RESOLUTION NO. 1568

A RESOLUTION OF THE BOARD OF ADA COUNTY COMMISSIONERS
AMENDING THE 2007 ADA COUNTY COMPREHENSIVE PLAN PROVIDING
FOR THE ADOPTION OF THE CARTWRIGHT RANCH COMPREHENSIVE
PLAN, DEVELOPMENT PLAN, AND ECONOMIC IMPACT ANALYSIS

The Board of County Commissioners of Ada County, Idaho, meeting in regular
session on the 12th day of August, 2008, hereby adopts the following and amends the
2007 Ada County Comprehensive Plan (Plan) to wit:

WHEREAS, on November 27, 2007, the Board of Ada County Commissioners
adopted by, Resolution No.1518, the current Plan, as amended by Resolution No.1556
adopted June 24, 2008, all as allowed by the Local Planning Act, § 67-6509(c); and

WHEREAS, Goal 5.10 and the subsequent policies of the Plan directs the
promotion and encouragement of Planned Communities outside of areas of city impact;
and

WHEREAS, on June 22, 2006 Cartwright Ranch, LLC and Developers of Hidden
Springs, LLC submitted applications for approval of a Planned Community called
Cartwright Ranch that included an application to amend the Plan to adopt and include the
Cartwright Ranch Comprehensive Plan, Cartwright Ranch Economic Impact Analysis,
and Cartwright Ranch Development Plan as part of the Plan; and

WHEREAS, property owners within a minimum of 1,000 feet of the site were
notified of the hearing by alternate forms of notice. Legal notice of the Ada County
Planning and Zoning Commission’s (Commission) hearing was published in The Idaho
Statesman on November 13 and November 20, 2007. Notices of the public hearing were
posted on the site on November 13, 2007. And on November 21, 2007 a Public Service
Announcement was issued and;

public hearings were held by the Commission; and

WHEREAS, on March 13, 2008, the Commission recommended approval of File
No. 200600180 PC to the Board of Ada County Commissioners (Board) and
recommended the adoption of the Cartwright Ranch Comprehensive Plan as a text
amendment to the Ada County Comprehensive Plan and;

WHEREAS, property owners within a minimum of 1,000 feet of the site were
notified of the hearing by alternate forms of notice. Legal notice of the Board’s hearing
was published in The Idaho Statesman on April 29, 2008 and May 6, 2008. Notices of
the public hearing were posted on the site April 16, 2008. And on May 7, 2008 a Public Service Announcement was issued and;

WHEREAS, on May 14, 2008, June 18, 2008, and July 16, 2008 the Board held public hearings on the application; and

WHEREAS, the Board, after complying with the requisite due process and having the requisite public hearings, has approved the Cartwright Ranch Planned Community Application; and

WHEREAS, it is appropriate as part of the approval to amend the Plan to adopt the Cartwright Ranch Comprehensive Plan as part of the Plan by adding Appendix C.4 entitled the “Cartwright Ranch Comprehensive Plan” and to provide for the addition of the “Cartwright Ranch Comprehensive Plan” as attached hereto as Exhibit 1; “Cartwright Ranch Economic Impact Analysis” as attached hereto as Exhibit; and “Cartwright Ranch Development Plan” as attached hereto as Exhibit 3 to the Ada County Comprehensive Plan as an addendum thereto.

BE IT THEREFORE RESOLVED by the Board of Ada County Commissioners that 2007 Ada County Comprehensive Plan be amended to add Appendix C.4 to be entitled the “The Cartwright Ranch Comprehensive Plan”, and to provide for the addition of the Cartwright Ranch Comprehensive Plan, as attached hereto as Exhibit 1; together with the Cartwright Ranch Economic Impact Analysis, as attached hereto as Exhibit 2, and the Cartwright Ranch Development Plan, as attached hereto as Exhibit 3, to the Ada County Comprehensive Plan as an addendum thereto.

Board of Ada County Commissioners

By: ________________
Fred Tilman, Chairman

ABSENT

By: ________________________________
Paul R. Woods, Commissioner

By: ________________________________
Rick Yzaguirre, Commissioner

ATTEST:

______________________________
J. David Navarro, Ada County Clerk

RESOLUTION NO. 1568 -- A RESOLUTION AMENDING THE 2007 ADA COUNTY COMPREHENSIVE PLAN PROVIDING FOR THE ADOPTION OF THE CARTWRIGHT RANCH COMPREHENSIVE PLAN
Edits to text.
VISION STATEMENT

Vision

The primary vision of Cartwright Ranch is to continue the Hidden Springs Community in the tradition of small towns spread throughout Idaho. Cartwright Ranch will maintain the traditional character of the Dry Creek area while allowing for small town, mixed-use development. Development of the Cartwright Ranch community is intended to provide residents with a clear sense of place. Playing fields and recreation facilities will be located throughout the site. The project will include 448 acres of natural open space and 24 acres of developed open space. The Cartwright Ranch Town Center encompassing 24 acres or 3.5 percent of development will include at least 20,000 square feet of commercial uses, which are expected to include the Community Center (with a pool, meeting hall and post office); professional offices; service-oriented business; and possibly some food service.

Cartwright Ranch seeks to be compatible with its environment and surrounding natural resources through sensitive design (see Sub-Element F9, pp. 2, 4, 6, 10-17), careful control of construction methods (see Sub-Elements F1, p. 1, F8, pp. 2-3, F9, pp. 2, 6, 10-11), benign operation and maintenance of the planned community, enhancement of wildlife habitat (see Sub-Element F8), and the behavior of its residents (see Sub-Element F8, pp. 2-3, F9, p. 2) along with conservation of significant areas of open space (see Sub-Element F9, p. 11). Cartwright Ranch will preserve the most important natural features of Cartwright Ranch including hillsides, wildlife corridors and habitat, waterways and wetlands, and native and naturalized communities of vegetation.

Perhaps most importantly, Cartwright Ranch has been conceived as an integrated planned community with a rural character and with requisite maintenance and operating entities plus established development standards and design guidelines. When people make the choice to live in Cartwright Ranch, it will be with a vision of what the community and its surroundings will be like both now and in the future.
Fig. B1
## ELEMENT B, PLANNED COMMUNITY COMPREHENSIVE PLAN

### SUB-ELEMENT B2, GOALS, OBJECTIVES AND POLICIES

<table>
<thead>
<tr>
<th>COMPREHENSIVE PLAN REQUIREMENT</th>
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<th>PLANNED COMMUNITY OBJECTIVES &amp; POLICIES</th>
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<td>Objectives CR 5.1, CR 5.3 &amp; CR</td>
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Definitions for Cartwright Ranch Goals, Objectives and Policies

Ada County Comprehensive Plan. The adopted comprehensive plan for Ada County.

Cartwright Ranch Comprehensive Plan. The adopted comprehensive plan for Cartwright Ranch, which is incorporated into the Ada County Comprehensive Plan as Section ______.

Cartwright Ranch Development Plan. The approved development plan for Cartwright Ranch, which is attached hereto as Element F, Cartwright Ranch Development Plan.

Cartwright Ranch Land Use Map. The adopted land use map for Cartwright Ranch, which is attached hereto as Figures ______.

Cartwright Ranch Zoning Ordinance. The adopted zoning ordinance for Cartwright Ranch, which is codified as Ada County Code, Title 8, Article 21__.

Design Guidelines. The approved design guidelines for Cartwright Ranch, which are set forth as Element F9 in the Cartwright Ranch Development Plan.

Design Review Committee. As defined in Ada County Code, Section 8-21__ [DRAFTING NOTE: in the Cartwright Ranch Zoning Ordinance].

Private Property Rights

Goal CR 1.1: Protect private property rights.

Objective CR 1.1: Development approvals within Cartwright Ranch shall protect private property rights.

Policy CR 1.1-1: Land use ordinances, policies, fees and decisions, including land use restrictions and/or conditions of approval, as applied to Cartwright Ranch, shall not violate private property rights, as prescribed under the declarations of purpose in Chapter 80, Title 67, Idaho Code.
Objective CR 1.2: Property owners within Cartwright Ranch will use their property wisely, maintain it in good condition, and preserve it for future generations.

Policy CR 1.2-3: Property owners within Cartwright Ranch acknowledge and expect that Ada County and the homeowners association for Cartwright Ranch will preserve private property rights and values by enforcing regulations to ensure that neighboring land uses are compatible and harmonious.

Population

Goal CR 2.1: Residential development will be permitted in Cartwright Ranch to an expected population at build-out of approximately 1600 people.

Objective CR 2.1: Permit development consistent with a projected population of 1,600 people.

Policy CR 2.1-1: Permit development of up to 625 residential units, unless modified by the Board of County Commissioners.

School Facilities and Transportation

Goal CR 3.1: Provide for primary and secondary public education for Cartwright Ranch residents.

Objective 3.1: Arrange for the availability of on-site and/or off-site primary and secondary education opportunities.

Policy CR 3.1-1: Permit Cartwright Ranch residents to send their children to the existing public school at Hidden Springs, pursuant to policies providing preference to Cartwright Ranch residents along with other residents of the Dry Creek valley.

Policy CR 3.1-2: For children not attending the school at Hidden Springs, the Boise School District will provide transportation to other schools as needed.

Economic Development

Goal CR 4.1: Develop Cartwright Ranch as a quality planned community that will be a long-term economic asset to the Treasure Valley.
Objective CR 4.1: Ensure that development in Cartwright Ranch is consistent with the approved plans.

Policy CR 4.1-1: Develop each plat within Cartwright Ranch in accordance with the Cartwright Ranch Land Use Map.

Land Use

Goal CR 5.1: Develop Cartwright Ranch as a quality mixed-use planned community that will provide a high quality of life for Cartwright Ranch residents and will protect the quality of life of the surrounding community.

Objective CR 5.1: Cartwright Ranch will include a mix of housing types and densities to provide for a strong and diverse community.

Policy CR 5.1-1: Permit subdivision of Cartwright Ranch into the several lot types described in the Cartwright Ranch Zoning Ordinance.

Policy CR 5.1-2: Permit construction of various housing types on the appropriate lot types as allowed by the Cartwright Ranch Zoning Ordinance.

Objective CR 5.2: Cartwright Ranch will include on-site office and commercial uses, as set forth in Element F2 of the Cartwright Ranch Development Plan.

Policy CR 5.2-1: Establish the mixed-use area as set forth on the Cartwright Ranch Land Use Map.

Policy CR 5.2-2: Through application of the Design Guidelines, ensure that commercial and office uses in Cartwright Ranch are well designed, attractive and pedestrian-friendly.

Policy CR 5.2-3: Include commercial uses in Cartwright Ranch as set forth in Element F2 of the Cartwright Ranch Development Plan.

Objective CR 5.3: Cartwright Ranch will maintain a small-town feel.

Policy CR 5.3-1: Cluster development on the valley floor and in the southern draws in accordance with the Cartwright Ranch Land Use Map, to extend the small town feel begun by Hidden Springs.

Policy CR 5.3-2: Preserve steep slopes and ridge tops to enhance the feeling of open space.
Policy CR 5.3-3: Enforce the Design Guidelines for Cartwright Ranch.

Objective CR 5.4: Building within Cartwright Ranch will be of a uniform, quality design.

Policy CR 5.4-1: Enforce the Design Guidelines for Cartwright Ranch.

Objective CR 5.5: Cartwright Ranch will include significant community amenities.

Policy CR 5.5-1: Include the following amenities in Cartwright Ranch: a town hall/community center, a greenbelt along Dry Creek, a trail system consistent with the Ridge-to-Rivers Plan, open space in accordance with the Cartwright Ranch Land Use Map, and neighborhood commercial services.

Objective CR 5.6: Appropriate entities will have responsibility for maintenance, management and governance of Cartwright Ranch.

Policy CR 5.6-1: Establish a Cartwright Ranch homeowners association or expand the jurisdiction of the Hidden Springs Master Association to maintain common areas and enforce the conditions, covenants and restrictions for Cartwright Ranch.

Policy CR 5.6-2: Establish a Design Review Committee to review building and landscaping design in Cartwright Ranch.

Natural Resources

Goal CR 6.1: Cartwright Ranch will protect the natural resources in the development.

Objective CR6.1: Cartwright Ranch will maintain and enhance the natural environmental qualities of the land, and air and water quality.

Policy CR 6.1-1: Develop plats in Cartwright Ranch in accordance with the Cartwright Ranch Land Use Map to protect steep slopes, floodways and ridge lines.

Policy CR 6.1-2: Provide for home occupation, on-site amenities and employment-generating uses in Cartwright Ranch to reduce vehicle traffic and enhance air quality.

Objective CR 6.2: Cartwright Ranch will conserve and enhance wildlife habitat and migration corridors.
Policy CR 6.2-1: Construct plats in Cartwright Ranch in accordance with the Cartwright Ranch Land Use Map, which arranges uses and open space to protect wildlife corridors and habitat.

Policy CR 6.2-2: Enhance wildlife habitat in Cartwright Ranch in accordance with the Cartwright Ranch Development Plan as set forth in Element F8 of the Cartwright Ranch Development Plan.

Hazardous Areas

Goal CR 7.1: Design and maintain Cartwright Ranch to mitigate any hazardous areas in the development.

Objective CR 7.1: Minimize the threat and assist in the control of wildfires.

Policy CR 7.1-1: Enforce project, site and building wildfire design guidelines consistent with those in place in Hidden Springs.

Policy CR 7.1-2: Provide appropriate vehicular accesses for fire and emergency vehicles.

Public Services

Goal CR 8.1: Ensure that Cartwright Ranch includes appropriate public services, amenities and building requirements.

Objective CR 8.1: Ensure that Cartwright Ranch has all essential public services and mechanisms in place to maintain and operate such systems.

Policy CR 8.1-1: Require that all Cartwright Ranch plats include the provision of water systems, wastewater collection and treatment, streets and sidewalks, telephone and other public services the developer deems appropriate.

Policy CR 8.1-2: For each Cartwright Ranch plat, determine that all providers of essential public services are ready, willing and able to serve the proposed development.

Objective CR 8.2: Developed parks and common areas in Cartwright Ranch shall be irrigated.

Policy CR 8.2-1: Provide for an irrigation delivery system for all
developed parks and common areas.

Objective CR 8.3: Cartwright Ranch shall include energy-efficient structures.

Policy CR 8.3-1: Enforce the Design Guidelines, which shall include requirements for energy-efficient structures and energy conservation.

Transportation

Goal CR 9.1: Cartwright Ranch will provide the transportation infrastructure needed by its residents and will offer reasonable mitigation measures for the traffic generated by Cartwright Ranch.

Objective CR 9.1: Cartwright Ranch will include an adequate transportation system meeting established levels of service.

Policy CR 9.1-1: Construct all on-site streets, alleys and sidewalks in accordance with standards approved by the Ada County Highway District, consistent with prior approvals for Hidden Springs.

Policy CR 9.1-2: Cooperate with the Ada County Highway District to improve Cartwright Road through the existing West Foothills Overlay extraordinary impact fee.

Objective CR 9.2: Cartwright Ranch will take reasonable measures to reduce traffic generated by the development.

Policy CR 9.2-1: Consistent with the steps undertaken by Hidden Springs, implement trip reduction strategies as set forth in Element F5, p. 8, Cartwright Ranch Development Plan, to reduce vehicular trip generation and minimize the number of vehicle trips outside the community.

Policy CR 9.2-2: Provide a network of public and private paths for bicycles and pedestrians to allow ease of movement around the community.

Recreation

Goal CR 10.1: Provide a quality recreation system for Cartwright Ranch.

Objective CR 10.1: Include appropriate parks, greenbelt areas and other recreational amenities in the development.
Policy CR 10.1-1: Provide a publicly accessible greenbelt area and path along Dry Creek within the project site and on-site trails that link to the Foothills regional trail system.

Policy CR 10.1-2: Create a community center, parks, playfields and recreational facilities as set forth in Element F7, Cartwright Ranch Development Plan.

Special Areas or Sites

Cartwright Ranch does not include any special areas or sites as defined in the Ada County Comprehensive Plan or in state law.

Housing

Goal CR 11.1: Meet an appropriate portion of the County’s housing needs.

Objective CR 11.1: Provide a diversity of housing choices within Cartwright Ranch consistent with development costs and market realities.

Policy CR 11.1-1: Approve plats within Cartwright Ranch including a variety of lot types in accordance with the Cartwright Ranch Land Use Map.


Community Design

Goal CR 12.1: Develop Cartwright Ranch as a quality mixed-use planned community that will provide a high quality of life for Cartwright Ranch residents and will protect the quality of life of the surrounding community.

Objective CR 12.1: Cartwright Ranch will maintain a small-town feel.

Policy CR 12.1-1: Cluster development on the valley floor and in the southern draws in accordance with the Cartwright Ranch Land Use Map, to extend the small town feel begun by Hidden Springs.

Policy CR 12.1-2: Preserve steep slopes and ridge tops to enhance the feeling of open space.

Objective CR 12.2: Building within Cartwright Ranch will be of a uniform, quality design.


Objective CR 12.3: Cartwright Ranch will include significant community amenities.

Policy CR 12.3-1: Include the following amenities in Cartwright Ranch: a town hall/community center, a greenbelt along Dry Creek, a trail system consistent with the Ridge-to-Rivers Plan, open space in accordance with the Cartwright Ranch Land Use Map, and neighborhood commercial services.

Implementation

The Cartwright Ranch Comprehensive Plan will be implemented by applying the plan to plat applications submitted by the developer within Cartwright Ranch as provided in the Cartwright Ranch Zoning Ordinance. The foregoing goals and policies shall apply to plat approvals within Cartwright Ranch in lieu of any other provisions of the Ada County Comprehensive Plan.
Replaced maps.
ELEMENT B, PLANNED COMMUNITY COMPREHENSIVE PLAN

SUB – ELEMENT B3, CONCEPTUAL LAND USE MAP

Fig. B3.1

CARTWRIGHT RANCH PLANNED COMMUNITY
ELEMENT B, REVISION 5_012308

B-3 1 OF 3
### LAND USE INTENSITY RANGES BY NEIGHBORHOOD

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% = The percentage of the total number of residential dwelling units by Lot Type within each neighborhood.

N/A = Not Allowed or Not Applicable

The total number of residential dwelling units in the Cartwright Ranch Planned Community shall not deviate from the range of 820 dwelling units +/- 10%, unless the approved comprehensive plan, development plan, and technical studies are amended pursuant to the applicable provisions of the Ada County Code.

Fig. B3.1 [Enlargement]
CARTWRIGHT RANCH PLANNED COMMUNITY
LAND USE MAP
CONCEPTUAL DEVELOPMENT DENSITY AND INTENSITY

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<td>2 TO 10</td>
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This illustration of the Cartwright Ranch land use map is based upon current development concepts which are subject to approval in accordance with County ordinances.

Fig. B3.2
Town Primary

The town primary street will serve as the main street through the project providing access to the Town Center, commercial uses and residential uses and connectivity to the Hidden Springs Planned Community. The typical section includes a 68’ right-of-way with two 12’ travel lanes, two 8’ parallel parking lanes and 5’ sidewalks separated from the curb by an 8’ tree lawn. The town primary street will establish a comfortable environment for pedestrians with tree-lined sidewalks and with shortened pedestrian crosswalks, created by eliminating on-street parking at the intersections to accommodate “bulb-outs.” The typical section may be widened to provide a landscaped median at the Cartwright Road entrance to the project. See “Road and Circulation Plan” for the layout of roads.
Town Secondary

Town secondary streets will provide primary access to the residential and commercial uses in the valley floor. The typical section includes a 56' right-of-way with two 10' travel lanes, an 8' parking lane on one side and 5' sidewalks separated from the curb by an 8' tree lawn. Slow vehicular speeds and tree-lined sidewalks will ensure a comfortable pedestrian environment. See “Road and Circulation Plan” for the layout of roads.
Rural Residential

The rural residential streets will provide access to homesites above the valley floor and are proposed to mirror the more rural nature of the view lots. The narrow improved section will also serve to minimize the impact on the steeper slopes found in this area. The typical section includes a 50’ right-of-way with two 11’ travel lanes with 4’ bike/pedestrian lanes, a 1’ wide flush ribbon curb and grassed swales. These roadways will be located and designed to discourage through travel and to maintain low vehicular speeds. See “Road and Circulation Plan” for the layout of roads.
As appropriate, the town secondary street with perpendicular parking will serve commercial areas of the project where the uses require additional parking beyond that provided by the typical parallel orientation. The typical section would include two 12’ travel lanes with 18’ deep parking stalls. A 6’ sidewalk is provided directly behind the curb. Where no parking is provided, a 5’ sidewalk will be separated by an 8’ tree lawn.
Town Alley

Alleys will be created to eliminate driveways on town streets. Fewer driveways on town streets mean more on-street parking, more resident interaction, less utilitarian infrastructure and fewer garages lining residential streets. Alleys will also be used for utility easements and trash collection. The typical alley section is a 16’ right-of-way and pavement for residential uses and a 20’ right-of-way and pavement for commercial uses. See “Road and Circulation Plan” for the layout of roads and alleys.
Trails and Paths

The Dry Creek Greenbelt Path will parallel Dry Creek and provide for the continuation of the Greenbelt Path from Hidden Springs, to the north, and eventually to the south and east to adjacent properties. The foothills trail system will connect to the Greenbelt Path at strategic locations within the community and will provide pedestrians and bikes with access to open space areas throughout the Town Center and foothills areas. The two-foot width of the foothills trails allows this access with only minimal disturbance of the natural environment, while also providing hikers and bikers with a natural, “single-track” trail experience. See “Open Space and Trails Plan” for the layout of trails.
Road Types

- Town Primary (Hidden Springs Drive)
- Town Secondary
- Rural Residential
- Alley
- Existing Roads
- Foothills Trails
- Dry Creek Greenbelt
- Bus Stops
- Cartwright Ranch Boundary

Roads and Circulation Plan
Open Space and Trails Plan

Legend

- Dry Creek Greenbelt Path (DCGB)
- Foothills Trails (FT)
- Parks (P)
- Conservation Easement
- Open Space (O)
- Cartwright Boundary

Open Space, Parks and Trails Plan
EXHIBIT 2 – CARTWRIGHT RANCH ECONOMIC IMPACT ANALYSIS
ELEMENT E, ECONOMIC IMPACT ANALYSIS

ELEMENT E, ECONOMIC STUDY

EXECUTIVE SUMMARY

Cartwright Ranch is a proposed planned community development of about 700 acres immediately adjacent to the Hidden Springs community to the east and south in Ada County, Idaho. The site is outside the Boise city limits and its “area of impact.” The development will contain about 620 homes on lots ranging from 1,200 square feet to 8,000 square feet.

Cartwright Ranch will be developed to appear as a seamless addition to the Hidden Springs development north of Boise in Ada County, Idaho. The development will include residential, commercial, public, and recreational uses.

Cartwright Ranch hired ECONorthwest (ECO) to estimate the fiscal impacts associated with development of Cartwright Ranch in Ada County. Fiscal impacts are the public costs and revenues associated with some policy or action (in this case the Cartwright Ranch development). For local governments, fiscal impacts include the costs of providing services (e.g., police and fire protection) to a new development and the revenues (e.g., from property taxes) that the development will generate. A fiscal impact analysis compares the costs and revenues of new development on a local government. All dollar figures in this analysis are in 2006 dollars.

Throughout this analysis, ECO has made assumptions that are conservative. That is, the model estimates costs to be higher than they are likely to be, and revenue to be lower than it is likely to be. This methodology ensures that the analysis does not underestimate the fiscal impact Cartwright Ranch is likely to have on local jurisdictions.

A. Expected Property Values and Taxable Value

The developers of Cartwright Ranch expect the total market value of the development, at full build-out, to be $386,475,000. That market value is expected to have a net taxable value of $262,680,000.

The build-out and absorption rates for new development are critical to planning for service providers because they will not begin collecting on the full amount of net taxable income until the development is fully built-out. The developers of Cartwright Ranch have projected a build-out and absorption period of six years, averaging 103 units per year, beginning in 2008.

Table ES-1 shows the cumulative number of units expected to be absorbed every year, the number of units that will generate property taxes, and the net taxable value associated with those units in the year the unit generates property taxes.
**ELEMENT E, ECONOMIC IMPACT ANALYSIS**

**Table ES-1. Absorption rate and net taxable value at Cartwright Ranch ($2006)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Units Sold per Year</th>
<th>Cumulative Taxable Units</th>
<th>Net Taxable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>103</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2009</td>
<td>103</td>
<td>103</td>
</tr>
<tr>
<td>3</td>
<td>2010</td>
<td>103</td>
<td>207</td>
</tr>
<tr>
<td>4</td>
<td>2011</td>
<td>103</td>
<td>310</td>
</tr>
<tr>
<td>5</td>
<td>2012</td>
<td>103</td>
<td>413</td>
</tr>
<tr>
<td>6</td>
<td>2013</td>
<td>103</td>
<td>517</td>
</tr>
<tr>
<td>7</td>
<td>2014</td>
<td>0</td>
<td>620</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest.

**B. Fiscal Impacts by Service District**

**B.1 Ada County**

There are no expected immediate capital improvement costs to the County associated with Cartwright Ranch. There are no specific revenues associated with capital expenditures, for a zero net fiscal impact for capital.

To meet the Sheriff’s department’s staffing goals of 1.0 deputy per 465 houses, Cartwright Ranch will generate about $100,000 in new operations costs at full build-out. Table ES-2 shows the cost at full build-out, and incremental costs each year.

**Table ES-2. Fiscal impacts to Ada County ($2006)**

<table>
<thead>
<tr>
<th>Year 7/Full</th>
<th>Year 6</th>
<th>Year 5</th>
<th>Year 4</th>
<th>Year 3</th>
<th>Year 2</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Revenue-Operations
1-Time Sheriff Fee $32,020
Property Tax $0 $112,092 $224,184 $336,276 $448,367 $560,821 $672,551

Cost-Operations
Sheriff $16,663 $33,325 $65,988 $98,550 $131,133 $163,706 $196,279
General Gov’t Expense $23,431 $46,861 $70,292 $93,723 $117,154 $140,584 $164,014
Operations Cost-Net Balance $-8,074 $31,905 $67,904 $125,903 $186,281 $247,901 $308,262 $368,992

Source: see text for complete discussion of methods.

ECO estimated the per capita cost of variable general expenses at Ada County to be $93. The table shows expected operating costs for the absorption period and at full build-out.

The Sheriff’s mitigation fee is more than adequate to cover patrol services during the development phase, and the total net fiscal impact to the entire County is expected to be negative in the first year. Cartwright Ranch is expected to have a negative cost impact of about $8,000 in the first year of development. Every year after that, the net balance is
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positive, well in excess of the year’s loss. Thus, Cartwright Ranch negative impact is only very small, and temporary, so the Sheriff’s mitigation fee applied only in Year 1 is sufficient.

B.2 Ada County Paramedics

Ada County Paramedics will provide Emergency medical services (EMS) to the Cartwright Ranch development. Ada County Paramedics provides ambulance transport, see the text below describing North Ada County Fire & Rescue for first-responder services.

For operations, Ada County Paramedics receives less than 30% of its revenue from property taxes generated by the Emergency Medical District, with the balance covered by charges for service. The District will generate an additional $5,000 in property taxes from Cartwright Ranch, beginning in Year 2, and at full-build-out will generate about $30,000. Marginal operating costs will increase by about $3,750 each year, beginning in Year 1. Property taxes will not cover the marginal cost of operations until Year 5, but the gap will be filled by charges for ambulance services. No mitigation for operations is required.

For capital, it is not clear what costs are explicitly attributable to Cartwright Ranch. In theory, no new station is required. It has become apparent over the last year than the new residents in planned communities expect urban levels of service, and find rural levels of service unacceptable. The Ada County Paramedics expect to build a new station sometime in the next ten years which will service many planned communities, and Cartwright Ranch and Hidden Springs will make up a small part of that service area. Therefore, at this time, we are unable to estimate capital costs attributable to Cartwright Ranch.

Table ES-3. Fiscal impacts to Ada County Paramedics ($2006)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td>Property Tax</td>
<td>$0</td>
<td>$4,970</td>
<td>$9,940</td>
<td>$14,911</td>
<td>$19,881</td>
</tr>
<tr>
<td>Cost-Operations</td>
<td>$3,750</td>
<td>$7,500</td>
<td>$11,250</td>
<td>$15,000</td>
<td>$18,750</td>
<td>$22,500</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>-$3,750</td>
<td>-$2,530</td>
<td>-$1,310</td>
<td>-$89</td>
<td>$1,131</td>
<td>$2,367</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

B.3 Noxious Weeds, Pests, and Mosquito Abatement

Staff at Ada County report that they do not expect the Cartwright Ranch development to significantly impact costs for noxious weeds, pests, and mosquito abatement. Table ES-4 shows that the development will generate roughly $32,000 a year after full build-out, and no mitigation is required over interim years.

1 As reported by Darby Weston, Ada County Emergency Medical, February 7, 2007.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Property Tax-Pest</td>
<td>$0</td>
<td>$5,325</td>
<td>$10,650</td>
<td>$15,975</td>
<td>$21,301</td>
<td>$26,643</td>
<td>$31,951</td>
</tr>
<tr>
<td>Property Tax-Mosquito</td>
<td>$0</td>
<td>$1,208</td>
<td>$2,417</td>
<td>$3,625</td>
<td>$4,833</td>
<td>$6,045</td>
<td>$7,250</td>
</tr>
<tr>
<td>Cost-Operations</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Pest Extermination</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Mosquito Abatement</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$5,325</td>
<td>$10,650</td>
<td>$15,975</td>
<td>$21,301</td>
<td>$26,643</td>
<td>$31,951</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

B.4 Ada County Highway District (ACHD)

The ACHD imposes impact fees on new development that cover the cost of improving roads affected by the new development. The fees are designed to cover costs of capital improvements, resulting in a $0 net balance for capital costs.

The ACHD will generate property taxes as the development is built and thereafter, which will support maintenance of roads. We estimate that Cartwright Ranch will create about 8 miles of new roads, and that maintenance costs roughly $10,000 per mile (annualized) which would generate about $80,000 in new annual costs to the District, when the roads reach an age that maintenance is required. The fiscal model assumes that maintenance costs start at $15,000 per year, and increase by $15,000 per year until reaching the full $80,000 annual cost. This is likely an overestimate of maintenance costs.

Table ES-5. Fiscal impacts to the Ada County Highway District ($2006)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Full</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td></td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$0</td>
</tr>
<tr>
<td>Traffic Impact Fee</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$0</td>
</tr>
<tr>
<td>Extraordinary Impact Fee</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td></td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$0</td>
</tr>
<tr>
<td>Construction</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td>$0</td>
<td>$41,808</td>
<td>$83,616</td>
<td>$125,424</td>
<td>$167,232</td>
<td>$209,175</td>
<td>$250,848</td>
</tr>
<tr>
<td>Property Tax</td>
<td>$0</td>
<td>$15,000</td>
<td>$30,000</td>
<td>$45,000</td>
<td>$60,000</td>
<td>$75,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Cost-Operations</td>
<td>$0</td>
<td>$26,808</td>
<td>$53,616</td>
<td>$80,424</td>
<td>$107,232</td>
<td>$134,175</td>
<td>$170,848</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

Table ES-5 shows Cartwright Ranch is expected to have a positive cost impact throughout the absorption period and at full build-out. Table ES-5 does not show the marginal increase in maintenance costs to existing, but given the large positive net balance, the increased...
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Revenue is expected to be significantly greater than increased costs. Thus, no mitigation is necessary.

B.5 Boise School District

The Cartwright Ranch development is expected to generate about 310 school-aged residents, and one-third of these will attend schools in the BSD. During the build-out period, the development will generate, on average, 17 new students each year to the BSD. The fiscal model assumes that each student costs $8,367. The fiscal model assumes that in Year 1, the development will generate new students and their associated costs and revenues for half the school year.

Transportation costs include the cost of adding a bus route in Year 1, and a second bus route in Year 3, for a total cost a full build-out of $70,400.

Cartwright Ranch will generate $956,000 in property tax revenue at full build-out. This revenue will not diminish what the State of Idaho provides to the District. In addition, the new students in the District will generate roughly $475,000 per year at full build-out from the state.

Table ES-6 summarizes the fiscal impacts to the BSD, and shows there is a net loss in the first two years of development. By Year 3, Cartwright Ranch will generate more in property tax to the BSD than the development will cost the BSD, and by Year 4, the net gain exceeds the loss in Year 1.

<table>
<thead>
<tr>
<th>Table ES-6. Fiscal impacts to the Boise School District ($2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Projected Number of Students</td>
</tr>
<tr>
<td>Revenue-Capital</td>
</tr>
<tr>
<td>Cost-Capital</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
</tr>
<tr>
<td>Revenue-Operations</td>
</tr>
<tr>
<td>Basic Levy</td>
</tr>
<tr>
<td>State support</td>
</tr>
<tr>
<td>Cost-Operations</td>
</tr>
<tr>
<td>Bus Route</td>
</tr>
<tr>
<td>Instruction</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

B.6 Ada Community Library

The Library Board expects to boost staffing at the Hidden Springs Branch Library, and we assume half of those costs will be covered by existing development in Hidden Springs. We also assume that staffing will not reach the new, planned level of 1.5 FTE until Year 3 of development. To maintain its level of service of 3.5 volumes per resident, Ada Community Library will need to purchase about 5,300 volumes for the new residents of Cartwright Ranch.
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Ranch. If the library purchases all of those volumes by Year 7, it will cost the library about $17,700 per year (at $20 per volume), as shown in Table ES-7. Operating costs will include the costs of operating the library (utilities, janitorial services, insurance, etc.). Although actual costs of operating the new library space are not fully known, property tax revenue is expected to more than cover expected costs.

Table ES-7. Fiscal impacts to the Ada Community Library ($2006)

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td>not yet known</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>not yet known</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td>$0</td>
<td>$26,368</td>
<td>$52,737</td>
<td>$79,105</td>
<td>$105,473</td>
<td>$131,927</td>
<td>$158,210</td>
</tr>
<tr>
<td>Property Tax</td>
<td>$0</td>
<td>$355</td>
<td>$710</td>
<td>$1,064</td>
<td>$1,419</td>
<td>$1,775</td>
<td>$2,129</td>
</tr>
<tr>
<td>Cost-Operations</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$355</td>
<td>$710</td>
<td>$1,064</td>
<td>$1,419</td>
<td>$1,775</td>
<td>$2,129</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

The excess revenue generated by the Cartwright Ranch development could be used to fund the capital costs of building some new structure on the land donated by Cartwright Ranch, in the event the Library District chooses to do so. No further mitigation is necessary.

B.7 Dry Creek Cemetery

No capital revenues or costs are expected to be imposed on the Cemetery District. Because the development is not expected to impose an operations costs on the District, property tax revenues are expected to exceed projected operations costs. Table ES-8 shows Cartwright Ranch creating net revenue of about $2,100 per year at full build-out to the Dry Creek Cemetery.

Table ES-8. Fiscal impacts to the Dry Creek Cemetery ($2006)

<table>
<thead>
<tr>
<th>Year</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td>$0</td>
<td>$355</td>
<td>$710</td>
<td>$1,064</td>
<td>$1,419</td>
<td>$1,775</td>
<td>$2,129</td>
</tr>
<tr>
<td>Property Tax</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Operations</td>
<td>$0</td>
<td>$355</td>
<td>$710</td>
<td>$1,064</td>
<td>$1,419</td>
<td>$1,775</td>
<td>$2,129</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$355</td>
<td>$710</td>
<td>$1,064</td>
<td>$1,419</td>
<td>$1,775</td>
<td>$2,129</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

No mitigation is required.
B.8 North Ada County Fire & Rescue

No capital costs are expected to be imposed on the Fire & Rescue District, because the District has already purchased a new station (Station 3) at Hidden Springs. Station 3 is sufficient to serve the additional population of Cartwright Ranch. The development at Cartwright Ranch will increase property tax revenues to allow the District to staff Station 3.

The District expects that the development will require 1.5 full-time equivalent firefighters to serve the new population associated with Cartwright Ranch at full build-out, a cost of about $110,000 per year. The fiscal models assumes that half of those costs will come on line in Year 3, and all of the cost in Year 6.

Property tax revenues are expected to exceed projected operations costs. Table ES-9 shows Cartwright Ranch creating $528,000 in net revenue at full build-out. No mitigation is required.


<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Revenue-Operations

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Tax</td>
<td>$0</td>
<td>$106,471</td>
<td>$212,942</td>
<td>$319,413</td>
<td>$425,884</td>
<td>$532,698</td>
<td>$638,825</td>
</tr>
<tr>
<td>Cost-Operations</td>
<td>$0</td>
<td>$0</td>
<td>$55,000</td>
<td>$55,000</td>
<td>$55,000</td>
<td>$110,000</td>
<td>$110,000</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$106,471</td>
<td>$157,942</td>
<td>$264,413</td>
<td>$370,884</td>
<td>$422,698</td>
<td>$528,825</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

C. Conclusion

For most service districts, the cost of adding one new household to the district may be too small to measure. For a general service like parks and recreation, districts do not track their new users. New households may not contain any new users or may contain users whose use is very different from the average.

In the case of Cartwright Ranch the number of households is not large (620) relative to the County as a whole. Increased costs for many of the districts is not dependent on increased population as much as it is on the location of the development.

The property values of the Cartwright Ranch residential properties will produce more than sufficient property taxes to fund the operations and maintenance costs for providing services to the development for all service providers. This analysis has made a strong effort to be conservative when estimating costs and revenue (erring high for costs, and low for revenues), so there can be no doubt that Cartwright Ranch fully funds the government services it will use.
ELEMENT E, ECONOMIC IMPACT ANALYSIS

ECO has reviewed Sub-Element E2, Infrastructure and Financing Plan for Cartwright Ranch. Based on the data reported in the Financing Plan, the developers have the means to finance the necessary infrastructure to build the development at Cartwright Ranch.
CHAPTER 1: INTRODUCTION

Cartwright Ranch is a proposed planned community development of about 700 acres immediately adjacent to the Hidden Springs community to the east and south in Ada County, Idaho. Cartwright Ranch will be developed as a seamless addition to the Hidden Springs development. The site is outside the Boise city limits and its “area of impact.”

Cartwright Ranch hired ECONorthwest (ECO) to estimate the fiscal impacts associated with development of Cartwright Ranch in Ada County. This report summarizes ECO’s analysis of the revenues, costs, and impacts to level of service associated with the development.

This introductory chapter has three sections:

- A. What are fiscal impacts? Defines fiscal impacts and explains the purpose and limitations of a fiscal impact analysis.
- B. Evaluation Methods describes how ECO conducted the evaluation.
- C. Organization of this Report provides a descriptive outline of the remainder of the report.

A. What are fiscal impacts?

Fiscal impacts are the public costs and revenues associated with some policy or action (in this case the Cartwright Ranch development). For local governments, fiscal impacts include the costs of providing services (e.g., police and fire protection) to a new development and the revenues (e.g., from property taxes) that the development will generate. A fiscal impact analysis compares the costs and revenues of new development on a local government.

A fiscal impact analysis does not consider broader impacts of development, such as jobs and income, traffic congestion, environmental impacts, or others. These impacts are important and should be considered before developing a large project, but it is beyond the scope of a fiscal analysis to consider these broader impacts.

A fiscal impact analysis considers only direct impacts. Direct impacts are the costs incurred by the affected local governments and the immediate revenues generated by the development to those local governments. Examples of costs are salaries for police officers and building new infrastructure such as roads, water, and sewer. Revenues include sales tax, property tax, and intergovernmental revenues. Direct impacts do not include indirect consequences of growth, for example, a new development may spur more intense development in neighboring properties raising the total value of those properties, which would generate increased property tax revenues (and possibly demand for services). A fiscal impact analysis tallies only the costs and revenues immediately associated with the development.

A fiscal impact analysis considers the current costs and revenues. A key assumption behind our analysis is that the affected local governments’ budgets will not differ significantly from their future budgets. This is how fiscal impact analysis has been conducted for decades.
Fiscal impact analysis is concerned with public costs, not private costs. This analysis focuses on the public side and does not analyze private costs or revenues.

Fiscal impact analysis typically focuses on local jurisdictions. This analysis does not consider revenues to the Idaho state or the federal government but rather focuses on Ada County and affected local districts.

B. Data and methods

To conduct our analysis, we relied on the following primary sources of information:

- **Ada County Adopted Budget, Fiscal Year 2005-06.** We reviewed the County’s most recent budget to understand the costs of personnel and materials and services.
- **Property value estimates from Cartwright Ranch.** Staff at Cartwright Ranch provided estimates of lot values and expected market value of future house. Cartwright Ranch staff also provided estimates of absorption rates.
- **Interviews with staff at local jurisdictions.** We interviewed staff at the County and other affected jurisdictions to understand how the new development would affect costs, revenues, and service levels. We interviewed staff at the County Assessors office to understand assessed property values differ from market values.

C. Organization of This Report

Ada County Code considers developments greater than 640 acres to be “planned communities”, and requires specific analysis for those developments. Cartwright Ranch is about 700 acres and must meet Code requirement for planned communities. This report is organized to meet the requirements of Section 8-2E-4(E) of the revised ordinance.

- **Chapter 2: Background,** describes the proposed planned community at Cartwright Ranch and expected values and absorption rates. This chapter discusses the issues identified in Section 8-2E-4(E)(1), the Economic Feasibility Study.
- **Chapter 3: Fiscal Impacts to Ada County** describes the revenues and costs to Ada County resulting from the development of Cartwright Ranch, and how levels of service will be impacted by the development. This chapter also describes revenues and costs to taxing districts managed by the County. This chapter discusses the issues identified in Section 8-2E-4(E)(3), the Fiscal Impact Study, of the proposed revised ordinance.
- **Chapter 4: Fiscal Impacts to other Districts** describes the revenues and costs to the other affected jurisdictions. This chapter also includes a discussion of private infrastructure (as required by Section 8-2E-4(E)(2)).

Section 8-2E-4(E)(2) describes the requirements for an Infrastructure and Public Facilities Financing Plan. ECO has reviewed Sub-Element E2, Infrastructure and Financing Plan for Cartwright Ranch. Based on the data reported in the Financing Plan, the developers have the means to finance the necessary infrastructure to build the development at Cartwright Ranch. The Cartwright Ranch development does not include public facilities in its plans. The
ELEMENT E, ECONOMIC IMPACT ANALYSIS

development is designed to be a seamless addition to the Hidden Springs community, which already includes a fire station and charter school. The size of the development does not merit additional public facilities.
This chapter provides the background data that the fiscal impact analysis is based upon. It is organized into four sections:

- **A. Description of Cartwright Ranch** describes the proposed development, including the number of units and type of uses.
- **B. Expected property values and taxable value** describes the expected market values and expected assessed values of the development, which will determine expected property tax revenue.
- **C. Absorption rates** describes the schedule that the developers expect for construction and occupancy.
- **D. Expected demographics** discusses the projected incomes and household size of probable residents. The age and household size of the future residents impacts the service required by schools and emergency medical service providers.

**A. Description of Cartwright Ranch**

Cartwright Ranch is a proposed planned community development of about 700 acres immediately adjacent to the Hidden Springs community to the east and south in Ada County, Idaho. The site is outside the Boise city limits and its “area of impact.” The development will contain about 620 homes on lots ranging from 1,200 square feet to 8,000 square feet.

Cartwright Ranch will be developed to appear as a seamless addition to the Hidden Springs development north of Boise in Ada County, Idaho. The development will include residential, public, and recreational uses, and a small amount of commercial space.

- **Residential uses.** The great majority of the developed Cartwright Ranch will be residential units. There will be about 620 residential units; 123 will be attached townhomes with the remaining 497 as single-family houses. Housing will cover about 264 acres.
- **Non-residential uses.** The proposed development may include a swimming and fitness center, a town hall, a mail facility, landscaped park areas, and open space areas. The only employment associated with Cartwright Ranch would be staff at the library in Hidden Springs. Total earnings for the possible 1.5 full-time equivalents at the library would be $42,500. The Homeowner’s Association may employ a property manager.

The proposal for the Cartwright Ranch development will include about 20,000 square feet of commercial, that will be built as needed. The development is designed so that the residents can easily access the commercial and retail activities in the adjacent Hidden Springs development.

**B. Expected Property Values and Taxable Value**

Property taxes are the primary means that the Cartwright Ranch development will impact local governments’ revenues. This section discusses expected property values and how the
ELEMENT E, ECONOMIC IMPACT ANALYSIS

Fiscal impact analysis converts market values to assessed values, which in turn generates property taxes.

The developers of Cartwright Ranch provided ECO estimated market values for the development based on lot size, location, and a construction multiplier. The Cartwright Ranch developers are selling vacant lots. The developers at Cartwright Ranch estimated market value at full build-out, based on the assumption that the market value of the houses is five times the expected value of the vacant lots, as has been the case for recent sales at Hidden Springs. A sample of recent home sales at the Hidden Springs development show that the average (mean) multiplier (home price/lot price) was 5.5. Thus, using a multiplier of 5 conservatively estimates projected home values.

The developers at Cartwright Ranch provided ranges of expected values of house for the four proposed lot types at Cartwright Ranch. For the all lot types, except view lots, there are two sub-types. Each sub-type has a range of expected values. To estimate the total market value at build-out, ECO calculated the midpoint of each sub-type range, and multiplied that figure by the expected number of lots. At this time, the developers have not precisely identified the exact number of lots for each sub-type. Therefore, ECO assumed that one-third of the Townhouse, Village, and Traditional lots would be in the higher priced range, and two-thirds of the lots would be in the lower priced range. ECO assumed that the majority of the homes would be the lower-priced subtype, to ensure that our property value estimates are appropriately conservative.

Table 1 shows the range of expected market values by lot type, as estimated by the developers of Cartwright Ranch. The table also shows the calculated mid-point value for each sub-type, and the total market value at build-out. The table shows total market value at full build-out to be about $386 million.

Table 1. Estimated market and assessed values, by unit type, at Cartwright Ranch ($2006)

<table>
<thead>
<tr>
<th>Lot Type</th>
<th>Number of Units</th>
<th>Range of Expected Home Prices</th>
<th>Total Market Value at Build-out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Mid-point</td>
</tr>
<tr>
<td>Townhouse-High</td>
<td>41</td>
<td>$200,000 - $350,000</td>
<td>$275,000</td>
</tr>
<tr>
<td>Townhouse-Low</td>
<td>82</td>
<td>$175,000 - $325,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Village-High</td>
<td>37</td>
<td>$325,000 - $575,000</td>
<td>$450,000</td>
</tr>
<tr>
<td>Village-Low</td>
<td>75</td>
<td>$300,000 - $550,000</td>
<td>$425,000</td>
</tr>
<tr>
<td>Traditional-High</td>
<td>72</td>
<td>$500,000 - $900,000</td>
<td>$700,000</td>
</tr>
<tr>
<td>Traditional-Low</td>
<td>143</td>
<td>$400,000 - $800,000</td>
<td>$600,000</td>
</tr>
<tr>
<td>View</td>
<td>170</td>
<td>$800,000 - $1,200,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>620</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Frank Martin at Cartwright Ranch.

To convert the projected market values to assessed values, ECO considered Idaho law and local market factors. ECO interviewed staff at the Ada County Assessor's Office to

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2 Personal communication with Frank Martin and Charles Carlise, March 23, 2006.
determine a reasonable conversion methodology.1 Under Idaho law, properties must be assessed at market value each year. The Ada County Assessor’s Office compares recent sales to estimate the market value for properties. Although the Assessor’s Office updates the estimates each year, the assessments lag behind actual market values because the market is constantly changing and the data is based on sales that have already occurred. The Assessor’s Office estimates that assessed values are actually 10% to 20% below market values.

Table 2. Estimated market and assessed values, by unit type, at Cartwright Ranch ($2006)

<table>
<thead>
<tr>
<th>Lot Type</th>
<th>Number of Units</th>
<th>Average Market Value /Unit</th>
<th>Estimated Assessed Value /Unit</th>
<th>Total Assessed Value at Build-out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Townhouse-High</td>
<td>41</td>
<td>$275,000</td>
<td>$220,000</td>
<td>$9,020,000</td>
</tr>
<tr>
<td>Townhouse-Low</td>
<td>82</td>
<td>$250,000</td>
<td>$200,000</td>
<td>$16,400,000</td>
</tr>
<tr>
<td>Village-High</td>
<td>37</td>
<td>$450,000</td>
<td>$360,000</td>
<td>$13,440,000</td>
</tr>
<tr>
<td>Village-Low</td>
<td>75</td>
<td>$425,000</td>
<td>$340,000</td>
<td>$25,386,667</td>
</tr>
<tr>
<td>Traditional-High</td>
<td>72</td>
<td>$700,000</td>
<td>$560,000</td>
<td>$40,133,333</td>
</tr>
<tr>
<td>Traditional-Low</td>
<td>143</td>
<td>$600,000</td>
<td>$480,000</td>
<td>$68,800,000</td>
</tr>
<tr>
<td>View</td>
<td>170</td>
<td>$1,000,000</td>
<td>$800,000</td>
<td>$136,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>620</strong></td>
<td></td>
<td><strong>$309,180,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Cartwright Ranch, adjusted by ECONorthwest based on data from the Ada County Assessor’s Office.

Table 2 shows our calculation of assessed values at full build-out. To incorporate the lag in assessed values and to avoid overestimating the property tax contribution from the Cartwright Ranch development, the fiscal model assumes that the assessed value is 20% less than the market values. This results in total estimated assessed value of $309 million at full build-out. All dollar figures are in 2006 dollars, and do not factor in inflation.

The next step to determine total taxable value is to account for tax exemptions. Owner-occupied primary residences in Idaho qualify for a homeowner’s exemption. The Idaho Legislature passed a bill in the most recent Legislative session that expands the exemption. The new law exempts 50% of the taxable value of the home, including the land, up to $75,000. The value of the exemption will be indexed to inflation in the future.4

The development’s primary market is households that are seeking a primary residence, and the developers expect most of the homes will act as such. The developers at Cartwright Ranch are not developing units designed to be rental units. Some home buyers may choose to rent out their property, but, to date, most houses in the Hidden Springs development are owner-occupied. The fiscal model therefore assumes that the new exemption of $75,000 applies to all of the homes in the Cartwright Ranch development. In addition, the value of the houses, even excluding the land, will exceed $100,000, so that the occupants will be able to maximize the exemption. Table 3 shows the projected net taxable value of the Cartwright Ranch development is $263 million.

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1 Personal communication with Dave Jauquet, Ada County Assessor’s Office, April 4, 2006.

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Table 3. Total projected taxable value of Cartwright Ranch development ($2006)

<table>
<thead>
<tr>
<th>Cartwright Ranch Value</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Units</td>
<td>620</td>
</tr>
<tr>
<td>Total Assessed Value</td>
<td>$309,180,000</td>
</tr>
<tr>
<td>Less Homeowners Exemption</td>
<td>$46,500,000</td>
</tr>
<tr>
<td>Net Taxable Value</td>
<td>$262,680,000</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest.

The Idaho Property Tax Reduction Act allows persons over age 65, widowed or disabled of any age, and POWs who meet income and resident requirements to reduce their property tax liability by $1,200. Given the expected demographic in the Cartwright Ranch development (see discussion below), the fiscal model assumes that no residents will be eligible for this tax exemption.

C. Absorption Rates

The build-out and absorption rates for new development are critical to planning for service providers because they will not begin collecting on the full amount of net taxable income until the development is fully built-out. Services providers may experience increased costs before new revenues are collected. If service providers must begin providing services before build-out they would have to cover the costs with another revenue source.

The developers of Cartwright Ranch have projected an absorption period of six years for 620 units, or an average of 103 units per year, beginning in 2008. The six-year absorption rate is reasonable, even conservative, given recent experience at Hidden Springs. In 2005, 250 houses at Hidden Springs sold. The developers report that it takes builders approximately six months to build a house from the time the builder purchases the lot. At this time, demand for lots and homes exceeds supply. Many homes are sold before they are completed, and builders could sell more if they could build more.

An absorption rate of 103 units per year assumes that Cartwright Ranch captures a very small portion of new housing sales in Ada County. That figure represents between 2% and 4% of new housing sales per year in 2003, 2004, and 2005.

A recent news article in the Idaho Statesmen provides evidence of Hidden Springs' competitive advantage. The article reported that the realtor representing Hidden Springs,

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Brad Barker, was named one of the top real estate agents in the country. Mr. Barker credits the Hidden Springs development.1

The fiscal model assumes that the 103 homes absorbed each year of the six-year period all come on the property tax rolls at the same time, and generate tax revenue for the entire year. This is unlikely to be the actual scenario—homes will be built and sold over the course of the year, some completed in January and some completed in December. The fiscal model keeps the assumptions simple, because any estimate of actual sale month (or quarter) inherently requires more precision than existing data merit. Delays in the construction schedule, quick sales, and other factors make such projections inaccurate. It is possible that some properties may have a revenue lag of up to 18 months, but others will see a lag of only six months. To keep the revenue estimates conservative, the fiscal assumes that the property tax revenue will lag one year behind sales. Given that the absorption rate is conservative, a 12-month lag is a reasonable figure to calculate future revenue streams.

Table 4 shows how the absorption rate will impact the net taxable value over the six-year period of development. We assume that 103 houses are built and sold in Year 1, but those houses do not generate a full year of property tax revenue until Year 2. This underestimates the amount of tax revenue generated in Year 1. Some house will be on the tax rolls in year 1, and pay property taxes. But allowing a 12-month lag for all houses ensures that this analysis conservatively estimates the revenues generated by the development. After 2014, the service districts will continue to receive the full annual property tax amount.

<table>
<thead>
<tr>
<th>Year</th>
<th>Units Sold per Year</th>
<th>Cumulative Taxable Units</th>
<th>Net Taxable Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2008</td>
<td>103</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>2009</td>
<td>103</td>
<td>103</td>
</tr>
<tr>
<td>3</td>
<td>2010</td>
<td>103</td>
<td>207</td>
</tr>
<tr>
<td>4</td>
<td>2011</td>
<td>103</td>
<td>310</td>
</tr>
<tr>
<td>5</td>
<td>2012</td>
<td>103</td>
<td>413</td>
</tr>
<tr>
<td>6</td>
<td>2013</td>
<td>103</td>
<td>517</td>
</tr>
<tr>
<td>7</td>
<td>2014</td>
<td>0</td>
<td>620</td>
</tr>
</tbody>
</table>

Source: ECONorthwest, based on values provided by Cartwright Ranch.

The values shown in Table 4, are 2006 dollars, and do not factor in inflation. ECO has kept all dollar values in 2006 dollars, so that projected revenues are comparable to projected costs. The housing units will most likely increase in value, but so will the cost to local governments of providing services. This analysis compares all revenue (i.e., from property taxes) to all costs in 2006 dollars.

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D. Expected demographics

The expected demographics of a development affect expected costs to local service providers. For example, a high number of school-age children will impact school districts, and a high number of elderly residents will impact demand for emergency medical services. This section discusses these factors.

The homes at Cartwright Ranch are expected to have high values, so households with relatively high incomes will occupy the development. To estimate the demographic make up of the future occupants, ECO used the City of Eagle, Idaho. Eagle is a relatively affluent community, and its demographic make-up is a reasonable proxy for Cartwright Ranch’s future residents. ECO considered using Hidden Springs as an example, but standard data sources do not provide that level of detail.

Table 5 shows the distribution of household income in Eagle, and as a comparison, Idaho. The data show that Eagle has relatively fewer low-income households and relatively more high-income households than the statewide average. Another measure of income is median income—the middle point of all households, 50% of the households have incomes greater than the median and 50% of the household have incomes lower than the median. The median household income in 2000 in Eagle was $65,300, almost twice the statewide median income of $37,600.

Table 5. Household income distribution in Eagle City, Idaho and Idaho, 2000

<table>
<thead>
<tr>
<th>Eagle City</th>
<th>Idaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>$&lt;35,000</td>
<td>992</td>
</tr>
<tr>
<td>$35,000 - $49,999</td>
<td>462</td>
</tr>
<tr>
<td>$50,000 - $99,999</td>
<td>1,569</td>
</tr>
<tr>
<td>$100,000- $199,999</td>
<td>718</td>
</tr>
<tr>
<td>$200,000+</td>
<td>146</td>
</tr>
<tr>
<td>Total</td>
<td>3,887</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, Census 2000.

The developers of Cartwright Ranch and Hidden Springs initially expected the development to attract households with children. They have since found that the development attracts more ‘empty nesters’ than families with young children. This corresponds to housing trends seen across the country: the baby boom cohort is the largest demographic in the U.S., and generally speaking, their children have grown up or are close to it. The baby boomer age group is more likely to have accumulated enough wealth to afford a home in Hidden Springs or Cartwright Ranch. Families with young children are more likely to be at the beginning of a career, therefore earning less, and they have the additional expenses of raising children.
There are 2.87 residents per households, on average, in Eagle and 2.44 in Boise. The Boise School District has reported that Hidden Springs generates 0.5 students per household, indicating that household size in Hidden Springs and Cartwright Ranch is even smaller than in Boise. In the absence of a data source that can more precisely identify household size, we estimate that the average household size in Cartwright Ranch will be 2.45 residents per household. The fiscal impact model assumes that the development will generate 1,519 new residents, including 310 new students.

While 20,000 square feet of space is reserved for commercial uses in Cartwright Ranch, the development does not rely on assumptions about the construction of commercial space either to mitigate traffic demands or to offset the fiscal impacts of the development. Cartwright Ranch makes no representations regarding the ability of its residents or visitors to support commercial, service or retail uses.

CHAPTER 3: FISCAL IMPACTS TO ADA COUNTY

This chapter discusses expected costs and revenues to Ada County, resulting from the proposed planned community at Cartwright Ranch. There are four taxing districts managed by Ada County, all discussed in this chapter. The chapter first describes revenues for all taxing districts, then costs and service levels for each taxing district:

A. Revenues

Ada County collects revenue in a variety of ways. The property tax is its largest revenue source, generating 43% of the total budget in fiscal year 05-06. Figure 1 shows the different revenue sources and their contribution to the whole budget.

Figure 1. Ada County revenue by source, fiscal year 05-06

Source: Ada County Final Budget, 2005-2006. Ada County Accounting Department.

Property Tax

Property taxes are the primary means through which the Cartwright Ranch development will impact Ada County’s revenues.

Table 6 shows the property tax levies and projected revenues that would support Ada County and the three districts the County manages. The table projects revenue for the build-out period, according to projected assessed values and absorption rates described in Chapter 2. All levies in the table are regular levies, not capital bonds. By full build-out, the Cartwright Ranch development will generate about $672,000 to the County’s General Fund, and
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$741,000 to the County and the three additional districts managed by the County (in 2006 dollars).

Table 6. Property tax levies and projected revenue over absorption period ($2006)

<table>
<thead>
<tr>
<th>District Number</th>
<th>District</th>
<th>2006 Levy</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Full Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ada County</td>
<td>0.0025800344</td>
<td>$0</td>
<td>$112,092</td>
<td>$224,184</td>
<td>$336,276</td>
<td>$448,367</td>
<td>$560,821</td>
<td>$672,551</td>
</tr>
<tr>
<td>2</td>
<td>Pest Extermination</td>
<td>0.000121634</td>
<td>$0</td>
<td>$5,325</td>
<td>$10,650</td>
<td>$15,975</td>
<td>$21,301</td>
<td>$26,643</td>
<td>$31,951</td>
</tr>
<tr>
<td>3</td>
<td>Emergency Medical</td>
<td>0.000113527</td>
<td>$0</td>
<td>$4,970</td>
<td>$9,940</td>
<td>$14,911</td>
<td>$19,881</td>
<td>$24,867</td>
<td>$29,821</td>
</tr>
<tr>
<td>43</td>
<td>Mosquito Abatement</td>
<td>0.000027599</td>
<td>$0</td>
<td>$1,298</td>
<td>$2,417</td>
<td>$3,625</td>
<td>$4,833</td>
<td>$6,045</td>
<td>$7,250</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>0.002823104</td>
<td>$0</td>
<td>$123,595</td>
<td>$247,191</td>
<td>$370,786</td>
<td>$494,382</td>
<td>$618,376</td>
<td>$741,573</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest with data from the Ada County Assessor’s Office and Cartwright Ranch.

The numbers in Table 6 assume that the levy rates do not change as Cartwright Ranch develops and is added to the County’s assessed value. This fiscal analysis assumes that levy rates do not change over the five-year projection period. ECO interviewed staff at the Ada County Treasurer’s office to determine the variability of levy rates. Most levy rates in Ada County (in addition to those levied by the County) vary little. The County’s rate grew by just over 1%, on average, each year from 2002 to 2005. In the last year, the levy rate slightly declined. Levy rates for the Pest Extermination District (District 2) and the Mosquito Abatement District (District 43) increased by about 7% per year, on average, from 2002 to 2005. The rate changed because the total budget increased to respond to public health issues, such as increased efforts to control mosquitoes in response to the presence of West Nile virus.

Because levy rates have varied so little in the past, or in response to unpredictable issues, it is reasonable to assume that the 2006 rates will continue throughout the projection period.

Licenses and Permits

Ada County issues licenses and permits for the following activities:

- Marriage
- Liquor
- Beer
- Wine
- Catering
- Transfer for beer, wine, liquor
- Vehicle escort
- Solicitor/peddler

All of the licenses and permits in these categories, except marriage licenses, are paid by businesses or sole proprietors. As a residential development with very little retail space, the

---

10 Personal communication with Lyn Call, Ada County Treasurer’s Office, May 8, 2006.
Cartwright Ranch development will not generate revenue from those licenses and permits. The residents of Cartwright Ranch will generate marriage license revenue at a rate comparable to the rest of the County’s population, but the total revenue attributable to Cartwright Ranch is so small it will have no discernable impact on the County’s budget.

**Intragovernmental Revenue**

This revenue sources includes federal and state grants, and also sales and liquor tax revenue from the state. The Cartwright Ranch development will not affect the County’s revenue from grants.

The new population will affect revenue from sales and liquor taxes, collected and distributed by the state. The distribution varies every year, because the total revenue collected by the state varies every year.

The actual distribution received by Ada County is based on a complicated formula. The County gets a set amount every year and an amount based on the proportion that the County’s population bears to the population of the state. Because of the complexity of the calculation, County staff was unable to provide an estimate of the dollar amount based on population.

The fiscal model does not project expected intragovernmental revenue to be generated by increasing the County’s population. The estimate is based on many variables that we could not obtain. Additionally, because the revenue is based on sales tax, and total statewide retail sales fluctuate with changes in the regional and national economy, predicting actual revenue is fraught with error. Cartwright Ranch will only increase the County’s by about 1,500 new residents, which will have a very small impact on population-based revenue sources.

**Charges for Services**

About one-quarter of the County’s revenue comes from charges for services and a majority of the departments at the County collect charges for services. The charges and the services vary widely. Some departments are partially funded by charges for services. For example, about one-quarter of the Sheriff’s total budget comes charges for services—the Sheriff charges for contractual services to small cities in the County. Almost all of the Development Services department’s budget is funded be service charges, collected in the form of building and engineering fees. The fiscal model does not calculate revenue collected from service charges.

**Fines**

Ada County collects fines and forfeits for traffic, parking, and criminal infractions. Annual revenue for 2005 from fines and forfeits is expected to be about $1.2 million.

The fiscal model assumes that Cartwright Ranch residents will generate the same revenue from fines and forfeits on a per capita basis as do existing Ada County residents. In 2005, the average revenue per capita in Ada County was $3.50. Throughout the absorption period, the
new residents will generate roughly an additional $900 each year in increased revenue in form of fines and forfeits. At full build-out, the new residents of Cartwright Ranch will generate about $5,300 annually in fines and forfeits to Ada County (in 2006 dollars).

B. Costs and Service Levels

New development creates ongoing service obligations to governments. This section describes the projected costs resulting from the Cartwright Ranch development to Ada County and the districts managed by the County. The section also describes service levels in the area and how they will be impacted by the development.

Ada County requires that this analysis measure the “impacts of the planned community upon existing infrastructure and any cost of new infrastructure.” This means the analysis must consider both operating and maintenance (O&M) costs and capital costs.

Capital improvements differ from O&M in several important ways. Capital improvements cost more and last longer than O&M, and O&M costs are planned in one-year (or two-year) budgets, but capital improvements must be planned over longer periods.

Most revenues used to pay for capital improvements are restricted by law or policy to be used for a specific type of public facility. For example, traffic impact fees can be used only for system improvements that benefit those who pay the fees. By comparison, most revenues that are available for O&M expenses can be used for any type of public service or program.

The costs and service level discussion is organized into the following sections:

- B.1 General County Services
- B.2 Sheriff’s Office
- B.3 Parks
- B.4 Solid Waste
- B.5 Ada County Paramedics
- B.6 Noxious Weeds, Pests, and Mosquito Abatement

B.1. General County Services

Ada County would provide general administration, court system services, building and development, and public health services to the Cartwright Ranch development.

Under Ada County Code, planned communities must provide for sewer, water, schools, and recreational facilities. The developers of Cartwright Ranch will therefore construct all roads and recreational facilities within the development and the private utility companies that serve the area will provide facilities for sewer and water.
ELEMENT E, ECONOMIC IMPACT ANALYSIS

This means that there will not be immediate capital improvement costs to public service districts associated with the development of Cartwright Ranch.

To estimate the total costs imposed by the new households at Cartwright Ranch, ECO estimated the per capita cost of general expenses at Ada County. To estimate variable costs (i.e., those costs that increase as population increases), ECO accounted for general government current expenses, as identified in the Ada County budget. Current expenses include the Sheriff’s department, which is discussed separately and excluded from this estimate. ECO also excluded costs associated with the County Commissioners, as those costs are fixed, and will not increase as population grows.

Total current expenses\(^\text{11}\) funded by property taxes in the 2005-06 budget year—minus the Sheriff and the County Commissioners (a fixed cost)—are $30,977,047. Per capita costs, based on a 2005 County population of 334,704, equal $93.\(^\text{12}\) Table 7 shows the estimated costs associated with general government activities at Ada County, throughout the absorption period and at full build-out. The fiscal model has purposely included all general county expenses (except the Sheriff and Commissioners) funded by property taxes in this calculation, to be conservative. The only items excluded from this calculation are the costs of the Sheriff and the County Commissioners. The fiscal model has made assumptions to err high on costs and low on revenues, to ensure that Cartwright Ranch is paying its fair share for public services.

Table 7. Projected costs of general government activities ($2006)

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 8/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cartwright Ranch Population</strong></td>
<td>253</td>
<td>506</td>
<td>760</td>
<td>1,013</td>
<td>1,286</td>
</tr>
<tr>
<td><strong>General Gov’t Expense</strong></td>
<td>$23,431</td>
<td>$46,861</td>
<td>$70,292</td>
<td>$93,723</td>
<td>$117,154</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest with data from the Ada County 2005-2006 Budget and Claritas, Inc.

Remaining County services are either self-supporting, that is, the service is entirely supported by explicit fees, or is discussed below in subsequent sections.

**B.1.1. Conclusion**

Conclusions about general County services are discussed below, with conclusion’s about the Sheriff’s Office.

\(^{11}\) Current Expenses are those expenses that are not funded by special levies or taxing districts, are not self-supported funds, and are not capital projects funds. Current expenses are funded by a mix of revenue sources, including property taxes, charges for services, licenses and permits, and other miscellaneous revenue sources.

\(^{12}\) Population based on 2005 estimates from Claritas, Inc.
B. 2. Sheriff's Office

Cartwright Ranch would receive law enforcement services from the Ada County Sheriff's Office. The Sheriff's department is the largest department, by budget, at the County. About one-quarter of the entire County budgets funds the Sheriff's operations.

The fire station in Hidden Springs has an office that can be used by the Ada County Sheriff’s Department. At this time, the Sheriff does not staff the office.

The Sheriff’s Office reported to ECO staff that it considers planned communities to be easier to serve than rural areas because neighbors are familiar with each other and watch out for activity in the area. The Sheriff’s Office reported that the planned communities are easy to patrol, and it is generally less expensive to provide services to a denser area than it is to a rural area with homes far from each other.13

According to staff at the Sheriff’s office, a deputy costs about $75,000 per year including benefits. A police car with radio, modem, and computer costs $36,000. It takes nine months from the date of hire to train a new deputy before he/she is ready to patrol alone.14

The Sheriff’s office reports it intends to provide a service level measured by the ratio of patrol deputy to population of 1.0 per 465 houses.15 The Sheriff’s office does expect to hire new staff at that level as Cartwright Ranch develops. For the 620 houses to be built at the Cartwright Ranch development, the Sheriff would require 1.33 deputies. The Sheriff’s office expects the development will require approximately one new car.16

The fiscal model estimates that costs for new deputies (1.33 deputies plus one car) to serve Cartwright Ranch at full build-out development are $100,000 per year (2006 dollars). The fiscal model assumes the Sheriff’s office will purchase a new car in Year 3, and the car will last beyond the build-out period. The model assumes the car is an O&M cost, and not a capital cost.

Because of the lag to collect revenue from property taxes (discussed in the previous chapter), the Sheriff has devised a method to ensure it has adequate revenue to cover costs.17 Each quarter, the Sheriff’s office will bill developers a one-time of $310.87 per dwelling unit built in that quarter. In subsequent years, the patrol services would be covered through regular property tax sources.

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13 Personal communication with Lt. Scott Johnson at the Ada County Sheriff’s Office, March 2, 2006.
14 Personal communication with Lt. Scott Johnson at the Ada County Sheriff’s Office, March 2, 2006.
15 Ada County Development Services, Powerpoint presentation, “South Ada County Planned Community/Large Development Coordination Meeting”, dated May 17, 2006.
16 Personal communication with Lt. Scott Johnson at the Ada County Sheriff’s Office, March 2, 2006.
17 Ada County Sheriff’s Office, “Demystifying the Cost of Protecting Planned Communities” (http://www.adasheriff.org/About/weServe.asp).
ELEMENT E, ECONOMIC IMPACT ANALYSIS

The Sheriff's office calculated that fee based on an 18-month lag. This model assumes an average lag of 12 months, some houses will have only a six-month lag, some will have an 18-month lag.

If the Cartwright Ranch paid the Sheriff's office's fee of $310.87 over the entire absorption period, it would generate about $192,000, more than enough to cover the cost of 1.3 deputies and a new car, which will cost $133,500.

Therefore, the fiscal model assumes that the fee is paid in Year 1, to cover the gap, but in subsequent years, the property tax covers expected patrolling costs for the Cartwright Ranch development.

B.2.1. Conclusion

There are no expected immediate capital improvement costs to the County associated with Cartwright Ranch. There are no specific revenues associated with capital expenditures, for a zero net fiscal impact for capital.

To meet the Sheriff's department's staffing goals of 1.0 deputy per 465 houses, Cartwright Ranch will generate about $100,000 in new operations costs at full build-out. Table 8 shows the cost at full build-out, and incremental costs each year.

Table 8. Fiscal impacts to Ada County ($2006)

<table>
<thead>
<tr>
<th>Revenue-Capital</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td>$32,020</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>1-Time Sheriff Fee</td>
<td>$0</td>
<td>$112,092</td>
<td>$224,184</td>
<td>$336,276</td>
<td>$448,367</td>
<td>$560,821</td>
<td>$672,551</td>
</tr>
<tr>
<td>Property Tax</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<td>$66,650</td>
<td>$83,313</td>
<td>$99,975</td>
<td>$99,975</td>
</tr>
<tr>
<td>Sheriff</td>
<td>$23,431</td>
<td>$46,861</td>
<td>$70,292</td>
<td>$93,723</td>
<td>$117,154</td>
<td>$140,584</td>
<td>$140,584</td>
</tr>
<tr>
<td>General Gov't Expense</td>
<td>$560,821</td>
<td>$672,551</td>
<td>$8,074</td>
<td>$31,995</td>
<td>$87,904</td>
<td>$176,903</td>
<td>$247,901</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

ECO estimated the per capita cost of variable general expenses at Ada County to be $93. The table shows expected operating costs for the absorption period and at full build-out.

The Sheriff's mitigation fee is more than adequate to cover patrol services during the development phase, and the total net fiscal impact to the entire County is expected to be negative in the first year. Cartwright Ranch is expected to have a negative cost impact of about $8,000 in the first year of development. Every year after that, the net balance is positive, well in excess of the year's loss. Thus, Cartwright Ranch negative impact is only very small, and temporary, so the Sheriff's mitigation fee applied only in Year 1 is sufficient.
B.3. Parks

The developers of Cartwright Ranch will develop landscaped areas in addition to establishing areas for natural open space. The landscaped areas will be conveyed to the homeowners association upon a set date once the development is complete. The homeowners association will be responsible for maintaining the landscaped areas. The development is expected to not impose any costs on the County for parks.

No mitigation is required.

B.4 Solid Waste

The solid waste department is operated as an Enterprise Fund of Ada County, which means it is wholly funded by fees for service. Thus, the cost of providing service to Cartwright Ranch development will be fully covered by fees for that service.

No mitigation is required.

B.5 Ada County Paramedics

Emergency medical services (EMS) are provided by Ada County Paramedics, a special taxing district managed by Ada County. EMS in Ada County receives less than 30% of its revenue from property taxes generated by the Emergency Medical District, with the balance covered by charges for service. Ada County Paramedics work in conjunction with North Ada County Fire and Rescue to provide service; North Ada Fire and Rescue provide first responder services and Ada County Paramedics manage all pre-hospital transport.

With increasing amounts of development in unincorporated Ada County, Ada County Paramedics is facing changes in how they manage their operations. Currently, they have a service goal of arrival at a scene in less than 9 minutes at least 90% of the time. Developments in unincorporated areas provide a challenge to Ada County Paramedics: either they reduce the level of service standards to 15-20 minutes as was traditionally the expectation for rural areas, or they increase coverage of these unincorporated areas. Residents of these new developments are demanding 9-minute levels of service equivalent to urban areas such as Boise. When the new developments reach full build-out, they will be able to pay for the increased levels of service, but there is a gap between when the first residents move in and when the increased level of service can be funded. Ada County Paramedics is currently trying to decide how to fund these levels of service in developments that have not reached full build out.

Currently, Ada County Paramedics does not have a station in Hidden Springs and will not have one in Cartwright Ranch. The closest station is located either at State and Glenwood in Boise, or at the new facility under construction at the intersection of Highways 55 and 44.

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18 This section is based on a personal communication with Darby Weston, Ada County Emergency Medical, February 22, 2006 and February 7, 2007.
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Cartwright Ranch is about 10 or 11 minutes away from both stations. This distance would mean that residents of Cartwright Ranch will not receive the same level of service as provided to other residents. But it would also impact residents of other areas if units are called outside of the 9-minute area. If a unit from the State and Glenwood station is called outside of Boise and a subsequent call for service is made inside Boise, the unit may take longer to respond.

Ada County Paramedics provides a 24-hour unit in a community if that community generates 2,000 calls for service per year. For example, the City of Eagle, with a population of 18,000, generates about 1,000 calls for service. Therefore Ada County Paramedics has a 12-hour unit in Eagle during high demand hours. The projected population of Hidden Springs and Cartwright Ranch by themselves will not generate 2,000 calls for service and would therefore not necessitate an additional 24-hour unit in the area.

Ada County Paramedics can provide enhanced service contracts if there is demand from a community. Communities that desire a local unit could then contract for and pay the cost of a 24-hour unit. A current estimate for the cost of an EMS unit is $450,000 per year, including personnel and maintenance costs.  

Because the estimated new population associated with the Cartwright Ranch development is 1,520 residents, the development will not generate enough calls to justify an additional unit on its own. The fiscal model estimates that Cartwright Ranch will generate about 100 calls per year at full build-out, a marginal cost increase of $22,500 for operations.

In the future, the pressure from new developments, one of which is Cartwright Ranch, will force Ada County Paramedics to build a new facility, probably on Highway 55 near Dry Creek, in the next 5 or 10 years. The cost of a new station and ambulance will be about $1.2 million, including $1 million for the station, $160,000 for the ambulance, and $40,000 in associated costs. Yearly operations and maintenance is about $450,000.

B.5.1. Conclusion

Ada County Paramedics will provide emergency medical services (EMS) to the Cartwright Ranch development. Ada County Paramedics provides ambulance transport, see the text below describing North Ada County Fire & Rescue for first-responder services.

For operations, Ada County Paramedics receives less than 30% of its revenue from property taxes generated by the Emergency Medical District, with the balance covered by charges for service. The District will generate an additional $5,000 in property taxes from Cartwright Ranch, beginning in Year 2, and at full-build-out will generate about $30,000. Marginal operating costs will increase by about $3,750 each year, beginning in Year 1. Property taxes will not cover the marginal cost of operations until Year 5, but the gap will be filled by charges for ambulance services. No mitigation for operations is required.

19 As reported by Darby Weston, Ada County Emergency Medical.
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For capital, it is not clear what costs are explicitly attributable to Cartwright Ranch. In theory, no new station is required. It has become apparent over the last year than the new residents in planned communities expect urban levels of service, and find rural levels of service unacceptable. The Ada County Paramedics expect to build a new station sometime in the next ten years which will service many planned communities, and Cartwright Ranch and Hidden Springs will make up a small part of that service area. Therefore, at this time, we are unable to estimate capital costs attributable to Cartwright Ranch.

Table 9. Fiscal impacts to Ada County Paramedics ($2006)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Full Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue-Capital</strong></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Cost-Capital</strong></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>unknown</td>
</tr>
<tr>
<td><strong>Capital Costs-Net Balance</strong></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Revenue-Operations</strong></td>
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<td>$14,911</td>
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<td>Property Tax</td>
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<td>$11,250</td>
<td>$15,000</td>
<td>$18,750</td>
<td>$22,500</td>
<td>$22,500</td>
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<tr>
<td><strong>Cost-Operations</strong></td>
<td>$3,750</td>
<td>$7,500</td>
<td>$11,250</td>
<td>$15,000</td>
<td>$18,750</td>
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<tr>
<td><strong>Operations Cost-Net Balance</strong></td>
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<td>-$89</td>
<td>$1,131</td>
<td>$2,367</td>
<td>$7,321</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

B.6 Noxious Weeds, Pests, and Mosquito Abatement

Ada County provides services to control and abate noxious weeds, gophers and woodchucks, and mosquitoes in compliance with State and Federal regulations. Staff at Ada County report that they do not expect the Cartwright Ranch development to significantly impact costs.

Staff report that some developments include retention ponds, and Ada County is beginning work on an education program regarding retention ponds for developments. Retention ponds can become mosquito-breeding spots. To prevent this, they must be drained within 72 hours. The Mosquito Abatement division is working with the Development Services Department on potential development code changes that would regulate retention ponds, and the new rules will apply to all development. County staff do not expect this regulation to impact County costs.

B.6.1. Conclusions

Staff at Ada County report that they do not expect the Cartwright Ranch development to significantly impact costs for noxious weeds, pests, and mosquito abatement. Table 10 shows...
that the development will generate roughly $32,000 a year after full build-out, and no mitigation is required over interim years.


<table>
<thead>
<tr>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>Build-Out</td>
</tr>
<tr>
<td>Revenue-Capital</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Tax-Pest</td>
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<td>$26,643</td>
<td>$31,951</td>
</tr>
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<td>Property Tax-Mosquito</td>
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<td>Cost-Operations</td>
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<td></td>
<td></td>
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</tr>
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<td>Pest Extermination</td>
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<td>$0</td>
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<td>$0</td>
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<tr>
<td>Mosquito Abatement</td>
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<td>$0</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$5,325</td>
<td>$10,650</td>
<td>$15,975</td>
<td>$21,301</td>
<td>$26,643</td>
<td>$31,951</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.
ELEMENT E, ECONOMIC IMPACT ANALYSIS

CHAPTER 4: FISCAL IMPACTS TO OTHER DISTRICTS

This chapter describes total revenues and costs for the five local governments not part of the County:

- A. Ada County Highway District
- B. Boise School District
- C. Ada Community Library
- D. Dry Creek Cemetery
- E. North Ada County Fire & Rescue
- F. Other Services.

A. Ada County Highway District

Ada County Highway District (ACHD) is responsible for the planning, construction, maintenance, operations, rehabilitation and improvements of all urban streets, rural roadways, and bridges in Ada County, except for state and federal highways.

A.1 Revenue

The Ada County Highway District’s primary revenue sources include property taxes, Highway Users Funds, and traffic impact fees.

Table 11 shows the ACHD’s 2006 property tax levy and the projected property tax revenue generated from Cartwright Ranch over its absorption period. The fully developed property at Cartwright Ranch will generate about $251,000 in property tax revenue (in 2006 dollars). This revenue supports operations and maintenance.

Table 11. Property tax levy and projected revenue over absorption period ($2006)

<table>
<thead>
<tr>
<th>2006 Levy</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Full Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000954955</td>
<td>$0</td>
<td>$41,808</td>
<td>$83,616</td>
<td>$125,424</td>
<td>$167,232</td>
<td>$209,175</td>
<td>$250,848</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest with data from the Ada County Assessor’s Office and Cartwright Ranch.

The Ada County Highway District imposes a traffic impact fee on new developments within the District, to support road improvements required by new development. Impact fees are assessed on new development proportional to that development’s contribution to the need for major infrastructure improvements. It should be noted that the fees will be assessed at the time of permitting for building homes and will therefore be assessed on the builders of individual homes and not on the developers of the overall Cartwright Ranch project. Cartwright Ranch is within the Northeast Service Area and would therefore be subject to
ELEMENT E, ECONOMIC IMPACT ANALYSIS

traffic impact fees of $3,447 per single-family unit and $1,775 per townhouse. During the absorption period, the development will generate about $321,900 each year, for total revenue to the ACHD of $1.93 million.

Cartwright Ranch also falls within the West Foothills Overlay Assessment area and would therefore be subject to an additional “extraordinary impact fee.” The West Foothills Overlay Assessment extraordinary impact fee assesses developers for the cost of upgrading existing roads within the overlay area. The extraordinary impact fee is $3,197 per parcel. During the absorption period, the development will generate about $329,000 each year, for total revenue to the ACHD of about $1.97 million.

Total impact fees to be assessed on the Cartwright Ranch development by ACHD would be $3.9 million. Impact fees are one-time fees. The estimated build-out and absorption rate of 103 units per year over a six-year period would result in the ACHD collecting about $651,000 per year.

A.2 Costs and Service Levels

The developers will build all of the roads within Cartwright Ranch to Ada County Highway District specifications. The roads will be phased in as improvement work is done. As the roads are built, the Ada County Highway District will inspect them and note any further work required. Then there is a one-year period during which the developer is responsible for maintenance.

At the end of the year, the ACHD will inspect each road and if it is acceptable the ACHD takes over ownership of the roads and responsibility for all maintenance.

If new development within the ACHD triggers public costs, (e.g., to expand roads between Cartwright Ranch and Boise to accommodate increased traffic), the ACHD assesses impact fees to allocate those costs to the development rather than to the existing residents of the community. In simplest terms, this is sometimes described as “growth pays for growth.”

The ACHD’s current impact fee model estimates the average travel impacts generated by new development. The impact fee is calculated to cover the impacts of new development. As described above in the revenue section, the ACHD will assess about $2.64 million in impact fees upon permitting for the development of housing at Cartwright Ranch. This means that the total costs of Cartwright Ranch on District roads is estimated to be $2.64 million.

The ACHD also maintained roads. The maintenance costs attributable to the development at Cartwright Ranch are those to maintain the 8 miles of road within the development, and the increased maintenance caused by increased trips on the existing roads leading to Cartwright Ranch.

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22 Ada County Highway Department, Traffic Impact Fee Schedule (http://www.achd.ada.id.us/Departments/rowpd/impacfee.asp).

23 Personal communication with Bruce Mills, ACHD, April 4, 2006.
Ranch. To estimate the cost of maintaining the roads within the Cartwright Ranch development, ECO used the cost per mile figure reported in the final fiscal impact analysis prepared for the Cliffs Planned Community. In that report, they estimated that annualized road maintenance costs an average of $9,918. ECO rounded the cost per mile estimate to $10,000. Cartwright Ranch will have roughly 8 miles of roads, requiring annual maintenance costs of about $80,000 when the roads reach an age when they require maintenance. The fiscal model assumes that maintenance costs start at $15,000 per year in Year 2, and increase by $15,000 per year until reaching the full $80,000 annual cost. Costs are zero in Year 1 because Cartwright Ranch has fully warranted the road for the first year.

Traffic generated by residents of Cartwright Ranch will increase the wear and tear on existing roads to Cartwright Ranch, primarily Highway 55, and other roads throughout Ada County. This analysis does not estimate the marginal impact the development will have to existing roads, but acknowledges that the development will marginally increase the wear and tear on Highway 55.

A.3 Conclusion

The ACHD imposes impact fees on new development that cover the cost of improving roads affected by the new development. The fees are designed to cover costs of capital improvements, resulting in a $0 net balance for capital costs.

The ACHD will generate property taxes as the development is built and thereafter, which will support maintenance of roads. We estimate that Cartwright Ranch will create about 8 miles of new roads, and that maintenance costs roughly $10,000 per mile (annualized) which would generate about $80,000 in new annual costs to the District, when the roads reach an age that maintenance is required. The fiscal model assumes that maintenance costs start at $15,000 per year, and increase by $15,000 per year until reaching the full $80,000 annual cost. This is likely an overestimate of maintenance costs.

Table 12 shows Cartwright Ranch is expected to have a positive cost impact throughout the absorption period and at full build-out. Table 12 does not show the marginal increase in maintenance costs to existing roads, but given the large positive net balance, the increased revenue is expected to be significantly greater than increased costs. Thus, no mitigation is necessary.
Table 12. Fiscal impacts to the Ada County Highway District ($2006)

<table>
<thead>
<tr>
<th>Revenue-Capital</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Impact Fee</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$321,914</td>
<td>$0</td>
</tr>
<tr>
<td>Extraordinary Impact Fee</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
<td>$329,000</td>
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<tr>
<td>Total</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$0</td>
</tr>
<tr>
<td>Cost-Capital</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
<td>$650,914</td>
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<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Property Tax</td>
<td>$0</td>
<td>$41,808</td>
<td>$83,616</td>
<td>$125,424</td>
<td>$167,232</td>
<td>$209,175</td>
<td>$250,848</td>
</tr>
<tr>
<td>Cost-Operations</td>
<td>$0</td>
<td>$15,000</td>
<td>$30,000</td>
<td>$45,000</td>
<td>$60,000</td>
<td>$75,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$26,808</td>
<td>$53,616</td>
<td>$80,424</td>
<td>$107,232</td>
<td>$134,175</td>
<td>$170,848</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

B. Boise School District

Cartwright Ranch and Hidden Springs are located within the Boise School District. Hidden Springs has already built a charter school in the Hidden Springs development that has over 400 students enrolled.\(^{24}\) The school gives enrollment priority to students who live in the Dry Creek Valley between Highway 55 and Pierce Park Road, north of the Foothills, which includes Hidden Springs and Cartwright Ranch.

Students in Cartwright Ranch will be able to attend the charter school, as space permits, or schools within the Boise School District. At least some students living in the Cartwright Ranch development will attend schools in the Boise School District. Not all families within Cartwright Ranch will choose to attend the charter school and high school students will not be accommodated by the charter school.

Based on current enrollment patterns, about two-thirds of students living in the Cartwright Ranch development will attend the charter school, and the remaining third will attend other schools in the Boise School District.

B.1 Capital needs

The Boise School District estimates that, on average, each residence in the District generates 0.5 students as estimated the student population to be expected from Cartwright Ranch.\(^{25}\) The

\(^{24}\) Enrollment information provided by Boise School District.

\(^{25}\) As reported by Nancy Landon at the Boise School District.
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District describes the following methodology for estimating the number of students likely to result from new development:26

Number of total housing units in development
\[ \times 0.5 \text{ (the district-wide average pupils per household)} \]
\[ = \text{estimated total number of K-12 students generated by the development} \]

Using the School Districts methodology, ECO calculated that Cartwright Ranch will generate 310 students total, or on average, 24 per grade. Assuming that the students are evenly distributed across grades, Cartwright Ranch will generate 167 elementary school students, 72 middle school students, and 72 high school students. We assume that one-third of the 310 students (103 students) will attend existing schools in the BSD (the current ratio for households in Hidden Springs), and will not attend the Charter School.

Table 13 shows the typical capacity of elementary, middle, and high schools and the portion of school capacity the number of students resulting from the Cartwright Ranch development would use. As shown in the table, at full build-out Cartwright Ranch students are estimated to account for 30% to 37% of one elementary school’s capacity, 8% to 10% of one middle school’s capacity, and 5% to 6% of one high school’s capacity.

Table 13. School capacity, acres needed for new schools, estimated Cartwright Ranch students and their impact on school capacity

<table>
<thead>
<tr>
<th>School Capacity</th>
<th>Acres Needed for New School</th>
<th>Cartwright Ranch Students as Percent of School Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary school</td>
<td>450 to 550</td>
<td>10</td>
</tr>
<tr>
<td>Middle school</td>
<td>700 to 900</td>
<td>30</td>
</tr>
<tr>
<td>High school</td>
<td>1,200 to 1,600</td>
<td>40</td>
</tr>
</tbody>
</table>


Cartwright Ranch will not generate enough students to merit building a new school at any grade level. It will generate less than half the students needed to build an elementary school, and only a fraction of students for middle and high schools. In addition, most of the elementary students will attend the Hidden Springs Charter School.

B.2 Revenue

In August 2006, the State of Idaho changed how it funds schools throughout the state. The statewide property tax was replaced with a statewide sales tax. The Boise School District provided estimates of the per pupil revenue it now receives from the State. The District estimated it would receive about $4,600 for each new student enrolled and served in the

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26 Memorandum from the Boise School District to Ennis Dale and Anne Fifield, “Cartwright Ranch Planned Community”, May 16, 2006. ECO used the methodology described in that memorandum, but the proposed number of housing units has changed since that memorandum was written, and the memorandum had some mathematical errors that ECO corrected.
Element E, Economic Impact Analysis

The BSD will only receive this revenue for the students enrolled in the BSD, not those students enrolled at the Hidden Springs Charter School. At full build-out the expected 103 students that Cartwright Ranch will send to the BSD will generate about $475,000 per year in state support.

The Boise School District is a “charter district” with special authority stemming from that charter district status. The charter authorizes the Boise School District to certify a property tax, currently calculated on a rate of $0.00364 times the taxable value. Table 14 shows the projected property tax revenue generated from Cartwright Ranch over its absorption period, for the Boise School District. Cartwright Ranch will generate $956,000 per year in property tax revenue at full build-out.

Table 14. Property tax levy and projected revenue over absorption period ($2006)

<table>
<thead>
<tr>
<th>Year 7/Full Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006 Levy</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>0.003640000</td>
</tr>
</tbody>
</table>
| Source: Calculated by ECONorthwest with data from the Boise School District and Cartwright Ranch.

B.3 Education Costs

This section describes the fiscal model’s assumptions behind the costs of educating the students from Cartwright Ranch that will attend schools in the BSD. As discussed above, about one-third of the students in the Cartwright Ranch development will attend BSD schools, the remainder will attend the Hidden Springs Charter School. At full build-out, the development will generate 310 students total, and about 103 will attend BSD schools. Only those 103 students will be a cost to the BSD. On average, the development will generate 17 new students per year. The fiscal model assumes that in the first year, only half those students will attend BSD schools in that year, to account for the fact that it is unlikely that the new houses will all be purchased at the beginning of the fiscal year (the revenue from the state accounts for this reduction, as well). In Year 2 and subsequent years, the model assumes that the students associated with expected absorption attend school the full year.

Staff at the Boise School District reported that it costs $7,602 per pupil in General Fund expenditures and $9,131 in funds expenditures. Based on conversations with BSD staff, a reasonable number for new students lies between those two figures. The fiscal model assumes that the per pupil cost is the midpoint between those two figures.

B.4 Transportation

28 Idaho State Department of Education “Charter School Handbook” (www.sde.state.id.us/instruct/charter/default.asp)
29 Based on an email communication with Nancy Landon at the Boise School District, March 15, 2007 and a telephone interview on March 20, 2007.
The Boise School District will provide busing for students in Cartwright Ranch who attend schools in the District. Each bus route costs about $34,000 per year, plus $3,500 for fuel, for a total $37,500 per year. Boise School District contracts with Laidlaw for busing services, and all busing costs, capital and operations, are included in the $37,500 figure.

The Boise School District reports it will need an additional bus route to serve Cartwright Ranch in the first year, and an additional bus route before the development is completed.

ECO interviewed staff at the Idaho Department of Education, Division of School Transportation to understand how school districts are reimbursed for transportation costs. The staff at the Department of Education reported that school districts are reimbursed for 85% of their transportation costs, up to a cap. The cap is calculated by determining statewide average costs per mile and costs per rider. The cap is not a set dollar figure, but is calculated for each district based on total miles driven and number of riders in that district.

Boise School District has high transportation costs for many reasons. One, it is geographically large district. Two, there are many residents that live far from the City of Boise, and the students must be bused long distances. Three, It has a large number of special needs students, such as English Language Learners (who attend a school to learn English until they become competent English speakers) and a variety of disabled students. The BSD provides services to disabled students at different schools, and the students are bused to the appropriate campus. The number of both types of special needs students has significantly grown over the last decade. Four, the BSD has seen declining enrollment. That means that there are fewer kids on each bus, but each bus route must continue to operate. The BSD gets less per student revenue from the state, but their per student costs have risen. For all of these reasons, BSD bus routes have high mileage but low rider counts. The state formula does not work in the BSD's favor.

Additional bus routes to serve new students from Cartwright Ranch will impose a cost on the BSD. The State Department of Education, Bureau of Finance and Transportation provided ECO its spreadsheet model it uses to calculate the transportation reimbursement for each school district in Idaho. The spreadsheet shows preliminary estimates for fiscal year 2006. The BSD is expected to have transportation costs of $6,150,919 and will be reimbursed $4,636,122. The BSD will not be reimbursed for $528,409 and must cover that cost with local revenue.

ECO estimated what the BSD would be reimbursed in transportation costs imposed by the Cartwright Ranch development. We added $37,500 to the BSD’s total reimbursable costs, and added 40 miles to the total reimbursable miles and 15 riders. The model showed that the BSD would be reimbursed for the 6.2% of the new bus route, or about $2,300. Therefore, the BSD must fund the remaining $35,200 in new transportation costs with local revenue. ECO estimated that a second bus route would have a similar fiscal impact.

---

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The fiscal model shows that the cost of a new bus route to be $35,200.

The Boise School District and Cartwright Ranch, LLC have signed a Memorandum of Understanding that Cartwright Ranch will pay the BSD the cost of one bus route for one year.¹¹

**B.5 Conclusion**

The Cartwright Ranch development is expected to generate about 310 school-aged residents, and one-third of these will attend schools in the BSD. During the build-out period, the development will generate, on average, 17 new students each year to the BSD. The fiscal model assumes that each student costs $8,367. The fiscal model assumes that in Year 1, the development will generate new students and their associated costs and revenues for half the school year.

Transportation costs include the cost of adding a bus route in Year 1, and a second bus route in Year 3, for a total cost a full build-out of $70,400.

Cartwright Ranch will generate $956,000 in property tax revenue at full build-out. This revenue will not diminish what the State of Idaho provides to the District. In addition, the new students in the District will generate roughly $475,000 per year at full build-out from the state.

Table 15 summarizes the fiscal impacts to the BSD, and shows there is a net loss in the first two years of development. By Year 3, Cartwright Ranch will generate more in property tax to the BSD than the development will cost the BSD, and by Year 4, the net gain exceeds the loss in Year 1.

Table 15. Fiscal impacts to the Boise School District ($2006)

<table>
<thead>
<tr>
<th>Projected Number of Students</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>34</td>
<td>52</td>
<td>69</td>
<td>86</td>
<td>103</td>
<td>103</td>
</tr>
</tbody>
</table>

| Revenue-Capital              | $0     | $0     | $0     | $0     | $0     | $0     | $0        |
| Cost-Capital                 | $0     | $0     | $0     | $0     | $0     | $0     | $0        |
| Capital Costs-Net Balance    | $0     | $0     | $0     | $0     | $0     | $0     | $0        |

Revenue-Operations

| Basic Levy                   | $0     | $159,359 | $318,718 | $478,078 | $637,437 | $797,310 | $956,155  |
| State support                | $39,611 | $158,444 | $237,667 | $316,889 | $396,111 | $475,333 | $475,333  |

Cost-Operations

| Bus Route                    | $35,200 | $35,200 | $70,400 | $70,400 | $70,400 | $70,400 | $70,400   |
| Instruction                  | $72,045 | $288,179 | $432,269 | $576,359 | $720,449 | $864,538 | $864,538  |

Operations Cost-Net Balance

| $(-67,634)                   | $(-5,576) | $53,716 | $148,208 | $242,699 | $337,705 | $496,550 |

Source: see text for complete discussion of methods.

C. Ada Community Library

Library services are provided by Ada Community Library, which is primarily funded by property taxes. The Main Branch of Ada Community Library is located on West Victory Road in Boise. Ada Community Library has two additional branches, one in the City of Star and one in Hidden Springs. The Hidden Springs branch is self-service.

C.1 Revenue

Over 90% of the Library District’s budget is funded by property taxes. The remainder is funded by sales taxes and library fines. Table 16 shows Ada Community Library’s 2006 property tax levy and the projected property tax revenue generated from Cartwright Ranch over its absorption period. The fully developed property at Cartwright Ranch will generate about $140,000 in property tax revenue (in 2006 dollars).

Table 16. Property tax levy and projected revenue over absorption period ($2006)

<table>
<thead>
<tr>
<th>2006 Levy</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Full Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000602291</td>
<td>$0</td>
<td>$26,368</td>
<td>$52,737</td>
<td>$79,105</td>
<td>$105,473</td>
<td>$131,927</td>
<td>$158,210</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest with data from the Ada County Assessor’s Office and Cartwright Ranch.

C.2 Capital Costs

Cartwright Ranch has offered to donate land for a new library site, but legal constraints limit the library district’s ability to save money to fund a new building. At this time, the library

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32 Data about the Library District is based on a personal communication with Mary DeWalt, Director, Ada Community Library, April 4, 2006.
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district is researching options to fund a new building on the donated land. Because the library is still in the preliminary planning stages for a larger, more permanent facility at the Hidden Springs Cartwright Ranch developments, capital costs are unknown at this time.39

C.3 Costs and Service Levels

The Ada Community Library has had a branch library in the multi-purpose building in Hidden Springs. The developers at Hidden Springs have been negotiating with the Library Board to provide expanded space. The Board has been discussing the issue for many months, whether to lease or buy space from Hidden Springs. The Board has decided to lease 1,600 square feet of retail space in the Hidden Springs development.38 Leasing details have yet to be worked out with Hidden Springs.

Costs and service levels for the expanded Hidden Springs branch library are still under discussion by the Board. Although staffing, floor space, and volume levels are still in flux for the Hidden Springs branch library at this time, a rough set of library service standards are followed to ensure that the Hidden Springs and Cartwright Ranch developments receive adequate library service. The library uses the standards of just under one librarian FTE per 1,000 residents, approximately 3.5 volumes per resident, and 1.0 to 1.6 square feet of library space per resident. Based on these service standard, Hidden Springs is adequately served at this time, but will need additional service and facilities as population grows.37

ECO applied staffing and cost estimates for a library space as reported in a May 2006 Powerpoint presentation prepared by Ada County Development Services. That presentation showed a range of branch library sizes and associated staffing levels. ECO assumed that the expanded space at Hidden Springs would have 1.5 full-time equivalent staff, which will cost the District $55,400 per year. This analysis assumes half of that cost is attributable to Cartwright Ranch, and the remainder to the existing development at Hidden Springs.

Property tax revenues, at full build-out, are expected to exceed staffing costs by roughly $112,000 per year. This additional revenue is expected to fully fund the non-personnel operating costs of the branch library.

C.4 Conclusions

The Library Board expects to boost staffing at the Hidden Springs Branch Library, and we assume half of those costs will be covered by existing development in Hidden Springs. We also assume that staffing will not reach the new, planned level of 1.5 FTE until Year 3 of development. To maintain its level of service of 3.5 volumes per resident, Ada Community Library will need to purchase about 5,300 volumes for the new residents of Cartwright Ranch. If the library purchases all of those volumes by Year 7, it will cost the library about

37 Personal communication with Mary DeWalt, Ada Community Library Director, January 25, 2007.
38 Personal communication with Mary DeWalt, Ada Community Library Director, January 25, 2007.
39 Personal communication with Mary DeWalt, Ada Community Library Director, January 25, 2007.
$17,700 per year (at $20 per volume), as shown in Table 17. Operating costs will include the costs of operating the library (utilities, janitorial services, insurance, etc.). Although actual costs of operating the new library space are not fully known, property tax revenue is expected to more than cover expected costs.

### Table 17. Fiscal impacts to the Ada Community Library ($2006)

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-Capital</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
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<td>Cost-Capital</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Revenue-Operations</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Property Tax</td>
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<td>$105,473</td>
<td>$131,927</td>
<td>$158,210</td>
</tr>
<tr>
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<td>Other Operating Costs</td>
<td>not yet known</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
<td>$0</td>
<td>$12,518</td>
<td>$25,037</td>
<td>$51,405</td>
<td>$77,773</td>
<td>$104,227</td>
<td>$130,510</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

The excess revenue generated by the Cartwright Ranch development could be used to fund the capital costs of building some new structure on the land donated by Cartwright Ranch, in the event the Library District finds a legal means to do so.

### D. Dry Creek Cemetery

#### D.1 Revenue

The Cemetery District is primarily funded by property taxes, with some income from the sale of plots. Table 18 shows Dry Creek Cemetery’s 2006 property tax levy and the projected property tax revenue generated from Cartwright Ranch over its absorption period. The fully developed property at Cartwright Ranch will generate about $2,100 in property tax revenue (in 2006 dollars).

### Table 18. Property tax levy and projected revenue over absorption period ($2006)

<table>
<thead>
<tr>
<th>2006 Levy</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7/Final Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000008104</td>
<td>$0</td>
<td>$355</td>
<td>$710</td>
<td>$1,064</td>
<td>$1,419</td>
<td>$1,775</td>
<td>$2,129</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest with data from the Ada County Assessor’s Office and Cartwright Ranch.

---

36 Personal communication with Nancy Howe, Cry Creek Cemetery District, April 4, 2006.
D.2 Costs and Service Levels

Staff at the Dry Creek Cemetery report that the Cartwright Ranch development is expected to not increase costs or affect service levels."

D.3 Conclusions

No capital revenues or costs are expected to be imposed on the Cemetery District. Because the development is not expected to impose an operations costs on the District, property tax revenues are expected to exceed projected operations costs. Table 19 shows Cartwright Ranch creating net revenue of about $2,100 per year at full build-out to the Dry Creek Cemetery.

<table>
<thead>
<tr>
<th>Table 19. Fiscal impacts to the Dry Creek Cemetery ($2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>Revenue-Capital</td>
</tr>
<tr>
<td>Cost-Capital</td>
</tr>
<tr>
<td>Capital Costs-Net Balance</td>
</tr>
<tr>
<td>Revenue-Operations</td>
</tr>
<tr>
<td>Property Tax</td>
</tr>
<tr>
<td>Cost-Operations</td>
</tr>
<tr>
<td>Operations Cost-Net Balance</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.

No mitigation is required.

E. North Ada County Fire & Rescue

Fire protection services are provided by the North Ada Fire & Rescue District, which includes most of the area from the northern edge of Boise to the northern Ada County line, is primarily funded by property tax revenues and charges for services (e.g., fire marshal).

E.1 Revenue

The Fire District is primarily funded by property taxes. Table 20 shows North Ada Fire & Rescue District’s 2005 property tax levy and the projected property tax revenue generated from Cartwright Ranch over its absorption period. The fully developed property at Cartwright Ranch will generate about $639,000 in property tax revenue (in 2006 dollars).

37 Personal communication with Nancy Howe, Cry Creek Cemetery District, April 4, 2006.

38 This section is based on a personal communication with Fire Chief Martin Knoelk, North Ada County Fire & Rescue, March 16, 2006 and Ron Amandus, Fire Marshall, March 1, 2006.
Table 20. Property tax levy and projected revenue over absorption period ($2006)

<table>
<thead>
<tr>
<th>Year 7/Full Build-Out</th>
<th>2006 Levy</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.002431953</td>
<td>$0</td>
<td>$106,471</td>
<td>$212,942</td>
<td>$319,413</td>
<td>$425,884</td>
<td>$532,698</td>
</tr>
</tbody>
</table>

Source: Calculated by ECONorthwest with data from the Ada County Assessor’s Office and Cartwright Ranch.

E.2 Costs and Service Levels

The North Ada Fire and Rescue constructed a new fire station (Station 3) in Hidden Springs. The fire station has a service radius of about 1.5 miles in all directions. Station 3, therefore is sufficient to serve the additional population of Cartwright Ranch. A new fire station (potential Station 4), which North Ada Fire & Rescue would like to build on the east side of the Cartwright Ranch site, would cost about $1.5 million to construct, operate, equip, and maintain.

Volunteers and some full-time staff with one fire engine currently staff Station 3. The North Ada Fire & Rescue staffs the station for EMS at peak hours, from 6 pm to 6 am, with a team of trained emergency medical technicians. The EMS responders are at the station during the evening hours, rather than reporting to the station when a call for service is received. Both North Ada Fire & Rescue and Ada County Paramedics respond to emergency calls; generally each agency sends at least one vehicle to the site of an emergency and staff of both agencies treats the patient, although Ada County Paramedics is responsible for transport. EMS calls make up about 70 to 80% of the calls for service received by the North Ada Fire & Rescue.

During the day, two full-time employees, the deputy chief and the maintenance officer, staff the fire station. Other volunteer staff is on-call. The Fire Chief has advised that as value is added to the property tax base, North Ada Fire & Rescue will be able to hire more full-time staff to serve the area and may eventually purchase additional engines. When North Ada Fire & Rescue builds Station 4, they plan to staff Station 3 with full-time firefighters and use volunteers to staff Station 4.

The North Ada Fire & Rescue, similar to fire districts nationwide, has a service goal of about one full-time equivalent firefighter/first responder to every 1,000 residents of its district. It takes ten firefighters/first responders to staff a fire engine 24 hours a day. Compensation for a firefighter/first responder, including benefits, averages between $70,000 and $80,000 per year. A new engine costs about $400,000. Since Cartwright Ranch is assumed to have 1,550

---

This section also based on a personal communication with Fire Chief Martin Knoolk, North Ada County Fire and Rescue, January 25, 2007. The fire station was financed by an investment company which was owned by one of the developers of Hidden Springs; the development had no direct connection to the financing of the fire station.
ELEMENT E, ECONOMIC IMPACT ANALYSIS

residents at full build-out, the fiscal model estimates the cost attributable to Cartwright Ranch would be $112,500 for 1.5 FTE firefighters. No additional fire engine would be necessary.

Adding Cartwright Ranch will increase the property tax revenue generated by the entire Hidden Springs/Cartwright Ranch development. The increased revenue will allow the Fire & Rescue to fund more full-time staff, and provide a higher level of service. This higher level of service means reduced response times for EMS and fire calls.

The Fire Chief and Fire Marshall emphasized the importance of adequate water and hydrants for fire services. Local fire code requires adequate hydranting for Cartwright Ranch. Water requirements for fire protection services are 1,500 gallons per minute for a home smaller than 3,600 square feet in size. Installation of sprinkler systems can partially satisfy this requirement as well. United Water has installed one water tank in the Hidden Springs area. As the area becomes more developed, United Water will install a second water tank to ensure adequate water supply.

E.3 Conclusions

No capital costs are expected to be imposed on the Fire & Rescue District, because the District has already purchased a new station (Station 3) at Hidden Springs. Station 3 is sufficient to serve the additional population of Cartwright Ranch. The development at Cartwright Ranch will increase property tax revenues to allow the District to staff Station 3.

The District expects that the development will require 1.5 full-time equivalent firefighters to serve the new population associated with Cartwright ranch at full build-out, a cost of about $110,000 per year. The fiscal models assumes that half of those costs will come on line in Year 3, and all of the cost in Year 6.

Property tax revenues are expected to exceed projected operations costs. Table 21 shows Cartwright Ranch creating $528,000 in net revenue at full build-out. No mitigation is required.

<table>
<thead>
<tr>
<th>Table 21. Fiscal impacts to the North Ada County Fire &amp; Rescue ($2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong>-<strong>Capital</strong></td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td><strong>Revenue</strong>-<strong>Operations</strong></td>
</tr>
<tr>
<td>Property Tax</td>
</tr>
<tr>
<td>Cost-Operations</td>
</tr>
<tr>
<td><strong>Capital Costs</strong>-Net Balance</td>
</tr>
</tbody>
</table>

Source: see text for complete discussion of methods.
F. Non-District Services

Ada County Code requires that the fiscal analysis account for costs and revenues to air quality programs, water systems, and wastewater systems.

- **Air quality.** ECONorthwest interviewed staff at the Idaho Department of Environmental Quality and COMPASS to determine what impact the development would have on air quality programs. The interviews indicated that the development would have only a small impact on air quality, and any impact would be evaluated in a traffic analysis for the development.°

- **Water.** Water service is to be provided to the Cartwright Ranch development by United Water, a private water company. There will be no impact to local governments. The developers will pay for and build the infrastructure.

- **Wastewater.** Sewer service will be provided by the Hidden Springs Sewer Company, a private, for-profit utility company. There will be no impact to local governments. The developers will pay for and build the infrastructure.

G. Conclusion

For most service districts, the cost of adding one new household to the district may be too small to measure. For a general service like parks and recreation, districts do not track their new users, new households may not contain any new users or may contain users whose use is very different from the average.

In the case of Cartwright Ranch the number of households is not large (620) relative to the County as a whole. Increased costs for many of the districts is not dependent on increased population as much as it is on the location of the development.

The property values of the Cartwright Ranch residential properties will produce more than sufficient property taxes to fund the operations and maintenance costs for providing services to the development for all service providers. This analysis has made a strong effort to be conservative when estimating costs and revenue (erring high for costs, and low for revenues), so there can be no doubt that Cartwright Ranch fully funds the government services it will use.

° Personal communication with Jay Witt, COMPASS, February 28, 2006.
Edits to text.
ELEMENT E, ECONOMIC IMPACT ANALYSIS

SUB-ELEMENT E2, INFRASTRUCTURE AND FINANCING PLAN

This infrastructure and financing plan represents the current best estimates of the developer’s costs for essential infrastructure and public facilities associated with each phase of the Cartwright Ranch Planned Community. This plan also presents the timing for constructing and the strategy for financing this infrastructure.

Phasing

Ultimately, Cartwright Ranch is anticipated to include 620 residential units, 29 acres of developed open space, and 20,000 square feet for commercial uses. The development will be built in three phases, as illustrated in Fig.F10 in Sub-Element F-10. All essential infrastructure and public facilities will be: (1) installed within each phase of development to provide service to each lot; (2) sized for the current phase of development, while including sufficient capacity for future phases; and (3) stubbed to the boundary of each future phase, allowing for ready extension to subsequent phases. Complete build-out of the three phases is projected to take approximately six years from the start of construction. However, timing to complete all three phases of Cartwright Ranch is subject to change due to market conditions, product mix, local housing competition and other potential factors not necessarily within the developer’s control.

Phase One

Preliminary projections are for the first phase to include a mix of 100-275 residential units drawn. This phase will also include roadway improvements from the connection on the west side of Cartwright Ranch into Hidden Springs to the main road connection into Cartwright Road on the east side of the development. These improvements are all within the development boundaries. Utility systems to support this phase will also be constructed including a water reservoir, water distribution lines, sewage treatment system, and the stormwater retention areas servicing the Phase One development area. The Community Center, with pool and post office, will be included in Phase One. A significant portion of the trail system will be developed during Phase One, with additional trails to be built during subsequent phases. Approximately 15.1 acres of developed open space are anticipated for completion in Phase One.

Subsequent Phases

The rate of development following the initial phase, exact location and number of future phases, and types and number of units to be included in each future phase may be revised based on market demand, regional and national economic conditions and construction logistics. Analysis at this time indicates that approximately 150-200 units per year can be successfully absorbed.

Approximately 12 acres of developed open space are anticipated for completion in Phase Two and the remaining acres in Phase Three.
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Prior to issuance of the 400th building permit, the developer of Cartwright Ranch will construct a minimum of 5,000 square feet of space for commercial uses in the Town Center, which uses may include retail space, professional offices, service-oriented businesses, and a library or similar civic function. The developer will reserve sufficient land in the Town Center to construct an additional 15,000 square feet of space for commercial uses for a total of 20,000 square feet. The developer will actively market (including by listing with a commercial broker) this additional space and pursue any viable tenant for all or a portion of this space. If some portion of the 20,000 square feet remains unbuilt following the issuance of the 600th building permit, then the developer may petition the County to allow a different land use on that site. Until the commercial uses are built, the site will be appropriately landscaped with planted grasses.

Table E2.1 provides the anticipated completion time for each phase.

Table E2.1: Summary of Phasing

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year</th>
<th>Land Uses</th>
<th>Residential Units</th>
<th>Estimated Population</th>
<th>Land Contained</th>
<th>Infrastructure Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Year 0-2</td>
<td>Residential; Open Space</td>
<td>275</td>
<td>687.5</td>
<td>244</td>
<td>Streets; Utilities; Community and recreation facilities</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Year 3-4</td>
<td>Residential; Mixed Use; Open Space</td>
<td>309</td>
<td>772.5</td>
<td>369</td>
<td>Streets; Utilities</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Year 5-6</td>
<td>Residential; Open Space</td>
<td>36</td>
<td>90</td>
<td>67</td>
<td>Streets; Utilities</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>620 units</td>
<td>1550 pop.</td>
<td>680 acres</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Infrastructure and Financing

Essential infrastructure and public facility improvements include streets and public access, dry utilities (i.e., underground power, natural gas, telephone / cable television / data), wet utilities (i.e., sanitary sewer, potable water, and pressurized water for irrigation of open space), and amenities (i.e. open space, trails, pool, community center). Table E2.2 provides a summary of services and associated infrastructure needed to serve the project, along with the costs and financing plan for such services and associated infrastructure. Community services and utilities for the project are described further in Sub-Element F6.

Table E2.2: Summary Matrix of Services, Infrastructure/Cost, and Financing Plan
<table>
<thead>
<tr>
<th>Service/Service Provider</th>
<th>Identified Infrastructure/Cost</th>
<th>Proposed Financing Plan</th>
<th>Unresolved/Unmitigated Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ada County</td>
<td>No need identified</td>
<td>Public provision; tax revenue &amp; permit fee financed</td>
<td>None. Impacts not atypical of incremental development in Ada County.</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ada County Sheriff's Dept.</td>
<td>No need identified</td>
<td>Public provision; tax revenue &amp; building permit fee financed</td>
<td>None</td>
</tr>
<tr>
<td>Emergency Medical Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ada County Paramedics</td>
<td>No need identified</td>
<td>Public provision; tax revenue financed</td>
<td>None. Impacts not atypical of incremental development in Ada County.</td>
</tr>
<tr>
<td>Pest Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ada County Pest Control</td>
<td>No need identified</td>
<td>Public provision; tax revenue financed</td>
<td>None. Impacts not atypical of incremental development in Ada County.</td>
</tr>
<tr>
<td>Library Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Library</td>
<td>No need identified</td>
<td>Public provision; tax revenue financed</td>
<td>On going discussions for possible new branch location</td>
</tr>
<tr>
<td>Roads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ada County Highway District</td>
<td>Phase I and II development as well as Cartwright Road improvements</td>
<td>Developer financed with equity</td>
<td>Subject to Developer Reimbursement for extraordinary impact fees</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boise Independent School Dist.</td>
<td>$40,000 for transportation services</td>
<td>Private debt, equity financed</td>
<td>None</td>
</tr>
<tr>
<td>Emergency Fire/EMT Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Ada County Fire Rescue District</td>
<td>No need identified</td>
<td>Public provision; tax revenue; private debt &amp; equity financing (station); land sale proceeds (shortfalls)</td>
<td>None</td>
</tr>
<tr>
<td>Parks, Trails &amp; Open Space</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ada County Parks &amp; Waterways</td>
<td>Parks, facilities, trails, open space, and revegetation onsite</td>
<td>Homeowners Association fees</td>
<td>None</td>
</tr>
</tbody>
</table>
### Table E2.2: Summary Matrix of Services, Infrastructure/Cost, and Financing Plan

<table>
<thead>
<tr>
<th>Service/Service Provider</th>
<th>Identified Infrastructure/Cost</th>
<th>Proposed Financing Plan</th>
<th>Unresolved/Unmitigated Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idaho Fish &amp; Game</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
</tr>
<tr>
<td><strong>Air &amp; Water Quality Programs</strong></td>
<td>No need identified; project features intended to minimize impacts (see Sanitary Sewer)</td>
<td>No need identified</td>
<td>None. Design and elements cited as exceeding those of typical development.</td>
</tr>
<tr>
<td><strong>Solid Waste Management</strong></td>
<td>No need identified; Ada County's expansion of existing landfill space sufficient.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
<tr>
<td><strong>Potable Water United Water</strong></td>
<td>Continuous loop system currently being negotiated</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
<tr>
<td><strong>Sanitary Sewer Hidden Springs Sewer Company LLC</strong></td>
<td>Expansion of existing Water Treatment system; $1.74 million.</td>
<td>Letter of credit already in place</td>
<td>None</td>
</tr>
<tr>
<td><strong>Electrical Service</strong></td>
<td>Applicant costs projected at $1.65 million.</td>
<td>Developer financed with equity</td>
<td>None</td>
</tr>
<tr>
<td><strong>Natural Gas Service Intermountain Gas Company</strong></td>
<td>On-site extension not anticipated to impose up-front Applicant costs.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
<tr>
<td><strong>Telecommunications CableOne</strong></td>
<td>On-site extension not anticipated to impose up-front Applicant costs.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
<tr>
<td><strong>CTC</strong></td>
<td>On-site extension not anticipated to impose up-front Applicant costs.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
</tbody>
</table>

The developer's estimated probable installation costs for these essential services (described in the above Table E2.2), along with all other infrastructure costs for development of Cartwright Ranch, are presented by phase in Table E2.3. The costs listed in Table E2.3...
ELEMENT E, ECONOMIC IMPACT ANALYSIS

reflect the actual current engineering cost estimates (i.e. Preliminary Opinion of Probable Construction Costs) for the Cartwright Ranch development. Tables E2.4, E2.5, E2.6 provide a further breakdown of these costs by quantity and units for each category of infrastructure.

The developer of Cartwright Ranch will finance its costs for these improvements with a combination of private debt and equity. As demonstrated in the letter from Goldman, Sachs & Co. included in Sub-Element G-1, the developer of Cartwright Ranch has over $30 million in readily marketable securities. The developer is committed to ensuring the successful development of Cartwright Ranch, including customary financial assurances to appropriate service providers with each phase of development.

Table E2.3: Estimated Total Developer Costs for Infrastructure by Phase

<table>
<thead>
<tr>
<th>Infrastructure/Public Facilities</th>
<th>Installation Cost</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>219,001</td>
<td>70,106</td>
<td>83,395</td>
<td>65,500</td>
</tr>
<tr>
<td>Grading</td>
<td>8,988,295</td>
<td>4,204,186</td>
<td>4,543,909</td>
<td>240,200</td>
</tr>
<tr>
<td>Roads</td>
<td>4,716,707</td>
<td>2,531,899</td>
<td>1,811,028</td>
<td>373,780</td>
</tr>
<tr>
<td>Street Lights &amp; IPCo</td>
<td>1,650,000</td>
<td>870,000</td>
<td>680,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Concrete</td>
<td>1,233,516</td>
<td>773,903</td>
<td>358,338</td>
<td>101,275</td>
</tr>
<tr>
<td>Sewer</td>
<td>1,740,718</td>
<td>984,100</td>
<td>670,286</td>
<td>86,332</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>986,663</td>
<td>492,174</td>
<td>442,509</td>
<td>51,980</td>
</tr>
<tr>
<td>Water</td>
<td>3,815,259</td>
<td>2,061,981</td>
<td>1,553,328</td>
<td>199,950</td>
</tr>
<tr>
<td>Misc. Construction &amp; Surveying</td>
<td>184,100</td>
<td>89,600</td>
<td>81,700</td>
<td>12,800</td>
</tr>
<tr>
<td>Mobilization</td>
<td>1,538,900</td>
<td>788,800</td>
<td>670,200</td>
<td>79,900</td>
</tr>
<tr>
<td>Bonding &amp; Permitting</td>
<td>879,400</td>
<td>450,700</td>
<td>383,000</td>
<td>45,700</td>
</tr>
<tr>
<td>Contingency</td>
<td>3,297,700</td>
<td>1,690,200</td>
<td>1,436,200</td>
<td>171,300</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>29,250,259</strong></td>
<td><strong>15,007,649</strong></td>
<td><strong>12,713,893</strong></td>
<td><strong>1,528,717</strong></td>
</tr>
</tbody>
</table>

Table E2.4: Estimated Quantity and Units for Infrastructure in Phase One

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Extended Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Earthwork</td>
<td>1</td>
<td>LS</td>
<td>$5,400,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Roads</td>
<td>20,700</td>
<td>LF</td>
<td>$4,180,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Sewer</td>
<td>23,218</td>
<td>LF</td>
<td>$1,300,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Storm Drainage</td>
<td>4,061</td>
<td>LF</td>
<td>$625,000.00</td>
</tr>
<tr>
<td>5</td>
<td>Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water Lines, valves and fittings</td>
<td>24,520</td>
<td>LF</td>
<td>$1,900,000.00</td>
</tr>
<tr>
<td></td>
<td>Pressure Reducing Valve/Vaults</td>
<td>2</td>
<td>EA</td>
<td>$100,000.00</td>
</tr>
</tbody>
</table>
## ELEMENT E, ECONOMIC IMPACT ANALYSIS

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Extended Cost</th>
</tr>
</thead>
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**Total Project Cost** $15,000,000.00

Notes:
1. Right-of-Way Acquisition, Construction Administration and Signage are excluded.

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**Table E2.5: Estimated Quantity and Units for Infrastructure in Phase Two**

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**Table E2.6: Estimated Quantity and Units for Infrastructure in Phase Three**

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**Total Project Cost** $1,541,000.00

Notes:
1. Right-of-Way Acquisition, Construction Administration and Signage are excluded.
ELEMENT E, ECONOMIC IMPACT ANALYSIS

1. Right-of-Way Acquisition, Construction Administration and Signage are excluded.
EXHIBIT 3 - CARTWRIGHT RANCH DEVELOPMENT PLAN
F1.1 - Hydrology

Hydrology Overview

The Dry Creek surface water hydrology system is derived from both artificial and natural sources. The artificial sources are derived through unused irrigation waters and excess water pumped to facilitate the needs of local livestock. The natural recharge sources include seasonal precipitation (average is 0.24 acre-feet per acre during growing season), and discharge of springs and seeps along Dry Creek and its tributaries.

Source fluctuation, especially seasonally, has had an affect on the spatial variation in local hydraulic conditions along the major drainage and has an important role in determining the controlling processes involved with local flood processes, resulting flood features, and subsequent erosion attributes. In addition, ancestral hydraulic processes have contributed to a diverse depositional morphology, especially along Dry Creek.

The principal hydrologic feature in the study area is the Dry Creek drainage basin. The basin drains approximately 60 square miles of intermountain uplands. Gauging station records from 1953 through 1968 show peak discharges range from 3500 to 4700 acre-feet of water for the basin that includes the Cartwright Ranch project area. The peak flows appear to be concentrated from February through April. The exception is occasionally January shows moderately high flows.

Floodways

Encroachment on the established floodplain, such as structures and fills, increases the concern of the effects of localized flooding. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase of flood constraints. Floodway identification is a useful tool to assist local community development in proper floodway management as it relates to land use planning. The floodway delineated in this study was computed from Currant Creek east along Dry Creek using Federal Emergency Management Agency/U.S. Army Corps of Engineers, hydrologic engineering analyst protocol. Peak flood discharges were determined for the 10, 50, and 100-year events for the Dry Creek drainage. Discharge rates and flow frequency information was obtained from gauging stations located approximately 2.0 miles west of the study area. The results of the review show the 10, and 50-year flood events will probably be contained in the present Dry Creek channel. The 100-year event will probably overtop the present creek channel up to an average of approximately 300 feet lateral distance from the creek centroid. The accompanying map shows the floodplain boundary for the 10, 50, and 100-year flood events. The boundary locations are an integral part of effective long term land use planning.
Natural Springs

The diverse depositional environment associated with Dry Creek has contributed to unique conditions that promote artesian flow at a number of locations along Dry Creek within and adjacent to the Cartwright Ranch property boundary. Approximately nine natural springs are clustered near the southeast corner of section 31, the northwest corner of section 5 and the southwest corner of section 32, Township 5 North, Range 2 East. There are two springs located in the southern foothills fed by the Sands of the Pierce Gulch Formation.

Some diversion of spring flow has been attempted during the past for agricultural purposes, however, for the most part the springs have remained undeveloped. Flow of the springs is often intermittent, and depends largely on seasonal precipitation and local water recharge. The most likely explanation for the springs and their historic characteristic is that they are fed by recharge from precipitation; upstream irrigation and snow melt from mountainous runoff generally from slopes to the north. Ancient stream beds (visible on current aerial photographs) probably transport the water from upstream surface and subsurface sources. The identification of shallow groundwater areas is paramount in effective land use planning, especially during foundation engineering for residential development. The areas that have natural springs present are identified on the accompanying map. Some portions of these springs and the Dry Creek riparian area are wetland areas.

Surface Water Recharge

Every year some sections of Dry Creek do in fact dry up. Various upstream reaches dry up while other reaches (benefiting from upstream recharge through shallow groundwater) continue to flow. These historic characteristics provide a glimpse of the relative complexity and interrelationship between surface water and groundwater.

Groundwater

Groundwater in the Cartwright Ranch area is found in permeable sedimentary aquifers and in fractured rock aquifers. The fractured rock aquifers appear to be limited to the slopes on the north side of Dry Creek. Depth to groundwater varies, and ranges from a few feet below ground surface along Dry Creek, to more than one hundred feet below ground surface in upland locations. Table B provides groundwater depth data for a portion of the valley floor.

Hydrogeology

The Cartwright Ranch area geology is described in detail in section F1-2, Soils later in this report. Groundwater characteristics of the local hydrogeologic units are discussed below.

- **Alluvium.** Recent alluvium in the Dry Creek valley consists of unconsolidated sand, gravel, and silt that has been eroded from nearby uplands and deposited by Dry Creek and tributary streams. Thickness of the alluvium is generally less than
50 feet. Groundwater from the alluvium has been tapped by shallow wells for irrigation and domestic use.

- **Terteling Springs Formation.** The Terteling Springs formation is composed of a layered sequence of lake bed sediments - primarily sand, sandstone, silt, clay, and mudstone. Saturated sand and sandstone layers within the Terteling Springs formation act as productive aquifers. Domestic and irrigation wells within the project area vicinity tap aquifers within the Terteling Springs formation. Clay, silt, and mudstone layers act as aquitards, restricting the movement of groundwater. Clay, silt, and mudstone sediments are believed to be the predominant saturated sediments south of Dry Creek.

- **Volcanic Rocks.** Volcanic rocks within the project area consist primarily of basalt flows. Most of these volcanics have relatively low permeability and are not considered to be significant aquifers, although some groundwater production has been reported from basalt aquifers in areas of the foothills.

- **Granite.** Cretaceous-age granitic rocks of the Idaho Batholith are exposed within the Currant Creek drainage, east of Cartwright Road. These rocks generally have very low porosity and permeability and do not serve as productive aquifers.

**Geothermal**

Low temperature geothermal wells (85-110°F) have been drilled in the Dry Creek area, both east and west of the Cartwright Ranch project area. These wells tap aquifers found at depths of less than 1,000 feet. Warm groundwater (>85°F) is likely to be found below about 500 feet beneath the Dry Creek Valley.

Groundwaters with temperatures in excess of 85°F (i.e., low-temperature geothermal waters) are generally restricted from development for municipal and irrigation uses by the 1982 Idaho Geothermal Resources Act. In addition, water temperatures in excess of 85°F are not desirable for domestic use due to aesthetics, chemical composition and increased potential for bacterial contamination. As a result, warm groundwaters are probably not available nor desirable for Cartwright Ranch water supply development.

**Groundwater Flow**

Within the project area, shallow groundwater flow likely follows topography, with Dry Creek acting as the drain for groundwater from upland areas. The depth to groundwater data and soils logs presented in Tables A and B confirm the notion that Dry Creek acts as a drain for upstream events. Clearly the shallow groundwater flow direction has component vectors both down the valley parallel to Dry Creek and perpendicular toward Dry Creek. It is not clear if deep ground-water flow is parallel to Dry Creek, or south toward the Boise River. Local groundwater flow in the Cartwright Ranch area is probably influenced by geologic units and structure, with preferential movement through higher permeability materials in old stream beds and along fault-related fracture paths.
Groundwater Recharge and Discharge

Recharge of the local groundwater system is derived primarily from leakage of Dry Creek and its tributary streams and from direct infiltration of precipitation. Additional recharge is derived from infiltration of flood irrigation water diverted from Dry Creek. Total annual groundwater recharge has not been determined for the project area, but may be substantial during those months when Dry Creek is carrying snow melt.

Groundwater discharge currently occurs at domestic and irrigation wells, at springs, and through stream beds within the gaining reaches of Dry Creek and Currant Creek.

Surface water and groundwater are generally in direct hydraulic connection in the vicinity of springs and in the gaining reaches of Dry Creek and tributary streams. During periods without direct runoff of precipitation or snow melt, the flowing reaches of Dry Creek are probably a reflection of the local water table. Many of these reaches dry up during the summer time, suggesting a seasonal lowering of the local water table at that time.

Aquifer Hydraulics

Deep aquifer hydraulics within the study area are not known, and will need to be determined as part of a future test well program. Aquifer hydraulics in the lower Dry Creek area, west of the Cartwright Ranch project, were calculated following a 30-day pumping test of a well located approximately two miles southwest of the junction of Highway 55 and Dry Creek Road (Feast, 1991 and Baker, 1991). This well was pumped at an average rate of 743 gallons per minute. Draw down in the pumping well was 81 feet after 30 days of pumping. Draw down in observation wells ranged from 3.8 feet at a well 800 feet from the pumping well to 1.0 feet at wells 2300 and 3600 feet from the pumping well. Based upon the response of the observation wells, aquifer transmissivities in the range of 33,000 to 92,000 ft²/day were calculated. The calculated storage coefficient ranged from 0.0006 to 0.08, indicating semi-confined conditions. Given the distance and changes in geologic conditions, the aquifer hydraulic characteristics in the Cartwright Ranch project area cannot be directly inferred from the characteristics in the Lower Dry Creek area.

Groundwater Quality

Analyses of water samples from wells in the vicinity of the project area are reported by Parliman (1983) and Baker (1991). These analyses include data for both warm water and cold water aquifers in the Dry Creek Valley. Based on these data, groundwater from deep coldwater aquifers in the Cartwright Ranch project area is anticipated to be good quality for domestic use, with moderate levels of hardness and no water quality parameters in excess of EPA maximum contaminant levels (MCLs). Geothermal aquifers are also anticipated to be of good quality, with the exception of fluoride concentrations which may exceed EPA MCLs.
The shallow alluvial aquifer is often in direct hydraulic connection with the surface water flow of Dry Creek and as a result is not sufficiently protected from surface contaminants for domestic consumption. For that reason, the shallow alluvial aquifer is not as desirable for domestic use as deeper, more protected, aquifers of the Terteling Springs Formation. Well logs suggest that clay layers should provide protection from surface and surficial activity for wells tapping aquifers below 100 feet.

Existing Groundwater Development

Existing wells within the project area produce groundwater primarily for domestic and stock water uses, with some minor irrigation uses. Wells outside of the project area produce water for agricultural irrigation and space heating, in addition to domestic and stockwater.

Reported well yields in the Dry Creek Valley range from over 2,000 gallons per minute (gpm) to less than 5 gpm. In general, the higher yield wells are located in the valley floor, west of the project site. The higher yield wells tap sand aquifers within the Terteling Springs Formation and the lower part of the recent alluvium. The low yield wells are typically located in either the granite foothills north and northeast of the site or in the thick blue clay sediments south of the site.

Documented Water Level Declines

There are no long-term groundwater hydrographs for wells within the project area. The closest long-term hydrograph is for well 05N-OIE-34DBB1, located in the Dry Creek Valley approximately three miles west of the project. This hydrograph has a period of record of nearly 30 years. Baker (1991) evaluated the hydrograph of this well and found no significant decline in recent years.
## Table B

**Groundwater Depth Observations**

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F1.2 Soils

Geologic Overview

Refer to Figure F1.2a

Portions of the geology in the Dry Creek area have been mapped in the past by K.M. Hollenbaugh, 1972; Beck, 1989; Othberg and Burnham, 1990; Burnham and Wood, 1992; and Baker, 1991. The unconsolidated soil and rock that underlie the Cartwright Ranch property range in age from Pliocene to Holocene, which is relatively recent in geological time. The Dry Creek area occurs within a transition zone between fluvial (stream deposited) sediments and lacustrine (lake deposited) sediments. Certain geologic events that occurred prior to the emplacement of the known soil and rock in the area greatly influenced the types of deposition and geomorphology that is characteristic of the area today. These earlier events include a long period of granitic intrusions, regional uplift, and volcanism. In addition, evidence of large lake deposition and erosion are evident in the lower elevations along Dry Creek. Wave cut benches are characteristic of the lower foothill elevations along the south side of Dry Creek. Ancestral streams carrying sediments from the adjacent uplands were also deposited near the lake margins.

Coarse-grained sands were deposited along the stream channels and shores of the lake. Finer sands and silts were carried down the Dry Creek drainage system. The sediments that were deposited are collectively known as sediments of the Idaho Group. Because of the depositional complexity of the sediments in the Boise foothills (which includes the Dry Creek area), recent lithostratigraphic formation names changes within the Idaho Group have been reassigned the Terteling Springs Formation. The formation consists of four distinct lithologic members of which portions are found in the study area.

Objective

The surficial geology shows the deposits within the study area and their general relationships. The geology of an area constitutes the framework which influences the development of other natural features. Soils developed from the weathering of the geologic units and both surface and subsurface water flow are largely controlled by the geologic framework. Successful planning and engineering development depends upon an understanding of the geology of the area, as well as an understanding of physical properties of the soil and rock. The geologic map presented in this report was compiled from known map sources and field reconnaissance and is a preliminary guide to geologic units and features for the Cartwright Ranch area.

Faulting and Seismicity

Foothills faulting generally occurs in NW/SE and/or East-West trending normal faults. Distinct separation of foothills and valley floor often make fault traces. The exception in the
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Dry Creek area is separation of lithologic units or non-conformable lateral extension of rock and soil formations. Splinter faults sub-parallel and often perpendicular to the primary faults have helped define the present geomorphology of the area. Faulting in the foothills is known to consist of single fault plains a few inches wide or fault zones, several feet to ten's of feet wide that are composed of many interconnected fault plains. Field observation collected during preliminary site reconnaissance imply that Dry Creek may be structurally controlled. Observations include linear correlation of primary structures such as contorted bedding plains, hot springs, and unconformable bedding.

Woodward-Lundgren and Associates identified most foothills faults as inactive. According to Woodward-Lundgren, there has not been historical movement of the major faults in the area within the last 500,000 years. The U.S. Coast and Geodetic Survey in their Seismic Risk Map (1969) and the Uniform Building Code (1982) assign the area to Zone 2B, indicating moderate potential for earthquake damage.

Zone 2 corresponds to a maximum earthquake intensity of VII on the modified Mercalli intensity scale. Damage in the study area would probably be caused by ground shaking due to fault displacement outside the study area.

Miller and Jones (1988) performed a probabilistic estimation of earthquake intensities for Idaho based on the historic seismic record. They concluded that there is better than a 90 percent probability that the maximum earthquake intensity will be less than VI for the foothills area for a given 50-year period.

Lithologic Map Units

The following lithologic descriptions are characteristic of the geologic units present in the study area.

Terteling Springs Formation

The Terteling Springs Formation is a facies assemblage of sediments and sedimentary rock mostly of lacustrine or lake-shore depositional environment. The base of the formation is mapped where these sedimentary deposits rest upon a thick sequence of plagonite tuff and basalt, or upon rhyolite or the granitic rock. The formation is composed of tan to light gray silts, sands and clays. Induration is moderate, although very dense, silica-cemented sandstone is locally present. The silica cement was precipitated from hydrothermal groundwater which moved through fault conduits. Fracturing is not evident in the sand layers. Fracture spacing is not evident in the sand layers. Fracture spacing in the sand-stone ranges from 6 inches to 10 feet or more. Some minor amounts of poorly to well-sorted, light gray to tan sand with minor gravel and claystone layer are locally present.
Sand of the Pierce Gulch Formation

The foothills located along the southern boundary of Cartwright Ranch consist of Sand of the Pierce Gulch Formation. Inferred contact between the Pierce Gulch Formation and the Terteling Springs Formation occurs at roughly elevation 3100 feet on the property. The formation is composed of pale yellow-gray arkosic sand overlain by pebble to cobble gravel. Springs and seeps occur along the contact between the permeable sands and the underlying silts and clays of the Terteling Springs Formation. Two of the springs are moderately productive and have established channels.

Undifferentiated Basalt

A volcanic assemblage of tuffs, basalts and ash occurs beneath and interbedded with the Terteling Springs Formation. The low shear strength of portions of this unit are often associated with unstable slopes in the Boise foothills. The unit often contains expansive clays. The volcanic assemblages are identified by dark brown soils with mud-cracked and fissured surfaces.

Intracanyon Terrace Gravel

Fluvial sand and sandy gravel with sub angular cobbles and boulders are characteristic of this lithologic unit. These deposits form terraces along some of the gulches and also flat divides between canyon/gulch near the margins of the foothill-valley environment. Indurations and stratification are relatively poor. These deposits represent stream and wave cut action of the Dry Creek drainage.

Quaternary Alluvial Fan Deposits

This unit is comprised of light gray to tan sand and gravel deposits. The sand and gravel is poorly indurated and poorly stratified. Fracturing is not evident. The deposits are usually located near the mouth of established drainages.

Landslide Deposits

This unit is comprised of unsorted, unstratified rock and soil masses which have been deposited by slumps, landslides and debris flows. The particle size may range from clay to large boulders. The ground surfaces are hummocky with flat lobate toes. This unit also includes the scar area from which the soil and rock mass originated and displaced rock units which are not related to faulting. The color is dependant upon the source material. Fractures are not evident. Slope failure is evident in the study area, particularly north of Currant Creek, but not within the Cartwright Ranch boundaries.
Recent Alluvium Deposits

This lithologic unit consists of unconsolidated silt, sand and gravel deposits of the Dry Creek drainage, Currant Creek and McFarland Creek. Fractures are not evident. This unit also includes recent floodplain deposits along Dry Creek.
Legend
- **Qas**: Sandy Alluvium of Side-Stream Valley and Gulches
- **Tps**: Sand of the Pierce Gulch Formation
- **Ts**: Sand and Mudstone of Terteling Springs Formation

Geologic Conditions

Fig. F1.2a
Soil Overview
Refer to Figure F1.2b

The surficial soils of the Cartwright Ranch property are associated with two Idaho soil geomorphic provinces. The Northern Rocky Mountain province and the Malheur-Boise Basin of the High Lava Plains subprovince of the Columbia Intermontane province. The diverse topography throughout the project area has contributed to a highly variable soil morphology. The U.S. Department of Agriculture, Soil Conservation Service has identified twelve soil classifications for the area.

Objective

The recognition and/or prediction of soil behavior with respect to soil morphology is paramount in selecting the correct avenue for land use planning. Recognition of the diverse soil behavior is useful in adjusting land use, including the urbanization, to the limitations and potentials of natural resources and the environment. Planners and others using the soil data can evaluate the impact of specific land uses on the overall productivity of the survey area or other broad planning area and on land use patterns.

Soil Units

The U.S. Department of Agriculture, National Resources Conservation Service (NRCS) have identified thirteen soil units for the Cartwright Ranch property. These units are listed below:

<table>
<thead>
<tr>
<th>Map Unit</th>
<th>Symbol</th>
<th>Soil Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>240</td>
<td>Collister-Flofeather Complex</td>
</tr>
<tr>
<td></td>
<td>242</td>
<td>Flofeather Sandy Loam</td>
</tr>
<tr>
<td></td>
<td>244</td>
<td>Piercepark Coarse Sandy Loam</td>
</tr>
<tr>
<td></td>
<td>247</td>
<td>Aldape-Haw Complex</td>
</tr>
<tr>
<td></td>
<td>249</td>
<td>Pawtoot-Haw Complex</td>
</tr>
<tr>
<td></td>
<td>312</td>
<td>Shadoval-Polecat Complex</td>
</tr>
<tr>
<td></td>
<td>313</td>
<td>Shadoval-Polecat-Pawtoot Complex</td>
</tr>
<tr>
<td></td>
<td>315</td>
<td>Shadoval-Polecat Complex</td>
</tr>
<tr>
<td></td>
<td>316</td>
<td>Polecat-Shadoval-Dangulch Complex</td>
</tr>
<tr>
<td></td>
<td>356</td>
<td>Cranegulch-Hullsgulch Complex</td>
</tr>
<tr>
<td></td>
<td>358</td>
<td>Quailridge-Fortbois Complex</td>
</tr>
<tr>
<td></td>
<td>361</td>
<td>Quailridge-Hullsgulch-Cranegulch Complex</td>
</tr>
<tr>
<td></td>
<td>371</td>
<td>Quailridge-Fortbois-Rock Outcrop Complex</td>
</tr>
</tbody>
</table>
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Engineering Soils Table and Map

Table C (Engineering Soils Table) provides engineering information related to the use of each soil unit as it relates to building sites, sanitary facilities, construction materials and water management. The engineering data is based on NRCS test data using known relationships between soil properties and the behavior of soils in various engineering uses. The data presented in the table can be useful in choosing alternative practices or general designs that will overcome unfavorable soil properties and minimize soil-related failures. However, it is important to understand these data do not eliminate the need for site-specific investigations, testing, and analysis.

The accompanying soils map provides a broad perspective of the soils and associated topography as well as the general diversification of the soil morphology for the Cartwright Ranch property.

This preliminary screening of soils properties provides a relatively normal (without unusual difficulty) geotechnical framework. Within the confines of regulatory oversight, good design practice and good construction technique there are no soils characteristics that would preclude development as planned.

2000 Field Observations and Soils Logs

Table A: Soil Logs provides a summary of the actual soils observations started 2000, first as excavations for soils logs and also as observation wells for long term observation of groundwater levels.

Table B: Groundwater Depth Observation is a log of the depth to groundwater at various observation wells and test pits. The soils map shows the approximate locations of the observation wells and test pits.
<table>
<thead>
<tr>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-1</th>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-2</th>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>48-120&quot;</td>
<td>Sand with silt to silty sand. Medium brown, medium dense, moist.</td>
<td>48-120&quot;</td>
<td>Silty sand. Medium brown, medium dense, moist.</td>
<td>Remarks</td>
<td>Remarks</td>
</tr>
<tr>
<td>120-144&quot;</td>
<td>Sand with silt. Light brown, Medium grained, Medium dense, wet.</td>
<td>120-144&quot;</td>
<td>Sand with silt. Light brown, medium grained, medium dense, wet.</td>
<td>144-150&quot;</td>
<td>Clarye silt. Light brown, stiff, wet, low plasticity.</td>
</tr>
<tr>
<td>Remarks</td>
<td>Piezometer installed to 142.2&quot;. Water level measured at 126&quot; on 4-18-2000.</td>
<td>Remarks</td>
<td>Remarks</td>
<td>Piezometer installed to 140.4&quot;. Water encountered during excavation at 120&quot;. Water level measured at 102&quot; on 4-18-2000.</td>
<td></td>
</tr>
<tr>
<td>Excavated 4-12-2000</td>
<td>Pit #CTP-4</td>
<td>Excavated 44 2-2000</td>
<td>Pit #CTP-5</td>
<td>Excavated 4-12-2000</td>
<td>Pit #CTP-6</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
<td>---------------------</td>
<td>------------</td>
<td>---------------------</td>
<td>------------</td>
</tr>
<tr>
<td>132-162&quot;</td>
<td>Sand with silt to silty sand. Medium brown, medium dense, moist.</td>
<td>102-144&quot;</td>
<td>Sand with silt. Light brown, medium grained, medium dense, wet.</td>
<td>Remarks</td>
<td>Remarks</td>
</tr>
<tr>
<td>Remarks</td>
<td>Piezometer installed to 161.4&quot;. Water encountered during excavation at 156&quot;. Water level measured at 141&quot; on 4-18-2000.</td>
<td>Remarks</td>
<td>Piezometer installed to 145.2&quot;. Water level measured at 120&quot; on 4-18-2000.</td>
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<td></td>
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</table>
### Table A (Continued)
**Soils Log - 2000**

<table>
<thead>
<tr>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-7</th>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-8</th>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>54-132&quot;</td>
<td>Silt with clay and fine sand. Light yellowish-brown, medium dense, moist, vugs to 1/16&quot;</td>
<td>84-144&quot;</td>
<td>Siltstone. Light tannish-brown, moist, moderately indurated.</td>
<td>84-132&quot;</td>
<td>Siltstone. Light tannish-brown, moist, moderately indurated.</td>
</tr>
<tr>
<td>132-152&quot;</td>
<td>Silty sand to sandy silt. Light yellowish-brown, moist.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td>Piezometer installed to 147&quot;. No ground water measured to 11.7&quot; on 4-18-2000.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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</tr>
</tbody>
</table>
### Table A (Continued)
#### Soils Log - 2000

<table>
<thead>
<tr>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-10</th>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-11</th>
<th>Excavated 4-12-2000</th>
<th>Pit #CTP-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-12&quot;</td>
<td>Pit #CTP-13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-48&quot;</td>
<td>Sandy silt. Dark brown, loose, moist.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48-96&quot;</td>
<td>Siltstone. Light tannish-brown, moist, moderately indurated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>96-126&quot;</td>
<td>Very fine sand. Light brown, moist, medium dense.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Siltstone. Light tannish-brown, moist, moderately indurated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
F1.3 – Topography

Slopes

The northern portion of the Cartwright Ranch property is characterized by the relatively flat valley floor and shallow, even slopes that are found throughout the Dry Creek Valley as it runs west toward Highway 55. The Creek and valley run diagonally along the northern side of the property a large flat valley floor and gentle slopes on the south. On the southern side of the property, the valley floor gradually transitions into moderate slopes as the foothills protrude in finger-like formations into the site. Between these finger ridges are long, narrow valleys and gulches with moderate to steep sides. Most of the ridges in this area have round, flat tops that gradually increase in slope as they move to the south.

A plan showing existing slopes has been prepared as part of this submittal. This exhibit shows the degree of slope for the existing land in categories corresponding with the County’s breakdown.

As shown on the plan, the valley floor adjacent to Dry Creek is comprised of level to gently sloping land (0-10%). The majority of the project is located in this terrain. In the south part of the property are foothills, characterized by moderate to steep slopes, well defined valley and level ridges.

Development has avoided slopes 25% and greater to the degree feasible. Those proposed roads located on steeper slopes will be stabilized to prevent erosion, have their side slopes graded to appear natural, and the slopes will be revegetated. Building envelopes will be established to prevent individual residences from being located on steeper slopes.

Much of the slope area in Cartwright Ranch is less than 25%, which makes for favorable building sites.

Aspect

The Dry Creek Valley is generally flat and open with varying degrees of solar exposure, depending upon tree cover and proximity to the foothills at the southwest portion of the site. The ridges and narrow valleys of the foothills that run in a north to south direction in the southern portion of the property create long side slopes with a solar orientation to the east and west. Various pockets of a northern aspect here are attributed to the ends of the ridgelines and certain areas within the narrow gulches, between the ridges.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Views

The development has been carefully planned to minimize visual impact from offsite. The views within the Cartwright Ranch property are generally open, up to the 180 degree range throughout the upper elevations of the site. Cartwright Ranch is not visible from the Boise area. Views from the ridgelines on the southern portion of the site extend into Dry Creek Valley and northward to Bogus Basin.

The majority of lots are located in valley, where the hills beyond will act as a backdrop. The lots in the foothills are larger (80 foot width minimum), and the residences will be architecturally controlled to emphasize horizontal rather than vertical forms and use building colors and materials that harmonize with the surrounding landforms and vegetation.

Of note is that much of the ridge directly west of Cartwright Road will be dedicated as open space, so the natural view that exists will be preserved.

Climate

The climate and wind patterns of the Cartwright Ranch property are typical of the Boise region. The temperate climate and four seasons are influenced by storm fronts that originate in the Pacific Ocean. There are occasional winter temperature inversions with extended periods of fog and cold that cause air quality problems. There is an average 12 inches of precipitation. January precipitation averages 1.6 inches with 30 degree temperatures. The average July precipitation is 0.3 inches with temperatures in the range of 80 to 100 degrees. It is not uncommon to have 20 to 30 consecutive days of no precipitation in the months of July and August. Typically the area at this elevation receives a total of 1.5 to 2 feet of snow during the winter months with snow staying on the ground for an average of 5 to 7 days.
Legend

- < 8 Percent Slope
- 8 - 15 Percent Slope
- 15 - 25 Percent Slope
- > 25 Percent Slope

Cartwright Boundary

Fig. F1.3a
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Aspect (azimuth)
- Flat (-1)
- North (337.5-22.5)
- Northeast (22.5-67.5)
- East (67.5-112.5)
- Southeast (112.5-157.5)
- South (157.5-202.5)
- Southwest (202.5-247.5)
- West (247.5-292.5)
- Northwest (292.5-337.5)
- South (157.5-202.5)
- North (337.5-22.5)

Fig. 1.3b
F1.4 – Vegetation

Common Species and Communities of Plants

Four distinct communities of vegetation grow within the boundaries of Cartwright Ranch, each associated with a different land form, surface water, or body of groundwater at or near the ground surface. They are: (1) open pasture south of Dry Creek, (2) ridges and valleys of the open range, (3) Dry Creek, and (4) the unnamed waterway and adjacent wetlands that parallel Cartwright Road and are tributary to Dry Creek (see Figures 1, 2, and 3; and Appendix 1 attached to the March 20, 2006 memorandum by Ecological Design, Inc. in Sub-Element G5).

The open pasture south of Dry Creek is flat and occasionally irrigated by wheel lines, however applied water likely flows to a subsurface body of groundwater as there is little evidence of surface drainage. The plant community is composed of grasses and forbs, almost all of which are recognized weedy species. They include medusa head (Taeniatherum caput-medusae), tall willow herb (Epilobium paniculatum), cheatgrass (Bromus tectorum), bull thistle (Cirsium vulgare), chicory (Chichorium intybus), moth mullein (Verbascum blattaria), and three awn (Aristida purpurea). Growth is sparse with considerable bare ground observed at the time of field reviews conducted February 27 and March 6, 2006 (see Appendix 1 to the March 20, 2006 memorandum in Sub-Element G5). The pasture has the appearance of being overgrazed and under-irrigated, and unable to accommodate the grazing pressure placed upon it.

More distant from Dry Creek and south of the pasture are dissected foothills with ridges and valleys oriented in a north south direction. Intermittent drainage ways in each of the valleys flow north toward Dry Creek, but are isolated from it with no surface water connections. Narrow corridors of palustrine emergent wetlands follow some of these drainage ways for a portion of their lengths. A stock watering pond has been constructed by an earth impoundment on the largest of these drainage ways, but now appears to be abandoned.

The plant community on the ridges and hillsides is dominated by many of the weedy grasses and forbs observed in the pasture along with common sunflower (Helianthus annuus) and common yarrow (Achillea millifolium). Also, diminutive and scattered individuals of woody shrubs including basin big sagebrush (Artemesia tridentate var. tridentata) and rabbit brush (Chrysothamnus nauseosus) were observed. Woody shrubs growing in some of the drainage ways include blue elderberry (Sambucus cerulea), hackberry (Celtis reticulata), and Wood’s rose (Rosa woodsii).

The presence of an abundance of weedy grasses and forbs, and the sparse cover of woody species and their lack of stature and vigor all suggest the valleys and ridges are also overgrazed and unable to accommodate the grazing pressure placed upon them.
Dry Creek flows southwest from the front of the Boise Mountains and gathers flow from named tributaries including Daniels Creek. It is known to be an intermittent stream within the project area where surface water is lost to a subsurface body of groundwater. South of Cartwright Road the channel is unstable as evidenced by the presence of cut banks at the waters edge and deposits of course sand in the channel forming point bars. A mature canopy of black cottonwood (Populus trichocarpa) and crack willow (Salix rigida) trees shade much of the channel, however an understory of vegetation is largely missing from the floodplain due to heavy grazing by livestock. The banks of this reach of Dry Creek are also damaged by unregulated access to the channel by cattle. A corrugated steel metal pipe (CGSP), approximately four feet in diameter and ten feet long, allows access by farm machinery across Dry Creek. The invert of the CGSP is below the invert of the channel and its bottom is mostly filled with course sand and debris. Although a fishery has been reported in Dry Creek sparse habitat, poor water quality (i.e. sediment), and variable water quantity (i.e. seasonal loss of surface water) are limiting factors to populations of fish.

North of Cartwright Road the riparian corridor of Dry Creek is fenced, which effectively excludes cattle. As a result a dense cover of grasses, forbs, shrubs, and trees grow there. Although livestock have no access to the creek, we observed cut banks and sediment in the channel as was present in the reach of Dry Creek south of Cartwright Road where grazing pressure was great. It appears it is the nature of Dry Creek to be unstable, likely because of the lack of rock in the sedimentary deposits that comprise the valley floor to armor the banks and bed of the channel. Riparian vegetation growing here includes black cottonwood, silver maple (Acer saccharinum), red osier dogwood (Cornus stolonifera), golden currant (Ribes aureum), and coyote willow (Salix exigua).

An unnamed spring originating near the southeast corner of the project area flows parallel to Cartwright Road. It too never makes a surface water connection with Dry Creek and it too is degraded by heavy grazing pressure. It, along with the reach of Dry Creek south of Cartwright Road, present outstanding opportunities for restoration of degraded wetlands and riparian corridors.
Figure F1.4 - Locations of Native and Naturalized Plant Communities, Sensitive Species, and Weedy Species (Source Aerial Photograph: COHPPAS 2003)
Cartwright Ranch
Cartwright Ranch, LLC
Ada County, Idaho

Ecological Design, Inc.
February 19, 2007
**Dominant Species**  
**AREA 1 - Eastern Portion of Dissected Foothills**

**Grasses**  
medusa head (*Taeniatherum caput-medusae*)
cheatgrass (*Bromus tectorum*)
three awn (*Aristida purpurea*)

**Forbs**  
tall willow herb (*Epilobium paniculatum*)
bull thistle (*Cirsium vulgare*)
chicory (*Cichorium intybus*)
moth mullein (*Verbascum blattaria*)

*weedy species*

**Dominant Species**  
**AREA 2 - Dissected Foothills**

**Shrubs**  
hackberry (*Celtis reticulata*)

**Dominant Species**  
**AREA 3 - Western Portion of Dissected Foothills**

**Shrubs**  
basin big sagebrush (*Artemisia tridentata var. tridentata*)
rabbitbrush (*Chrysothamnus nauseosus*)
bitterbrush (*Purshia tridentata*)

**Forbs**  
common sunflower (*Helianthus annuus*)
common yarrow (*Achillea millefolium*)

**Dominant Species**  
**AREA 4 - Undeveloped Intermittent Waterways**

**Shrubs**  
blue elderberry (*Sambucus cerulea*)
hackberry (*Celtis reticulata*)
Wood's rose (*Rosa woodsii*)

**Dominant Species**  
**AREA 5 - Dry Creek**

**Trees**  
black cottonwood (*Populus trichocarpa*)

**Shrubs**  
red osier dogwood (*Cornus stolonifera*)
golden currant (*Ribes aureum*)
coyote willow (*Salix exigua*)

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**Fig. F1.4**

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For further details, see the February 19, 2007 memorandum by Ecological Design, Inc. included in Sub-Element G-5.

**F1.5 – Sensitive Plant and Wildlife Species**

At the request of Ecological Design, Inc. the Idaho Department of Fish and Game Conservation Data Center queried their database and provided an inventory of occurrences of plant species of special concern, and threatened or endangered plant species within the boundaries of Cartwright Ranch and the adjacent area (see Appendix 2 to the March 20, 2006 memorandum in Sub-Element G5). Their response, dated March 3, 2006, shows no listed, candidate, or proposed threatened or endangered plant species were identified within the boundaries of Cartwright Ranch.

**Aase’s onion (Allium aaseae) - Status: GRank G3, SRank S3, State GP3, BLM Type 3**

Aase’s onion is considered by the Natural Heritage Program and Conservation Data Center to be both a global and state rare or uncommon, but not imperiled species (i.e. rare or uncommon throughout its global range and within the State of Idaho). It is considered by the US Bureau of Land Management to be an imperiled species with a moderate chance of endangerment.

One occurrence documented by Idaho Department of Fish and Game - Conservation Data Center is within the boundaries of Cartwright Ranch. It is:

1. Township 4N, Range 2E, Sections 8, 9, 16, and 17 on 100 acres on the north side of Pierce Park Road in the upper Pierce Gulch; also near the heads of two tributaries to Dry Creek.

**Common Species of Terrestrial Animals**

The four distinct communities of vegetation growing within the boundaries of Cartwright Ranch provide habitat for game and non-game species of wildlife. Some species make exclusive use of upland as compared to wetland habitat, while others make use of both depending on their life stage (e.g. juvenile v. adult) or daily and seasonal need for a particular component of habitat (e.g. reproductive space v. cover from predators v. winter browse).

Game and non-game wildlife species known to occur in the southwest region of Idaho in habitat provided by uplands including urban areas, farmlands, sagebrush steppe, shrub steppe, desert, rocky canyons, and grasslands are summarized in Table 1. These species may be found within the boundaries of Cartwright Ranch.
Table 1 - Species of Reptiles, Amphibians, and Mammals Known to Occur in Upland Habitat in the Southwest Region of Idaho

**Reptiles:**
1. Mojave black collared lizard (Crotaphytus bicintores)
2. longnose leopard lizard (Gambelia wislizenii)
3. short horned lizard (Phrynosoma douglasii)
4. sagebrush lizard (Sceloporus graciosus)
5. western fence lizard (Sceloporus occidentalis)
6. rubber boa (Charina bottae)
7. racer (Coluber constrictor)
8. ringneck snake (Diadophis punctatus)
9. night snake (Hypsiglena torquata)
10. gopher snake (Pituophis melanoleucus)
11. western terrestrial garter snake (Thamnophis elegans)
12. western rattlesnake (Crotalus viridis)

**Amphibians:**
1. long toed salamander (Ambystoma macrodactylum)
2. western toad (Bufo boreas)
3. Woodhouse toad (*Bufo woodhousei*)
4. Pacific tree frog (Hyla regilla)
5. Great Basin spadefoot (*Scaphiopus intermontanus*)

**Mammals:**
1. Virginia opossum (Didelphis virginiana)
2. Merriam's shrew (Sorex merriama)
3. coast mole (Scapanus orarius)
4. little brown myotis (Myotis lucifugus)
5. Yuma myotis (Myotis yumanensis)
6. long eared myotis (Myotis evotis)
7. long legged myotis (Myotis volans)
8. California myotis (Myotis californicus)
9. western pipistrelle (Pipistrellus hesperus)
10. big brown bat (Eptesicus fuscus)
11. spotted bat (Euderma maculatum)
12. Townsend's big eared bat (Piecetus townsendii)
13. pallid bat (Antrozous pallidus)
14. pygmy rabbit (Brachylagus idahoensis)
15. Nutalls cottontail (Sylvilagus nutallii)
16. white tailed jackrabbit (Lepus townsendii)
17. black tailed jackrabbit (Lepus californicus)
18. least chipmunk (Tamias minimus)
19. yellow bellied barmot (Marmota flaviventris)
20. white tailed antelope squirrel (Ammospermophilus leucurus)
21. Townsend’s ground squirrel (Spermophilus townsendii)
22. Idaho ground squirrel (Spermophilus bruneus)
23. fox squirrel (Sciurus niger)

Mammals (Continued):
1. Townsend’s pocket gopher (Thomomys townsendii)
2. northern pocket gopher (Thomomys talpoides)
3. little pocket mouse (Perognathus longimembris)
4. dark kangaroo mouse (Microdipodops megacephalus)
5. Ords kangaroo rat (Dipodomys ordii)
6. western harvest mouse (Reithodontomys megalotis)
7. canyon mouse (Peromyscus crinitus)
8. deer mouse (Peromyscus maniculatus)
9. northern grasshopper mouse (Onychomys leucogaster)
10. desert woodrat (Neotoma lepida)
11. bushy tailed woodrat (Neotoma cinerea)
12. montane vole (Microtus montanus)
13. sagebrush vole (Lemmiscus curtatus)
14. Norway rat (Rattus norvegicus)
15. house mouse (Mus musculus)
16. coyote (Canis latrans)
17. red fox (Vulpus vulpes)
18. kit fox (Vulpus microtis)
19. raccoon (Procyon lotor)
20. ermine (Mustela erminea)
21. long tailed weasel (Mustela frenata)
22. badger (Taxidea taxus)
23. western spotted skunk (Spilogale gracilis)
24. striped skunk (Mephitis mephitis)
25. mountain lion (Felis concolor)
26. bobcat (Felis rufus)
27. elk (Cervus elaphus)
28. mule deer (Odocoileus hemionus)
29. pronghorn antelope (Antilocpra americana)

(Source: Groves and Marks 1985)
Game and non-game wildlife species known to occur in the southwest region of Idaho in habitat provided by wetlands including wet meadows, marshes, streams, and riparian areas are summarized in Table 2. These species may be found within the boundaries of Cartwright Ranch.

Table 2 - Species of Reptiles, Amphibians, and Mammals Known to Occur in Wetlands in the Southwest Region of Idaho

Reptiles:
1. western skink (Eumeces skiltonianus)
2. western terrestrial garter snake (Thamnophis elegans)
3. common garter snake (Thamnophis sirtalis)

Amphibians:
1. western toad (Bufo boreas)
2. Pacific tree frog (Hyla regilla)
3. striped chorus frog (Hyla triseriata)
4. Great Basin spadefoot (Scaphiopus intermontanus)
5. northern leopard frog (Rana pipiens)
6. spotted frog (Rana pretiosa)

Mammals:
1. vagrant shrew (Sorex vagrans)
2. western pipistrelle (Pipistrellus hesperus)
3. nutall's cottontail (Sylvilagus nutallii)
4. beaver (Castor canadensis)
5. deer mouse (Peromyscus maniculatus)
6. meadow vole (Microtus pennsylvanicus)
7. muskrat (Ondatra zibethica)
8. western jumping mouse (Zapus princeps)
9. porcupine (Erethizon dorsatum)
10. raccoon (Procyon lotor)
11. ermine (Mustela erminea)
12. striped skunk (Mephitis mephitis)
13. red fox (Vulpes vulpes)
14. mule deer (Odocoileus hemionus)

(Source: Groves and Marks 1985)

Idaho Department of Fish and Game has observed during systematic winter counts of big game, and local residents have reported resident populations of mule deer and pronghorn antelope south of Dry Creek in the area of Cartwright Ranch. Individual of each species are thought to number less than twelve (Leitzinger pers. comm.). Migratory populations of mule deer and elk have been repeatedly observed by Idaho Department of Fish and Game north of CARTWRIGHT RANCH PLANNED COMMUNITY ELEMENT F, REVISION 1_030707
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Dry Creek during systematic winter counts of big game. Their locations are shown on a map prepared by Idaho Department of Fish and Game (see Figure 4 attached to the March 20, 2006 memorandum in Sub-Element G5). In general, their numbers are greatest north and east of Cartwright Ranch at higher elevations and closer to Lucky Peak. With the exception of approximately 10 acres north of Dry Creek, the footprint of the Cartwright Ranch development is outside of deer and elk winter range.

In addition to the common species of wildlife listed in Tables 1 and 2 numerous species of passerine birds, upland game birds, raptors and owls feed, perch, roost, and nest within the boundaries of Cartwright Ranch. Passerine birds include, but are not limited to, common nighthawk (Chordeiles minor), Says phoebe (Sayornis saya), black billed magpie (Pica pica), house wren (Troglodytes aedon), American robin (Turdus migratorius), northern mockingbird (Mimus polyglottus), sage thrasher (Toxostoma rufum), grasshopper sparrow (Ammodramus savannarum), red winged blackbird (Agelaius phoeniceus), western meadowlark (Sturnella neglecta), house sparrow (Passer domesticus), purple martin (Progne subis), American crow (Corvus brachyrhynchos), and common raven (Corvus corax).

Upland game birds include, but are not limited to, California quail (Callipepla californica), ring necked pheasant (Phasianus colchicus), chukar (Alectoris chukar), and gray partridge (Perdix perdix).

Raptors and owls include, but are not limited to, red tailed hawk (Buteo jamaicensis), ferruginous hawk (Buteo regalis), northern harrier (Circus cyaneus), Swainsons hawk (Buteo swainsoni), American kestrel (Falco sparverius), western screech owl (Otus kennicottii), and great horned owl (Bubo virginianus).

Although Dry Creek is known to be an intermittent stream within the project area, fish from upstream and downstream reaches where flow is perennial likely move to and find temporary habitat at Cartwright Ranch during times of seasonal water. They may include, but are not limited to, longnose dace (Rhinichthys cataractae), mountain sucker (Catostomus platyrhynchos), mottled sculpin (Cottus bairdi), and slimy sculpin (Cottus cognatus). Steelhead (Oncorhynchus mykiss) in excess of those required for hatcheries and released by Idaho Department of Fish and Game in the Boise River have been known to migrate into other intermittent tributary streams including Sand Creek.
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Terrestrial Animal Species of Special Concern and Threatened or Endangered Animal Species

At the request of Ecological Design, Inc. the Idaho Department of Fish and Game - Conservation Data Center queried their database and provided an inventory of occurrences of terrestrial animal species of special concern, and threatened or endangered terrestrial animal species within the boundaries of Cartwright Ranch and adjacent area (see Appendix 2 attached to the March 20, 2006 memorandum in Sub-Element G5). Their response, dated March 6, 2006, shows no species of special concern or listed, candidate, or proposed threatened or endangered terrestrial animal species were identified within the boundaries of Cartwright Ranch.

Terrestrial Fish Species of Special Concern and Threatened or Endangered Animal Species

At the request of Ecological Design, Inc. the Idaho Department of Fish and Game (IDFG) - StreamNet queried their database and provided an inventory of occurrences of fish species of special concern, and threatened or endangered fish species within the boundaries of Cartwright Ranch and adjacent area (see Appendix 2 attached to the March 20, 2006 memorandum in Sub-Element G5).

Their response, dated March 6, 2006, shows no listed, candidate, or proposed threatened or endangered fish species were identified within the boundaries of Cartwright Ranch. However, one occurrence of inland redband trout (*Oncorhynchus mykiss gairdneri*) - a species of special concern - was identified within the boundaries of Cartwright Ranch. The data are summarized below.

Inland redband trout (*Oncorhynchus mykiss gairdneri*) - Status: Federal SC, State GSC, USFS S, BLM S

Inland redband trout is considered by the Natural Heritage Program and StreamNet to be a Federal and state sensitive species. It is a state protected game species, and also considered by the US Forest Service and the US Bureau of Land Management to be a sensitive species.

A documented occurrence(s), presumably in Dry Creek, identified by Idaho Department of Fish and Game (IDFG) - StreamNet is within the boundaries of Cartwright Ranch.
F1.6 – Historical Resources

Historic Resources Summary Report

Introduction

In March of 2006, an inventory and assessment was conducted for historical resources on Cartwright Ranch in Dry Creek, Ada County by Susan M. Stacy (see Element 3 for Curriculum Vitae). This assessment responds to Section 5.8-17 a.7 of the Ada County Comprehensive Plan, which requests information on “cultural resources including...historical and archaeological site findings” as part of the pre-development site conditions in a proposal to develop a planned community.

This analysis identifies the known cultural resources, places them in a historical context, and evaluates their historical significance. Overall, no structures were found to meet the criteria for contributing significant information about the history of Dry Creek Southwest Idaho, or for nomination to the National Register of History Places.

For details regarding historical resources assessment work on the Cartwright Ranch property and the review of such assessment by the Idaho State Historic Preservation Office, please see Sub-Element G3.

Location

Cartwright Ranch consists of about 1000 acres in Sections 4, 5, 8, and 9 of T4N R2E in Ada County, Idaho. The most direct access to the property from Boise is by driving north on Bogus Basin Road and turning west on Cartwright Road. The stucco house, now numbered 11515 Cartwright Road, and its associated outbuildings are 5.1 miles from Bogus Basin Road on the west side of Cartwright Road. It is situated at the eastern edge of Section 5, just north of the point where Cartwright Road crosses Dry Creek. The creek curves toward the north, with the effect that the creek and the road embrace the house and its outbuildings.

A "spring," mapped by the USGS on the Boise North quad (1972), is located on the west side of Cartwright Road in Section 5, about 3/4th of a mile north of its junction with Pierce Park Road.

According to a 1977 site survey (form) filed with the Idaho State Historic Preservation Office (SHPO), a homestead foundation of cut stone and excavated earth is located in Section 9 on the "west side of Cartwright Road, c 1.125 km. north of junction with Pierce Park Road; c 250 m[eters] downstream of map-indicated spring along Cartwright Road."
General Description of the Area

The 1000 acres lie chiefly in the watershed of Dry Creek, an intermittent stream originating in the Boise Front to the north. The elevation ranges between ridge tops at approximately 3600 and the Dry Creek floodplain at about 2940 above msl, with side streams and gulches feeding Dry Creek.

The relief near Dry Creek and its flood plain consists of sloping to nearly flat areas that, when water is available, are irrigable. On both sides of the creek, narrow canyons and steep to moderate slopes drain into Dry Creek. The hillsides are vegetated with sagebrush, shrubs, and grasses. Riparian areas near the creek and springs include locust, willow, rose, and blackberry. Dry Creek proceeds north, turns west and southwest to Boise River, where its mouth is located near Eagle, Idaho.

The property appears to contain no named rock outcroppings, sandstone overhangs, caves, or other rock formations. However, rock outcroppings are observable near several ridgetops. Small flood plain ledges occur along Dry Creek and its tributary drainages.

Pre-historic Dry Creek

The Idaho SHPO houses surveys and site descriptions of reported pre-historic and historic sites. No one has produced a comprehensive cultural resource survey of Dry Creek Valley. Nevertheless, site reports for pre-historic and historic cultural resources do indicate the previous presence of Native Americans and Euro-American settlers in Dry Creek. SHPO files contain no records of prehistoric sites on Cartwright Ranch. On file at the SHPO is a "sensitivity assessment" conducted by SAIC in 1994 for the Hidden Springs developers, which includes the land within the boundaries of Cartwright Ranch. This document evaluates the likelihood of finding Native American archaeological sites in Ada County and its significant geographical units. The authors note that sedimentation in flood plains can bury archaeological sites, preventing their identification.

The existence of the (pre-historic) Dry Creek Rockshelter, a Native American big-game hunting camp in the upper reaches of Dry Creek (beyond Cartwright Ranch), suggests that Native Americans hunted the hills and slopes of Dry Creek. If so, lithic remains (shaped rock tools and chips resulting from manufacture) might be discovered elsewhere along Dry Creek.

The authors conclude that the likelihood of locating sites on Dry Creek's floodplain and gentler slopes is "moderate." On steeper slopes, in narrow drainages, and on ridgetops, the likelihood is "low." A long-time resident of Dry Creek in the Cartwright Ranch area, Mr. Ostalosa, reported in an interview that he had "never found anything." No one has attempted to identify the sequential occupation of Dry Creek by specific ethnic groups.
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The History of Dry Creek

The most useful accounts of the history of Dry Creek include a memoir by Dorothy Stiff Wyman, Light Upon the Mountain, and a brief historical context provided to the developers of Cartwright Ranch by historians Madeline Buckendorf and Barbara Perry Bauer in 1994.

Although the Stiff family settled on a section of Dry Creek -- she called it the "Stack Rock community" -- above Cartwright Ranch, Wyman describes the conditions and challenges faced by settlers attempting to dry-land farm in the period between about 1910 and the onset of the Great Depression. That this family -- and most others -- were unable to create lasting economic enterprises does much to explain a shift in the economy of Dry Creek to one based more on grazing and livestock management. Livestock entrepreneurs began in the 1940s (and later) to assemble parcels originally patented in smaller units, hoping that larger holdings could support both summer and winter operations.

SAIC archaeologists and Buckendorf/Bauer each proposed historical contexts for Cartwright Ranch/Dry Creek history which the present historical investigation continues to support. A "context" conceptualizes the larger sweep of forces influencing the decisions of people and the process of change in a specific locale. The context below enhances the previous contexts and differentiates "lower" from "middle and upper" Dry Creek settlement.

Please see Appendix A in Sub-Element G-3 for a detailed description of the following prehistoric and historic period contexts.

Pre-1811: Native American peoples occupy southwest Idaho. Contact with Euro-Americans after 1811.

1811-1836: Fur traders and trappers explore southwest Idaho.


1862-1889: Lower Dry Creek Settlement. Gold discoveries bring settlers who farm, benefiting from toll road between Horseshoe Bend and Silver City mines.

1889-1933: Upper/Middle Dry Creek Settlement. Later wave of homesteaders attempt dry farming during population boom during early 1900s until Depression.

1933-1945: Great Depression and World War II. Many families leave Upper/Middle Dry Creek for better economic opportunity elsewhere.

1945-present: Consolidation of land holdings and large-scale subdivision. Cow-calf operations are followed by subdivisions.
History of Marlatt Place (Stucco House) at 11515 Cartwright Road

This house is on a 160-acre parcel of land originally patented by William Daly in 1889. In subsequent land transactions, the original parcel was divided, but the "north half of the SE 1/4 of Section 5 in T4N R2E" retained its identity. This is the location of the stucco house.

An analysis of deed transfers, interviews, and other sources leads to the conclusion that the original basis for the stucco house was a homestead probably built by William Marlatt not long after he purchased the land in 1917. Subsequent owners continued to enlarge the original. Please see Appendix B for details.

A major enlargement and modernization of the house occurred in 1957, when the Winn family contracted with Skully and Rodomack of Boise to apply stucco siding and an asphalt roof to the entire enlarged structure in 1957. No remains of the original are extant today. Considering that remodels and enlargements took place on all four sides of the house, it is possible that today's kitchen, which is in the center of the structure, at one time may have been the homestead. As a relic or exemplar of the homesteading period or its architecture in Dry Creek Valley, the house has no value.

During the ownership of Oscar Baumhoff, which began in 1963, a fire destroyed several older wood outbuildings just west of the house. Metal buildings took their place. A few old wood structures remain on the site, but the integration of new and old structures has devalued the site for its potential as a historic landscape.

Please see Appendix D for a description and condition report of the Marlatt House.

The Garrett Place Homestead Foundation and nearby Spring

This foundation is believed to be located on the west side of Cartwright Road above (south of) the Marlatt Place and near a spring. It was cursorily surveyed in 1977 and recorded on a site survey form by Michael Ostrogorsky, on file at the SHPO. He said the foundation was "of cut stone and excavated earth." The foundation probably is on land patented by Benton Garrett in 1913. To date, field trips by both the historian and Cartwright Ranch personnel have not located the foundation.

Near and below the spring just west of Cartwright Road is an abandoned poured concrete structure of unknown date and probably used as a water trough for cattle. The structure is visible from the edge of the road and may or may not be near its original location of use.

The foundation and spring are in an area of Cartwright Ranch which, according to Stanley Gray, Cartwright Ranch representative, is not proposed for development.
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The Marlatt Place: Architectural Significance

The "original" homestead known as the Marlatt Place has been thoroughly surrounded by more contemporary additions, and the whole was sided in stucco about 49 years ago by the Winn family. Nothing remains of the original spirit of the house, whatever that might have been. Should the 1945-to-Present period of Middle/Upper Dry Creek settlement ever be considered of historic significance, the house illuminates modest efforts to establish a livestock-based enterprise as subsequent owners enlarged and modified the house as economically as possible.

The outbuildings are a collection of mixed-age structures, making it difficult to discern a "landscape" typical of any particular era, certainly not the homestead era. It is uncertain that the older wood structures are in original locations. Fire during the 1950s eradicated several of the outbuildings present in the 1940s period, notably a garage and barn.

If the property were to be considered for nomination to the National Register of Historic Places, a historian would be hard pressed to devise an argument for significance based on criteria for architectural qualities or construction representing the work of a master, association with historic persons or events, or as a property likely to contribute significant information about the history of Dry Creek or Southwest Idaho. The odd-lot buildings and stucco house represent an economic enterprise (dry-land grazing and cow/calf operations) that is being replaced by urban and suburban development of Boise City and the Boise valley region.

F1.7 – Hazardous Areas

Geotechnical Characterization

Development of the geotechnical constraints characterization was designed to help recognize factors inherent to natural features that would potentially affect project planning, development and construction. The Boise foothills are prone to some geotechnical constraints that are characterized by slope failure, over-steepened slopes, excess hillside erosion and uncontrolled flooding.

Slope stability and expansive soils associated with the Boise foothill's volcanic assemblage as a geologic unit is known for its potential for both shallow (translational) and deep-seated (rotational) slope failures. The lower stratigraphic sequence of the volcanic assemblage's characteristic of low shear strength, especially along interface clay layers with the lower Terteling Springs Formation. The expansive (swelling) soils are readily recognized by the chocolate brown color and mud-cracked surface, and occurrence of these soils is confined to the outcrop area of the volcanic assemblage. It is believed clayey soils in these areas may have excessive low shear strength when saturated. In addition, the clays tend to have poor drainage, and some are moderately expansive.
Objective

The purpose of this analysis is to identify geotechnical-related constraints associated with the Cartwright Ranch area and compile the constraint information into a useful non-technical map form for use by planners to guide future development. The data and maps generated by this study will aid in the formation of planning and development guidelines and construction standards that will:

1. Minimize the detrimental effect of natural constraints to the health, safety, and general welfare of the Cartwright Ranch project in individual site acquisition and/or development of real property; and

2. Encourage the most beneficial use of selected development areas and productive development of sites within each area.

Geotechnical Constraint/Slope Maps

The geotechnical hazards map is a compilation and analysis of all available data that may identify potential natural constraints. As such, the natural constraints that have been identified are minor.

The slope map and description included in this section illustrates and describes areas categorized by the following slopes:

- 0-5 percent
- 6-10 percent
- 11-15 percent
- 16-20 percent
- 21-25 percent
- Over 25 percent

Geotechnical Constraints Classification

The following constraint categories have been developed as a general guideline for general planning and development at Cartwright Ranch.

High Constraints:
Development of these areas should be avoided. Characteristic of severe slope failure, high groundwater, over-steepened slopes, and rock topple.

Moderate Constraints:
These areas can be developed with some limitations and/or restrictions. These areas may
include ancestral slope failure, steep slopes, some swelling or fat clays. The restrictions placed due to the potential hazards are usually not serious enough to prevent development.

**Low Constraints:**
These areas can be developed. Little or no development restrictions are associated with these areas. These areas are located primarily south of Dry Creek and Currant Creek.
Geotechnical Constraints Level

- High Constraints
- Medium Constraints
- Low Constraints

Cartwright Boundary

Geotechnical Constraints

Fig. F1.7
F1.8 – Impact on Natural Features

Summary of Opportunities and Constraints

The analysis of site Opportunities and Constraints is derived from information presented in the Pre-Development Conditions section of this Plan and summarized in Figure F1.8. As such, the Site Analysis is a composite overlay of the Geographic Information Systems (GIS) resource maps, background reports and field review by the development and planning team. The following outline highlights the natural and cultural factors which either singularly or in combination have presented assets or limitations in the proposed development of Cartwright Ranch.

Opportunities

Varied Topography: Slopes and land forms that range from shallow, open areas in the Dry Creek Valley floor to the gentle side slopes of the adjacent ridges, into the moderate or steeper slopes of the foothills and gulches provide a great diversity to the Cartwright Ranch property. These conditions afford the opportunity to sensitively incorporate development into the topography integrating buildings, roads and infrastructure to minimize visual impacts and disturbance on the property.

Valley and Hillside Views At the south side of the property, the view across Dry Creek Valley features the backdrop of the foothills that immediately rise up to the high ridges, front range and mountains above this valley.

Creeks: Dry Creek that runs through the Cartwright Ranch property offers a number of opportunities related to wildlife habitat, trail/greenway corridors and visual amenities.

Access: The close proximity and routing of primary roads to the property from the south and west via State Street, Highway 55, Seamans's Gulch Road, as well as Dry Creek Road from the east offer various routes for convenient vehicular access and traffic distribution.

Groundwater: A groundwater resource in the Cartwright Ranch project vicinity is found in permeable sedimentary aquifers, with reported well yields of up to 2,000 gallons per minute in the Dry Creek Valley west of the project area.

Constraints

Steep Slopes: A number of areas throughout the southern portions of the site are constrained by slopes that are in excess of 25%. These slopes are located on the southern side of the property along the sides of the ridgelines that project into the Dry Creek Valley.
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Visually Sensitive Hillsides: Due to the amount and exposure of slope area, including ridge lines, side slopes and exposed hillside areas within the property, there is a significant amount of visually sensitive land.

Power Line: The power line that runs diagonally across the far most eastern side of the property creates a includes a significant easement and setback area that impacts lot placement and restricts land use along this corridor.

Floodplain: The Dry Creek floodplain and floodway present a constraint related to buildable area and access within the valley floor.

Land with Limited Access: Certain portions of the Cartwright Ranch property are difficult to access due to steep slopes, ridgelines, stream corridors, lack of easements or adjacent property configurations and geological hazard areas.

Surface Water and Wetlands: Established drainages and springs including Dry Creek, and the unnamed spring should be isolated from all unnecessary construction activity. Road and utility crossings should be planned carefully with appropriate restoration.
### Table C
**Engineering Soils Table**

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# ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

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*Note: Some entries in the table were not estimated.*

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CARTWRIGHT RANCH PLANNED COMMUNITY  
ELEMENT F, REVISION 1_030707  
F-1 47 OF 54
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Engineering Soils Table

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*Absence of an entry indicates data were not estimated*
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Absence of an entry indicates data were not estimated.
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<td>15-May</td>
<td>0</td>
<td>NP</td>
<td>8.0-20</td>
<td>Low</td>
</tr>
<tr>
<td>Fortbois</td>
<td></td>
<td>0-7</td>
<td>SM</td>
<td>85-100</td>
<td>60-100</td>
<td>50-75</td>
<td>15-30</td>
<td>0</td>
<td>NP</td>
<td>6.0-20</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7-11</td>
<td>SM</td>
<td>85-100</td>
<td>60-100</td>
<td>45-70</td>
<td>35-40</td>
<td>35.50</td>
<td>NP-A</td>
<td>6.0-20</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11-40</td>
<td>SM</td>
<td>85-100</td>
<td>85-100</td>
<td>65-76</td>
<td>30-Oct</td>
<td>0</td>
<td>NP</td>
<td>6.0-20</td>
<td>Low</td>
</tr>
<tr>
<td>Rock Outcrop</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Absence of an entry indicates data were not estimated.
Edits to text.
Introduction

The primary objective of the Cartwright Ranch plan is to create a small-town community in the tradition of Idaho small towns and pattern the character of Hidden Springs. The project will maintain the traditional character of the Dry Creek Valley while allowing for clustered mixed-density development. The project will also protect and enhance the site's natural environment—through permanent open space, conservation easements and/or revegetation plans—including riparian areas (Elements F1 and F8), groundwater recharge areas (Element F1), open space/natural features (Elements F1 and F7), wildlife and winter range areas (Elements F7 and F8).

Land use planning for Cartwright Ranch will enhance the character of Hidden Springs by creating separate neighborhoods and using the Town Center as the gathering place for the community. The design will attempt to intensify the Town Center area by providing for lot types that allow commercial uses and higher residential density. The comprehensive plan for Cartwright Ranch identifies the following levels (in gross acres) of development intensity:

- Residential – 190 acres consisting of four distinct residential lot types as defined below.
- Mixed Use – 18 acres including higher density residential and 20,000 square feet of commercial uses.
- Developed open space – 24 acres containing both active and passive parks, some programmed for active recreation and community use and some programmed for strolling.
- Natural open space – 448 acres will be either left in a natural state or partially restored and enhanced to provide both a visual amenity to the community and a transition from developed areas.

Residential Uses

The residential program for Cartwright Ranch is the result of a desire to create a rural community with a variety of housing options for prospective residents. The following overview provides a description of the four residential options:

*View Lots* - These are lots that generally occur on the site's moderately sloped hillsides and are located to the south and west of the Town Center. These lots vary substantially in size and configuration to respond to existing topography and minimize visual impact.

*Traditional Lots* - The Traditional Lots are intended to provide a transition from different types of lots or different land uses. These lots provide two functions: some are buffers between different uses and some are larger lots in a more open rural setting.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Village Lots - These are reminiscent of the "in-town" lots traditionally found in Idaho's agricultural towns and communities. These lots and homes built on them are intended to form a close-knit residential village with strong pedestrian and community orientation like some of the established neighborhoods of Boise (such as the North and East Ends).

Town Home Lots - These are the community's smallest lots. They serve a dual purpose. They provide commercial and office uses, which are discussed below. Second, they provide opportunities for alternative, attached or smaller detached homes, which may appeal to seniors, empty nesters, first time homebuyers, and/or single parents who prefer a small unit with limited yard area. Town Home lots are intended to be located in or within convenient walking distance of the Town Center. A minimum of five percent (5%) of the residential units constructed on the Town Home Lots will be Multi-Family Dwellings, as that term is defined in the Cartwright Ranch Zoning Ordinance.

Table F2.1 Residential Price Points

<table>
<thead>
<tr>
<th>Lot Type</th>
<th>Home Design</th>
<th>Estimated Size Range (Sq Ft)</th>
<th>Estimated Price Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Home</td>
<td>1-3 level attached town homes</td>
<td>1200 - 2400</td>
<td>$200,000 - $350,000</td>
</tr>
<tr>
<td></td>
<td>3-4 story buildings – single family condominiums</td>
<td>1000 - 2000</td>
<td>$175,000 - $325,000</td>
</tr>
<tr>
<td>Village</td>
<td>Detached single family street-loaded garage</td>
<td>1500 - 2000</td>
<td>$325,000 - $575,000</td>
</tr>
<tr>
<td></td>
<td>Detached single family alley-loaded garage</td>
<td>1500 - 3000</td>
<td>$300,000 - $550,000</td>
</tr>
<tr>
<td>Traditional</td>
<td>Detached single family street-loaded garage</td>
<td>2500 - 4500</td>
<td>$500,000 - $900,000</td>
</tr>
<tr>
<td></td>
<td>Detached single family alley-loaded garage</td>
<td>2000 - 4000</td>
<td>$400,000 - $800,000</td>
</tr>
<tr>
<td>View</td>
<td>Detached single family street-loaded garage</td>
<td>4000 - 6000</td>
<td>$800,000 - $1,200,000</td>
</tr>
</tbody>
</table>

Non-Residential Uses

Mixed Use – The Town Center will include commercial and office uses, providing on-site employment opportunities for community residents. Commercial Town Home lots can accommodate approximately 20,000 square feet of commercial uses, which are expected to include the Community Center, post office, professional offices, service-oriented business, and possibly some food service.

Developed Open Space – Uses include a greenbelt along Dry Creek, a series of regional and local trails, both neighborhood parks and ballparks and significant areas of open space. The developed open space is designed to integrate into natural open space areas.
Element F, Planned Community Development Plan

Natural Open Space - As a conservation-based development, natural open space is an essential element of Cartwright Ranch, both in terms of land use pattern and development character. Natural open space is organized to be contiguous, inter-connected and diverse, but built upon a clear series of principles related to scale and purpose.

Table F2.2: Land Use and Density

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Gross Acreage</th>
<th>Units</th>
<th>Gross Density</th>
<th>% of Total Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Boundary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entire Parcel</td>
<td>680</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>View Lots</td>
<td>101</td>
<td>171</td>
<td>1.7</td>
<td>27.6%</td>
</tr>
<tr>
<td>Traditional Lots</td>
<td>62</td>
<td>205</td>
<td>3.3</td>
<td>33.1%</td>
</tr>
<tr>
<td>Village Lots</td>
<td>30</td>
<td>121</td>
<td>4.0</td>
<td>19.5%</td>
</tr>
<tr>
<td>Town Home Lots</td>
<td>12</td>
<td>104</td>
<td>8.7</td>
<td>16.8%</td>
</tr>
<tr>
<td>Mixed Use (Non Residential)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town Home Lots</td>
<td>2</td>
<td>19</td>
<td>9.5</td>
<td>3.0%</td>
</tr>
<tr>
<td>Community Center Lots</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developed Open Space</td>
<td>24</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Natural Open Space</td>
<td>448</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table represents anticipated land uses as of July 2007. The final allocation of uses may vary based on site and market conditions as allowed by this Application and Zoning Ordinance. Commercial townhome lots represent 20,000 s.f. of commercial use area. Park areas within the Town Center are included in the Developed Open Space.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Visuals – Building Type Examples

Town Home Lots:
Village Lots:
Traditional Lots:
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

View Lots:

CARTWRIGHT RANCH PLANNED COMMUNITY
ELEMENT F, REVISION 4_012308

F-29 OF 12
Amenities:

CARTWRIGHT RANCH PLANNED COMMUNITY
ELEMENT F, REVISION 4_012308
F-2 10 OF 12
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Commercial:

CARTWRIGHT RANCH PLANNED COMMUNITY
ELEMENT F, REVISION 4_ 012308
RE-SUBMITTAL COVER SHEET SUBELEMENT F3

Replaced figure.
Land Use Patterns

Fig. F3
Surrounding Land Uses

The land uses to the West, Northwest, and North of Cartwright Ranch are primarily vacant land (including dedicated open space), with some residential (including Hidden Springs) and some agriculture. The land uses to the Northeast, East, Southeast, South and Southwest are primarily agriculture, with some vacant land and some residential.
Overview

Studies conducted by Blueprint for Good Growth and Communities in Motion, have projected the addition of over 200,000 new residents to Ada County alone in the next 25 years.

As a result, the Treasure Valley faces the same challenge to its quality of life as many other communities throughout the western U.S. As a scenically attractive, lifestyle oriented region with good schools, strengthening employment centers and strong family values, it is increasingly appealing to a broad range of in-migrating businesses, families and retirees. Recent analyses show that current home and lot inventories are at increasingly low levels, driving the cost of housing ever higher. While this pressure should decrease given newly approved developments, much of the new home construction and lot development is occurring in areas on the far western end of the Valley. As the region struggles to maintain its housing supply and affordability, it also struggles with the attendant impacts of air quality, jobs to housing balance and maintaining a visible and vibrant historic center.

At the same time the Valley tackles these 'macro' issues, it tries to keep up with the challenges that arise from small, incremental subdivision style developments that — due to their size — contribute little in the way of larger open space networks, community-building amenities, a diversity of housing products or price points to create a vibrant, genuine community.

In developing Cartwright Ranch at Hidden Springs we will be addressing many of these concerns both at a macro, regional level; and at the site based, neighborhood level. This is first and foremost accomplished through the Planned Community Development Model.

Combining a conservation-based development strategy with best practices in planned community development, the developer will conserve and steward important open space resources while creating 620 new homesites, with an expected resident population of 1,592. Further, the development’s Town Center will accommodate approximately 20,000 square feet of commercial and office uses, providing on-site employment opportunities for community residents.

The development rationale and benefits offered by the Cartwright Ranch at Hidden Springs include:

- New homes, which will be centrally located to downtown and the west valley. This strengthens not only the economic vitality of the development, but helps compensate for the Valley's ever-shifting population center to the west.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

- Reduced travel times (as much as 30 minutes) by creating stronger proximity of housing to jobs. This has a positive contribution on regional air quality due to reduced employment related commutes from the west.
- A diversity of housing and housing prices. Through comprehensive planning and scale of development, multiple housing styles and prices can be offered in a manner that cannot be brought forward through smaller, incremental subdivision style of development.
- The construction, funding and maintenance of significant open space and conservation programs without additional cost to existing taxpayers. This is not provided nor required of incremental subdivision style of development.
- On-site employment opportunities for residents in the Town Center’s commercial and office uses.

All of these benefits result from a form of comprehensive planning, implementation and funding enabled by Planned Community zoning codes.

According to the Ada County Comprehensive Plan Goal Statement, Planned Communities are "a mixture of compatible land uses that are intended to be developed under the guidance of specific plans and contain integrated design themes, have a high degree of self-sufficiency and be innovative in their approach to site planning and development."

In summary, Cartwright Ranch will provide a significant benefit to the region through the provision of more diverse, affordable housing closer to the employment centers of the region. In the process it can also plan, fund and operate a self-sufficient style of community that cannot be created through incremental subdivision development. As current zoning and land use laws are structured, this can only be accomplished outside the Area of Impact, because it is only in this jurisdiction that the Planned Community zoning category is a permitted form of development.

Projected Population at Build-Out

Cartwright Ranch master plan and phasing strategy is designed to create a variety of residential products that reflect the changing household composition within Ada County, as well as respond to current regional development and population trends. Based on the successful mix used in the development of Hidden Springs, this strategy of product diversity will increase absorption, allow multiple builders to participate in the construction and development of Cartwright Ranch, and make for a more interesting, vibrant and diverse community.
See Table 1 below for a listing of the types of residential products anticipated and the total projected population at build-out.

Table 1 - Anticipated Population at Build-out

Source of Estimate: Cartwright Ranch

<table>
<thead>
<tr>
<th>Lot Type</th>
<th>Product Type</th>
<th>Product Size (sq ft)</th>
<th>Target Market(s)</th>
<th>Estimated number of units by Product Type</th>
<th>Estimated persons per unit</th>
<th>Sub Total population by Product Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Town Homes</td>
<td>rental or for-sale condominium flats</td>
<td>800-1,200</td>
<td>non-families; without kids</td>
<td>76</td>
<td>1.5</td>
<td>114</td>
</tr>
<tr>
<td>Town Homes</td>
<td>for sale town homes or live/work</td>
<td>1,200-1,800</td>
<td>single without kids; single with kids</td>
<td>75</td>
<td>2</td>
<td>150</td>
</tr>
<tr>
<td>Village Lots</td>
<td>town homes or custom</td>
<td>1,500-2,200</td>
<td>married with kids</td>
<td>251</td>
<td>2.5</td>
<td>627.5</td>
</tr>
<tr>
<td>Traditional Lots</td>
<td>for sale custom detached</td>
<td>1,500-3,000</td>
<td>married with kids</td>
<td>63</td>
<td>3.5</td>
<td>220.5</td>
</tr>
<tr>
<td>View Lots</td>
<td>for sale custom detached</td>
<td>2,500-5,000</td>
<td>married with kids; married without kids</td>
<td>160</td>
<td>3</td>
<td>480</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>625</td>
<td></td>
<td>1592</td>
</tr>
</tbody>
</table>

Wtg avg persons per household 2.5
RE-SUBMITTAL COVERSHEET SUBELEMENT F5

Edits to text; replace figure.
The design of the vehicular and pedestrian circulation system at Cartwright Ranch must meet the safety and functional intent of the Ada County Highway District's (ACHD) design standards while also fulfilling the aesthetic, environmental, and community building goals of the project. The circulation hierarchy and typical cross-sections that follow strive to strike a balance between these two requirements. The main objectives of the Cartwright Ranch circulation system include:

1. Provide a functionally efficient, safe, balanced, network of vehicular, bicycle and pedestrian facilities.

2. Maintain the project's rural character by using rural cross-sections wherever possible.

3. Minimize disturbance of existing soils and vegetation.


5. Use grassed swales wherever possible to disperse stormwater, allow for maximum percolation and remove run-off pollutants.

6. Provide on-street parking throughout the Town Center.

7. Design street cross sections to a level that provides relative ease of vehicular movement, while also encouraging reduced speeds.

8. Accommodate "through" bicycle traffic on-street and "recreational" bicycle traffic both on street and on shared pedestrian/bicycle paths separated from roadways.

9. Allow sidewalks and shared pedestrian/bicycle paths to meander in pedestrian easements outside the road right-of-way for maximum design flexibility.
**Road Standards Table**

<table>
<thead>
<tr>
<th>Road Type</th>
<th>ROW</th>
<th>Total pavement Width</th>
<th>Travel Lanes</th>
<th>Shoulder Width(s)</th>
<th>Parking</th>
<th>Sidewalk/ Bike Path Width</th>
<th>Planter Width</th>
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</thead>
<tbody>
<tr>
<td>Town Primary</td>
<td>60'</td>
<td>40</td>
<td>2@12</td>
<td>Nine</td>
<td>Both</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Town Primary @ Intersection</td>
<td>60'</td>
<td>24</td>
<td>2@12</td>
<td>Nine</td>
<td>Nine</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Town Secondary</td>
<td>50'</td>
<td>28</td>
<td>2@10</td>
<td>Nine</td>
<td>One Side</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Rural Residential</td>
<td>52'</td>
<td>22</td>
<td>2@11</td>
<td>Nine</td>
<td>Nine</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>Town Secondary Permanent 1D</td>
<td>72'</td>
<td>60</td>
<td>2@12</td>
<td>Nine</td>
<td>Both</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Town Secondary Permanent 2D</td>
<td>62'</td>
<td>42</td>
<td>2@12</td>
<td>Nine</td>
<td>One Side</td>
<td>5 &amp; 6</td>
<td>0.6 &amp; 3</td>
</tr>
<tr>
<td>10 Residential Alley</td>
<td>40'</td>
<td>10</td>
<td>2@2</td>
<td>Nine</td>
<td>Nine</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>20 Residential Alley</td>
<td>20'</td>
<td>20</td>
<td>2@10</td>
<td>Nine</td>
<td>Nine</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

**TOWN PRIMARY**

---

**CARTWRIGHT RANCH PLANNED COMMUNITY, ELEMENT F, REVISION 3_012308**

F-5 3 of 13
Town Primary

The town primary street will serve as the main street through the project providing access to the Town Center, commercial uses and residential uses and a link through to the Hidden Springs Planned Community. The typical section includes a 68' right-of-way with two 12' travel lanes, two 8' parallel parking lanes and 5' sidewalks separated from the curb by an 8' tree lawn. These lane widths comply with accepted ACHD standards. The sidewalk is intended for pedestrian use. The town primary street will establish a comfortable environment for pedestrians with tree-lined sidewalks and with shortened pedestrian crosswalks, created by eliminating on-street parking at intersections to accommodate "bulb-outs." The typical section may be widened to provide a landscaped median at the Cartwright Road entrance to the project. See “Road and Circulation Plan” for the layout of roads.
Town Secondary

Town secondary streets will provide primary access to the residential and commercial uses in the valley floor. The typical section includes a 56’ right-of-way with two 10’ travel lanes, an 8’ parking lane on one side and 5’ sidewalks separated from the curb by an 8’ tree lawn. These lane widths comply with accepted ACHD standards. The sidewalk is intended for pedestrian use. A comfortable pedestrian environment will be provided with slow vehicular speeds and tree-lined sidewalks. See “Road and Circulation Plan” for the layout of roads.
Rural Residential

The rural residential streets will provide access to homesites above the valley floor and are proposed to mirror the more rural nature of the view lots. The narrow improved section will also serve to minimize the impact on the steeper slopes found in this area. The typical section includes a 50’ right-of-way with two 11’ travel lanes with 4’ bike/pedestrian lanes, a 1’ wide flush ribbon curb and grassed swales. These roadways will be located and designed to discourage through travel and maintain low vehicular speeds. See “Road and Circulation Plan” for the layout of roads.
Town Street Perpendicular

As appropriate, the town secondary street with perpendicular parking will serve commercial areas of the project where the uses require additional parking beyond that provided by the typical parallel orientation. The typical section would include two 12’ travel lanes with 18’ deep parking stalls. A 6’ sidewalk is provided directly behind the curb. Where no parking is provided, an 8’ tree lawn will separate a 5’ sidewalk.
Town Alley

Alleys will be created to eliminate driveways on town streets. Fewer driveways on town streets mean more on-street parking, more resident interaction, less utilitarian infrastructure and fewer garages lining residential streets. Alleys will also be used for utility easements and trash collection. The typical alley section is a 16' right-of-way and pavement for residential uses and a 20' right-of-way and pavement for commercial uses. See “Road and Circulation Plan” for the layout of roads and alleys.

Trails and Paths

The Dry Creek Greenbelt Path will parallel Dry Creek and provide for the continuation of the Greenbelt Path from Hidden Springs, to the north, and eventually to the south and east to adjacent properties. The foothills trail system will connect to the Greenbelt Path at strategic locations within the community and will provide access to open space areas throughout the
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

village and foothills areas. See Sub-Element F7 “Open Space and Trails Plan” for the layout of trails.

Traffic Strategy

Cartwright Ranch has been carefully planned to minimize traffic impacts on surrounding roadways and concentrate offsite trips to the south and west of the community. Five key elements of this strategy are:

1. **Project Density**

   It is anticipated that approximately 95% of the population of the Cartwright Ranch Community is projected to be located west of Cartwright Road. The traffic analysis of Cartwright Ranch concludes the highest percentage of trips into downtown Boise, Eagle and south to I-84 will occur within the existing road system to the south and west of the project: on Seaman's Gulch Road, to Hill Road, Gary Lane to Glenwood Road and State Street; and on Dry Creek Road West to Highway 55.

2. **Rural Road Section**

   As part of the rural character of the community, the rural road section (designs) will be utilized to the greatest extent possible and based on approval of these sections by ACHD. These sections will not have curbs, gutters or sidewalks. Also, these roads will have attached paths that will accommodate bicycles and pedestrians thereby reducing vehicular trips and improve both the safety and alternate transportation options in the community.

3. **Future Growth Scenario**

   Due to the topography of the area, it is anticipated that the bulk of future development within the Dry Creek Valley, including significant nonresidential uses, will occur to the west of Hidden Springs and Cartwright Ranch. Strategic placement of Cartwright Ranch densities at the south of Dry Creek and the easy access to the Hidden Springs Town Center at the western end of both communities will help draw the majority of community traffic toward transportation corridors to the population centers and services to the west. The Cartwright Ranch Town Center, located near the eastern end of the Valley will provide a key local destination for residents of Cartwright Ranch and, to some extent, Hidden Springs.

4. **Traffic Focus and Diversion**

   Cartwright Ranch supports traffic planning and design measures that will direct traffic to corridors with adequate capacity and future additional potential. These
measures include: diversionary intersections at Hill Road and Gary Lane, and Hill Road and 36th (both recently adopted by ACHD), that will direct traffic to the south rather than along Hill Road and Harrison Boulevard. These improvements will greatly increase the already good accessibility of Hidden Springs and Cartwright Ranch.

5. Travel Demand Management through Trip Reduction Strategy

One of the primary concerns surrounding development in the foothills is the potential traffic impact on existing neighborhoods. The Cartwright Ranch Specific Plan places major emphasis on the concept of Travel Demand Management.

The Plan incorporates trip reduction strategies to promote trip containment and trip reduction to minimize impacts on existing transportation networks and existing neighborhoods. Using the ACHD-approved Institute of Transportation Engineers (ITE) trip generation rates, the Traffic Impact Study at Element G-4 finds that Cartwright Ranch will keep trip generation below the Ada County average by providing connectivity with the Hidden Springs development and its existing amenities, including the Hidden Springs school, mercantile, café, and library.

The Traffic Impact Study estimates that Cartwright Ranch will generate 5477 average daily trips based on full build out of 497 single-family homes and 123 townhouses multiplied by the Ada County average of 9.57 and 5.86 daily trips, respectively, for these uses. Approximately seven percent of these trips, according to the Study, will be retained within the Cartwright Ranch and Hidden Springs developments and off of external roadways due to the existence of the school and commercial uses in Hidden Springs.

Reliance on an adjoining neighborhood for commercial uses is consistent with the Ada County Comprehensive Plan for planned communities. Policy 5.8-5 calls for the County to “Ensure phased and orderly development that provides appropriate combinations of land uses and promotes a high degree of self-sufficiency within Planned Communities. Self-sufficiency is defined as the ability to provide essential public services, commercial and community facilities within or in close proximity to a Planned Community.” (Emphasis added).

Although not strictly relied upon for its trip capture here, Cartwright Ranch expects significant additional trip capture will result from the 20,000 square feet of commercial uses in the Cartwright Ranch Town Center, which are expected to include the Community Center (with a pool, meeting hall and post office); professional offices; service-oriented businesses; and possibly some food service.

Other elements of the community and design should also support trip reductions. On-
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

site amenities such as the clubhouse, recreation facilities, and parks will reduce some of the external trips that are taken on ACHD roadways. Cartwright Ranch will incorporate the most advanced practical telecommunications technology to encourage and promote telecommuting. The site will also have an extensive pedestrian and bicycle trail system for internal circulation and connectivity to the adjacent development Hidden Springs. See the “Walking and Radius Analysis” below and see Sub-Element F7 “Open Space and Trails Plan” for the layout of trails.

Bicycle security facilities will be installed at several locations in the Town Center and at the various parks located within the development.

Cartwright Ranch will provide a bus shelter in the Town Center, and right-of-way for bus parking and turnout as appropriate, for use when the regional transit district provides bus service to the area. The development also will offer options for vanpooling and a park and ride lot connected to the pedestrian and bicycle trail system to reduce vehicle trips.
LEGEND

- PLANNED COMMUNITY BOUNDARY
- ROADS
- DRY CREEK GREENBELT PATH
- FOOTPATH TRAILS
- DRY CREEK
- DRY CREEK VEGETATION
- AARD'S ORCHARD

CARTWRIGHT RANCH PLANNED COMMUNITY
WALKING RADIUS ANALYSIS

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOOD USE</td>
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</tr>
<tr>
<td>RESIDENTIAL</td>
<td>180 AC</td>
</tr>
<tr>
<td>DEVELOPED OPEN SPACE</td>
<td>34 AC</td>
</tr>
<tr>
<td>NATURAL OPEN SPACE</td>
<td>448 AC</td>
</tr>
</tbody>
</table>

THIS ILLUSTRATION OF THE CARTWRIGHT RANCH LAND USE MAP IS BASED UPON CURRENT REGULATIONS, AND MAY BE SUBJECT TO CHANGE IN ACCORDANCE WITH COUNTY ORDINANCES.

CARTWRIGHT RANCH PLANNED COMMUNITY,
ELEMENT F, REVISION 3_012308

F-5 13 of 13
Sheriff, Fire and Emergency Medical Services

- Sheriff

Police protection will be provided to the residents of Cartwright Ranch through the Ada County Sheriff’s Department. All services and operations of the Department will be coordinated through the main office at the City/County Law Enforcement Building. The Department will be encouraged to provide a sheriff station outpost at the Fire Station described below once it is developed.

- Fire Services

Fire services will be provided by North Ada Fire and Rescue from District Fire Station No. 3 located at 5871 Hidden Springs.

- Emergency Medical Services

Emergency Medical Services will be provided by Ada County. The closest station to Cartwright Ranch is at the headquarters station, adjacent to the North Ada Fire and Rescue District headquarters on Glenwood Street, west of the Fairgrounds. This facility will adequately serve the community without the need for additional facilities.

Water Supply

United Water of Idaho will serve the entire Cartwright Ranch subdivision with a community water system, as evidenced by the letter included in Element G-13. Cartwright Ranch is within United Water’s approved certificated service area. United Water controls the design of the water system, which will be a standard water distribution system with a storage tank and pressure reducing valves to separate pressure zones. The water system is designed and constructed according to normal municipal standards and is maintained by United Water of Idaho. After United Water settles on a final design, it is submitted to the Idaho Department of Environmental Quality for approval. No other approvals are needed for the water system.

United Water also provides the project’s irrigation supply. No separate system is required; therefore no additional approvals are required. The "fine scale" system (services and irrigation heads) will be owned and operated by the community association.

The International Fire Code, appendix C, table C105.1 states that fire hydrants are to have a maximum distance of 250 feet or less to any property from the nearest hydrant. The fire hydrant spacing in the system will be designed such that each building lot is within 250 feet.
of a hose connection point. Hydrants will be strategically located near emergency access easements to the residential perimeter and wildlife management areas, as well as periodically along roadways.

**Water Quality Management**

Water quality protection is a central strategic aspect of Cartwright Ranch. Certainly, the local and state environmental regulations will not tolerate any foreseeable pollution to either groundwater or surface water. More important, the prospective market for land ownership in the proposed development will not tolerate pollution or even the potential for pollution of surface water and groundwater. Water quality management is reflected throughout this application in the land uses, in the infrastructure and in the way the owner's association operates. The following is a brief summary of the various water quality management practices incorporated throughout this application.

- **Road and Drainage Design**

Roads have been laid out throughout Cartwright Ranch in a manner that takes advantage of local terrain and soil conditions. The roadway concepts in this application include rural and urban road sections with large grass swales and various onsite runoff features which are used to collect, treat and dispose of excess drainage. Runoff from lot areas are, likewise, being conveyed to management facilities for treatment and disposal. The drainage system will be designed and engineered in a manner that prevents runoff from the site from exceeding predevelopment levels.

- **Land Use Configuration**

The absolute foundation for rational development including water quality management is to utilize the natural soils and geologic features on site to their optimum. This type of planning is the basis of the configuration presented in this application. Water quality management becomes a subconscious element of the layout process.

- **Wastewater Treatment System**

Cartwright Ranch will use Hidden Springs' wastewater treatment system in accordance with the serviceability letter included in Element G-9. The existing wastewater treatment system in Hidden Springs is a sophisticated facultative lagoon treatment system, with disposal by land application of treated effluent on common open space areas. All collection, treatment, and disposal features have been planned, designed and constructed in accordance with current regulatory guidelines and mandates. These guidelines and mandates have been established to protect groundwater quality. The good soils and geologic conditions encountered on this site offer an excellent opportunity to implement these wastewater
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Treatment facilities without any impact on groundwater. See more details below regarding the sewer system.

- Implementation Strategy

Development of the completed phases of Hidden Springs has demonstrated the technical feasibility of successful water quality management. Implementation of the strategies have allowed the following milestones to be met:

- The development of Hidden Springs does not negatively impact surface and groundwater quality in the vicinity.
- During construction an environmental field coordinator should be on site. That person's responsibility should include observations to assure that construction activities and constructed facilities are in conformance with the intent and recommendations of the water quality management concept introduced in this application.
- After construction a suitable monitoring and management structure must be in place. It must have the authority and ongoing resources to administer the water, wastewater treatment, and drainage facilities.
- Qualified professional management entities have been retained to supervise construction, operations, maintenance and monitoring of the drainage, water and wastewater treatment systems.

- Water Conservation

The most effective way to manage water quality is to conserve water. Water conservation is an important component of Cartwright Ranch’s goals, and as such a comprehensive water management program has been established for the project. The goal of the water conservation plan is very simply to reduce the amount of water diverted, used and consumed in the proposed development.

Except indirectly through United Water’s water supply, Cartwright Ranch does not utilize groundwater, thereby ensuring conservation of groundwater in the vicinity. Conservation will take several general forms. Water is being conserved by limiting the area and type of irrigation allowed throughout the development. Domestic demand is limited by promoting or requiring the use of water saving showers and fixtures within each individual house or commercial unit, and metered and monitored by United Water to track the use and abuse of water supply throughout the development.
The exterior conservation plan will include the following exterior water conservation measures:

- Building/landscape envelopes on all residential lots larger than 10,000 square feet.
- Use of drought tolerant grasses and shrubs.
- Efficient irrigation equipment, scheduling and management.
- Soil amendment in landscape areas.
- Mulch cover in landscape areas.
- Timed controller for specific uses such as lawns.

The interior water conservation plan will include covenants or architectural standards that seek to implement interior water conservation. The plan will include the following conservation measures:

- High-efficiency (low-flow) shower heads, toilets and faucets.
- Water meters and a water usage data base that facilitates real-time analysis.

Based on experience and current literature, it is reasonable to expect that water usage can be significantly reduced below what is "normal" for the area. The planning target for conservation is 10 to 15 percent reduction from these "normal" predicted demands.
Element F, Planned Community Development Plan

Legend
- Cartwright Water Distribution
- Cartwright Boundary
- Existing UMI Mains
- Connection to Existing Lines

Water Distribution Plan

Fig. F6a
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Sewer System

General Description

Cartwright Ranch will use Hidden Springs wastewater treatment system in accordance with the serviceability letter included in Element G-9. The Cartwright Ranch sewer system is comprised of a conventional gravity collection system discharging to a lift station that delivers sewage to the Hidden Springs wastewater treatment facility. That facility includes two aerobic and facultative lagoons, a storage reservoir, and a sand filtration system with disinfection. Treated effluent is land applied to common open space areas throughout Hidden Springs. Permitting for the operation of the system has recently been renewed through the Idaho Department of Environmental Quality. The current treatment system has the capacity to treat 145,000 gallons per day or serve approximately 800 customers.

The system has been operated and maintained by a licensed treatment plant operator, reporting to the Idaho Department of Environmental Quality on a regular basis, certifying to the permit condition compliance. The land application of the treated effluent serves to conserve water by eliminating the need to irrigate those areas with the domestic water supply while supplementing the groundwater through infiltration.

An evaluation of the existing system to determine expansion capability was recently completed. It was determined that expansion of the system to serve the proposed buildout of 1,650 customers was feasible, both from a technological and available land area standpoint. Based on conservative estimates, the full build-out of both Hidden Springs and Cartwright Ranch will not exceed 1,650 units. The design for expanding the system has been completed and approved by the Idaho Department of Environmental Quality. Construction is anticipated to be completed by the end of 2007.

All components of the sewer system for Cartwright Ranch have been designed, approved and permitted except the gravity collection system. Calculations for projected wastewater flows from Cartwright Ranch have already been approved by the Idaho Department of Environmental Quality as part of the approval of the wastewater treatment system. Design criteria for the collection system is dictated by Idaho Department of Environmental Quality regulations. No mechanical components are required.
LEGEND

- Cartwright Sewer Lines
- Existing Sewer Lines
- Cartwright Boundary

Sewer System Plan

ConNECTION TO EXISTING SYSTEM

Fig. F6b
Table F6.1 provides a summary of services and associated infrastructure needed to serve Cartwright Ranch, along with the costs and financing plan for such services and associated infrastructure. Additional details regarding infrastructure costs and financing are included in Sub-Element E2.

### Table F6.1 Summary Matrix of Services, Infrastructure/Cost & Financing Plans

<table>
<thead>
<tr>
<th>Service/Service Provider</th>
<th>Identified Infrastructure/Cost</th>
<th>Proposed Financing Plan</th>
<th>Unresolved/Unmitigated Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Government</td>
<td>No need identified</td>
<td>Public provision; tax revenue &amp; permit fee financed</td>
<td>None. Impacts not atypical of incremental development in Ada County.</td>
</tr>
<tr>
<td>Ada County</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>No need identified</td>
<td>Public provision; tax revenue &amp; building permit fee financed</td>
<td>None</td>
</tr>
<tr>
<td>Ada County Sheriff's Dept.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Medical Services</td>
<td>No need identified</td>
<td>Public provision; tax revenue financed</td>
<td>None. Impacts not atypical of incremental development in Ada County.</td>
</tr>
<tr>
<td>Ada County Paramedics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pest Control</td>
<td>No need identified</td>
<td>Public provision; tax revenue financed</td>
<td>None. Impacts not atypical of incremental development in Ada County.</td>
</tr>
<tr>
<td>Ada County Pest Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Services</td>
<td>No need identified</td>
<td>Public provision; tax revenue financed</td>
<td>Ongoing discussions for possible new branch location</td>
</tr>
<tr>
<td>Ada Community Library</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads</td>
<td>Phase I and II development as well as Cartwright Road improvements</td>
<td>Developer financed with equity</td>
<td>Subject to Developer Reimbursement for extraordinary impact fees</td>
</tr>
<tr>
<td>Ada County Highway District</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>Boise Independent School Dist. $40,000 for transportation services</td>
<td>Private debt, equity financed</td>
<td>None</td>
</tr>
<tr>
<td>North Ada County Fire Rescue District</td>
<td>No need identified</td>
<td>Public provision; tax revenue; private debt &amp; equity financing (station); land sale proceeds (shortfalls)</td>
<td>None</td>
</tr>
<tr>
<td>Parks, Trails &amp; Open Space</td>
<td>Ada County Parks &amp; Waterways Parks, facilities, trails, open space, and revegetation on-site</td>
<td>Homeowners Association fees</td>
<td>None</td>
</tr>
<tr>
<td>Idaho Fish &amp; Game</td>
<td>Pending</td>
<td>Pending</td>
<td>Pending</td>
</tr>
<tr>
<td>Air &amp; Water Quality Programs</td>
<td>No need identified; project features intended to minimize impacts (see Sanitary Sewer)</td>
<td>No need identified</td>
<td>None. Design and elements cited as exceeding those of typical development.</td>
</tr>
<tr>
<td>Solid Waste Management</td>
<td>No need identified; Ada County's expansion of existing landfill space sufficient.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
</tbody>
</table>

CARTWRIGHT RANCH PLANNED COMMUNITY ELEMENT F, REVISION 5_012308 F-6 9 OF 10
**ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN**

<table>
<thead>
<tr>
<th>Utility Type</th>
<th>Connection Type</th>
<th>Cost Information</th>
<th>Service Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potable Water</td>
<td>Continuous loop system; currently being negotiated</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
<tr>
<td>Sanitary Sewer</td>
<td>Expansion of existing Water Treatment system; $1.74 million.</td>
<td>Letter of credit already in place</td>
<td>None</td>
</tr>
<tr>
<td>Electrical Service</td>
<td>Applicant costs projected at $1.65 million.</td>
<td>Developer financed with equity</td>
<td>None</td>
</tr>
<tr>
<td>Natural Gas Service</td>
<td>On-site extension not anticipated to impose up-front Applicant costs.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>On-site extension not anticipated to impose up-front Applicant costs.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
<tr>
<td>CTC</td>
<td>On-site extension not anticipated to impose up-front Applicant costs.</td>
<td>No need identified; fee-for-service</td>
<td>None</td>
</tr>
</tbody>
</table>

**Utility Connections**

The proposed connection points for utilities including electric service, natural gas service, telephone, internet, and television cable will be at the boundary shared with the adjacent Hidden Springs development. Specific routing plans and connection points for these utilities will be determined in connection with each individual utility.

**Community Services**

The Town Center includes a 5500-square foot community town hall, a 3500-square foot swim and fitness recreation center, and a postal facility. No school or library is proposed to be included in Cartwright Ranch at this time; both are located in the adjacent Hidden Springs development. The Town Center will include a bus shelter and right-of-way for bus parking and turnout as appropriate, for use when the regional transit district provides bus service to the area, as well as options for vanpooling and a park and ride lot connected to the pedestrian and bicycle trail system. Bicycle security facilities will be installed at several locations in the Town Center and at various parks throughout the development. The extensive network of parks and trails are described and illustrated in Sub-Element F7.

The Town Center will provide a forum for sharing information on activities, educational programs, cultural services, carpooling, park and ride opportunities, wildlife issues, open space management, and other basic informational services.
RE-SUBMITTAL COVER SHEET SUBELEMENT F7

Edits to text; replace figure.
Open Space and Trails Strategy

Overview

Cartwright Ranch includes 24 acres of developed open space, or 3.5 percent of the total 680 acres, and 448 acres of natural open space, or 66% of the total 680 acres. There will be approximately 18.7 acres of developed open space per 1000 people, based on an estimated total population of 1550.

Cartwright Ranch includes a strategy for creating a comprehensive system of trails and paths to allow pedestrian and bicycle access to open space and outlying foothill areas. Internally, this system will connect the residential neighborhoods with the Town Center, community open space and the greenbelt along Dry Creek. These internal trails will in turn provide external connections to regional open space and the trail system along Currant Creek, McFarland Creek and Dry Creek. Five highlights of this strategy include:

1. Safety

The path and trail system will generally be contiguous although not always directly parallel to the community road system. This will allow pedestrians and bicycles to circulate independently of vehicular traffic providing a greater degree of safety.

2. Trip Reduction

Providing alternative modes of travel is one of the primary goals of Cartwright Ranch. Developing trails and distinct internal connections between the open space, neighborhoods and the Town Center, as well as access to community facilities and recreation areas for pedestrian and bicycle traffic will reduce the number of vehicular trips necessary within the project area.

3. Regional Connections

The Cartwright Ranch trail system will make a major contribution to regional public access and trail systems. Cartwright Ranch will implement the first phase of a greenbelt trail that runs along Dry Creek, from Bogus Basin to the City of Eagle. It will also implement major pieces of the foothills regional trail system that provides access across the western foothills and beyond.

4. Wildlife Protection

Wildlife is an important consideration for Cartwright Ranch in the location and design of trails and their season(s) of use. Destruction of sensitive habitat and changes to the behaviors of wildlife are avoided by locating trails, both in the foothills and along Dry Creek, largely in areas
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

greatly altered by past grazing practices and by prohibiting motorized use of trails. Trails or portions of them may be seasonally closed with the recommendation and advice of the Idaho Department of Fish and Game.

Although they range throughout Cartwright Ranch, changes to the behaviors of mule deer (*Odocoileus hemionus*) and pronghorn antelope (*Antilocapra americana*) are minimized by limiting the length of trails in that area where the highest quality habitat occurs (i.e. eastern portion of dissected foothills). Although locating no trails in this area is an alternative that was considered, it was judged to have the potential for greater harm because it would not guide and encourage recreators to a constructed trail, but instead give them permission to wander on several, self-made trails.

Further, the trails shown on Figure F7 below have been located to avoid their intrusion into areas identified by Ecological Design, Inc. as areas of occurrence of Aase’s onion (*Allium aaseae*), a rare and sensitive plant.

For further details, see the February 19, 2007 memorandum by Ecological Design, Inc. and other analysis included in Sub-Element G-5.

5. **Wildfire Prevention**

Strategic alignment of the trail system around the perimeter of neighborhood and wildlife management areas will provide emergency access for homeowners and firefighters while serving as firebreaks to limit the spread or incidence of wildfire.

**Open Space and Trails Plan**

Figure F.7 illustrates the proposed layout of open space and trails in Cartwright Ranch. The precise trail locations will be field determined to avoid any conflict with any areas of sensitive plant species. The community association will manage and maintain these trails through the covenants, codes and restrictions (CCRs) for the Cartwright Ranch community. The CCRs will include or incorporate by reference: a management plan for wildlife protection and open space areas; a budget for areas accomplishing the management plan; a designated funding source for meeting that budget; specific limitations on permitted amendments to the CCRs that ensures the continued funding and responsibilities for wildlife protection and open space management; and a mechanism for permanent protection of the open space areas under a conservation easement. The funding source will be an up-front assessment and a reconveyance assessment at the time of initial and future sales of residential properties based on set percentages of value. The budget and funding source for wildlife protection and management of open space areas will be sufficient to cover all of the developer’s commitments for the Cartwright Ranch Planned Community.
Legend

- - - - - Dry Creek Greenbelt Path (DCGP)
- - - - - Parks (P)
- - - - - Cartwright Boundary
- - - - - Foothills Trails (FT)
- - - - - Open Space (O)

Open Space, Parks and Trails Plan
Table F7.1: Natural Open Space

<table>
<thead>
<tr>
<th>Name/Signifier</th>
<th>Size</th>
<th>Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Type</td>
<td>Length</td>
</tr>
<tr>
<td>O-1</td>
<td>35.3 acres</td>
<td></td>
</tr>
<tr>
<td>O-2</td>
<td>40.6 acres</td>
<td>FT</td>
</tr>
<tr>
<td>O-3</td>
<td>1.2 acres</td>
<td></td>
</tr>
<tr>
<td>O-4</td>
<td>8.1 acres</td>
<td>FT</td>
</tr>
<tr>
<td>O-5</td>
<td>61.6 acres</td>
<td>FT</td>
</tr>
<tr>
<td>O-6</td>
<td>14.0 acres</td>
<td>FT</td>
</tr>
<tr>
<td>O-7</td>
<td>4.0 acres</td>
<td>FT</td>
</tr>
<tr>
<td>O-8</td>
<td>18.4 acres</td>
<td>FT</td>
</tr>
<tr>
<td>O-9</td>
<td>201.3 acres</td>
<td>FT</td>
</tr>
<tr>
<td>O-10</td>
<td>11.7 acres</td>
<td>DCGB</td>
</tr>
<tr>
<td>O-11</td>
<td>0.6 acres</td>
<td></td>
</tr>
<tr>
<td>O-12</td>
<td>49.3 acres</td>
<td>DCGB</td>
</tr>
<tr>
<td>O-13</td>
<td>2.2 acres</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>448.3 acres</strong></td>
<td><strong>32,790'</strong></td>
</tr>
</tbody>
</table>

This table represents anticipated park categories as of December 2007. Individual sizes may vary based on final design and layout, however total natural open space acreage will be maintained. A minimum of 440 acres of natural open space will be subject to a conservation easement.
Table F7.2: Developed Open Space

<table>
<thead>
<tr>
<th>Name/Signifier</th>
<th>Category</th>
<th>Size</th>
<th>Active/Passive</th>
<th>Trail</th>
<th>Type</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-1</td>
<td>Neighborhood</td>
<td>1.4 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-2</td>
<td>Pocket</td>
<td>0.2 acres</td>
<td>Passive</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-3</td>
<td>Pocket</td>
<td>0.5 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-4</td>
<td>Pocket</td>
<td>0.8 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-5</td>
<td>Pocket</td>
<td>0.1 acres</td>
<td>Passive</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-6</td>
<td>Pocket</td>
<td>0.2 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-7</td>
<td>Pocket</td>
<td>0.1 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-8</td>
<td>Pocket</td>
<td>0.1 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-9</td>
<td>Community</td>
<td>10.1 acres</td>
<td>Passive</td>
<td>DCGB 2,580' FT 1,660'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-10</td>
<td>Neighborhood</td>
<td>3.3 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-11</td>
<td>Neighborhood</td>
<td>2.0 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-12</td>
<td>Neighborhood</td>
<td>1.7 acres</td>
<td>Passive</td>
<td>DCGB 350' FT 190'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-13</td>
<td>Pocket</td>
<td>0.2 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-14</td>
<td>Pocket</td>
<td>0.3 acres</td>
<td>Passive</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-15</td>
<td>Pocket</td>
<td>1.0 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-16</td>
<td>Pocket</td>
<td>1.0 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-17</td>
<td>Pocket</td>
<td>0.4 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-18</td>
<td>Pocket</td>
<td>0.1 acres</td>
<td>Active</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23.5 acres</td>
<td></td>
<td></td>
<td></td>
<td>6,140'</td>
</tr>
</tbody>
</table>

This table represents anticipated park categories as of December 2007. Individual sizes may vary based on final design and layout, however total developed open space acreage will be maintained.

All park areas will be landscaped. Additional improvements that may be provided within the parks include:

- Pocket Parks - benches, playground equipment for small children, signage or monuments and lighting.
- Neighborhood Parks – playfields, clubhouse/fitness center, outdoor pool, gazebo, parking lot, playground equipment, trails, benches, signage or monuments and lighting.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Community Park – Dry Creek Greenbelt Trail, other trails, benches and signage or monuments.
Edits to text.
Executive Summary - A Plan To Mitigate Potential Adverse Impacts To Wildlife And Wetlands, And To Abate Noxious Weeds

Goals and Objectives of the Mitigation Plan

The goal of the Plan to Mitigate Potential Adverse Impacts to Wildlife and Wetlands, and to Abate Noxious Weeds ("Plan") is to successfully implement all appropriate and practicable measures to avoid and minimize potential adverse impacts, to restore and rehabilitate adversely impacted areas, and to compensate for remaining adverse impacts to wildlife habitat and wetlands. Measures that provide for raptors and owls, passerine and upland birds, amphibians, reptiles, small mammals, and big game will accomplish this goal. The goal of this Plan is also is to prevent occurrences of noxious weeds and to abate common weeds that are now present.

The overarching objectives of the Plan are: (a) to achieve these goals by the measures described in this Plan so that an equivalent quality and quantity of wildlife habitat and wetlands are provided by repair and restoration, (b) to achieve these goals in an efficient and cost effective manner, and (c) to demonstrate the likelihood of success of mitigation by generating data according to a monitoring plan and comparing measurable results to both qualitative and quantitative performance standards.

These objectives are further described as the following:
1. Conserve existing, native and naturalized populations of fish, wildlife, and plants and their habitats so as to maintain and enhance a functioning community within a natural ecosystem.
2. Restore and rehabilitate degraded open range, waterways, and wetlands by appropriate and practicable means and methods.
3. Provide for the daily and seasonal movements of both resident and migratory wildlife.
4. Conserve soils not formally landscaped in open range to prevent erosion and loss to air and water.
5. Maintain existing surface and ground-water quality and control sources of pollutants.
6. Maintain existing air quality and control sources of pollutants.
7. Conserve natural landscapes and land forms, and their aesthetics.

Mitigation Measures Proposed by the Mitigation Plan

Measures proposed in Chapter 7 of the Plan to mitigate potential direct, indirect, and cumulative adverse impacts attributable to the project are described below.
Flora and Fauna

Planning Phase

1. The developer of the Cartwright Ranch Planned Community ("Developer") will establish by conservation easement a minimum of 440 acres of permanent, natural open space in the Boise Foothills within Cartwright Ranch.

2. The Developer will prepare a plan for the Cartwright Ranch Planned Community to respond to and suppress natural and human caused fire and incorporate that plan in the Covenants, Conditions, and Restrictions ("CCRs") of the Home Owners Association ("HOA") (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Articles 3.1.7.16).

Design Phase

3. The Developer will require by CCRs of the HOA the maintenance of all existing native and naturalized vegetation outside of a prescribed building envelope and area of ground disturbance within each lot of the Cartwright Ranch Planned Community. Exceptions to this are a fire safe zone around each structure, areas where weedy species should be controlled, and common areas where formal landscapes are prescribed (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Articles 3.1.7.16, 3.1.7.21, 3.1.8.1, and 6.4 and Residential Design Guidelines for Hidden Springs. 2002). The HOA and Open Space Manager will oversee and enforce this measure.

4. The Developer will require by CCRs of the HOA that only native and naturalized plant species known to be drought tolerant are planted in areas of formal landscaping within a building envelope and prescribed area of ground disturbance. Prescribed species will also not inordinately attract wildlife so as to avoid conflicts between browsing wildlife and humans (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Articles 3.1.7.16, 3.1.7.21, 3.1.8.1, and 6.4 and Residential Design Guidelines for Hidden Springs. 2002). The HOA and Open Space Manager will oversee and enforce this measure.

Operation and Maintenance Phase

5. The HOA will restore 25 acres per year of permanent, natural open space described in measure 1 above with the appropriate species, planting methods, and sources of plant materials that replicate the community of grasses, forbs, and shrubs indigenous to the sagebrush steppe of Southwest Idaho; and that are generally described in the document titled Idaho Department of Fish and Game -
Region 3 Prescription for Revegetation of Wetlands, Riparian Areas, and Uplands Within a Typical Southwest Idaho Stream Corridor (Tiedemann 1992) (see Appendix E of this plan), with changes to reflect the character of the local environment. This measure will be further articulated by the Ecologist and Engineer in Special Provisions to the Construction Contract (SPCC) and drawings prepared as part of engineering plans for the project. Special attention will be given to plant structure, wildlife value, and the diversity of the plant community to best complement the surrounding landscape of the area. Methods to control weedy species will also be prescribed. The SPCC will be approved by Ada County with the last final plat in consultation with Idaho Department of Fish and Game.

6. The Developer will require by CCRs of the HOA that noxious weeds within individual lots be controlled by homeowners and that the HOA control noxious weeds within all common areas to protect native and naturalized vegetation. Control will be achieved by physical, chemical, and/or biological means approved by Federal and State of Idaho authorities (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Article 6.4 and Residential Design Guidelines for Hidden Springs. 2002).

Populations of Wildlife and their Habitats

Planning Phase

7. The Developer will locate the footprint of privately owned lots outside of the valleys of the project area to provide seasonal migration corridors and daily movement corridors for raptors and owls, passerine birds, upland birds, reptiles, amphibians, and small mammals between the Boise Foothills and Dry Creek. Mule deer and pronghorn antelope that habituate to the development may also make use of these corridors. Seasonal migration corridors and daily movement corridors will be established and maintained to be a minimum 53 to 208 feet in width (see Figure 11).

8. The Developer will prepare an open space, parks, and trails plan which will allow for construction of a limited number of trails within the Cartwright Ranch Planned Community to avoid dispersed, informal trail development by recreators (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Articles 3.1.8.1, 5.2, and 9.7 and Declaration of Conservation Easement. 1997. Article 3.3.3.5).

Design Phase

9. The Developer will require by CCRs of the HOA the use of residential fencing that permits and outdoor lighting that does not discourage the migrations and
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movements of wildlife (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Articles 3.1.7.21 and 6.5; Residential Design Guidelines for Hidden Springs. 2002; and Declaration of Conservation Easement. 1997. Articles 3.2.7 and 3.3.3.6).

Construction Phase

10. The Developer will plan the start of ground disturbance activities (i.e. clearing and grubbing) within each phase of the project to be outside the window of time migratory birds are likely to be nesting. When this cannot be accomplished because of the logistics of construction, the Open Space Manager will survey and count the numbers and species of nesting birds that will be affected and report results to Ada County and the Idaho Department of Fish and Game.

Operation and Maintenance Phase

11. The Developer will work with Idaho Department of Fish and Game - Southwest Region Office to prescribe future management by the Developer and HOA of wildlife habitats within open space within the Cartwright Ranch Planned Community (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Articles 3.1.7.16, 3.1.7.21, 3.1.8.1, 3.1.9.1 and 5.2 and Declaration of Conservation Easement. 1997. Articles 1.2, 2, 3.2.5, and 3.3.1). Every other year, the Open Space Manager will submit a report to the Ada County Development Services Director on the status and performance of restoration efforts and any necessary adaptive management strategies. Prior to submittal of the report, the Open Space Manager will seek comments from the Idaho Department of Fish and Game.

12. Access to and use of open space within the Cartwright Ranch Planned Community by recreators (e.g., pedestrians, cross-country skiers, snow shoers, and bicyclists) will be by express permission of the Developer and HOA. The activities, numbers of recreators, and area and time of use will be limited to avoid impacts to native and naturalized vegetation and wildlife, and to prevent erosion of soil. Motorized recreational vehicles will be prohibited on all but dedicated rights-of-way for roads within the Cartwright Ranch Planned Community by agreement between the Developer and Ada County or other entity with rights of enforcement (for example, see Appendix D of this Plan - Declaration of Conservation Easement. 1997. Articles 3.2.6, 3.2.8, and 4.7). The holder of the conservation easement, the HOA, and the Open Space Manager will oversee and enforce this measure.

13. The Developer will require by CCRs that domestic dogs within their owner’s property be restricted with a fence, invisible fence, or similar structure or device to avoid disturbance to wildlife. Domestic dogs will be controlled outside of
fenced properties by requiring they be leashed. Fair warning will be provided to birds and other wildlife by requiring all domestic cats be collared with a bell or other audible signal of their presence (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. 6.10). The holder of the conservation easement, the HOA, and the Open Space Manager will oversee and enforce this measure.

Waterways and Wetlands

Planning Phase

14. The Developer will avoid adverse impacts to waterways and wetlands by locating all lots outside of the active channel and adjacent 100-year floodplain of Dry Creek, isolated springs and seeps, and other wetlands.

15. The Developer will establish by conservation easement, a minimum 50-foot setback of lines of private property from the centerline of Dry Creek, and a 190 to 200-foot wide riparian corridor where the property that is Cartwright Ranch is to both sides of Dry Creek. For the approximately 950 feet of Dry Creek where Cartwright Ranch is to one side of Dry Creek, the riparian corridor will vary between 90 and 200 feet. This riparian corridor will be maintained as open space to preserve and protect wetland functions and services (a.k.a. wetland functions and values), and to provide a seasonal migration and daily movement corridor for wildlife. Areas of setback less than 100 feet will be fortified with additional plantings. Trails, benches, signage, and monuments may be located within the riparian corridor.

Design Phase

16. The Developer will minimize adverse impacts attributable to road and utility crossings of Dry Creek by locating them largely within areas previously disturbed by past and present land uses.

Construction Phase

17. The Developer will restore the permanent, natural open space, described in measure 15 above and a 50-foot wide riparian corridor that parallels Cartwright Road, with the appropriate species, planting methods, and sources of plant materials described in the document titled Idaho Department of Fish and Game - Region 3 Prescription for Revegetation of Wetlands, Riparian Areas, and Uplands Within a Typical Southwest Idaho Stream Corridor (Tiedemann 1992) (see Appendix E of this plan), with changes to reflect the character of the local environment. This measure will be further articulated by the Ecologist and Engineer in Special Provisions to the Construction Contract (SPCC) and drawings prepared as part of engineering plans for the project. Special attention will be given to plant structure, wildlife value, and the diversity of the plant community.
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to best complement the surrounding landscape of the area. The SPCC will be approved by Ada County with the last final plat in consultation with Idaho Department of Fish and Game. Restoration will be completed within 5 years after the start of construction.

18. The Developer will repair and restore non-jurisdictional waterways and wetlands adversely impacted by construction activities by successfully revegetating all disturbed ground with the appropriate species, planting methods, and sources of plant materials described in the document titled *Idaho Department of Fish and Game - Region 3 Prescription for Revegetation of Wetlands, Riparian Areas, and Uplands Within a Typical Southwest Idaho Stream Corridor* (Tiedemann 1992) (see Appendix E of this plan), with changes to reflect the character of the local environment. This measure will be further articulated by the Ecologist and Engineer in Special Provisions to the Construction Contract (SPCC) and drawings prepared as part of engineering plans for the project. Special attention will be given to plant structure, wildlife value, and the diversity of the plant community to best complement the surrounding landscape of the area. The SPCC will be approved by Ada County with each final plat in consultation with Idaho Department of Fish and Game.

19. The Developer will repair and restore jurisdictional waterways and wetlands adversely impacted by construction activities. If required by the US Army COE, remaining unavoidable adverse impacts to jurisdictional waterways and wetlands will be compensated, on-site and in-kind at the locations agreed to at a future early coordination meeting. Candidate compensations sites will be determined by future studies and include the unnamed waterway and adjacent wetlands that parallel Cartwright Road; the unnamed, intermittent drainage way(s) and wetlands in the valley(s) of the dissected foothills south of the pasture; and isolated springs and seeps.

20. Regulation of runoff attributable to construction of the project will be accomplished by Best Management Practices (BMPs) published in the in the Idaho Transportation Department Erosion and Sediment Control Manual (December, 2001) and/or Idaho Department of Environmental Quality, Catalog of Stormwater BMPs for Cities and Counties (2006). Temporary and permanent soil stabilization practices, structural controls, disposal of sanitary and hazardous waste, control of sediment attributable to offsite tracking of vehicles, and the timing of practices and controls will be fully articulated by the Ecologist in a Stormwater Pollution Prevention Plan (SWPPP) as required by the Clean Water Act §402, National Pollution Discharge Elimination System (NPDES) Construction General Permit (CGP).
21. Sites for equipment and materials storage, equipment refueling and maintenance, and temporary waste disposal and transfer will be located by the Engineer distant from sensitive and/or vulnerable resources (e.g. waterways and wetlands) and designated on project plans. The contractor will be obliged by contract to comply with this requirement.

Operation and Maintenance Phase

22. The Developer will ensure by CCRs of the homeowners association the maintenance of all native and naturalized vegetation within the permanent, natural open space described in measures 15 and 17 above (for example, see Appendix D of this Plan - Master Declaration of Covenants, Conditions, and Restrictions for Hidden Springs, Idaho. 1998. Articles 3.1.7.16, 3.1.7.21, 3.1.8.1, and 6.4 and Residential Design Guidelines for Hidden Springs. 2002) after restoration of this area is complete. The holder of the conservation easement will oversee and enforce this measure.

23. The Developer will demarcate boundaries of protected open space on the ground, including the setback from Dry Creek, with permanent monuments, pins, or other markers to ensure adjacent homeowners know not to encroach on these areas.

Other Natural Resources

Design Phase

24. Removal and placement of earth (a.k.a. cut and fill) will be required to construct local public roads and crossings of waterways within the Cartwright Ranch Planned Community, and to level building envelopes within each lot. The volume of material required for fill will be balanced by the Engineer, if possible, with that available from cuts to avoid the need to develop a local borrow source and waste location. Locations, dimensions, and volumes will be fully described to Ada County when preliminary design of the proposed project is complete.

Noxious Weeds

In recent time, only one of the weedy species observed and identified at Cartwright Ranch is legally declared to be noxious [(i.e. Scotch thistle (Onopordum acanthium)]. That area is limited to the existing pasture southwest of Dry Creek and is within the footprint of development of Cartwright Ranch. None have been identified in the open space that is part of the Cartwright Ranch Planned Community (see Appendix A of this Plan). The Developer will contract with Ada County Weed and Pest Control to survey, monitor, and control noxious weeds throughout the community during the period of construction, and will require the Cartwright Ranch Homeowners Association do the same after construction is complete.
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Implementation of the Mitigation Plan

For each objective, Appendix C2 of the Plan in Sub-Element G5, sets forth the specific resources at risk, predictions of success for each mitigation measure, and performance standards by which to evaluate future conditions. The performance standards prescribe a specific time-frame within which each mitigation measure will be accomplished. Sub-Element also includes estimated costs for implementing the mitigation measures.

The Developer and HOA will implement and fund the mitigation measures and related tasks during the design, construction, and operation and maintenance phases of the development, including the following:

1. Work with a qualified consultant to prepare any additional information needed to implement the plan.
2. Dedicate a conservation easement and restore the Dry Creek riparian corridor, from where it crosses Cartwright Road to the Hidden Springs boundary, and a 50-foot wide riparian corridor that parallels Cartwright Road.
3. Dedicate a conservation easement and restore a minimum of 440 acres of sagebrush steppe in the Boise Foothills.
4. Repair and restore all ground affected by construction activities.
5. Develop an open space trail system.
6. Prepare CCRs to restrict or require certain uses on lots, as identified in plan.

Prior to commencement of construction of the first phase of the project, the Developer will hire a qualified Open Space Manager, not as an employee but as an independent contractor. The HOA, once formed, will take over responsibility for contracting with and supervising the Open Space Manager. The Open Space Manager will perform the following duties:

1. Implement all of the mitigation measures identified in the Plan that are not the responsibility of the Developer.
2. Hire contractors.
3. Administer contracts.
4. Prepare a plan and a budget to implement mitigation measures.
5. Oversee work required to implement the mitigation measures.
6. Prepare a work plan describing operation and maintenance of the mitigation measures.
7. Oversee operation and maintenance of the mitigation measures.
8. Coordinate activities with Federal, State of Idaho, and local governments and the qualified 501(c)(3) that is a party to a conservation easement including, but not limited to, Idaho Department of Fish and Game and Ada County.
9. Visually inspect all open space once each month for vandalism, needed maintenance, and additional needs not anticipated by the work plan for operation and maintenance of open space.
10. Oversee and approve a study plan for monitoring the status of and performance of mitigation.
11. Oversee the production of field data required to evaluate progress toward meeting performance standards described in the mitigation plan.


13. Present the bi-annual monitoring report to the Ada County Development Services Director and Idaho Department of Fish and Game.

14. Oversee corrective measures, if any, recommended by Idaho Department of Fish and Game and Ada County.

15. Coordinate development of educational programs and oversee the presentation of programs for residents.

The Open Space Manager and the Open Space Manager’s actions will be funded by a transfer fee in the amount of 25% of 1% (25 basis points) of the gross sales price of any Cartwright Ranch lot or parcel sold or resold, in perpetuity, with such funds to be held in a segregated account for the defined purposes of open space management and education and related uses. Annual HOA assessments will make up the difference, if any, between the annual budget and available transfer fee funds.

Implementation of the Mitigation Plan and related funding obligations will be established within the CCRs that will be recorded at the time of approval of the first final plat. The CCRs will provide that any amendment to these specific provisions of the CCRs requires the consent of the conservation easement holder or, if prior to the grant of the conservation easement, the consent of the Ada County Development Services Director.

For additional details, see the full Mitigation Plan and supporting appendices by Ecological Design, Inc. included in Sub-Element G-5.
Edits to text.
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SUB – ELEMENT F9, CENTRAL DESIGN CONCEPTS

Pre-Development Site Conditions

Cartwright Ranch is located approximately 15 miles northwest of Boise. The site totals 680 acres, of which 611 acres lie west of Cartwright Road, and 68 acres lie east of Cartwright Road. Dry Creek passes through the northern part of the property and adjacent to that are level to gently sloping terraces. In the south part of the property are foothills, characterized by moderate to steep slopes, a well-defined valley and level ridges. Wetlands and riparian environments exist in some of the drainages. The only significant tree cover is along the Dry Creek corridor; the remaining land has shrub and grasslands typical of the Front Range foothills.

The current land use is predominately agricultural. There are a few existing structures that are vacant and generally in poor condition. The existing planned community of Hidden Springs is directly to the west.

The plans presented in this document are the result of an extensive period of regional and site-based analysis, a careful consideration of program and design alternatives and the study of other major projects in the country that are known for environmental quality and traditional community values. The plans were refined to reflect the suggestions of numerous public agencies and interest groups (including many neighboring property owners) who are concerned with land use and development in the Dry Creek Valley.

The resulting development strategy seeks to copy the Hidden Springs character that sets a distinctive precedent for development in the Dry Creek Valley - by establishing a small town with agricultural elements along Dry Creek as the defining identity and amenity for an environmentally sensitive and visually dramatic planned community. The central planning concepts that make up this plan include the following:

Integrated Community

Cartwright Ranch will use innovative infrastructure technologies, resource management techniques and financial investment strategies to create a planned community that integrates the unique qualities of its site with responsible development and operations.

- Site disturbance will be minimized through the use of rural roadway designs, building envelope controls on View Lots, and a compact and efficient Town Center core.
- Water will come from United Water Idaho, and be distributed to a reservoir and a comprehensive distribution system.
- Sewage will be handled through a pressurized subsurface treatment system.
- The sewage treatment system is managed by a qualified professional entity and governed by the Department of Environmental Quality and Central Health District.
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- Stormwater will be captured, dispersed and treated in a series of grassy swales and retention areas that will naturally filter pollutants and recharge the aquifer.
- Connectivity to Hidden Springs' amenities—including the school, mercantile, café, and library—as well as Cartwright Ranch’s on-site commercial and community/recreation facilities will help to capture traffic and minimize the number of trips on roadways outside of the two developments.
- A wildfire prevention and management strategy, developed in coordination with North Ada Fire and Rescue and BLM will be implemented. Elements include use of non-combustible building materials, fire resistant vegetation, sufficient water supply and pressure, and access to applicant’s property.
- Advanced telecommunication connections to every home will enable residents who choose to work at home to communicate with their employers, schools, libraries and other information services without leaving the community.
- Extensive trails and bicycle facilities will encourage residents to walk and recreate within the community as well as have access to larger regional systems.
- An active community association will be established to ensure long-term maintenance and operations is of the quality of initial improvements.
- The Cartwright Ranch boundary configuration together with the design and provision of essential public services enhances the ability of Cartwright Ranch to potentially be annexed or incorporated.

Maintaining Rural Character

Cartwright Ranch will maintain the existing rural character of Dry Creek Valley by concentrating higher density residential in the Town Center. The View Lots and Traditional Lots have designated building envelopes that will allow the majority of the site area of these lots to remain in undisturbed native vegetation and open space. The roadways outside the Town Center will be maintained as rural cross-sections with natural shoulders and grassy swales, rather than urban curb and gutters. Project features such as the community center and residential neighborhood entries will be designed consistent with the site’s character.
Land Use Concepts

Cartwright Ranch is conceived as a small-town community that includes a variety of lot and house types, a 24-acre Town Center, playing fields, trails and open space. The plan is based on a careful analysis of the physical and ecological conditions of the site and the Dry Creek valley. Key components of the plan are described below:

1. Town Center – The Town Center is envisioned as the “heart” of the community. Located near Dry Creek, a few of its tributaries, and Cartwright Road, this center consists of a 5,500 square foot community town hall, a 3,500 square foot swim and fitness recreation center, and a postal facility, all organized around a town green. A commercial overlay is proposed for the adjacent neighborhood to allow for commercial and home-office uses.

2. Residential – The plan calls for a series of discreet and bounded neighborhoods, defined by natural features. The three neighborhoods in the valley are reminiscent of the best of Boise’s North End neighborhoods, with single family detached homes on “traditional” lot sizes, alley-loaded garages and within easy access to the Town Center.
walking distance of the Town Center and recreational amenities. The foothill neighborhoods have been located to minimize visual impact — including no development on the ridge adjacent to Cartwright Road — and recede into the landscape.

A total of 620 lots are proposed, ranging from 20 foot wide townhouse/condo, to 2 acre View Lots in the foothills.

Fig. F9.2 Town Center Street Scene

General Architectural Design Objectives

The intent of both the Hidden Springs and the Cartwright Ranch architectural guidelines is to encourage a diversity of design and at the same time produce a harmonious community which reflects the:

- small-town, agricultural setting
- local climate
- continuity with the characteristics, forms and materials of small town regional building traditions
- pedestrian orientation

Many examples of buildings that incorporate elements encouraged in homes at Hidden Springs and Cartwright Ranch can be found in rural communities and older regional neighborhoods. In general they are respectful of each other and maintain harmony in the community.
Building Types and Styles within the Foothills

Since many homesites in the foothills are potentially highly visible from off-site, building masses, roof forms and ridgelines in this area should be low, with foundations and roof lines stepping to follow existing slopes.

- Buildings should be made up of smaller building elements to fit the structure more closely to the site and to assure a low profile.
- The use of natural materials is encouraged, such as wood or stone. Stucco finishes are appropriate as well, provided they are colored and textured to complement the surrounding landscape.
- Foothill homes should utilize walls, terraces and grading to make the home appear as if it "grows" out of the site.
- Buildings should incorporate long overhangs, hipped roofs and/or clipped gable ends rather than tall open gables, to minimize apparent height of buildings. A variety of textures and colors should be used that, when seen from a distance, blend the building into its site and minimize its presence.

Fig. F9.3 Foothills Home
Building Massing within the Town Center

Simple building masses within the Town Center shall create a sense of integrity at the nucleus of the community because buildings in the Town Center will be seen as a group rather than individually.

- Use of the rectangular box forms of farmhouses and the early Boise neighborhoods are encouraged in order to create a Town Center "streetscape".
- Buildings should be particularly sensitive to their street frontage. Design elements should create a play of light and shadow and reduce perceived bulk, such as deep porches, decks, overhangs, multi-paned windows and building offsets.
- Second story floor areas may be the same as the first story floor area.
Town Center Architecture

Home architecture may include Victorian, Farmhouse, Craftsman and/or Mission/Basque styles, and other diverse styles reinterpreted from traditional neighborhoods. Homes will generally be finished in a vibrant and diverse color palette, and include features such as elevated porches, bay and dormer windows, and garages that do not dominate the architectural design.
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- Buildings should preferably be finished with painted wood or wood simulations, such as wood board and batten, clapboard siding (maximum 6" width exposure), wood shingles or quality wood simulations such as Fiber Cement. Trim, fascias, columns, deck and porch railings should also be painted. The defined Design Review Committee may approve stained wood finishes, trims, columns, deck and porch railings if the stained wood is consistent with the architectural style of the home. Stucco finishes will also be appropriate for Town Center homes. Vinyl siding, trims, columns and railings are not allowed.
- The use of stone or brick for foundations, structural elements and chimneys is encouraged. Stucco is also acceptable. Siding clad chimneys are not allowed on exterior walls.
- In order to create a "presence" along the Town Center primary street (see “Road and Circulation Plan” in Sub-Element F5 for the layout of roads), buildings along this corridor are encouraged to be three story with large front porches (minimum depth 6') and primarily utilize masonry materials such as stone or brick for foundations and first floor structural elements or walls. Within the Town Center, a wider spectrum of colors is appropriate compared with a more limited palette for the valley and foothill neighborhoods. Accent colors should be used to highlight trim and window elements.

Fig. F9.7 Building Envelopes
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Building Envelopes and Sighting Considerations for View Lots

Building envelopes have been established for all View Lots to ensure that every home is sited to maximize views, minimize impacts to the site, and provide for certainty about future building of adjacent homes. All improvements on a home site (including outdoor amenities such as pools, patios, ancillary buildings and related improvements) must take place within the building envelope area, with the exception of utility connections, driveways or pedestrian access.

On View Lots, areas outside of the building envelope are to remain in an essentially natural condition, or enhanced in accordance with the landscape concepts outlined herein. Specific landscaping requirements will be defined in the Design Guidelines and enforced by the Design Review Committee.

3. Open Space and Parks – A minimum of 440 acres will be set aside as permanent and protected open space through a conservation easement. The plan has been carefully developed to minimize potential conflicts between wildlife and built improvements. The community association will manage open space and parks in accordance with the covenants, codes and restrictions for the Cartwright Ranch community.

Open Space and Parks

Open space is a critical part of the proposed plan. Cartwright Ranch includes 24 acres of developed open space, or 3.5 percent of the total 680 acres, and 448 acres of natural open space, or 66% of the total 680 acres. Together, open space makes up 69% of the project.

The objective of the open space system is a comprehensive open space network that both creates a pedestrian-oriented community and preserves natural resources, including:

- Protection for sensitive environments, including Dry Creek and wetland corridors.
- Protection of likely animal movement corridors such as valleys.
- A recreation system that provides multiple opportunities, including walking, running and mountain biking.
- Common areas for more structured gathering and play, including a large “town green” for the entire community, smaller neighborhood open spaces, and play areas/tot lots.

The key component of the open space system is the dedication of an open space buffer of at least 100 feet on either side of Dry Creek. No permanent structures will be built within this buffer area, with the exception of recreation trails.

From this open space “spine”, open space corridors will follow the valley drainages. These corridors will provide the opportunity for large-animal movement and the protection of wetlands and other sensitive low-lying areas.
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Recreation trails will link these open spaces areas with individual neighborhoods and the Town Center as well as the neighboring Hidden Springs development. Cartwright Ranch would also welcome the opportunity to appropriately connect with any regional trail systems.

4. Recreation – An extensive trail network will link all areas of the development with both the interior areas and the exterior of the development including the residential areas, the Town Center, neighborhood greens, community parks, and other community amenities. In addition, playfields will be located in several different areas and will be easily accessible from all neighborhoods.

Landscape Concepts

Landscaping will be implemented as follows:

- Common area and streets – In the Town Center and adjacent neighborhoods on the flatter land, there will be a more formal and consistent landscape that will be the foundation of a small-town lifestyle. This would be comprised of regularly spaced canopy street trees, parks and fields for gathering, and a clear definition of public and private spaces through the use of hedges and fences. In the foothills, the common areas and streetscapes would reflect a more natural character.

- Individual lots – All individual lots will be required to be amply landscaped. Because there are different landscape zones on the property, landscape requirements will vary by lot in order to best respond to the natural environment. The goal is to ensure that proposed landscaping is appropriate to the specific zone that that lot is located in. The specific requirements will be defined in the Design Guidelines and enforced by the Design Review Committee.

Fig. F9.8 Town Center Street Landscape Concept
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Landscape Standards

- Landscape improvements shall incorporate, rehabilitate and enhance the existing site, incorporate indigenous species and minimize areas of intensive irrigation.
- Landscape plantings should consist of a few different varieties and types in order to create a more unified rather than fragmented landscape.
- Plants that require little maintenance are favored over those that require constant spraying or pruning. The minimal use of pesticides is encouraged.
- Landscaping should be harmonious with regional climatic conditions. This will be achieved through careful selection of plant materials that express the desired aesthetic qualities while meeting the maintenance and durability requirements of the project.
- Water conservation measures will be encouraged through principles of xeriscaping, setting limits on landscaped and irrigated areas within common areas and residential lots, and utilizing high-efficiency, low-volume irrigation systems.
- Along streets with curb, gutter and sidewalk, trees will be provided with a minimum spacing of fifty (50) feet. Along streets without curb, gutter and sidewalk, other plantings will be provided as appropriate with the topography and site.
- Landscaping will be used to establish a clear and logical orientation to the neighborhoods and open space areas within Cartwright Ranch, including the following areas:
  - Entry areas to the community will be characterized by open, country roads lined with native grasses punctuated by select plantings of deciduous tree groves that will reinforce the entries as community gateways.
  - Riparian areas will be characterized by naturalistic placement of trees and shrubs that will enhance and replicate the existing riparian environment while providing wildlife habitat.
  - Agricultural areas will be cultivated with crops orchards, windrows, and hedgerows.
  - Natural open space areas will remain in their natural state or selectively enhanced as appropriate to the land and wildlife management parameters of the project.
  - Town areas will include traditional street trees in planting strips and medians with front and rear yard domestic gardens in residential and commercial lots.
  - View Lots will include irrigated landscape envelopes that contrast with enhanced native shrubs and grasses outside those envelopes.
Landscape Concept for View Lots

- The use of conifer type plant materials should be minimized because of their opaque and high contrast qualities in the hillside landscape.
- In areas close to the house, higher plant materials may be used to create privacy areas, screen service areas and reduce the apparent height of buildings as viewed from off-site and adjacent homesites.
- Areas immediately adjacent to building improvements within the building envelope that are not visible from off-site may use a greater variety of plant material including introduced and non-native plants.
- Automatic irrigation systems are required for all revegetation areas. These systems may be abandoned when plantings have been clearly established after a minimum of two growing seasons.
Landscape Concept for Traditional Lots

- Areas immediately adjacent to building improvements within the building envelope that are not visible from off-site may use a greater variety of plant material including introduced and non-native plants.
- Manicured or groomed yards, terraces, and pools are to be restricted to areas defined by buildings, walls, plantings or other defined edges, and are only permitted within the building envelope.
- Each owner shall landscape and irrigate the swale in the street right-of-way in front of their homesite utilizing an approved seed or sod. Landscaping shall not alter the design depth of the swale or impede in any way the flow of storm water through the swale. Gravel, lava rock, or extensive paved surfaces (excluding normal driveway access and entry pathways) will not be permitted.
- Drainages, riparian and wetland areas are to be protected from disturbance during construction.
- Temporary construction disturbance – Areas that are temporarily disturbed due to construction will be minimized. In those cases where a temporary disturbance is
unavoidable, appropriate restoration of the natural landscape will be implemented, including methods such as hand planting and hydroseeding.

- Open space – Open space will remain essentially undisturbed. Appropriate best-management practices (published by the Idaho Department of Environmental Quality) will be implemented to ensure the health of riparian environments and prevent the spreading of weeds and other invasive plants, as well as those practices that may be required for wildfire management and protection.
- Dry Creek – The Dry Creek corridor will also remain essentially undisturbed, except for best-management practices (published by the Idaho Department of Environmental Quality) to ensure the health of the riparian environment, to prevent invasive plants from spreading, and to ensure that the stream banks are stable.

All plants will be appropriate to the Treasure Valley’s climate.

**Design Guidelines**

A comprehensive set of Design Guidelines will be implemented for Cartwright Ranch as part of the conditions, covenants and restrictions (CC&Rs) recorded for the development. These will be similar to the design guidelines at Hidden Springs, which have already been approved by Ada County, and will address:

- The vision of Cartwright Ranch as a tight-knit small-town community in the tradition of small towns in Idaho.
- Guidelines and standards for sitework on individual lots, including grading, planting, siting of structures and open space, all designed to preserve and enhance the rural setting and natural environment.
- Guidelines and standards for residences and all ancillary structures, including appearance, massing, height, color and finishes. The intent of these architectural guidelines is to encourage diversity of design and at the same time produce a harmonious continuity with small town regional building traditions.
- Guidelines and standards for exterior energy and water conservation measures, including:
  - Building/landscape envelopes on all residential lots larger than 10,000 square feet.
  - Use of drought-tolerant grasses and shrubs.
  - Efficient irrigation equipment, scheduling and management.
  - Soil amendment in landscape areas.
  - Mulch cover in landscape areas.
- Guidelines and standards for interior energy and water conservation measures, including:
  - High-efficiency (low-flow) shower heads, toilets and faucets.
  - Water meters and a water usage data base that facilitates real-time analysis.
  - Timed controller for specific uses such as lawns.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

The Design Guidelines will be rigorously enforced by an experienced and fully qualified Design Review Committee.

Town Center Multi-Family and Commercial Design Guidelines

All lot grading, siting of structures, architectural designs of structures, exterior colors, landscaping, parking, water features, and outdoor furniture, art, signs, monuments, flagpoles, fencing, walls, and lighting in the Town Center shall be subject to the final design guidelines, incorporated into the Cartwright Ranch CC&Rs and subject to approval by the Cartwright Ranch Design Review Committee. Conceptual commercial design guidelines are included below. In the event of any conflict between these conceptual guidelines and the CC&R’s, the provisions of the CC&R’s shall govern and control.

Diverse and authentic architectural designs are encouraged along with the use of as many natural and nontoxic recycled materials as is economically feasible. Structures and mechanical systems should be resource efficient (i.e. using less materials, energy, and water) and designed to meet or exceed current Energy Star standards. Natural daylighting and effective ventilation systems should be implemented to enhance the indoor living environment including better air quality.

1) Building Setbacks: Shall comply with the Cartwright Ranch Zoning Code
2) Building Height: Shall comply with the Cartwright Ranch Zoning Code
3) Parking: Shall comply with the Cartwright Ranch Zoning Code
4) Signage/ Fencing/ Walls: Wrought iron and natural materials such as wood, stone, and brick are encouraged. The Design Review Committee may approve other materials. Maximum height is 6 feet for fences or walls. Maximum sign size is 32 square feet per side. Vinyl materials are prohibited for all signs, fences, and walls.
5) Landscaping: Indigenous species are encouraged that are drought tolerant. Please refer to the Approved Plant Materials list in the Residential Design Guidelines. The Design Review Committee may approve additional materials.
6) Lighting: Up lighting is prohibited, including landscaping and street lighting, to protect the dark sky. All lighting should be shielded.
7) Architectural Design: Please refer to the Residential Design Guidelines. The Design Review Committee may approve other designs.
8) Massing:

A. Where the side elevation at the end of a building is oriented to a street, driveway or neighboring property, massing and design quality should be compatible with the front elevation.

B. Garages may be attached, detached, or underground. All garage structures must be compatible with the architecture, colors, and materials of the main building and neighboring structures.

C. Roof lines should correspond to the variation in building massing and articulation with bays, gables, and dormers. Parapets on flat roofs should be articulated with well-designed details.

D. Buildings should be encouraged to vary their height to create visual interest.

E. Balconies are encouraged on upper floors and over entry porches.

F. Elevation articulation is encouraged. Some detail elements to consider are:

1. Changes in colors, textures, and/or materials.

2. Projections, recesses, and reveals.

3. Window styles and primary entrances.

4. Projections or breaks in the vertical rise of the building elevation.

9) Building Colors & Materials:

A. Materials such as stucco, stone, cementitious siding, or brick are encouraged. The Design Review Committee may approve other materials. Vinyl materials are prohibited as well as highly reflective materials.

B. A varied palette color is encouraged. Earth tone colors are preferred; however, the Design Review Committee may approve the use of more vibrant colors.

10) Streetside Elevations:

A. Streetside elevations of commercial or multi-family buildings should contribute to the appeal of the Town Center through the building articulation and heights,
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

massing, colors, and materials.

B. Retractable awnings or permanent canopies for sun protection and the creation of protected sidewalk space are encouraged.

11) Side and Rear Elevations:
A. Four-sided architecture is required.
B. Side and rear elevations should be compatible with street elevations as to articulation, massing, materials, colors, and textures.

12) Screening Requirements:
A. Rooftop mechanical equipment should be screened to the height of the equipment using consistent exterior colors and materials.

B. Service areas for buildings should be located at the rear including loading, recycling, garbage, meters and equipment. Service areas should be screened from view to the height of the equipment with decorative fencing or walls compatible with the building elevation’s materials and colors if visible from the street, unless otherwise approved in writing by the Design Review Committee.

Energy and Water Conservation Standards

- Indoor Water and Energy Use
  - The average flow rate for all lavatory faucets and shower heads will be less than or equal to 2.0 gallons per minute.
  - The average flow rate for all toilets will be less than or equal to 1.3 gallons per flush.
  - Water heaters will be Energy Star-qualified or have equivalent performance specifications.
  - Cooling equipment will consist of Energy Star-qualified air conditioning unit or heat pump or have equivalent performance specifications.
  - Heating equipment will consist of Energy Star-qualified gas furnace, heat pump or boiler or have equivalent performance specifications.
  - At least three (3) Energy Star-labeled light fixtures or Energy Star-labeled compact fluorescent light bulbs will be installed.
  - Windows will be Energy Star-qualified or have equivalent performance specifications.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

- Outdoor Water and Energy Use
  - Water conservation measures will be encouraged through principles of xeriscaping, setting limits on landscaped and irrigated areas within common areas and residential lots, and utilizing high-efficiency, low-volume irrigation systems.
  - Drip irrigation will be encouraged in planting beds.
  - Turf areas will be zoned separately from other planted bed, based on watering needs. A timer/controller will activate valves for each watering zone.
  - View Lots will concentrate irrigated landscaping within landscape envelopes

Minimizing Visual Impact

Where development is proposed, buildings, utilities and roads will be carefully sited and screened to minimize their visual impact from both on-site and off-site adjoining properties. Techniques used to minimize visual impact include:

- Concentrating development in the more hidden side coves, gulches, and valleys.
- Minimizing development of the highly visible hillsides and keeping development either at the base or top of slopes.
- Sitting ridge top units in saddles and low areas to minimize "skylining" when development occurs at the top of slopes.
- Orienting roadway views to open space.
- Offsetting building pads to permit views between homes to open space, agricultural fields and the creeks.
- Using native vegetation in natural massings to blend homes with hillsides.
- Limiting heights, breaking up building massing and facades to minimize the visual scale of structures.

Sign Standards

- Lighting and landscaping shall be an integral part of all signage proposals.
- Signs constructed of wrought iron, brick, concrete, wood, stucco, stone, and other natural materials with painted or relief cut letters are encouraged.
- Free-standing signs should be in proportion/scale to the surrounding elements.
- Identification signs will be provided at project entrances and appropriately illuminated by indirect and screened or ground-mounted lighting.
- Commercial signs shall be small and subdued to respect the residential character of the community.
- The following signs are prohibited:
  - Signs that constitute a hazard to traffic of pedestrians;
  - Signs located within any stream or drainage channel;
  - Mobile signs or portable signs; balloons, flags or kite-style signs;
  - Inflatable signs;
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

- Signs that produce odor, sound, smoke, flame or other emissions;
- Signs that imitate or simulate official signs or that use yellow or red blinking or intermittent lights resembling danger or warning signals;
- Signs using strobe lights or individual light bulbs exceeding 75 watts;
- Signs on public property or right of way or signs attached to utility poles, street lights, fences, barns, sheds, or similar structures; and
- Roof signs and billboards.

Conserving Natural Systems

Cartwright Ranch has been carefully planned to minimize impact on the natural systems in Dry Creek Valley and in some cases to enhance or improve natural systems which have been stressed by the existing ranch and grazing operations. Riparian areas will be maintained in their existing configuration or will be enhanced.

Greenbelt or open space buffers have been designated between all riparian areas and nearby development. Wildlife corridors and big game winter range management areas have been designated to support big game winter foraging.

Greenbelt, regional and local trails have been designed to allow both wildlife and humans to move unobstructed throughout Cartwright Ranch and connect to corridors on adjoining lands. Approximately sixty-nine percent (69%) of Cartwright Ranch will remain as open space. Existing vegetation will be maintained through the enforcement of building envelopes and related design guidelines on the rural residential lots. Natural drainage ways will be protected through similar design guidelines regulating the grading and drainage of building parcels.

Protecting Water Quality

Water quality is integral to several planning concepts including transportation, water, sewer and facilities management.

Drainage from the road system will be contained and filtered through grass swales and natural soils where terrain allows. The water system will be metered and managed. Reclaimed waste water will be used to irrigate farming activities and common areas. Waste water will be treated primarily through a pressurized subsurface treatment system. All the water quality management features will be designed in accordance with regulatory standards and sited with soils and geology suited to that purpose. The existing springs on the south side of Dry Creek will be integrated into the overall site plan's common areas and agricultural areas. All of these systems will all be integrated into the overall management structure for the area.

These concepts, properly designed, constructed, maintained and managed, will offer a rare opportunity to have development without sacrificing water quality.
metal be utilized for roofing materials. These guidelines will also require any highly combustible material used for exterior siding, paneling, fencing and other wood structures to be factory treated with an industry rated fire retardant chemical.

Landscaping and Fuel Modification

The landscape planting guidelines for the Cartwright Ranch will include provisions for wildfire prevention in conjunction with site planning, aesthetics, water requirements, native plants and ongoing maintenance programs. The goal of these guideline provisions will be two-fold: first, to implement a comprehensive landscape design that will reduce fuel volume in the common and perimeter areas; and second, to provide individual home sites with a framework for fuel modification. The guideline criteria for the fuel modification in the common areas and residential neighborhoods of Cartwright Ranch are: planting fire resistant plant materials; establishing irrigated landscape envelopes within each home site; developing vegetation buffers that provide transition to adjacent native vegetation and establishing criteria for clearance between buildings and plantings within each site.

![Wildfire Safety Diagram](image)

**Fig. F9.11 Wildfire Safety Diagram**

Maintenance and Management

Ongoing maintenance, management and enforcement of the wildfire prevention program will be the responsibility of the community association and governed by the covenants, codes and restrictions for the Cartwright Ranch community. The design guidelines for the project will be administered by a design review committee for site planning, architectural and landscape design compliance with the wildfire prevention program. Additionally, public information and education programs about wildfire prevention will be developed in cooperation with the North Ada Fire and Rescue District and the Bureau of Land Management.
Developing a Distinctive Community

Cartwright Ranch has also been conceived with the intent of establishing an environment that fosters a high quality of development and strong community interaction amongst its residents. The Town Center will emulate the small town character which makes so many of Idaho's rural towns unique. The community will offer home sites with a broad range of size configurations and features. Cartwright Ranch will encourage a diversity of residents bound together with a common pride and identity in their community. While distinctive in their design and product type, residential neighborhoods will be linked by pathways and trails to the Town Center, allowing the Town Center to act as a community wide gathering place. Recreational facilities such as play fields, playgrounds, tot lots, trails and other open space features will provide numerous opportunities for residents to interact. Cartwright Ranch will also sponsor numerous community activities including farmers markets, community gatherings, family-oriented holiday events and educational sessions to encourage residents to explore the natural environment, meet their neighbors and share in community activities.

Cartwright Ranch will provide Ada County and the Boise area with a model planned community that captures the rural character and traditional town values that have historically made Idaho communities ideal environments to live and raise a family.

Flexibility

The development plan and design guidelines contained herein are intended to depict the general nature and relative intensity of residential and non-residential development at Cartwright Ranch, while allowing sufficient flexibility to permit detailed planning and design as development progresses through market cycles. The configuration of development parcels and phases may be altered to accommodate detailed site conditions and revisions to the project's implementation strategy, provided that the reconfiguration does not conflict with the general intent or specific conditions of approval for the Cartwright Ranch Planned Community.

Wildfire Prevention Strategy

Background

The Cartwright Ranch Community has been carefully planned with a strategy for the prevention, control and rapid extinguishment of wildfires. This program is intended to address the legitimate concern about residential development in the foothill areas as it relates to public safety and wildfire prevention, while maintaining the functional and aesthetic parameters of the community. Development of a program for wildfire prevention has been an effort involving members of the planning team and local fire experts. This strategy has been reviewed with fire and resource experts since the recent (1996) wildfire affecting the Cartwright Ranch property. The consensus is that the strategy remains valid and highly desirable as an approach to dealing with fire hazards in the foothills.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Available Water

United Water of Idaho will serve the entire Cartwright Ranch subdivision with a community water system, along with Hidden Springs. This water system is designed according to normal municipal standards and is constructed and maintained by United Water of Idaho. The International Fire Code, appendix C, table C105.1 states that fire hydrants are to have a maximum distance of 250 feet or less to any property from the nearest hydrant. The fire hydrant spacing in the existing system is such that each building lot is within 250 feet of a hose connection point. Hydrants will be strategically located near emergency access easements to the residential perimeter and wildlife management areas, as well as periodically along roadways. The hydrants will supply a minimum flow of 1500 gallons per minute at a static pressure of 20 psi.

Emergency Vehicle Access

The access road and internal street design for the Cartwright Ranch subdivision provide sufficient fire and emergency vehicle access. Adequate emergency vehicles access to Cartwright Ranch is provided along the Hidden Springs 4th addition and Cartwright Road. Hidden Springs 4th addition has several cross streets that are accessed from Dry Creek Road (N. Humphreys Way) and W. Hidden Springs Drive, and a series of cross streets connecting those two streets.

The street system for Cartwright Ranch provides good access to all lots. There are no dead-end street sections of 150 feet or more without turnarounds. The streets in Cartwright Ranch will have a paved width of 22 feet wide or wider, and the main access roads in the lower section are a minimum of 29 feet wide. Upper sections will have 26 feet clear width. These specifications comply with IFC requirements for access road width and width in front of fire hydrants.

Site Planning

Careful site planning for fire protection at the perimeter of the residential neighborhoods as well as local protection for individual home sites is a critical function of the wildfire prevention program for Cartwright Ranch. As such, a comprehensive system of roads, trails, riparian greenways and open preserves is an integral part of each neighborhood. This system provides strategic emergency access points and fire breaks at the neighborhood perimeters that allow firefighters to confine a fire to a small area. To reduce local exposure to hillside areas, the residential lots in each neighborhood will be low density, with a limited building envelope on the most level portion of the site. Also, setbacks will be required between all structures and adjacent slopes.

Non-Combustible Construction Materials

Architectural design guidelines for the Cartwright Ranch project will require that non-combustible materials such as tile/slate, asphalt composition shingles, and standing seam
metal be utilized for roofing materials. These guidelines will also require any highly combustible material used for exterior siding, paneling, fencing and other wood structures to be factory treated with an industry rated fire retardant chemical.

Landscaping and Fuel Modification

The landscape planting guidelines for the Cartwright Ranch will include provisions for wildfire prevention in conjunction with site planning, aesthetics, water requirements, native plants and ongoing maintenance programs. The goal of these guideline provisions will be two-fold: first, to implement a comprehensive landscape design that will reduce fuel volume in the common and perimeter areas; and second, to provide individual home sites with a framework for fuel modification. The guideline criteria for the fuel modification in the common areas and residential neighborhoods of Cartwright Ranch are: planting fire resistant plant materials; establishing irrigated landscape envelopes within each home site; developing vegetation buffers that provide transition to adjacent native vegetation and establishing criteria for clearance between buildings and plantings within each site.

Fig. F9.11  Wildfire Safety Diagram

Maintenance and Management

Ongoing maintenance, management and enforcement of the wildfire prevention program will be the responsibility of the community association and governed by the covenants, codes and restrictions for the Cartwright Ranch community. The design guidelines for the project will be administered by a design review committee for site planning, architectural and landscape design compliance with the wildfire prevention program. Additionally, public information and education programs about wildfire prevention will be developed in cooperation with the North Ada Fire and Rescue District and the Bureau of Land Management.
Edits to text.
Phasing Plan

The Phasing Plan for the Cartwright Ranch community outlines the anticipated sequence of development implementation. Initial phases of construction are relatively easier to identify and predict than subsequent phases, which could be adjusted in response to general economic conditions, market forces and absorption rates.

Figure F10 identifies the phases and sequence anticipated at this time. The sequence reflects two primary considerations: One is that a variety of densities and housing types are desirable for inclusion in each phase; another is that infrastructure is planned for development in an economically efficient manner. All land use types are included in each phase, with the exception of the preliminary assumption that Town Home units may not be developed until Phase Two. Phasing is planned in such a way that at the completion of each phase all essential public services needed to meet that and preceding phases are in place and that financing necessary for maintenance and operation of those services is assured. Cartwright Ranch will be developed in such a way that integrity of the community will be maintained at the end of each phase.

Ultimately, Cartwright Ranch is anticipated to include 620 residential units, 29 acres of developed open space, and 20,000 square feet for commercial uses.

Phase One (2008-2010)

Preliminary projections are for the first phase to include a mix of 100-275 residential units drawn from the following categories: View Lots, Traditional Lots, Town Home Lots and Village Home Lots. The number of units in each of these categories will be based on market demand and the need to offer potential residents a variety of housing options.

This phase will also include roadway improvements from the connection on the west side of Cartwright Ranch into Hidden Springs to the main road connection into Cartwright Road on the east side of the development. These improvements are all within the development boundaries. Utility systems to support this phase will also be constructed including a water reservoir, water distribution lines, sewage treatment system, and the stormwater retention areas servicing the Phase One development area. The Community Center, with pool and post office, will be included in Phase One. A significant portion of the trail system will also be developed during Phase One, with additional trails to be built during subsequent phases. Approximately 15.1 acres of developed open space are anticipated for completion in Phase One.
Subsequent Phases

The rate of development following the initial phase, exact location and number of future phases, and types and number of units to be included in each future phase may be revised based on market demand, regional and national economic conditions and construction logistics. Analysis at this time indicates that approximately 150-200 units per year can be successfully absorbed. The anticipated completion time for each phase is as follows:

Table F10.1: Summary of Phasing

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year</th>
<th>Land Uses</th>
<th>Residential Units</th>
<th>Estimated Population</th>
<th>Land Contained</th>
<th>Infrastructure Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>Year 0-2</td>
<td>Residential; Open Space</td>
<td>275</td>
<td>687.5</td>
<td>244</td>
<td>Streets; Utilities</td>
</tr>
<tr>
<td>Phase 2</td>
<td>Year 3-4</td>
<td>Residential; Mixed Use; Open Space</td>
<td>309</td>
<td>772.5</td>
<td>369</td>
<td>Streets; Utilities</td>
</tr>
<tr>
<td>Phase 3</td>
<td>Year 5-6</td>
<td>Residential; Open Space</td>
<td>36</td>
<td>90</td>
<td>67</td>
<td>Streets; Utilities</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>620 units</td>
<td>1550 pop.</td>
<td>680 acres</td>
<td></td>
</tr>
</tbody>
</table>

Anticipated population levels for each phase can be determined by multiplying the estimated number of persons per unit - 2.5 - by the number of units anticipated in each phase.

Approximately 12 acres of developed open space are anticipated for completion in Phase Two and the remaining acres in Phase Three.

Prior to issuance of the 400th building permit, the developer of Cartwright Ranch will construct a minimum of 5,000 square feet of space for commercial uses in the Town Center, which uses may include retail space, professional offices, service-oriented businesses, and a library or similar civic function. The developer will reserve sufficient land in the Town Center to construct an additional 15,000 square feet of space for commercial uses for a total of 20,000 square feet. The developer will actively market (including by listing with a commercial broker) this additional space and pursue any viable tenant for all or a portion of this space. If some portion of the 20,000 square feet remains unbuilt following the issuance of the 600th building permit, then the developer may petition the County to allow a different land use on that site.
As part of the County review of the Cartwright Ranch development that will occur every two years, the developer will provide the Director with a summary including: number of residential units and commercial uses platted to date; number of and type of units built by type; quantities and types of commercial and public facilities; a description of all infrastructure and services developed; and an updated outline of future phases.
ELEMENT F, PLANNED COMMUNITY DEVELOPMENT PLAN

Phases
- Phase 1
- Phase 2
- Phase 3

Cartwright Boundary

Phasing Plan

Fig.F10
April 18, 2006

Sarah Stobaugh
Supervisor of Boundaries
and Transportation
Boise School District
8169 W. Victory Road
Boise, Idaho 83709

Re: Cartwright Ranch at Hidden Springs
Planned Community Application
Ada County Development Services Department

Dear Sarah:

As we discussed on Monday, Cartwright Ranch is preparing a planned community application to be presented to the Ada County Development Services Department shortly.

One of the requirements of that application is that the applicant provide "a letter from the school district indicating school capacities and facility needs in the attendance area." Section 8-2E-4. F. 1l of the Ada County Code (Proposed). As we also discussed, this requirement is set forth in proposed amendments to the Ada County Code which the Development Services Department has requested that our application comply with.

So that your response will be in the context of our application, the Cartwright Ranch at Hidden Springs application is for 620 residential units. We anticipate that 151 of those units will have no more than two residents and that some of these will be single parent homes.

Cartwright Ranch is located immediately East of Hidden Springs and is intended to have all the appearances of a seamless addition or expansion of Hidden Springs. It is planned around a village core and will include a number of parks, an extensive trail system and other community facilities.
So that you may get a feel for this project as well as the traffic flows within the development and adjacent property I have enclosed a map of the project identifying our present plans for this development. We do not anticipate there will be occupied housing within the development until the later part of 2008 or early 2009.

Thank you in advance for your assistance in this request. Should you have any questions, please do not hesitate to contact me.

Sincerely,

A. Ennis Dale
MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding between Cartwright Ranch, LLC, 485 East Riverside Drive, Eagle, ID 83616 (Cartwright Ranch) and The Independent School District of Boise City, 8169 West Victory Road, Boise, ID 83709 (Boise School District).

The Boise School District acknowledges that the impact to the District of the Cartwright Ranch Planned Community is unique because of the existence of the Hidden Springs Charter School. After several discussions regarding the impact to the Boise School District of the Cartwright Ranch Planned Community, both parties have agreed to the following mitigation:

Cartwright Ranch will pay to the Boise School District the cost of one bus route for one year, based on the projected need of an additional bus route to service the Hidden Springs and Cartwright Ranch areas. The Boise School District will invoice Cartwright Ranch for the cost of the bus and fuel at the beginning of the school year in which homes will be occupied in the Cartwright Ranch Planned Community (projected to be 2008-09 school year). The cost of the bus will be based on the daily rate per bus during the first year that homes are occupied plus the cost of fuel for an estimated 72 miles per day at the fuel rate on the date of invoice. Estimated one-year cost as of March 2007 is $39,572.96; however both parties recognize that the actual cost will be higher by the time of invoicing.

This mitigation is based on the current projected build-out of 620 residential units in Cartwright Ranch. If the final approval for Cartwright Ranch exceeds the projected 620 residential units by more than 5%, The Boise School District reserves the right to re-negotiate the mitigation.

Independent School District of Boise City

Cartwright Ranch, LLC

Date: April 12, 2007

Date: April 27, 2007

"Educating Today For a Better Tomorrow"
An Equal Opportunity Employer-Educator
Storm Drainage System

General Description

The natural drainage flows are altered by development of an area in three basic ways. First, drainage patterns are redirected and concentrated by grading and the construction of roads. Second, flows are increased by the installation of more impervious surfaces than previously existed. Finally, the quality of the water is impacted by the runoff from pavement surfaces and fertilized landscaped areas. The existing storm drainage system within Hidden Springs safely transports concentrated flows to management facilities strategically located to filter nutrients and attenuate increased flows. The existing system will be expanded as the development continues into future phases.

The Diagrammatic Drainage Plan depicts internal drainage shed boundaries and possible locations of major management features.

Design Criteria

The design of drainage facilities associated with the Ada County road system falls under the jurisdiction of the Ada County Highway District. The design of the drainage facilities for Cartwright Ranch is depicted in the proposed road section designs.

Conveyance Systems

Redirection and concentration of drainage flows has and will continue to primarily be a result of construction of the road network serving the project. A combination of rural and urban road sections have been developed, depending on the development intensity of a particular area. In rural section areas, grassed roadside swales are the primary conveyance with culverts crossing at low points and other critical locations. Curb and gutter convey drainage to a more formal storm sewer system of inlets and culverts in areas where urban road sections have been constructed. In each case, the conveyance systems have been designed to deliver the storm water runoff to the management facilities while minimizing erosion.

Management Facilities

The storm water management facilities are the primary drainage feature for mitigating the increased flows generated from Hidden Springs. These features range from level swales graded parallel to the contour where flows are small to detention areas where higher densities will create larger flows. Other examples of these facilities include seepage trenches, dry wells and ponds. A number of site specific factors effect the type of facility chosen. Less dense development, generate lower flows requiring smaller structures in local applications.
More dense development areas include regional facilities for management due to higher anticipated flows and site availability. Soils and slope conditions, proximity to existing drainage ways and size of the drainage area also dictate the selection of facility. These management facilities serve a second purpose of water quality management, which is discussed below.

Water Quality Management

The quality of storm water runoff has become one of the most sensitive issues associated with land development. Residual materials from pavement surfaces, excess nutrients from fertilized landscaped areas and sediments carried with higher velocity flows contribute to the degradation of surface water quality. A number of strategies have been employed at Hidden Springs to minimize that degradation and to treat the water prior to discharge to the natural drainageways. Other sections of this application address management of landscaping. Relatively narrow road sections minimize pavement areas while still providing safe travelways. Rural road sections are considered to allow the treatment of runoff as close to the source as possible, specifically in roadside grassed swales.

As previously discussed, all surface water runoff is directed to management facilities for the control of runoff quantities. Detaining runoff in these facilities also allows suspended sediments and nutrients to settle. Between the source and these management facilities, erosion and sediment control techniques are utilized to "pretreat" the runoff. Vegetated roadside and culvert discharge swales provide nutrient uptake. Small check dams slow channel flow velocities. Riprapped aprons slow velocities and disperse concentrated flows from storm drainage systems. The emphasis is on keeping the concentration of flows to a minimum and dispersing those concentrated flows in vegetated swales at every opportunity. Not only does this promote nutrient uptake but it also promotes infiltration and groundwater recharge.

Surface water quality is addressed both during and after construction of development improvements. In addition to the methods previously discussed, temporary features employed during construction include silt fences, strawbale barriers, siltation basins, sediment traps and other proven and appropriate best management practices. The temporary mitigation program focuses on limiting the area of disturbance and treating the surface water as close to the source as possible.