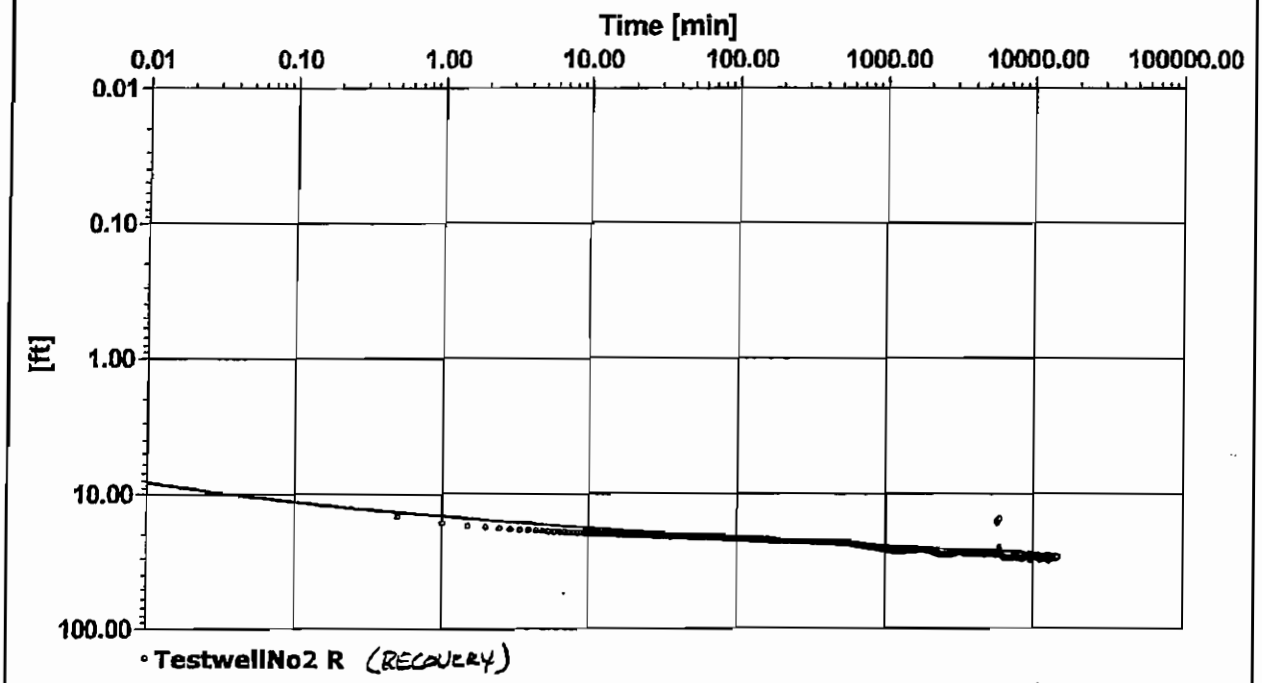


Calculation after Theis

Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
Test Well 2	2.00×10^4	2.00×10^2	2.93×10^{-3}	0.5	

City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report
	Project: Recovery Eagle Aquifer Test
	Number:
	Client:

Location:	Pumping Test: Recovery Eagle Aquifer Test	Pumping well: TestwellNo2 R
Test conducted by:		Test date: 6/30/2006
Analysis performed by:	recovery	Date: 6/30/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	

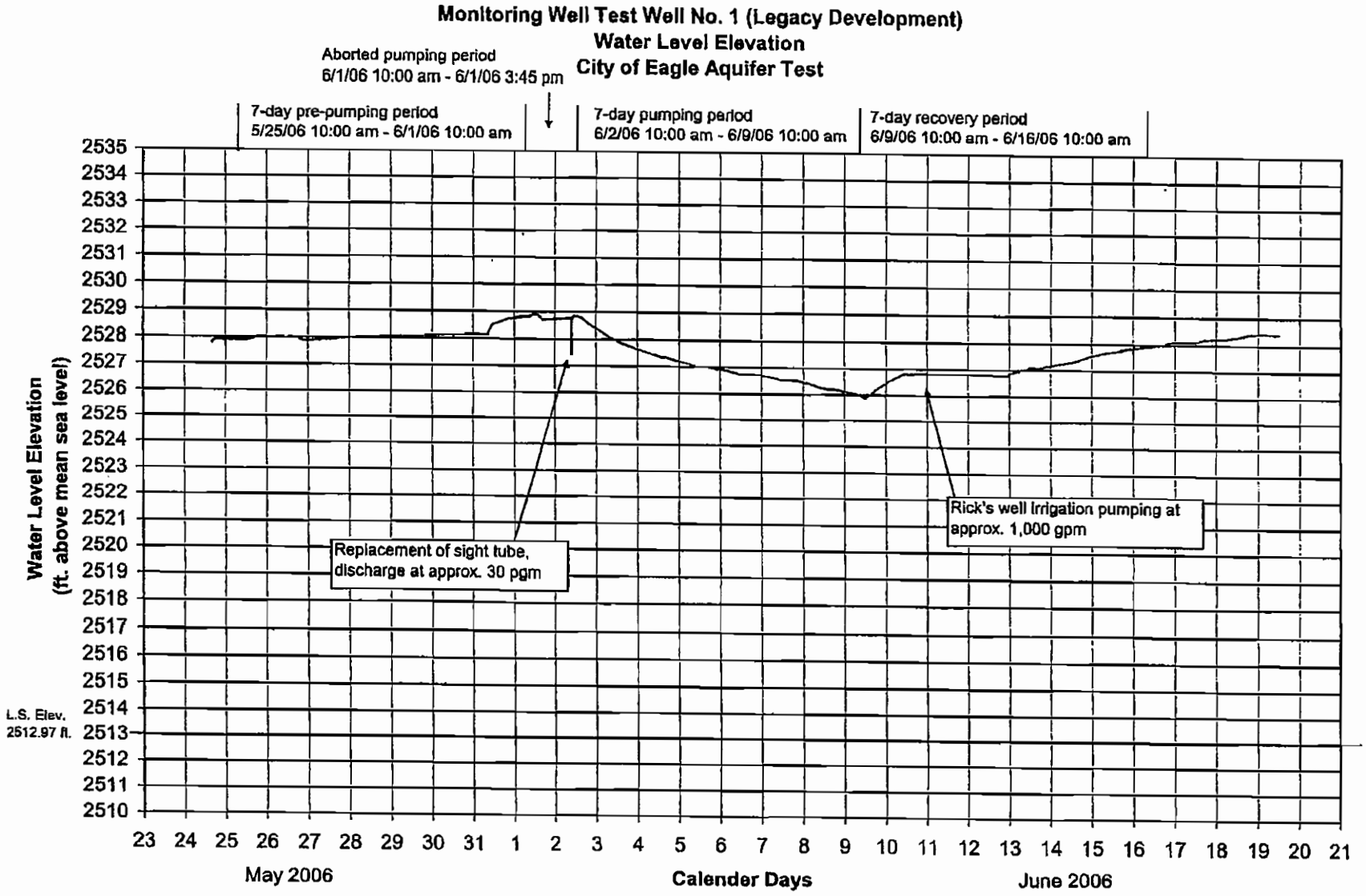


Calculation after Theis

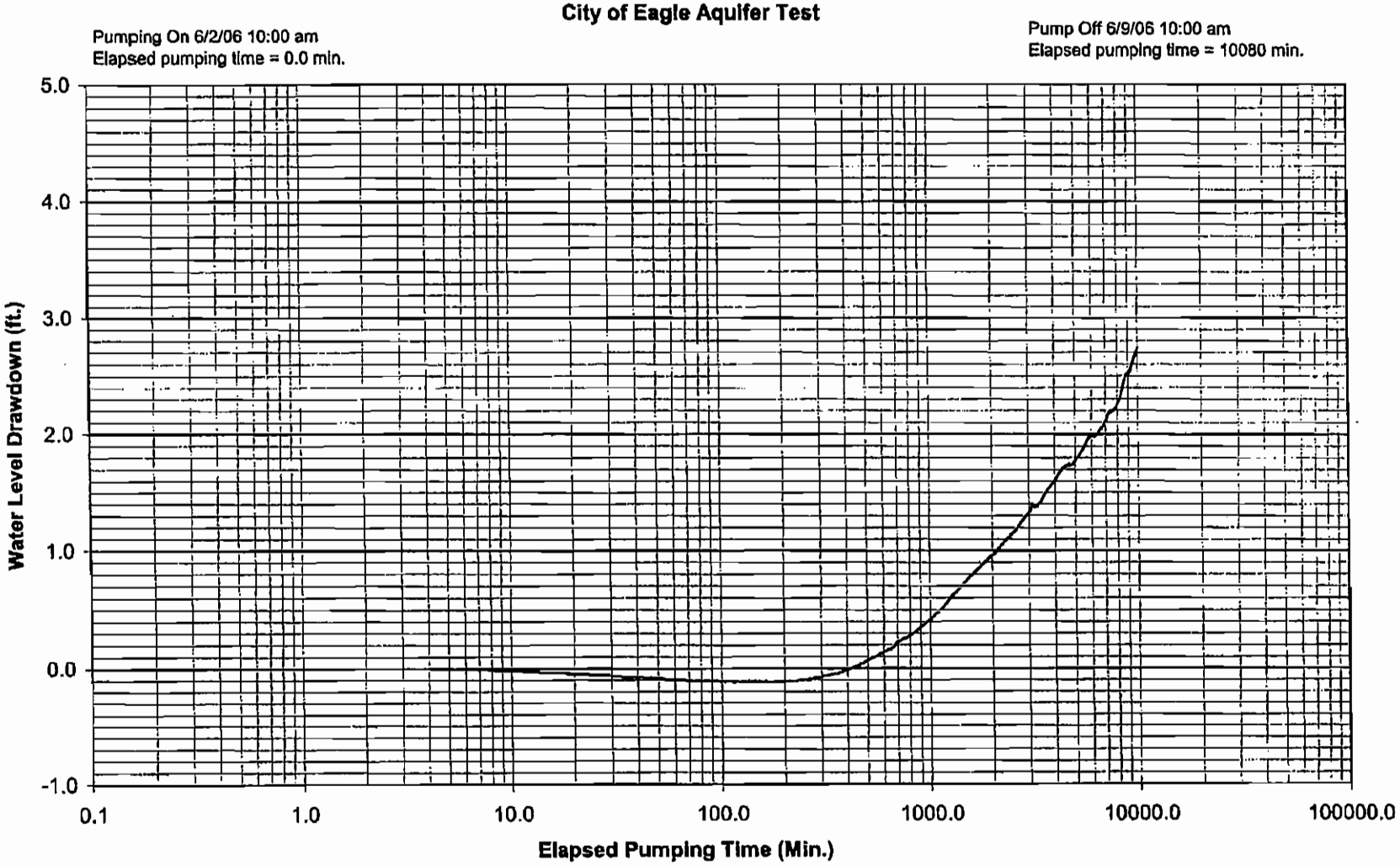
Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
TestwellNo2 R	1.75×10^{4}	1.75×10^{2}	3.00×10^{-3}	0.5	

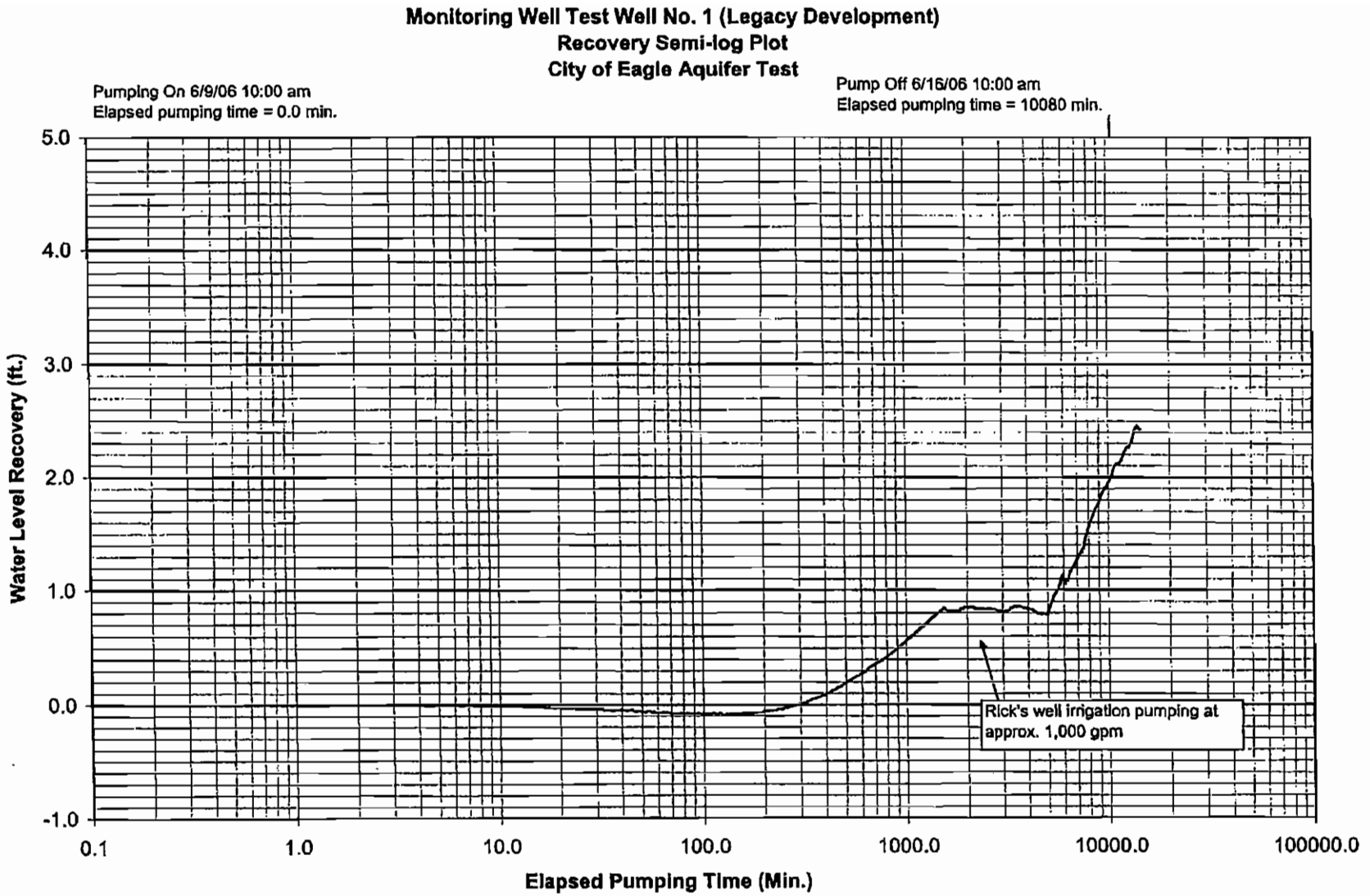
Appendix C.2

TEST WELL 1 (Legacy)


Monitoring Well Test Well No. 1 (Legacy Development)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Water Level Elevation
(ft. above mean sea level)
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
2524
2523
2522
2521
2520
2519
2518
2517
2516
2515
2514
2513
2512
2511
2510
L.S. Elev.
2512.97 ft.
Replacement of sight tube,
discharge at approx. 30 pgm
Rick's well Irrigation pumping at
approx. 1,000 gpm
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calender Days
June 2006

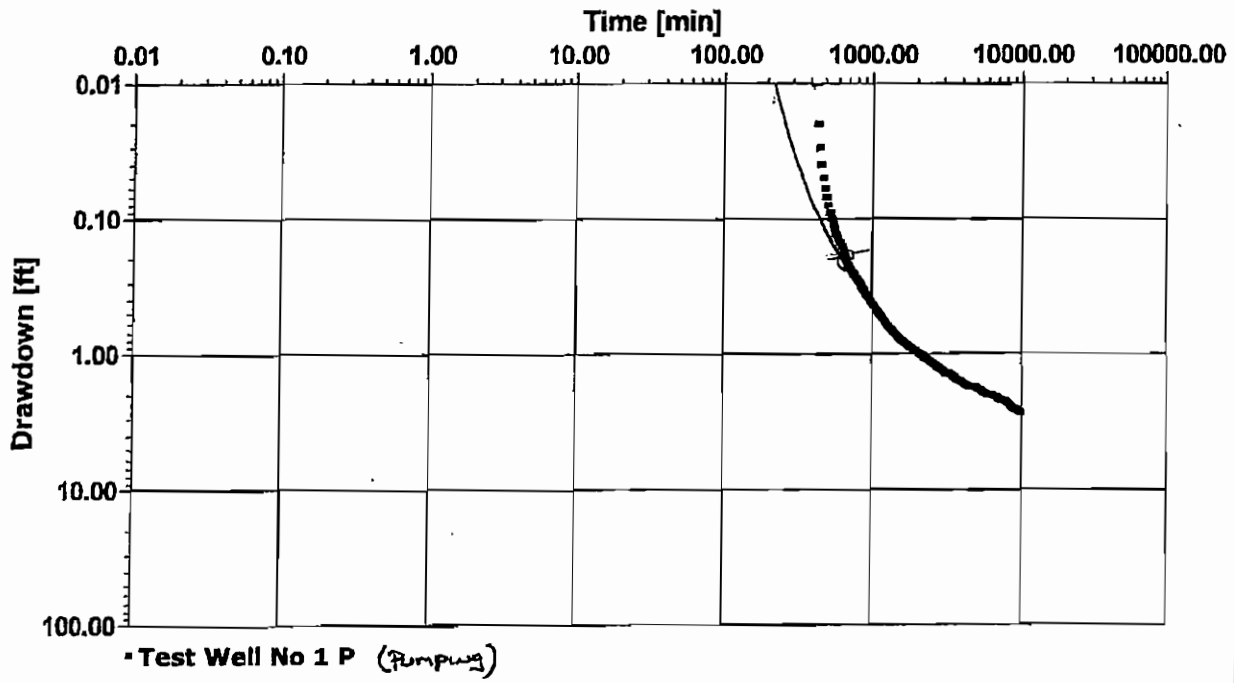
Monitoring Well Test Well No. 1 (Legacy Development)
Drawdown Semi-log Plot
City of Eagle Aquifer Test




Monitoring Well Test Well No. 1 (Legacy Development)
Recovery Semi-log Plot
City of Eagle Aquifer Test
Pumping On 6/9/06 10:00 am
Elapsed pumping time = 0.0 min.
Pump Off 6/16/06 10:00 am
Elapsed pumping time = 10080 min.
Water Level Recovery (ft.)
5.0
4.0
3.0
2.0
1.0
0.0
-1.0
0.1
1.0
10.0
100.0
1000.0
10000.0
100000.0
Elapsed Pumping Time (Min.)
Rick's well irrigation pumping at approx. 1,000 gpm

City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report
	Project: Eagle Aquifer Test
	Number:
	Client:

Location:	Pumping Test: Drawdown	Pumping well: Test Well No 2 P
Test conducted by:		Test date: 6/30/2006
Analysis performed by:	New analysis 1	Date: 8/30/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	

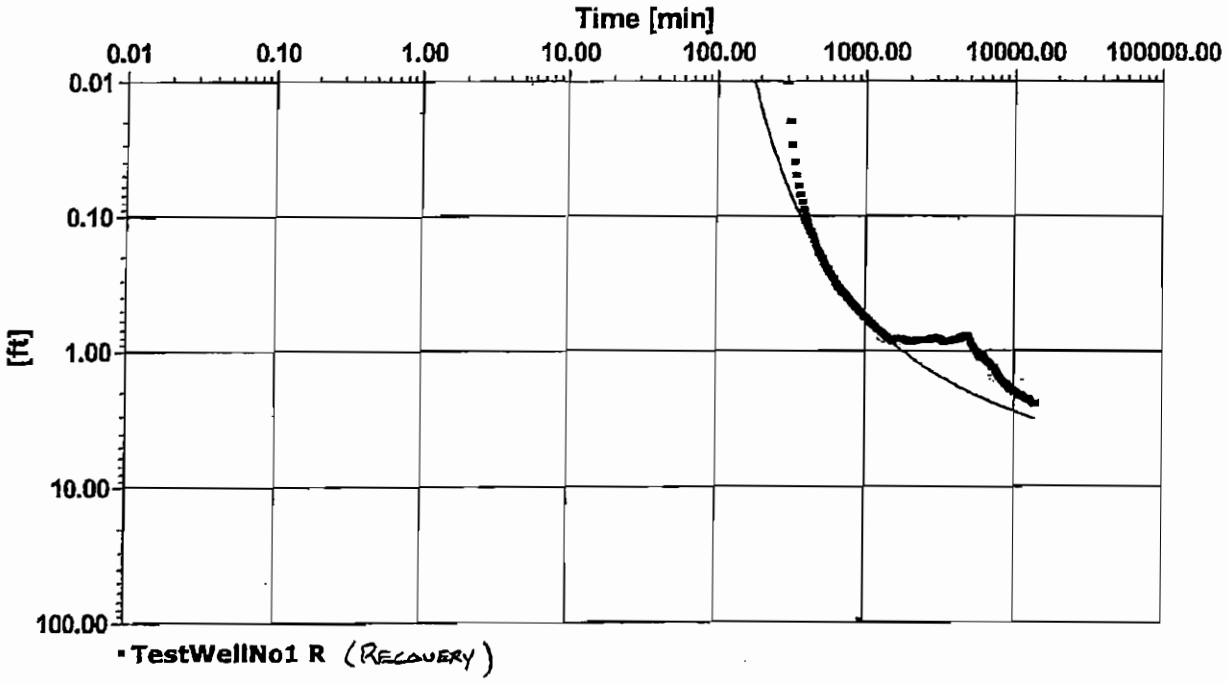


Calculation after Theis

Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
Test Well No 1 P	1.95×10^{4}	1.95×10^{2}	1.58×10^{-2}	1604.58	

City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report	
	Project: Recovery Eagle Aquifer Test	
	Number:	
	Client:	

Location:	Pumping Test: Recovery Eagle Aquifer Test	Pumping well: TestwellNo2 R
Test conducted by:		Test date: 6/30/2006
Analysis performed by:	recovery	Date: 6/30/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	

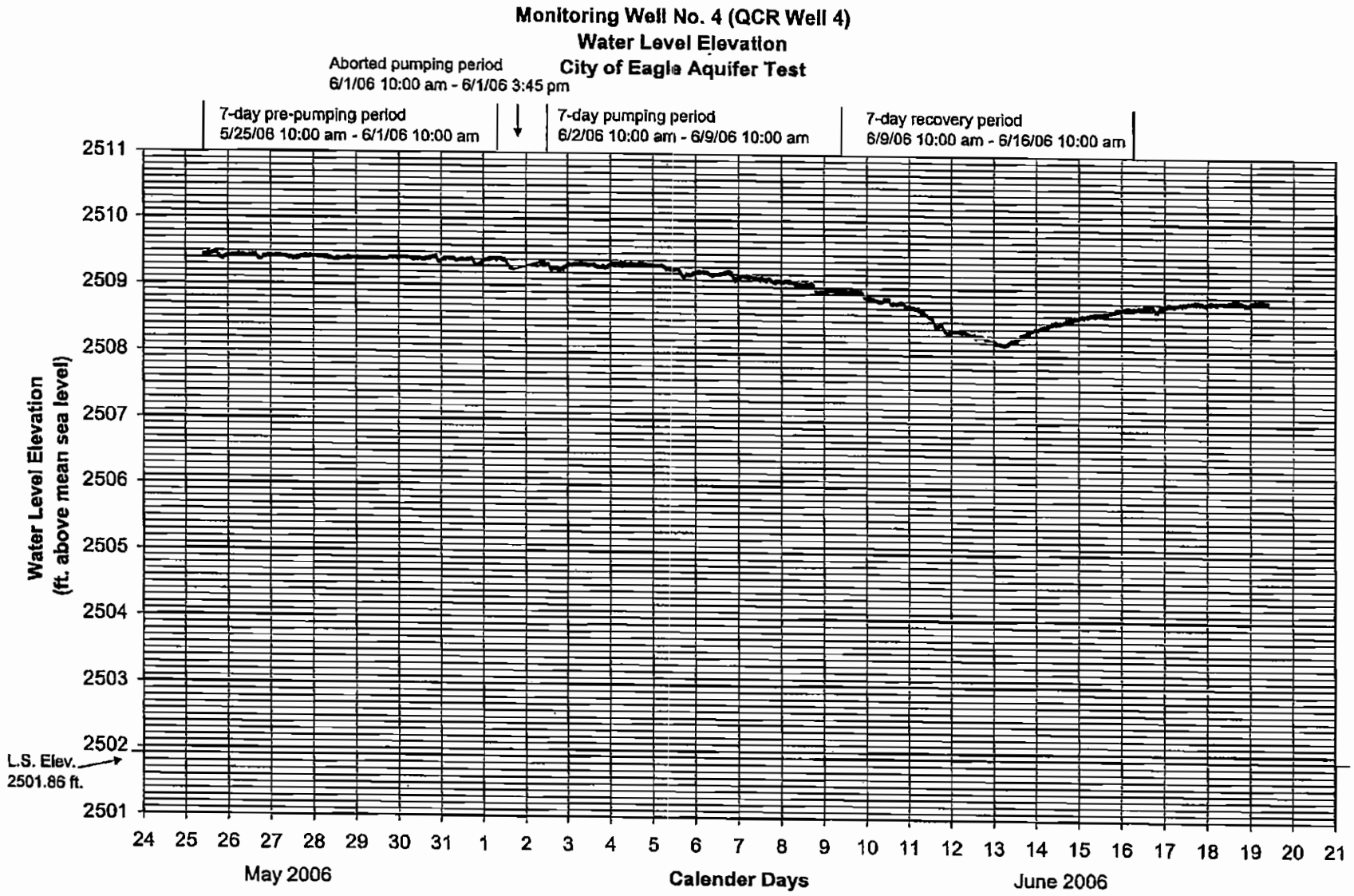


Calculation after Theis

Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
TestWellNo1 R	2.01×10^{4}	2.01×10^{2}	1.30×10^{-2}	1604.58	

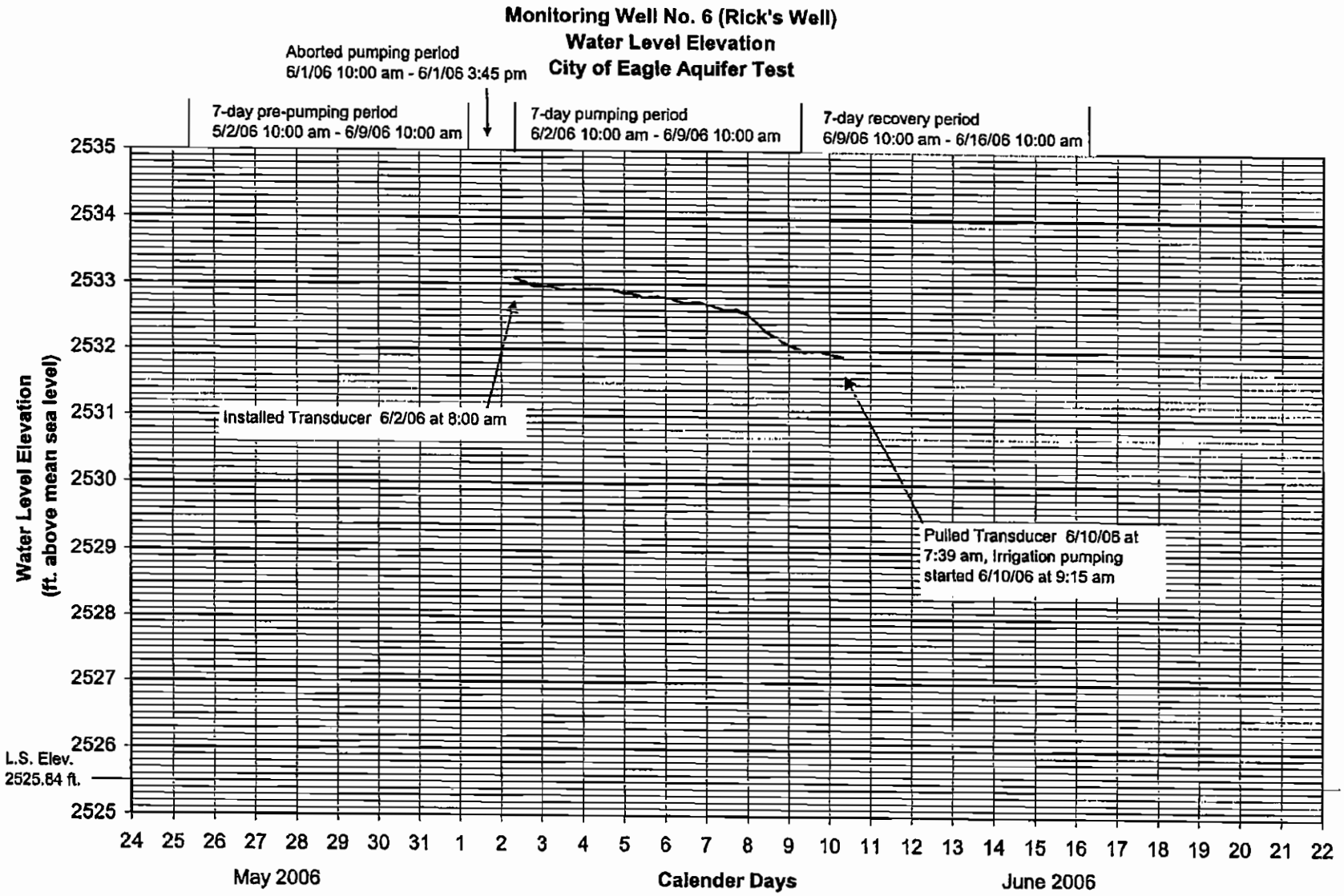
Appendix C.3

MONITORING WELL 4 (QCR 4)


Monitoring Well No. 4 (QCR Well 4)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Water Level Elevation
(ft. above mean sea level)
2511
2510
2509
2508
2507
2506
2505
2504
2503
2502
2501
L.S. Elev.
2501.86 ft.
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calender Days
June 2006

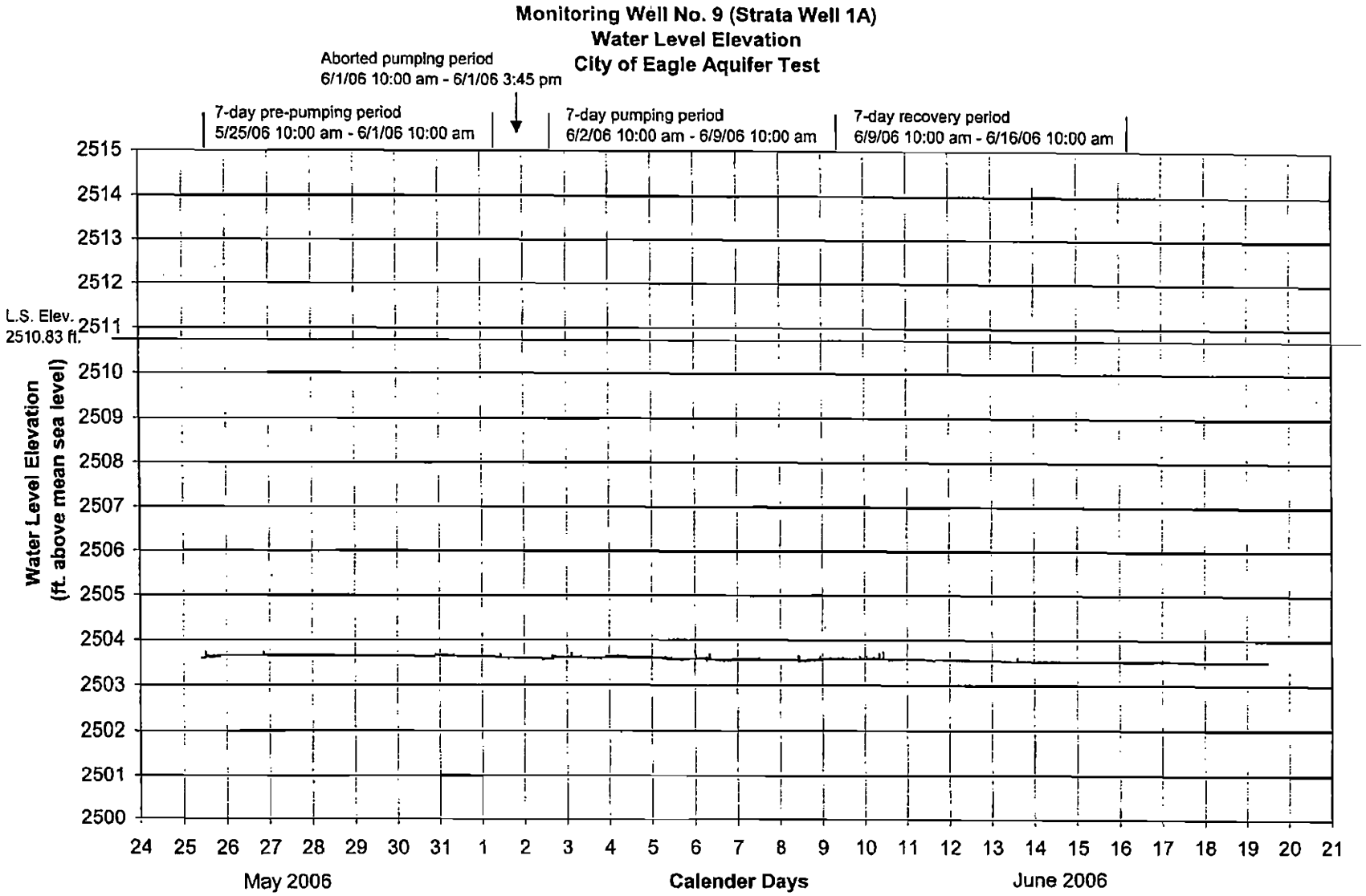
Appendix C.4

MONITORING WELL 6 (Rick's)


Monitoring Well No. 6 (Rick's Well)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/2/06 10:00 am - 6/9/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Water Level Elevation
(ft. above mean sea level)
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
L.S. Elev.
2525.84 ft.
Installed Transducer 6/2/06 at 8:00 am
Pulled Transducer 6/10/06 at
7:39 am, Irrigation pumping
started 6/10/06 at 9:15 am
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
May 2006
Calender Days
June 2006

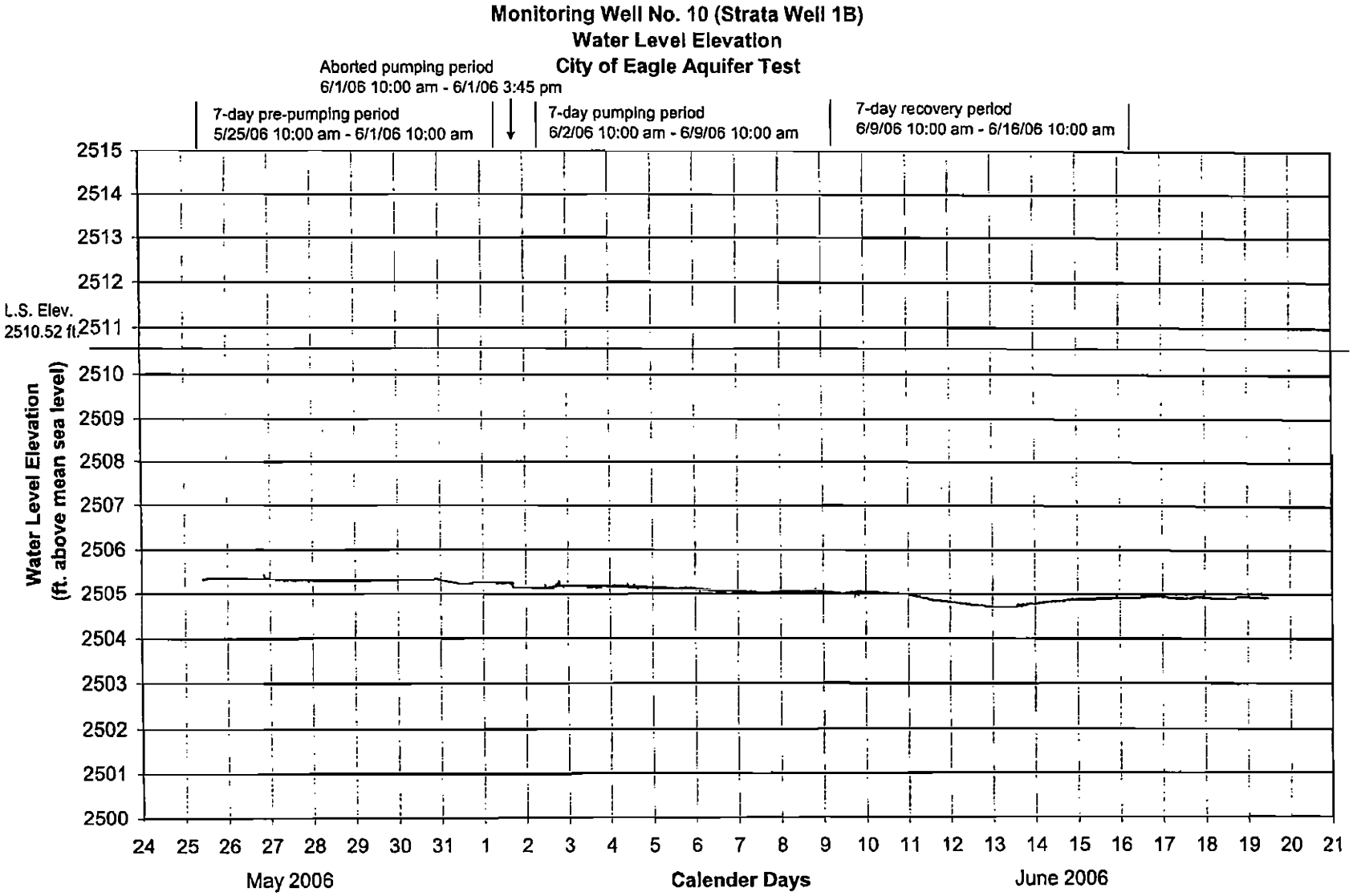
Appendix C.5

MONITORING WELL 9 (Strata 1A)


Monitoring Well No. 9 (Strata Well 1A)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
L.S. Elev.
2510.83 ft.
Water Level Elevation
(ft. above mean sea level)
2515
2514
2513
2512
2511
2510
2509
2508
2507
2506
2505
2504
2503
2502
2501
2500
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calender Days
June 2006

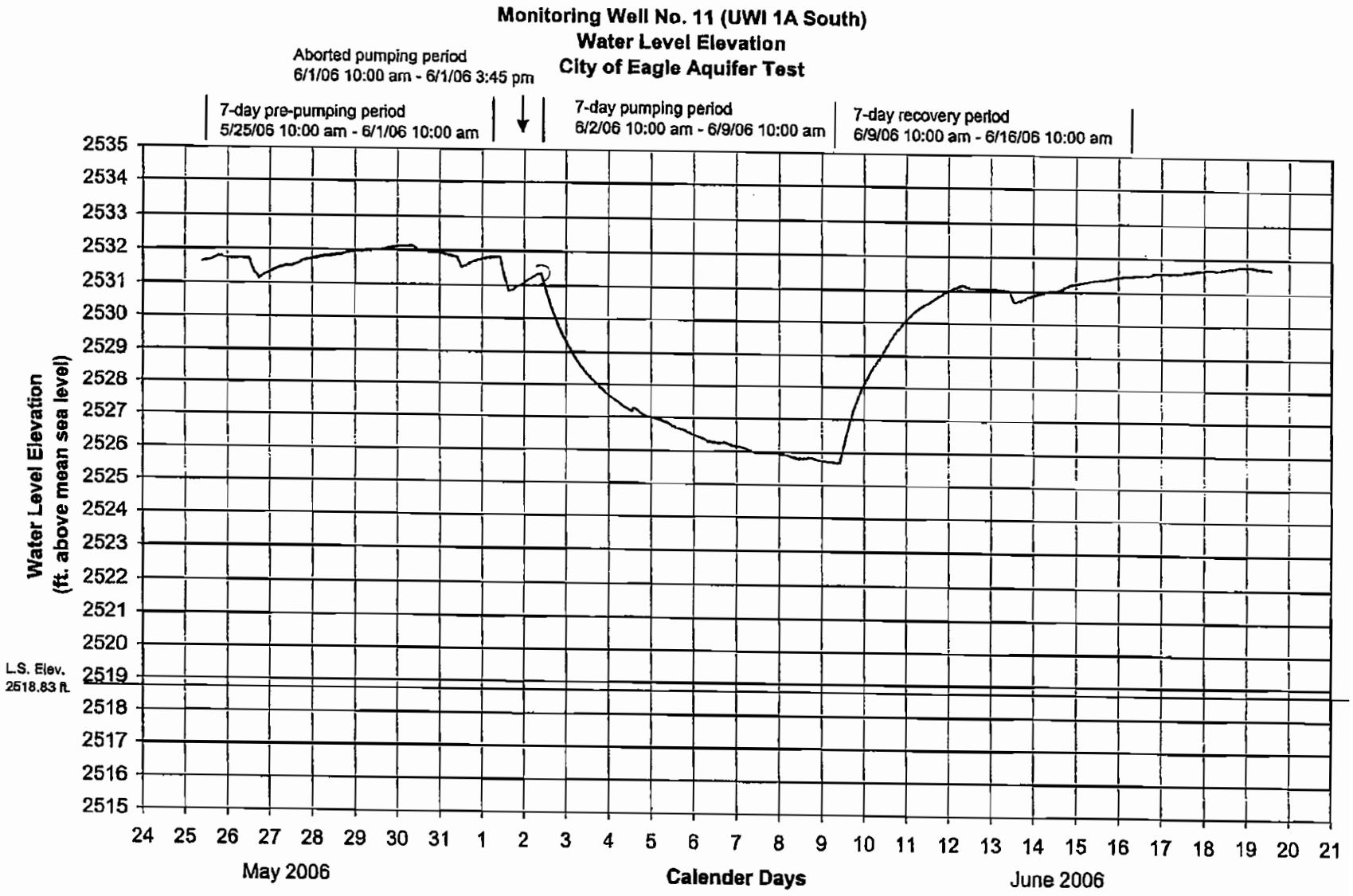
Appendix C.6

MONITORING WELL 10 (Strata Well 1B)

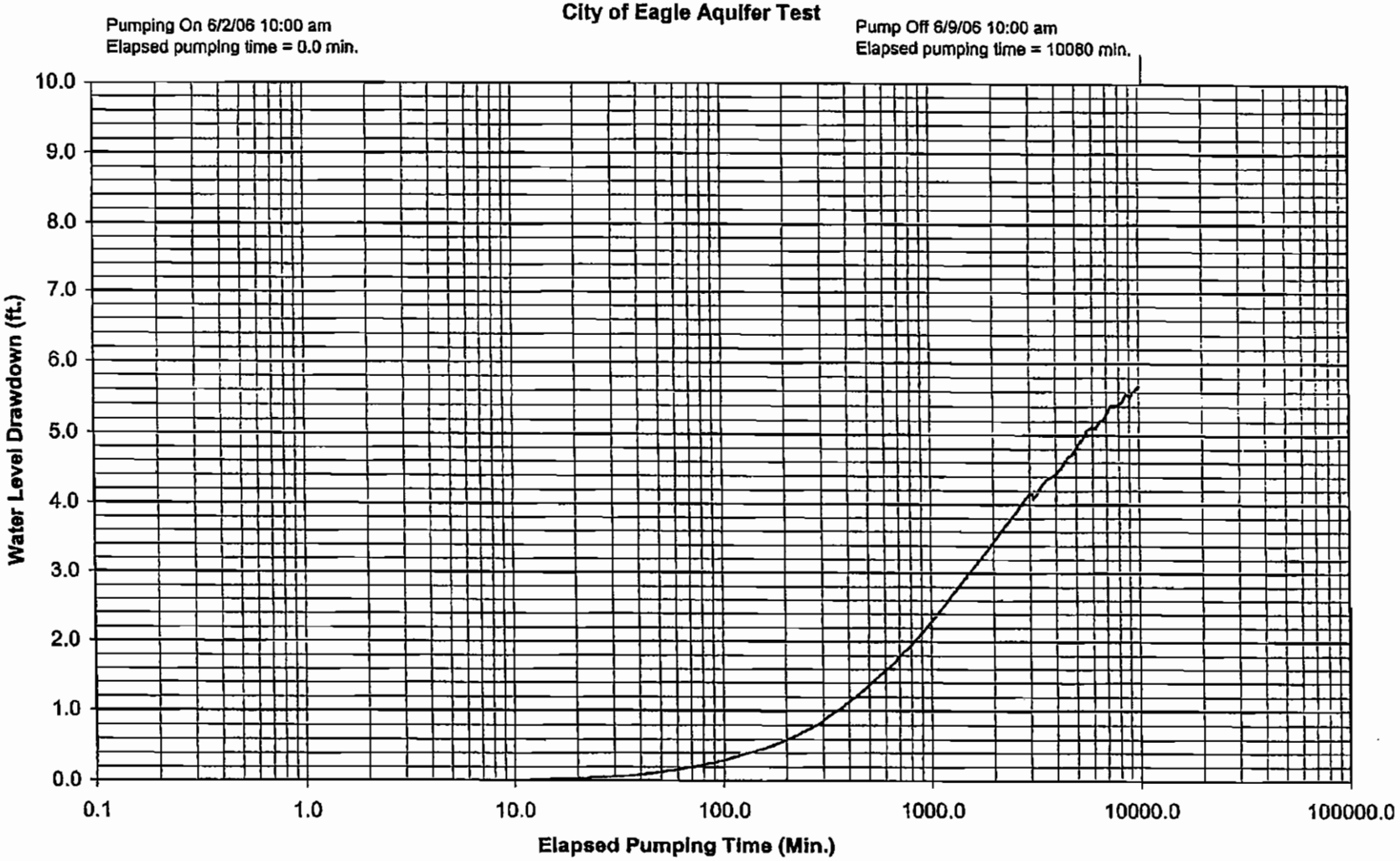

Monitoring Well No. 10 (Strata Well 1B)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
L.S. Elev.
2510.52 ft.
Water Level Elevation
(ft. above mean sea level)
2515
2514
2513
2512
2511
2510
2509
2508
2507
2506
2505
2504
2503
2502
2501
2500
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calender Days
June 2006

Appendix C.7

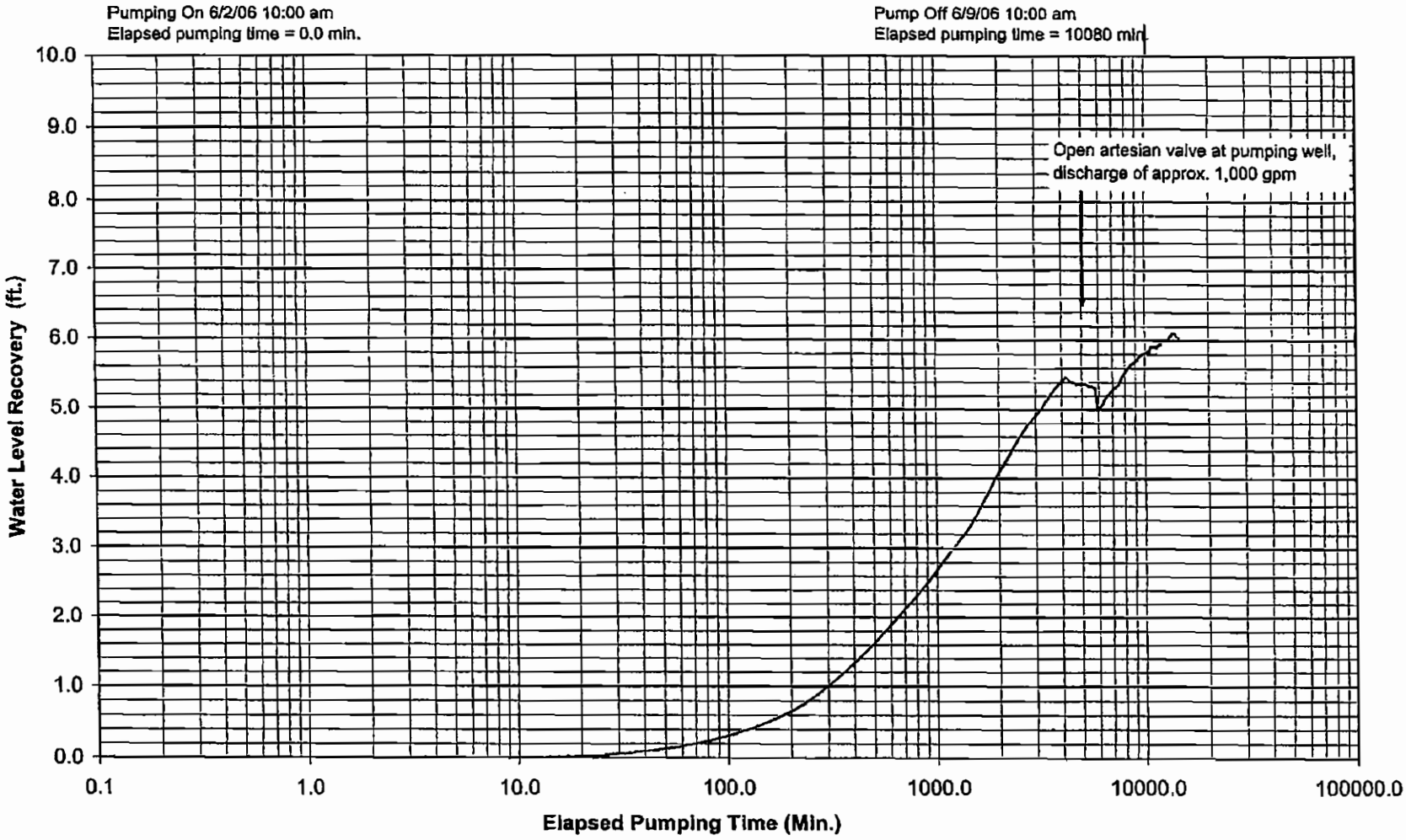
MONITORING WELL 11 (UWI 1A)


Monitoring Well No. 11 (UWI 1A South)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Water Level Elevation
(ft. above mean sea level)
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
2524
2523
2522
2521
2520
2519
2518
2517
2516
2515
L.S. Elev.
2518.83 ft.
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calender Days
June 2006

Monitoring Well No. 11 (UWI 1A South)
Drawdown Semi-log Plot
City of Eagle Aquifer Test

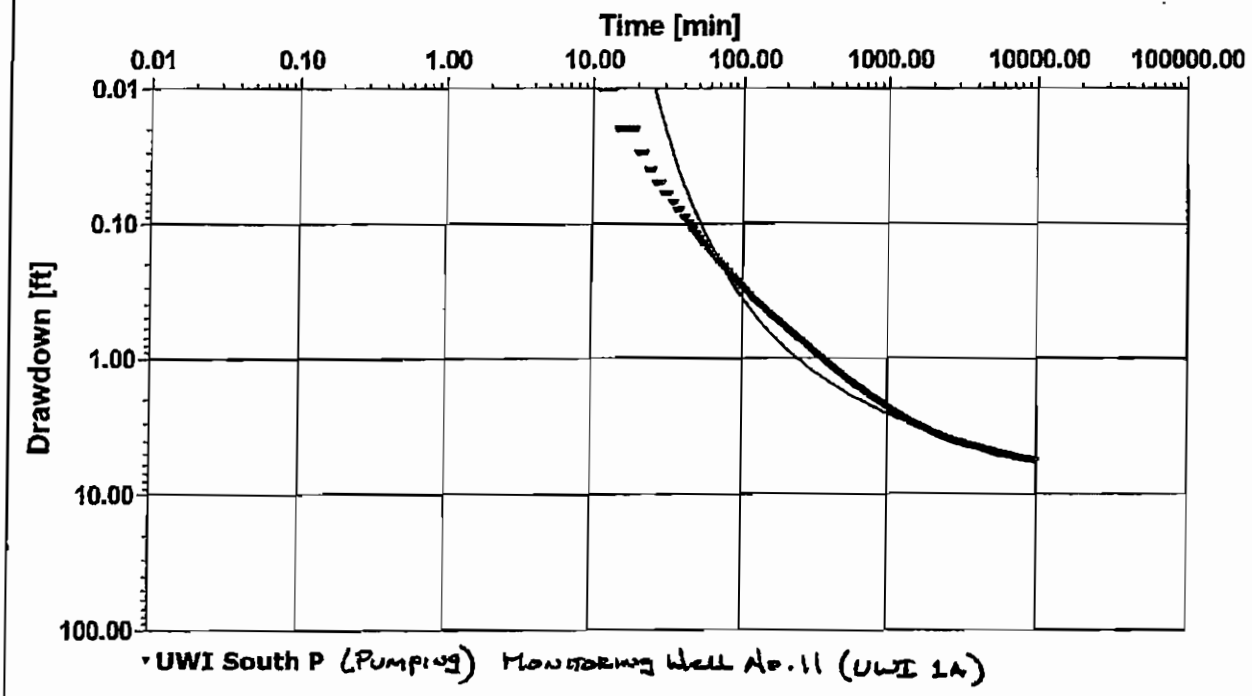


Monitoring Well No. 11 (UWI 1A South)
Recovery Semi-log Plot
City of Eagle Aquifer Test



City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report
	Project: Eagle Aquifer Test
	Number:
	Client:

Location:	Pumping Test: Drawdown	Pumping well: Test Well No 2 P
Test conducted by:		Test date: 6/30/2006
Analysis performed by:	New analysis 1	Date: 6/30/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	

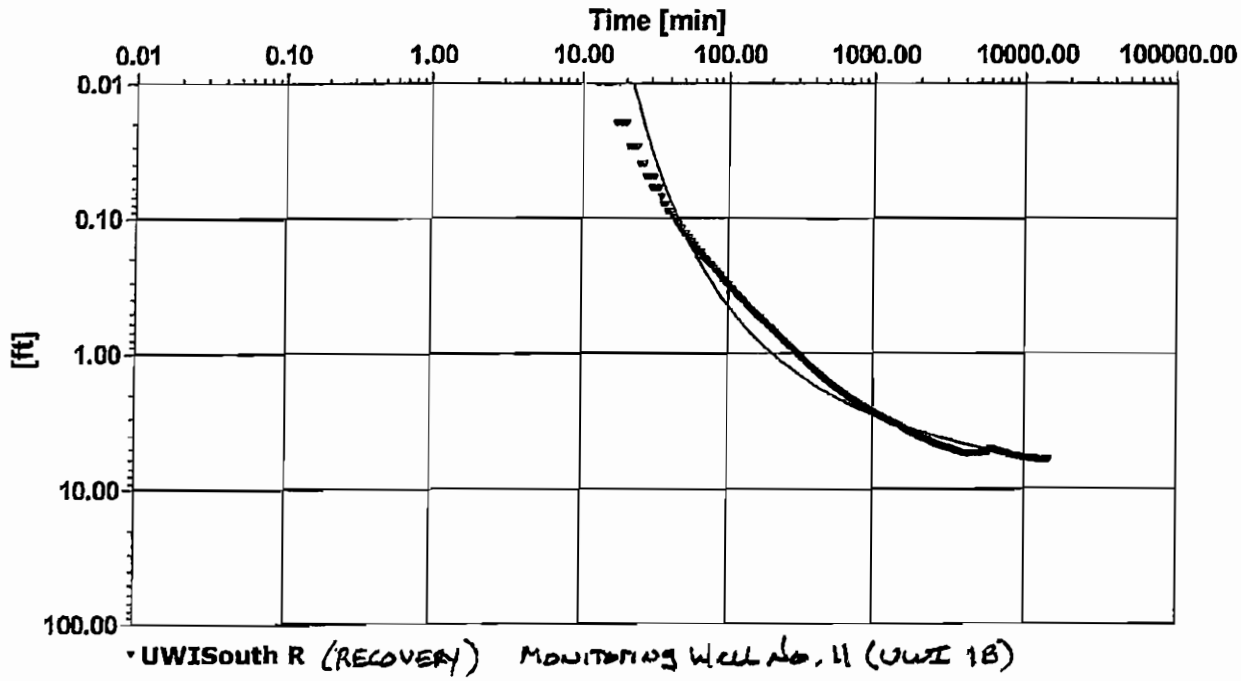


Calculation after Theis

Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
UWI South P	1.85×10^{4}	1.85×10^{2}	7.80×10^{-4}	2405.68	

City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report
	Project: Recovery Eagle Aquifer Test
	Number:
	Client:

Location:	Pumping Test: Recovery Eagle Aquifer Test	Pumping well: TestwellNo2 R
Test conducted by:		Test date: 6/30/2006
Analysis performed by:	recovery	Date: 6/30/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	



Calculation after Theis

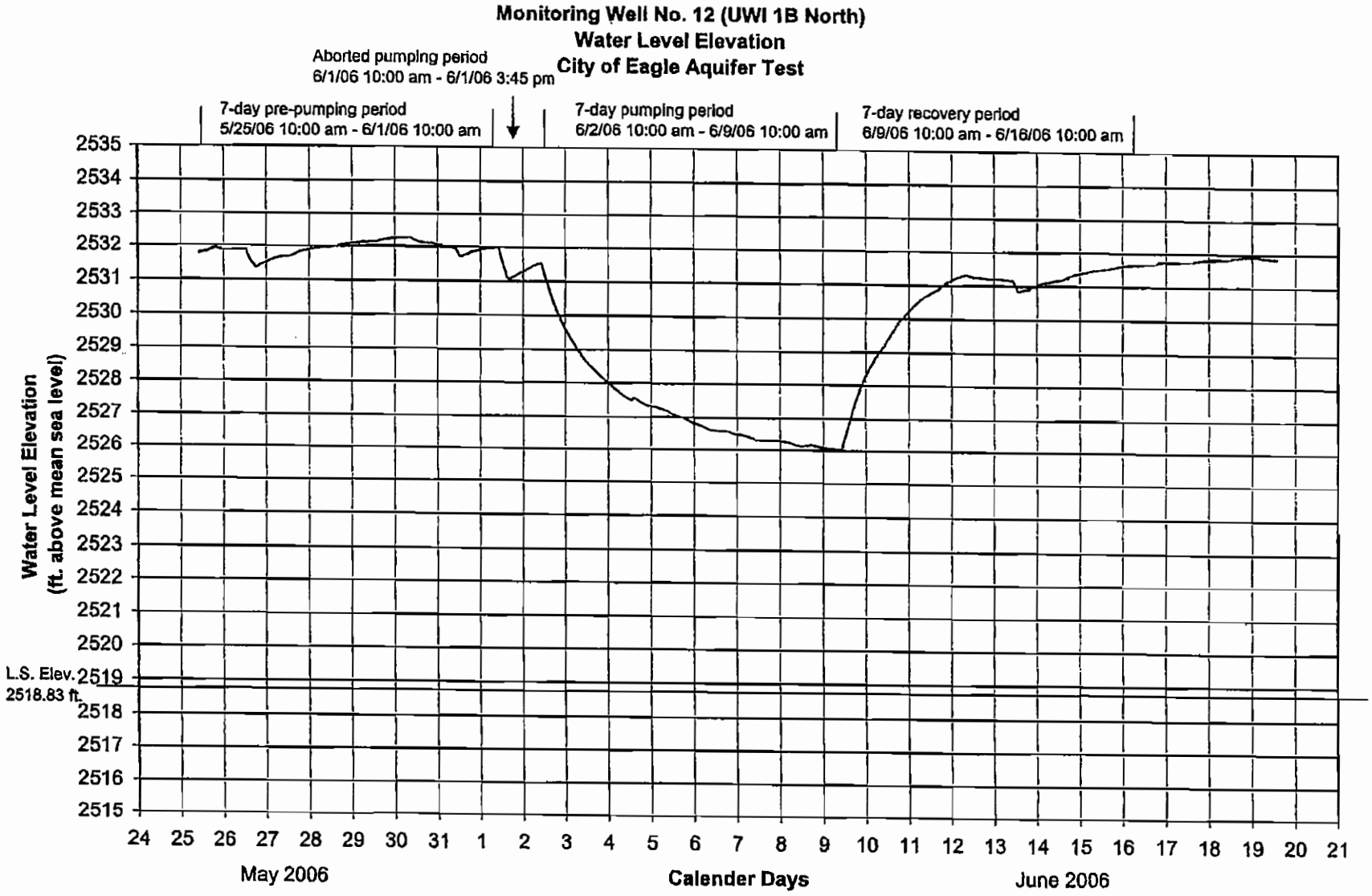
Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
UWISouth R	1.77×10^{4}	1.77×10^{2}	6.62×10^{-4}	2405.68	

Exclusion of Points
$t = 2000$ to $t = 4257$

COMPUTER FIT

Appendix C.8

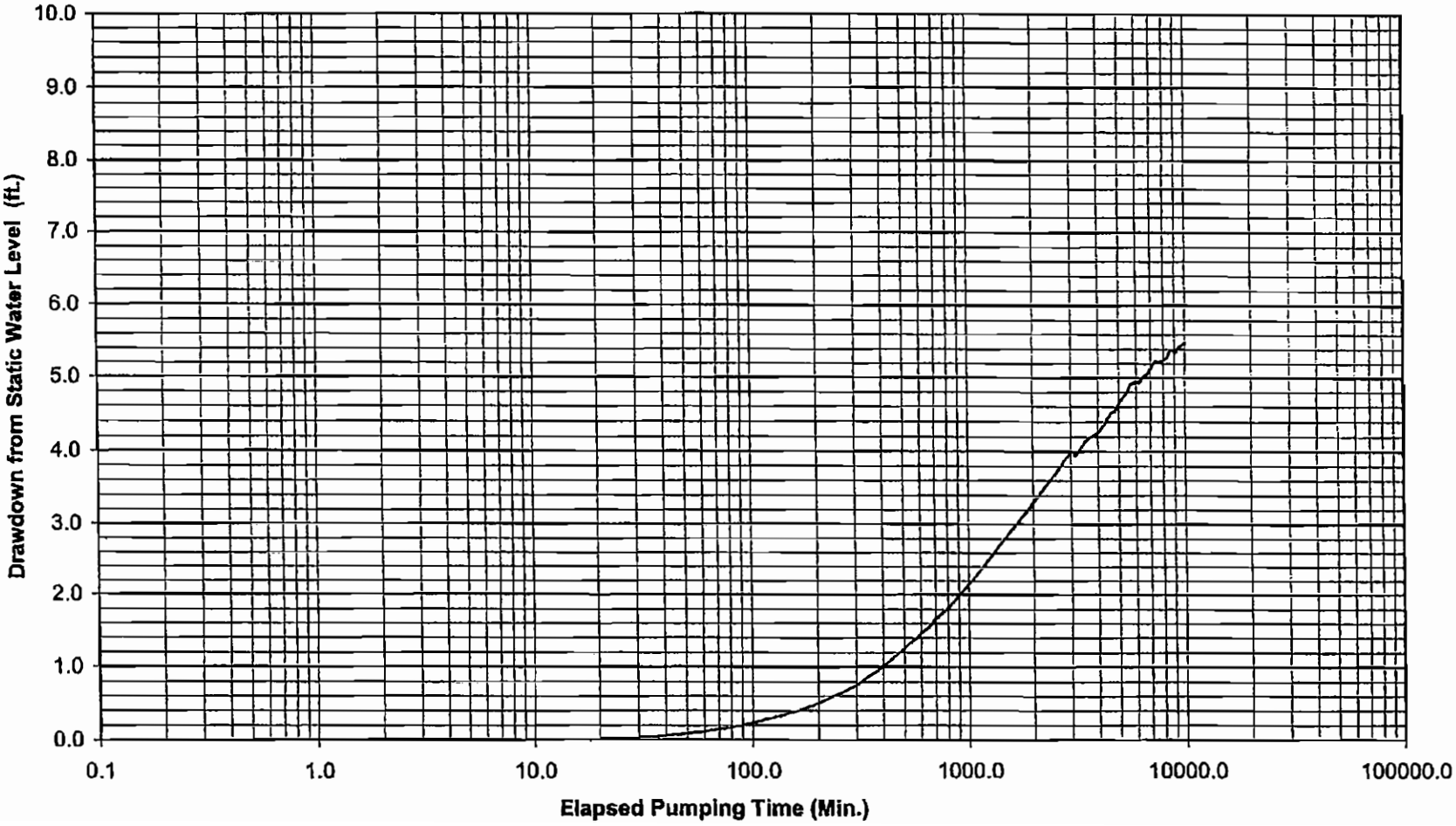
MONITORING WELL 12 (UWI 1B)


Monitoring Well No. 12 (UWI 1B North)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Water Level Elevation
(ft. above mean sea level)
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
2524
2523
2522
2521
2520
2519
2518
2517
2516
2515
L.S. Elev.
2518.83 ft.
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calender Days
June 2006

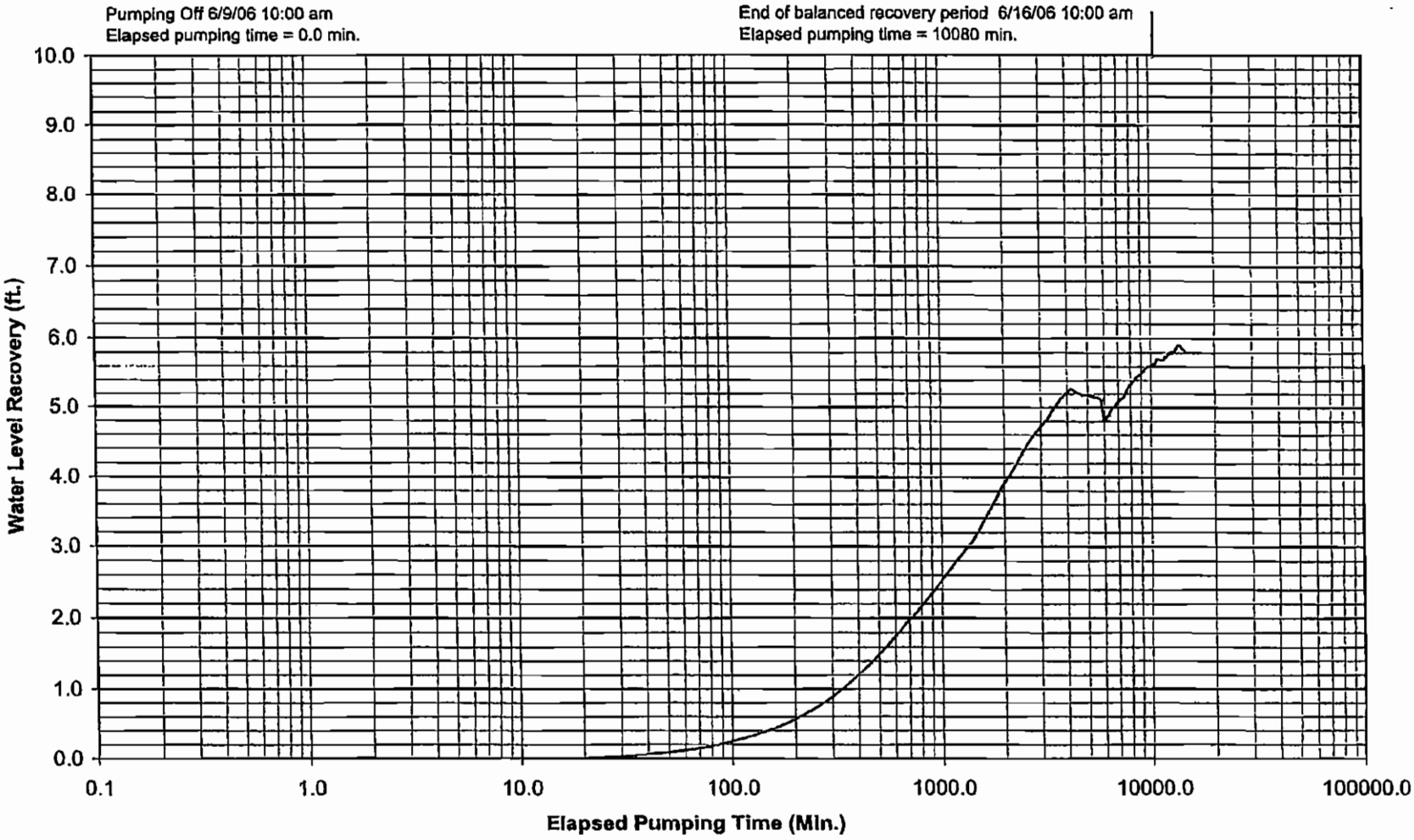
Monitoring Well No. 12 (UWI 1B North)
Drawdown Semi-log Plot
City of Eagle Aquifer Test

Pumping On 6/2/06 10:00 am
Elapsed pumping time = 0.0 min.

Pump Off 6/9/06 10:00 am
Elapsed pumping time = 10080 min.

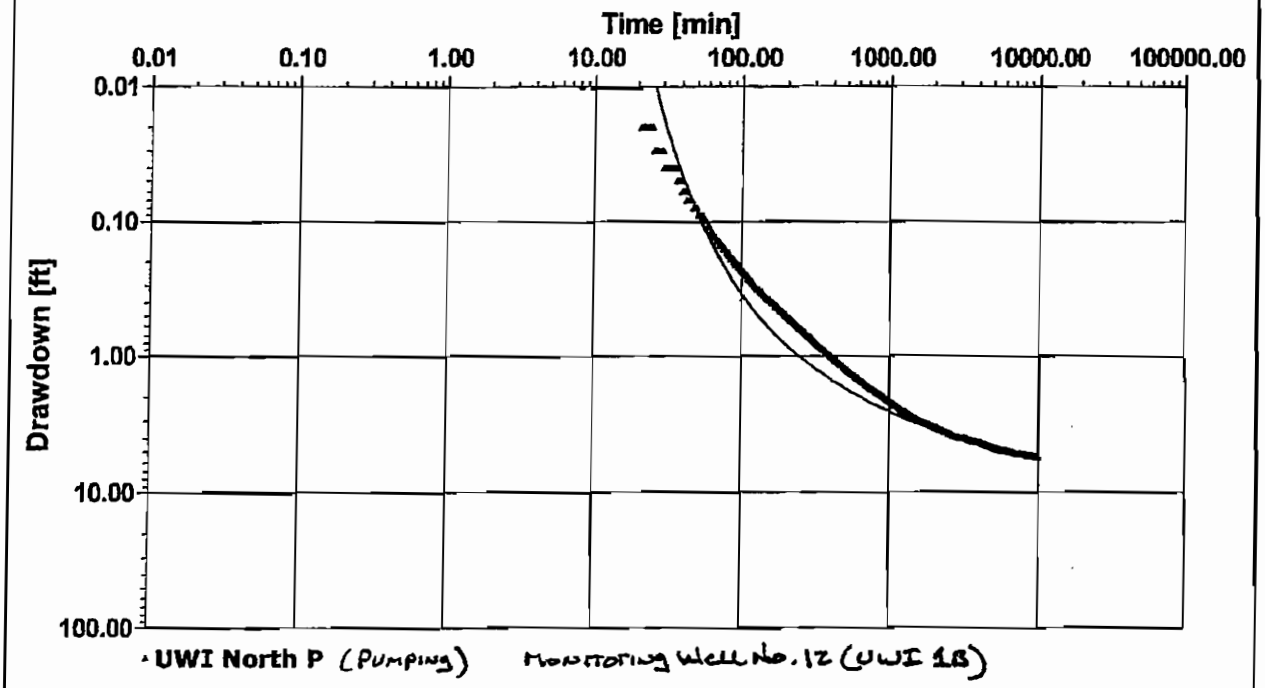


Monitoring Well No. 12 (UWI 1B North)
Recovery Semi-log Plot
City of Eagle Aquifer Test



City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report
	Project: Eagle Aquifer Test
	Number:
	Client:

Location:	Pumping Test: Drawdown	Pumping well: Test Well No 2 P
Test conducted by:		Test date: 6/30/2006
Analysis performed by:	New analysis 1	Date: 6/30/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	

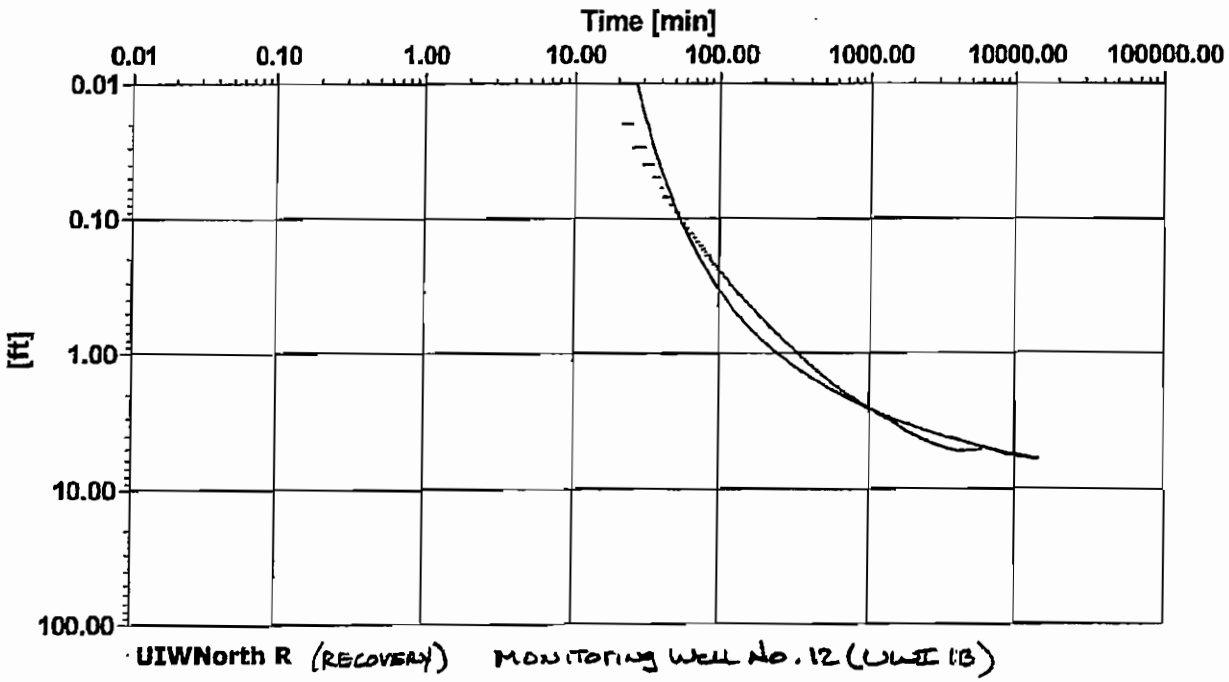


Calculation after Theis

Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
UWI North P	1.80×10^{4}	1.80×10^{2}	7.90×10^{-4}	2405.68	

City, State/Province Address Contact Info Company Name	Pumping Test Analysis Report
	Project: Recovery Eagle Aquifer Test
	Number:
	Client:

Location:	Pumping Test: Recovery Eagle Aquifer Test	Pumping well: TestwellNo2 R
Test conducted by:		Test date: 6/30/2006
Analysis performed by:	recovery	Date: 6/30/2006
Aquifer Thickness: 100.00 ft	Discharge rate: 1580 [U.S. gal/min]	

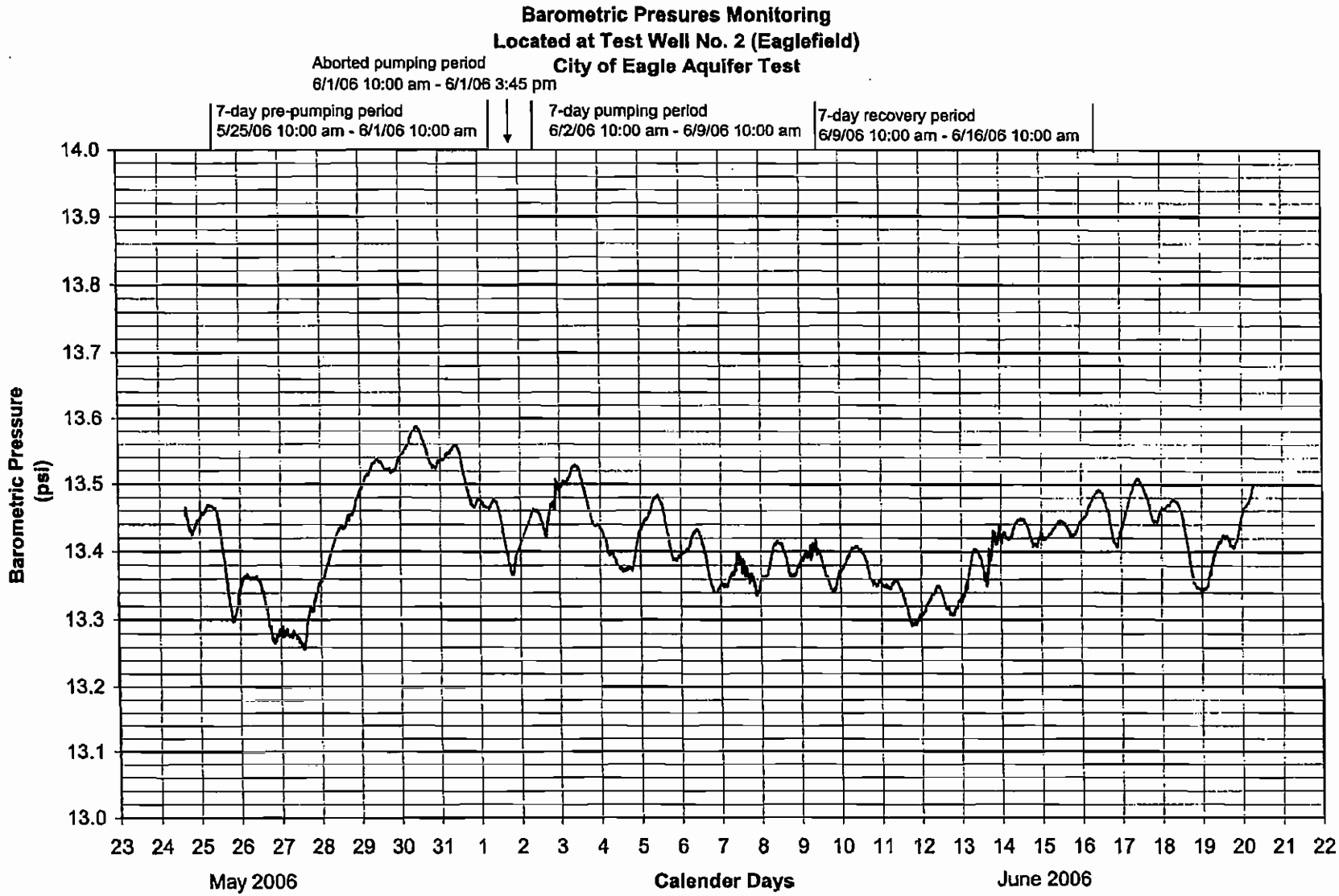


Calculation after Theis

Observation well	Transmissivity [ft²/d]	K [ft/d]	Storage coefficient	Radial distance to PW [ft]	
UIWNorth R	1.80×10^{4}	1.80×10^{2}	8.00×10^{-4}	2405.68	

Appendix C.9

BAROMETER


Barometric Presures Monitoring
Located at Test Well No. 2 (Eaglefield)
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Barometric Pressure (psi)
14.0
13.9
13.8
13.7
13.6
13.5
13.4
13.3
13.2
13.1
13.0
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
May 2006
Calender Days
June 2006

APPENDIX D

MONITORING WELL SURVEY DATA

HOLLADAY ENGINEERING COMPANY
32 N. MAIN PAYETTE, ID 83661 (208) 642-3304 FAX (208)642-2159 email: hec@holladayengineering.com

MONITORING WELLS

OWNER : CITY OF EAGLE — DATE: 6/27/06

PROJECT : MONITORING WELL ELEVATIONS — PROJECT: EG061204

AREA : T.4N., R.1W., S. 11 — PAGE:

COORDINATES:

SURVEY PT. NO.	WELL	NORTHING	EASTING	LATITUDE	LONGITUDE	ELLIP.
1001	MW4	744362.8	2441586.0	43° 42' 24.54111" N	116° 26' 37.01283" W	2445.52
1002	MW6	744588.6	2446816.4	43° 42' 27.19661" N	116° 25' 25.84087" W	2469.58
1006	MW7	744008.1	2447329.0	43° 42' 21.50594" N	116° 25' 18.79939" W	2464.49
1010	MW9	743615.2	2445294.5	43° 42' 16.44486" N	116° 25' 58.13148" W	2454.54
1011	MW10	743595.6	2445295.1	43° 42' 16.45073" N	116° 25' 57.67684" W	2454.22
1012	MW11	739778.3	2448944.4	43° 41' 39.86635" N	116° 24' 56.34880" W	2462.67
1015	MW12	739778.3	2448944.4	43° 41' 39.86635" N	116° 24' 56.34880" W	2462.67
1008	TW1	742602.3	2446168.4	43° 42' 07.53036" N	116° 25' 34.46777" W	2456.70
1007	TW2	741256.3	2447040.0	43° 41' 54.30943" N	116° 25' 22.42892" W	2457.89

ELEVATIONS: GROUND ELEVATIONS (NOT TOP CASING ELEVATIONS)

WELL	ELEVATION	DESC.
MW4	2501.86	(N) HUB
MW6	2525.84	(E) HUB
MW7	2520.74	(NW) HUB
MW9	2510.83	(N) HUB
MW10	2510.52	(N) HUB
MW11	2518.83	EAST (N) RIM
MW12	2518.83	EAST (N) RIM
TW1	2512.97	(N) HUB
TW2	2514.15	-

GENERAL NOTES:

VERTICAL: NAVD88 - BASED ON MEASURED ELLIPSOID HEIGHT AND CALCULATED GEOID SEPARATION (GEOID 03).

HORIZONTAL:

IDAHO STATE PLANE GRID (IDAHO WEST ZONE - NAD83) - GROUND DISTANCES SHOWN
USING AVERAGE COMBINED FACTOR OF 0.99986746067
TO CONVERT GRID TO GROUND DISTANCES

133

ADDENDUM TO

CITY OF EAGLE 7-DAY AQUIFER TEST REPORT

Prepared for the

City of Eagle, Idaho
310 East State Street
Eagle, Idaho

Prepared by

Holladay Engineering Company
P.O. Box 235
Payette, ID 83661

SPF Water Engineering, LLC
600 East River Park Lane
Boise, ID 83706

February 22, 2007

HOLLADAY ENGINEERING CO

SPF Water Engineering, LLC
water resource consultants

M3 EAGLE LLC
EXHIBIT
133

Executive Summary

Holladay Engineering, Inc. conducted a 7-day constant-rate aquifer test for the City of Eagle in June of 2006. An Idaho Department of Water Resources (IDWR) memorandum (dated November 29, 2006) listed several questions and/or issues stemming from a review of this aquifer test report. The purpose of this Aquifer Test Report Addendum was to review aquifer-test results and address questions raised in the IDWR review.

The results from this review are consistent with conclusions drawn from the original aquifer test report and testimony presented in an administrative hearing for Applications 63-32089 and 63-32090. The primary conclusion from this review is that the target aquifers for Applications 63-32089 and 63-32090 have sufficient capacity for additional withdrawals. Specific conclusions include the following:

Aquifer and Water Levels

1. The target aquifers consist of confined to partially-confined sand layers approximately 200 to 500 feet below ground surface.
2. Water levels in the vicinity of the proposed diversions are stable. Numerous deeper wells have artesian heads extending as high as 19 feet above ground surface.
3. Transmissivity estimates developed from previous tests of confined aquifers calculated from pumping tests of other wells in the west Eagle area (i.e., Redwood Creek and Floating Feather wells) ranged from 7,400 to 21,500 ft^2/day.

Aquifer Test

4. A 7-day aquifer test was conducted with an average discharge rate of approximately 1,580 gpm. This rate is consistent with expected diversion rates from individual wells under the proposed permit.
5. Responses to pumping in the Eagle 7-day aquifer test were observed in the No. 2 (Eaglefield), No. 1 (Legacy), and United Water wells. Lack of response in the Ricks and QRC No. 4 wells is likely because of an insufficient hydraulic connection.
6. Estimated transmissivity values from the 7-day aquifer test ranged from about 10,000 to 39,500 ft^2/day. One lower value (8,600 ft^2/day) is suspect because it was based on a period of apparent water-level fluctuations (which were likely caused by a clogged transducer vent tube).
7. Storativity values from the 7-day aquifer test ranged from 8.95×10^{-4} to 1.48×10^{-2}.

8. Semi-log plots of aquifer drawdown and recovery indicated possible barrier (negative) boundary effects, recharge (positive) boundary effects, variations in aquifer thickness, leakage, and/or changes in aquifer materials. The most apparent negative boundary effect was observed in the Legacy monitoring well. Offset strata or spatial variations in aquifer materials or thicknesses (which would result in an apparent negative boundary effect) are consistent with the conceptual model of aquifer conditions in this area.

9. Aquifer-recharge effects during the aquifer test are indicated by positive x-intercepts in straight-line UWI-well recovery plots (drawdown vs. t/t_0).

10. Water levels fully recovered in the pumping and monitoring wells from drawdown associated with the aquifer test.

Potential Impacts to Existing Users

11. Substantial increases in ground water withdrawals for municipal purposes in Eagle over the last 10 years have not resulted in substantial local water-level declines.

12. Potential well interference under reasonable pumping scenarios projected using the Theis method resulted in theoretical water-level drawdowns ranging from about 2 to 25 feet at a distance of two miles from the pumping well (depending on assumed aquifer parameter values, and assumed pumping rate). At 1,400 feet from a pumping well the theoretical drawdown estimates ranged from 4 to 40 feet (the closest distance between a protestants' well and potential point of diversion is approximately 1,500 feet). The effects of offset strata or spatial variations in aquifer materials or thicknesses (which would result in an apparent negative boundary effect) could exacerbate water level responses to pumping. However, these theoretical projections of water level impacts are likely very conservative because (a) aquifer recharge is excluded and (b) similar pumping rates in nearby wells (e.g., Floating Feather and Redwood Creek) have resulted in minor (if any) local water-level declines.

Aquifer Capacity

13. The aquifer in the vicinity of the proposed diversions has capacity for additional diversions, based on currently stable water levels.

14. The aquifer in the vicinity of the proposed diversions likely has the capacity to supply the entire amount of water that would likely be withdrawn under these permits (approximately 4,000 acre feet per year), although some drawdown from the proposed diversions will occur.

Monitoring

15. Monitoring and reporting of production rates from all points of diversion under the proposed permit is recommended.

16. Periodic (e.g., quarterly) water-level monitoring in selected wells near the points of diversion is recommended during the permit development period.

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1. INTRODUCTION

Holladay Engineering, Inc. conducted a 7-day constant-rate aquifer test for the City of Eagle in June of 2006 (Figure 1, Appendix A). Aquifer-test procedures, results, and data analysis were summarized in an aquifer test report (Holladay Engineering Company, 2006). An Idaho Department of Water Resources (IDWR) memorandum (dated November 29, 2006) listed several questions and/or issues stemming from a review of this aquifer test report.

The purpose of this Aquifer Test Report Addendum was to review aquifer-test results and address questions raised in the IDWR review. The general objective of the Addendum is to summarize and/or clarify previously-reported aquifer-test information and results. Specific objectives of this addendum are to:

1. Summarize relevant information previously provided in the (a) Aquifer Test Plan (*letter from Chris Duncan to Gary Spackman dated October 12, 2005 and letters from Chris Duncan to Rob Whitney dated November 28, 2005 and May 15,* 2005), (b) aquifer test report (Holladay Engineering Company, 2006), and/or (c) referred to in the administrative hearing for Water Right Applications 63-32089 and 63-32090
2. Review the conceptual model of ground water flow in the test vicinity
3. Review the aquifer-test discharge rate
4. Review the selected aquifer-test analysis methods in the context of the conceptual model
5. Report transmissivity and storativity values for additional monitoring wells (where appropriate)
6. Provide corrected well recovery analyses
7. Provide a graphical aquifer-test summary
8. Evaluate aquifer capacity and potential impacts on existing wells.

This addendum is organized as follows: Section 2 provides a description of hydrogeology in the aquifer-test area, Section 3 summarizes aquifer-test methods, Section 4 presents aquifer-test results and analyses, and Section 5 provides a summary of aquifer-test parameter values. Section 6 explores potential impacts to existing wells and Section 7 lists conclusions and recommendations. Figures, tables, aquifer-test hydrographs and curve-matching plots, and drillers' reports are provided in Appendices A, B, and C, respectively.

2. HYDROGEOLOGIC CONDITIONS AND CONCEPTUAL MODEL OF GROUND-WATER FLOW

2.1. Geologic Setting

The Eagle No. 2 well is located near the northern margins of the lower Boise River basin (Treasure Valley). Surficial geology (Figure 2) consists of Quaternary sandy alluvium, terrace gravels, and alluvial fan sediments (Othberg and Stanford, 1992) belonging to the Snake River Group. Underlying these sediments, and exposed at the surface north of the site, is a thick sequence of tilted, faulted, and eroded interbedded sand, silt, and clay sediments (Wood and Clemens, 2004) belonging to the Tertiary-aged Idaho Group. A series of southeast-northwest trending faults are present along or near the northern valley margins, with stratigraphic offsets ranging from feet to several hundred feet or more.

2.2. Drillers' Reports

Wells in the aquifer-test area extend from depths of less than 50 feet to almost 1,000 feet. Drillers' reports list shallow sand and gravel layers (Snake River Group) underlain by a thick sequence of interbedded sand and clay zones (Idaho Group). Drillers' reports for deeper wells list a transition from brown (or tan) to blue clay sediments at depths between 450 and 600 feet. Numerous water-bearing sand layers are noted within the brown sediments. Water bearing-zones below the brown-blue clay transition are thinner and less prevalent compared to overlying strata. Numerous drillers' reports indicate flowing artesian conditions; water levels above ground surface are a clear indication of confined aquifer conditions.

The nested United Water Idaho piezometers (UWI-1A and UWI-1B) penetrated a more extensive and consistent sand sequence (Figure 3) than the City of Eagle Test Well No. 2 (Eaglefield) or the Eagle Test Well No. 1 (Legacy). These differences reflect local aquifer heterogeneity (with apparent less and thinner water-producing sand layers to the north or northwest of the United Water test wells).

2.3. Ground-water Flow

Ground-water flow in the aquifer-test area occurs in shallow, local flow systems and in deeper, more regional flow systems. The potentiometric surface for the shallow aquifer in this area indicates flow in a southwesterly direction (Petrich and Urban, 2004). Shallow aquifers are recharged from surface channel seepage, irrigation infiltration, and precipitation infiltration. Shallow aquifers discharge to the Boise River and/or channels draining to the Boise River.

Ground water in deeper aquifers is confined by the multiple clay zones present in this area. Individual clay layers may not be of substantial thickness or great areal extent, but the clay layers, alone or in aggregate, appear to form effective aquitards.

Numerous wells with artesian heads rising more than 20 feet above ground surface attest to the confining nature of clay aquitards. Artesian hydraulic heads reflect ground-water elevations in areas where tilted, deeper, confined aquifer layers intersect with shallower water-table aquifers and/or surface water.

Ground water in intermediate and deeper aquifer zones in this area flows in a westerly or northwesterly direction (Petrich and Urban, 2004). Recharge to deeper aquifers occurs by downward leakage in upgradient areas (where tilted deeper aquifer zones intersect with shallow aquifers). Discharge from deeper aquifers occurs as vertical leakage and to wells.

2.4. Water Levels

Initial static water levels listed in drillers' reports for wells in the immediate vicinity of the aquifer-test area (i.e., T4N, R1W Section 11) range from about 10 feet below ground surface to above ground surface. Artesian heads in some wells completed more than about 250 feet below ground surface extend 19 feet or more above ground surface.

Water-level data for wells in the vicinity of the Eagle No. 2 well (T4N, R1W) were downloaded from IDWR's well log database (courtesy of Shane Bendixsen, IDWR). Water levels for wells with at least three measurements taken since 1990 and with at least one measurement taken since 2000 are plotted in Figure 4. Any measurements that were taken when a well was pumping or recently pumped (and were noted as such) were excluded.

Virtually all of the 25 wells with available water-level data (Figure 4) exhibited relatively stable water levels. Several wells exhibited recent variability, likely associated with local pumping conditions. The relative water-level stability is remarkable given the increases in local ground-water development over the last 10 years.

2.5. Aquifer Parameters

Aquifer parameter values have been estimated in two other well tests in the vicinity of the Eagle No. 2 well. First, an 8.5-hour test was conducted in a 415-foot deep well drilled for the Redwood Creek Subdivision[1] (Figure 5). A constant discharge rate of approximately 2,100 gpm yielded a transmissivity estimate in the pumping well of 7,400 ft^2/day (Scanlan Engineering, 1994). A transmissivity value from late-term recovery data was estimated at 21,500 ft^2/day. An apparent transmissivity and storativity calculated from the Ricks well[2] (which is located approximately ½ mile to the west of the pumping well) was 20,500 ft^2/day and $2x10^{-4}$ respectively. However, the estimates based on water-level responses to the Ricks well may be high because

[1] This well is now operated by United Water Idaho.
[2] This is a different Ricks well than was used in the Eagle No. 2 pumping test.

of an indirect aquifer connection between these two wells or partial penetration of the Ricks well into the pumping-well aquifer.

Second, a 51-hour test was conducted at an average discharge rate of 1,500 gpm in the 346-foot deep Floating Feather well (Scanlan Engineering, 1995). This test yielded a transmissivity estimate of approximately 20,000 ft^2/day. Water-level measurements in the Crandlemire Irrigation Well, located approximately 65 feet southeast of the Floating Feather Well, yielded a transmissivity estimate of 20,000 ft^2/day with a storage coefficient of $5x10^{-4}$. The transmissivity and storativity based on long-term recovery data were 20,500 ft^2/day and $1x10^{-4}$, respectively.

The Treasure Valley ground-water flow model (Petrich, 2004a) included the Eagle No. 2 area. Calibrated transmissivity values in this area ranged from approximately 4,000 to 9,000 ft^2/day. The Treasure Valley model was constructed to simulate regional ground-water flow, and as such, transmissivity values were calibrated to aggregate water levels over relatively large areas. The values estimated from actual aquifer tests in the west Eagle area are considered more representative aquifer parameter estimates than the model values.

2.6. Conceptual Model of Ground-water Flow

There are 3 general aquifer systems present in the west Eagle area: (1) shallow, unconfined aquifers present in coarse-grained sediments, (2) intermediate-depth partially-confined to confined aquifers in sand layers interbedded with clay, and (3) deeper, heterogeneous sand aquifers interbedded with and confined by multiple clay layers. Test wells No. 2 and No. 1 (Eaglefield and Legacy wells, respectively), completed between 280 and 425 feet below ground surface, draw water from the deeper, confined (or partially-confined) aquifer system. Ground-water flow in these deeper zones is in a general westerly direction (Petrich and Urban, 2004). Artesian heads in these deeper aquifers extend 19 or more feet above ground surface. Artesian heads reflect water-level elevations in upgradient recharge areas where the target aquifer zones intersect with shallow water-table aquifers. Recharge occurs primarily as underflow from upgradient areas. Discharge occurs as vertical seepage, underflow toward downgradient areas, and well withdrawals. Existing aquifer-test results suggest transmissivity values ranging up to 21,500 ft^2/day (160,000 gpd/ft) and with a storage coefficient of about 0.0001.

3. AQUIFER-TEST REVIEW

3.1. Aquifer-test Pumping and Monitoring Configuration

The Eagle aquifer test was performed in three phases: pre-test monitoring from May 25, 2006 to June 2, 2006; a 7-day aquifer test from June 2, 2006 through June 9, 2006; and post-test monitoring from June 9, 2006 through June 16, 2006. This section summarizes the aquifer test and analysis methods.

The pumping well for this aquifer test was the 430-foot deep Test Well No. 2 (Eaglefield well – see Figure 1), located northwest of the intersection of Highway 44 (State Street) and Linder Road. A step-test was conducted following well completion at artesian flow rates of 571, 782, and 1,010 gpm for 30-minute intervals (Appendix B1 in the Aquifer Test Report). Specific capacity (SC) estimates based on these flow rates ranged from approximately 73 to 77 gpm/ft. This well was pumped at a rate of approximately 1,580 gpm for the 7-day, constant-rate aquifer test.

Water levels were monitored in 8 wells (including the pumping well – see Figure 1 and Figure 6) prior to, during, and after the aquifer test. Information describing monitoring well selection was provided in the City of Eagle Aquifer Test Plan (*letter from Chris Duncan to Gary Spackman dated October 12, 2005 and letters from Chris Duncan to Rob Whitney dated November 28, 2005 and May 15,* 2005). Six of these wells (Eaglefield Well, Legacy Well, UWID wells, Ricks Irrigation Well, and the QCR No. 4 Well) are completed in the lower aquifer zone at depths between 200 feet to 500 feet. Two of the deep-zone monitoring wells (UWI 1A and UWI 1B) are configured as 2-inch nested monitoring wells within an 8-inch diameter borehole. There is no seal between the open intervals of the two wells so they represent, in effect, averaged water levels between the combined screened intervals. Monitoring wells No. 9 and No. 10 are dedicated water-level monitoring wells completed in a shallow unconfined water table aquifer at a depth of 55 feet. Monitoring well construction details, lithologic logs, and testing information are provided in Appendix B of the aquifer test report.

3.2. Drawdown and Recovery Analysis Methods

Aquifer-test analyses consisted of the following:

1. Review of antecedent water-level trends, including possible barometric effects
2. Analysis of constant-rate discharge over time
3. Determination of aquifer parameters (transmissivity and storativity) based on pumping-well and monitoring-well responses using the Theis (1935) and Cooper Jacob (1946) methods

4. Evaluation of potential impacts to existing wells using the a series approximation to the Theis (1935) solution for confined aquifers.

The Theis (1935) log-log and Cooper-Jacob (1946) semi-log graphical methods (Dawson and Istok, 1991) offer a way to solve the Theis (1935) equation for radial flow to a well in a confined aquifer. These methods are appropriate for aquifers bounded from above and below by aquicludes, in which layers are horizontal and of infinite areal extent, the pre-pumping piezometric surface is horizontal and extends infinitely in a radial direction, and the aquifer is homogeneous and isotropic. Virtually no aquifers fully meet these assumptions. Aquifers in the west Eagle area are heterogeneous (evidenced by varying stratigraphic profiles). The general aquifer sequence is areally extensive (although not infinitely extensive); individual water-producing sediment layers and/or aquitards may be of varying thickness or limited areal extent. It was assumed for these analyses that aquifers underlying the west Eagle area are sufficiently "homogeneously heterogeneous" to meet the Theis and Cooper-Jacob assumptions.

Other analytical methods were considered, including those that account for leakage from overlying confining layers (Hantush, 1955) or leakage from storage (Hantush, 1960; Hantush, 1964). However, substantial variations in aquifer and aquitard thickness, variations in areal extent, and material heterogeneity limits the appropriate application of these alternative methods. Furthermore, the effect of leakage into the aquifer zone would reduce predictions of aquifer drawdown within the primary confined aquifer. Thus, the Theis or Cooper-Jacob methods produces a more conservative estimate of potential impacts to existing wells within the target aquifer.

Theis analyses were performed using the Aquifer Test Pro™ 4.0 software (Waterloo Hydrologic, 2004). Semi-log plots were analyzed using a simplification of the Cooper-Jacobs method. Transmissivity was calculated using

$$T = \frac{35 * Q}{ds}$$

where T= transmissivity (ft^2/day)
Q= discharge (gpm)
d_s = change in drawdown per log cycle

A similar approach was used for analyzing residual recovery data. A semi-log plot of residual recovery (s') versus t/t' (where s' represents residual drawdown, t is the time since the pumping test began, and t' is the time since the pump was stopped) was used to plot residual recovery data and calculate transmissivity (Driscoll, 1986).

4. AQUIFER-TEST RESULTS AND ANALYSIS

4.1. Antecedent Water-level Trends

Pre-test water levels were measured in the pumping and monitoring wells (Table 1, Appendix B). Daily fluctuations of approximately 2 feet were observed in the pumping well. Slight rising or falling trends were observed in several monitoring wells.

Slight daily and multi-day barometric pressure variations were seen in the barometric data. A slight falling barometric trend was recorded during the test (and extending approximately 5 days in to the recovery) followed by a slight rising trend. Daily barometric fluctuations do not correspond (in timing or magnitude) with daily pumping-well fluctuations.

Corrections to water-level data for barometric and antecedent trends were considered, but confounding factors such as well interference effects (Table 2) in some wells and inconsistent water-level responses to possible barometric effects minimized the value of these corrections. The maximum barometric pressure change during the pumping test and recovery period was 0.45 and 0.51 feet of water, respectively. The maximum pre-test barometric fluctuation was 0.77 feet of water. Water-level responses to changes in barometric pressure in a confined aquifer generally ranges from about 20% to 75% of the barometric change (Freeze and Cherry, 1979). Thus, the barometric influence on any well was likely less than 0.34 feet (75% of 0.45 feet) during the pumping test and 0.38 feet during the recovery test. These maximum likely barometric influences are less than observed drawdown in all wells experiencing drawdown in this test.

Fluctuations in antecedent water levels (Table 2) prevented determination of exact static water levels. The static water level in the pumping well prior to the 7-day constant rate test was influenced by prior false starts. Static water levels in several wells were therefore defined as a range based on pre-test water-level fluctuations.

4.2. Pumping-Well Discharge Data

The pump test was conducted at a discharge rate of 1,580 gpm. Discharge measurements were made continuously at the start of the test and at regular intervals during the later stages of the test.

During the first eight minutes of the pump test, the rate of discharge fluctuated as high as 2,000 gpm while the discharge valve was adjusted. The discharge rate was observed to drift approximately 10 gpm from the constant target rate of 1,580 gpm. Three additional discharge adjustments were made during the test to compensate for pumping rate drift. A plot of the discharge rate during the test is shown in Figure 7. The plot shows three pumping interruptions from power failures and subsequent

restarts. The average discharge rate the 7-day pumping period was approximately 1,580 gpm; this rate was used in drawdown-analysis calculations.

The pumping well is capable of higher long-term discharge rates (2,000 gpm or more). However, the maximum diversion rate requested under Application 63-32089 (in which the Eaglefield well is listed as a point of diversion) would be limited to 4.0 cfs (1,795 gpm). The effects of a higher aquifer-test rate (e.g., 1,795 gpm instead of 1,580 gpm) would have been greater drawdown in the pumping and monitoring wells. It is unlikely that a higher pumping rate (e.g., 1,795 gpm) would have provided meaningful drawdown data in wells that showed no drawdown at the 1,580-gpm rate. The calculated aquifer parameters values (transmissivity and storativity) based on the 1,580-gpm rate should be similar to estimates based on a theoretical higher discharge rate. A greater pumping rate may have revealed more distant boundary conditions, if present, during the 7-day test. However, in our opinion, the 1,580-gpm discharge rate was sufficient to provide meaningful aquifer-test results.

4.3. Water-level Data and Analysis

This section summarizes water-level data, interpretations, and aquifer parameter estimates. Hydrographs, curve matches, and other supplemental plots are provided in Appendix C.

Estimated transmissivity and storativity values based on this aquifer test should be considered approximate. First, transmissivity and storativity estimates are, by nature, approximate because of aquifer heterogeneity, aquifer anisotropy, and the subjective nature of curve-matching approximations. Second, parameter estimates may be influenced by small variations in barometric pressure (or other) influences on water levels, pump discharge fluctuations, and well interference.

4.3.1. Test Well No. 2 (Pumping Well)

The water-level data collected in the pumping well shows approximate 2-foot diurnal water-level fluctuations (ranging between 1 and 2 feet) throughout the aquifer test. Diurnal fluctuations can be caused by discharge fluctuations, barometric pressure changes, transducer error, and/or well interference. The diurnal fluctuations were not caused by discharge fluctuations because the diurnal fluctuations occur prior to and after the pumping test. The water-level fluctuations exceed the magnitude of, and do not coincide with, barometric fluctuations. Well interference with this diurnal pattern was not observed in other monitoring wells. Transducer error is therefore a likely reason for the observed diurnal fluctuations. Excess transducer cable (approximately 250 feet) was wrapped on a reel and covered by a cardboard box but was otherwise exposed to the elements. A plugged vent tube (possibly by moisture from evening rains) and daily heating and cooling of the transducer cable and vent tube could easily create pressure fluctuations such as those observed. However, despite the apparent diurnal fluctuations, the aquifer test is considered valid because

the maximum drawdown of approximately 31 feet far exceeded the diurnal fluctuations.

The pre-test water levels fluctuated approximately 2 feet between an elevation of approximately 2,532 and 2,534 feet. The hydrograph shows an approximate 1-foot drawdown from these static levels at the start of the pumping test. This approximate 1-foot drawdown indicates that the well had not fully recovered from a prior false start. Regardless, water levels returned to the pre-test range following aquifer-test recovery.

Discharge adjustments and diurnal fluctuations distorted the drawdown curve on semi-log paper. Nonetheless, three general straight-line data segments were identified. Transmissivity estimates based on these three data segments range from 20,100 to 20,500 ft^2/day.

Residual drawdown (recovery) data plotted on a semi-log graph suggest an inflection point at $t/t' \sim 35$ (which correspond with approximately 640 minutes into the recovery period). Straight-line fits to these data yielded a transmissivity value of 25,100 ft^2/day before the inflection point and 8,900 ft^2/d for data after the inflection point. The latter value is lower than was calculated for the drawdown during the aquifer test. The difference may be associated with transducer fluctuations during the test.

4.3.2. Monitoring Well Test Well No.1 (Legacy Well)

Antecedent water-level data in Test Well No. 1 (Appendix C) show a relatively stable trend with an approximate 0.8-foot increase on 5/31/06. The reason for the water level increase is unknown but likely reflects interference from another pumping well (i.e., pumping stopped in a nearby well). The water-level elevation range between approximately 2,528 and 2,529 feet was assumed to be the pre-test static water level range in this well. The post-test water-level recovery returned to approximately 2,528.5 feet, representing full recovery.

A semi-log plot of drawdown data indicates a change in slope (inflection point) at approximately 8,000 minutes. This change in slope may have been caused by encountering a barrier (negative) boundary, change in aquifer thickness, change in aquifer material characteristics, leakage from overlying or underlying aquifers, and/or changes in discharge rates.

The transmissivity estimate based on the Theis analysis was 22,600 ft^2/day; storativity was estimate to be 0.014. Estimated transmissivity using the straight-line method for $t < 8{,}000$ minutes was 29,900 ft^2/day and 11,400 ft^2/day for $t > 8{,}000$ minutes. Recovery data yielded a transmissivity of 39,500 ft^2/day from late data (i.e., $t/t' < 5$) and 11,600 ft^2/day from early data ($t/t' > 5$).

4.3.3. Monitoring Well Test Well No. 4 (QCR Well No. 4)

A water-level decline and recovery of approximately 1.0 foot is seen in the QCR No. 4 well from 6/10/06 to 6/17/06 (the aquifer test ended on June 9, 2006). The drawdown does not appear to be related to the pumping test because the apparent drawdown trend extends approximately 4 days longer than the aquifer test, during which all other wells had mostly recovered. The drawdown and subsequent recovery was likely caused by interference from another well. Drawdown analysis was not performed with these data because of the apparent, confounding well interference.

With full hydraulic connection between the pumping well and the QCR No. 4 well, the predicted drawdown in the QCR No. 4 well would be approximately 0.5 feet after 7 days of continuous pumping in the pumping well at a rate of 1,580 gpm (assuming a transmissivity value of 20,000 ft^2/day and a storativity of 0.001). This drawdown was not apparent in the QCR No. 4 well measurements, which draws into question the degree of hydraulic connection between these two wells.

4.3.4. Monitoring Well Test Well No. 6 (Ricks Irrigation Well)

Water-level data for the Ricks Irrigation Well were collected from 6/2/2006 through 6/10/2006. The well was not available for measuring antecedent or complete recovery water levels (measurements in this well ceased when irrigation use began). Water levels during the measurement period declined approximately 1 foot, although it is not clear that the decline was caused by the aquifer test. Water-level changes in this well were most possibly caused by other, nearby wells. An analysis of these data was therefore not performed.

With full hydraulic connection between the pumping well and the Ricks well, the predicted drawdown in the Ricks well would be about 2.6 feet after 7 days of continuous pumping in the pumping well at a rate of 1,580 gpm (assuming a transmissivity value of 20,000 ft^2/day a storativity of 0.001). This drawdown was not apparent in the Ricks well measurements, which draws into question the degree of hydraulic connection between these two wells.

4.3.5. Monitoring Well Test Well No. 9 (Strata Well 1A)

The hydrograph from Test Well No. 9 shows no meaningful water-level change during the aquifer test. Substantial water-level drawdown would not be expected given the shallow 15-foot well depth. No analysis was performed with these data.

4.3.6. Monitoring Well Test Well No. 10 (Strata Well 1B)

A minor water-level decline of approximately 0.30 feet was observed from 6/11/2006 through 6/13/2006, which recovered over approximately 2 days. This slight decline and subsequent recovery coincides with the drawdown observed in Monitoring Well No. 4 (QCR No. 4), but does not directly coincide with the aquifer-test drawdown and

recovery period. The minor drawdown in Well No. 10 is attributed to interference from another well because the drawdown pattern does not coincide with the aquifer-test drawdown pattern.

4.3.7. Monitoring Well Test Well No. 11 (UWI 1A)

Water levels in Test Well No. 11 (UWI 1A) fluctuate over an approximate 0.7-foot range prior to the aquifer test. Water levels during the pre-test period were influenced by well interference events on 6/26/06, 5/31/06, and the aborted pump test on 6/1/06 (Table 2). The assumed static water level in this well is an elevation range between approximately 2531.5 and 2532.0 feet. The actual pump test began with an approximate 0.5-foot residual drawdown from the initial aborted test. The maximum drawdown during the test was approximately 5.75 feet. Water levels recovered to the initial static water-level range.

Drawdown data plotted on a semi-log graph indicate a change in slope at approximately 5,000 minutes into the test. The change in slope likely reflects a recharge (positive) boundary, change in aquifer thickness, change in aquifer material characteristics, leakage, and/or discharge variations. Two transmissivity values were calculated from the semi-log plot: 14,200 ft^2/day for $t < 5{,}000$ minutes and 21,500 ft^2/day for $t > 5{,}000$ minutes. A storativity value of 5.5×10^{-5} was estimated using the straight-line method.

A log-log plot of drawdown data and Theis curve match yielded an estimated transmissivity of 16,200 ft^2/day and a storativity of 8.95×10^{-4} (based on drawdown data collected after about 1500 minutes into the test).

Recovery data plotted in a semi-log graph yielded 3 transmissivity estimates: 14,200 ft^2/d for $t/t' > 10.5$, 10,500 ft^2/d for t/t' between 7 and 10.5, and 11,400 ft^2/day for $t/t' < 7$.

Recovery data plotted as drawdown versus t/t_0 returned to a positive x-intercept (i.e., the drawdown curves intercept the x-axis between t/t_0 values of 3 and 6). Small positive x-intercept values may result from variations in storativity; larger values (such as those seen here) reflect aquifer recharge (Driscoll, 1986).

4.3.8. Monitoring Well Test Well No. 12 (UWI 1B)

Monitoring well No. 12 is the deep completed piezometer nested with monitoring well No. 11. There is no annular seal separating open intervals in Wells No. 10 and No. 11. Similar water level responses to pumping in Well No. 2 reflect the open well construction or vertical connection within the aquifer. Water level responses are similar (but not identical) to those observed in Test Well No. 11 (UWI 1A).

Water levels in Test Well No. 12 (UWI 1B) fluctuate over an approximate 0.7-foot range prior to the aquifer test. Water levels during the pre-test period were

influenced by well interference events on 6/26/06, 5/31/06, and the aborted pump test on 6/1/06 (Table 2). The assumed static water level in this well is a range from approximately 2531.5 feet to 2532.0 feet. The actual pump test began with an approximate 0.5-foot residual drawdown from the initial aborted test. The maximum drawdown during the test was approximately 5.75 feet. Water levels recovered to the initial static water-level range.

Drawdown data plotted on a semi-log graph indicate a change in slope at approximately 5,000 minutes into the test. The change in slope likely reflects a recharge (positive) boundary, change in aquifer thickness, change in aquifer material characteristics, leakage, and/or discharge variation. Two transmissivity values of were calculated from the semi-log plot: 14,900 ft^2/day for t < 5,000 minutes and 20,900 ft^2/day for t > 5,000 minutes. A storativity value of $5.5x10^{-5}$ was estimated using the straight-line method.

A log-log plot of drawdown data and Theis curve match yielded an estimated transmissivity of 16,400 ft^2/day and a storativity of 9.84×10^{-4} (based on drawdown data collected after about 1,500 minutes into the test).

Recovery data plotted in a semi-log graph yielded 3 transmissivity estimates: 15,400 ft^2/d for t/t' > 10.5, 10,200 ft^2/d for t/t' between 7 and 10.5, and 11,300 ft^2/day for t/t' < 7.

5. SUMMARY OF AQUIFER PARAMETER VALUES

Responses to pumping in the Eagle aquifer test were observed in Test Well No. 2 (Eaglefield Well), Test Well No. 1 (Legacy Well), and the two UWI monitoring wells (1A and 1B). Water level changes in the Ricks and QCR No. 4 wells were attributed to well interference from other wells (because drawdown patterns did not correspond with pumping in Test Well No. 2). Lack of apparent response in the Ricks and QRC No. 4 wells to this aquifer test is likely because of indirect hydraulic connection between these wells and the No. 2 pumping well and/or partial aquifer penetration (despite being completed at similar depths). Lack of response in the Strata wells is not surprising because these wells are completed in shallow, hydraulically distinct aquifers.

Transmissivity values calculated from aquifer-test results (Table 4 and Figure 7) generally ranged from about 10,000 ft^2/day (74,800 gpd/ft) to 36,600 ft^2/day (274,000 gpd/ft). These transmissivity estimates are consistent with aquifer parameter values estimated from pumping tests in the nearby Floating Feather and Redwood Creek wells.

Storativity values (based on the Theis method) ranged from $5.5x10^{-4}$ to $1.48x10^{-2}$. The $5.5x10^{-4}$ value is consistent with confined-aquifer conditions and the $1.48x10^{-2}$ value is consistent with partially-confined aquifer conditions. The $1.48x10^{-2}$ value may reflect a poor Theis-curve match.

Changes in slopes of drawdown rates plotted on semi-log graphs indicate positive and/or negative boundary conditions, changes in aquifer thickness, variations in aquifer material characteristics, leakage from overlying and/or underlying aquifers, and/or discharge fluctuations. The drawdown-curve variations are consistent with lithologic heterogeneity described in well drillers' reports for this area.

6. IMPACTS TO EXISTING WELLS

Potential impacts to existing wells were estimated using the aquifer test results presented above. A series of drawdown estimates were calculated using a series approximation to the Theis solution (Theis, 1935) and using various discharge rates, distances from the pumping well, and aquifer parameter values (Table 4).

The various discharge rates for the impact projections were based on reasonably-anticipated annual withdrawals. Our understanding is that proposed water rights 63-32089 and 63-32090 will serve the west-Eagle area. The City of Eagle Amended Water Master Plan prepared in December 2005 projects approximately 8,000 equivalent residential units for this area. Based on the most current information there could be as many as 14,000 equivalent residential units in the west-Eagle area.

Water use under the proposed water rights will be used primarily for domestic purposes (because surface water is available for irrigation in most of this area). Average domestic water use, based on our experience, is less than 250 gallons per day (gpd) per unit. The American Water Works Association (2004) estimated that national indoor water use is 70 gallons per capita per year (enough water to supply an average of 3.6 residents per home at the 250 gpd per unit rate). The Surprise Valley subdivision in southeast Boise (which uses surface water for irrigation) used an average of approximately 200 gpd per residential unit for domestic purposes (based meter records between 2000 and 2004). Assuming 250 gpd per unit, a reasonable maximum expected withdrawal volume under the proposed water rights for 14,000 units is approximately 3,920 acre feet per year. This is equivalent to an average annual pumping rate of 2,430 gpm (5.41 cfs). Actual pumping rates could range from less than 5.41 cfs to as high as 8.9 cfs (which would represent a peaking factor of 1.65 over the average rate).

Thus, potential impacts were projected at annual volumetric withdrawals of 1,000, 2,000, and 4,000 acre feet per year, representing various stages of water development in the listed place of use. Realizing these withdrawal volumes will take multiple years.

Distances from the theoretical pumping well were based on approximate distances to protestant wells. The closest protestant's well is approximately 1,500 from the closest point of diversion under this permit. More distant protestant's wells are approximately 2 miles from the closest point of diversion.

The Theis approach used to estimate projected impacts likely over-predicts impacts because recharge is neglected and possibly under-predicts impacts because the aquifer is likely not of infinite areal extent. However, the net aquifer impacts in this case are likely over-predicted because of substantial aquifer recharge. Substantial aquifer recharge is the only explanation for stable water levels in the context of substantial local historical withdrawal increases (Section 2.4).

Potential drawdown from one well pumping water at average rates between 620 (1.38 cfs) and 3,995 gpm (8.9 cfs) for a 1-year period were estimated using aquifer parameter values in the range of those observed in the Eagle aquifer test (e.g., T = 10,000 and 20,000 ft^2/day and S = $1x10^{-4}$ and $1x10^{-3}$). Discharge rates equivalent to annual withdrawals of 1,000, 2000, and 4,000 acre-feet per year reflect possible withdrawals over the development period of this right. The effects of a continuous full diversion at 8.9 cfs (representing an annual withdrawal volume of 6,400 acre-feet per year), although highly unlikely, were also evaluated. All Theis projections were done for a theoretical 1-year period.

The estimated drawdown amounts following one year of continuous pumping (assuming a transmissivity value of 20,000 ft^2/day and a storativity of 0.001) at rates between 620 gpm and 2,480 gpm (equivalent to annual withdrawal volumes of 1,000 and 4,000 and depending on distance from the pumping well) range from 2.4 to 17 feet, respectively (Table 4). A lower transmissivity value (T=10,000 ft^2/day) and a storativity of 0.001 would result in drawdown rates ranging from 4.1 to 32 feet, respectively. A transmissivity of 20,000 ft^2/day and a storativity of 0.0001 results in projected impacts of 3.5 to 22 feet. Finally, a transmissivity value of 10,000 ft^2/day and storativity of $1x10^{-4}$ results in projected drawdown of 6.3 to 40 feet.

Projected impacts at a withdrawal rage of 3,995 gpm (8.9 cfs), equivalent to an annual withdrawal of 6,400 acre-feet per year, ranged from 15.2 to 65 feet between 1,400 feet and 2 miles from the pumping well. However, these impacts are highly unlikely because this withdrawal rate is unlikely.

Again, the estimates listed above are conservative because recharge to the target aquifers is neglected. Substantial recharge occurs, as evidenced by stable water levels (Section 2.4) despite increasing historical withdrawals. For example, production in the nearby Floating Feather Well (Figure 9), which is completed in a similar aquifer zone as the Test Well No. 2, increased from 266 acre-feet per year in 1997 to almost 1,500 acre-feet per year in 2004 with no apparent water-level decline. Production in the Redwood Creek well (Figure 9) increased from 2 acre-feet in 2000 to 314 acre-feet in 2004. In fact, municipal ground-water production throughout the Eagle area (Figure 10) increased from about 794 acre feet in 1993 to 3,923 acre feet in 2002 – a 3.7-fold increase. Current production may exceed 5,000 acre feet per year. Nonetheless, water levels in the west Eagle area remained relatively stable (Figure 4) during this time. Based on these observations, the Theis drawdown projections based on aquifer-test results are likely conservative.

The hydraulic connection between the pumping well and the Ricks and QCR No. 4 wells appears to be more limited than between the pumping well and the UWI wells to the south. The impacts of extended pumping from the No. 2 (Eaglefield) well (or other points of diversion under the proposed permit) would be less in aquifers of limited hydraulic connection.

The ultimate sustainable yield of aquifers in this area is unknown. However, stable water levels, despite historical production increases, bode well for continued water

development. Furthermore, simulations using the Treasure Valley aquifer model (Petrich, 2004a; Petrich, 2004b) suggest the potential for additional water development capacity in this area.

7. CONCLUSIONS AND RECOMMENDATIONS

The primary conclusion from this aquifer-test review and analysis is that the target aquifer for Applications 63-32089 and 63-32090 has sufficient capacity for additional withdrawals. Specific conclusions include the following:

Aquifer and Water Levels

1. The target aquifers consist of confined to partially-confined sand layers approximately 200 to 500 feet below ground surface.
2. Water levels in the vicinity of the proposed diversions are stable. Numerous deeper wells have artesian heads extending as high as 19 feet above ground surface.
3. Transmissivity estimates developed from previous tests of confined aquifers calculated from pumping tests of other wells in the west Eagle area (i.e., Redwood Creek and Floating Feather wells) ranged from 7,400 to 21,500 ft^2/day.

Aquifer Test

4. A 7-day aquifer test was conducted with an average discharge rate of approximately 1,580 gpm. This rate is consistent with expected diversion rates from individual wells under the proposed permit.
5. Responses to pumping in the Eagle 7-day aquifer test were observed in the No. 2 (Eaglefield), No. 1 (Legacy), and United Water wells. Lack of response in the Ricks and QRC No. 4 wells is likely because of an insufficient hydraulic connection.
6. Estimated transmissivity values from the 7-day aquifer test ranged from about 10,000 to 39,500 ft^2/day. One lower value (8,600 ft^2/day) is suspect because it was based on a period of apparent water-level fluctuations (which were likely caused by a clogged transducer vent tube).
7. Storativity values from the 7-day aquifer test ranged from 8.95×10^{-4} to 1.48×10^{-2}.
8. Semi-log plots of aquifer drawdown and recovery indicated possible barrier (negative) boundary effects, recharge (positive) boundary effects, variations in aquifer thickness, leakage, and/or changes in aquifer materials. The most apparent negative boundary effect was observed in the Legacy monitoring well. Offset strata or spatial variations in aquifer materials or thicknesses (which would result in an apparent negative boundary effect) are consistent with the conceptual model of aquifer conditions in this area.
9. Aquifer-recharge effects during the aquifer test are indicated by positive x-intercepts in straight-line UWI-well recovery plots (drawdown vs. t/t_0).

10. Water levels fully recovered in the pumping and monitoring wells from drawdown associated with the aquifer test.

Potential Impacts to Existing Users

11. Substantial increases in ground water withdrawals for municipal purposes in Eagle over the last 10 years have not resulted in substantial local water-level declines.

12. Potential well interference under reasonable pumping scenarios projected using the Theis method resulted in theoretical water-level drawdowns ranging from about 2 to 25 feet at a distance of two miles from the pumping well (depending on assumed aquifer parameter values, and assumed pumping rate). At 1,400 feet from a pumping well the theoretical drawdown estimates ranged from 4 to 40 feet (the closest distance between a protestants' well and potential point of diversion is approximately 1,500 feet). The effects of offset strata or spatial variations in aquifer materials or thicknesses (which would result in an apparent negative boundary effect) could exacerbate water level responses to pumping. However, these theoretical projections of water level impacts are likely very conservative because (a) aquifer recharge is excluded and (b) similar pumping rates in nearby wells (e.g., Floating Feather and Redwood Creek) have resulted in minor (if any) local water-level declines.

Aquifer Capacity

13. The aquifer in the vicinity of the proposed diversions has capacity for additional diversions, based on currently stable water levels.

14. The aquifer in the vicinity of the proposed diversions likely has the capacity to supply the entire amount of water that would likely be withdrawn under these permits (approximately 4,000 acre feet per year), although some drawdown from the proposed diversions will occur.

Monitoring

15. Monitoring and reporting of production rates from all points of diversion under the proposed permit is recommended.

16. Periodic (e.g., quarterly) water-level monitoring in selected wells near the points of diversion is recommended during the permit development period.

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APPENDIX A: FIGURES

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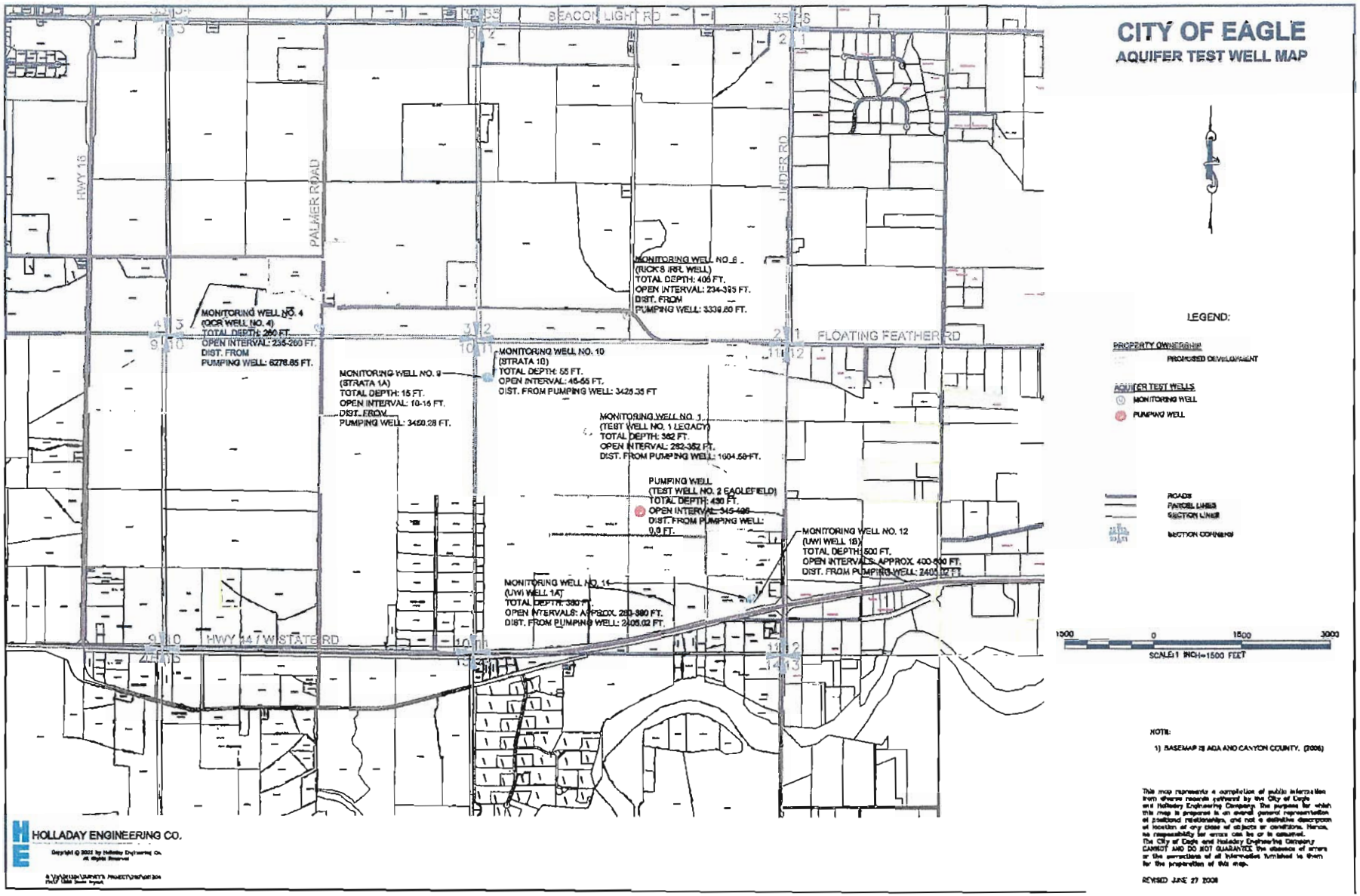


Figure 1: Site map

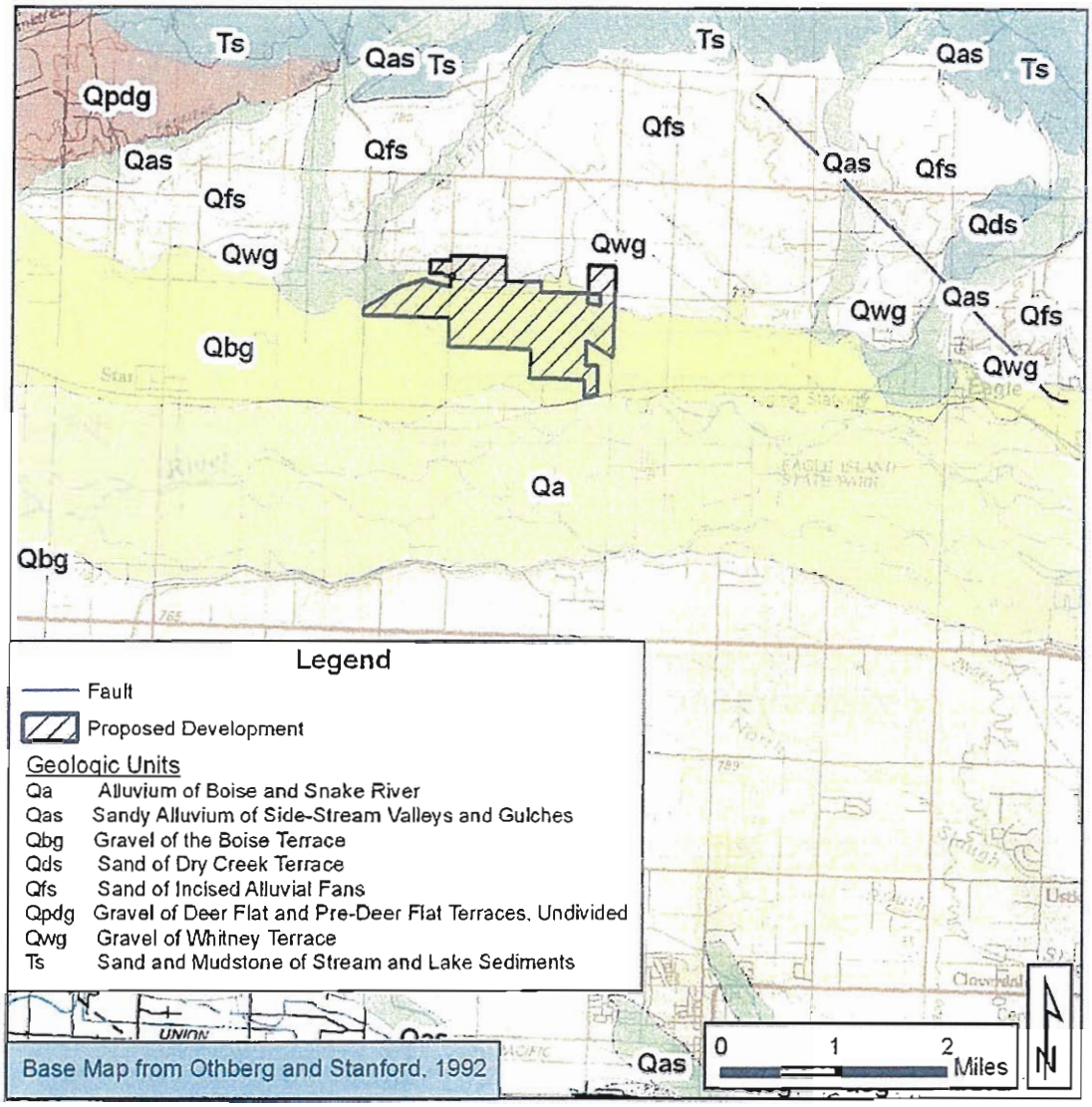


Figure 2: Surficial geology.

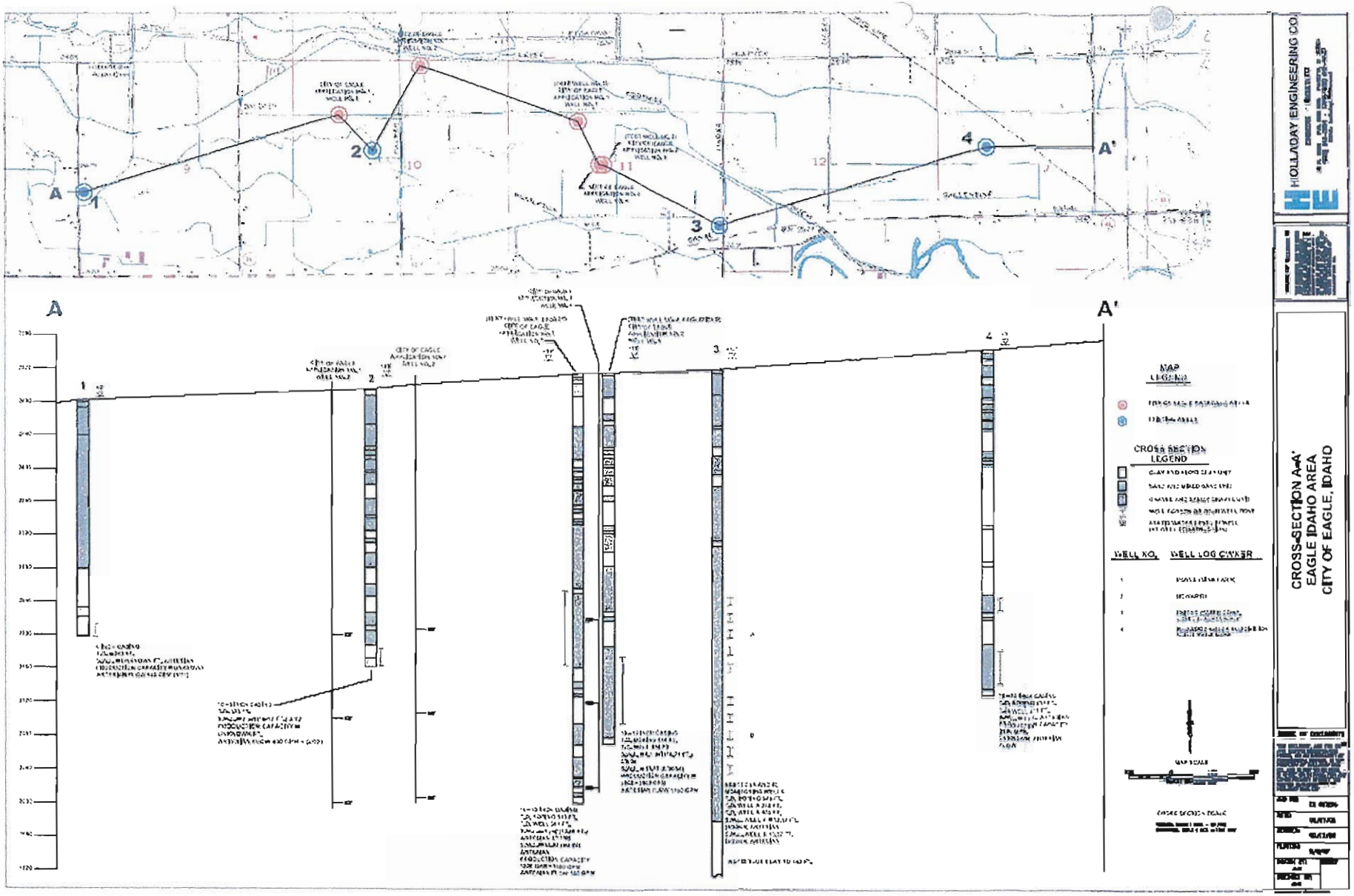


Figure 3: Lithologic cross section

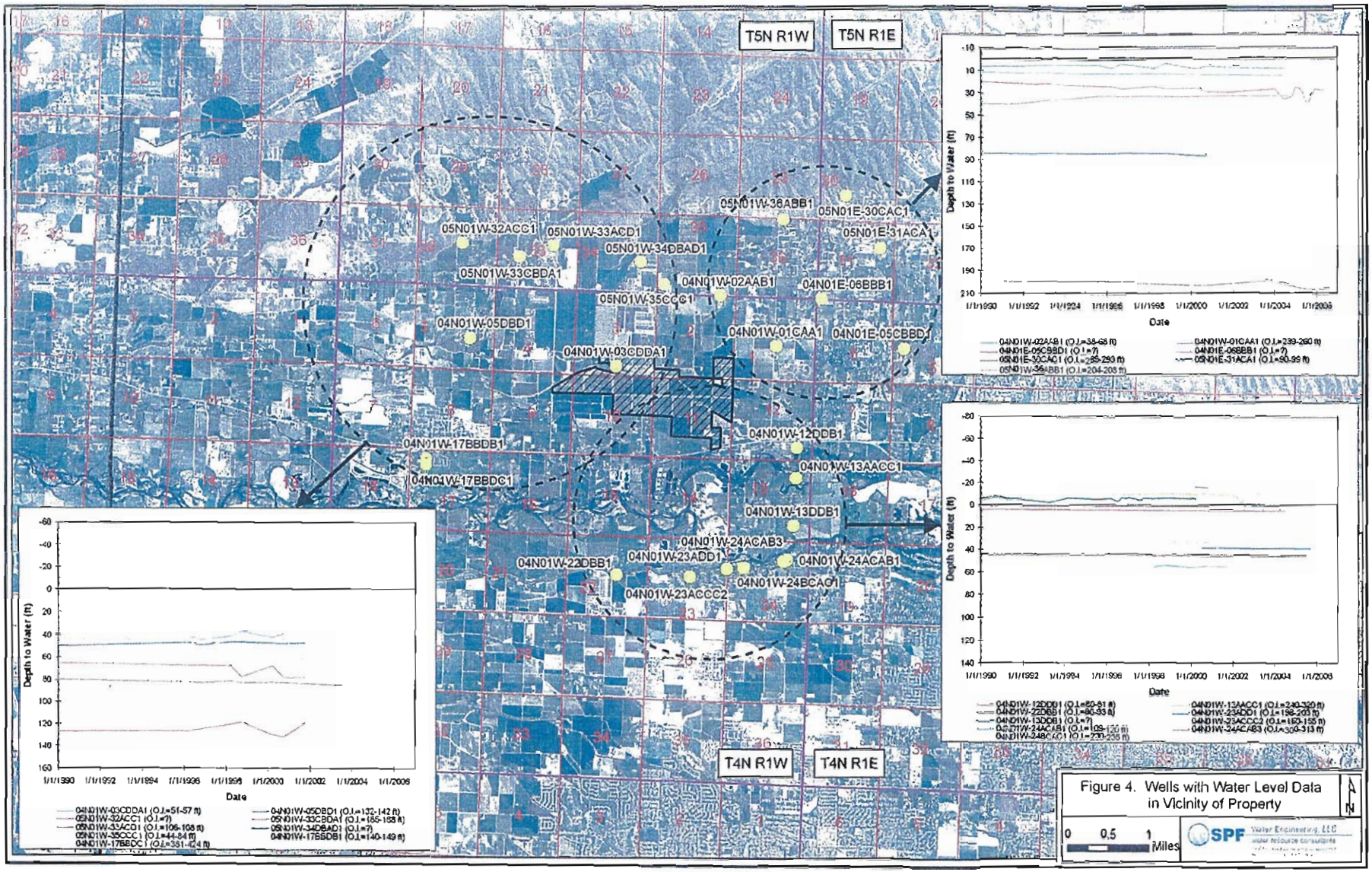


Figure 4: Water levels

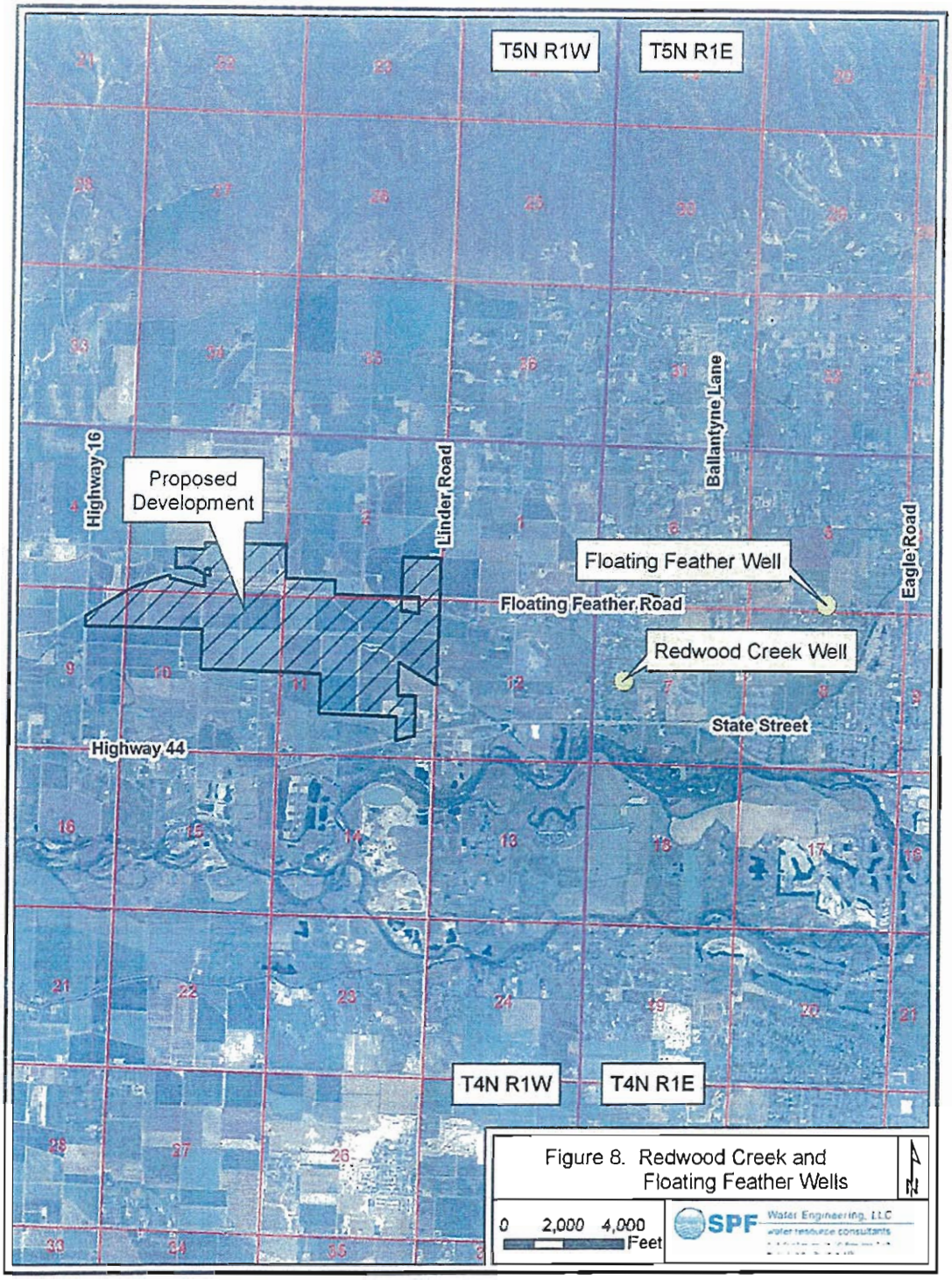


Figure 5: Location of Floating Feather and Redwood Creek wells.

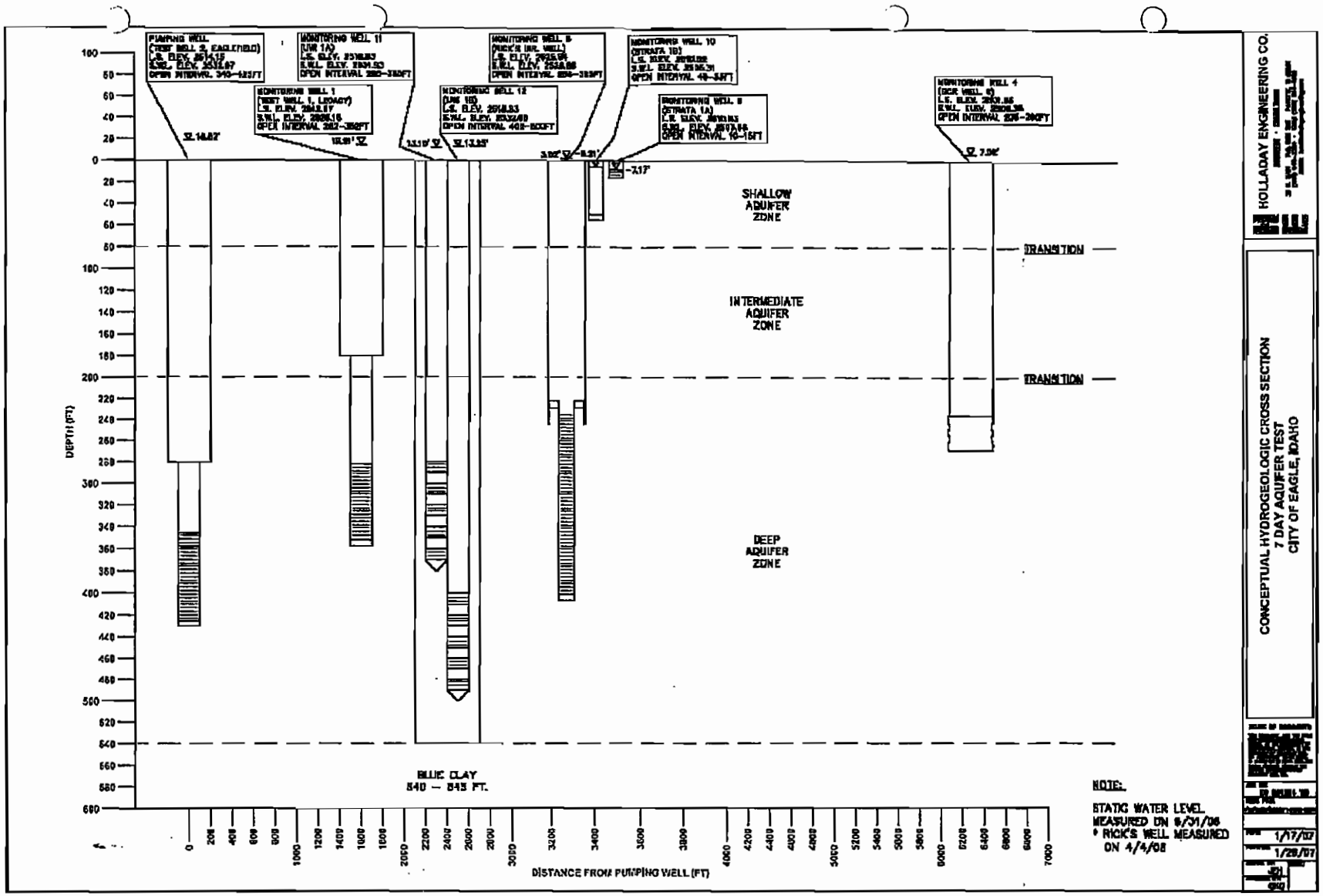


Figure 6: Conceptual cross section

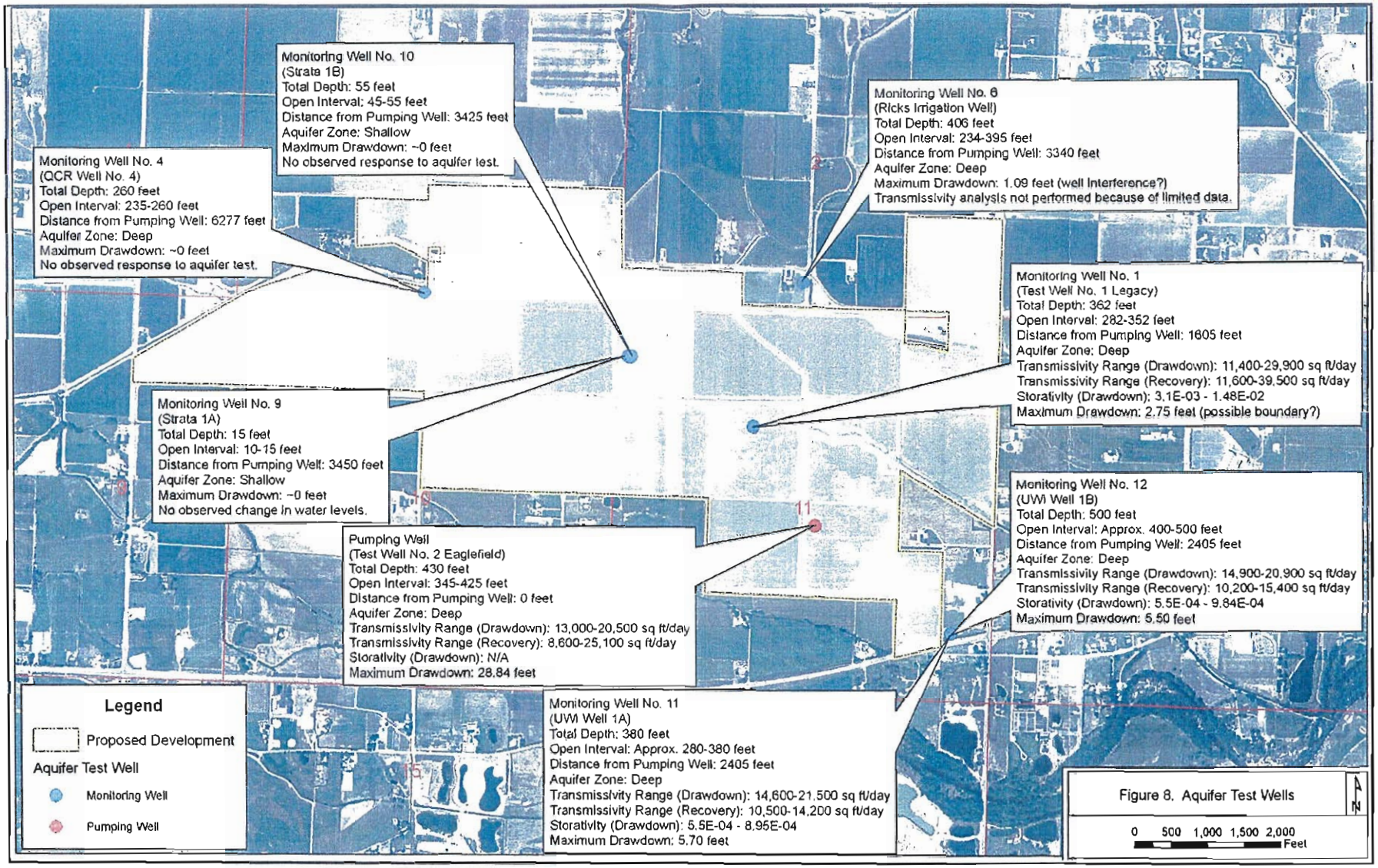


Figure 8: Aquifer test summary map **Page 28**

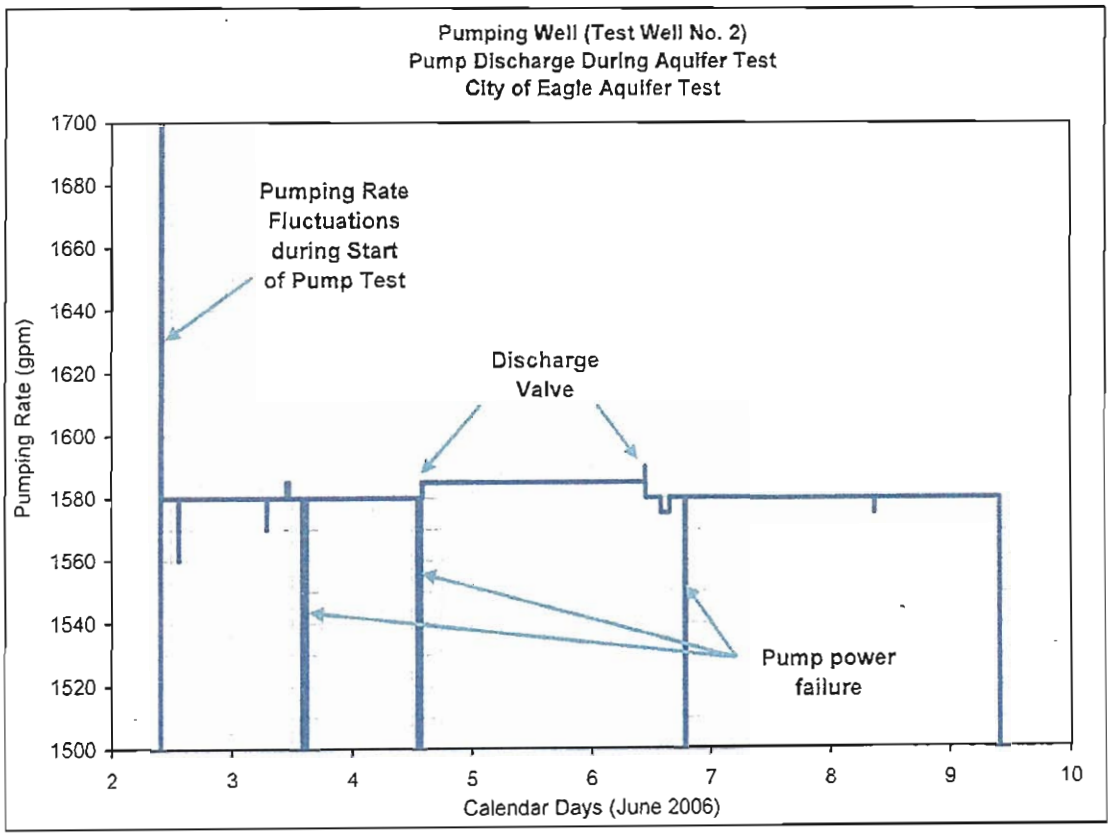


Figure 7: Discharge rate.

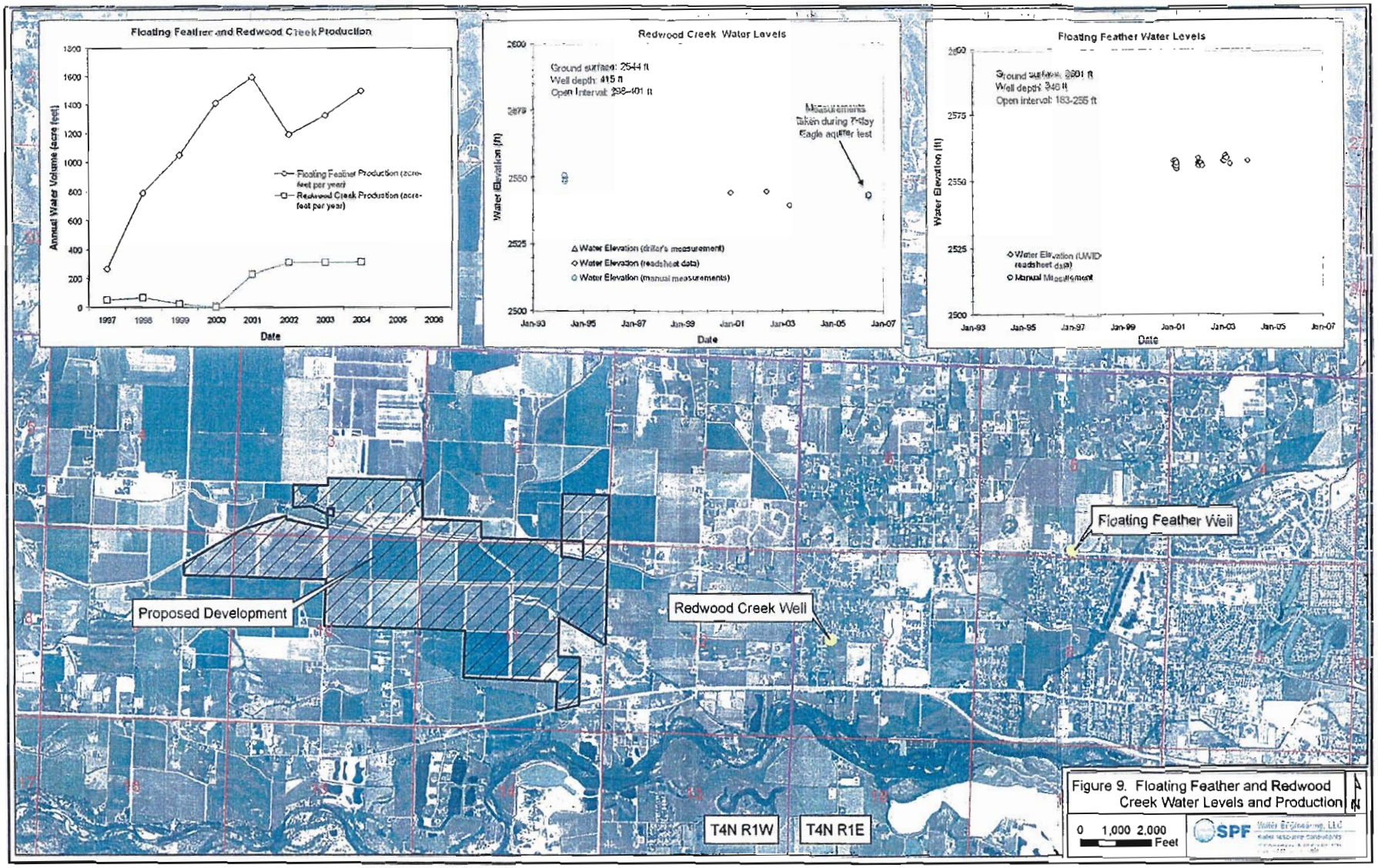


Figure 9: Floating Feather and Redwood Creek Page 29

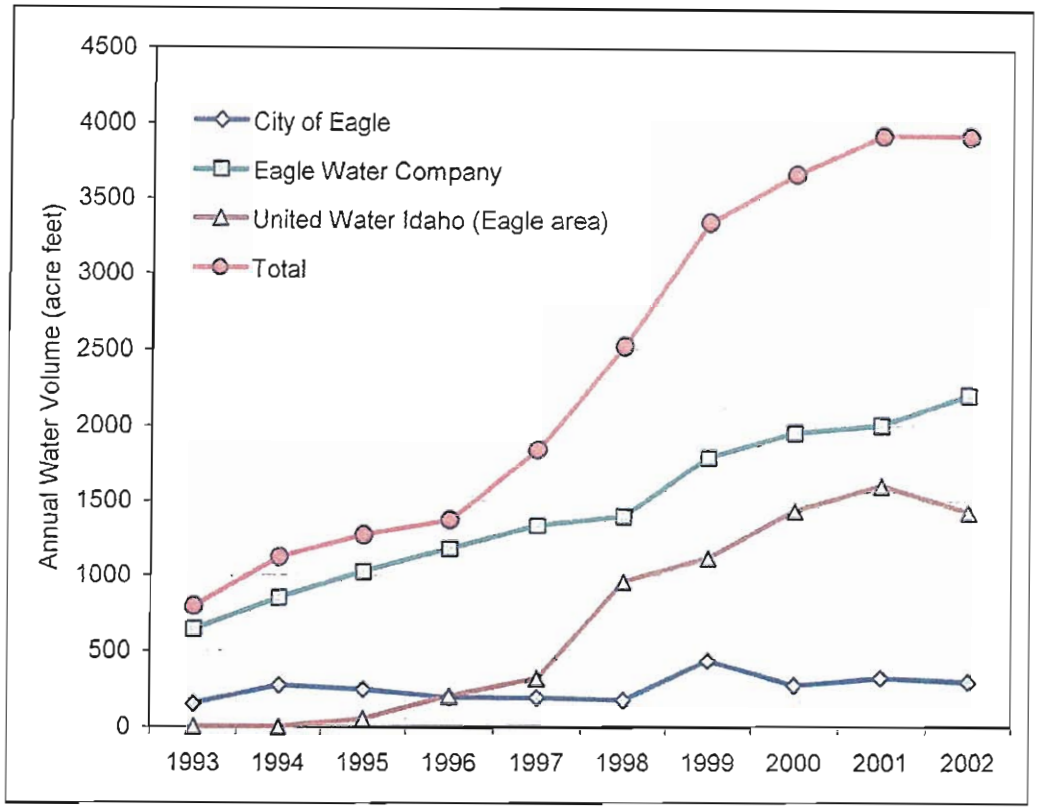


Figure 10: Eagle-area ground-water withdrawals, 1993-2002.

APPENDIX B: TABLES

Table 1: Antecedent water-level trends. 32
Table 2: Aquifer test notes. 33
Table 3: Summary of aquifer-test results. 34
Table 4: Theis (1935) estimates of drawdown at various rates and at various distances from pumping well after 365 days of continuous pumping 35

Well	Antecedent Trend Comments
Test Well No. 2 (Eaglefield)	Diurnal fluctuations of approximately 2 feet observed in pre-test, test, and post-test data. The fluctuations are not similar to pre-test barometric pressure variations, and do not coincide with test and post-test barometric pressure variations. Water-level fluctuations are most likely caused by transducer vent-tube heating and cooling.
Test Well No. 1 (Legacy)	Pre-test water levels show a slight increasing trend and an approximate 2-foot rise during the day prior to the test. A slight decreasing barometric pressure trend during the test and increasing trend beginning approximately 5 days after the test may be influencing water levels in this test well, but apparent well interference (suggested by the water-level rise prior to the test) preclude a meaningful barometric pressure correction.
Monitoring Well No. 4 (QCR No. 4)	A slightly decreasing water-level trend extending to approximately Day 5 of the recovery test and subsequent water-level rise generally coincides with a barometric pressure change. However, an approximately 0.35 psi (0.81 feet of water) rise prior to the test resulted in no apparent water-level response, precluding meaningful barometric corrections.
Monitoring Well No. 6 (Ricks Well)	Water-level trends mirror a general barometric pressure decline, but the water-level decline exceeds the barometric pressure change. Water-level effects are likely a response to the pumping well or other nearby wells.
Monitoring Well No. 9	No meaningful water-level changes recorded during test (this well penetrates an unconfined aquifer so minimal barometric pressure impacts would be expected).
Monitoring Well No. 10	No meaningful water-level changes recorded during test (this well penetrates an unconfined aquifer so minimal barometric pressure impacts would be expected).
Monitoring Well No. 11 (UWI 1A South)	Slight visual appearance of barometric effects prior to, during, and after aquifer test, although other apparent interference events (such as from pumping well) minimizes value of barometric correction.
Monitoring Well No. 12 (UWI 1A South)	Slight visual appearance of barometric effects prior to, during, and after aquifer test, although other apparent interference events (such as from pumping well) minimizes value of barometric correction.

Table 1: Antecedent water-level trends.

Note	Date & Time	Description of Pumping Test Events
1	5/26/06 12:30	Installed production pump in Test Well No. 2, opened artesian discharge valve at Test Well No. 2 and discharged water at an estimated rate of 1,000 gpm from 5/26/06 12:30 to 5/26/06 18:20.
2	5/31/06 10:00	Tested pumping equipment prior to starting the pump test at Test Well No. 2. Pumped water at an estimated rate of 1,600 gpm on 5/31/06 10:00 to 5/31/06 12:00.
3	6/1/06 10:00	Started the aquifer test at a pumping rate of 1,500 gpm but aborted the test after a power failure at Test Well No. 2 (pumping well) on 6/1/06 at 15:45. Aborted pump test period was from 6/1/06 10:00 to 6/1/06 15:45.
4	6/2/06 9:15	Opened artesian discharge valve at Test Well No. 1 to replace water-level sight tube on 6/2/06 9:15 to 9:20. Discharge rate was estimated at 300 gpm.
5	6/2/06 10:00	Restarted pumping phase of aquifer test on 6/2/06 10:00 at 1,580 gpm and continued constant rate pumping to 6/9/06 10:00 am.
6	6/3/06 14:00	Power failure at pumping well (Test Well No. 2) because of possible generator overheating. Pumping rate was 1580 gpm. Pump stopped on 6/3/06 14:00. Restarted pump on 6/3/06 14:49.
7	6/4/06 13:11	Power failure at pumping well (Test Well No. 2) due to possible overheating of generator. Pumping rate was 1,580 gpm. Pump stopped on 6/4/06 13:11. Restarted pump on 6/4/06 13:52
8	6/6/06 18:41	Power failure at pumping well (Test Well No. 2) due to possible overheating of generator. Pumping rate was 1,580 gpm. Pump stopped on 6/6/06 18:41. Restarted pump on 6/6/06 18:52
9	6/10/06 9:15	Pumping of Tom Ricks Irrigation well (Monitoring Well No. 6) for irrigation of hay field. Well discharge rate into canal was estimated at 1,000 gpm from 6/10/06 9:15 to 6/10/06 17:00.
10	6/13/06 10:00	Removal of the production pump at Test Well No. 2. Artesian discharge valve was opened and water was discharged at an estimated rate of 1,000 gpm from 6/13/06 10:00 to 6/13/06 14:00; transducer was removed.

Table 2: Aquifer test notes.

Well ID	Monitoring Well Configurations			Drawdown Analysis					Recover Analysis	
	Open Interval (ft)	Aquifer Zone	Radial Distance From Pumping Well (ft)	Max DDN (ft)	Theis		Semi-Log Method		Semi-Log Method	
					T ft^2/day	S	T ft^2/day	S	T ft^2/day	S
Test Well 2 (Pumping Well)	345-425	Deep	0.00	28.84	13,000	n/a	20,500	n/a	25,100	n/a
							20,100	n/a	8,600	n/a
							20,100	n/a		
Test Well 1 (Legacy)	282-352	Deep	1,605	2.75	22,600	1.48E-02	29,900	3.1E-03	39,500	n/a
							25,600	n/a	11,600	n/a
							11,400	n/a		
Monitoring Well 11 (UWI 1A)	280-330	Deep	2,405	5.68	16,200	8.95E-04	14,600	5.5E-04	14,200	n/a
							21,500	n/a	10,500	n/a
									11,400	n/a
Monitoring Well 12 (UWI 1B)	400-500	Deep	2,405	5.51	16,400	9.84E-04	14,900	5.5E-04	15,400	n/a
							20,900	n/a	10,200	n/a
									11,300	n/a
Monitoring Well 6 (Ricks Well)	234-395	Deep	3,340	1.09	Limited data, no analysis preformed					
Monitoring Well 4 (QCR Well 4)	235-260	Deep	6,277	n/a	Observed water level change is not a response to aquifer test					
Monitoring Well 9 (Strata 1A)	10-15	Shallow	3,450	n/a	No observed water level change					
Monitoring Well 10 (Strata 1B)	45-55	Shallow	3,425	n/a	Observed water level change is not a response to aquifer test					
Range of Transmissivity Estimates: 34,600 - 8,900 ft^2/ft										
Range of Storativity Estimates: 1.48×10^{-2} - 9.84×10^{-4}										

Table 3: Summary of aquifer-test results.

T (ft^2/day)	S	Annual Volume (acre-feet)	Average Discharge to Meet Annual Volume (gpm)	Drawdown at 1400 feet (ft)	Drawdown at 3500 feet (ft)	Drawdown at 1 mile	Drawdown at 2 miles
20000	0.001	1000	620	4.3	3.4	3.0	2.4
20000	0.001	2000	1240	8.6	6.8	6.1	4.7
20000	0.001	4000	2480	17.2	13.7	12.1	9.5
20000	0.001	6400	3995	27.5	21.9	19.4	15.2

T (ft^2/day)	S	Annual Volume (acre-feet)	Average Discharge to Meet Annual Volume (gpm)	Drawdown at 1400 feet (ft)	Drawdown at 3500 feet (ft)	Drawdown at 5280 feet (ft)	Drawdown at 10560 feet (ft)
10000	0.001	1000	620	7.9	6.3	5.1	4.1
10000	0.001	2000	1240	15.8	12.5	10.1	8.2
10000	0.001	4000	2480	31.7	25.1	20.3	16.4
10000	0.001	6400	3995	51.0	40.4	32.7	26.3

T (ft^2/day)	S	Annual Volume (acre-feet)	Average Discharge to Meet Annual Volume (gpm)	Drawdown at 1400 feet (ft)	Drawdown at 3500 feet (ft)	Drawdown at 5280 feet (ft)	Drawdown at 10560 feet (ft)
20000	0.0001	1000	620	5.4	4.5	4.1	3.5
20000	0.0001	2000	1240	10.8	9 9.1	8.2 7.9	6.9
20000	0.0001	4000	2480	21.5	18 18.1	16.5	13.8 13.9
20000	0.0001	6400	3995	34.4 34.5	28.9	26.4	22.2

T (ft^2/day)	S	Annual Volume (acre-feet)	Average Discharge to Meet Annual Volume (gpm)	Drawdown at 1400 feet (ft)	Drawdown at 3500 feet (ft)	Drawdown at 5280 feet (ft)	Drawdown at 10560 feet (ft)
10000	0.0001	1000	620	10.1	8.5	7.3	6.3
10000	0.0001	2000	1240	20.2	16.9	14.5	12.5
10000	0.0001	4000	2480	40.4	33.8	29.0	25.1
10000	0.0001	6400	3995	64.6 65.1	54.5	46.8	40.1 40.4

Note:

Reasonably-anticipated pumping rates highlighted in blue.

Recharge is excluded in these estimates.

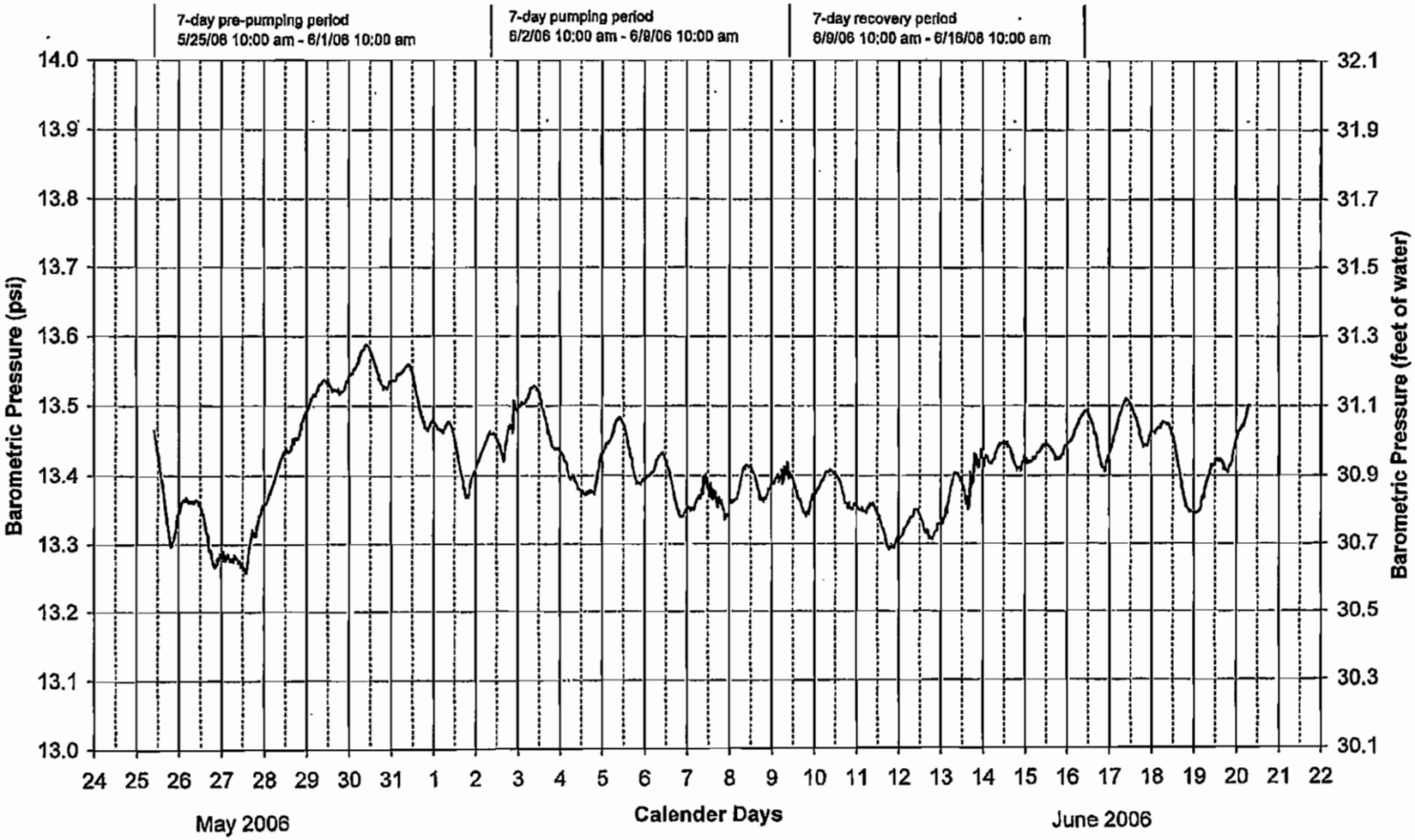
Table 4: Theis (1935) estimates of drawdown at various rates and at various distances from pumping well after 365 days of continuous pumping.

APPENDIX C: HYDROGRAPHS AND CURVE-MATCHING PLOTS

Appendix C.1

BAROMETRIC PRESSURE MONITORING

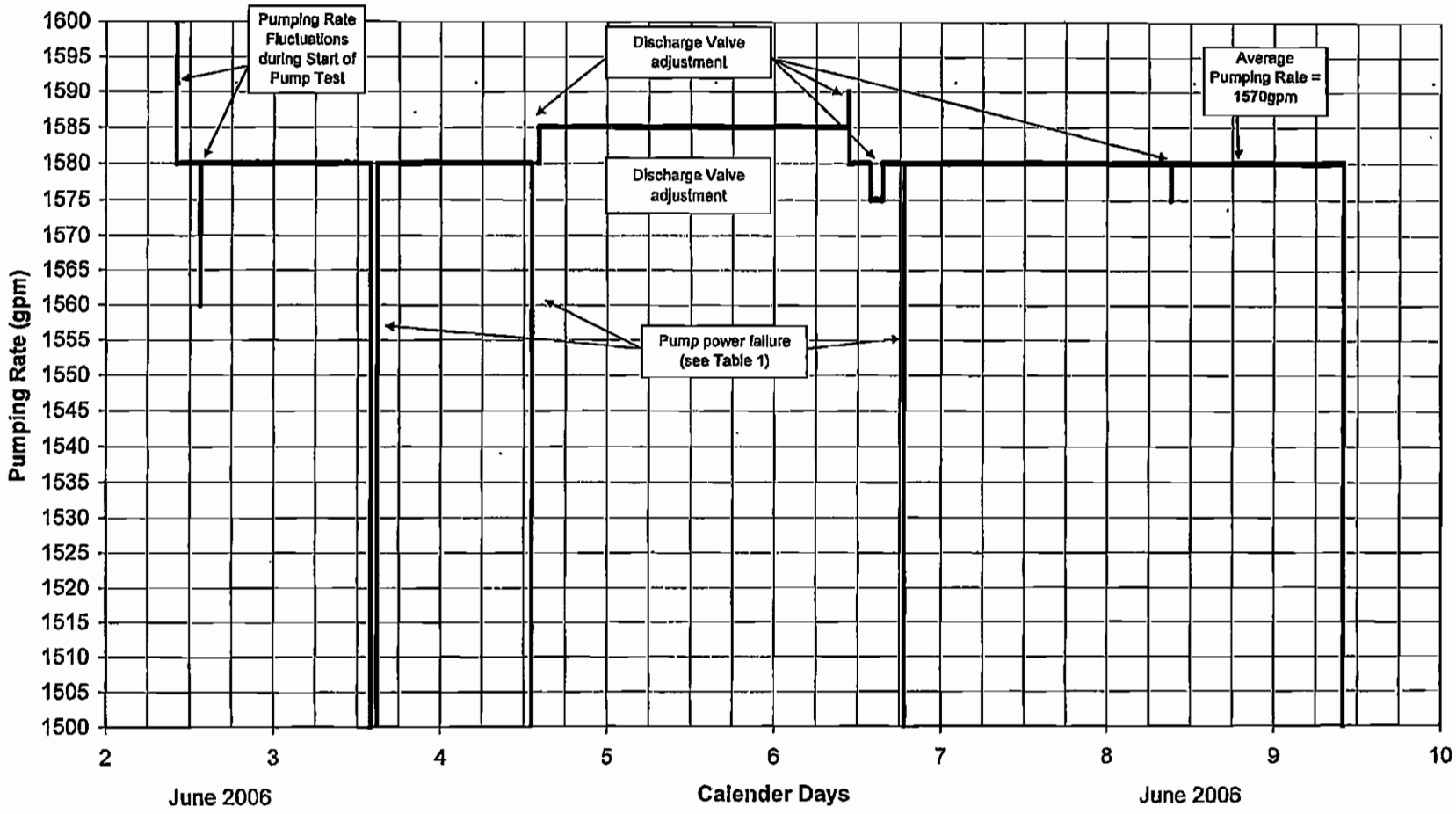
Barometric Presures Monitoring
Located at Test Well No. 2 (Eaglefield)
City of Eagle Aquifer Test



Appendix C.2

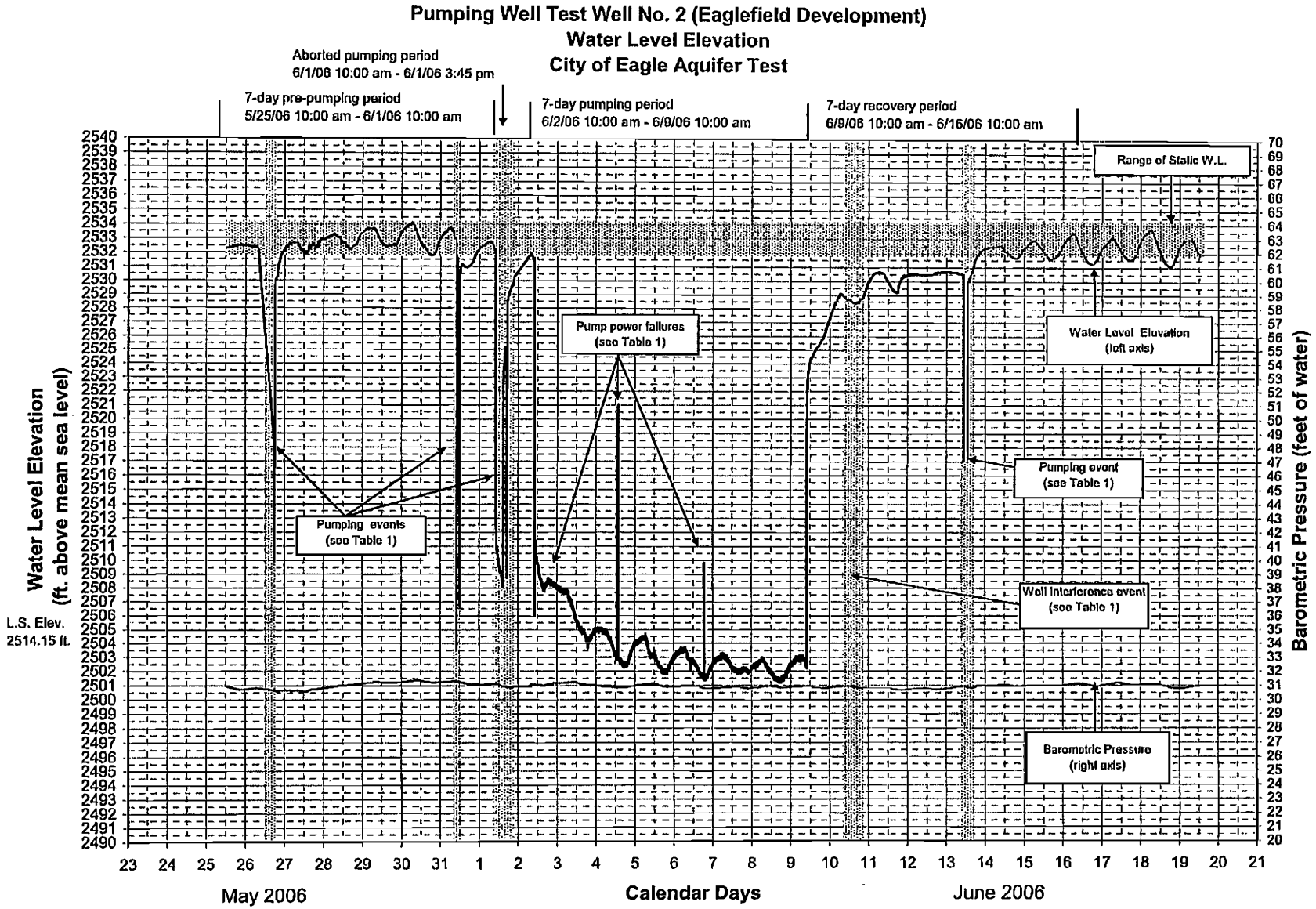
PUMP DISCHARGE MONITORING

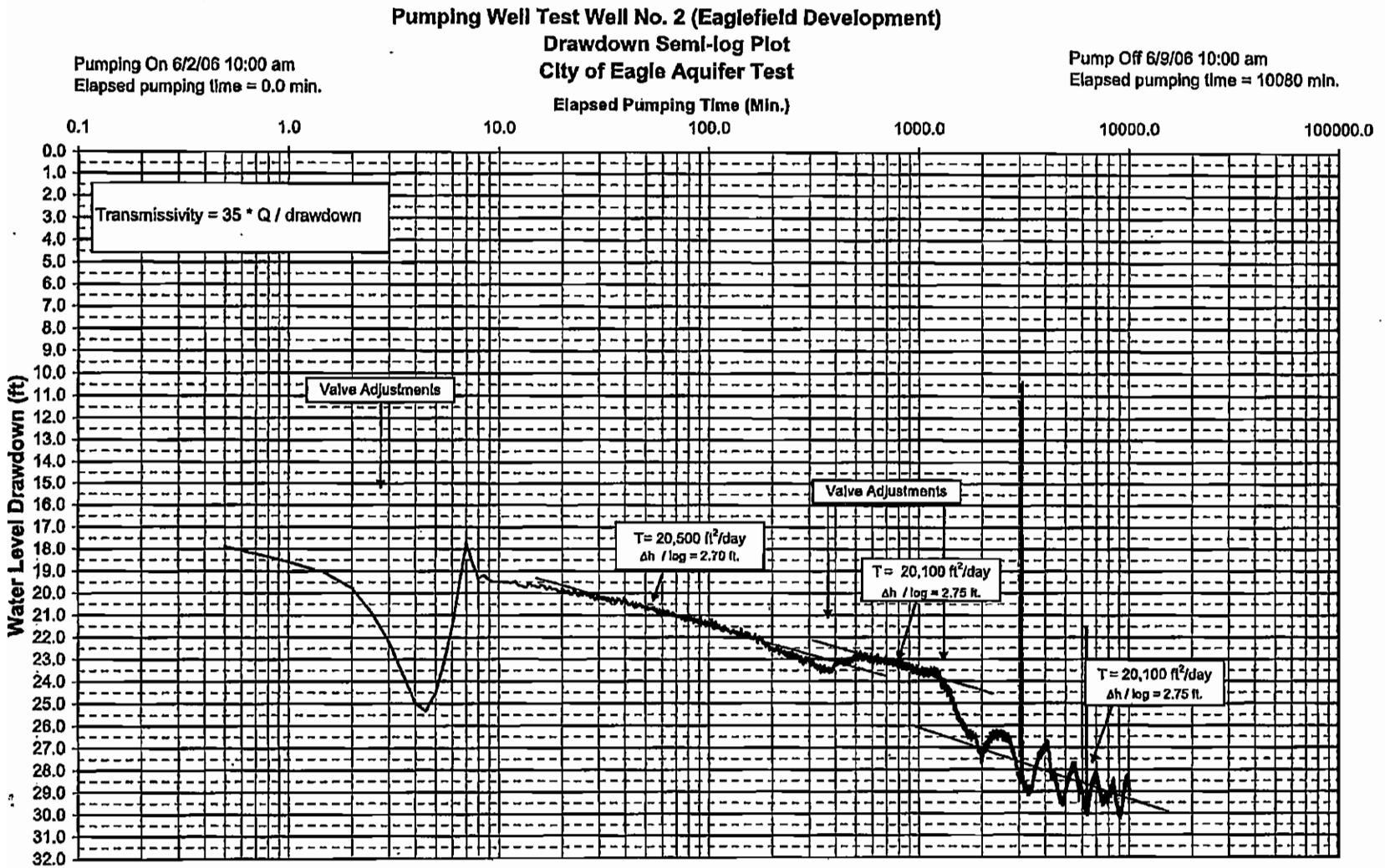
Pumping Well (Test Well No. 2)
Pump Discharge During Aquifer Test
City of Eagle Aquifer Test



Appendix C.3

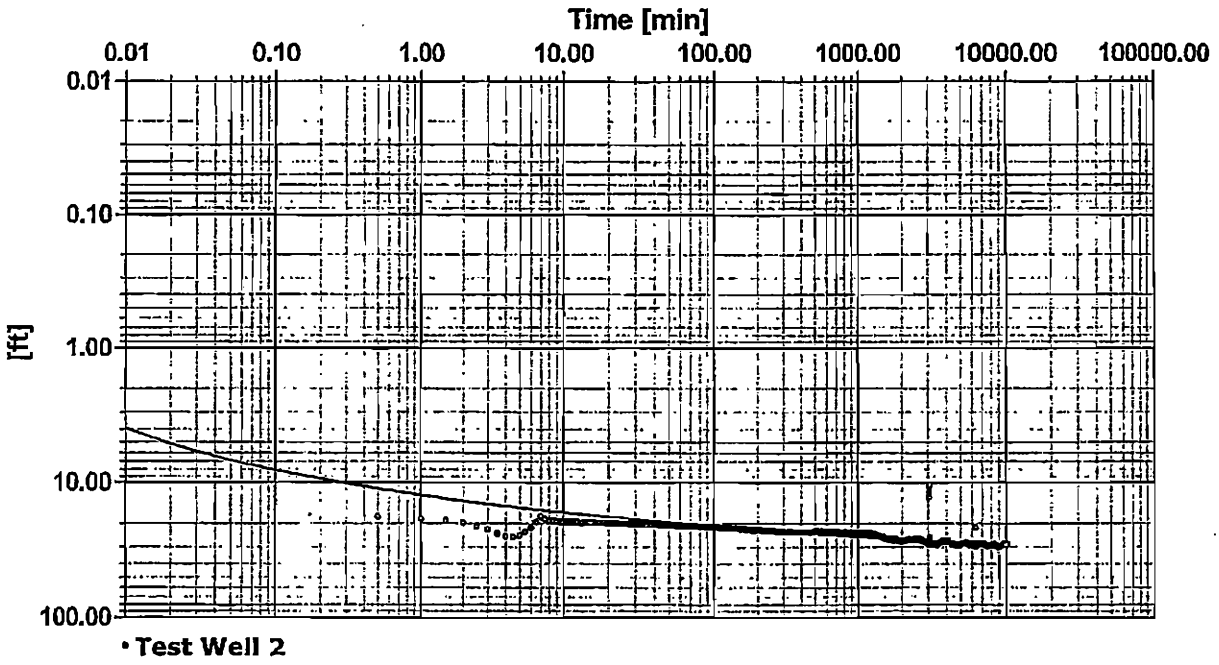
TEST WELL 2 (Eaglefield)(Pumping Well)


Pumping Well Test Well No. 2 (Eaglefield Development)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Range of Static W.L.
Pump power failures
(see Table 1)
Water Level Elevation
(left axis)
Pumping event
(see Table 1)
Pumping events
(see Table 1)
Well interference event
(see Table 1)
Barometric Pressure
(right axis)
Water Level Elevation
(ft. above mean sea level)
L.S. Elev.
2514.15 ft.
Barometric Pressure (feet of water)
Calendar Days
May 2006
June 2006


Pumping Well Test Well No. 2 (Eaglefield Development)
Drawdown Semi-log Plot
City of Eagle Aquifer Test
Pumping On 6/2/06 10:00 am
Elapsed pumping time = 0.0 min.
Pump Off 6/9/06 10:00 am
Elapsed pumping time = 10080 min.
Elapsed Pumping Time (Min.)
0.1
1.0
10.0
100.0
1000.0
10000.0
100000.0
Water Level Drawdown (ft)
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
30.0
31.0
32.0
Transmissivity = 35 * Q / drawdown
Valve Adjustments
Valve Adjustments
T= 20,500 ft²/day
Δh / log = 2.70 ft.
T= 20,100 ft²/day
Δh / log = 2.75 ft.
T= 20,100 ft²/day
Δh / log = 2.75 ft.

Payette, ID P.O. Box 235 Main St. Holladay Engineering	Pumping Test Analysis Report
	Project: Eagle 7 Day Aquifer Test
	Number: EG 061204
	Client: City of Eagle

Location: Eagle, Idaho	Pumping Test: 7 Day Aquifer Test	Pumping well: Test Well 2
Test conducted by: Holladay Engineering		Test date: 6/2/2006
Analysis performed by:	Test well 2 Theis	Date: 1/17/2007
Aquifer Thickness: 100.00 ft	Discharge: variable, average rate 1569.2 [U.S. gal/min]	



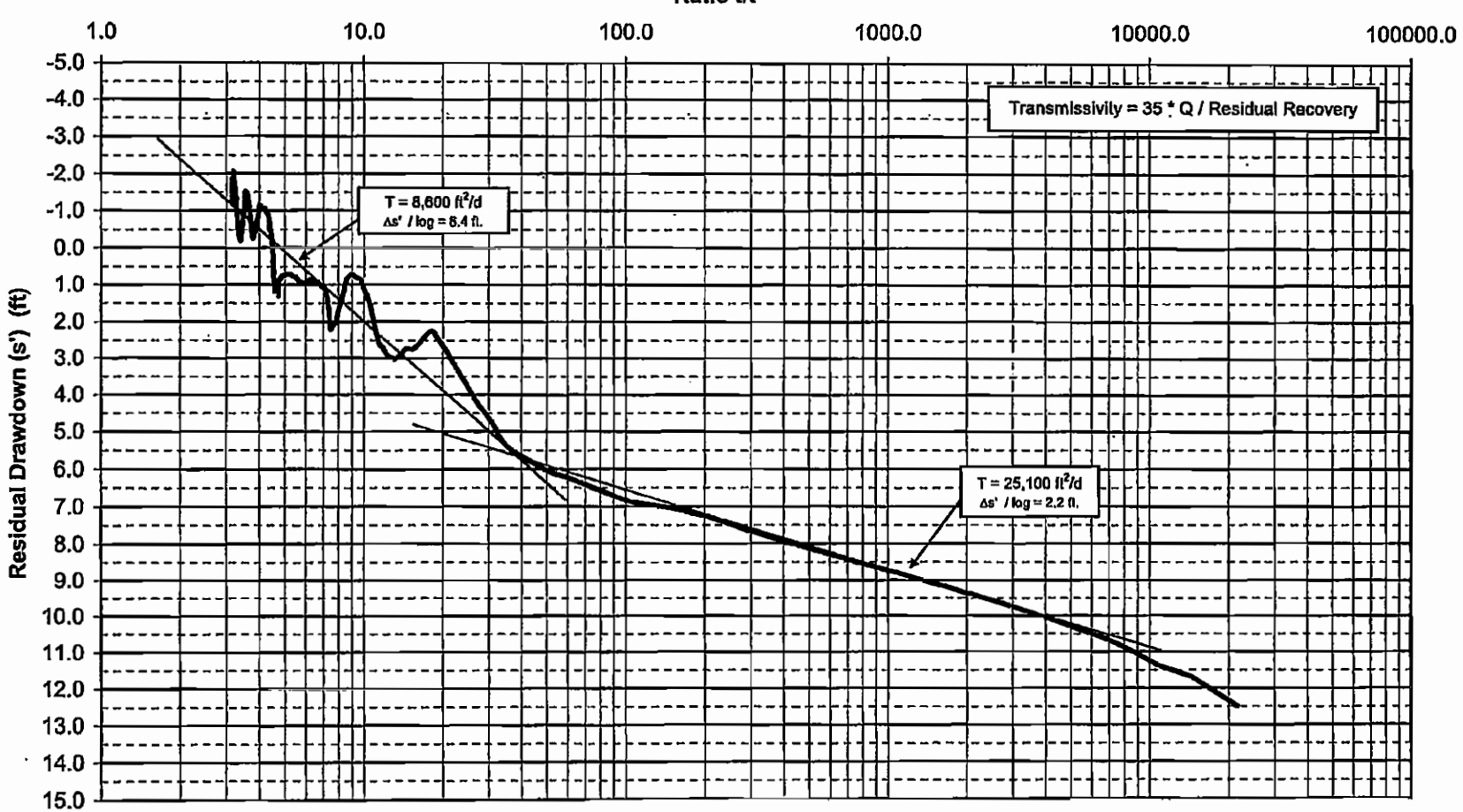
Calculation after Theis

Observation well	Transmissivity [ft²/d]			Radial distance to PW [ft]	
Test Well 2	1.30×10^4			0.5	

Test Well No. 2 (Eaglefield) Theis Analysis of Drawdown Data

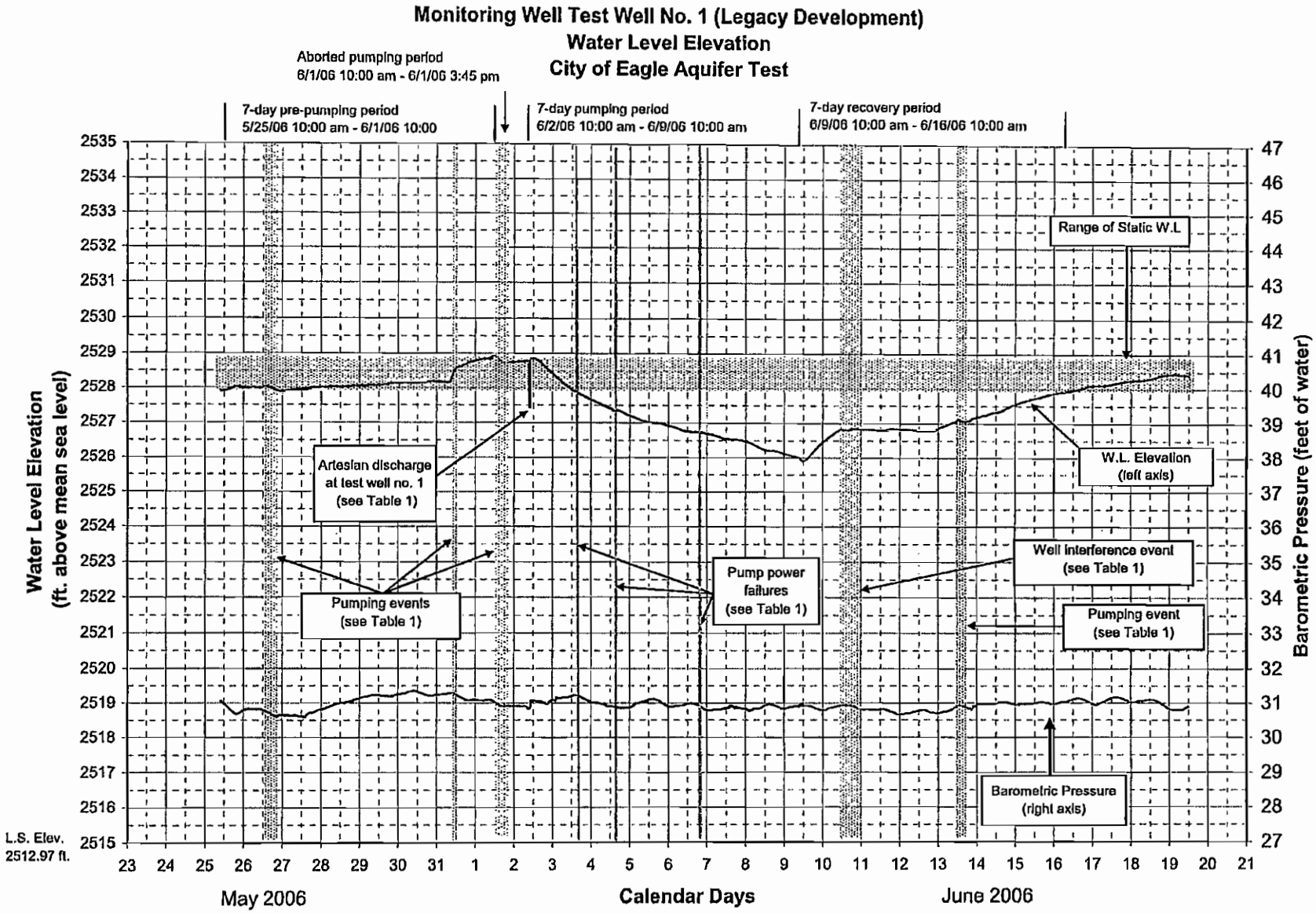
Notes: The Theis curve fit is an automatic fit for the entire data set.

Pumping Well Test Well No. 2 (Eaglefield Development)
Water Level Recovery Semi-log Plot
City of Eagle Aquifer Test

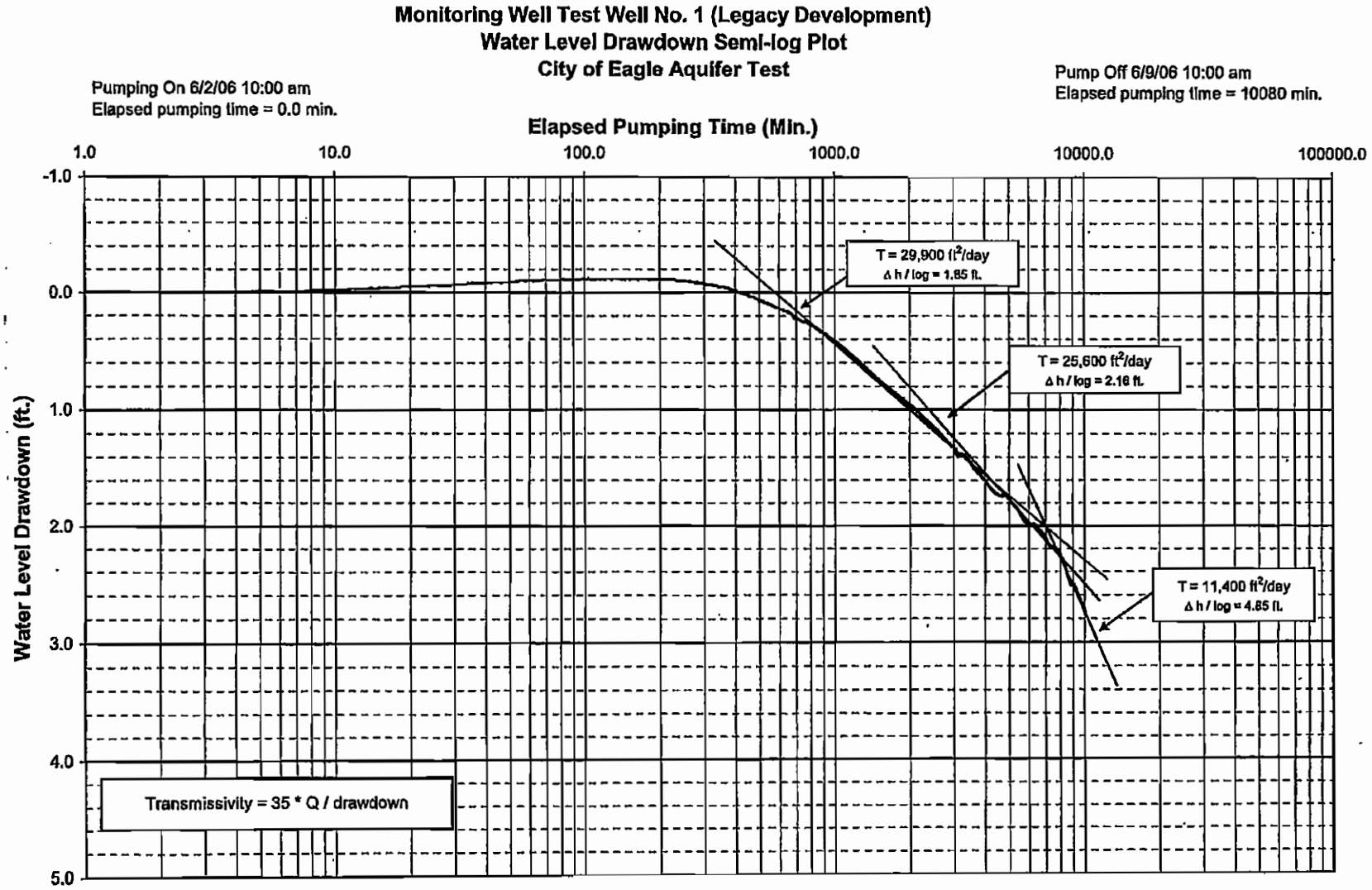


Appendix C.4

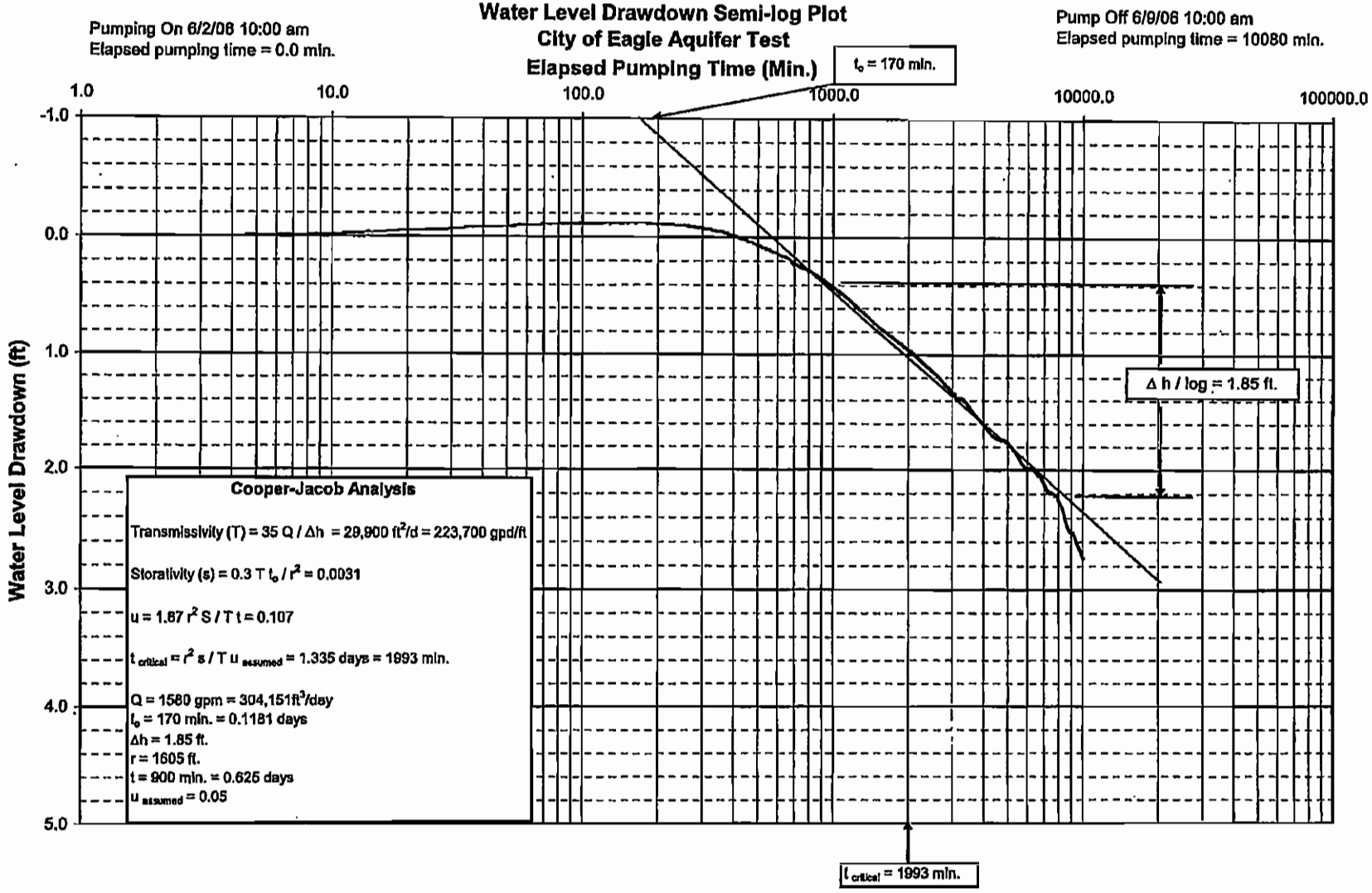
TEST WELL 1 (Legacy)


Monitoring Well Test Well No. 1 (Legacy Development)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Range of Static W.L
W.L. Elevation
(left axis)
Artesian discharge
at test well no. 1
(see Table 1)
Pumping events
(see Table 1)
Pump power
failures
(see Table 1)
Well interference event
(see Table 1)
Pumping event
(see Table 1)
Barometric Pressure
(right axis)
Water Level Elevation
(ft. above mean sea level)
Barometric Pressure (feet of water)
L.S. Elev.
2512.97 ft.
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
2524
2523
2522
2521
2520
2519
2518
2517
2516
2515
47
46
45
44
43
42
41
40
39
38
37
36
35
34
33
32
31
30
29
28
27
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calendar Days
June 2006

Monitoring Well Test Well No. 1 (Legacy Development)
Water Level Drawdown Semi-log Plot
City of Eagle Aquifer Test

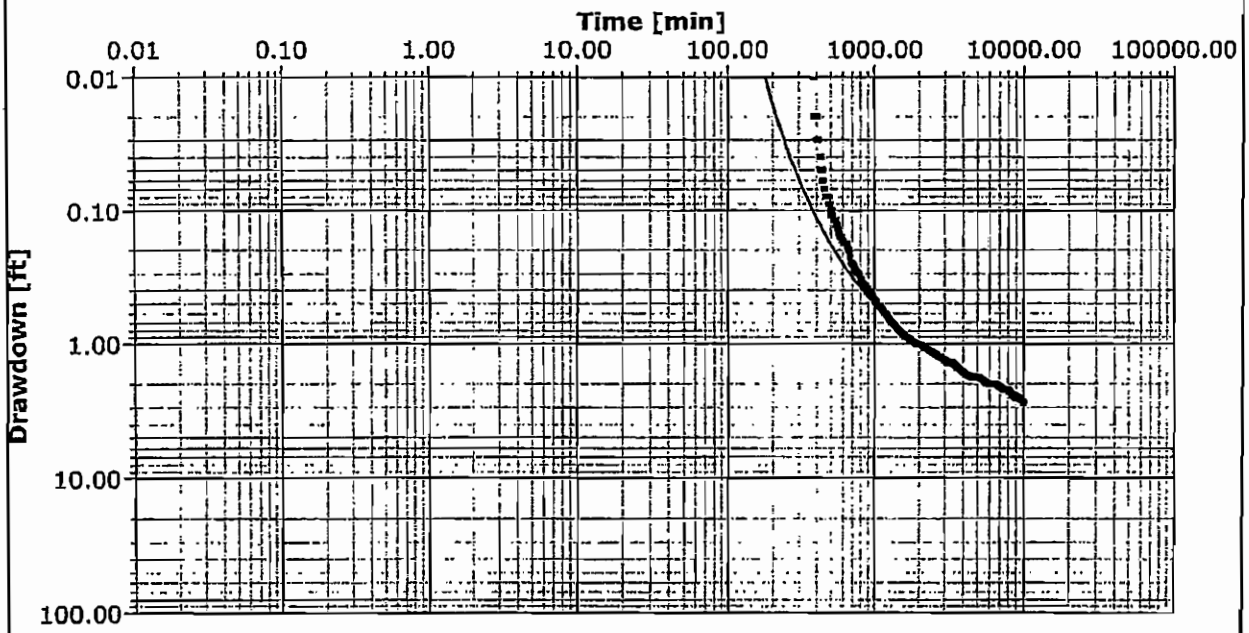


Monitoring Well Test Well No. 1 (Legacy Development)
Cooper-Jacob Analysis
Water Level Drawdown Semi-log Plot
City of Eagle Aquifer Test



Payette, ID P.O. Box 235 Main St. Holladay Engineering	Pumping Test Analysis Report
	Project: Eagle 7 Day Aquifer Test
	Number: EG 061204
	Client: City of Eagle

Location: Eagle, Idaho	Pumping Test: 7 Day Aquifer Test	Pumping well: Test Well 2
Test conducted by: Holladay Engineering		Test date: 6/2/2006
Analysis performed by:	Test Well 1 Theis	Date: 1/16/2007
Aquifer Thickness: 100.00 ft	Discharge: variable, average rate 1569.2 [U.S. gal/min]	



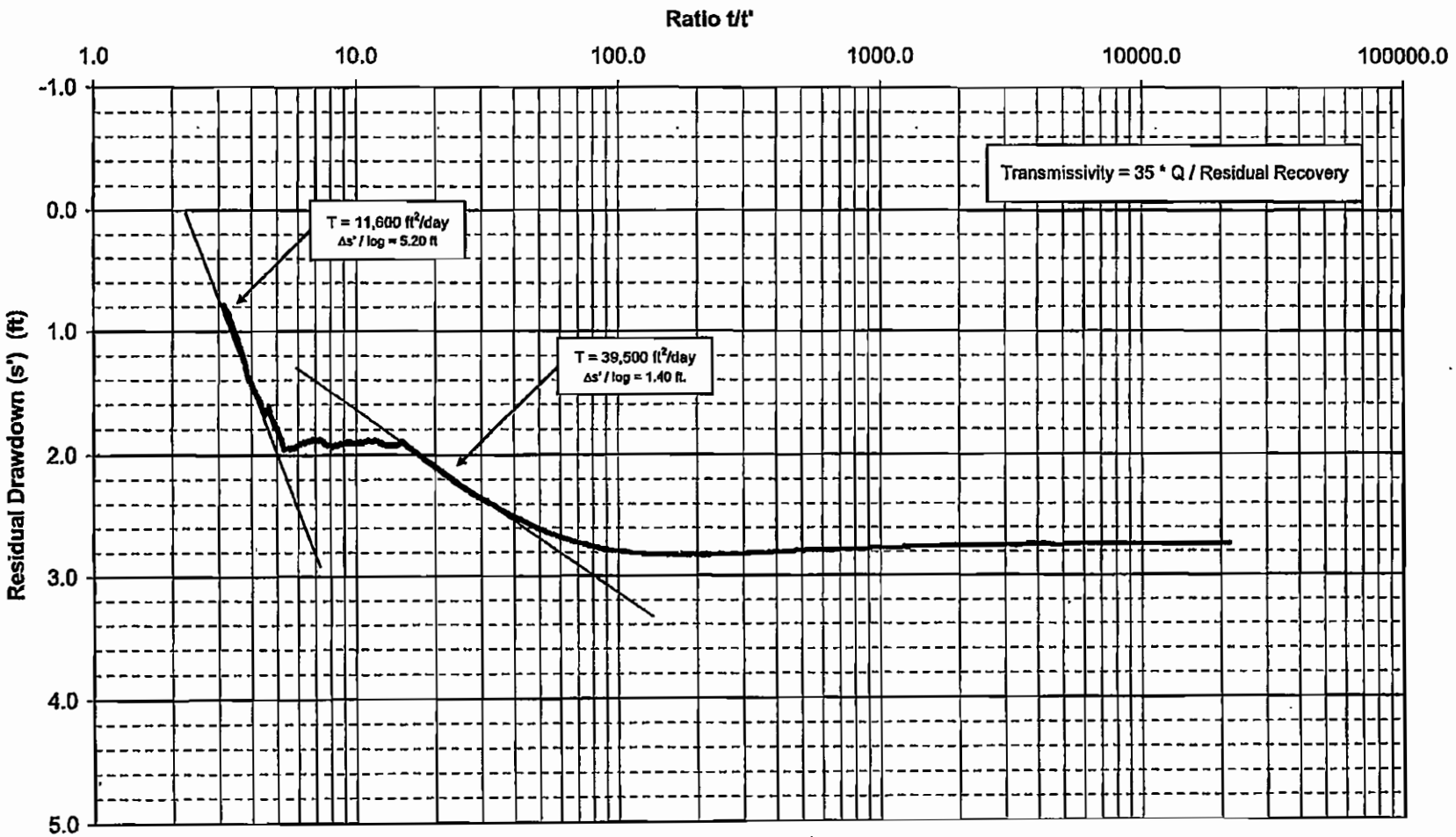
Calculation after Theis

Observation well	Transmissivity [ft²/d]		Storage coefficient	Radial distance to PW [ft]	
Test Well 1	2.26×10^{4}		1.41×10^{-2}	1604.58	

Test Well No. 1 (Legacy) Theis Analysis of Drawdown Data

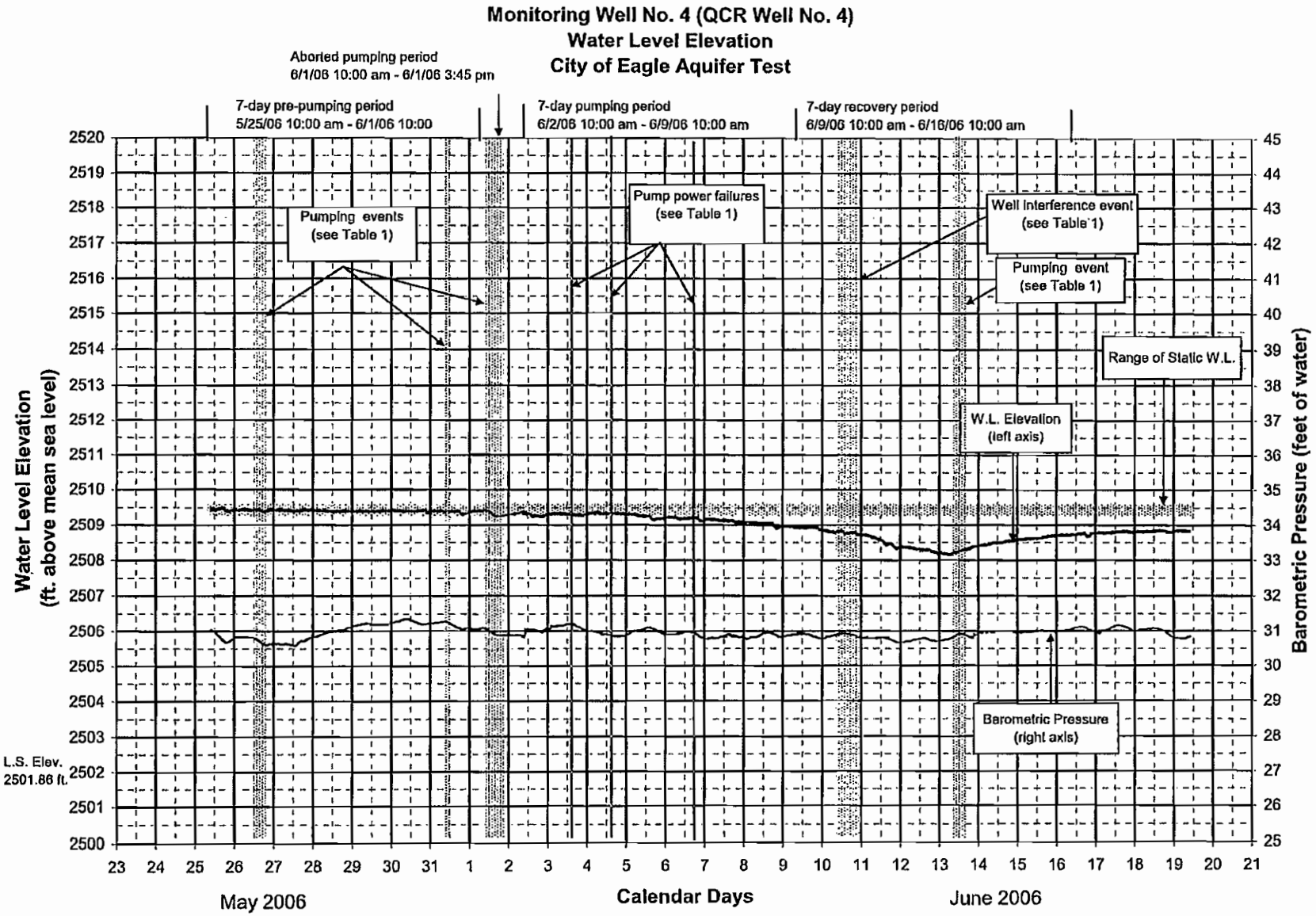
Notes: The Theis curve fit is an automatic fit for a portion of the data set (0-8000min). Data points (8000-10080min) were excluded from the analysis.

Monitoring Well Test Well No. 1 (Legacy Development)
Water Level Recovery Semi-log Plot
City of Eagle Aquifer Test



Appendix C.5

MONITORING WELL 4 (QCR 4)


Monitoring Well No. 4 (QCR Well No. 4)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Pumping events
(see Table 1)
Pump power failures
(see Table 1)
Well interference event
(see Table 1)
Pumping event
(see Table 1)
Range of Static W.L.
W.L. Elevation
(left axis)
Barometric Pressure
(right axis)
Water Level Elevation
(ft. above mean sea level)
Barometric Pressure (feet of water)
L.S. Elev.
2501.86 ft.
2520
2519
2518
2517
2516
2515
2514
2513
2512
2511
2510
2509
2508
2507
2506
2505
2504
2503
2502
2501
2500
45
44
43
42
41
40
39
38
37
36
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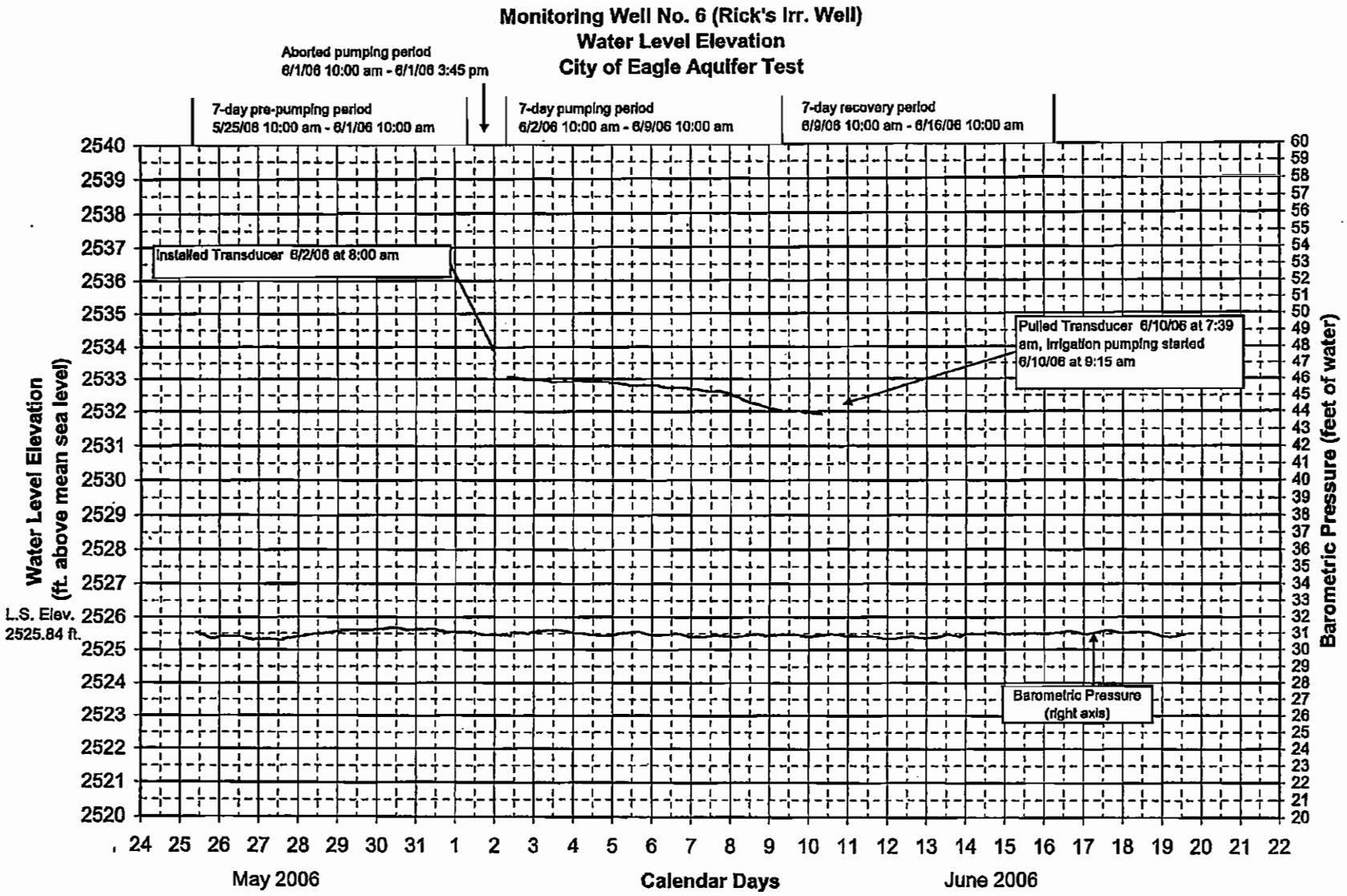
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calendar Days
June 2006

Appendix C.6

MONITORING WELL 6 (Rick's)


Monitoring Well No. 6 (Rick's Irr. Well)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Installed Transducer 6/2/06 at 8:00 am
Pulled Transducer 6/10/06 at 7:39 am, Irrigation pumping started 6/10/06 at 9:15 am
Barometric Pressure (right axis)
L.S. Elev. 2525.84 ft.
Water Level Elevation (ft. above mean sea level)
Barometric Pressure (feet of water)
2540
2539
2538
2537
2536
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
2524
2523
2522
2521
2520
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32
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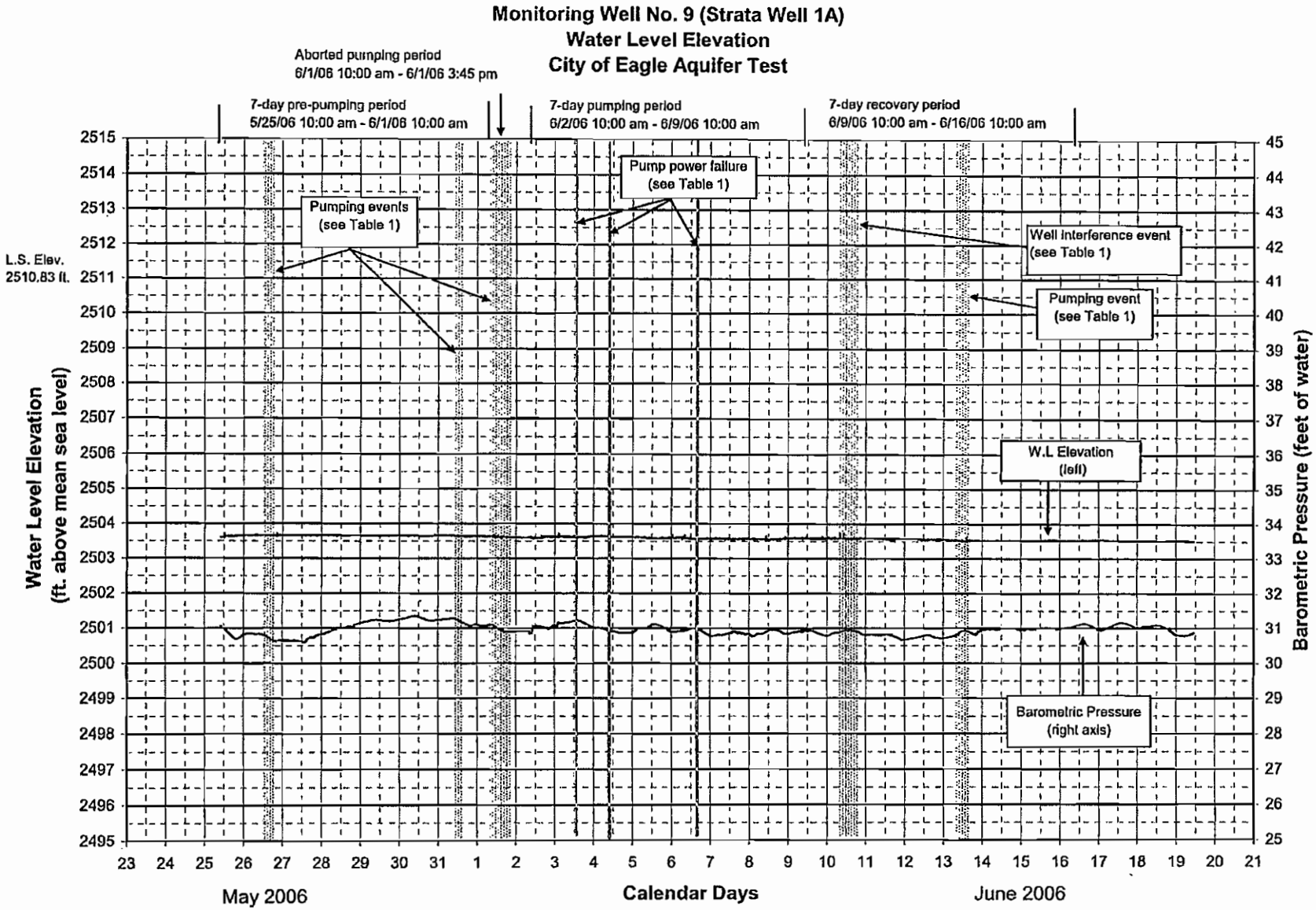
26
25
24
23
22
21
20
24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
May 2006
Calendar Days
June 2006

Appendix C.7

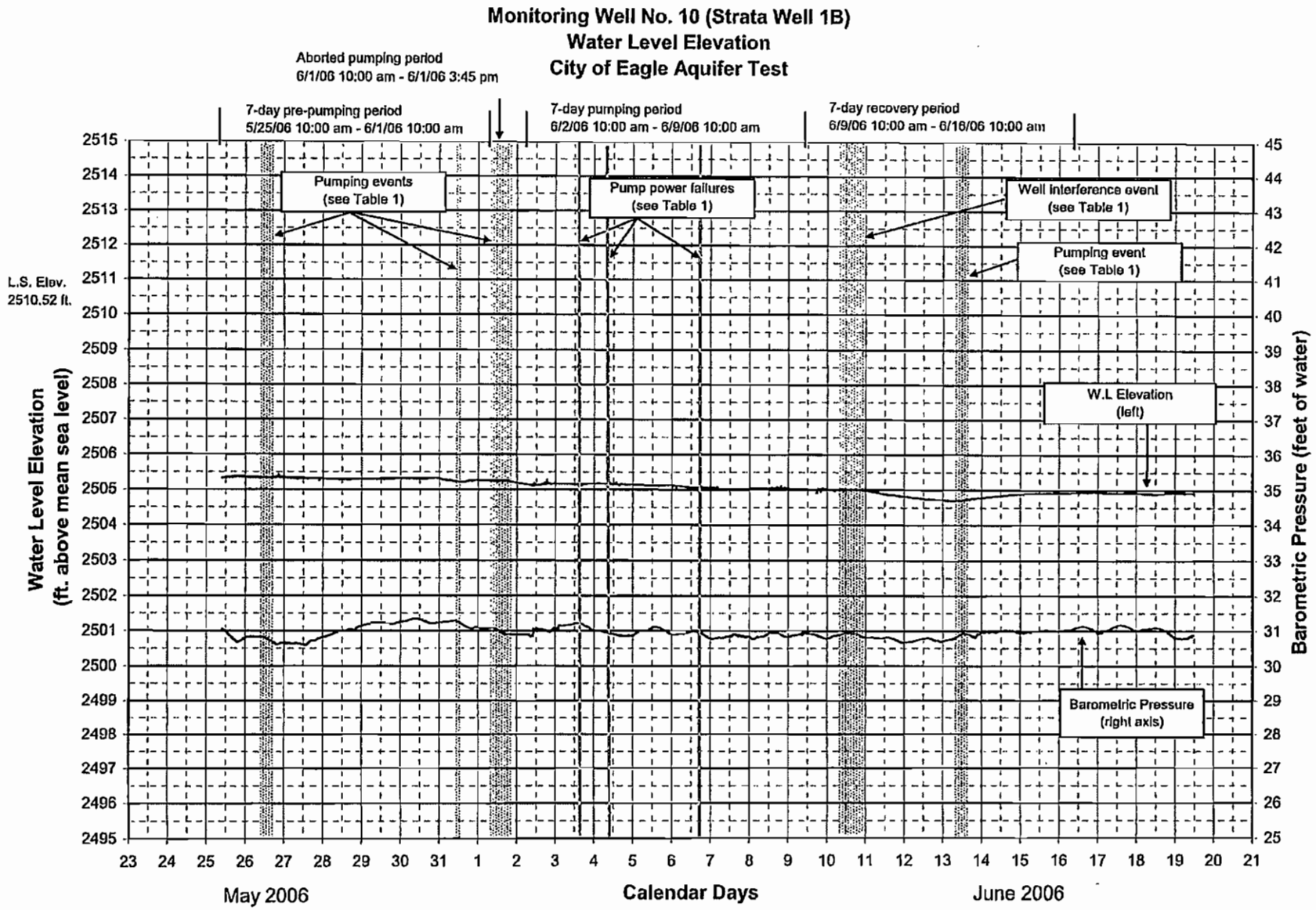
MONITORING WELL 9 (Strata 1A)


Monitoring Well No. 9 (Strata Well 1A)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Pump power failure
(see Table 1)
Pumping events
(see Table 1)
Well interference event
(see Table 1)
Pumping event
(see Table 1)
W.L Elevation
(left)
Barometric Pressure
(right axis)
L.S. Elev.
2510.83 ft.
Water Level Elevation
(ft. above mean sea level)
Barometric Pressure (feet of water)
Calendar Days
May 2006
June 2006

STRATA 1B

Appendix C.8

MONITORING WELL 10 (Strata 1B)


Monitoring Well No. 10 (Strata Well 1B)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Pumping events
(see Table 1)
Pump power failures
(see Table 1)
Well interference event
(see Table 1)
Pumping event
(see Table 1)
W.L Elevation
(left)
Barometric Pressure
(right axis)
L.S. Elev.
2510.52 ft.
Water Level Elevation
(ft. above mean sea level)
Barometric Pressure (feet of water)
2515
2514
2513
2512
2511
2510
2509
2508
2507
2506
2505
2504
2503
2502
2501
2500
2499
2498
2497
2496
2495
45
44
43
42
41
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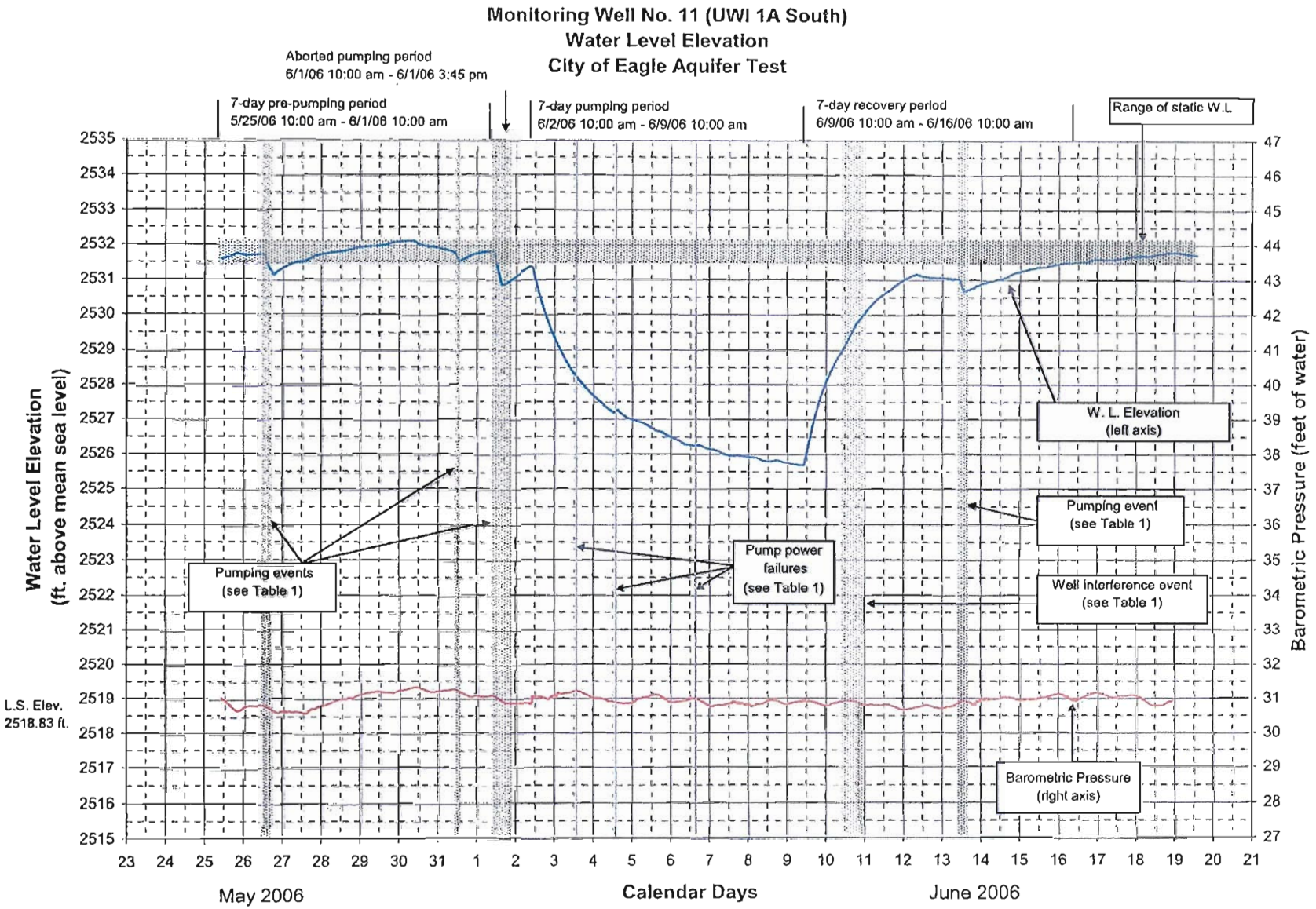
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calendar Days
June 2006

Appendix C.9

MONITORING WELL 11 (UWI 1A)


Monitoring Well No. 11 (UWI 1A South)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00 am
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Range of static W.L
W. L. Elevation
(left axis)
Pumping event
(see Table 1)
Pump power
failures
(see Table 1)
Pumping events
(see Table 1)
Well interference event
(see Table 1)
Barometric Pressure
(right axis)
L.S. Elev.
2518.83 ft.
Water Level Elevation
(ft. above mean sea level)
Barometric Pressure (feet of water)
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
2524
2523
2522
2521
2520
2519
2518
2517
2516
2515
47
46
45
44
43
42
41
40
39
38
37
36
35
34
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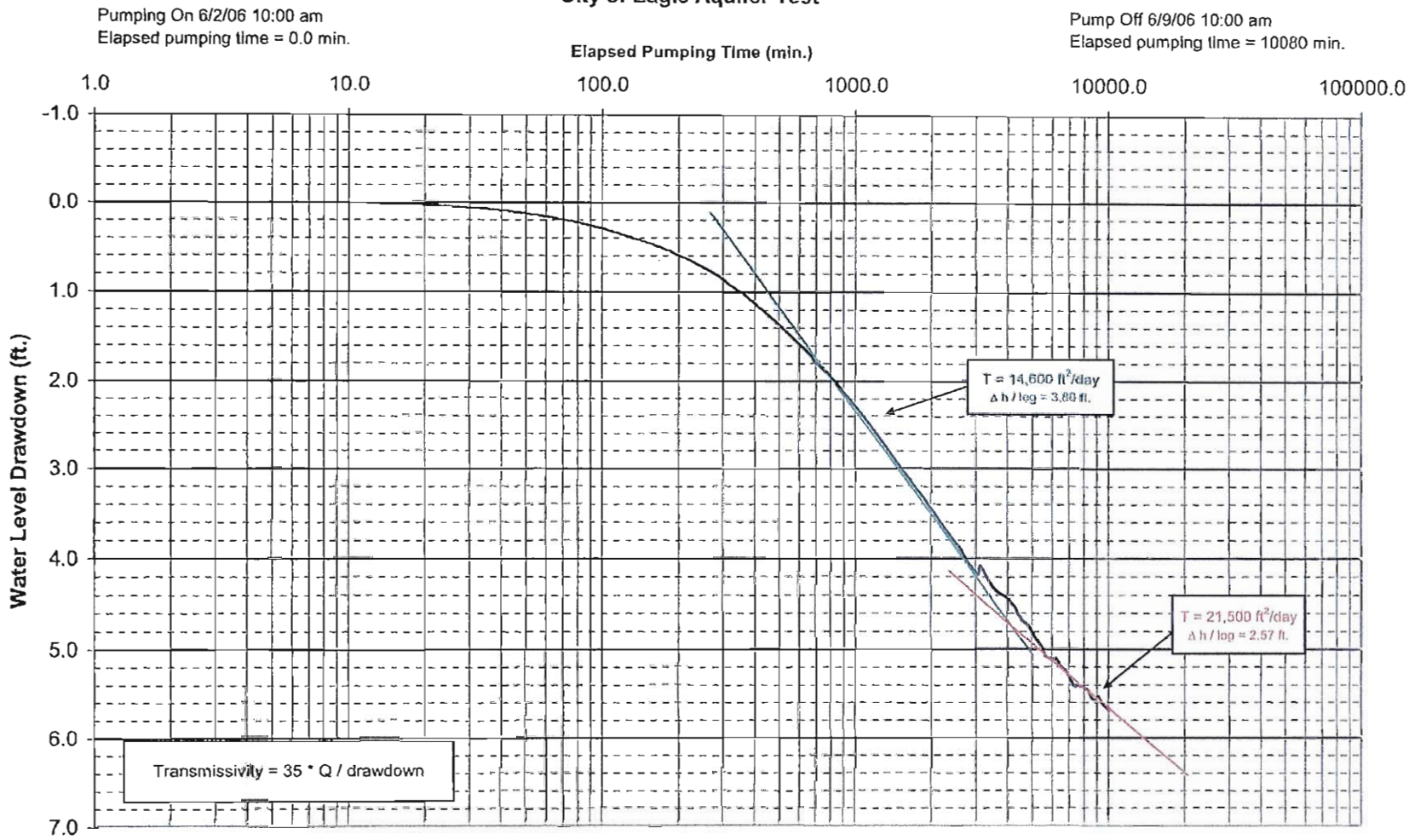
32
31
30
29
28
27
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calendar Days
June 2006

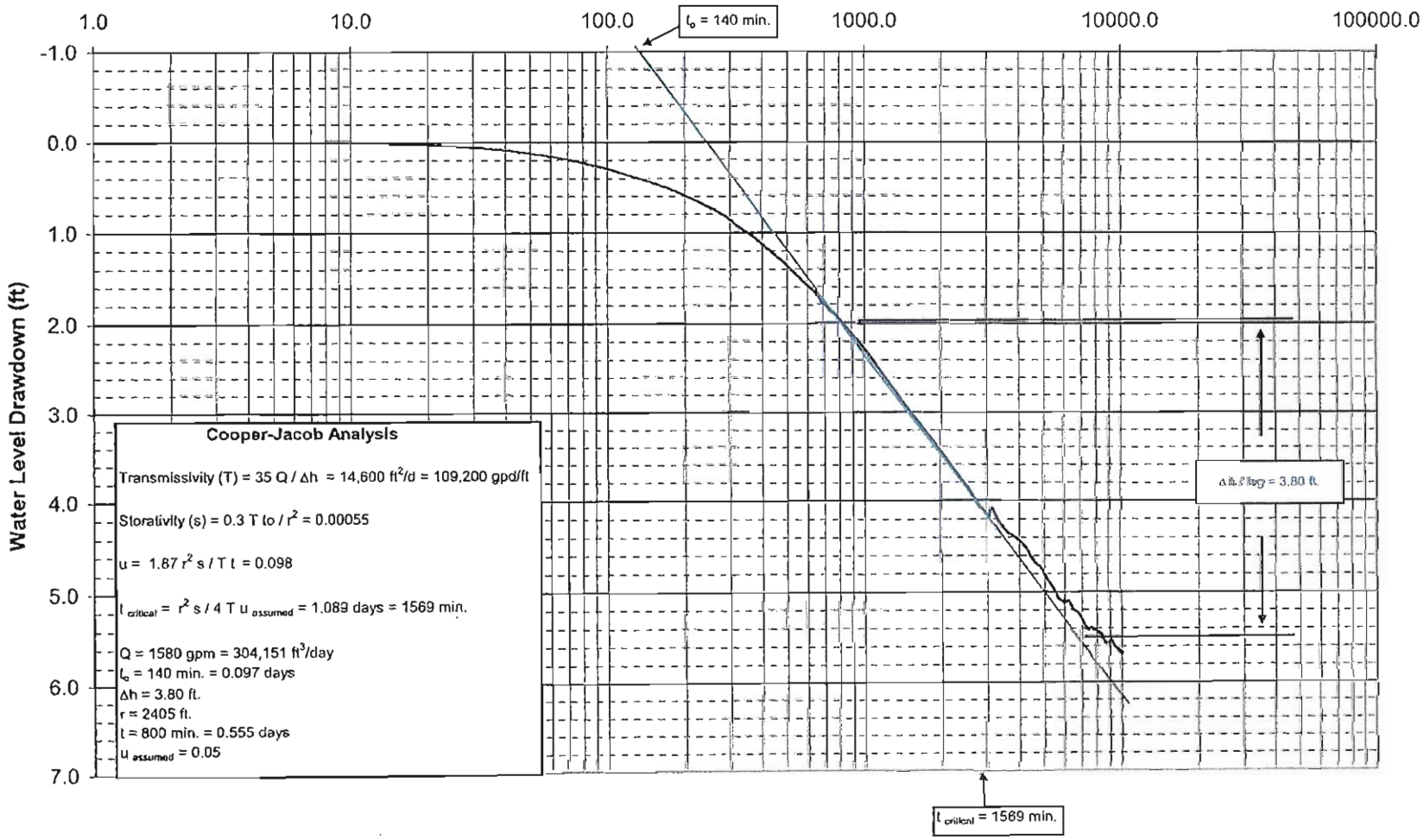
Monitoring Well No. 11 (UWI 1A South)
Water Level Drawdown Semi-log Plot
City of Eagle Aquifer Test



Monitoring Well No. 11 (UWI 1A South)
Water Level Drawdown Semi-log Plot
City of Eagle Aquifer Test

Pumping On 6/2/06 10:00 am
Elapsed pumping time = 0.0 min.

Pump Off 6/9/06 10:00 am
Elapsed pumping time = 10080 min.



Cooper-Jacob Analysis

Transmissivity (T) = 35 Q / Δh = 14,600 ft^2/d = 109,200 gpd/ft

Storativity (s) = 0.3 T t_o / r^2 = 0.00055

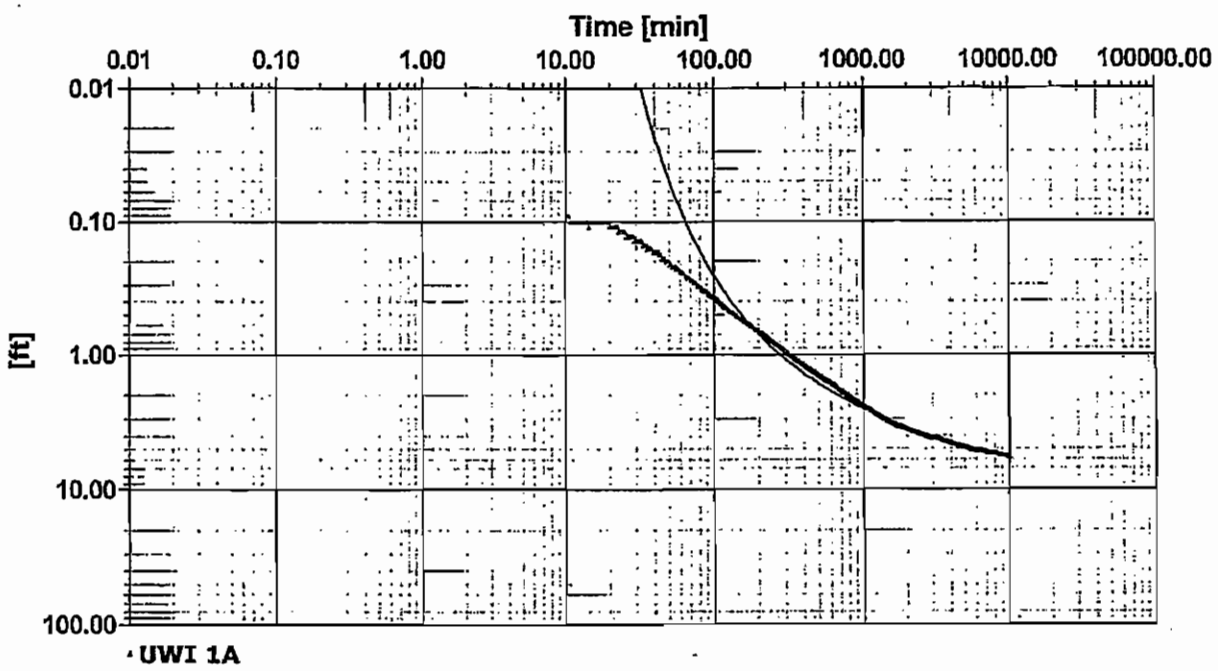
u = 1.87 r^2 s / T t = 0.098

$t_{critical}$ = r^2 s / 4 T $u_{assumed}$ = 1.089 days = 1569 min.

Q = 1580 gpm = 304,151 ft^3/day
t_o = 140 min. = 0.097 days
Δh = 3.80 ft.
r = 2405 ft.
t = 800 min. = 0.555 days
$u_{assumed}$ = 0.05

Payette, ID **P.O. Box 235** **Main St.** **Holladay Engineering**	**Pumping Test Analysis Report**	
	Project: Eagle 7 Day Aquifer Test	
	Number: EG 061204	
	Client: City of Eagle	

Location: Eagle, Idaho	Pumping Test: 7 Day Aquifer Test	Pumping well: Test Well 2
Test conducted by: Holladay Engineering		Test date: 6/2/2006
Analysis performed by:	UWI 1A (computer fit)	Date: 1/18/2007
Aquifer Thickness: 100.00 ft	Discharge: variable, average rate 1569.2 [U.S. gal/min]	



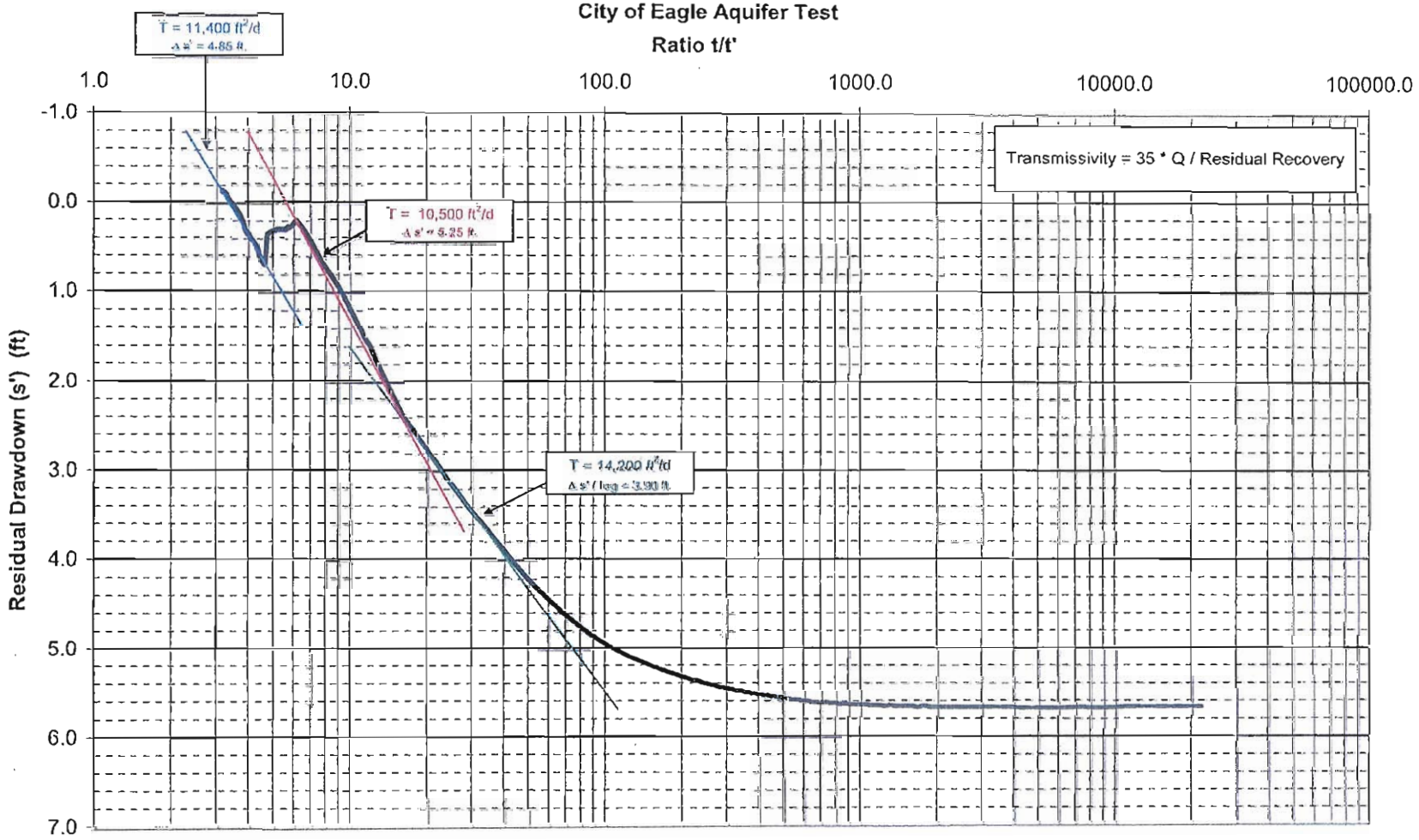
Calculation after Theis

Observation well	Transmissivity [ft²/d]		Storage coefficient	Radial distance to PW [ft]	
UWI 1A	1.62×10^{4}		8.95×10^{-4}	2405.02	

Monitoring Well 11 (UWI 1A) Theis Analysis of Drawdown Data

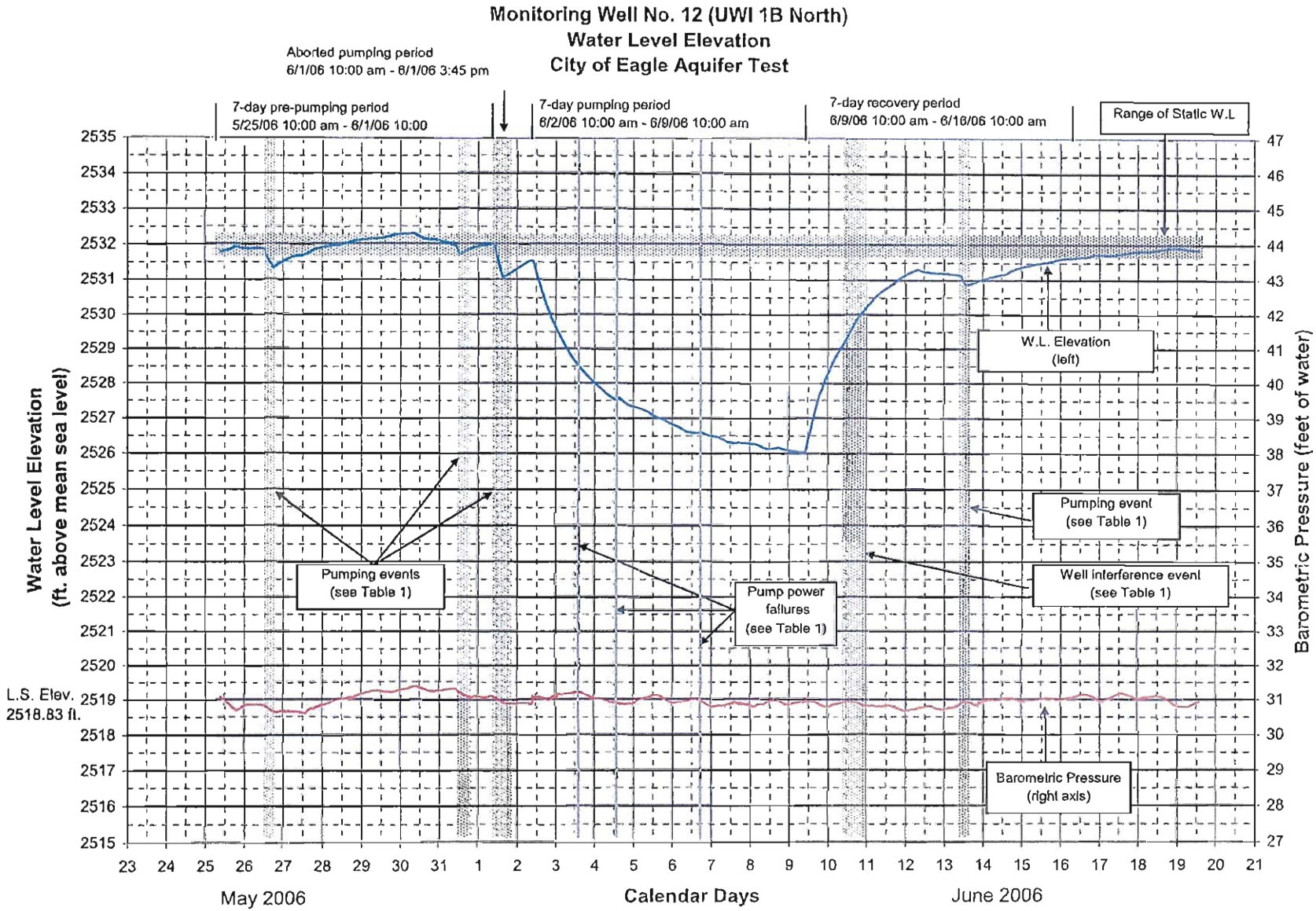
Notes: The Theis curve fit is an automatic fit for the entire data set.

Monitoring Well No. 11 (UWI 1A South)
Water Level Recovery Semi-log Plot
City of Eagle Aquifer Test



Appendix C.10

MONITORING WELL 12 (UWI 1B)


Monitoring Well No. 12 (UWI 1B North)
Water Level Elevation
City of Eagle Aquifer Test
Aborted pumping period
6/1/06 10:00 am - 6/1/06 3:45 pm
7-day pre-pumping period
5/25/06 10:00 am - 6/1/06 10:00
7-day pumping period
6/2/06 10:00 am - 6/9/06 10:00 am
7-day recovery period
6/9/06 10:00 am - 6/16/06 10:00 am
Range of Static W.L
W.L. Elevation
(left)
Pumping event
(see Table 1)
Pumping events
(see Table 1)
Pump power
failures
(see Table 1)
Well interference event
(see Table 1)
Barometric Pressure
(right axis)
L.S. Elev.
2518.83 ft.
Water Level Elevation
(ft. above mean sea level)
Barometric Pressure (feet of water)
2535
2534
2533
2532
2531
2530
2529
2528
2527
2526
2525
2524
2523
2522
2521
2520
2519
2518
2517
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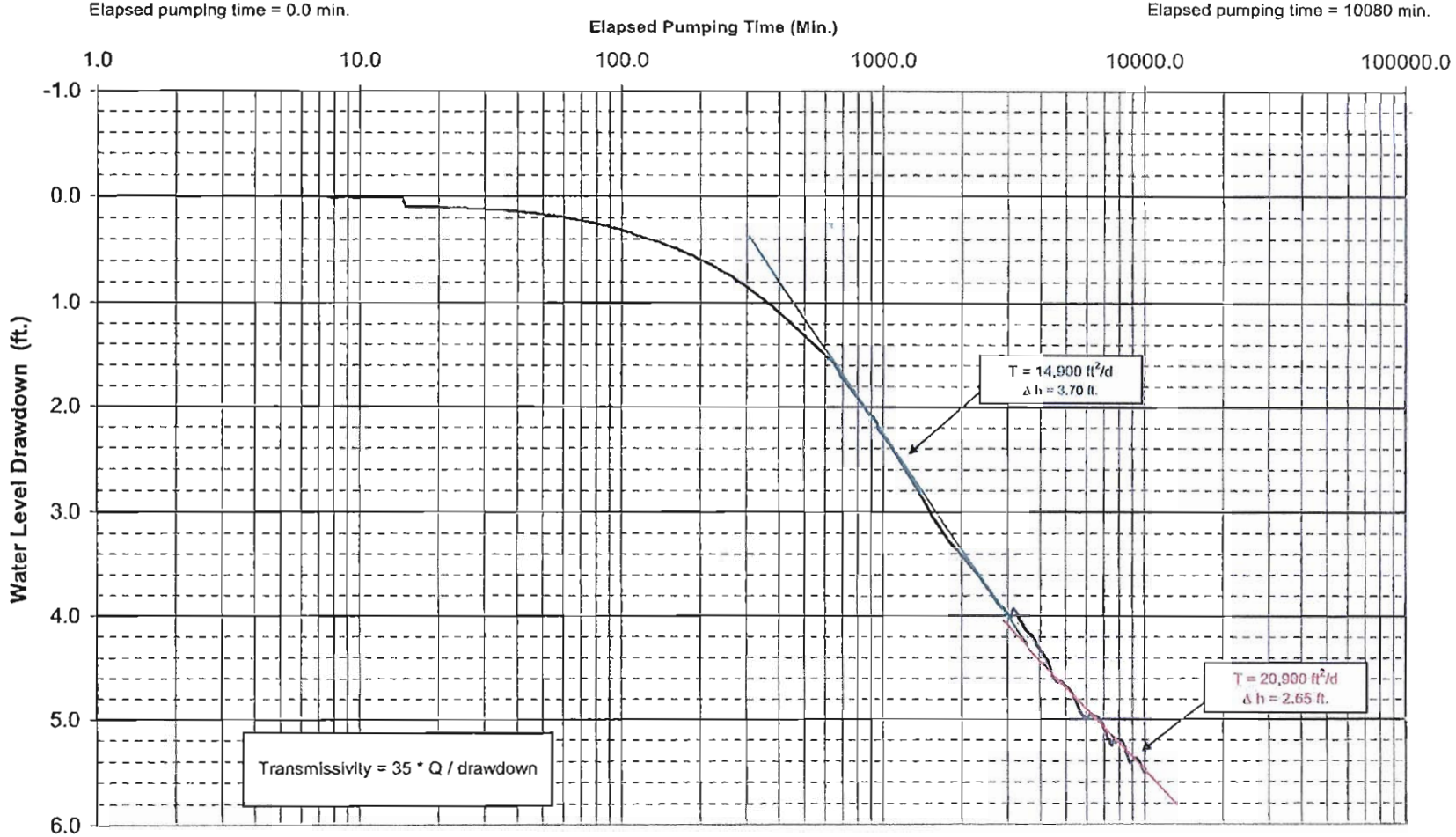
23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 2006
Calendar Days
June 2006

Monitoring Well No. 12 (UWI 1B North)
Water Level Drawdown Semi-log Plot
City of Eagle Aquifer Test

Pumping On 6/2/06 10:00 am
Elapsed pumping time = 0.0 min.

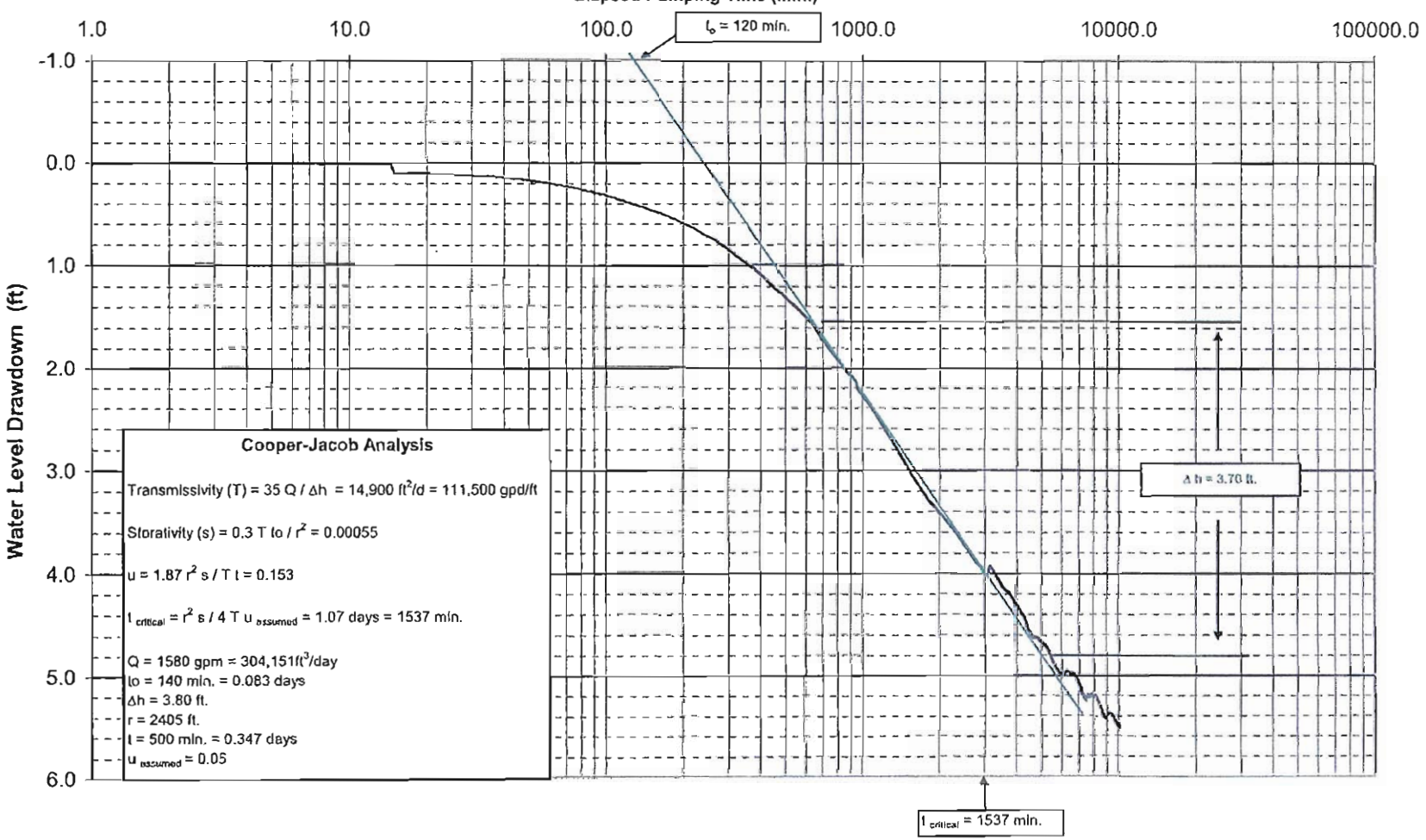
Pump Off 6/9/06 10:00 am
Elapsed pumping time = 10080 min.



Monitoring Well No. 12 (UWI 1B North)
Water Level Drawdown Semi-log Plot
City of Eagle Aquifer Test

Pumping On 6/2/06 10:00 am
Elapsed pumping time = 0.0 min.

Pump Off 6/9/06 10:00 am
Elapsed pumping time = 10080 min.



Cooper-Jacob Analysis

Transmissivity (T) = 35 Q / Δh = 14,900 ft^2/d = 111,500 gpd/ft

Storativity (s) = 0.3 T t_o / r^2 = 0.00055

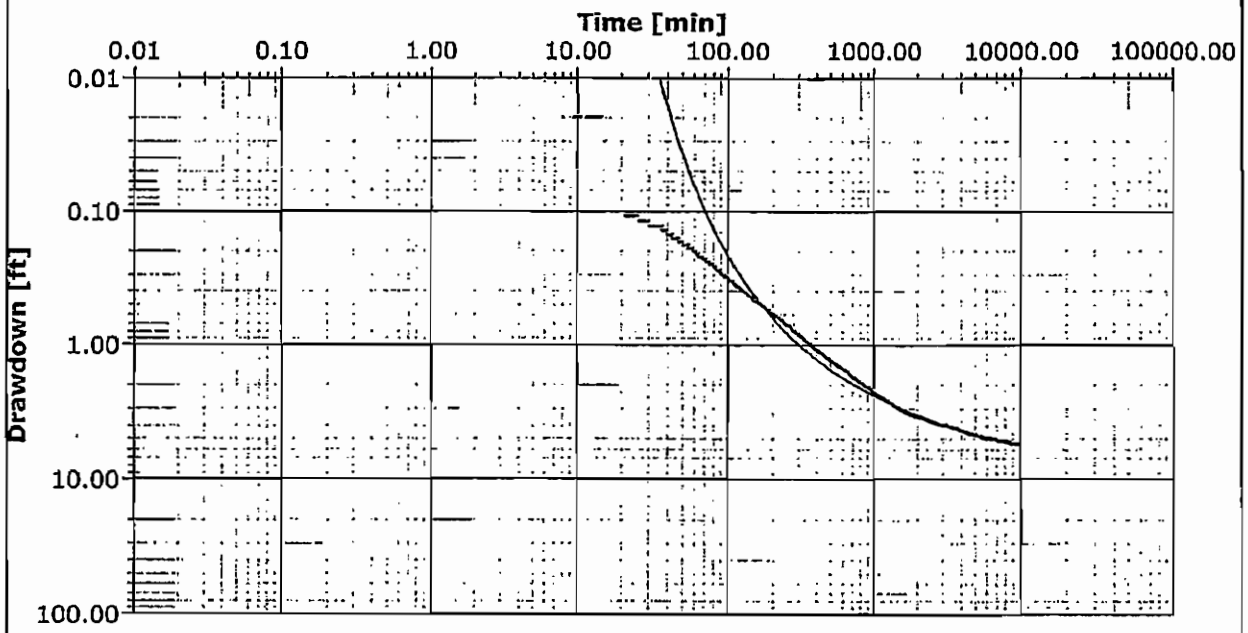
u = 1.87 r^2 s / T t = 0.153

$t_{critical} = r^2 s / 4 T u_{assumed}$ = 1.07 days = 1537 min.

Q = 1580 gpm = 304,151ft^3/day
t_o = 140 min. = 0.083 days
Δh = 3.80 ft.
r = 2405 ft.
t = 500 min. = 0.347 days
$u_{assumed}$ = 0.05

Payette, ID P.O. Box 235 Main St. Holladay Engineering	Pumping Test Analysis Report
	Project: Eagle 7 Day Aquifer Test
	Number: EG 061204
	Client: City of Eagle

Location: Eagle, Idaho	Pumping Test: 7 Day Aquifer Test	Pumping well: Test Well 2
Test conducted by: Holladay Engineering		Test date: 8/2/2006
Analysis performed by:	UWI 1B (computer fit)	Date: 1/18/2007
Aquifer Thickness: 100.00 ft	Discharge: variable, average rate 1569.2 [U.S. gal/min]	



Calculation after Theis

Observation well	Transmissivity [ft²/d]		Storage coefficient	Radial distance to PW [ft]	
UWI 1B	1.64×10^{4}		9.84×10^{-4}	2405.02	

Monitoring Well 12 (UWI 1B) Theis Analysis of Drawdown Data

Notes: The Theis curve fit is an automatic fit for the entire data set.

Monitoring Well No. 12 (UWI 1B North)
Water Level Recovery Semi-Log Plot
City of Eagle Aquifer Test

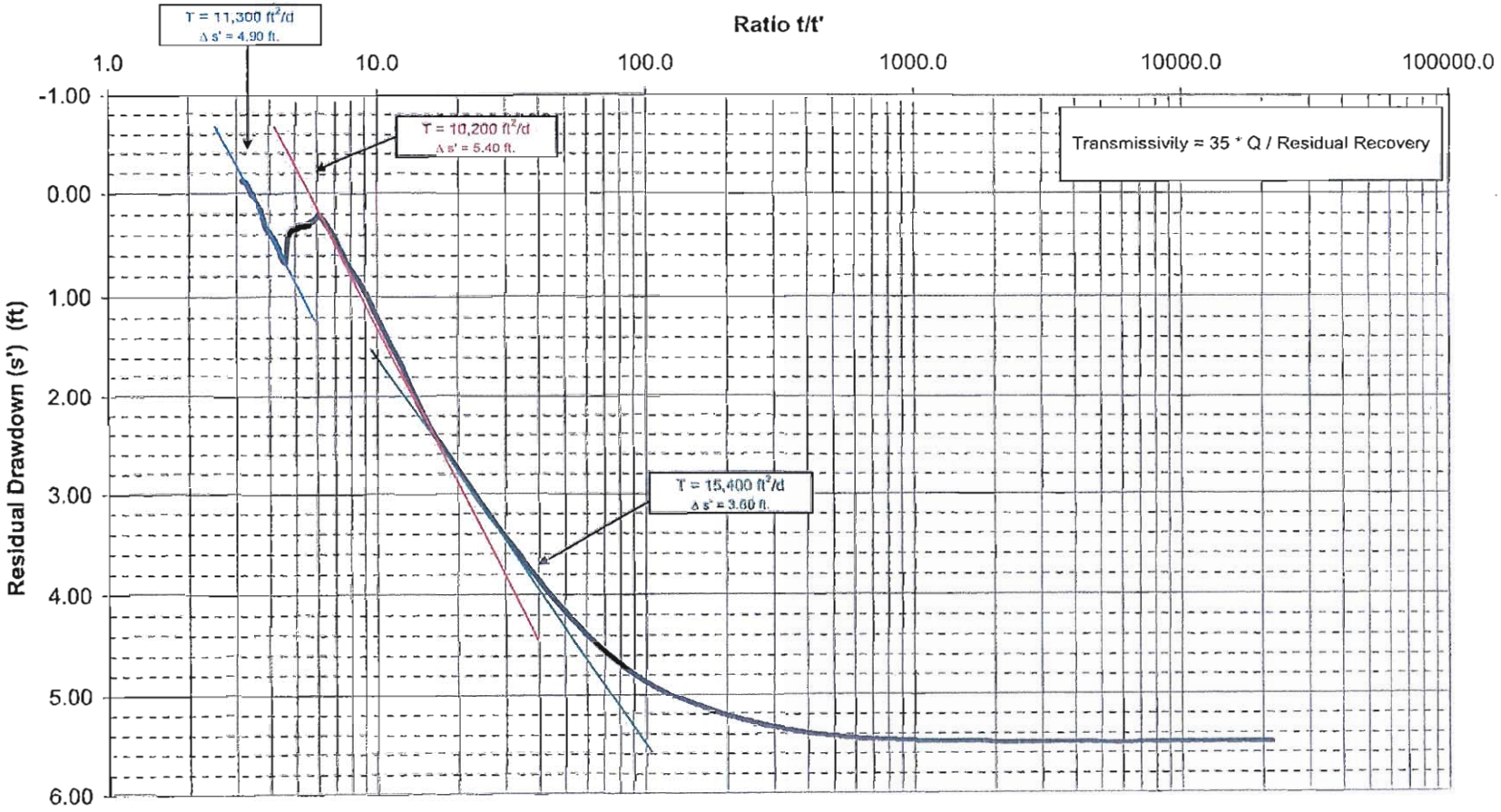


EXHIBIT ____140 TO 144____

SCANNED

No Document for this Exhibit

Refer to scanned document:

"Inventory of M3 Eagle Exhibits (as of 8-7-09)"

Document date 10/13/09