The Millennium

General Development Plan

Approval of this General Development Plan creates
a vested property right pursuant to Section 24-68-103
Colorado revised statutes, as amended.

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June 13, 2006

Binder Updated March 2026
Current through Minor Amendment 11.3

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SECTION 1
OVERALL GDP NARRATIVE

1.1 INTRODUCTION

Suburban development occurring in recent decades has been successful at providing housing, shopping, employment areas and recreation facilities. However, there are often a number of shortcomings with much conventional suburban land development, such as: segregated / poorly linked land uses, over-dependence on the automobile, discouragement of pedestrian circulation, fragmented development, lack of sense of community, lower quality of life, and lower tax base due to low density.

The GDP represents a unique opportunity to create a better, more livable pattern of development. The GDP proposes to: master plan the entire development area; provide unifying design elements; provide a better mix of integrated land uses; plan for the pedestrian; provide a range of housing opportunities in close proximity to jobs; create quality housing, shopping and work places; create social gathering spaces; create a sense of community; and to create harmony between the natural and the built environment.

Approval of the GDP creates Vested Property Rights pursuant to Section 24-68-103, Colorado Revised Statutes, as amended.

1.1.1 Background Information

There are approximately 2958 acres within four separate parcels of land that comprise the GDP. The four parcels, Parcels A, B, C and D, are described in separate narratives in this GDP (See Sections 2, 3, 4 and 5 respectively). The Key Map (Map 1 in Section 11) delineates the boundaries of each of the four GDP parcels. Parcel A is located east of I-25. Parcel B is located east and south of Houts Reservoir and Equalizer Lake. Parcel C is located west of Houts Reservoir and Equalizer Lake. Parcel D is located south of US 34 and south and west of Mountain View High School.

Sections 2, 3, 4 and 5 provide detailed information specific to each parcel including descriptions of the parcel locations, sizes, existing and proposed land uses, circulation, specific public services information, existing natural area influences landform modification and any specific conditions imposed upon the parcel or Subparcels.

The narrative sections for each of the four parcels include a list of land use categories for each Subparcel. Section 12 of the GDP sets forth the regulations and procedures by which the uses are to be developed.

In order to ensure quality development, Performance Standards (Sections 6 through 10) have been created and are a part of this GDP.

The Centerra DRC has been formed as an advisory committee to review Development Projects proposed within the GDP for compliance with the Performance Standards. The Centerra DRC will meet regularly to review Development Projects. Review by the Centerra DRC is required prior to submittal of a Development Project to the City. Please see Section 12 for a description of the Centerra DRC's role in the approval of Development Projects within the GDP.

1.1.2 GDP Goals

A. Conformity with the intent of the Master Plan, to the extent such Master Plan is not inconsistent with the Restated Agreement, the GDP and the General Conditions and Special Conditions thereof. The overall goal of the GDP is to provide a long-range plan for the future of the eastern part of the City that will encourage quality development that is carefully planned and

orchestrated. The purpose will be to ensure that Loveland continues to develop with a high quality image that enhances the City's image as one of the premier communities in Northern Colorado.

B. Balance of Uses. An additional goal of the GDP is to provide a mix of uses, creatively located and integrated, that provides a balance of residential, commercial, retail, office, public facilities, light manufacturing and open space. Through providing this balance, residents will be able to easily access all of the needs of daily life without having to drive long distances. Work, shopping, and recreation will be provided in a mix that encourages alternative transportation.

C. Attract High Quality Users. A third goal of the GDP is to create an attractive area that will serve as a magnet to attract and retain the highest quality employers. Base level jobs, which encourage clean manufacturing, are a prime desire of this development. Economic modeling of base level industry indicates that these types of jobs provide positive economic benefits to a community and help provide financial security.

D. Good Neighbor. Lastly, it is the intent of the GDP to recognize the importance of being good neighbors in the community and to adjacent neighbors. Through actively engaging neighborhood participation and through sensitive development, the GDP seeks to recognize adjacent land use relationships and provide meaningful and equitable solutions to citizens outside of the GDP's boundaries and within the development.

1.2 LAND USE INFORMATION

1.2.1 Overall Concept

The zoning for this property is defined by the GDP. The GDP provides a mechanism by which land areas can be uniquely developed to meet the needs of the City, property owners, residents and Applicants and as an alternative to conventional zoning regulations.

Development within this GDP shall be in accordance with the review processes and timeframes contained in Section 12. The Performance Standards shall apply to all Development Projects within this GDP. Refer to the GDP maps and the applicable Performance Standards for land use types, densities, and locations of each proposed land use (see Maps 4, 5, 6 and 7 in Section 11). A maximum of 10,382 Dwelling Units shall be allowed within the GDP, unless amended. The maximum number of Dwelling Units for each Parcel of the GDP is provided on Maps 4, 5, 6 and 7 in Section 11.

It is the responsibility of the applicant to demonstrate to the City that Development Projects comply with the land uses and Performance Standards in the GDP.

1.2.2 Circulation

Circulation is discussed separately in the narrative for each of the four parcels of the GDP. In addition, the Conceptual Amenity Map depicts conceptual access points and a master planned trail system within the GDP (See Map 2 in Section 11 and Section 7 for additional access and circulation information).

1.2.3 Public and Private Facility Providers

Following is a list of the utility providers currently available to provide services within the GDP. The

provision of services by other utility providers will be determined at the time of development.

A. Police – Loveland Police Department
B. Fire – Loveland Fire and Rescue Department
C. Schools – Thompson R2-J School District
D. Parks and Open Space – City
E. Water and Sewer – City
F. Electric – City Light and Power
G. Gas – Xcel Energy Company
H. Telephone – Qwest Communications

This GDP area is currently served by Fire Stations One, Four and Six. In the future, an additional fire station may be constructed on the east side of I-25 to serve a portion of the GDP.

A majority of the GDP area will be served by the East Side Lift Station. Portions of Parcel A will require service from the new Interchange Lift Station and a lift station located west of I-25 and south of US 34. Parcel B-13 will be served by a new lift station to be installed south of US 34 and west of I-25.

Specific sites and locations/alignments for water, sanitary and storm water systems illustrated on this GDP shall be determined in accordance with the applicable General Conditions. Snow and ice removal services will be provided in accordance with the City's Snow and Ice Control Plan.

1.2.4 Open Space

The GDP incorporates a network of open space areas, greenbelts and pedestrian trail connections that will form the basis of the open space system (Refer to Map 2 in Section 11). These areas will be designed to interconnect the various neighborhoods and/or businesses within the GDP and to the regional trail system.

Setbacks for wetlands and Environmentally Sensitive Areas will be provided as recommended within the applicable Environmentally Sensitive Areas Report. Section 6.12 of the Performance Standards addresses planning issues for Environmentally Sensitive Areas.

Maintenance, subdivision, noise impacts, and timing of and criteria for planting of buffers within Environmentally Sensitive Areas are discussed in Section 6.12 of the Performance Standards.

Although trails may not be shown on the GDP drawings (Maps 2, 4, 5, 6, and 7), if areas are identified as appropriate for recreational uses within the applicable Environmentally Sensitive Areas Report, these uses may be allowed with future development upon approval by the City.

1.2.5 Landscaping / Landscape Elements

Landscape design and materials are discussed in Sections 6.13 through 6.17 of the Performance Standards.

1.2.6 Other Urban Design Elements

Thematic components that will provide unity throughout the GDP include arterial streetscapes, bridges, landscape walls, trails, directional and street name signage, accent lighting, sculpture, other street furniture and similar design elements.

1.2.7 Architecture

Architectural design and materials for non-residential uses and standards are included in Section 8. Architectural design and materials for Residential Uses are included in Sections 9 and 10.

1.2.8 Typical Residential Neighborhood Layout

Typical residential neighborhood concepts are discussed in Sections 9 and 10.

1.2.9 Land Use Compatibility

Land use compatibility shall be accomplished through the application of the Performance Standards contained in Section 6.8.

1.2.10 Airport Influence Area

The boundaries of the Airport Influence Area depicted on the maps in Section 11 of the GDP were approved by the Amended and Restated Annexation and Development Agreement for the Millennium GDP effective July 11, 2006 ("Restated Agreement") and such boundaries serve as the basis for Special Conditions applicable to certain GDP parcels or Subparcels because of their proximity to the Airport. Any such Special Conditions are set forth in Appendices 2-1, 3-1, 4-1 and 5-1 to Sections 2 through 5, respectively, of the GDP. The Airport Lines depicted on the maps in Section 11 of the GDP shall be applicable to all parcels and Subparcels of the GDP.

1.2.11 Landform Modification

The majority of property in the GDP is relatively flat. Any landform modification that is done will be for the purpose of creating visual interest through the development, to provide screening as necessary, or to provide for proper management of drainage. The amount of grading on the property will be minimized to the extent reasonably feasible. Refer to Map 3 in Section 11 and the parcel narratives in Sections 2, 3, 4 and 5 for more detail.

1.2.12 Implementation

It is anticipated that development within the GDP will be phased over a period of approximately 25 years. It is anticipated that each of the parcels will have multiple phases.

1.3 ALLOWABLE USES WITHIN EACH LAND USE CATEGORY

Following are lists of the specific uses that are included within each of the land use categories referred to throughout this GDP. The land use categories for each Subparcel, together with the specification of the land use category as either a Use-by-Right or a Special Review Use, are set forth in the land use legends on Maps 4, 5, 6 and 7 in Section 11. A land use category, as a whole, may be a Use-by-Right or a Special Review Use, depending on the location of the Subparcel and the adjacent land uses and features. Plugged and Abandoned Wells are permitted within each Subparcel of the GDP. Any exception to the categorization of an entire land use category as either Use-by-Right or Special Review Use is noted in parentheses following the specific use. For example, see Section 1.3.4 where it is noted that Group Homes/Group Care Facilities are always a Special Review Use, even if Heavy Commercial Uses are Uses-by-Right in a specific Subparcel.

1.3.1 Institutional/Civic/Public Uses

A. Public and private schools (college, university, vocational and technical education, etc.).
B. Places of worship, churches, or places of assembly.
C. Public Facilities.
D. Parks, recreation and other open lands.
E. Cemeteries.
F. Community Facilities.
G. Neighborhood Support/Recreational Facilities.

H. Public and non-profit offices and administrative facilities.
I. Government, semipublic, or other civic uses.
J. Clubs and Lodges.
K. Oil and Gas Facilities.
L. Accessory Uses related to the above listed uses.

1.3.2 Residential Uses (If not within a Mixed Use Neighborhood)

A. Single Family Detached Dwellings.
B. Single Family Attached Dwellings.
C. Multi-Family Dwellings.
D. Live/Work Structures.
E. Senior Housing of a Residential Nature.
F. Group Homes for up to eight (8) developmentally disabled or elderly persons.
G. Home occupations (in accordance with Municipal Code).
H. Ancillary Dwelling Units.
I. Neighborhood Support/Recreational Facilities.
M. Oil and Gas Facilities.

1.3.3 Light Commercial Uses

A. General Offices.
B. Bed and Breakfast Establishments.
C. Restaurants, Indoor and Outdoor.
D. Restaurants, Fast Food (drive-through permitted).
E. Funeral homes / mortuaries.
F. Grocery Stores (no greater than 20,000 sf).
G. Financial services and institutions, and clinics.
H. Artisan and photography studios and galleries.
I. Veterinary facilities and Animal Clinics Small Indoor Use including Pet Day Care Facilities.
J. Senior Housing of a Non-residential Nature.
K. Child-care centers.
L. Medical offices.
M. Open-Air Farmers Market.
N. Print Shops.
O. Hotel/Motel.
P. Parking lots and Parking Garages.
Q. Retail Establishments (no greater than 25,000 sf).
R. Health and Fitness Clubs.
S. Personal and Business Service Shops.
T. Oil and Gas Facilities.
U. Accessory Uses related to the above listed uses.

1.3.4 Heavy Commercial Uses

A. Supermarkets and Grocery Stores (greater than 20,000 sf).
B. Hospitals.
C. Hospital Accessory Uses such as a helipad.
D. Group Homes / Group Care Facilities (Special Review Use only).
E. Senior Housing of a Non-residential Nature.
F. Veterinary facilities and Animal Clinics Small Outdoor Use including Pet Day Care Facilities.
G. Auto Dealerships.
H. Vehicle Major Repair, Servicing and Maintenance.
I. Conference / Convention Centers.
J. Retail Establishments (greater than 25,000 sf).
K. Bars, taverns, nightclubs.
L. Call Center.
M. Vehicle Minor Repair, Servicing and Maintenance establishments (indoors).
N. Entertainment Facilities and Theaters.
O. Gasoline stations and Convenience Stores with fuel sales.
P. Equipment, trucks and trailer rental establishments.
Q. Parking lots and Parking Garages (as a principal use).
R. Indoor Recreational Uses.
S. Wireless Telecommunications Facility / Services (Special Review Use only).
T. Personal Wireless Services / Facilities (Special Review Use only or in accordance with Municipal Code).
U. Self storage, mini storage, mini Warehouse.
V. Outdoor Storage related to the above listed uses.

W. Light Commercial Uses that have Outdoor Storage associated with them.
X. Oil and Gas Facilities.
Y. Accessory Uses related to the above listed uses.

1.3.5 Mixed Use Village Center

A. The Light Commercial Uses listed in Section 1.3.3.
B. The Institutional/Civic/Public Uses listed in Section 1.3.1.
C. Multi-Family Dwellings.
D. Single Family Attached Dwellings.
E. Live/Work Structures.
F. Single Family Detached Dwellings.
G. Parks and Open Space Uses listed in Section 1.3.9.
H. The Heavy Commercial Uses listed in Section 1.3.4.
I. Oil and Gas Facilities.

1.3.6 Light Industrial Uses

A. Warehouses and Distribution
B. Flex Office/R&D/Industrial/Warehouse
C. Light Manufacturing
D. Research Laboratories.
E. Medical laboratories.
F. Workshops and Custom Small Industry uses.
G. Outdoor Storage of Recreational Vehicle, Boats and Trucks.
H. Accessory Buildings and Uses including outdoor storage of equipment, products or other goods.

1.3.7 Heavy Industrial Uses

A. Wireless Telecommunications Facility / Services.
B. Personal Wireless Services / Facilities
C. Heavy Manufacturing.
D. Recycling facilities, heavy industry.
E. Vehicle Major Repair, Servicing and Maintenance.
F. Accessory Buildings and Uses.
G. Outdoor Storage of equipment, products or other goods as a principle use.

1.3.8 Business Park Uses

A. Public safety and emergency facilities.
B. Parks, recreation and other open lands.
C. Cemeteries.
D. Community Facilities.
E. Neighborhood Support/Recreational Facilities.
F. Public and non-profit offices.
G. Government, semipublic or other civic uses.
H. Clubs and Lodges.
I. Public utilities.
J. General Offices.
K. Bed and Breakfast Establishments.
L. Restaurants, Indoor and Outdoor.
M. Restaurants, Fast Food (drive-through permitted).
N. Funeral homes / mortuaries.
O. Grocery Stores (no greater than 20,000 sf).
P. Financial services and institutions.
Q. Artisan and photography studios and galleries.
R. Veterinary facilities and small animal clinics.
S. Medical offices.
T. Open-Air Farmers Markets.
U. Print Shops.
V. Hotel/Motel.
W. Retail Establishments.
X. Health and Fitness Clubs.
Y. Personal and Business Service Shops.
Z. Supermarkets and Grocery Stores (greater than 20,000 SF).
AA. Auto Dealerships.
BB. Conference / Convention Centers.
CC. Retail Establishments (greater than 10,000 SF).

DD. Bars, taverns and nightclubs.
EE. Call Center.
FF. Vehicle Minor Repair, Servicing and Maintenance.
GG. Entertainment Facilities and Theaters.
HH. Gas stations and Convenience Stores with fuel sales.
II. Equipment, trucks, and trailer rental.
JJ. Parking lots and Parking Garages.
KK. Indoor Recreational Uses and facilities.
LL. Wireless Telecommunications Facility/Services.
MM. Personal Wireless Facilities.
NN. Warehouses.
OO. Light Industrial Uses.
PP. Flex Research and Development Facilities.
QQ. Research and medical laboratories.
RR. Workshops and Custom Industry uses.
SS. Recreational vehicle, boats and truck storage.
TT. Light and Heavy Manufacturing.
UU. Recycling facilities, heavy industry.
VV. Vehicle Major Repair, Servicing and Maintenance.
WW. Privately owned and maintained landscape areas.
XX. Publicly owned and maintained landscape areas.
YY. Passive and active Recreation.
ZZ. Agricultural Activity, community gardens or similar uses.
AAA. Community Facilities, parks, Recreation Space and Recreation Facilities.
BBB. Accessory Uses related to the above.
CCC. Outdoor Accessory Uses related to above uses.

1.3.9 Parks and Open Space Uses

A. Privately owned and maintained landscaped areas (parks, plaza, trails, etc.) or natural areas.
B. Publicly owned and maintained landscaped areas or natural areas.
C. Golf courses (public and private).
D. Passive or active recreation fields, courtyards, Accessory Buildings, associated maintenance facilities, and clubhouses.
E. Agricultural activity, community gardens, or similar uses.
F. Community Facilities, cultural arts facilities, parks, Recreation Space and Recreation Facilities.
G. Oil and Gas Facilities.

1.3.10 MUN

A. Institutional/Civic/Public Uses

1. Places of worship, churches, and other places of assembly.
2. Public and private schools (elementary, intermediate, and high school, etc.).
3. Other educational/training facilities if within an Urban Character Village.
4. State licensed child or adult day-care centers.
5. Group Homes/Group Care Facilities.
6. Public safety and emergency facilities.
7. Community Facilities (including golf courses, public and private).
8. Indoor public and private cultural, educational and Recreational Facilities and community centers.
9. Outdoor public and nonprofit educational and Recreational Facilities.
10. Senior Housing of a Non-residential Nature.
11. Essential public utility and public service installations.
12. Cemeteries.
13. Public and private non-profit offices and administrative facilities.
14. Government, semipublic, or other civic uses.
15. Clubs and Lodges.

B. Residential

1. Single-Family Detached Dwellings.
2. Single-Family Attached Dwellings.
3. Multi-Family Dwellings.
4. Single family, two family, or multi-family condominium Dwelling Units.
5. Ancillary Dwelling Units, including guest quarters limited to one per Lot.
6. Co-Housing structures and related facilities.
7. Senior Housing of a Residential Nature.
8. Extended Stay Housing.
9. Home occupations.
10. Live/Work Structures – only in Urban Character Villages.
11. Bed and Breakfast Establishments.
12. Group Home / Group Care Facilities.
13. Oil and Gas Facilities.

C. Commercial (in Urban Character Village only)

An Urban Character Village shall include at least two of the following uses:

1. Live/Work Structures or Townhomes.
2. Mixed-Use Structures including commercial, residential, and other allowed uses are allowed and encouraged in Urban Character Villages.
3. Multi-Family Dwelling Units. (Single family, or other types of Dwelling Units may be included in an Urban Character Village, but may not be used to meet the requirement for a second land use.)
4. Government, semi-public or other civic uses.
5. Artisan and photography studios, professional offices, educational/training facilities, financial services, Personal and Business Service Shops, Retail Stores, Convenience Stores (without gasoline sales), clinics or similar uses. Individual office or commercial uses with a maximum of 8,000 square feet gross Floor Area.
6. Indoor veterinary facilities; Animal Clinics Small Indoor Use and Pet Day Care Facilities. Outdoor facilities are not allowed.
7. Restaurants, pubs, or coffee shops with a maximum of 4,000 square feet of gross Floor Area. (Drive-through restaurant facilities shall not be permitted).
8. Clubs and Lodges.
9. Health and Fitness Clubs.
10. Public plazas or gardens.
11. Recreational Facilities.
12. Public or private elementary, intermediate and high schools.
13. Adult Day/Respite Care Facilities or child care facilities.
14. Places of assembly or worship.
15. Open-Air Farmers Market. (Temporary/seasonal outdoor markets are Uses-By-Right; Permanent outdoor markets are Special Review Uses only.)
16. Hotels, Bed and Breakfast Establishments, or other commercial lodging establishments with a maximum of eight (8) guestrooms.

D. Parks, Recreation and Opens Lands

1. Natural areas.

2. Parks and Recreation Facilities, including trails, neighborhood parks, pocket parks or village greens, plazas, formal or informal gardens, playgrounds, and/or similar uses.

3. Public or private Community Facilities, including environmental centers, parks, Recreation Spaces, and other Recreational Facilities.

4. Open lands for cultivation of crops, community gardens, or similar uses.

E. Accessory/Miscellaneous

1. Accessory Buildings and Uses.
2. Satellite dish Antennas eighteen (18) inch-

es or less in diameter.

3. Active or passive solar, or other alternative energy devices.
4. Personal Wireless Facilities (Special Review Use only).

1.4 GDP REPORT

The GDP report format established by the City is designed for a standard GDP. However, for this GDP, many of the items typically addressed in the GDP are addressed in the Restated Agreement and the Performance Standards set forth herein.

A. The proposed development is complementary to and in harmony with existing development and future development plans for the area in which the proposed development is to take place by:

   1. Incorporating natural physical features into the development and providing sufficient open spaces considering the type and intensity of use;

   2. Incorporating site planning techniques that foster the implementation of the city's master plans, and encourage a land use pattern that supports a balanced transportation system, including auto, bike, and pedestrian traffic, public or mass transit, and the cost-effective delivery of other municipal services consistent with adopted plans, policies and regulations of the City;

   3. Incorporating physical design features in the development that provide a transition between the development and adjacent land uses through the provision of an attractive entryway, edges along public streets, architectural design, and appropriate height and bulk restrictions on structures;

   4. Incorporating identified Environmentally Sensitive Areas, including but not limited to, wetlands and wildlife corridors, into the development design;

   5. Incorporating elements of community-wide significance such as schools, parks, recreational trails, etc.;

   6. Incorporating public facilities or infrastructure, or cash-in-lieu, that are reasonably related to the proposed development so that the proposed development will not negatively impact the levels of service of the city's services and facilities; and

   7. Incorporating an overall plan for the design of the streetscape within the development, including landscaping, auto parking, bicycle and pedestrian circulation, architecture, placement of buildings and street furniture.

B. The property will be developed in phases. Uses-by-Right and Special Review Uses will comply with the GDP.

C. The proposed development will be complementary to and in harmony with existing development plans for the area in which the proposed development is to take place by incorporating the factors set forth under item A. 1 through 7 of this report.

1.5 DEVELOPMENT CONDITIONS

Development within the GDP shall be subject to the applicable General Conditions in Appendix 1-1 attached to this Section 1 and incorporated herein by this reference.

Development within the separate parcels or Subparcels of the GDP shall also be subject to the applicable Special Conditions set forth as an appendix to the narrative for that parcel in Sections 2 through 5 of the GDP.

APPENDIX 1-1

GENERAL CONDITIONS

PARKS

1. The possible purchase of a park site within any proposed subdivision within the GDP shall be discussed by the Applicant with the Parks and Recreation Department prior to approval of such subdivision plat.

2. Except as otherwise provided in any Special Condition, the Applicant for each subdivision plat within the GDP shall construct that portion of the trail, including any trail underpass, which is depicted on the approved master trail plan for the GDP and which is located adjacent to or within such platted area.

PLANNING

3. Every Development Project within the GDP shall comply with all applicable provisions of the GDP and the conditions of the individual project's approval.

4. Development Projects within the GDP shall be subject to the payment of all applicable fees required by the Municipal Code.

5. Unless specifically authorized pursuant to General Condition No. 9, no building permits shall be issued until all on-site and off-site public improvements required for the subject subdivision have been completed by the Applicant or others and approved by the City, or a satisfactory guarantee has been made to the City for all such incomplete public improvements in accordance with the Municipal Code, except to the extent any of such requirements is inconsistent with provisions of the PVH Agreement or the MFA.

6. All Buildings must be constructed in compliance with current Building Code requirements.

7. If any individual Development Project within the GDP does not meet the contiguity requirements of the Master Plan, to the extent applicable, the Director shall, in his or her sole discretion, be authorized to administratively grant an exception to such contiguity requirements in accordance with the applicable provisions of the Regulatory Procedures.

8. At the Developer's option, it may design upgraded street furnishings (i.e., benches, trash receptacles, etc.), regulatory signs, bus stops, street lights or other similar visible public improvements for the GDP. The City agrees to cooperate with the Developer in establishing criteria to review and approve or deny such designs and to negotiate an equitable sharing of costs for, and maintenance of, the same, except as otherwise provided in the MFA or the Service Plan for the Centerra Metropolitan Districts Nos. 1 through 4.

9. Provided that adequate water for fire protection and an acceptable all-weather access road for emergency vehicles are available to the site, the Director shall have the discretion to permit the approval of a Final Plat and/or the issuance of building permits for Development Projects within the GDP prior to: (a) signing of public improvement construction drawings by the City, provided such drawings have been submitted in final form, after consultation with City and non-City review agencies, and are ready to be executed; (b) the dedication of easements and rights-of-way for public im-

provements; and (c) the construction of public improvements. In exercising the discretion authorized, the Director shall consider the following factors:

- Whether or not practical difficulties exist;
- Whether such permits could be issued without impairing public health, safety and welfare; and
- With regard to item (b) above, reasonable assurance of the Applicant's ability to acquire the needed easement or right-of-way prior to issuance of a certificate of occupancy.

In such event, the Applicant, prior to the issuance of such building permit, shall post with the City financial security to ensure acquisition of any necessary easements and rights-of-way and completion of public improvements in a form and amount as the City may deem necessary, and the applicant shall complete and obtain City approval of items (a) through (c) listed herein prior to the issuance of any certificate of occupancy for the affected Building or Buildings.

Provided that adequate water for fire protection and an acceptable all-weather access road for emergency vehicles are available to the site, the Director shall have the discretion to approve the issuance of building permits for model homes and sales offices for any Development Projects within the GDP prior to completion of the items listed in (a), (b) and (c) above.

10. Developer has hired a consultant acceptable to the City which has created a building permit tracking system for the GDP, which includes the tracking of CEF reimbursements, fees-in-lieu of land dedication for schools and the Environmental Fees (the "Tracking System"). The City shall utilize the Tracking System for projects within the GDP for those items required to be tracked pursuant to the General or Special Conditions and, upon the Developer's request, shall provide a quarterly statement to the Developer with the results of the Tracking System for that period.

11. Development Projects within the GDP shall comply with the submittal and review requirements of the Regulatory Procedures and shall also comply with any applicable submittal and review requirements of the Municipal Code.

12. No more than a total of 10,382 Dwelling Units shall be permitted within the GDP, unless the GDP is amended pursuant to the Regulatory Procedures. Notwithstanding that each Parcel within the GDP states a maximum number of Dwelling Units, an applicant may increase by five percent (5%) the number of residential Dwelling Units within any such Parcel, provided that the overall total number of Dwellings Units therein does not exceed 10,382.

POWER

13. The Applicant shall be responsible for staking underground power lines per the requirements of the City's Electric Division, including cut and fill stakes as required. The Applicant shall be responsible for any costs associated with the relocation, raising, or lowering of the underground electrical three phase electric power lines which are necessitated by incorrect staking, changes in road design, installation of other utilities, or any other construction changes caused by the Applicant.

SANITARY SEWER

14. Except as otherwise provided in the Special Conditions, each project within the GDP shall be required to meet the City's current requirements for provision of adequate sanitary sewer facilities necessary to serve the project, which may be in the form of construction of such facilities, a payment-in-lieu of construction of such facilities or a reimbursement for previously constructed facilities which are needed to service the project.

15. The Developer has completed and submitted to the City a master sanitary sewer plan for the GDP which has addressed sanitary sewer loadings for the entire GDP as well as any off-site impacts that may result from the sanitary sewer demands associated with the GDP. With each site-specific Development Project, the Applicant shall provide to the City an analysis of the applicability of the master sanitary sewer plan to such project and, to the extent the sanitary sewer assumptions for such project differ from the assumptions of the master sanitary sewer plan (whether the assumptions are based on higher or lower demands than those of the master sanitary sewer plan), the Applicant shall provide such additional information as may be required by the City to determine the sanitary sewer impacts of the project.

STORM DRAINAGE

16. Drainage plans and improvements as required by City standards shall be provided for each Development Project within the GDP.

17. Elevation of foundation and the lot grade shall be designed to provide for adequate surface water removal.

18. Sufficient spot elevations, sketch plan, preliminary drainage report, erosion control plan and other drainage information required by the City's storm drainage criteria manual, as amended, shall be submitted in accordance with the requirements of such manual.

19. Proposed regional detention ponds that are not identified improvements of the City's master drainage plan shall be designed and constructed without financial contribution from the City's stormwater utility unless the City Council approves a master drainage plan update that includes regional detention ponds and an application for an individual project within the GDP is submitted to the City which requires construction of a regional detention pond shown on such an updated master drainage plan.

20. Written permission from the owners of each irrigation canal and reservoir accepting stormwater runoff, both as to quantity and quality, into their canals and reservoirs shall be required at the time of preliminary and final development plans, unless the City Attorney has determined that such permission is not legally required.

TRANSPORTATION

21. Except for those street design cross sections shown on Map 8 of the GDP every Development Project within the GDP shall comply with the design and construction standards set forth in LCUASS and the Transportation Plan.

22. As a condition of approval of any Development Project within the GDP, the City may impose such transportation-related requirements and/or restrictions as it deems necessary based upon the conclusions of the Traffic Study for such Development Project, applicable provisions of

the Municipal Code and LCUASS and any applicable Special Conditions or General Conditions.

23. Notwithstanding any conceptual information included in the GDP, street layout and alignments, access locations, intersection configurations and intersection operations (traffic control) shall be finally determined in conjunction with the review and approval of individual Development Projects within the GDP.

24. Subject to the provisions of General Condition No. 9, if off-site right-of-way is required for transportation facilities needed to meet City ordinances, the Applicant shall submit, prior to approval of any Preliminary Plat, preliminary development plan or preliminary public improvement construction plans, a "Letter of Intent" from the affected off-site property owner acknowledging its intent to dedicate to the City such right-of-way, in a form acceptable to the City Attorney.

25. Subject to the provisions of General Condition No. 9, the off-site right-of-way needed to serve each Development Project shall be acquired and dedicated to the City by the Applicant in a form acceptable to the City and at no cost to the City prior to the approval of the Final Plat or final construction plans (for each project) by the Transportation Engineering Division. Prior to or concurrent with approval of any final subdivision plat for any Development Project subject to the GDP, all right-of-way required by the then current City standards for said subdivision shall be dedicated to the City at no cost to the City. Prior to construction of a City-funded project to improve any roadways adjacent to the GDP, the right-of-way necessary for the roadway improvements shall be dedicated by the Applicant to the City in a form acceptable to the City and at no cost to the City.

26. Notwithstanding any information presented in the previous traffic studies for the GDP, Applicant shall provide any additional traffic information, corrections, revisions and analysis required by the City to verify compliance with applicable standards at the time of development application submittal.

27. General ACF Regulations:

27.1 All Development Projects within the GDP shall comply with the ACF Regulations except as otherwise provided herein or in any applicable Special Condition of this GDP and except to the extent less restrictive regulations are adopted, in which case those less restrictive regulations shall apply.

27.2 In connection with development of the GDP, the following State and federal highways shall be exempt from compliance with the ACF Regulations during the Vesting Period:

(i) I-25 and its interchanges (which, pursuant to City policies are presently exempt from ACF Regulations); and

(ii) U.S. 34 and its intersections.

27.3 The evaluation of projects within the GDP for compliance with the ACF Regulations and any approved exceptions thereto shall occur at the time of submittal of the earliest of the following items: a preliminary or minor subdivision plat; building permit application; or Special Review Use application. A Traffic Study, together with any additional traffic information, corrections, revisions and analysis required by the City to

verify compliance, shall be submitted with each separate project within the GDP, in accordance with LCUASS standards.

27.4 Based on the project's Traffic Study, each project shall make all street improvements within one (1) mile from the closest point on a boundary of each such project necessary to comply with the ACF Regulations and any approved exceptions thereto, and except where the necessary link improvements (as opposed to intersection improvements) are not required or not shown on the Transportation Plan**.** If such link improvements are not required or not shown on the Transportation Plan, the Applicant shall not be obligated to construct any transportation link improvements over and above those shown on the Transportation Plan.

27.5 The provisions of General Condition No. 27.4 above, which are based on the Transportation Plan, shall apply to all Development Projects within the GDP only for a twenty (20)-year period, commencing on June 30, 2006 and provided that both of the following conditions are met by each such project submitted to the City: (a) the traffic generated by such project, when combined with traffic generated by all other approved Development Projects within the GDP, does not exceed 184,235 total daily trip ends (which represents approximately eighty percent [80%] of the estimated total daily trip ends from the GDP); and (b) the uses within such project, when combined with uses within all other approved Development Projects within the GDP, do not exceed either a total of 9,856,800 non-residential square feet or a total of 6177 Dwelling Units, representing approximately eighty percent (80%) of the estimated non-residential square footage and eighty percent (80%) of the estimated Dwelling Units, respectively, which are likely to be constructed within the GDP.

27.6 Prior to the end of the 5th, 10th, 14th, 17th, 19th and 20th years after commencement of the twenty (20)-year period referenced in General Condition No. 27.5 above, the Developer shall provide to the Director in writing: (a) the total daily trip ends generated by Development Projects in the GDP; (b) the total amount of the non-residential square feet in the approved Development Projects in the GDP; and (c) the total number of Dwelling Units constructed within the GDP.

28. Adequate shoulder width shall be provided as determined by the City Engineer and CDOT adjacent to all right turn lanes on US 34 at the proposed accesses.

29. In the event that the Transportation Plan is amended to eliminate roadway improvements that are required to be constructed pursuant to a General or Special Condition, the Public Works Director shall be authorized to administratively waive or modify the requirements of any such condition.

30. The Applicant shall obtain, at no cost to the City, all FHWA and CDOT approvals needed for any underpass of I-25 proposed in connection with a project within the GDP. Written documentation of these approvals must be provided to the City by the Applicant prior to the approval of any Final Plat or final improvement construction plans that include this future underpass.

31. Each Preliminary Plat application that includes improvements to any County road shall be accompanied by a letter of concurrence from the

County Engineering Department stating that it has reviewed the preliminary design for the work that is proposed on the County roads. In addition, the letter shall clarify whether or not the County supports the construction of these proposed roadway improvements, and that it anticipates issuing formal approval of the construction drawings after receipt and review of the final plan.

WATER

32. As per timing language designated within the applicable subdivision development agreement, the Applicant agrees to meet raw water requirements for such subdivision in compliance with the Municipal Code. Nothing herein shall be construed as preventing the Applicant from seeking a waiver or modification of water rights requirements as provided in the Municipal Code.

WATER AND SANITARY SEWER

33. All public water and wastewater improvements constructed in conjunction with the GDP shall be in conformance with the Municipal Code, the City's water and wastewater master plan and technical development standards for such improvements in effect at the time of development application submittal.

ACQUISITION OF EASEMENTS/ RIGHTS-OF-WAY

34. Development of the GDP is expected to require the construction and installation of arterial streets, sanitary sewer, water and stormwater trunk and interceptor lines, a sanitary sewer lift station and other significant public improvements which will provide coordinated, regional improvements benefiting properties other than the GDP. For those improvements, or a portion of them, which are located beyond the boundaries of the GDP and are not contemplated in the MFA or in the Centerra Metropolitan Districts' Service Plan to be constructed by the Centerra Metropolitan Districts, Applicants of projects within the GDP shall use good faith efforts to obtain required easements or rights-of-way for the same in a reasonably direct route, including paying fair market value compensation therefor. If an Applicant is unable to so obtain required easements or rights-of-way, the City, in good faith, will consider condemnation pursuant to then current City policy to obtain the same. If condemnation action is taken by the City, the actual costs to the City, including attorneys' fees, therefor shall be paid by the Applicant whose project triggered the condemnation, unless the public improvement for which such easement or right-of-way is needed is eligible for reimbursement under the Municipal Code.

In the event the City refuses to condemn any easement or right-of-way necessary to receive a positive determination of adequacy for any off-site public facilities, the City agrees that the Applicant shall not be required, as a condition of development approval, to construct or install the improvement for which such easement or right-of-way is needed, provided that the existing off-site facilities and any facilities to be constructed with the proposed development are reasonably determined by the City, based upon conclusions of the applicable study for the proposed development, to safely service such development. In that event, the City may require that the Applicant escrow with the City, in cash or security acceptable to the City, a sum equal to the cost of the necessary improvements and the fair market value of the cost of any easement or right-of-way required for such improvements, which escrow shall only be

used for such purposes. On the anniversary date of the posting of such escrow and continuing each year thereafter for a period not to exceed ten (10) years from the date the escrow is established, the amount of such escrow shall be increased or decreased by the Applicant, as set forth hereafter, unless, prior to such anniversary date, the City has acquired the relevant easements or rights-of-way and the public improvements for which the escrow was established have been completed. The escrow shall be increased or decreased annually as aforesaid by an amount equal to the percentage of increase or decrease in the Consumer's Price Index over the preceding year. "Consumer Price Index" shall mean the Revised Consumer's Price Index for the Cities of Denver and Boulder for construction, published by the Bureau of Labor Statistics of the United States Department of Labor. Escrowed monies shall be returned to the Applicant only to the extent that during such ten (10)-year period, right-of-way or public improvements which were the subject of the escrow have been respectively acquired or constructed by the Applicant or third parties. At the expiration of such ten (10)-year period, all remaining escrowed monies shall be released from escrow and shall be deposited into a City capital improvement fund to be used for the acquisition of the needed right-of-way or easement and/or the construction of other public improvements within or adjacent to the GDP.

SCHOOL DISTRICT

35. As set forth in the Restated Agreement, the Developer has dedicated to the School District a 30-acre middle school site in exchange for which it shall be reimbursed by the City, to the extent paid, the School District's fees in lieu of land dedication ("School Fees") for two thousand eighty-five (2,085) Dwelling Units in the GDP. The Developer has also agreed to dedicate two 10-acre elementary school sites to the School District as embodied in the Special Conditions for Parcels A and C, respectively. For each such elementary school site dedication, the Developer shall be reimbursed, to the extent paid, School Fees for an additional six hundred ninety-five (695) Dwelling Units in the GDP. The School Fees shall be collected by the City at the time of building permit issuance for any residential Dwelling Unit in the GDP in accordance with the then-current rates for School Fees set forth in the School District IGA and any amendments thereto, and any applicable reimbursement shall be promptly made by the City to the Developer. School Fees for which the Developer is not entitled to be reimbursed shall be remitted to the School District in accordance with the City's normal practice regarding the same.

SIGNS

36. All existing signs within the GDP that do not have sign permits issued by the City shall have sign permits issued and shall comply with any applicable, approved planned sign program or, if none, applicable provisions of the Municipal Code.

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SECTION 2
PARCEL A

2.1 INTRODUCTION

Parcel A is approximately 1166 acres in size and includes Parcels A, B and C of the East Region of the Millennium Addition, Tract A of the McWhinney Addition, Parcels C and D of the Savanna Addition and the East and Central Parcels of the Grange Addition.

This site is located at the northeast corner of I-25 and US 34 (East Eisenhower Boulevard). The site is divided by the Union Pacific Railroad tracks, which run roughly from the northwest corner of the site to the southeast corner of the site. The Greeley – Loveland Irrigation Canal and the Farmers Ditch cross the southern portion of the site. Refer to Map 1 and Map 4 in Section 11, for the location of Parcel A.

2.2 LAND USE INFORMATION

2.2.1 Existing Land Uses

Parcel A-3 is currently being developed as a regional shopping mall. The balance of Parcel A has existing agricultural activities and related uses and mineral extraction uses (2 oil wells). The existing agricultural uses are to be allowed to continue as legal non-conforming uses within this parcel.

There are two existing oil wells, buried concrete vaults and burn-off valve assemblies as well as four oil tanks near the northeast corner of this parcel. To the extent that the Developer acquires control of the mineral rights, the oil wells will be abandoned and the related structures listed above, will be removed and disposed of properly off-site prior to issuance of a building permit for development within 350' of the wells.

According to the Mineral Extraction Report prepared by Terracon on December 24, 1998 and the Mineral Extraction Report prepared by Earth Engineering Consultants, Inc. on March 29, 2007, there are no economically viable sand and gravel resources to be extracted from this parcel.

2.2.2 Proposed Land Uses

The land use categories for Parcel A include Institutional/Civic/Public, Light Commercial Uses, Heavy Commercial Uses, Light Industrial Uses, Heavy Industrial Uses (a maximum of 8,100,000 gross square feet of commercial and industrial uses), Mixed Use Village Center, Residential Mixed Use Neighborhood (MUN), Residential Uses (not in an MUN) and Parks and Open Space Uses. The total number of permitted Dwelling Units in Parcel A is 3,781, however, each Subparcel in Parcel A in which residential uses are allowed is also subject to a total number of Dwelling Units therein as set forth below:

Parcel A-1	1,250
Parcel A-2	880
Parcel A-3	1,000
Parcel A-5	632
Parcel A-6	664
Parcel A-7	127
Parcel A-8	688

It is intended that Parcels A-6 and A-7 develop primarily with residential uses and that non-residential uses in such parcels, although permitted, will be secondary and complementary to the residential uses.

Refer to Section 1.3 for a detailed list of the specific uses within each land use category, and the Land Use Legend on Map 4 in Section 11 for the identification of each land use category as either a Use-by-Right or a Special Review Use.

Section 12 contains the review processes applicable to such uses. Please refer to Section 12.1.2 and General Condition No. 12 for information on the ability to increase the number of Dwelling Units.

2.2.3 Density

The maximum density of residential developments in Parcel A is provided on Map 4 in Section 11 and in Sections 9 and 10.

Density within a 300-foot wide strip along a portion of the north edge of Parcel A-5 and along the east

edge of Parcel A-5 is limited to 3 Dwelling Units per gross acre (see Map 4 in Section 11). Density within a 300-foot wide strip along a portion of the east edge of Parcel A-2 is limited to 10 Dwelling Units per gross acre (see Map 4 in Section 11).

2.2.4 Airport Influence Area

Any Special Conditions applicable to development in Parcel A because of its proximity to the Airport are included in the Special Conditions attached as Appendix 2-1 attached to this Section 2.

2.3 CIRCULATION

2.3.1 Site Access

Subject to City approval of specific Development Projects, primary access to the Subparcels of Parcel A will be from US 34. Additional access points will be from High Plains Boulevard on the east and from Crossroads Boulevard on the north. There will also potentially be a future access from the west via the extension of Kendall Parkway under I-25.

2.3.2 Internal Circulation

An integrated network and hierarchy of transportation ways will be provided for automobiles, pedestrians, bicyclists, and public transportation.

Centerra Parkway is the primary access/circulation road between US 34 (East Eisenhower Boulevard) and Crossroads Boulevard that will provide access to development sites within the parcel. Additional access points and roadways are anticipated to accommodate efficient and safe traffic flow.

Refer to Section 7 for detailed information on access, circulation, and parking.

The Conceptual Amenity Map (Map 2 in Section 11) illustrates a proposed, conceptual trail system. Although not all buffer and open space areas have trails shown on this map, they will be allowed if determined appropriate in the applicable ESAR.

Details on any proposed trail system shall be provided with applications for Preliminary Plats and/or Final Plat review or applications for a building permit. Development within Subparcel A-1 shall comply with the intent of the US 34 Corridor Plan. Refer to Section 6.9 for additional view corridor guidelines.

2.3.3 Standards

The street network for Parcel A is intended to develop as recommended in the Transportation Plan.

All streets shall comply with LCUASS as described in Section 7 and General Condition No. 21.

2.4 PUBLIC AND PRIVATE UTILITIES

The following subsections indicate the utility providers currently available to serve Parcel A. The provision of services by other utility providers will be determined at the time of development.

2.4.1 Water and Sewer

The City will provide water and sewer service. Water line extensions to serve this property are located under I-25 near the proposed Kendall Parkway and at McWhinney Boulevard. These water line extensions continue east along Sky Pond Drive and Kendall Parkway, then north in Centerra Parkway to the north line of Parcel A. The water line system then extends east and north to the City's elevated tank located south of Crossroads Boulevard. Sanitary sewer service is provided by a combination of a gravity system in conjunction with a lift station. A sanitary sewer trunk main crosses I-25 just north of The Greeley and Loveland Irrigation Canal crossing. This main then runs north in Centerra Parkway. A lift station and gravity sewer will provide service to areas along US 34 and areas east of Centerra Parkway and north of the Union Pacific Railroad. Details of services will be worked out at time of preliminary and/or final development plan or at the time of application for a building permit.

2.4.2 Storm Drainage

Detention shall either be provided on individual sites or in regional detention ponds in accordance with the East I-25 Basin Master Drainage Plan or the City's Storm Drainage Master Plan.

2.4.3 Electric

The City's Water and Power Department will provide electricity. A 600 amp underground feeder is located along the north side of US 34, and a 200 amp underground feeder is located at the southern boundary of the Crossroads Business Park. Approximately the eastern one-quarter of this parcel is located within the Poudre Valley Rural Electric Association service territory.

A surcharge of 5% will be added to all bills for the sale of electric power to uses established after January 31, 1987 within the service territory of the Poudre Valley Rural Electric Association for a period of ten years after the effective date of the annexation of the affected Parcels or portions thereof. For Parcels A-1 through A-4 and A8, except that portion of Parcel A-1 known as the Central Parcel of the Grange Addition, the surcharge will expire October 3, 2010 (Note that the Central Parcel of the Grange Addition is not subject to the surcharge). For Parcel A-5, the surcharge will expire Ju1y 11, 2016. For Parcels A-6 and A-7, the surcharge will expire July 15, 2018.

In the event that electric power for construction is not be available, generators will have to be used for construction power. Also, an engineering deposit in the then current amount, site/utility plans, an electrical one-line drawing and construction drawings must be submitted to the Water and Power Department for the design of the underground electric extension to the building.

2.4.4 Natural Gas

It is presently anticipated that Xcel Energy Company will provide natural gas.

2.4.5 Telephone

It is presently anticipated that Qwest Communications will provide telephone and telecommunications services.

2.4.6 Irrigation Ditches

There are two existing irrigation ditches on the property, the Farmers Ditch and The Greeley and Loveland Irrigation Canal. These existing irrigation ditches will be maintained in place, boxed, lined or re-aligned as necessary. If any realignment or physical change is proposed in the ditch or improvement is proposed to any portion of an irrigation ditch, the ditch company will be contacted for approval. A copy of a letter from the ditch company shall be submitted to the City prior to any approval that directly impacts the ditch. Irrigation ditches may be used as a raw water supply for irrigation of open space areas.

2.4.7 Railroads

The Union Pacific Railroad tracks run through Parcel A roughly from the northwest corner of the site to the southeast corner of the site (see Map 4 in Section 11). In order to mitigate railroad noise and vibration, the Applicant shall provide a bufferyard between Buildings for residential occupancy on lots in Parcel A and the edge of the railroad right-of-way in accordance with the requirements set forth in Section 15, Appendix A of the GDP. See also Special Condition No. 18 in Appendix 2-1.

2.5 NATURAL AREAS

Any Environmentally Sensitive Areas within Parcel A have been identified in an ESAR. The ESARs applicable to Parcel A are provided in Section 14 of the GDP.

For Parcels A-1 and A-4, please refer to the ESAR prepared by Ecological Resource Consultants dated July 18, 2003 and revised November 20, 2003. Please refer to the ESAR prepared by FlyWater Consulting, Inc. dated October 11, 2007 for the southeast portion of Parcel A-1, which is known as the Central Parcel of the Grange Addition.
For Parcels A-2, A3 and A-8, please refer to the ESAR prepared by Cedar Creek Associates dated January, 1999.

For Parcel A-5, please refer to the ESAR prepared by Ecological Resource Consultants dated June 8,

2004.
For Parcels A-6 and A-7, please refer to the ESAR prepared by FlyWater Consulting, Inc. dated October 11, 2007.

A unique feature within Parcel A is the drainage area at the southwest corner which has been identified as a high quality habitat. A mixture of wetlands and uplands exists within this area and includes large, mature cottonwoods. This area will be protected from development within this parcel by a 75-foot buffer (as shown on Map 4 in Section 11). The mature cottonwoods will also be preserved.

2.6 LANDFORM MODIFICATION

Parcel A is relatively flat. Landform modification will occur in order to create visual interest through the site to provide screening as necessary, and/or to provide for proper management of drainage. The existing drainage pattern running roughly from the northeast to the southwest corner of the parcel will be preserved.

Refer to the Conceptual Utility/Grading Map, (Map 3 in Section 11) as well as Section 6.10.2 for additional grading information and amounts of anticipated cut and fill.

2.7 DEVELOPMENT CONDITIONS

Development within Parcel A shall be subject to the applicable General Conditions in Appendix 1-1 of Section 1 and the applicable Performance Standards in Sections 6 through 10.

Development within Parcel A shall also be subject to the applicable Special Conditions in Appendix 2-2 attached to this Section 2 and incorporated herein by this reference.

APPENDIX 2-1

SPECIAL CONDITIONS FOR PARCEL A

AIRPORT

Special Condition No. 1 (Parcels A-1, A-3, A-4 and A-8):

Those portions of Parcel A that are located within the boundaries of the Airport Influence Area (including portions of Parcels A-1, A-3 and A-8 and all of Parcel A-4) as depicted on Map 4 in Section 11 of the GDP are subject to that Avigation Easement recorded in the Larimer County Records on July 9, 2004 at Reception No. 2004-0066598.

Special Condition No. 2 (Parcels A-1, A-3, A-4 and A-8):

Those portions of Parcel A that are located within the Airport Influence Area may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations, therefore, all subdivision plats for property that is wholly or partially located within the boundaries of the Airport Influence Area as depicted on Map 4 in Section 11 of the GDP shall contain the following language: "All or a portion of the property being subdivided may be located within the Airport Influence Area of the Fort Collins-Loveland Municipal Airport. Such property may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations."

Special Condition No. 3 (Parcels A-1, A-3, A-4 and A-8):

No structures located within those portions of Parcel A that are located within the Airport Influence Area as shown on Map 4 in Section 11 of the GDP shall extend into restricted air space as defined by FAA Regulation, Part 77, and the Applicant shall comply with all applicable notice requirements of such FAA Regulation.

Special Condition No. 4 (Parcels A-1, A-3, A-4 and A-8):

Except to the extent otherwise required by applicable Federal law, all new bodies of water within the Airport Influence Area as depicted on Map 4 in Section 11 of the GDP and within a radius of 10,000 feet from the end of any runway of the Airport, shall be prohibited provided that: (1) they are larger than one-quarter acre in size; (2) they are installed after Ju1y 11, 2006; (3) they are designed to hold or retain water permanently or over extended periods of time; and (4) they are bird attractants. To the extent permitted by Federal law, this prohibition shall not apply to a relocation or expansion of any existing water body or to detention ponds that have outlet structures designed to prevent the permanent containment of water.

Special Condition No. 5 (Parcels A-1, A-3, A-4 and A-8):

No exterior lighting, reflective material, smoke emissions or electronic emissions shall be permitted in the Airport Influence Area as depicted on Map 4 in Section 11 of the GDP which would materially lower pilots' visibility or cause material interference with the Airport's navigation and communication systems. For purposes of this condition, "reflective material" is defined as glazing with a reflectivity of 65% or greater.

Special Condition No. 6 (Parcels A-1, A-3, A-4 and A-8):

The Developer shall include the following disclosure statement in all of its contracts for the sale of any of the property located within Parcel A of the GDP which is also within the Airport Influence Area as shown on Map 4 in Section 11 and further, shall include a provision in such sales contracts that the purchaser thereof shall include the following disclosure statement in all of its subsequent contracts for sale of such property: "The property subject to this contract may be located within the Airport Influence Area of the Fort Collins-Loveland Municipal Airport. Such property may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations." Each such contract

subject to this Special Condition shall expressly provide that the disclosure provision survives closing and is enforceable at law or in equity by the City as a third party beneficiary of such contract.

FEES/CREDITS/REIMBURSEMENTS

Special Condition No. 7 (Parcels A-1, A-3 and A-4):

Pursuant to the MFA, projects within Parcels A-1, A-3 and A-4 (MFA Commercial Area) shall not be eligible to receive reimbursement from the City to which they might otherwise be entitled pursuant to City Regulations, as defined in the MFA, for the design and construction of public improvements therein, with the exception of the following reimbursements:

1. The City's obligation to reimburse Centerra Properties West, LLC for certain costs incurred for a preliminary design of the Arterial Street Improvements. Refer to Section 6.5 of the PVH Agreement for specific terms.

2. Reimbursements for public improvements which were completed prior to January 20, 2004. Refer to Sections 12.3 and 13.5 of the MFA for specific terms.

3. Reimbursements for public improvements completed in connection with Development Projects not within the MFA Commercial Area, unless such public improvements are not eligible for reimbursement pursuant to the MFA, Section 12.3.

Special Condition No. 8 (Parcels A-1, A-3 and A-4):

Centerra Properties West, LLC and its affiliates are entitled to receive certain credits against City water system impact fees and City capital expansion fees for streets in connection with Development Projects within Parcels A-1, A-3 and A-4 (MFA Commercial Area) pursuant to the terms of the MFA. Refer to Section 12.1 of the MFA for the specific terms.

Special Condition No. 9 (Parcels A-1, A-3 and A-4):

Except as provided in Special Conditions Nos. 7 and 8 above, the Applicant of every project within Parcels A-1, A-3 and A-4 (MFA Commercial Area) shall be responsible for payment of all applicable City development fees and use taxes and for satisfaction of all raw water requirements. Refer to Section 12.3 of the MFA for the specific terms.

Special Condition No. 10 (Parcels A-2, A-5 and A-8):

With the exception of the local street segment as defined in LCUASS, all streets that are included in the City's Transportation Capital Improvement Plan, as part of the Transportation Plan ("CIP"), shall be deemed part of the City's street capital expansion fee system and eligible for street CEF reimbursement consistent with City policy, which City policy presently designates only those streets classified as arterial and above as part of such CIP system and eligible for reimbursement. To the extent the Developer, as a condition of the development of Parcels A-2, A-5 or A-8, has designed and/or constructed, or caused to be designed and constructed, improvements to such streets, it shall be entitled to a reimbursement therefor but such reimbursement shall be in an amount equal to the costs incurred by or on behalf of the Developer in the design and construction of such streets (including the cost of off-site easement acquisition), plus interest at the average rate received by the City on its investments over the twelve (12)-month period preceding the date such interest commences to accrue, compounded annually and accruing from the date of completion and acceptance of the eligible improvement to the date reimbursement has been made. The Developer shall be reimbursed an amount equal to eighty percent (80%) of each applicable street CEF actually paid by any person or entity other than the City for each building permit within all projects in the GDP, and such reimbursement shall continue to apply until the Developer has received reimbursements in an amount equal to the total cost, as calculated above, of those eligible streets designed and constructed, or caused to be designed and constructed, by the Developer. The remaining twenty percent (20%) of each applicable street CEF paid at building permit issuance may be used by the City to fund capital transportation costs in other areas of the City, as it deems appropriate. Reimbursements shall be made

by the City to the Developer on a quarterly basis. Notwithstanding the foregoing, the Developer shall not be entitled to any reimbursement from the City under this Special Condition for those "Public Improvements" which are not eligible for reimbursement from the City under Section 12.3 of the MFA.

Special Condition No. 11 (Parcel A-4):

Centerra Properties West, LLC and its affiliates are entitled to receive a deferral of certain City system impact fees and capital expansion fees for a defined period in connection with the development of the approved lifestyle center in Parcel A-4 pursuant to the terms of the MFA. Refer to Section 12.2 of the MFA for specific terms.

NOTIFICATION OF MINERAL ESTATE OWNERS

Special Condition No. 12 (Parcels A-1, A-6 and A-7):

The first application for a subdivision plat which includes any portion of that part of Parcel A-1 known as the Central Parcel of the Grange Addition or any portion of Parcels A-6 or A-7 shall require a public hearing before the Planning Commission at least thirty (30) days prior to the administrative approval of such subdivision plat, for the limited purpose of hearing objections of mineral estate owners, as such owners are defined by C.R.S. §24-65.5-102(5). Such public hearing shall constitute the "initial public hearing" for the subdivision plat application; notice thereof shall be given in accordance with the requirements of C.R.S. §24-65.5-103 and, except as required by C.R.S. §24-65.5-103(1.5), no further notice to mineral estate owners within such subdivision plat shall be given. Prior to final approval of the subdivision plat for which notice was given pursuant to this Special Condition, the Applicant shall provide the City with a written certification in accordance with the requirements of C.R.S. §24-65.5-103.3.

PLANNING

Special Condition No. 13 (Parcel A):

Developer shall provide sufficient Personal and Business Service Shops in Parcel A to service the Residential Uses in Parcel A.

Special Condition No. 14 (Parcels A-1 and A-3):

Residential uses which are not located in a Mixed-Use Structure shall not occupy more than eighteen (18) acres of land within Parcel A-1, nor shall such uses occupy more than a total of one hundred seven (107) acres within Parcels A-1 and A-3 combined.

Special Condition No. 15 (Parcel A-1):

Residential uses within Parcel A-1 which are not located in a Mixed-Use Structure shall be integrated into the Mixed Use Village Center project so that they have physical connections, and visually relate, to the other land use components within such project.

Special Condition No. 16 (Parcels A-6 and A-7):

Multi-family Dwellings and Single Family Dwellings within Parcels A-6 and A-7 shall be separated by an intervening public street, private road subject to a public access easement or open space a minimum of fifty feet (50') wide.

Special Condition No. 17 (Parcel A-1)

For a retail use occupying a minimum of 75,000 SF which utilizes a roof mounted US flag as part of their corporate branding, the maximum building and structure heights listed in Table 6-2 shall only apply to the building and not to the roof mounted flag pole, which shall not exceed a height of 35 feet above the highest part of the roof of the building.

POWER

Special Condition No. 18 (Parcels A-6 and A-7):

All subdivision plats for property within Parcels A-6 and A-7 shall include the following note: "The property included on this plat is located within the certified service territory of the Poudre Valley Rural Electric Association and is, therefore, subject to a five percent (5%) surcharge on electrical energy until (insert date 10 years after final approval of the Grange Addition), 2018."

RAILROAD

Special Condition No. 19 (Parcel A):

For the purpose of mitigating general railroad noise and vibration, the Applicant shall provide a buffer-yard between Buildings for residential occupancy on lots in Parcel A and the Union Pacific Railroad right-of-way in accordance with the requirements set forth in Section 15, Appendix A of the GDP.

Special Condition No. 20 (Parcels A-1, A-3 and A-8):

The Union Pacific Railroad tracks run through Parcel A generally from the northwest corner of such parcel to the southeast corner of the parcel. Residents adjacent to such railroad tracks may experience noise and vibration effects resulting from the passage of trains on such tracks in close proximity to adjacent Lots. A notice reciting the above-stated potential impacts from such railroad tracks shall be placed on each subdivision plat which includes any portion of Parcels A-1, A-3, or A-8 within 500 feet of the railroad right-of-way.

SCHOOL DISTRICT

Special Condition No. 21 (Parcel A-1):

The development of a Mixed Use Village Center in Parcel A-1 shall not require the dedication of land for a school site, however, the School District will assess fees in lieu of land dedication in accordance with the School District IGA as Category B (5 or more attached units).

Special Condition No. 22 (Parcels A-2 and A-8):

The Developer shall dedicate one ten (10)-acre elementary school site within Parcel A-2 or A-8 to the School District in accordance with the requirements of the School District IGA, the Municipal Code to the extent not inconsistent with the School District IGA, and the site selection criteria of the School District established by its current Master Plan. So long as the dedicated site provides two points of roadway access and does not contain on-site detention, the size of such site shall be ten (10) acres. If the foregoing conditions are not met with the site, the acreage may be increased, at the School District's discretion, up to a total of twelve (12) acres for such site, as needed to provide sufficient accessibility and developable acreage. The timing of the dedication shall be in accordance with the requirements of the Municipal Code and the School District IGA. Any land dedicated for a school site, which land is subsequently conveyed to the Developer or others upon the School District's determination that the land is not suitable for school purposes, shall remain subject to the Performance Standards and allowed uses for Parcels A-2 and A-8 following such conveyance. All land dedicated and used for school purposes shall remain subject to the Performance Standards to the extent consistent with State law.

In accordance with an agreement between the Developer and the School District, the School District has agreed to work in good faith with the Centerra DRC (or its assignee) to provide a design for the school on the dedicated school site generally consistent with the architectural theme of the GDP, subject to budgetary constraints of the School District and to the final decision of the Board of Education of the School District.

TRANSPORTATION

Special Condition No. 23 (Parcel A):

To the extent that street and/or trail crossings of the existing railroads are required as a condition of a Development Project within Parcel A to meet the ACF Regulations and any approved exceptions thereto or other applicable Municipal Code requirements, the City shall be responsible for processing

the requests for Public Utilities Commission approval of such crossings, and the Applicant shall be responsible for the payment of the City's reasonable costs incurred therefor, including reasonable attorney's fees.

Special Condition No. 24 (Parcel A-1):

Unless designed and constructed by others, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, Kendall Parkway from Centerra Parkway to US 34 to the standards required by the Transportation Plan and LCUASS. The necessity, timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within that portion of Parcel A-1 formerly known as the Central Parcel on the Grange Addition.

Special Condition No. 25 (Parcels A-1 through A-4 and A-8):

Unless designed and constructed by others or by the City pursuant to the PVH Agreement, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcels A-1 through A-4 and A-8.

(a) Rocky Mountain Avenue from north of the Union Pacific Railroad crossing to Crossroads Boulevard.

(b) Kendall Parkway from Boyd Lake Avenue to Rocky Mountain Avenue.

(c) CR 24 (East 29th Street) from Rocky Mountain Avenue under I-25 to the north/south major arterial roadway in Parcel A.

(d) Boyd Lake Avenue from CR 20C East 5th Street) to CR 24E (East 37th Street).

(e) CR 20C (East 5th Street) from Boyd Lake Avenue to CR 9E (Sculptor Drive).

(f) CR 9E (Sculptor Drive) from US 34 to State Highway 402.

Special Condition No. 26 (Parcel A-5):

Prior to or concurrent with the approval of any Development Project or Final Plat within Parcel A-5, or as otherwise approved by the City Engineer, the owner shall dedicate, at no cost to the City, the right-of-way necessary for all street improvements either within or adjacent to said Development Project or Final Plat that are shown on the Transportation Plan.

Special Condition No. 27 (Parcel A-5):

Unless designed and constructed by others or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcel A-5.

(a) County Road 3 from the north boundary of Parcel A-5 to US 34.

(b) Boyd Lake Avenue adjacent to Parcel C-4.

(c) Kendall Parkway from Boyd Lake Avenue to Rocky Mountain Avenue.

Special Condition No. 28 (Parcels A-6 and A-7):

Unless designed and constructed by others, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant

shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The necessity, timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcels A-6 and A-7.

(a) High Plains Boulevard (LCR3) adjacent to Parcel A-7 to US 34.

(b) Centerra Parkway from Kendall Parkway to Crossroads Boulevard.

(c) An east-west collector street from Centerra Parkway to High Plains Boulevard (LCR3).

UTILITIES

Special Condition No. 29 (Parcel A-1):

At least thirty (30) days prior to the public hearing before the Planning Commission for the first Development Project within a Mixed Use Village Center, the Developer shall submit water demand projections and wastewater load projections for said project to the City's Water and Power Department. Based on such projections, the City shall update its water model to reflect the water demand projections for the Development Project and the Developer shall update its wastewater model for property east of I-25 to reflect the wastewater load projections for the Development Project. The updated models shall be reviewed and approved by the City's Water and Power Department prior to the public hearing of the City Council on the Development Project. Pending the Water and Power Department's approval of the updated models, which include the 850 dwelling units proposed in Parcel A-1, the Developer shall be responsible for capacity increases in water and wastewater conveyance components including all piping and sanitary sewer lift stations as well as I-25 crossings, but excluding water and wastewater treatment facilities.

Special Condition No. 30 (Parcel A-1):

Unless designed and constructed by others or otherwise approved by the Director of the Water and Power Department, the Developer shall design and construct, or cause to be designed and constructed, at no cost to the City, the following water and sanitary sewer improvements to City standards. The exact size and location of each improvement and the timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within that portion of Parcel A-1 known as the Central Parcel of the Grange Addition.

(a) A water main in Kendall Parkway from Centerra Parkway to US 34.

(b) A water main along the north side of US 34 from Centerra Parkway to the east boundary of Parcel A-1 with a connection to the water main described in subparagraph (a) above.

(c) A water main through that portion of Parcel A-1 known as the Central Parcel of the Grange Addition with two points of connection.

(d) Extension of the existing wastewater main located near US 34 and Centerra Parkway north of the Union Pacific Railroad tracks to the east boundary of Parcel A-1 and north to the north boundary of Parcel A-1, with sufficient capacity to accommodate wastewater flows from that portion of Parcel A-1 known as the Central Parcel of the Grange Addition and future development adjacent to such property.

(e) The Interchange Lift Station with appropriate mains and force mains, as described in the Technical Supplement to the Centerra Wastewater Master Plan dated February, 2005.

Special Condition No. 31 (Parcels A-6 and A-7):

Unless designed and constructed by others or otherwise approved by the Director of the Water and Power Department, the Developer shall design and construct, or cause to be designed and constructed at no cost to the City, the following water and sanitary sewer improvements to City standards. The exact size, location and capacity of each improvement and the timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcels A-6 and A-7.

(a) A water main along the north side of US 34 from Centerra Parkway to the easternmost improvement within Parcel A-7.
(b) A water main through Parcels A-6 and A-7 with two points of connection to the water main described in subparagraph (a) above.

(c) A secondary water main connection between a water main within Parcels A-6 and A-7 and a water main in Centerra Parkway.

(d) Extension of the existing wastewater main located near US 34 and Centerra Parkway north of the Union Pacific Railroad tracks to the easternmost improvement within Parcel A-7, with sufficient capacity to accommodate wastewater flows from Parcels A-6 and A-7 and future development adjacent to such parcels.

(e) The Interchange Lift Station with appropriate mains and force mains, as described in the Technical Supplement to the Centerra Wastewater Master Plan dated February, 2005.

Special Condition No. 32 (Parcels A-1, A-6 and A-7):

Any reimbursement for the East Side Lift Station shall be in accordance with that Reimbursement Agreement by and between the Developer and the City of Loveland Water Department dated September 7, 2004.

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SECTION 3

PARCEL B

3.1 INTRODUCTION

Parcel B is approximately 883 acres in size and includes the east portion of Parcel D of the Millennium Addition, northwest region of the Millennium Addition, the Twin Peaks Addition, the Range View Addition, the Myers Group Partnership #949 Addition, portions of the Savanna Addition, portions of the McWhinney Addition and the West Parcel and Cloverleaf East Parcel of the Grange Addition.

Parcel B is generally located east and south of the Houts Reservoir and Equalizer Lake, south of Crossroads Boulevard, west of I-25 and north of US 34, with one Subparcel located south of US 34. Refer to Map 1 and Map 5 in Section 11 for the location of Parcel B.

3.2 LAND USE INFORMATION

3.2.1 Existing Land Uses

The historical uses within Parcel B were primarily agricultural activities. There are currently two existing office buildings in Parcel B-4, one office building in Parcel B-1, a mixed used building in Parcel B-6, a regional hospital in Parcel B-11, several buildings in Parcel B-12, a dog track on Parcel B-14 and a parking lot on a portion of Parcel B-7. The existing agricultural uses shall be allowed to continue as legal non-conforming uses within Parcel B until development occurs.

3.2.2 Proposed Land Uses

The land use categories for Parcel B include: Institutional / Civic / Public Uses, Light Commercial Uses, Heavy Commercial Uses, Light Industrial Uses, Heavy Industrial Uses (a maximum of 9,608,000 sf gross square feet of commercial / industrial uses), Business Park Uses and Parks and Open Space Uses, Mixed Use Village Center, Residential Uses (not in an MUN) allowed in Parcels B-1, B-4 and B-14, and Residential MUN uses also allowed in Parcel B-13. The number of Dwelling Units permitted within all of Parcel B is 3,357.

Refer to Section 1.3 for a list of the specific uses within each land use category, and the Land Use Legend on Map 5 in Section 11 for the identification of each land use category as either a Use-by-Right or a Special Review Use. Section 12 contains the review processes applicable to such uses.

3.2.3 Airport Influence Area

Any Special Conditions applicable to development in Parcel B because of its proximity to the Airport are included in the Special Conditions attached as Appendix 3-1 attached to this Section 3.

3.3 CIRCULATION

3.3.1 Site Access

Subject to City approval of specific Development Projects, primary access to the Subparcels of Parcel B will be from Rocky Mountain Avenue, Crossroads Boulevard, McWhinney Boulevard, Kendall Parkway and from US 34.

3.3.2 Internal Circulation

An integrated network and hierarchy of transportation ways will be provided for automobiles, pedestrians, bicyclists, and public transportation.
Refer to Section 7 for detailed information on access, circulation, and parking.

The Conceptual Amenity Map (Map 2 in Section 11) illustrates a proposed, conceptual trail system. Although not all buffer/ open space areas have trails shown on this map, they will be allowed if determined appropriate in the applicable ESAR.

Details on any proposed trail system shall be provided with applications for Preliminary Plats and /or Final Plat review or applications for a building permit.

3.3.3 Standards

All streets shall comply with LCUASS as described in Section 7 and General Condition No. 21.

3.4 PUBLIC AND PRIVATE UTILITIES

The following subsections indicate the utility providers currently available to serve Parcel B. The provision of services by other utility providers will be determined at the time of development.

3.4.1 Water and Sewer

The City will provide water and sewer service. A water line has been located along Boyd Lake Avenue and extended along the north property line to the Union Pacific Railroad, then to the water line in Rocky Mountain Avenue to serve Parcel B. In addition, a waterline has been extended east from Rocky Mountain Avenue along the Union Pacific Railroad to serve Parcel B. A sewer main has been located along Rocky Mountain Avenue to serve this property.

A water line is to be extended from Boyd Lake Avenue east along the south side of US 34 to serve Parcel B-13. This water line will be looped into the water line in Rocky Mountain Avenue. Sanitary sewer service will be facilitated by new a lift station and force mains from the lift station to the gravity sewer in Boyd Lake Avenue.

Details of services will be worked out at time of preliminary and/or final development plan, or at the time of application for a building permit.

3.4.2 Storm Drainage

Detention shall either be provided on-site or within the Houts Reservoir / Equalizer Lake system in accordance with the City's storm drainage master plan. On-site water quality treatment will be encouraged prior to on-site drainage entering Houts Reservoir or Equalizer Lake in designated Environmentally Sensitive Areas.

3.4.3 Electric

The City's Water and Power Department will provide electricity. A 600 amp overhead feeder is located along Rocky Mountain Avenue.

3.4.4 Natural Gas

It is presently anticipated that Xcel Energy Company will provide natural gas.

3.4.5 Telephone

It is presently anticipated that Qwest Communications will provide telephone and telecommunications services.

3.4.6 Irrigation Ditches

The existing Greeley and Loveland Irrigation Canal will remain in place. If any realignment or physical change is proposed to the ditch, or any improvement is proposed to any portion of this irrigation ditch, The Greeley and Loveland Irrigation Company will be contacted for approval. A copy of a letter from the ditch company shall be submitted to the City prior to any approval, which directly impacts the ditch. Irrigation ditches may be used as a raw water

supply for irrigation of open space areas so long as all Municipal Code requirements are met. See Section 19.06.030 – Irrigation with raw water.

3.4.7 Railroads

The Great Western Railroad tracks are adjacent to the southern boundary of Parcel B-13 (see Map 5 in Section 11). In order to mitigate railroad noise and vibration, the Applicant shall provide a bufferyard between Buildings for residential occupancy on lots in Parcel B-13 and the edge of the railroad right-of-way in accordance with the requirements set forth in Section 15, Appendix A of the GDP. See also Special Condition No. 47 in Appendix 3-1.

3.5 NATURAL AREAS

Any Environmentally Sensitive Areas within Parcel B have been identified in an ESAR. The ESARs applicable to Parcel B are provided in Section 14 of the GDP.

The ESAR prepared by Cedar Creek Associates (dated January, 1999 and revised May, 1999) and a subsequent ESAR prepared by Ecological Resource consultants (dated July 18, 2003) recommended certain buffer areas on the east side of the Houts Reservoir and Equalizer Lake. All required buffers have been preserved by conveyance to the HPF, therefore, no additional buffers shall be required for the development of Parcels B-1, B-2 or B-4.

For Parcel B-3, please refer to the ESAR prepared by Ecological Resource Consultants dated June 8, 2004.

For Parcel B-6, please refer to the ESAR prepared by ESNR Corporation dated January, 2000.

For Parcels B-10 and B-11, please refer to the ESAR prepared by Cedar Creek Associates dated August 17, 2000 and the ESAR prepared by Wildland Consultants dated January, 2000.

For Parcel B-12, please refer to the ESAR prepared by Ecological Resource Consultants dated February 4, 2005.

For Parcel B-13, please refer to the ESAR prepared by FlyWater Consulting, Inc. dated October 11, 2007.

For Parcel B-14, please refer to the ESAR prepared by FlyWater Consulting, Inc. dated February 12, 2008.

3.6 LANDFORM MODIFICATION

Parcel B is relatively flat. Landform modification will occur in order to create visual interest and to provide screening as necessary, and/or to provide for proper management of drainage.

Refer to the Conceptual Utility/Grading Map, (Map 3 in Section 11), as well as Sections 6.11 and 6.17 for additional grading information and the anticipated amounts of cut and fill.

3.7 DEVELOPMENT CONDITIONS

Development within Parcel B shall be subject to the applicable General Conditions in Appendix 1-1 to Section 1 and the applicable Performance Standards in Sections 6 through 10.

Development within Parcel B shall also be subject to the applicable Special Conditions in Appendix 3-1 attached to this Section 3 and incorporated herein by this reference.

APPENDIX 3-1

SPECIAL CONDITIONS FOR PARCEL B

AIRPORT

Special Condition No.1 (Parcel B):

No structures located within those portions of Parcel B that are located within the Airport Influence Area as shown on Map 5 in Section 11 of the GDP shall extend into restricted air space as defined by FAA Regulation, Part 77, and the Applicant shall comply with all applicable notice requirements of such FAA Regulation.

Special Condition No. 2 (Parcel B-1):

Each Building constructed in Parcel B-1 for a Residential Use as defined in Section 1.3.2 of this GDP which is also located within the 55dB/65dB noise contour for the Airport, as shown on Map 10 in Section 11 of the GDP, shall be subject to the "Noise Attenuation Construction Performance Standards" attached hereto as Attachment No. 1, which ensures the compatibility of such Residential Uses with airport operations.

Special Condition No. 3 (Parcels B-1 through B-4, B-7, B-13 and B-14):

The owners of those portions of Parcels B-1 through B-4, Parcel B-7, Parcel B-13 and Parcel B-14 that are located within the boundaries of the Airport Influence Area as depicted on Map 5 in Section 11 of the GDP shall execute and deliver to the City for recording concurrently with the Final Plat for such property, an Avigation Easement in the form attached hereto as Attachment No. 2.

Special Condition No. 4 (Parcels B-1 through B-4, B-7, B-13 and B-14):

Those portions of Parcels B-1 through B-4, Parcel B-7, Parcel B-13 and Parcel B-14 that are located within the Airport Influence Area may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations, therefore, all subdivision plats for property that is located within Parcels B-1 through B-4, Parcel B-7, Parcel B-13 and Parcel B-14 which are also wholly or partially located within the boundaries of the Airport Influence Area as depicted on Map 5 in Section 11 of the GDP shall contain the following language: "All or a portion of the property being subdivided may be located within the Airport Influence Area of the Fort Collins-Loveland Municipal Airport. Such property may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations."

Special Condition No. 5 (Parcels B-1 through B-4, B-7, B-13 and B-14):

Except to the extent otherwise required by applicable Federal law, all new bodies of water within Parcels B-1 through B-4, Parcel B-7, Parcel B-13 and Parcel B-14 which are also located within the Airport Influence Area as depicted on Map 5 in Section 11 of the GDP and within a radius of 10,000 feet from the end of any runway of the Airport, shall be prohibited provided that: (1) they are larger than one-quarter acre in size; (2) they are installed after July 11, 2006; (3) they are designed to hold or retain water permanently or over extended periods of time; and (4) they are bird attractants. To the extent permitted by Federal law, this prohibition shall not apply to a relocation or expansion of any existing water body or to detention ponds that have outlet structures designed to prevent the permanent containment of water.

Special Condition No. 6 (Parcels B-1 through B-4, B-7, B-13 and B-14):

No exterior lighting, reflective material, smoke emissions or electronic emissions shall be permitted in within Parcel B-1 through B-4, Parcel B-7, Parcel B-13 and Parcel B-14 which are also located within the Airport Influence Area as depicted on Map 5 in Section 11 of the GDP which would materially lower pilots' visibility or cause material interference with the Airport's navigation and communication systems. For purposes of this condition, "reflective material" is defined as glazing with a reflectivity of 65% or greater.

Special Condition No. 7 (Parcels B-1 through B-4, B-7 and Parcel B-14):

Residential Uses are not permitted in those portions of Parcels B-1 through B-4, Parcel B-7 and Parcel B-14 of the GDP which are also located within the Airport's critical zone as depicted on Map 5 of Section 11 of the GDP ("Critical Zone"). In the event that the Critical Zone is reduced in area pursuant to an amendment of the Airport Master Plan, such new Critical Zone boundary shall be used to determine the applicability of this condition.

Special Condition No. 8 (Parcels B-1 through B-4, B-7, B-13 and B-14):

The Developer shall include the following disclosure statement in all of its contracts for the sale of any of the property located within Parcels B-1 through B-4, Parcel B-7, Parcel B-13 and Parcel B-14 of the GDP which is also within the Airport Influence Area as shown on Map 5 in Section 11 and further, shall include a provision in such sales contracts that the purchaser thereof shall include the following disclosure statement in all of its subsequent contracts for sale of such property: "The property subject to this contract may be located within the Airport Influence Area of the Fort Collins-Loveland Municipal Airport. Such property may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations." Each such contract subject to this Special Condition shall expressly provide that the disclosure provision survives closing and is enforceable at law or in equity by the City as a third party beneficiary of such contract.

Special Condition No. 9 (Parcels B-9, B-10 and B-11):

Parcels B-9, B-10 and B-11 are subject to that Avigation and Hazard Easement recorded in the Larimer County Records on May 10, 2004 at Reception No. 2004-0044058.

Special Condition No. 10 (Parcels B-9, B-10 and B-11):

Except to the extent otherwise required by applicable Federal law, all new bodies of water within Parcels B-9, B-10 and B-11 and within a radius of 10,000 feet from the end of any runway, shall be prohibited provided that: (1) they are larger than one-quarter acre in size; (2) they are installed after June 3, 2003; (3) they are designed to hold or retain water permanently or over extended periods of time; and (4) they are bird attractants. To the extent permitted by Federal law, this prohibition shall not apply to a relocation or expansion of any existing water body.

Special Condition No.11 (Parcels B-9, B-10 and B-11):

No exterior lighting, reflective material, smoke emissions or electronic emissions shall be permitted in Parcels B-9, B-10 and B-11 which would materially lower pilots' visibility or cause material inter-

ference with the Airport's navigation and communication systems.

Special Condition No. 12 (Parcels B-9, B-10, B-11 and B-14):

All helicopter activities conducted within Parcels B-9, B-10, B-11 or B-14 shall be coordinated with the management of the Airport and the FAA for development of procedures to ensure that such activities will not adversely affect Airport operations.

Special Condition No. 13 (Parcel B-12):

Each subdivision application for property within Parcel B-12 shall be reviewed by the manager of the Airport and comments sent to the City Planning Division prior to final approval.

Special Condition No. 14 (Parcel B-12):

Attached hereto as Attachment No. 3 is a depiction of Parcel B-12 referred to herein as the "Parcel B-12 Airport Depiction**",** which provides all of the following specific information:

a. The existing runway protection zone, Critical Zone, noise contours, flight pattern areas and the Airport Influence Area;

b. A Land Use table; and

c. An overlay of the FAA FAR 77, the approximate finished floor elevations for the contemplated structures within Parcel B-12 and the maximum building height for each structure based on the FAA FAR 77, to be used as a reference to determine maximum building heights per site with each subdivision application.

Special Condition No. 15 (Parcel B-12):

Uses allowed within Parcel B-12 shall include the Business Park Uses listed in Section 1.3.8 of the GDP.

No other uses shall be allowed within Parcel B-12 unless the Current Planning Manager approves a use which is:

(i) permitted in the I District – Developing Industrial District (currently Section 18.36 of the Municipal Code); and

(ii) is not a use denoted "I" on the Land Use table of the Parcel B-12 Airport Depiction; and

(iii) which he or she deems to be substantially similar in impact to the uses allowed within Parcel B-12 including, but not limited to, its compatibility with the Airport.

Every use within Parcel B-12 shall be consistent with the Land Use table and height restrictions shown on the Parcel B-12 Airport Depiction attached hereto as Attachment No. 3. Application of such Land Use table to uses within Parcel B-12 shall be in accordance with the Examples of Applications of Use Table attached hereto as Attachment No. 4.

Special Condition No. 16 (Parcel B-12):

Each subdivision plat within Parcel B-12 shall also contain the following language: "All or a portion of the property being subdivided may be located within the Fort Collins/Loveland Municipal Airport's influence zone, critical zone and/or the 65db noise curve and as a result, such property may be subjected to low flying aircraft which at times may exceed the 65db noise levels and further such property may have restrictions on uses and heights of structures."

Special Condition No. 17 (Parcel B-12):

Adequate profile information shall be submitted for each site plan within Parcel B-12 to verify that FAA Part 77 is not violated by any building, tower or any other man-made structures and trees.

Special Condition No. 18 (Parcel B-12):

Except to the extent otherwise required by applicable Federal law, new bodies of water within Parcel B-12 shall be prohibited within a radius of 10,000 feet from the end of any runway, provided that: (a) they are larger than one-quarter acre in size; (b) they are installed after July 20, 2004; (c) they are designed to hold or retain water permanently or over extended periods of time; and (d) in the reasonable determination of the manager of the Airport, they are bird attractants. To the extent permitted by Federal law, this prohibition shall not apply to a relocation or expansion of any existing water body.

Special Condition No. 19 (Parcel B-12):

No exterior lighting, reflective material, smoke emissions or electronic emissions shall be permitted within Parcel B-12 which would materially lower pilots' visibility or cause material interference with the Airport's navigation and communication systems, as reasonably determined by the manager of the Airport.

Special Condition No. 20 (Parcel B-12):

Parcel B-12 is subject to the Avigation Easement recorded in the Larimer County Records on August 17, 2004 at Reception No. 2004-0080755.

ENVIRONMENTAL

Special Condition No. 21 (Parcels B-13 and B-14):

The first application for a subdivision plat within Parcel B-13 and Parcel B-14 shall be accompanied by a Phase II Environmental Assessment of such parcel.

Special Condition No. 22 (Parcels B-13 and B-14):

Prior to the approval of the first application for a subdivision plat within Parcel B-13 and B-14, a plan for mitigation of the environmental conditions identified in the Phase II Environmental Assessment for such parcel shall be prepared by an environmental consultant and approved by the City.

Special Condition No. 23 (Parcels B-13 and B-14):

Prior to the issuance of the first building permit within each approved Development Project within Parcel B-13 and Parcel B-14, the Developer shall mitigate, in compliance with the approved mitigation plan for such parcel and all applicable federal, state, and local regulations and requirements, any environmental conditions within such Development Project that are identified in the applicable Phase II Environmental Assessment**,** or, in the alternative, the Developer shall demonstrate, to the City's satisfaction, that the Development Project is not within the area affected by the environmental conditions identified in the applicable Phase II Environmental Assessment.

Special Condition No. 24 (Parcel B-13):

1. Decommissioning of Well. The Developer does not currently own or control the oil and gas well and associated storage tanks located on Parcel B-13 ("Well"). In the event that the Developer acquires ownership or control thereof, it shall take all necessary steps to decommission the Well in accordance with applicable State statutes. Any damage to any

public improvements caused by plugging and de-commissioning activities associated with the Well shall be promptly repaired by the Developer to the satisfaction of the City.

2. Interim Requirements. Unless and until such decommissioning has occurred, the following requirements shall apply: (i) a 350 foot buffer area**,** measured from the center of the wellhead**,** shall be required around the wellhead of the Well ("Buffer") and, for purposes of this Special Condition, "wellhead" shall mean that area, 75 feet by 75 feet square centered over the Well ("Wellhead"); (ii) no development which requires a building permit shall be permitted within the Buffer, but parking lots and landscaping shall specifically be permitted therein whether a building permit is required or not, provided that, in the event a building permit is required for any such improvement, it shall meet all building permit requirements therefore; (iii) no impermeable surface construction such as paving shall be allowed over the Wellhead; (iv) the area above the Wellhead shall be maintained in such a manner as to allow venting of the Wellhead to the surface; and (v) any final subdivision application which includes the Wellhead shall locate it in an Outlot.

ENVIRONMENTAL FEES

Special Condition No. 25 (Parcels B-1, B-4 and B-13):

Each residential building permit issued for a new Dwelling Unit in Parcels B-1, B-4 and B-13 through December 31, 2040, shall require the payment of a Residential Environmental Fee of Forty-three Cents ($0.43) per finished and unfinished square foot of habitable space within the Dwelling Unit including basements, but excluding garages, carports, porches and decks. Each Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 26 (Parcel B):

Pursuant to the Agreement Regarding Environmental Fees among the City, Developer and the Environmental Entities dated June 27, 2006 and all amendments thereto, prior to fifty percent (50%) build-out of both Parcels B and C, an environmental center shall be constructed near the Houts and Equalizer Reservoirs by or on behalf of the Environmental Entities. "Build-out", as used herein in connection with both residential and non-residential development, shall mean the construction of all principal Buildings for the total number of residential Dwelling Units and the total amount of non-residential square footage permitted within both Parcels B and C.

Special Condition No. 27 (Parcels B-1, B-2, B-4, B-6, B-7, B-10, B-11, and B-13):

Each building permit issued for a new non-residential Building within Parcels B-1, B-2, B-4, B-6, B-7, B-10, B-11 (north of East 29th Street), and B-13 through December 31, 2040 shall require the payment of a Non-Residential Environmental Fee of One Dollar ($1.00) for each gross square foot of the non-residential Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 28 (Parcels B-1, B-2, B-4, B-6, B-7, B-10, B-11, and B-13):

Each building permit issued for an addition to an existing non-residential Building within Parcels B-1, B-2, B-4, B-6, B-7, B-10, B-11 (north of East 29th Street), and B-13 through December 31, 2040,

which addition results in an increase of the Building's gross square footage, shall be assessed a Non-Residential Environmental Fee of One Dollar ($1.00) per square foot based on the gross square footage of the addition to the Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 29 (Parcels B-3 and B-12):

Each building permit issued for a new non-residential Building within Parcel B-3 and Parcel B-12 through December 31, 2040 shall require the payment of a Non-Residential Environmental Fee of Fifty Cents ($0.50) for each gross square foot of the non-residential Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 30 (Parcels B-3 and B-12):

Each building permit issued for an addition to an existing non-residential Building within Parcel B-3 and Parcel B-12 through December 31, 2040, which addition results in an increase of the Building's gross square footage, shall be assessed a Non-Residential Environmental Fee of Fifty Cents ($0.50) per square foot based on the gross square footage of the addition to the Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 31 (Parcels B-9**,** B-11 and B-14):

Each building permit issued for a new non-residential Building within Parcel B-9**,** Parcel B-11 (south of East 29th Street) and Parcel B-14 through December 31, 2040 shall require the payment of a Non-Residential Environmental Fee of Seventy-five Cents ($0.75) for each gross square foot of the non-residential Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 32 (Parcels B-9**,** B-11 and B-14):

Each building permit issued for an addition to an existing non-residential Building within Parcel B-9**,** Parcel B-11 (south of East 29th Street) and Parcel B-14 through December 31, 2040, which addition results in an increase of the Building's gross square footage, shall be assessed a Non-Residential Environmental Fee of Seventy-five Cents ($0.75) per square foot based on the gross square footage of the addition to the Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 33 (Parcels B-1, B-2, B-3, B-4, B-6, B-7, B-9, B-10, B-11, B-12 and B-14):

The written consent of the Environmental Entities is required prior to the City's final approval of a rezoning of any of the following Parcels: B-1, B-2, B-3, B-4, B-6, B-7, B-9, B-10, B-11, B-12 and B-14, if such rezoning would result in the removal of the Parcel from the Millennium GDP.

FEES/CREDITS/REIMBURSEMENTS

Special Condition No. 34 (Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-11):

A City reimbursement agreement dated January 23, 2003 obligates the City to attempt to collect reim-

bursements from the applicants of specified properties in connection with certain water improvements installed within the right-of-way for Rocky Mountain Avenue. The City has waived its right to collect a reimbursement under such agreement from non-residential development within Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-11. Refer to Section 5.2.5 of the PVH Agreement for specific terms.

Special Condition No. 35 (Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12):

In connection with water and sewer improvements which the City has constructed pursuant to the PVH Agreement, every building permit for a non-residential use within Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12 shall be assessed a cost equal to its proportionate share of the actual cost of the local portion of any oversized water or sanitary sewer line and any water or sewer improvement which solely benefits the proposed non-residential use. Refer to Section 5.2.3 of the PVH Agreement for specific terms.

Special Condition No. 36 (B-1, B-2, B-4, B-6, B-7 and B-9 through B-12):

Pursuant to the MFA, projects within Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12 (MFA Commercial Area) shall not be eligible to receive reimbursement from the City to which they might otherwise be entitled pursuant to City Regulations, as defined by the MFA, for the design and construction of public improvements therein, with the exception of the following reimbursements:

1. The City's obligation to reimburse Centerra Properties West, LLC for certain costs incurred for a preliminary design of the Arterial Street Improvements. Refer to Section 6.5 of the PVH Agreement for specific terms.

2. Reimbursements for public improvements which were completed prior to January 20, 2004. Refer to Sections 12.3 and 13.5 of the MFA for specific terms.

3. Reimbursements for the design and construction of all or a portion of the Arterial Street Improvements completed by Applicants of non-residential projects within Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12 (PVH Commercial Area) to serve such projects, in the event of the City's failure to appropriate money for such improvements. Refer to Section 6.1.5 of the PVH Agreement for specific terms.

4. Reimbursements for public improvements completed in connection with Development Projects not within the MFA Commercial Area, unless such public improvements are not eligible for reimbursement pursuant to the MFA, Section 12.3.

Special Condition No. 37 (Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12):

Centerra Properties West, LLC and its affiliates are entitled to receive certain credits against City water system impact fees and City capital expansion fees for streets in connection with Development Projects within Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12 (MFA Commercial Area) pursuant to the terms of the MFA. Refer to Section 12.1 of the MFA for the specific terms.

Special Condition No. 38 (Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12):

Except as provided in Special Conditions No. 34 and 35 above, the Applicant of every project within Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-12 (MFA Commercial Area) shall be responsible for payment of all applicable City development fees and

use taxes and for satisfaction of all raw water requirements. Refer to Section 12.3 of the MFA for the specific terms.

Special Condition No. 39 (Parcels B-2 and B-4):

Parcels B-2 and B-4 are adjacent to and are benefitted by improvements to Rocky Mountain Avenue constructed by Developer. Any development of such Parcels will be subject to a third-party reimbursement obligation to Developer for its proportionate share of the costs of improvements. No later than September 9, 2006, Developer shall provide the City with the documentation required by LCUASS (currently Section 1.9.3.B.1.f. and g.). After execution and recording of the reimbursement agreement, the City shall attempt to provide notice on future plats of the obligated properties (currently Section 1.9.3.B.1.h.). The parties acknowledge however, that no notice as required by LCUASS needs to be given. To the extent this condition may be inconsistent with the applicable provisions of LCUASS, the terms hereof shall prevail.

Special Condition No. 40 (Parcels B-9 and B-11):

The PVH Project (located in Parcels B-9 and that portion of Parcel B-11 south of East 29th Street) is entitled to a waiver of twenty-five percent (25%) of certain City development fees and/or use taxes pursuant to the PVH Agreement. Refer to Section 4 of the PVH Agreement for specific terms.

NOTIFICATION OF MINERAL ESTATE OWNERS

Special Condition No. 41 (Parcel B-13 and B-14):

The first application for a subdivision plat which includes any portion of Parcel B-13 or Parcel B-14 shall require a public hearing before the Planning Commission at least thirty (30) days prior to the administrative approval of such subdivision plat, for the limited purpose of hearing objections of mineral estate owners, as such owners are defined by C.R.S. §24-65.5-102(5). Such public hearing shall constitute the "initial public hearing" for the subdivision plat application; notice thereof shall be given in accordance with the requirements of C.R.S. §24-65.5-103 and, except as required by C.R.S. §24-65.5-103(1.5), no further notice to mineral estate owners within such subdivision plat shall be given. Prior to final approval of the subdivision plat for which notice was given pursuant to this Special Condition, the Applicant shall provide the City with a written certification in accordance with the requirements of C.R.S. §24-65.5-103.3.

PARKS AND RECREATION

Special Condition No. 42 (Parcel B-13):

No additional vehicular or pedestrian connections are proposed within the Loveland Sports Park due to existing drainage systems and private drives within the park. The location and type of vehicular and pedestrian connections between Parcel B-13 and the Loveland Sports Park shall be determined during review and approval of future Development Projects within Parcel B-13. Each such connection shall be designed to accommodate the existing drainage system and private street network within the Loveland Sports Park and may require the installation of additional lighting, sidewalks, accessible walkways, culvert crossings or other safety measures for the benefit of Loveland Sports Park users. The design and construction of any such connections and the ancillary improvements shall be done at no cost to the City.

Special Condition No. 43 (Parcel B-13):

Due to the current sports field design and storm drainage system within the Loveland Sports Park, Developer acknowledges that the City may not agree to grant any additional easements or Rights-of-Way to accommodate future streets or utilities proposed by any future Development Project within Parcel B-13. Any proposed utilities, including a forced wastewater mainline, may be allowed within the existing 40' utility easement on the north side of the Loveland Sports Park, and shall be determined at time of preliminary design and plat. If allowed, all design, demolition, construction and repair shall be paid for by the Developer at no cost to the City.

Special Condition No. 44 (Parcel B-13):

Loading and delivery areas for non-residential uses in Parcel B-13 shall be adequately screened from the Loveland Sports Park.

Special Condition No. 45 (Parcel B-13):

Solid fencing between the boundaries of Parcel B-13 and the Loveland Sports Park shall not exceed 48 inches in height. Any fencing along such boundary that exceeds 48 inches in height shall be of an open style that allows for views into the Loveland Sports Park. The design of any such fencing shall be determined during review and approval of future Development Projects within Parcel B-13 that are adjacent to the Loveland Sports Park.

Special Condition No. 46 (Parcel B-13):

Final subdivision plats that include property within Parcel B-13 that is adjacent to the Loveland Sports Park shall contain a disclosure regarding the existence and proximity of the Loveland Sports Park, uses that may occur within the park, the park's hours of operation and the use of lighted facilities, all of which are regulated by the City, together with an acknowledgement that the operation of the Loveland Sports Park is based on the Municipal Code and will not be changed because of subsequent development of properties adjacent thereto.

PLANNING

Special Condition No. 47 (Parcel B-13):

Prior to the approval of the first subdivision plat within Parcel B-13, the Applicant shall deliver to the City any required ditch or irrigation company easements, as determined by the City Attorney, and a crossing agreement, if a crossing of the ditch is needed for development of the subdivision.

Special Condition No. 48 (Parcel B-3):

Development of any portion of Parcel B-3 that is located within Tract D, Savanna Second Subdivision is prohibited until final approval of a replat of Tract D which results in any new lots or tracts created therein being located entirely within the boundaries of the GDP.

RAILROAD

Special Condition No. 49 (Parcel B-13):

For the purpose of mitigating general railroad noise and vibration, the Applicant shall provide a buffer-yard between Buildings for residential occupancy on lots in Parcel B-13 and the Great Western Railroad right-of-way in accordance with the requirements set forth in Section 15, Appendix A of the GDP.

Special Condition No. 50 (Parcel B-13):

The Great Western Railroad tracks are adjacent to the southern boundary of Parcel B-13. Residents adjacent to such railroad tracks may experience noise and vibration effects resulting from the passage of trains on such tracks in close proximity to adjacent Lots. A notice reciting the above-stated potential impacts from such railroad tracks shall be placed on each subdivision plat which includes any portion of Parcel B-13 within 500 feet of the railroad right-of-way.

TRANSPORTATION

Special Condition No. 51 (Parcel B):

To the extent that street and/or trail crossings of the existing railroads are required as a condition of a Development Project within Parcel B to meet the ACF Regulations and any approved exceptions thereto or other applicable Municipal Code requirements, acquisition of the necessary Public Utilities Commission approval for such crossing shall be governed by the terms of the PVH Agreement.

Special Condition No. 52 (Parcels B-1 and B-2):

Unless designed and constructed by others or by the City pursuant to the PVH Agreement, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcels B-1 and B-2.

(a) Rocky Mountain Avenue from north of the Union Pacific Railroad crossing to Crossroads Boulevard.

(b) Kendall Parkway from Boyd Lake Avenue to Rocky Mountain Avenue.

(c) CR 24 (East 29th Street) from Rocky Mountain Avenue under I-25 to the north/south major arterial roadway in Parcel A.

(d) Boyd Lake Avenue from CR 20C (East 5th Street) to CR 24E (East 37th Street).

(e) CR 20C (East 5th Street) from Boyd Lake Avenue to CR 9E (Sculptor Drive).

(f) CR 9E (Sculptor Drive) from US 34 to State Highway 402.

Special Condition No. 53 (Parcels B-1 and B-2):

The Applicant shall obtain, at no cost to the City (except as may be reimbursable consistent with the City's then-current adopted Capital Improvements Program), all FAA approvals required for the proposed extension of CR 26 (Crossroads Boulevard) from Rocky Mountain Avenue to North Boyd Lake Avenue, if such extension is required as a condition of development in Parcels B-1 or B-2 to meet ACF Regulations and any approved exceptions thereto. Written documentation of such approvals shall be provided to the City by the Applicant prior to the approval of any Final Plat that includes such future street extension.

Special Condition No. 54(Parcels B-1, B-2, B-4, B-6, B-7, B-9 through B-12, and B-14):

The following roadways shall be exempt from compliance with the ACF Regulations in connection with the development of non-residential uses in Parcels B-1, B-2, B-4, B-6, B-7, B-9 through B-12, and B-14:

(a) Rocky Mountain Avenue from, but not including, its intersection with County Road 24 (29th Street), north to and including its intersection with

Crossroads Boulevard and that portion of Crossroads Boulevard from its intersection with Rocky Mountain Avenue east to and including its intersection with the west I-25 frontage road;

(b) Existing portions of County Road 24E (37th Street) or any extension thereof west through its intersection with Boyd Lake Avenue;

(c) Existing portions of Rocky Mountain Avenue from County Road 24 (29th Street) south through its intersection with Hahn's Peak Drive; and

(d) Boyd Lake Avenue.

Special Condition No. 55 (Parcels B-1, B-2, B-4, B-6, B-7, B-9 through B-12**,** and B-14):

Except for those streets for which there is an approved exception from the ACF Regulations, Applicants of non-residential projects within Parcels B-1, B-2, B-4, B-6, B-7, B-9 through B-12**,** and B-14 shall be required to improve public street intersections adjacent to such projects to City standards to the extent necessary to comply with the ACF Regulations in the operation of such intersections and, in addition, shall be responsible for designing and installing all private street improvements necessary to adequately serve such projects. Refer to Section 6.4 of the PVH Agreement for specific terms.

Special Condition No. 56 (Parcels B-1, B-2, B-4, B-6, B-7, B-10, B-11**,** B-12 and B-14):

In accordance with Section 6.4 of the PVH Agreement, prior to the issuance of any building permit for the last twenty-five (25) acres of undeveloped non-residentially zoned property within Parcels B-1, B-2, B-4, B-6, B-7, B-10, that portion of B-11 north of East 29th Street, B-12, B-14 and that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (which properties exclude the PVH Property), all applicable ACF Regulations must be met for all public streets within the PVH Commercial Area with the exception of I-25 and its interchanges and US 34 and its intersections.

Special Condition No. 57 (Parcel B-3):

Prior to or concurrent with the approval of any development application or final plat within Parcel B-3, or as otherwise approved by the City Engineer, the owner shall dedicate, at no cost to the City, the right-of-way necessary for all street improvements either within or adjacent to said Development Project or Final Plat that are shown on the Transportation Plan.

Special Condition No. 58 (Parcel B-3):

Unless designed and constructed by others or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcel B-3.

(a) High Plains Boulevard from the north boundary of Parcel A-5 to US 34.

(b) Boyd Lake Avenue adjacent to Parcel C-4.

(c) Kendall Parkway from Boyd Lake Avenue to Rocky Mountain Avenue.

Special Condition No. 59 (Parcel B-4):

To the extent consistent with any approved access control plan, no signalized access will be permitted to Parcel B-4 from Rocky Mountain Avenue except at the intersection of CR 24 (29th Street), unless otherwise determined by the City Engineer. If unsignalized accesses meet any signal warrant in the future, the turning movements shall be eliminated as necessary to eliminate the signal warrant or, to the extent consistent with any approved access control plan, a roundabout shall be installed at the access point by the Applicant at no cost to the City.

Special Condition No. 60 (Parcel B-9):

Unless constructed by others or otherwise approved by the City Engineer, the sidewalk along the east side of Rocky Mountain Avenue from McWhinney Boulevard to the Greeley and Loveland Irrigation Canal shall be constructed, or cause to be constructed, by the Applicant of Parcel B-9 at no cost to the City prior to the issuance of a building permit withn Parcel B-9.

Special Condition No. 61 (Parcels B-9, B-10, B-11 and B-14):

In any Traffic Study for a Development Project within Parcels B-9, B-10, B-11 and B-14, the applicant shall not be required to count any of the vested gateway trips as background traffic, excluding those trips which are attributable to any site specific development plan within Parcels B-9, B-10, B-11 or B-14 approved after July 11, 2006. For purposes of this condition, the total number of "vested gateway trips" means the fifteen thousand six hundred and ninety (15,690) total daily trips, the three hundred and thirty-seven (337) A.M. peak hour daily trips and the one thousand, four hundred and fifty-two (1,452) P.M. peak hour daily trips previously vested for such Parcel as part of the approved Gateway GDP.

Special Condition No. 62 (Parcels B-9, B-10, B-11 and B-14):

Unless designed and constructed by others or by the City pursuant to the PVH Agreement, or otherwise approved by the City Engineer and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope, and phasing of such construction shall be determined during review and approval of future Development Projects within Parcels B-9, B-10, B-11 and B-14.

(1) Rocky Mountain Avenue from the existing terminus of the 4-lane section to Crossroads Boulevard;

(2) Kendall Parkway from Rocky Mountain Avenue to Boyd Lake Avenue;

(3) Crossroads Boulevard from Rocky Mountain Avenue to the west frontage road of I-25; and

(4) CR 24 (29th Street) from Rocky Mountain Avenue to the west side of I-25.

Special Condition No. 63 (Parcel B-11):

In accordance with the Transportation Plan, each Final Plat for a Development Project within Parcel B-11 which is adjacent to the Union Pacific Railroad ("Railroad") shall dedicate right-of-way twenty-five (25) feet in width adjacent to the existing Railroad right-of-way. In the event that the Transportation Plan is amended to remove such requirement, the requirements of this condition shall become of no effect as to Final Plats approved thereafter and the City Manager shall be authorized, notwithstanding any provision of the Municipal Code to the contrary, to administratively approve the va-

cation of any right-of-way dedications made pursuant to this condition. Such vacations shall be promptly recorded by the City in the Larimer County Records.

Special Condition No. 64 (Parcel B-12):

A minimum of two (2) points of access shall be provided to all Lots in Parcel B-12. This access may be provided via easements through other Lots.

Special Condition No. 65 (Parcel B-12):

Unless designed and constructed by others or by the City pursuant to the PVH Agreement, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcel B-12.

(a) Install a traffic signal and necessary auxiliary lanes at the intersection of Byrd Drive and Crossroads Boulevard;

(b) Rocky Mountain Avenue adjacent to Parcel B-12, excluding the sidewalk on the west side;

(c) A median within Rocky Mountain Avenue to accommodate a channelized "T" movement at Tahosa Creek Drive and to limit turning movements at the proposed right-in/right-out access points;

(d) Crossroads Boulevard to adjacent to Parcel B-12, excluding the sidewalk on the north side; and

(e) A median within Crossroads Boulevard to limit the Mount Massive intersection movement to right-in, right-out, left-in.

Special Condition No. 66 (Parcel B-13):

Unless designed and constructed by others, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The necessity, timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcel B-13.

(a) Hahns Peak Drive within Parcel B-13 to US 34.

(b) Rocky Mountain Avenue within Parcel B-13 to US 34.

(c) An east-west collector street within Parcel B-13.

(d) The design and construction or proportionate, pro-rata share contribution to the future design and construction of the extension and connection of Rocky Mountain Ave. to County Road 20E pending approval by the PUC to cross the GWRR. Proportionate contribution not to exceed the stated amount agreed upon in the Centerra South MFA for this improvement after the third bond issuance. Should the PUC deny approval for the railroad crossing, the City shall retain the proportionate contribution and use it toward other mitigation improvements as deemed acceptable and useful by both the City Engineer and a professional traffic

engineer engaged by the Applicant to ensure the improvements mitigate the US34 traffic issues related to Parcel B-13 of the GDP.

(e) A proportionate, pro-rata share contribution for the additional 2277 residential units toward future intersection improvements after Phase 1 improvements are constructed, timing to be determined through future SDP submittals, on US-34 at Rocky Mountain Avenue and at Hahn's Peak Drive. The timing and amount of this contribution to be determined by the City Engineer and a professional traffic engineer engaged by the Applicant with future Site Development Plan applications within Parcel B-13.

UTILITIES

Special Condition No. 67 (Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-14):

With the exception of those improvements which are the responsibility of the City pursuant to the PVH Agreement, any existing utilities that must be redesigned, rearranged, relocated, upgraded or extended in connection with the development of Parcels B-1, B-2, B-4, B-6, B-7 and B-9 through B-14 shall be done at the Applicant's expense unless otherwise agreed upon by the utility in question.

Special Condition No. 68 (B-4):

With the exception of those improvements which are the City's responsibility pursuant to the PVH Agreement, the Applicant of Parcel B-4 shall be responsible for staking underground power lines per the requirements of the City's Electric Division, including cut and fill stakes as required, and for any costs associated with the relocation, raising, or lowering of the underground electrical three phase electric power lines which are necessitated by incorrect staking, changes in road design, installation of other utilities, or any other construction caused by the Applicant.

Special Condition No. 69 (Parcels B-9, B-10 and B-11):

Prior to the approval of any Final Plat within Parcels B-9, B-10 or B-11, the Applicant shall provide a final engineering design acceptable to the City Stormwater Utility Department for all storm drainage discharges directly into the Greeley & Loveland Irrigation Canal, provided that storm drainage into the Greeley & Loveland Irrigation Canal is prohibited except for existing development or as agreed to by Greeley & Loveland Irrigation Company. Developed and detained storm drainage discharges releasing directly into the Greeley & Loveland Irrigation Canal shall be limited to the two-year historic release rate per Table SO-1, Urban Drainage and Flood Control Document, Volume 2, for all storm events up to and including the one hundred-year developed storm event.

WATER AND WASTEWATER

Special Condition No. 70 (Parcel B-13):

Unless designed and constructed by others or otherwise approved by the Director of the Water and Power Department, the Developer shall design and construct, or cause to be designed and constructed at no cost to the City, the following water and sanitary sewer improvements to City standards. The exact size, location and capacity of each improvement and the timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcel B-13.

(a) A water main on the south side of US 34 from Boyd Lake Avenue to the east boundary of Parcel B-13.

(b) A water main through Parcel B-13 with two points of connection to the water main described in subparagraph (a) above.

(c) A connection between the water main described in subparagraph (a) above and the existing water main on the north side of US 34 at Rocky Mountain Avenue.

d) An on-site wastewater collection system for Parcel B-13 and a lift station and force main connection to the existing gravity flow system. The lift station shall be designed with sufficient capacity for future wastewater flows from Parcel B-13 and for expansion to accommodate future wastewater flows from those portions of the Northwest Quarter of Section 15, Township 5 North, Range 68 West of the 6th Principal Meridian, County of Larimer, State of Colorado which lie north of the Great Western Railroad tracks. Design of the lift station and force main shall be coordinated with the City's Water and Power Department and approved by the regional 208 Wastewater Authority.

Special Condition No. 71 (Parcel B-13):

Any reimbursement for the East Side Lift Station shall be in accordance with that Reimbursement Agreement by and between the Developer and the City of Loveland Water Department dated September 7, 2004.

RESIDENTIAL DEVELOPMENT

Special Condition No. 72 (Parcel B-13)

Developer acknowledges the need for diverse housing in the City. To that end, Developer agrees to use commercially reasonable best efforts to include multiple types of for-sale residential units and workforce housing south of Mountain Lion Drive (subject to name change by the City) within Parcel B-13. Developer agrees to include one affordable housing project within Parcel B-13 with units available for-sale or for-rent by households earning 80% of the area median income or lower ("qualifying household"). No certificate of occupancy shall be issued unless a deed restriction is recorded against the subject affordable property. The deed restriction on for-sale units must prohibit the sale of the unit to any person or entity other than a qualifying household, require owner occupation, prohibit rental of for-sale units, and have a duration as set forth in Title 17 of the Municipal Code. The deed restriction on for-rent units must prohibit the rental of units to any person or entity other than a qualifying household, prohibit conversion of units from "rental" to "for-sale" without the prior written approval of the City, and have a duration as set forth in Title 17 of the Municipal Code.

At least 5.0% of the total units within Parcel B-13 at full build-out will be deed-restricted housing.

After residential development has commenced within Parcel B-13, and as the City Council's schedule permits, Developer shall report back to City Council not less than once a year on the status of residential development within Parcel B-13, including the number of for-sale residential homes and affordable housing units developed in the previous year.

Attachment No. 1
To Appendix 3-1
Special Conditions for Parcel B

Noise Attenuation Construction Performance Standards

A. Application. Each Building constructed for a Residential Use as defined in Section 1.3.2 of this GDP which is located in Parcel B-1 and within the 55dB/65dB noise contour for the Airport, as shown on Map 10 in Section 11 of the GDP, shall comply with the following requirements.

B. Design methods. It is intended that these requirements provide flexibility to permit the use of innovative approaches, techniques, and materials to achieve effective sound insulation.

C. Use of qualified acoustical consultant. In cases where materials included in a design do not have listed sound transmission class (STC) ratings acceptable to the building official, in order to verify compliance the building plans and specifications accompanying the application for a building permit shall be certified by a qualified acoustical consultant as meeting the required noise level reduction standards. Qualified consultants shall include members of the National Council of Acoustical Consultants and others who are approved by the building official, such approval being based on the demonstration of competence and credentials in the area of architectural acoustics.

D. This section contains both performance standards and prescriptive standards. All structures subject to these requirements shall comply with the following performance standards and all prescriptive standards, unless with respect to prescriptive standards only, it can be shown by documented tests, or other appropriate information acceptable to the building official, that equivalent performance can be accomplished by other means or methods.

1. Exterior walls.
    a. Performance standard. Exterior walls shall have a laboratory STC rating of at least thirty (30).
    b. Prescriptive standard.
        (1) Masonry walls having a weight of at least twenty-five (25) pounds per square foot do not require a furred (stud) interior wall. At least one surface of concrete block walls shall be of one-half (½) inch gypsum board or plastered, unless fire-rated assemblies are required by the City of Loveland International Residential Code (IRC).
        (2) Exterior stud walls shall be at least four (4) inches in nominal depth and shall be finished on the outside with siding-on-sheathing, stucco, or brick.
        (3) Interior surface of the exterior walls shall be of gypsum board or plaster at least one-half (½) inch thick, installed on the studs.
        (4) In addition to exterior wall covering, continuous composition board, plywood or gypsum board sheathing at least seven-sixteenths (7/16) inch thick shall cover the exterior side of the wall studs.
        (5) Sheathing panels shall be covered on the exterior with overlapping building paper.

(6) Insulation material of at least R-thirteen (13) shall be installed throughout the cavity space behind the exterior sheathing and between all studs.

2. Windows.
   a. Performance standard. Windows shall have a laboratory STC rating of at least twenty-eight (28).
   b. Prescriptive standard.
      (1) Windows shall have double-paned glass with each pane having a minimum thickness of one-eighth (1/8) inch and a minimum space between panes of one-half (1/2) inch.
      (2) All operable windows shall be weather-stripped.
      (3) Glass of fixed-sash windows shall be sealed with a non-hardening sealant or a soft elastomer gasket tape.
      (4) The perimeter of window frames shall be sealed to the exterior wall construction with a weather-resistant sealant.
3. Doors.
   a. Performance standard. Doors shall have a laboratory STC rating of at least twenty-six (26).
   b. Prescriptive standard.
      (1) All exterior side-hinged doors shall be solid core wood or insulated hollow metal at least one and three-fourths (1 ¾) inches thick and shall be weatherstripped.
      (2) Exterior sliding doors shall be weatherstripped and have double-paned glass with each pane having a minimum thickness of one-eighth (1/8) inch and a minimum space between panes of one-half (1/2) inch.
      (3) Glass in doors shall be sealed in an airtight nonhardening sealant or in soft elastomer gasket or glazing tape.
      (4) The perimeter of door frames shall be sealed to the exterior wall construction with a weather-resistant sealant.
5. Roofs.
   a. Performance standard.
      (1) Combined roof and ceiling construction other than described in this section and Section F (Ceilings) shall have the following Roofs shall have a laboratory STC rating of at least thirty-nine (39).
      (2) Skylights shall have a laboratory STC rating of at least twenty-eight (29).
   b. Prescriptive standard.
      (1) With a rafter or attic space at least six (6) inches deep, with member twenty-four (24) inch on center, and with a ceiling below, the roof shall consist on seven-sixteenths (7/16) inch composition board, plywood or gypsum board sheathing topped by roofing as required.
      (2) Open beam roof construction shall meet the prescriptive standard of R-thirty (30) insulation.
6. Ceilings.
   a. Prescriptive standard.
      (1) Gypsum board or plaster ceilings at least one-half (½) inch thick shall be provided, unless fire rated assemblies are required by IRC..
      (2) Insulation of at least R-19 shall be provided above the ceiling between joists.
7. Floors.

a. Prescriptive standard. Openings to any crawl space below the floor of the lowest occupied rooms shall be a minimum size of eighteen (18) inches by twenty-four (24) inches or as prescribed in the IRC and City of Loveland International mechanical Code, but shall not exceed two percent of the floor area of the occupied rooms.

8. Ventilation.

a. Prescriptive standard.

Attachment No. 2
To Appendix 3-1
Special Conditions for Parcel B

"Avigation Easement Form"

AVIGATION EASEMENT

WHEREAS, (insert name of owner/owners) (hereinafter jointly called the "**Grantors**"), are the owners in fee or contract purchasers of those certain parcels of land situated in the County of Larimer, State of Colorado, more particularly described and depicted on Exhibit "A" attached hereto, herein called ("**Grantors' Property**");

WHEREAS, the CITY OF FORT COLLINS, COLORADO, a municipal corporation, and the CITY OF LOVELAND, COLORADO, a municipal corporation, hereinafter called the "**Grantees**", are owners of the FORT COLLINS-LOVELAND MUNICIPAL AIRPORT, the legal description of which is set forth on Exhibit "B" attached hereto and incorporated herein by reference (the "**Airport**").

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantors, for themselves, their heirs, administrators, executors, successors and assigns, do hereby grant, bargain, sell, and convey unto the **Grantees**, their successors and assigns for the use and benefit of the public, as easement and right-of-way, appurtenant to the Airport for the unobstructed use and passage of all Aircraft (as hereinafter defined) in and through the airspace above Grantors' Property beginning at a height consistent with the Runway 33 Approach Profile described in the Airport Master Plan Update, Fort Collins-Loveland Municipal Airport, May, 1993 (the "**Airport Master Plan")**, and as further defined by FAA Regulation, Part 77. The restricted airspace as defined above is depicted on Exhibit "C" ("Runway 33 Approach Plan View") and Exhibit "D" ("FAA Regulation, Part 77, Runway 33R Approach Profile"), said exhibits being attached hereto and incorporated herein by reference.

Said easement and right-of-way shall be appurtenant to the Airport and for the benefit of the Grantees and their successors and assigns, guests, and invitees, including any and all persons, firms or corporations operating Aircraft to or from the Airport.

Said easement and burden shall include all things which may be alleged to be incident to or resulting from the use and enjoyment of said easement, including, but not limited to the right to cause in all air space above or in the vicinity of the surface of Grantors' Property such noise, vibrations, fume, deposits of dust or other particulate matter, fuel particles (which are incidental to the normal operation of said Aircraft), fear, interference with sleep and communication and any and all other effects that may be alleged to be incident to or caused by the operation of Aircraft over or in the vicinity of Grantors' Property or in landing at or taking off from, or operation at or on the Airport; and

Grantors do hereby fully waive, remise, and release any right or cause of action which they may now have or which they may have in the future against Grantees, their successor and assigns, due to such noise vibrations, fumes, dust, fuel particles and all other effects that may be caused or may have been caused by the usual and customary operation of Aircraft landing at, or taking off from, or operating at or on the Airport, or by Aircraft landing at, taking off from or operating on the Airport as part of an airshow conducted as a special event authorized by Grantees provided that, in connection with any such airshow, the Grantees have developed and implemented a traffic control plan so as to avoid a material disruption to uses in place on the Grantors' Property, and provided further that no aerobatic flights involved in such an airshow shall operate within the airspace over the Grantors' Property unless the owner thereof or said owner's agent, consents to such aerobatic flights, which consent may be withheld in said owner's sole discretion. For purposes of this Avigation Easement, "aerobatic flight" means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.

The easement and right-of-way hereby granted includes the continuing right in the Grantees to prevent the erection or growth upon Grantors' Property of any building, structure, tree, or other object within the air space easement granted hereby, and to remove from said air space, or at the sole option of the Grantees, as an alternative, to mark and light as obstructions to air navigation, any such building, structure, tree or other objects on upon, or which in the future may be upon Grantors' Property, together with the right of ingress to, egress from, and passage over Grantors' Property for the above purpose.

The provisions of said easement shall apply to the following:

(1) The current Airport facilities and the present operation of the Airport therein; and

(2) Any expansion of, or change to, the Airport facilities or operation of the Airport therein which is consistent and in accordance with the City of Loveland Comprehensive Master Plan dated October 18, 1994, as currently amended, including the latest amendment thereto dated February 18, 2003 (the "Comprehensive Plan") and the Airport Master Plan. "Comprehensive Plan" as used herein shall specifically not include any amendments thereto adopted by the City after February 18, 2003, and "Airport Master Plan" as used herein shall specifically not include any amendments thereto adopted by the Grantees after May, 1993.

As used herein, and to the extent consistent with the Airport Master Plan, the term "Aircraft" shall mean any and all types of aircraft, whether now in existence or hereafter manufactured and developed, to include, but not be limited to, jet aircraft, propeller driven aircraft, civil aircraft, military aircraft, commercial aircraft, helicopters and all types of aircraft or vehicles now in existence or hereinafter developed, regardless of existing or future noise levels, for the purpose of transporting persons or property through the air, by whomsoever owned or operated.

TO HAVE AND TO HOLD said easement and right-of-way, and all rights appertaining thereto unto the Grantees, their successors and assigns, until said Airport shall be abandoned or shall

cease to be used for public airport purposes, at which time the easement and right-of-way hereby granted shall automatically revert to Grantors, their successors and assigns.

AND for the consideration hereinabove set forth, the Grantors, for themselves, their heirs, administrators, executors, successors, and assigns, do hereby agree that for and during the life of said easement and right-of-way, they will not hereafter erect, authorize the erection or growth of, or authorize to remain upon Grantors' Property any building, structure, tree or other object extending into the aforesaid prohibited air space, and that they shall not hereafter use or authorize the use of Grantors' Property in such a manner as to create electrical interference with radio communication between any installation upon the Airport and Aircraft, or as to make it difficult for flyers to distinguish between airport lights and others, or to authorize any use of the Grantors' Property that causes a discharge of fumes, dust or smoke so as to impair visibility in the vicinity of the Airport or as otherwise to endanger the landing, taking off or maneuvering of Aircraft. Grantors furthermore waive all damages and claims for damages caused or alleged to be caused by or incidental to the prohibition of such activities.

It being understood and agreed that the aforesaid covenants and agreements shall run with the Grantors' Property and shall be forever binding upon the heirs, administrators, executors, successors and assigns of the Grantors.

IN WITNESS WHEREOF, the Grantors have hereunto set their hands and seals this _____day of _____, 20____.

GRANTORS:

Insert signature blocks and acknowledgements for owner/owners

Exhibit “A”

Grantors’ Property

(Insert legal description)

* * * * *

Exhibit “B”

Airport Legal Description

“All of the Barnstorm Second Addition to the City of Loveland, Colorado.”

* * * * *

Exhibit “C”

Runway 33 Approach Plan View

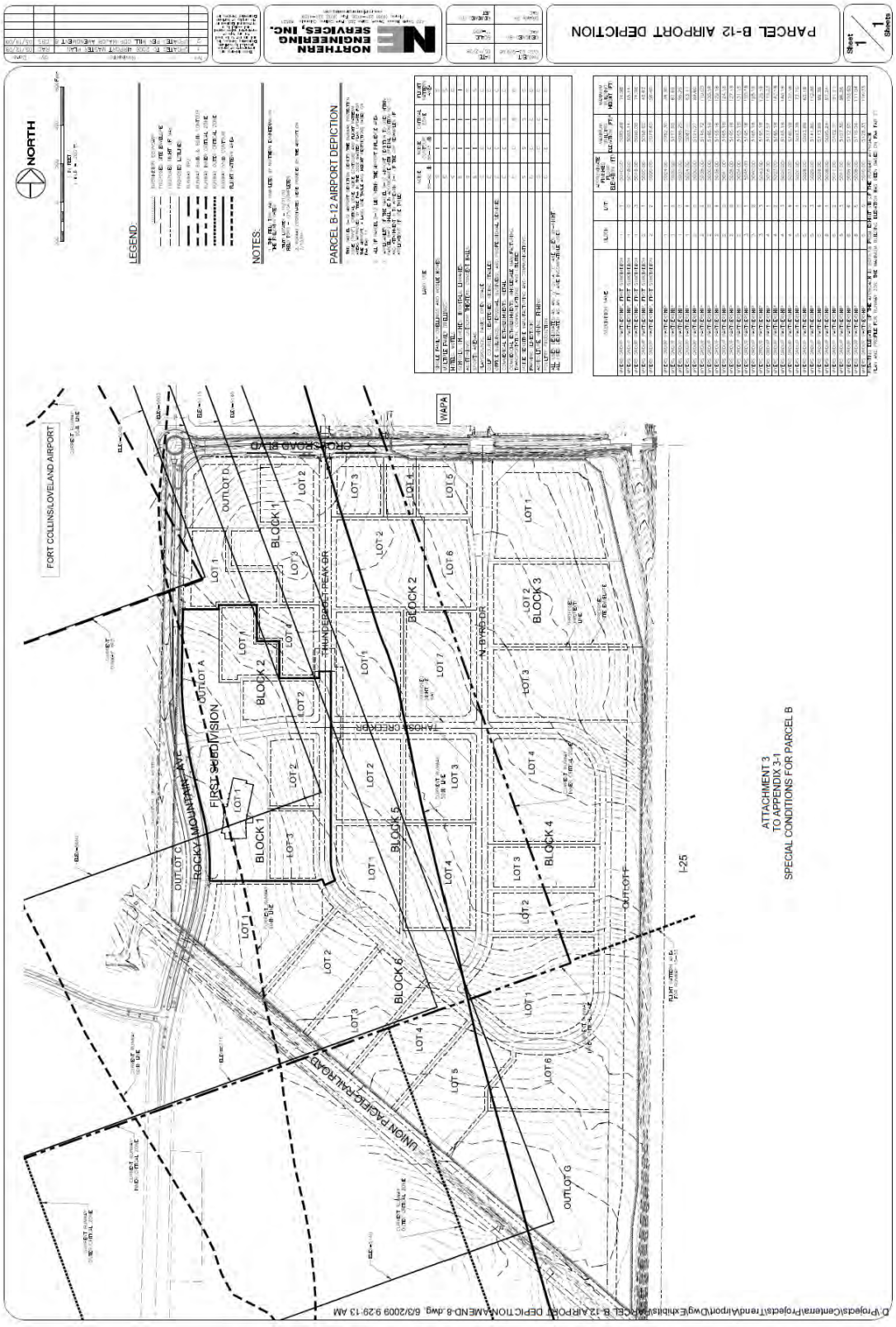
* * * * *

Exhibit “D”

FAA Regulation, Part 77, Runway 33R Approach Profile

Attachment 3
To Appendix 3-1
Special Conditions for Parcel B

Parcel B-12 Airport Depiction


PARCEL B-12 AIRPORT DEPICTION
NORTHERN ENGINEERING SERVICES, INC.
LEGEND
NOTES:
PARCEL B-12 AIRPORT DEPICTION
NORTH
FORT COLLINS/LOVELAND AIRPORT
CROSSROADS BLVD
WAPA
THUNDERBOLT PEAK DR
N BYRD DR
TAHOSE CREEK DR
FIRST SUBDIVISION
ROCKY MOUNTAIN AVE
UNION PACIFIC RAILROAD
I-25
OUTLOT A
OUTLOT B
OUTLOT C
OUTLOT G
OUTLOT H
BLOCK 1
BLOCK 2
BLOCK 3
BLOCK 4
BLOCK 5
BLOCK 6
ATTACHMENT 3
TO APPENDIX 3-1
SPECIAL CONDITIONS FOR PARCEL B

Attachment 4
To Appendix 3-1
Special Conditions for Parcel B

Examples of Applications of Use Table

PARCEL	Airport Depictions' Designation	Applicable Area Type	PERMITTED USES
1. 5-acre site with one principal use in a 45-acre subdivision.	Assume Potential Future Airport Depictions apply. In that depiction, Parcel 1 is located entirely within the "Critical Zone".	The only applicable area type is "Critical Zone".	Parcel 1 is limited to the six "S" Land Use categories and the two "C" Land Use categories listed under "Critical Zone".
2. 5-acre site with one principal use in a 45-acre subdivision.	Same assumption as above. In that depiction, 2 acres of Parcel 2 is within the "Noise Contour 65-75 db" and 3 acres is within the "Flight Pattern Area".	The two applicable area types are "Flight Pattern Area" and "Critical Zone".	The 2-acre site within Parcel 2 is limited to the two "S" Land Use categories and the eight "C" Land Use categories under "Noise Contour 65-75 db" and the 3-acre site would be limited to the five "S" Land Use categories and the nine "C" Land Use categories under "Flight Pattern Area".
3. 5-acre site with one principal use in a 45-acre subdivision.	Same assumption as above. In that depiction, all of Parcel 3 is within both the "Critical Zone" and the "Noise Contour 65-75 db".	The two applicable area types are "Critical Zone" and "Noise Contour 65-75 db".	Uses on Parcel 3 are limited to the eight Land Use categories which are either "C" or "S" under <u>both</u> "Critical Zone" and "Noise Contour 65-75 db".
4. 25-acre site with multiple uses in a 45-acre subdivision.	Same assumption as above. In that depiction, 15 acres of Parcel 4 are within the "Noise Contour 55-65 db", 8 acres are within the "Noise Contour 65-75 db" and 2 acres are within the "Flight Pattern Area".	The four applicable area types are "Noise Contour 55-65 db", "Critical Zone", "Noise Contour 65-75 db" and "Flight Pattern Area".	Uses on Parcel 4 are limited to: (1) 15-acre site – all Land Use categories under "Noise Contour 55-65 db"; (2) 8-acre site – eight Land Use categories which are either "C" or "S" under <u>both</u> "Critical Zone" and "Noise Contour 65-75 db"; and (3) 2-acre site – fourteen Land Use categories under "Flight Pattern Area" which are "C" or "S".

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ATTACHMENTS:

Attachment No. 1 – Avigation Easement Form

SECTION 4

PARCEL C

4.1 INTRODUCTION

Parcel C is located west and north of Houts Reservoir and Equalizer Lake and includes approximately 482 acres. Parcel C encompasses the west portion of Parcel D of the northwest region of the Millennium Addition, the western portion of Parcel B of the Savanna Addition, the Cloverleaf West Parcel of the Grange Addition and the adjacent lakes and the related buffer areas. Refer to Map 1 and Map 6 in Section 11 for location of this neighborhood.

There are a number of opportunities to create better, more livable patterns of development, including:

A. Provision of a variety of housing types allowing more people the opportunity to live near the substantial employment base evolving in the GDP.

B. The preservation and enhancement of Environmentally Sensitive Areas on and adjacent to the property.

C. The creation of a cohesive series of walkable neighborhoods linked to each other and to the schools, jobs, and services in the GDP.

D. Building neighborhoods with identity defined by "edges", entry features, streetscape treatments, architectural compatibility, "centers" and/or other unique design elements.

E. Encouraging the integration of appropriate non-residential uses such as schools, churches, day-care, live/work uses, small-scale offices, clinics, and other services into residential neighborhoods.

4.2 LAND USE INFORMATION

4.2.1 Existing Land Uses

Parcel C is currently used for agricultural purposes and residential development. The existing agricultural uses shall be allowed to continue as legal non-conforming uses within this parcel.

4.2.2 Proposed Land Uses

The land use categories for Parcel C include Residential Uses with a variety of housing types (with a maximum of 1,500 Dwelling Units permitted in Parcels C-1 and C-2 only); and a maximum of 180,000 gross square feet of non-residential uses in Parcels C-1 and C-2 and a maximum of 900,000 gross square feet of non-residential uses in Parcel C-4. Refer to Section 1.3 for a detailed list of the specific uses within each land use category, and the Land Use Legend on Map 6 in Section 11 for the identification of each land use category as either a Use-by-Right or a Special Review Use. Section 12 contains the review processes applicable to such uses. Please refer to Section 12.1.2 and General Condition No. 12 for information on addresses the ability to increase the number of Dwelling Units.

The GDP (Map 6 in Section 11) designates Parcels C-1 and C-2 as MUNs.

MUN uses for Parcels C-1 and C-2 are listed in detail in Section 1.3.10, and are further described in Section 9, however, Uses-by-Right within 300 feet of the existing centerline of Boyd Lake Avenue adjacent to the existing Boyd Lake Shores Subdivision (north of Frank Road and south of East 37th Street), are limited to the following uses:

a. Single Family Detached Dwellings on Lots of at least 6,000 square feet;

b. Accessory Uses and Buildings including guest quarters limited to one per Lot;

c. Public or private schools;

d. Churches and other places of assembly;

e. Cemeteries;

f. Open lands for cultivation of crops, other plants, or natural areas; and

g. Neighborhood parks, pocket parks or village greens, and playgrounds.

4.2.3 Density

Density information for Residential Uses in provided on Map 6 in Section 11 and in Sections 9 and 10.

4.2.4 Airport Influence Areas

Any Special Conditions applicable to development in Parcel C because of its proximity to the Airport are included in the Special Conditions attached as Appendix 4-1 attached to this Section 4.

4.3 CIRCULATION

4.3.1 Site Access

Subject to City approval of specific Development Projects, primary access to Parcel C will be from Boyd Lake Avenue at the locations indicated on the GDP (Lost Creek Drive, Frank Road, and Carrie Lane). Additional access points are anticipated from East 37th Street.

4.3.2 Internal Circulation

An integrated network and hierarchy of transportation ways will be provided for pedestrians, bicyclists and automobiles. The planned arterial and major collector system as shown on Map 6 in Section 11, lends itself to accommodating potential public transportation in the future. Refer to Section 7, Access, Circulation and Parking, for detailed circulation standards.

The Conceptual Amenity Map (Map 2 in Section 11) illustrates a proposed trail system. Details on any proposed trail system shall be provided with applications for Preliminary Plat and/or Final Plat review or applications for a building permit.

4.3.3 Standards

Within MUNs, streets will be designed as per LCUASS as required by General Condition No. 21 and the Performance Standards included of the GDP, with the minor exceptions for reduced design speeds and collector cross section allowed in any "Urban Character Villages" (See Map 8 in Section 11 and Section 9). In accordance with Section 9.6.2.B, alternative street designs shall be allowed subject to approval by the City Engineer.

4.4 PUBLIC AND PRIVATE UTILITIES

The following subsections indicate the utility providers currently available to provide services to Parcel C. The provision of services by other utility providers will be determined at the time of development.

4.4.1 Water and Sewer

The City will provide water and sewer service. Collection and distribution systems shall be designed and constructed as per current City standards. Further details of services will be worked out at time of Preliminary Plat, and/or final development plan, or at the time of application for a building permit.

4.4.2 Storm Drainage

Stormwater detention shall be provided either on-site or within the Houts Reservoir and Equalizer Lake system as per the City's storm drainage master plan. Water quality treatment will be encouraged on

site prior to on site drainage entering Houts Reservoir or Equalizer Lake.

4.4.3 Electric

Electric service will be provided by the City's Water and Power Department. Electric service is available from existing lines located south of Parcel C, and from a 600 amp overhead feeder located along the west side of North Boyd Lake Avenue.

All new electric distribution for single family and two family lots shall be front lot underground construction, unless otherwise accepted by the City's Water and Power Department.

4.4.4 Natural Gas

It is presently anticipated that Xcel Energy Company will provide natural gas from existing lines in the area.

4.4.5 Telephone

It is presently anticipated that telephone and telecommunications services will be provided by Qwest Communications, from existing lines in the area.

4.4.6 Irrigation Ditches

There is one existing irrigation ditch on the property, the Greeley and Loveland Irrigation Canal. The existing irrigation ditch will be maintained in place, boxed, lined and/or re-aligned as necessary. If any realignment or physical change is proposed in the ditch or improvement is proposed to any portion of an irrigation ditch, the ditch company will be contacted for approval. A copy of a letter from the ditch company shall be submitted to the City prior to any approval that directly impacts the ditch. Irrigation ditches may be used as a raw water supply for irrigation of open space areas.

4.5 NATURAL AREAS

Any Environmentally Sensitive Areas within Parcel C have been identified in two ESARs. The ESARs applicable to Parcel C are provided in Section 14 of the GDP.

For Parcels C-1 and C-2, please refer to the ESAR prepared by Cedar Creek Associates dated January, 1999.

For Parcel C-4, please refer to the ESAR prepared by Ecological Resource Consultants dated June 8, 2004.

For that portion of Parcel C-4 known as the Cloverleaf West Parcel of the Grange Addition, please refer to the ESAR prepared by FlyWater Consulting, Inc. dated February 12, 2008.

The lakes and surrounding environments that form the easterly edge of Parcel C provide an opportunity to protect and enhance existing natural wildlife features while creating a variety of recreational and educational features for neighborhood residents. Detailed Preliminary Design Plans (as described in Section 6) will be prepared for each identified Environmentally Sensitive Area and related buffer prior to or in conjunction with the approval of any Preliminary Plat creating building Lots within 300 feet of that sensitive area.

4.6 TYPICAL RESIDENTIAL NEIGHBORHOOD LAYOUTS

Map 9 in Section 11 of the GDP illustrates Neighborhood Planning Concepts (as described in Section 9) anticipated to be utilized in the MUNs in Parcels C-1 and C-2. Further criteria governing neighborhood layout is included in Section 9.

4.7 LANDFORM MODIFICATION

The topography of Parcel C gently slopes from west to east. Landform modification is expected to occur only in order to create visual interest throughout the site, for screening, or to provide for proper management of drainage.

Refer to the Conceptual Utility/Grading Map, (Map 3 in Section 11), as well as Sections 6.11 and 6.17 for additional information.

4.8 DEVELOPMENT CONDITIONS

Development within Parcel C shall be subject to the applicable General Conditions in Appendix 1-1 of Section 1 and the applicable Performance Standards in Sections 6 through 10.

Development within Parcel C shall also be subject to the applicable Special Conditions in Appendix 4-1 attached to this Section 4 and incorporated herein by this reference.

APPENDIX 4-1

SPECIAL CONDITIONS FOR PARCEL C

AIRPORT

Special Condition No. 1 (Parcel C):

The owners of those portions of Parcel C that are located within the boundaries of the Airport Influence Area as depicted on Map 6 in Section 11 of the GDP shall execute and deliver to the City for recording concurrently with the Final Plat for such property, an Avigation Easement in the form attached hereto as Attachment No. 1.

Special Condition No. 2 (Parcel C):

Those portions of Parcel C that are located within the Airport Influence Area may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations, therefore, all subdivision plats for property within Parcel C that is wholly or partially located within the boundaries of the Airport Influence Area as depicted on Map 6 in Section 11 of the GDP shall contain the following language: "All or a portion of the property being subdivided may be located within the Airport Influence Area of the Fort Collins-Loveland Municipal Airport. Such property may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations."

Special Condition No. 3 (Parcel C):

No structures located within those portions of Parcel C that are located within the Airport Influence Area as shown on Map 6 in Section 11 of the GDP shall extend into restricted air space as defined by FAA Regulation, Part 77, and the Applicant shall comply with all applicable notice requirements of such FAA Regulation.

Special Condition No. 4 (Parcel C):

Except to the extent otherwise required by applicable Federal law, all new bodies of water within Parcel C that are located within the Airport Influence Area as depicted on Map 6 in Section 11 of the GDP and within a radius of 10,000 feet from the end of any runway of the Airport, shall be prohibited provided that: (1) they are larger than one-quarter acre in size; (2) they are installed after July, 11, 2006; (3) they are designed to hold or retain water permanently or over extended periods of time; and (4) they are bird attractants. To the extent permitted by Federal law, this prohibition shall not apply to a relocation or expansion of any existing water body or to detention ponds that have outlet structures designed to prevent the permanent containment of water.

Special Condition No. 5 (Parcel C):

No exterior lighting, reflective material, smoke emissions or electronic emissions shall be permitted in those portions of Parcel C that are also located within the Airport Influence Area as depicted on Map 6 in Section 11 of the GDP which would materially lower pilots' visibility or cause material interference with the Airport's navigation and communication systems. For purposes of this condition, "reflective material" is defined as glazing with a reflectivity of 65% or greater.

Special Condition No. 6 (Parcel C):

Residential uses are not permitted in those portions of Parcel C of the GDP which are also located within the Airport's critical zone as depicted on Map 6 of Section 11 of the GDP. In the event that such critical zone is reduced in area pursuant to an amendment of the Airport Master Plan, such new critical zone boundary shall be used to determine the applicability of this condition.

Special Condition No. 7 (Parcel C):

The Developer shall include the following disclosure statement in all of its contracts for the sale of any of the property located within Parcel C of the GDP which is also within the Airport Influence Area as shown on Map 6 in Section 11 and further, shall include a provision in such sales contracts that the purchaser thereof shall include the following disclosure statement in all of its subsequent contracts for sale of such property: "The property subject to this contract may be located within the Airport Influence Area of the Fort Collins-Loveland Municipal Airport. Such property may experience noise from low-flying aircraft as a result of 24 hour per day aircraft operations." Each such contract subject to this Special Condition shall expressly provide that the disclosure provision survives closing and is enforceable at law or in equity by the City as a third party beneficiary of such contract.

ENVIRONMENTAL FEES AND ENVIRONMENTAL LAND DEDICATIONS

Special Condition No. 8 (Parcel C):

Pursuant to the Agreement Regarding Environmental Fees among the City, Developer and the Environmental Entities dated June 27, 2006, prior to fifty percent (50%) build-out of both Parcels B and C, an environmental center shall be constructed near the Houts and Equalizer Reservoirs by or on behalf of the Environmental Entities. "Build-out", as used herein in connection with both residential and non-residential development, shall mean the construction of all principal Buildings for the total number of residential Dwelling Units and the total amount of non-residential square footage permitted within both Parcels B and C.

Special Condition No. 9 (Parcels C-1 and C-2):

Each residential building permit issued for a new Dwelling Unit in Parcels C-1 and C-2 through December 31, 2040 shall require the payment of a Residential Environmental Fee of Forty-three Cents ($0.43) per finished and unfinished square foot of habitable space within the Dwelling Unit including basements, but excluding garages, carports, porches and decks. Each Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 10 (Parcel C-1):

Each building permit issued for a new non-residential Building within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue through December 31, 2040 shall require the payment of a Non-Residential Environmental Fee of One Dollar ($1.00) for each gross square foot of the non-residential Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 11 (Parcel C-1):

Each building permit issued for an addition to an existing non-residential Building within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue through December 31, 2040, which addition results in an increase of the Building's gross square footage, shall be assessed a Non-Residential Environmental Fee of One Dollar ($1.00) per square foot based on the gross square footage of the addition to the Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 12 (Parcel C-4):

Each building permit issued for a new non-residential Building within Parcel C-4 through December 31, 2040 shall require the payment of a Non-Residential Environmental Fee of Fifty Cents ($.50) for each gross square foot of the non-residential Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 13 (Parcel C-4):

Each building permit issued for an addition to an existing non-residential Building within Parcel C-4 through December 31, 2040, which addition results in an increase of the Building's gross square footage, shall be assessed a Non-Residential Environmental Fee of Fifty Cents ($.50) per square foot based on the gross square footage of the addition to the Building. Each Non-Residential Environmental Fee shall be delivered to the City in the form of a check made payable to the HPF.

Special Condition No. 14 (Parcels C-1, C-2 and C-4):

The written consent of the Environmental Entities is required prior to the City's final approval of a rezoning of any of the following Parcels: C-1, C-2 and C-4, if such rezoning would result in the removal of the Parcel from the Millennium GDP.

FEES/CREDITS/REIMBURSEMENTS

Special Condition No. 15 (Parcels C-1, C-2 and C-4):

With the exception of the local street segment as defined in LCUASS, all streets that are included in the City's Transportation Capital Improvement Plan as part of the Transportation Plan ("CIP"), shall be deemed part of the City's street capital expansion fee system and eligible for street CEF reimbursement consistent with City policy, which City policy presently designates only those streets classified as arterial or above as part of such CIP system and eligible for reimbursement. To the extent the Developer, as a condition of the development of Parcels C-1, C-2 or C-4, but excluding that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue, has designed and/or constructed, or caused to be designed and constructed, improvements to such streets, it shall be entitled to a reimbursement therefor but such reimbursement shall be in an amount equal to the costs incurred by or on behalf of the Developer in the design and construction of such streets (including the cost of off-site easement acquisition), plus interest at the average rate received by the City on its investments over the twelve (12)-month period preceding the date such interest commences to accrue, compounded annually and accruing from the date of completion and acceptance of the eligible improvement to the date reimbursement has been made. The Developer shall be reimbursed an amount equal to eighty percent (80%) of each applicable street CEF actually paid by any person or entity other than the City for each building permit within all projects in the GDP, and such reimbursement shall continue to apply until the Developer has received reimbursements in an amount equal to the total cost, as calculated above, of those eligible streets designed and constructed, or caused to be designed and constructed, by the Developer. The remaining twenty percent (20%) of each applicable street CEF paid at building permit issuance may be used by the City to fund capital transportation costs in other areas of the City, as it deems appropriate. Reimbursements shall be made by the City to the Developer on a quarterly basis. Notwithstanding the foregoing, the Developer shall not be entitled to any reimbursement from the City under this Special Condition for those "Public Improvements" which are not eligible for reimbursement from the City under Section 12.3 of the MFA.

Special Condition No. 16 (Parcel C-1):

In connection with water and sewer improvements which the City has constructed pursuant to the PVH Agreement, every building permit for a non-residential use within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (PVH Commercial Area) shall be assessed a cost equal to its proportionate share of the actual cost of the local portion of any oversized water or sanitary sewer line and any water or sewer improvement which solely benefits the proposed non-residential use. Refer to Section 5.2.3 of the PVH Agreement for specific terms.

Special Condition No. 17 (Parcel C-1):

A City reimbursement agreement dated January 23, 2003 obligates the City to attempt to collect reimbursements from the Applicants of specified properties in connection with certain water improvements installed within the right-of-way for Rocky Mountain Avenue. The City has waived its right to collect a reimbursement under such agreement from non-residential development within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (PVH Commercial Area). Refer to Section 5.2.5 of the PVH Agreement for specific terms.

Special Condition No. 18 (Parcel C-1):

Pursuant to the MFA, projects within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (MFA Commercial Area) shall not be eligible to receive reimbursement from the City to which they might otherwise be entitled pursuant to City Regulations, as defined in the MFA, for the design and construction of public improvements therein, with the exception of the following reimbursements:

1. The City's obligation to reimburse Centerra Properties West, LLC for certain costs incurred for a preliminary design of the Arterial Street Improvements. Refer to Section 6.5 of the PVH Agreement for specific terms.

2. Reimbursements for public improvements which were completed prior to January 20, 2004. Refer to Sections 12.3 and 13.5 of the MFA for specific terms.

3. Reimbursements for the design and construction of all or a portion of the Arterial Street Improvements completed by applicants of non-residential projects within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (PVH Commercial Area) to serve such projects, in the event of the City's failure to appropriate money for such improvements. Refer to Section 6.1.5 of the PVH Agreement for specific terms.

4. Reimbursements for public improvements completed in connection with Development Projects not within the MFA Commercial Area, unless such public improvements are not eligible for reimbursement pursuant to the MFA, Section 12.3.

Special Condition No. 19 (Parcel C-1):

Except as provided in Special Condition No. 17 above, the Applicant of every project within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (MFA Commercial Area) shall be responsible for payment of all applicable City development fees and use taxes and for satisfaction of all raw water requirements. Refer to Section 12.3 of the MFA for the specific terms.

Special Condition No. 20 (Parcel C-1):

Centerra Properties West, LLC and its affiliates are entitled to receive certain credits against City water system impact fees and City capital expansion fees for streets in connection with Development Projects

within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (MFA Commercial Area) pursuant to the terms of the MFA. Refer to Section 12.1 of the MFA for the specific terms.

SCHOOL DISTRICT

Special Condition No. 21 (Parcel C-2):

The Developer shall dedicate one ten (10)-acre elementary school site within Parcel C-2 to the School District in accordance with the requirements of the School District IGA, the Municipal Code to the extent not inconsistent with the School District IGA, and the site selection criteria of the School District established by its current Master Plan. The timing of the dedication shall be in accordance with the requirements of the Municipal Code and the School District IGA. Any land dedicated for a school site, which land is subsequently conveyed to the Developer or others upon the School District's determination that the land is not suitable for school purposes, shall remain subject to the Performance Standards and allowed uses for Parcel C-2 following such conveyance. All land dedicated and used for school purposes shall remain subject to the Performance Standards to the extent consistent with State law.
In accordance with an agreement between the Developer and the School District, the School District has agreed to work in good faith with the Centerra DRC (or its assignee) to provide a design for the school on the dedicated school site generally consistent with the architectural theme of the GDP, subject to budgetary constraints of the School District and to the final decision of the Board of Education of the School District.

NOTIFICATION OF MINERAL ESTATE OWNERS

Special Condition No.22 (Parcel C-4):

The first application for a subdivision plat which includes any portion of that part of Parcel C-4 known as the Cloverleaf West Parcel of the Grange Addition shall require a public hearing before the Planning Commission at least thirty (30) days prior to the administrative approval of such subdivision plat, for the limited purpose of hearing objections of mineral estate owners, as such owners are defined by C.R.S. §24-65.5-102(5). Such public hearing shall constitute the "initial public hearing" for the subdivision plat application; notice thereof shall be given in accordance with the requirements of C.R.S. §24-65.5-103 and, except as required by C.R.S. §24-65.5-103(1.5), no further notice to mineral estate owners within such subdivision plat shall be given. Prior to final approval of the subdivision plat for which notice was given pursuant to this Special Condition, the Applicant shall provide the City with a written certification in accordance with the requirements of C.R.S. §24-65.5-103.3.

TRANSPORTATION

Special Condition No. 23 (Parcels C-1 and C-2):

Unless constructed by others, the Greeley and Loveland Irrigation Canal trail underpass as shown on the master trail plan for the GDP shall be constructed at such time as North Boyd Lake Avenue is widened at its crossing with the canal trail underpass in conjunction with development in Parcels C-1 and C-2, except that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue.

Special Condition No. 24 (Parcels C-1 and C-2):

Unless designed and constructed by others or by the City pursuant to the PVH Agreement, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcels C-1 and C-2.

(a) Rocky Mountain Avenue from north of the Union Pacific Railroad crossing to Crossroads Boulevard.

(b) Kendall Parkway from Boyd Lake Avenue to Rocky Mountain Avenue.

(c) CR 24 (East 29th Street) from Rocky Mountain Avenue under I-25 to the north/south major arterial roadway in Parcel A.

(d) Boyd Lake Avenue from CR 20C (East 5th Street) to CR 24E (East 37th Street).

(e) CR 20C (East 5th Street) from Boyd Lake Avenue to CR 9E (Sculptor Drive).

(f) CR 9E (Sculptor Drive) from US 34 to State Highway 402.

Special Condition No. 25 (Parcels C-1 and C-2):

The Applicant shall obtain, at no cost to the City (except as may be reimbursable consistent with the adopted Capital Improvements Program), all FAA approvals required for the proposed extension of CR 26 (Crossroads Boulevard) from Rocky Mountain Avenue to North Boyd Lake Avenue, if such extension is required as a condition of development in Parcels C-1 or C-2 to meet ACF Regulations and any approved exceptions thereto. Written documentation of such approvals shall be provided to the City by the Applicant prior to the approval of any Final Plat that includes such future street extension.

Special Condition No. 26 (Parcel C-1):

The following roadways shall be exempt from compliance with the ACF Regulations in connection with the development of non-residential uses in that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue:

(a) Rocky Mountain Avenue from, but not including, its intersection with County Road 24 (29th Street), north to and including its intersection with Crossroads Boulevard and that portion of Crossroads Boulevard from its intersection with Rocky Mountain Avenue east to and including its intersection with the west I-25 frontage road;

(b) Existing portions of County Road 24E (37th Street) or any extension thereof west through its intersection with Boyd Lake Avenue;

(c) Existing portions of Rocky Mountain Avenue from County Road 24 (29th Street) south through its intersection with Hahn's Peak Drive; and

(d) Boyd Lake Avenue.

Special Condition No. 27 (Parcel C-1):

Except for those streets for which there is an approved exception from the ACF Regulations, Applicants of non-residential projects within that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (PVH Commercial Area) shall be required to improve public street intersections adjacent to such projects to City standards to the extent necessary to comply with ACF Regulations in the operation of such intersections and, in addition, shall be responsible for designing and installing all private street improvements necessary to adequately serve such projects.

Refer to Section 6.4 of the PVH Agreement for specific terms.

Special Condition No. 28 (Parcel C-1):

In accordance with Section 6.4 of the PVH Agreement, prior to the issuance of any building permit for the last twenty-five (25) acres of undeveloped non-residentially zoned property within Parcels B-1, B-2, B-4, B-6, B-7, B-9, B-10, that portion of B-11 north of East 29th Street, B-12 and that portion of Parcel C-1 located within the PVH Commercial Area (which properties exclude the PVH Property), all applicable ACF Regulations must be met for all public streets within the PVH Commercial Area with the exception of I-25 and its interchanges and US 34 and its intersections.

Special Condition No. 29 (Parcel C-4):

Prior to or concurrent with the approval of any Development Project or Final Plat within Parcel C-4, or as otherwise approved by the City Engineer, the owner shall dedicate, at no cost to the City, the right-of-way necessary for all street improvements either within or adjacent to said development or Final Plat that are shown on the Transportation Plan.

Special Condition No. 30 (Parcel C-4):

Unless designed and constructed by others or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcel C-4.

(a) High Plains Boulevard from the north boundary of Parcel A-5 to US 34.

(b) Boyd Lake Avenue adjacent to Parcel C-4.

(c) Kendall Parkway from Boyd Lake Avenue to Rocky Mountain Avenue.

UTILITIES

Special Condition No. 31 (Parcel C-1):

With the exception of those improvements which are the responsibility of the City pursuant to the PVH Agreement, any existing utilities that must be redesigned, rearranged, relocated, upgraded or extended in connection with the development of that portion of Parcel C-1 located east of a line 2625 feet east of the centerline of Boyd Lake Avenue (PVH Commercial Area) shall be done at the Applicant's expense unless otherwise agreed upon by the utility in question.

PLANNING

Special Condition No. 32 (Parcel C-4):

Development of any portion of Parcel C-4 that is located within Tract A, Savanna Second Subdivision is prohibited until final approval of a replat of Tract A which results in any new lots or tracts created therein being located entirely within the boundaries of the GDP.

Attachment No. 1

To Appendix 4-1

Special Conditions for Parcel C

"Avigation Easement Form"

AVIGATION EASEMENT

WHEREAS, (insert name of owner/owners) (hereinafter jointly called the "Grantors"), are the owners in fee or contract purchasers of those certain parcels of land situated in the County of Larimer, State of Colorado, more particularly described and depicted on Exhibit "A" attached hereto, herein called ("Grantors' Property");

WHEREAS, the CITY OF FORT COLLINS, COLORADO, a municipal corporation, and the CITY OF LOVELAND, COLORADO, a municipal corporation, hereinafter called the "Grantees", are owners of the FORT COLLINS-LOVELAND MUNICIPAL AIRPORT, the legal description of which is set forth on Exhibit "B" attached hereto and incorporated herein by reference (the "Airport").

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantors, for themselves, their heirs, administrators, executors, successors and assigns, do hereby grant, bargain, sell, and convey unto the Grantees, their successors and assigns for the use and benefit of the public, as easement and right-of-way, appurtenant to the Airport for the unobstructed use and passage of all Aircraft (as hereinafter defined) in and through the airspace above Grantors' Property beginning at a height consistent with the Runway 33 Approach Profile described in the Airport Master Plan Update, Fort Collins-Loveland Municipal Airport, May, 1993 (the "Airport Master Plan"), and as further defined by FAA Regulation, Part 77. The restricted airspace as defined above is depicted on Exhibit "C" ("Runway 33 Approach Plan View") and Exhibit "D" ("FAA Regulation, Part 77, Runway 33R Approach Profile"), said exhibits being attached hereto and incorporated herein by reference.

Said easement and right-of-way shall be appurtenant to the Airport and for the benefit of the Grantees and their successors and assigns, guests, and invitees, including any and all persons, firms or corporations operating Aircraft to or from the Airport.

Said easement and burden shall include all things which may be alleged to be incident to or resulting from the use and enjoyment of said easement, including, but not limited to the right to cause in all air space above or in the vicinity of the surface of Grantors' Property such noise, vibrations, fume, deposits of dust or other particulate matter, fuel particles (which are incidental to the normal operation of said Aircraft), fear, interference with sleep and communication and any and all other effects that may be alleged to be incident to or caused by the operation of Aircraft over or in the vicinity of Grantors' Property or in landing at or taking off from, or operation at or on the Airport; and Grantors do hereby fully waive, remise, and release any right or cause of action which they may now have or which they may have in the future against Grantees, their successor and assigns, due to such noise vibrations, fumes, dust, fuel particles and all other effects that may be caused or may have been caused by the usual and customary operation of Aircraft landing at, or taking off from, or operating at or on the Airport, or

by Aircraft landing at, taking off from or operating on the Airport as part of an airshow conducted as a special event authorized by Grantees provided that, in connection with any such airshow, the Grantees have developed and implemented a traffic control plan so as to avoid a material disruption to uses in place on the Grantors' Property, and provided further that no aerobatic flights involved in such an airshow shall operate within the airspace over the Grantors' Property unless the owner thereof or said owner's agent, consents to such aerobatic flights, which consent may be withheld in said owner's sole discretion. For purposes of this Avigation Easement, "aerobatic flight" means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.

The easement and right-of-way hereby granted includes the continuing right in the Grantees to prevent the erection or growth upon Grantors' Property of any building, structure, tree, or other object within the air space easement granted hereby, and to remove from said air space, or at the sole option of the Grantees, as an alternative, to mark and light as obstructions to air navigation, any such building, structure, tree or other objects on upon, or which in the future may be upon Grantors' Property, together with the right of ingress to, egress from, and passage over Grantors' Property for the above purpose.

The provisions of said easement shall apply to the following:

(1) The current Airport facilities and the present operation of the Airport therein; and

(2) Any expansion of, or change to, the Airport facilities or operation of the Airport therein which is consistent and in accordance with the City of Loveland Comprehensive Master Plan dated October 18, 1994, as currently amended, including the latest amendment thereto dated February 18, 2003 (the "Comprehensive Plan") and the Airport Master Plan. "Comprehensive Plan" as used herein shall specifically not include any amendments thereto adopted by the City after February 18, 2003, and "Airport Master Plan" as used herein shall specifically not include any amendments thereto adopted by the Grantees after May, 1993.

As used herein, and to the extent consistent with the Airport Master Plan, the term "Aircraft" shall mean any and all types of aircraft, whether now in existence or hereafter manufactured and developed, to include, but not be limited to, jet aircraft, propeller driven aircraft, civil aircraft, military aircraft, commercial aircraft, helicopters and all types of aircraft or vehicles now in existence or hereinafter developed, regardless of existing or future noise levels, for the purpose of transporting persons or property through the air, by whomsoever owned or operated.

TO HAVE AND TO HOLD said easement and right-of-way, and all rights appertaining thereto unto the Grantees, their successors and assigns, until said Airport shall be abandoned or shall cease to be used for public airport purposes, at which time the easement and right-of-way hereby granted shall automatically revert to Grantors, their successors and assigns.

AND for the consideration hereinabove set forth, the Grantors, for themselves, their heirs, administrators, executors, successors, and assigns, do hereby agree that for and during the life of said easement and right-of-way, they will not hereafter erect, authorize the erection or growth of, or authorize to remain upon Grantors' Property any building, structure, tree or other object extending into the aforesaid prohibited air space, and that

they shall not hereafter use or authorize the use of Grantors' Property in such a manner as to create electrical interference with radio communication between any installation upon the Airport and Aircraft, or as to make it difficult for flyers to distinguish between airport lights and others, or to authorize any use of the Grantors' Property that causes a discharge of fumes, dust or smoke so as to impair visibility in the vicinity of the Airport or as otherwise to endanger the landing, taking off or maneuvering of Aircraft. Grantors furthermore waive all damages and claims for damages caused or alleged to be caused by or incidental to the prohibition of such activities.

It being understood and agreed that the aforesaid covenants and agreements shall run with the Grantors' Property and shall be forever binding upon the heirs, administrators, executors, successors and assigns of the Grantors.

IN WITNESS WHEREOF, the Grantors have hereunto set their hands and seals this _____day of _____, 20____.

GRANTORS:

Insert signature blocks and acknowledgements for owner/owners

Exhibit "A"

Grantors' Property

(Insert legal description)

* * * * *

Exhibit "B"

Airport Legal Description

"All of the Barnstorm Second Addition to the City of Loveland, Colorado."

* * * * *

Exhibit "C"

Runway 33 Approach Plan View

* * * * *

Exhibit "D"

FAA Regulation, Part 77, Runway 33R Approach Profile

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Attachment No. 1 – Mountain Lion Drive Extension

SECTION 5
PARCEL D

5.1 INTRODUCTION

Parcel D is approximately 427 acres in size and is comprised of Parcels E-1, E-2, F-1, F-2 and F-3 of the Southwest Region of the Millennium Addition, Parcels G-1, G-2 and G-3 of the Serial Addition, the Gorom Addition and the Pfeiff Annexation.

Parcel D is located south of US 34, north of East First Street, and west of Boyd Lake Ave. (refer to Map 1 in Section 11). The site is divided by the Great Western Railroad tracks, which run east and west through the center of the Parcel. The Farmers Ditch runs diagonally through the Parcel from the northeast corner on the east edge to the southwest corner. The Boyd Lake Outfall Ditch runs primarily along the eastern edge of the Parcel. An existing industrial park including commercial uses and a gas plant is located just west of Parcel D to the north of the railroad tracks. South of the railroad tracks, to the west of the property is the Pine Tree residential neighborhood. Refer to Map 1 and Map 7 in Section 11 for location of Parcel D.

Parcel D presents a number of opportunities to create better, more livable patterns of development, including:

A. Provision of an integrated mix of uses including employment, shopping, recreational uses, educational facilities, and a variety of housing types allowing more people the opportunity to live, work, shop, and play within walkable areas.

B. The creation of a cohesive series of pedestrian friendly neighborhoods linked to each other and to the schools, jobs, and services in this Parcel and adjacent areas.

C. Building neighborhoods with identity defined by edges, entry features, streetscape treatments, architectural compatibility, centers and/or other unique design elements.

5.2 LAND USE INFORMATION

5.2.1 Existing Land Uses

Portions of Parcel D have been approved for residential, commercial and retail uses, and the remainder is in agricultural use or is vacant. The existing agricultural uses shall continue to be allowed as legal non-conforming uses within this parcel.

Upon development, any remaining above ground storage tanks, oil drums, gas cans, tractor / automobile batteries, or containers of pesticides / herbicides are to be removed from the site and disposed of offsite in accordance with applicable rules and regulations.

5.2.2 Proposed Land Uses

The land use categories for Parcel D include: Institutional/Civic/Public Uses, Light Commercial Uses, Light Industrial Uses, Heavy Commercial Uses and Heavy Industrial Uses (with a maximum of 1,700,000 gross square feet), Residential Uses (not in an MUN) Parks and Open Space Uses, and MUNs (with a maximum of 1,744 Dwelling Units).

Refer to Section 1.3 for a detailed list of the specific uses within each land use category, and the Land Use Legend on Map 7 in Section 11 for the identification of each land use category as either a Use-by-Right or a Special Review Use. Section 12 contains the review processes applicable to such uses. Please refer to Section 12.1.2 and General Condition No. 12 for information on addresses the ability to increase the number of Dwelling Units.

A Context Diagram is required for Development Projects within ¼ of a mile of US 34 for the purpose of illustrating that commercial uses are planned as a cohesive center(s) with coordinated access, circulation, signage, architecture, and landscape treatment.

Small, highway frontage parcels planned and developed independently as a "strip" ("strip" being described as individual Lots developed with uncoordinated access and circulation, competing and garish signage, unrestricted "franchise" architecture, and minimal, inconsistent landscaping) will not be allowed. Refer to Section 6 for information on Context Diagram requirements.

5.2.3 Density

Density information for Residential Uses is provided on Map 7 in Section 11 and in Sections 9 and 10.

5.3 CIRCULATION

5.3.1 Site Access

Subject to City approval of specific Development Projects, primary access to the site will be from US 34. Additional access points will be from East First Street on the south and Boyd Lake Avenue / County Road 9E on the east.

5.3.2 Internal Circulation

An appropriate network and hierarchy of transportation ways will be provided for automobiles, pedestrians, bicyclists, and public transportation. Refer to Section 7 of the Site Planning Criteria for detailed circulation information.

The Conceptual Amenity Map (Map 2 in Section 11) illustrates a proposed trail system. Although not all buffer/ open space areas have trails shown on this map, they will be allowed if determined appropriate in the applicable ESAR.

Details on any proposed trail system shall be provided with applications for Preliminary Plats and/or Final Plat review or applications for building permits.

5.4 PUBLIC AND PRIVATE UTILITIES

The following subsections indicate the utility providers currently available to provide services to Parcel D. The provision of services by other utility providers will be determined at the time of development.

5.4.1 Water and Sewer

The City will provide water and sewer service. An existing waterline is located along Denver Avenue to the west, and will be extended to serve this property. Additionally, future water lines along Boyd Lake Avenue could be extended to the site. A future sewer main will be located along East First Street, along County Road 9E and Boyd Lake Avenue. An extension from those lines will serve this property. Details of services will be worked out at time of Preliminary Plat or building permit, as applicable.

5.4.2 Storm Drainage

Detention shall either be provided on-site or in regional detention ponds.

5.4.3 Electric

The City's Water and Power Department will provide electricity. A 600 amp feeder is located along the south side of US 34. 200amp underground feeders are located along East 11th Street and East 13th Street along the west boundary. In addition, a 200 amp underground feeder is proposed to be located at the southwest corner of the site with construction of the adjacent Pine Tree development.

All new electric distribution for single family and two family Lots will be front lot underground construction, unless otherwise accepted by the Light and Water Department.

5.4.4 Natural Gas

It is presently anticipated that Xcel Energy Company will provide natural gas.

5.4.5 Telephone

It is presently anticipated that Qwest Communications will provide telephone and telecommunications services.

5.4.6 Irrigation Ditches

There are two existing irrigation ditches on the property – the Farmers Ditch and the Boyd Lake Outlet Ditch. The existing ditches will be maintained in place, boxed, lined and/or re-aligned as necessary. If any realignment or improvement is proposed to any portion of either of these irrigation ditches, the appropriate ditch company will be contacted for approval. A copy of a letter from the ditch company shall be submitted to the City prior to any approval that directly impacts the ditch. Irrigation ditches may be used as a raw water supply for irrigation of open space areas.

5.4.7 Railroads

The Great Western Railroad tracks divide the northerly 187± acres of Parcel D from the remainder of the site (See Map 7 in Section 11). Residential development in Parcel D adjacent to the railroad right-of-way shall be subject to the following requirements:

A. In order to mitigate railroad noise and vibration, the Applicant shall provide a bufferyard between Buildings for residential occupancy on lots in Parcel D and the railroad right-of-way in accordance with the requirements set forth in Section 15, Appendix A of the GDP.

B. For the purpose of mitigating railroad horn noise, Buildings for residential occupancy on lots adjacent to the railroad right-of-way are subject to the applicable setbacks which are depicted on Map 7 in Section 11 of the GDP.

See also Special Conditions No. 3 and 4 in Appendix 5-1.

5.5 NATURAL AREAS

Any Environmentally Sensitive Areas within Parcel D have been identified in an ESAR. The ESARs applicable to Parcel D are provided in Section 14 of the GDP.

For Parcels D-1 through D-8, please refer to the ESAR prepared by Cedar Creek Associates dated January, 1999.

For Parcel D-9, please refer to the ESAR prepared by Ecological Resource Consultants dated June 13, 2005.

For Parcel D-10, please refer to the Environmentally Sensitive Areas Report prepared by Ecological Resources Consultants dated April 17, 2017.

5.6 ARCHITECTURAL CONCEPTS

Descriptions of architectural elements for Immediate Neighborhoods housing types are included in Section 9, MUNs.

5.7 TYPICAL RESIDENTIAL NEIGHBORHOOD LAYOUTS

Typical residential neighborhood layout information is included in Map 10 of the GDP drawing set.

5.8 LANDFORM MODIFICATION

Parcel D is relatively flat. Landform modification will occur in order to create visual interest throughout the site, to provide screening as necessary, and/or to provide for proper management of drainage. On-site drainage will be primarily directed eastward towards the Boyd Lake Outlet Ditch.

Refer to the Conceptual Utility/Grading Map (Map 3 in Section 11), as well as Sections 6.11 and 6.17 for additional grading information.

Refer to the Conceptual Utility/Grading Map, included in the GDP, for additional grading information

5.9 DEVELOPMENT CONDITIONS

Development within Parcel D shall be subject to the applicable General Conditions in Appendix 1-1 of Section 1 and the applicable Performance Standards in Sections 6 through 10.

Development within Parcel D shall also be subject to the applicable Special Conditions in Appendix 5-1 attached to this Section 5 and incorporated herein by this reference.

APPENDIX 5-1

SPECIAL CONDITIONS FOR PARCEL D

FEES/CREDITS/REIMBURSEMENTS

Special Condition No. 1 (Parcels D-1 through D-10):

With the exception of the local street segment as defined in LCUASS, all streets that are included in the adopted version of the City's Transportation Capital Improvement Plan, as part of the Transportation Plan ("CIP"), shall be deemed part of the City's street capital expansion fee system and eligible for street CEF reimbursement consistent with City policy, which City policy presently designates only those streets classified as arterial or above as part of such CIP system and eligible for reimbursement. To the extent the Developer, as a condition of the development of Parcels D-1 through D-10, has designed and/or constructed, or caused to be designed and constructed, improvements to such streets, it shall be entitled to a reimbursement therefor but such reimbursement shall be in an amount equal to the costs incurred by or on behalf of the Developer in the design and construction of such streets (including the cost of off-site easement acquisition), plus interest at the average rate received by the City on its investments over the twelve (12)-month period preceding the date such interest commences to accrue, compounded annually and accruing from the date of completion and acceptance of the eligible improvement to the date reimbursement has been made. The Developer shall be reimbursed an amount equal to eighty percent (80%) of each applicable street CEF actually paid by any person or entity other than the City for each building permit within all projects in the GDP, and such reimbursement shall continue to apply until the Developer has received reimbursements in an amount equal to the total cost, as calculated above, of those eligible streets designed and constructed, or caused to be designed and constructed, by the Developer. The remaining twenty percent (20%) of each applicable street CEF paid at building permit issuance may be used by the City to fund capital transportation costs in other areas of the City, as it deems appropriate. Reimbursements shall be made by the City to the Developer on a quarterly basis. Notwithstanding the foregoing, the Developer shall not be entitled to any reimbursement from the City under this Special Condition for those "Public Improvements" which are not eligible for reimbursement from the City under Section 12.3 of the MFA.

PLANNING

Special Condition No.2 (Parcel D-9 and D-10):

Prior to any site disturbance or development activities on Parcel D-9, a detailed ESAR shall be conducted to determine the exact extent of Environmentally Sensitive Areas and potential buffer zones to protect such natural resources.

RAILROAD

Special Condition No. 3 (Parcel D):

The Applicant shall provide a bufferyard between Buildings for residential occupancy on lots in Parcel D and the Great Western Railroad right-of-way in accordance with the requirements set forth in Section 15, Appendix A of the GDP.

Special Condition No. 4 (Parcel D):

Buildings for residential occupancy on lots in Parcel D that are adjacent to the Great Western Railroad tracks shall be subject to the applicable setbacks which are depicted on Map 7 in Section 11 of the GDP, for the purpose of mitigating railroad horn noise.

Special Condition No. 5 (Parcels D-4, D-5, D-6, D-8, D-9 and D-10):

The Great Western Railroad tracks divide the northerly 187 acres of Parcel D from the remainder of Parcel D. Residents adjacent to such railroad tracks may experience noise and vibration effects resulting from the passage of trains on such tracks in close proximity to adjacent Lots. A notice reciting the above-stated potential impacts from such railroad tracks shall be placed on each subdivision plat which includes any portion of Parcels D-4, D-5, D-6, D-8, D-9 and D-10 within 500 feet of the railroad right-of-way.

TRANSPORTATION

Special Condition No. 6 (Parcel D):

Unless constructed by others or otherwise approved by the City Engineer, the Applicant is responsible for designing and constructing, or causing the design and construction of at no cost to the City, a collector street connection from the east boundary of Parcel D of the GDP, across the Boyd Lake Outlet Canal, and extending off-site through the property legally described on Attachment 1 to this Appendix 5-1 to connect to Mountain Lion Drive. The timing and detailed scope of the improvements shall be established by the Applicant and the City Transportation Engineering Division concurrently with the submittal and review of the Development Projects for the various phases in Parcel D.

Special Condition No. 7 (Parcel D):

To the extent that street and/or trail crossings of the existing railroads are required as a condition of a Development Project within Parcel D to meet the ACF Regulations and any approved exceptions thereto or other applicable Municipal Code requirements, the City shall be responsible for processing the requests for the State Public Utilities Commission approval of such crossings, and the Applicant shall be responsible for the payment of the City's reasonable costs incurred therefor, including reasonable attorney's fees.

Special Condition No. 8 (Parcel D):

Unless designed and constructed by others or by the City pursuant to the PVH Agreement, or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcels D-1 through D-10.

(a) Rocky Mountain Avenue from north of the Union Pacific Railroad crossing to Crossroads Boulevard.

(b) Kendall Parkway from Boyd Lake Avenue to Rocky Mountain Avenue.

(c) CR 24 (East 29th Street) from Rocky Mountain Avenue under I-25 to the north/south major arterial roadway in Parcel A.

(d) Boyd Lake Avenue from CR 20C (East 5th Street) to CR 24E (East 37th Street).

(e) CR 20C (East 5th Street) from Boyd Lake Avenue to CR 9E (Sculptor Drive).

(f) CR 9E (Sculptor Drive) from US 34 to State Highway 402.

Special Condition No. 9 (Parcel D-10):

Unless designed and constructed by others or otherwise approved by the City Engineer, and to the extent needed to comply with the ACF Regulations and any approved exceptions thereto, the Applicant shall design and construct, or cause to be designed and constructed at no cost to the City, the following street improvements to the standards required by the Transportation Plan and LCUASS. The timing, scope and phasing of such construction shall be determined during review and approval of future Development Projects within Parcel D-10.

(a) Boyd Lake Avenue as a four lane arterial adjacent to Parcel D-10.

(b) South Access, northbound left turn lane for the south access to Parcel D-10 from Boyd Lake Avenue

Special Condition No. 10 (Parcel D-10):

The first Development Project within Parcel D-10 shall dedicate right-of-way for a future street connection to Lot 2, Pfeiff Minor Land Division, File No. 15-S3349 as recorded at Reception No. 20160026252, County of Larimer, State of Colorado.

WATER AND SEWER

Special Condition No. 11 (Parcel D-10)

Unless designed and constructed by others, concurrent with the approval of any Development Project of Final Plat, the Developer shall design and construct, or cause to be designed and constructed at no cost to the City, the following water improvements to City standards:

(a) A water main loop from the existing 24" line in Boyd Lake Avenue to the existing 16" line located west of Boyd Lake Outlet Canal.

Special Condition No. 12 (Parcel D-10):

Pursuant to that "Reimbursement Agreement" recorded at Reception No. 2004-0093504 in the Larimer County Records, Larimer County Parcel No. 85170-00-002 was subjected to reimbursement obligations to the City of Loveland for the East Side Interceptor and Boyd Lake Ave. 24" Waterline (the "Total Reimbursement Amount"). Such parcel was thereafter platted as the Pfeiff Minor Land Division File No. #15-S3349, Larimer County, Colorado (the "Pfeiff MLD"). Parcel D-10, which is Lot 1 of the Pfeiff MLD (Parcel No. 85171-12-001) and which constitutes 44% of the total acreage of the Pfeiff MLD, shall be subject to a reimbursement obligation equal to 44% of the Total Reimbursement Amount. The owner of Parcel D-10 shall be responsible for payment to the City of Loveland of 44% of the Total Reimbursement Amount at the time that a water or sewer service line or extension which services all of any of Parcel D-10 is installed, and shall have no obligation to reimburse the City of Loveland any portion of the remaining 56% of the Total Reimbursement Amount.

Attachment No. 1

To Appendix 5-1

Special Conditions for Parcel D

"Avigation Easement Form"

AVIGATION EASEMENT

WHEREAS, (insert name of owner/owners) (hereinafter jointly called the "Grantors"), are the owners in fee or contract purchasers of those certain parcels of land situated in the County of Larimer, State of Colorado, more particularly described and depicted on Exhibit "A" attached hereto, herein called ("Grantors' Property");

WHEREAS, the CITY OF FORT COLLINS, COLORADO, a municipal corporation, and the CITY OF LOVELAND, COLORADO, a municipal corporation, hereinafter called the "Grantees", are owners of the FORT COLLINS-LOVELAND MUNICIPAL AIRPORT, the legal description of which is set forth on Exhibit "B" attached hereto and incorporated herein by reference (the "Airport").

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantors, for themselves, their heirs, administrators, executors, successors and assigns, do hereby grant, bargain, sell, and convey unto the Grantees, their successors and assigns for the use and benefit of the public, as easement and right-of-way, appurtenant to the Airport for the unobstructed use and passage of all Aircraft (as hereinafter defined) in and through the airspace above Grantors' Property beginning at a height consistent with the Runway 33 Approach Profile described in the Airport Master Plan Update, Fort Collins-Loveland Municipal Airport, May, 1993 (the "Airport Master Plan"), and as further defined by FAA Regulation, Part 77. The restricted airspace as defined above is depicted on Exhibit "C" ("Runway 33 Approach Plan View") and Exhibit "D" ("FAA Regulation, Part 77, Runway 33R Approach Profile"), said exhibits being attached hereto and incorporated herein by reference.

Said easement and right-of-way shall be appurtenant to the Airport and for the benefit of the Grantees and their successors and assigns, guests, and invitees, including any and all persons, firms or corporations operating Aircraft to or from the Airport.

Said easement and burden shall include all things which may be alleged to be incident to or resulting from the use and enjoyment of said easement, including, but not limited to the right to cause in all air space above or in the vicinity of the surface of Grantors' Property such noise, vibrations, fume, deposits of dust or other particulate matter, fuel particles (which are incidental to the normal operation of said Aircraft), fear, interference with sleep and communication and any and all other effects that may be alleged to be incident to or caused by the operation of Aircraft over or in the vicinity of Grantors' Property or in landing at or taking off from, or operation at or on the Airport; and Grantors do hereby fully waive, remise, and release any right or cause of action which they may now have or which they may have in the future against Grantees, their successor and assigns, due to such noise vibrations, fumes, dust, fuel particles and all other effects that may be caused or may have been caused by the usual and customary operation of Aircraft landing at, or taking off from, or operating at or on the Airport, or

by Aircraft landing at, taking off from or operating on the Airport as part of an airshow conducted as a special event authorized by Grantees provided that, in connection with any such airshow, the Grantees have developed and implemented a traffic control plan so as to avoid a material disruption to uses in place on the Grantors' Property, and provided further that no aerobatic flights involved in such an airshow shall operate within the airspace over the Grantors' Property unless the owner thereof or said owner's agent, consents to such aerobatic flights, which consent may be withheld in said owner's sole discretion. For purposes of this Avigation Easement, "aerobatic flight" means an intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal attitude, or abnormal acceleration, not necessary for normal flight.

The easement and right-of-way hereby granted includes the continuing right in the Grantees to prevent the erection or growth upon Grantors' Property of any building, structure, tree, or other object within the air space easement granted hereby, and to remove from said air space, or at the sole option of the Grantees, as an alternative, to mark and light as obstructions to air navigation, any such building, structure, tree or other objects on upon, or which in the future may be upon Grantors' Property, together with the right of ingress to, egress from, and passage over Grantors' Property for the above purpose.

The provisions of said easement shall apply to the following:

(1) The current Airport facilities and the present operation of the Airport therein; and

(2) Any expansion of, or change to, the Airport facilities or operation of the Airport therein which is consistent and in accordance with the City of Loveland Comprehensive Master Plan dated October 18, 1994, as currently amended, including the latest amendment thereto dated February 18, 2003 (the "Comprehensive Plan") and the Airport Master Plan. "Comprehensive Plan" as used herein shall specifically not include any amendments thereto adopted by the City after February 18, 2003, and "Airport Master Plan" as used herein shall specifically not include any amendments thereto adopted by the Grantees after May, 1993.

As used herein, and to the extent consistent with the Airport Master Plan, the term "Aircraft" shall mean any and all types of aircraft, whether now in existence or hereafter manufactured and developed, to include, but not be limited to, jet aircraft, propeller driven aircraft, civil aircraft, military aircraft, commercial aircraft, helicopters and all types of aircraft or vehicles now in existence or hereinafter developed, regardless of existing or future noise levels, for the purpose of transporting persons or property through the air, by whomsoever owned or operated.

TO HAVE AND TO HOLD said easement and right-of-way, and all rights appertaining thereto unto the Grantees, their successors and assigns, until said Airport shall be abandoned or shall cease to be used for public airport purposes, at which time the easement and right-of-way hereby granted shall automatically revert to Grantors, their successors and assigns.

AND for the consideration hereinabove set forth, the Grantors, for themselves, their heirs, administrators, executors, successors, and assigns, do hereby agree that for and during the life of said easement and right-of-way, they will not hereafter erect, authorize the erection or growth of, or authorize to remain upon Grantors' Property any building, structure, tree or other object extending into the aforesaid prohibited air space, and that

they shall not hereafter use or authorize the use of Grantors' Property in such a manner as to create electrical interference with radio communication between any installation upon the Airport and Aircraft, or as to make it difficult for flyers to distinguish between airport lights and others, or to authorize any use of the Grantors' Property that causes a discharge of fumes, dust or smoke so as to impair visibility in the vicinity of the Airport or as otherwise to endanger the landing, taking off or maneuvering of Aircraft. Grantors furthermore waive all damages and claims for damages caused or alleged to be caused by or incidental to the prohibition of such activities.

It being understood and agreed that the aforesaid covenants and agreements shall run with the Grantors' Property and shall be forever binding upon the heirs, administrators, executors, successors and assigns of the Grantors.

IN WITNESS WHEREOF, the Grantors have hereunto set their hands and seals this _____day of _____, 20____.

GRANTORS:

Insert signature blocks and acknowledgements for owner/owners

Exhibit "A"

Grantors' Property

(Insert legal description)

* * * * *

Exhibit "B"

Airport Legal Description

"All of the Barnstorm Second Addition to the City of Loveland, Colorado."

* * * * *

Exhibit "C"

Runway 33 Approach Plan View

* * * * *

Exhibit "D"

FAA Regulation, Part 77, Runway 33R Approach Profile

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SECTION 6
NON-RESIDENTIAL SITE PLANNING CRITERIA

6.1 SITE LAYOUT

Site design and land planning are critical elements in development of the GDP. Proposed Development Projects will be evaluated for compliance with the site planning criteria of this section.

These standards shall apply to Development Projects within the GDP unless they are in conflict with standards in Section 9 (MUN) or Section 10 (Residential).

6.2 BOUNDARIES/RIGHTS-OF-WAY/ EASEMENTS

Building permit site plans shall show existing property boundaries, rights-of-way and easements. Buildings and/or structures shall in no case extend into public rights-of-way or easements, or beyond its property boundary line.

Elements which may be allowed within an easement include: Trees, shrubbery, landscaping, retaining walls or other landscape features, berms, fences or walls, driveways, sidewalks, permitted signs, eaves that do not project more than 2½ feet into the easement, site furnishings, utility lines, wires and associated structures, such as power and light poles, provided that there are no conflicts between utilities within easements. Development Projects shall demonstrate that there are no conflicts between utilities and proposed landscape elements, signs, fences and walls. Landscape plans shall illustrate proposed and existing utilities.

Within any tree-lawn area, easement or street center median(s), trees shall not be planted within 10 feet of water, sanitary or storm main lines or within 5 feet of primary electrical lines, nor shall shrubs be planted within 5 feet of water, sanitary or storm main lines, unless otherwise approved by the utility provider. Offsets are not required from private utility service lines.

Elements allowed within a public right-of-way include: All of the elements allowed within an easement, except the following items: fences or walls, retaining walls, eaves of buildings, signs (except regulatory signs), berms, required bufferyards, and site furnishings unless otherwise approved by the Director.

6.3 SETBACKS

The Building and parking Setbacks have been designed to reflect the suburban character of this area and to establish a consistent street character. In general, the most generous Setbacks are along the perimeter and along the internal arterial roads within the non-residential areas. In a Mixed Use Village Center, Setbacks are reduced to allow for compact development and increased pedestrian connectivity.

See Table 6-1 for minimum Building and parking Setbacks. See Table 6-2 for minimum Oil and Gas Facilities Setbacks. In some cases, in order to comply with the bufferyard requirements, increased Setbacks may be necessary.

A. Features allowed within Setbacks. The following features may be located within required Setbacks, subject to the Building Code (see also the City's Bufferyard Standards for features allowed within bufferyards):

   1. Trees, shrubbery or other landscape features;
   2. Fences or walls that comply with the Municipal Code;
   3. Driveways which cross the setback;
   4. Sidewalks and or trails;
   5. Signs, subject to permit approval;
   6. Bay windows, architectural design embellishments;
   7. Eaves that do not project more than 2½ feet into the required setback;
   8. Chimneys, flues and ventilating ducts that do not project more than two feet into a required Setback and when placed so as not to obstruct light and ventilation;

8. Utility lines, wires and associated structures, such as power and lights;
9. Refer to Section 7.13 for further restrictions within sight triangles;
10. Refer to Appendix A for further restrictions within bufferyards.

Table 6-1 Minimum Setbacks

	MINIMUM SETBACKS FROM							
Land Use	**Side & Back Property Line**	**I-25 & US 34**	**Arterial Street ROW**	**Collector Street ROW**	**Local Street ROW**	**Alley ROW**	**Private Road (back of curb)**	**Between Buildings**
Mixed Use Village Center	0’ **	I-25 - 80’ from ROW, US 34 per 34 Corr. Plan^^	15’	0’	0’	0’	0’	0’
All Other Areas	Struct - 15’, Pkg – 10’ **, ***, ++, ^	I-25 - 80’ from ROW, US 34 - per 34 Corr. Plan^^	40’	25’+	25’+	Struct - 10’, Pkg – 0’	20’	6’ Between Eaves

Notes:

** 25’ minimum adjacent to Single Family Detached and Single Family Attached buildings with two dwellings (excludes Single Family Attached buildings with three or more dwellings) Residential Uses.

*** If the adjacent land use is similar or compatible, a 0 foot side Setback shall be allowed on one or more sides where common walls between uses exist.

\+ 25’ Setback shall be measured from the back of sidewalk in areas where the right-of-way line is located at the curb of the street. This does not apply to meandering sidewalks.

++ If a side or back property line is located along a public ROW, the ROW Setback is applied.

^ Parking areas which incorporate Shared Parking and/or driveways are excluded from the Setback requirement along the edge(s) of the property where this condition occurs.

^^ Refer to Section 6.11.3 of this GDP and the US 34 Corridor Plan for setbacks requirements along US 34 east of I-25.

General Note: A 0’ Lot line Setback will be allowed for all uses where the Setback and bufferyards are provided within an abutting Tract, Outlot or similar.

Table 6-2 Minimum Setbacks for Oil and Gas Facilities

MINIMUM SETBACKS FOR A NEW OIL AND GAS FACILITY FROM EXISTING DEVELOPMENT	
The minimum setbacks required for new oil and gas facilities from existing development shall comply with the setbacks within the Colorado Energy & Carbon Management Commission Rules and Regulations.	
MINIMUM SETBACKS FOR NEW LAND USES FROM AN EXISTING WELL (REVERSE SETBACKS)	
Land Use Zone	**Setback**
Critical Zone Permitted Uses-by-Right include: 1. Essential underground public utility facilities 2. Landscape, irrigation and Open Space	0’ to 200’ from the well head
Restricted Zone Permitted Uses-by-Right include: 1. Airport, heliport or helistop 2. Composting facility 3. Storage yard 4. Essential public utility uses, facilities, services and structures 5. Heavy Industrial Uses as described in this GDP 6. Wireless Telecommunications Facilities (all types) 7. Nursery or greenhouse 8. Recycling collection center 9. Self-storage 10. Street 11. Heavy Logistics center 12. Passenger motor vehicle sales or rental 13. Heavy motor vehicle sales or rental 14. Motorcycle, scooter or ATV sales or rental 15. Parks and Open Space Uses, including active recreation and restroom buildings which may include storage areas, pedestrian and bicycle trails, dog parks, and all other uses allowed in Parks and Open Space areas.	200’ to 500’ from the well head
Development Zone Permitted Uses-by-Right include: 1. Any approved Permitted Use-by-Right for the particular property as described in this GDP except for high occupancy Buildings as described below in the High Occupancy Building Zone.	500’ and beyond from the well head
High Occupancy Building Zone Permitted Uses-by-Right include: 1. Schools including pre-K through 12, community colleges and universities 2. Daycares 3. Churches 4. Theaters and entertainment venues 5. Outdoor assembly areas for events, concerts, etc.	1,000’ and beyond from the well head
MINIMUM SETBACKS FOR PLUGGED AND ABANDONED WELLS	
For Plugged and Abandoned Wells, the buffer shall be 50’ in width and 100’ in length, with the plugged and abandoned wellhead located in the center of the 50’ by 100’ buffer. Landscaping, parking lots, and Streets may be located within the buffer. There shall be no further setbacks for structures.	

6.4 BUILDING AND STRUCTURE HEIGHTS

Maximum heights for buildings and structures are listed in Table 6-3.

If approved by the City and the Centerra DRC, Building Heights (provided in Table 6-3) may be increased by a maximum of 10 feet if architectural detailing is provided in order to increase the aesthetic character of the façade. This additional height for the parapet, at corners and at other major Building elements, must not impact other Buildings or structures with shading and may be approved administratively by the Director, subject to approval by the Centerra DRC.

Structures that impede the use of Fire Department radios must install an antenna system within the structure. Loveland Fire and Rescue Department will determine the specifications and Buildings requiring the antenna system, unless otherwise approved.

Large or high-rise structures may be required to have a fire control room. This room will contain the control panels for the alarm system, fire extinguishing system, HVAC system, smoke control system or any other system as determined by Loveland Fire and Rescue Department. The Loveland Fire and Rescue Department will determine the requirements of the fire control room and Buildings requiring the fire control room.

High-rise structures may be required to have a fire department telephone system separate from the regular telephone system. Loveland Fire and Rescue Department will determine the requirements for the telephone system and Buildings requiring the system.

6.5 SHADOW AND SHADING ANALYSIS

Buildings or structures greater than fifty-five (55) feet in Height shall be designed so as not to have substantial adverse impact on the distribution of natural and artificial light on adjacent public and private property. Adverse impacts include, but are not limited to, casting shadows on adjacent property sufficient to preclude the functional use of solar energy technology, contributing to the accumulation of snow and ice during the winter on adjacent property, and shading of windows or gardens for more than three (3) months a year. Techniques to reduce the shadow impact of a Building may include, but are not limited to, repositioning of a structure on the lot, increasing the Setbacks, reducing Building or structure mass or redesigning a Building or structure shape.

Submittal Requirements: Developments proposing Building Heights in excess of fifty-five (55) feet shall include a shadow analysis that indicates on the project site plan the location of all shadows cast by the Building or structure (with associated dates of the year).

Table 6-3 Building and Structure Heights

Land Use	Maximum Height of Buildings and Structures*
Light & Heavy Commercial**	55 feet **
Institutional/Civic/Public	90 feet
Light and Heavy Industrial	45 feet

Notes:

*Building Heights are subject to height restrictions as defined by the applicable Special Conditions.

** -Hospital Uses are allowed a maximum Building Height of 90 feet;
-Office Uses are allowed a maximum Building Height of 85 feet;
-Hotel Uses are allowed a maximum Building Height of 120 feet

Table 6-4 Open Space Requirements

Land Use	Minimum % Private Open Space Required*
Light & Heavy Commercial	20%
Institutional/Civic/Public	30%
Light and Heavy Industrial	20%

Notes:

The percentages listed for minimum Private Open Space may be adjusted administratively up to 10% as long as the intent of the GDP is respected.

*Private Open Space requirements for Mixed Use Village Centers may be reduced. The core of the Mixed Use Village Center will be allowed 0% Open Space, and more Open Space is required as density of the Mixed Use Village Center feathers out. 10% Open Space is required for Multi-Family Dwellings within Mixed Use Village Centers, unless located within ¼ mile of another existing or planned Common Open Space area.

Buildings shall be, to the extent practical, located and designed so as not to cast a shadow onto structures within the site or on adjacent property greater than the shadow which would be cast by a thirty-foot hypothetical wall located along the property lines of the development between the hours of 9:00 am and 3:00 p.m., MST on December 21.

6.6 OPEN SPACE REQUIREMENTS

The minimum Private Open Space requirement for each Lot is indicated in Table 6-4, Open Space Requirements.

A minimum of 85% of the area defined as Private Open Space shall be vegetated landscaped areas. The intent is to create spaces which can be seen, used and enjoyed by people, whether on foot or in a vehicle. (See also Section 6.13 and 6.15).

An implementation plan shall be submitted for non-irrigated landscape areas describing how and when the non-irrigated areas will be established. Non-irrigated landscaping shall be established within a 3 year timeframe. Financial security, in a form and amount that is acceptable to the City in accordance with the Municipal Code, shall be provided to ensure seed establishment. In the event that the Centerra Metropolitan District No. 1 installs such landscaping, the financial security shall be in accordance with Section 4.3 of the MFA.

The Private Open Space requirement for an individual Lot may be reduced by 5% (for example, reduce requirements from 20% to 15%) where a Lot abuts public or Common Open Space or a golf course, if a minimum of one-third of the Lot's total perimeter length is immediately adjacent to the public or Common Open Space. The public or Common Open Space area which the Lot abuts, must also have an average width of 30' along the Lots edge in order for the reduction to be applied.

Private Open Space requirements for individual Lots within a Planned Retail Center and campuses may be reduced (if approved by the Centerra DRC and City), provided that the total percentage of Open Space within the center or campus meets the requirements of the GDP.

The Open space reductions described above can be reviewed and approved administratively by the Director.

6.7 ALLOWABLE OPEN SPACE ELEMENTS

Open space elements that may be included for the purpose of calculating Open Space in non-residential areas include:

A. Open Space areas shall be a minimum 85% vegetated with living plant material unless otherwise approved by the City;
B. Pedestrian plazas and entry courts, patios, outdoor gathering spaces (unenclosed amphitheaters);

C. Pedestrian/transit facilities where they represent a bus stop area (smaller than 500 square feet);

D. Sidewalks, trails, seating areas, fountains, pools, and information/exhibit kiosks;

E. Passive and active recreation areas;

F. Environmentally Sensitive Areas and associated buffers;

G. Detention areas, drainages, wetland water quality areas, ponds and irrigation ditches;

H. Landscaped areas planted with living plant material. Landscape materials shall be planted at a density that will cover mulch beds within a 3-year period;

I. Turf areas;

J. Other similar uses as approved by the City.

6.8 LAND USE COMPATIBILITY

The purpose of this section is to ensure that the physical and operational characteristics of proposed Buildings and uses are compatible when considered within the context of the surrounding area.

6.8.1 Outdoor Storage Areas/Mechanical Equipment

No areas for Outdoor Storage, trash collection or compaction, loading or other such uses shall be located within the Setback areas.

Loading docks, truck parking, Outdoor Storage, Outdoor Storage, Recreational Vehicles, Boats, and Trucks, utility meters, HVAC and other mechanical equipment, trash collection, trash compaction and other service functions shall be located and screened (per Sections 6.20, 6.21, 6.22 and 6.23) so that the visual and acoustic impacts of these functions are contained and out of view from public streets, public sidewalks, trails, and from dissimilar adjacent land uses.

6.8.2 Noise

Uses shall comply with the noise standards within the Municipal Code.

A. Where Outdoor Storage, loading areas and other similar uses are proposed adjacent to Residential Uses, the Applicant shall prepare and submit a noise study or memorandum identifying projected noise levels.

B. Noise issues can be mitigated using some or all of the following techniques: increased Setback, berming, solid fencing/walls, or landscaping. In some cases, landscaping alone is not sufficient to mitigate noise issues. In these instances, landscaping must be used in combination with some of the other techniques listed above.

6.8.3 Bufferyards

Bufferyards shall be constructed to mitigate problems associated with noise, odor, glare, dust, smoke, pollution, water vapor, conflicting land uses and density, height, mass, layout of adjacent uses, loss of privacy, unsightly views and other potential negative effects of development.

Bufferyards are not required in Mixed Use Village Centers.

Bufferyards shall be located on the outer perimeter of a Lot, extending to the Lot boundary line. Bufferyards shall not be located on any portion of an existing or dedicated public right-of-way, except as permitted by the City's Site Development Performance Standards and Guidelines.

Refer to Appendix A for the City of Loveland Site Performance Standards and Guidelines for detailed bufferyard performance standards. Bufferyards within this GDP shall comply with the City's bufferyard standards, as amended, unless otherwise approved. Alternatives to the requirements for bufferyard types, Setbacks and plant material quantities

shall be allowed subject to review and approval by the Director as stated within the bufferyard guidelines.

6.9 VIEW CORRIDORS

Views to the attractive natural surroundings, such as Equalizer Lake, Houts Reservoir, and the Rocky Mountain backdrop, as well as distinctive on-site features, including park areas, open space and natural areas are amenities to be shared by all. Preserving view opportunities of these features from Open Space corridors, building entries, and interior spaces is encouraged. Owners and Applicants are encouraged to emphasize these key natural features by reflecting them in their individual developments.

A. Where possible, create view corridors by aligning roads, driveways, Open Space corridors, building entries, and pedestrian walkways to preserve and take advantage of available views.

B. Protect significant views to the attractive natural surroundings.

6.10 RETAIL SITE AMENITIES AND DRIVE THROUGH FACILITIES

6.10.1 Retail Site Amenities

Each Planned Retail Center shall contribute to the enhancement of community and public spaces by providing at least two (2) of the following:

1. Patio/seating area/outdoor dining;
2. Pedestrian plaza with benches;
3. Transportation center/bus stop;
4. Window-shopping walkway;
5. Outdoor playground area;
6. Kiosk area;
7. Water feature/work of art;
8. Floral displays, flower pots or hanging flower baskets.

6.10.2 Drive-Through Facilities

Buildings with drive-through facilities, such as banks and fast food restaurants, shall be oriented in order to reduce the visibility of the drive-through window(s) from the dominant abutting public street.
Drive-through lanes and driveways are subject to parking lot screening requirements. (see Section 6.17).

6.11 US 34, I-25 AND MULTI-PHASED CAMPUS-STYLE DEVELOPMENT DESIGN CONSIDERATIONS

6.11.1 Policy

This GDP will have a significant presence along both US 34 and I-25. The intent of this section is to ensure that development located adjacent to either US 34 and I-25 and multi-phased campus-style development projects of 50 acres in size or larger are planned cohesively with visual quality and consistency in mind.

6.11.2 Context Diagram

Development Projects located within ¼ mile of either I-25 or US 34 right-of-way, Development Projects including a Mixed Use Village Center and multi-phased campus-style development projects of 50 acres in size or larger, shall include a Context Diagram (or reference an existing Context Diagram provided with an earlier application). The purpose of the Context Diagram is to illustrate how the project will contribute to the make-up of the roadway frontage, to illustrate that land uses are planned as cohesive center(s) with coordinated access, circulation, signage locations and landscape treatments.
The Applicant shall submit for review by the City, in conjunction with the plat review process, a possible configuration (or alternative configurations) of the land within 500 feet of the Development Project, (excluding land that is not a part of the GDP and land which is not within a ¼ mile of I-25 or US 34).

The Context Diagram for Development Projects within ¼ mile of either I-25 or US 34 right-of-way shall include the following:

A. Potential land uses and existing land uses;

B. Pedestrian and vehicular circulation patterns;

C. Open Space areas;

D. Landscape standards;

E. Conceptual drainage and utility systems;

F. Conceptual location of ground mounted project signs;

G. Other general planning considerations within 500' of the proposed Development Project;

H. Linkages to areas immediately adjacent, important views, corridors and vistas, and Environmentally Sensitive Areas (as identified within this GDP);

I. The Context Diagram shall clearly indicate which elements are schematic and subject to change with future Preliminary Plats, and which elements are considered to be conditions of approval of the concurrent Preliminary Plat application.

Multi-phased campus-style development projects of 50 acres in size or larger, the Applicant shall submit for review by the City in conjunction with the first Site Development Plan review process, a possible configuration (or alternative configurations) of land within the defined campus. The context diagram shall include the following:

A. Potential land uses and existing land uses;

B. Pedestrian and vehicular circulation patterns;

C. Open Space areas;

D. Conceptual drainage and utility systems;

E. Linkages to areas immediately adjacent, important views, corridors and vistas, and Environmentally sensitive Areas (as identified within this GDP).

6.11.3 US 34 Setback Treatment

The recommendations of the U.S. 34 Corridor Plan (available from the City) will be incorporated into the GDP. As an extension of the U.S. 34 Corridor Plan, property abutting US 34 east of I-25 will incorporate the recommended U.S. 34 Corridor Zones as shown in Figure 6-1. Alternatives to the recommendations of the U.S. 34 Corridor Plan shall be allowed subject to the approval of the Director.

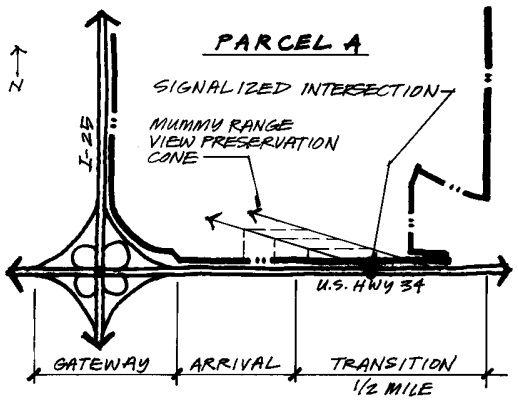


Figure 6-1 – View Preservation Cones will be Implemented at Signalized Intersection

6.11.4 I-25 Setback Treatment

A. A consistent and high quality image shall be presented along I-25 corridor. Visual impacts of Buildings shall be softened and views to parking areas shall be screened where possible.

B. The I-25 right-of-way will be primarily unirrigated grasses and sculpted landforms with occasional bands of shrubs and trees that meander just inside the right-of-way to the private property and back, to avoid a straight line treatment at the edge of the right-of-way.

C. The 80 foot landscape buffer adjacent to the right-of-way will be dominated by the sculpted landforms, supported by irrigated and unirrigated grasses, tree groupings, and banks of ornamental grasses, shrubs and perennials.

D. The combined I-25 right-of-way and 80 foot landscape buffer shall be designed as a unified concept.

E. Identity signs for significant projects will be allowed within the 80 foot buffer, per the Centerra Planned Sign Program which is included in Section 15 of this GDP as Appendix C.

F. Buildings and parking lots shall be setback a minimum of 80 feet from the I-25 right-of-way.

G. Fences shall be setback a minimum of 80 feet from the I-25 right-of-way or if required, per

CDOT standards. (Refer to Section 6.25 for additional fence standards).

H. Height of sculpted berms will vary by location. Berm locations and heights will be designed to provide screening of parking areas, service areas and to provide visual interest along I-25. Sculpted berms will range in height from 5 feet to 15 feet.



Figure 6-2 – Interstate 25 Treatment

6.12 ENVIRONMENTALLY SENSITIVE AREAS PLANNING

Note: The Environmentally Sensitive Areas Planning Performance Standards apply to all proposed land uses within this GDP.

A. ESARs are provided within Section 14 of this GDP. No further ESAR will be required with Preliminary Plats except in the case of sensitive, threatened, or endangered species as described below. The existing ESARs will suffice for Preliminary Plats when supplemented with the detailed reports and detailed preliminary design plans submitted as outlined below.

B. The City and the Applicant acknowledge that future federal or State listing of sensitive, threatened, or endangered species may result in the need to further analyze environmental conditions on the property. With future listings of such species, the City or the Applicant may require submittal of a supplemental ESAR solely to address the potential presence of, impacts to, and mitigation appropriate for said species.

C. In the more typical process for detailed planning and design of Environmentally Sensitive Areas, the Applicant will prepare, in consultation with the City's environmental planning staff a three step ***Amenities Framework Plan*** that will include:

1. A *Conceptual Amenity Map* – included as a part of this GDP - addressing general locations of natural/Environmentally Sensitive Areas, school sites, parks, trail systems, and other Recreational Facilities. This plan clarifies that;
   a. Developed portions of neighborhood park and school sites will not encroach on buffers as defined in the associated ESAR, as amended from time to time (included in this GDP).
   b. Industrial, Heavy Manufacturing, or similar uses of potential concern planned within 300' of Environmentally Sensitive Areas may, at the City's option, be required to provide a noise impact/mitigation study.

c. The determination of potential for a nature park or other educational/interpretive features integrated into any buffer areas will be made as the other *Supporting Documents* and *Detailed Preliminary Design Plans* evolve - as described below.

d. Timing of installation, species, soil prep, weed control, irrigation, maintenance, etc. will be addressed in the appropriate *Detailed Preliminary Design Plans* for each area.

e. Areas indicated as buffers are to be managed and protected from the impacts of human activities, but in some cases are not required to be totally inaccessible. In some areas, smaller buffers are intended only to address increased water quality concerns, which may be addressed through methods other than a predetermined setback of a certain dimension. Detention and other storm drainage management features may be integrated into some portions of larger buffer areas, subject to sensitive design. The same is true of some limited trail construction.

f. Appropriate recreational uses as determined in the related ESAR will not be prohibited.

g. The proposed trail across the divider of Houts Reservoir and Equalizer Lake is an important part of the overall pedestrian circulation system within the GDP. Because of the trail's proximity to the buffers called for as part of Areas 1, 2, 5, and 6, sensitive design and construction techniques are to be defined in the applicable *Detailed Preliminary Design Plans*.

2. Other *Supporting Documents* completed outside the scope of this GDP to address the long-term funding, maintenance, management, and potential environmental educational programs for Environmentally Sensitive Areas will be prepared and submitted for approval prior to the submittal of any Preliminary Plat creating building Lots abutting on Environmentally Sensitive Areas or related buffer areas, as defined in the January 1999 Cedar Creek *Sensitive Areas Report*. It is at this time that any changes in environmental conditions and/or City policy will be addressed.

3. *Preliminary Design Plans* will be prepared for each Environmentally Sensitive Area and related buffer, addressing mitigation measures, enhancements, grading, other physical improvements, plantings, and timing of installation. A *Preliminary Design Plan* for any Environmentally Sensitive Area – as defined in the ESAR– will be prepared and submitted for approval prior to, or in conjunction with, the approval of a Preliminary Plat for any building lots adjacent to, or within 300' of that sensitive area. Preliminary landscape plans shall illustrate the graphic locations of existing and proposed plant materials, areas to be receive seed and sod, general seed types, irrigated vs. non-irrigated areas, a plant legend showing the graphic symbols for the various plant types (plant labels and a plant list are <u>not</u> required with *Preliminary Design Plans*).

4. *Final Design Plans* will be prepared for each Environmentally Sensitive Area and related buffer, addressing mitigation measures, enhancements, grading, other physical improvements, plantings, and timing of installation. *Final Design Plan* for any Environmentally Sensitive Area – as defined in the ESAR – will be prepared and submitted for approval prior to, or in conjunction with, the approval of a Final Plat, combined Preliminary Plat and Final Plat, or Use-By-Right for any building Lots adjacent to, or within 300' of that sensitive area. Final Design Plans shall illustrate existing and proposed plant material, plant labels, a detailed plant materials list, indication of irrigated vs. non-irrigated areas, and description of seed/sod types.

5. Implementation of the elements of the applicable *Final Design Plan* will become a condition of approval of the Development Project for the subject property.

6.13 LANDSCAPING

Note: The Landscaping Performance Standards apply to all proposed land uses within the GDP.

Landscaping is intended to unify the Building and its site with adjacent development areas. Emphasis is on landscaping the GDP as a single entity, not on a small-scale with individual landscaped areas. In order to establish a consistent streetscape and Open Space image, a conceptual landscape master plan or a set of detailed landscape design guidelines shall be prepared and submitted to the City for approval along with the first Preliminary Plat within each parcel. The conceptual master plan or guidelines will specify the intent, character, types, and locations of landscape elements.

Development Projects shall include a detailed landscape plan that indicates the location, type, sizes and quantity of proposed landscape elements.

Where appropriate, turf will be low water requiring varieties with areas of longer, native species. Perennial and annual flowers will provide accent color.

Create a landscape that is sustainable, attractive, comfortable, and complimentary to the natural and manmade environment.

Use plant materials that are massed and placed to provide variety and focal points at strategic locations.

Where appropriate, use large-scale plantings with the intent of creating thickets of shrubs and broad sweeps of flowers in meadows that occur naturally in the Colorado plains and foothills region.

Plant evergreens and other trees with moderate to low water needs on uplands, while locating cottonwoods, willows and other riparian plants in drainages and low lying areas.

Landscaping and/or earth shaping shall be used to screen surface parking, to soften structures such as Parking Garages and stark walls; to buffer sound adjacent to heavily traveled areas. Shrubs are encouraged to be used for low level buffers, enclosure, identity and reinforcement of pathways, and to provide visual interest and display.

Landscape plans shall include landscaping for non-paved areas located in any public right-of-way adjacent and contiguous to the Lot to which the plan applies. The landscape plan shall illustrate existing trees, shrubs and irrigated turf areas immediately adjacent to the Lot for which the plan applies.

Sites adjacent to US 34 will incorporate the recommendations set forth in the U.S. 34 Corridor Plan, unless otherwise approved by the City.

Tree lawns shall be a minimum of six feet wide on streets classified as collectors or arterials; and on local residential streets of 28 feet or less. Street trees may be planted formally or informally providing that the required number of streets are included.

Berm and embankment slopes shall not exceed a ratio of 3:1 and must be graded with smooth transitions. Berm slopes facing public streets may not exceed 4:1. Shrubs and vines should be placed at least three feet to five feet from curbs to protect them from roadway chemicals. (See also Section 6.17).

Where surface retention is a part of the overall design, use of water features, both functional and ornamental, is highly encouraged.

Landscaping and irrigation must be completed in the next available planting season, or as soon as weather conditions permit, or within the schedule approved by the City, whichever is earlier. Areas to be landscaped shall be completed within 9 months of the date of occupancy. The City will require escrow in the amount of 125% of the value of the installed landscaping and irrigation, at the time of a temporary certificate of occupancy, until the landscaping is installed. In the event that the Centerra Metropolitan District No. 1 installs such landscaping, the financial security shall be in accordance with Section 4.3 of the MFA.

Landscape plans must be prepared by a professional landscape architect.

6.13.1 Landscape Design and Materials

As an alternative to the City guidelines and Performance Standards, specific landscape design criteria may be developed for each neighborhood or village

and approved as alternative compliance by the Director. Additional or alternative plant species, beyond those included in the City guidelines, may be used as appropriate to the site-specific conditions. Landscape design shall incorporate some or all of the following xeriscape principles:

A. Grouping plants with similar water requirements together;

B. Limiting high-irrigation turf and plantings to high-use and/or high visibility areas;

C. Use of low-water demanding plants and turf where practical;

D. Use of indigenous plant materials, where appropriate and practical;

E. Use of efficient irrigation systems, including the use of non-potable irrigation water;

F. Use of mulches and soil improvements;

G. Provision of programs for regular and attentive maintenance;

H. Trees and shrubs sizes, at the time of planting, shall comply with the minimum sizes listed in Table 6-5. Refer to Appendix B for a map of the Special Improvement District.

Table 6-5 Minimum Plant Sizes

Plant Type	Typical Min. Sizes	Min. Sizes within the Special Improvement District
Deciduous Shade Trees	2" caliper	2.5" caliper
Ornamental Tree	1 ½ caliper	2" caliper
Evergreen Trees	6' height	8' height
Shrubs	5 gallon	5 gallon

6.13.2 Tree Stocking

A. "Tree stocking" shall be required in landscape areas within one hundred (100) feet of a Building or structure as further described below. Landscape areas shall be provided in adequate numbers, locations and dimensions to allow tree stocking to occur along all high use or high visibility sides of any Building or structure (building facades abutting alleys are exempt from tree stocking requirements).

B. Tree stocking shall mean formal or informal groupings of trees (canopy, evergreen or ornamental) planted at a quantity equal to 1 tree for every 40 lineal feet of Building Frontage.

C. Exact locations and spacing may be adjusted at the option of the Applicant to support patterns of use, views and circulation as long as the minimum tree-planting requirement is met.

6.13.3 Foundation Planting

A. Where appropriate, trees, shrubs and groundcovers, shall be located near Buildings on the site to aesthetically integrate each Building into the overall site, to visually soften the massiveness of Buildings, and to separate the Building from the parking lot. The appropriate amount of Building foundation plantings shall be determined by the Centerra DRC and the City. Where trees are utilized, planting beds shall be a minimum of six (6) feet in width.

B. Where parking lots abut a Building without intervening landscaping, parking bays shall extend no more than seven (7) parking spaces without an intervening landscape island with a tree.

6.13.4 Retaining Walls

Materials such as split-face modular block (straight face - not beveled), brick, stone, artificial stone and other similar materials may be used to construct retaining walls.





Figure 6-3 Retaining Wall Examples

6.13.5 Ownership and Maintenance

Parks or other outdoor spaces may be dedicated to a public agency or be privately owned and maintained by the Applicant or property owners association. Public acceptance of such parks or outdoor spaces into the publicly owned system of open lands will be based on specific negotiation on an individual site basis.

Maintenance of landscaped areas located behind the sidewalk and within the public right-of-way, is the responsibility of the adjacent property owner. A Metropolitan District and/or an owners association will maintain landscaped areas between the sidewalk and the back of curb and any landscaped median located within the public right-of-way or an easement.

6.14 EXISTING VEGETATION

A. Preserve valuable shrubs, grasses and trees within natural drainage areas and areas not needed for development.

B. Preserve healthy, mature trees and younger plants that would normally succeed older plants; do not preserve trees, which are decayed, diseased or are reaching the end of their natural life span, as determined by a qualified professional.

C. Site plans shall identify locations, sizes and species of existing vegetation located within the Development Project. Existing vegetation shall be classified in one of the following categories: "Preserve," "Relocate" or "Remove". If a tree is classified “Remove”, a justification statement shall be provided. “Replacement Trees” shall be identified on the landscape plan in accordance with Table 6-6 below.

D. If there is no practical alternative in terms of siting Buildings and other development, trees and other plants may be removed. If valuable healthy, mature trees are destroyed by development, new trees shall be installed to replace the destroyed trees as described in Table 6-6.

Table 6-6 Replacement of Valuable Trees

Tree Removed	Replace With
24” or larger caliper tree	(3) 4” caliper min. trees
12” to 24” caliper tree	(2) 4” min. caliper trees
6” to 12” caliper tree	(1) 4” min. caliper tree
2” to 6” caliper tree	(1) 3” min caliper tree

6.15 IRRIGATION SYSTEM

Landscaping (except natural areas and other similar areas) shall be irrigated using an automatic underground irrigation system. Use of raw water for irrigation purposes is encouraged, but not required. Developments are required to irrigate their landscape areas including street rights of way adjacent to their respective properties.

Roadway medians (including roundabout islands), and Common Open Space areas will be irrigated and maintained by an owners association or Metropolitan District.

6.16 INTERNAL PARKING LOT LANDSCAPING

6.16.1 Policy

Areas within the perimeter of parking lots shall be landscaped to minimize the feeling of expansive hard surfaced areas, to improve the parking lot appearance and to reduce heat build-up. The landscape design of the areas shall allow for plant aeration and efficient traffic movement.

6.16.2 Criteria

A. Refer to Section 7.15.1 for landscape requirement within large parking areas.

B. Parking lots containing fifteen (15) or more parking spaces shall provide at least six (6) percent interior parking lot landscaping. At least seventy-five (75) percent of landscaped area should be covered with living materials within three years of installation.

C. Additional internal landscaping shall be provided in parking lots that exceed the minimum Parking Ratios. Fifty (50) square feet of internal landscape shall be provided for each parking space, which exceeds the Parking Ratio as defined in Section 7.17 of these Performance Standards. The additional internal landscaping can be distributed throughout the interior of the entire parking lot.

D. Shade trees shall be planted in the parking lots at a rate of at least one (1) tree and five (5) shrubs for every fifteen (15) parking spaces.

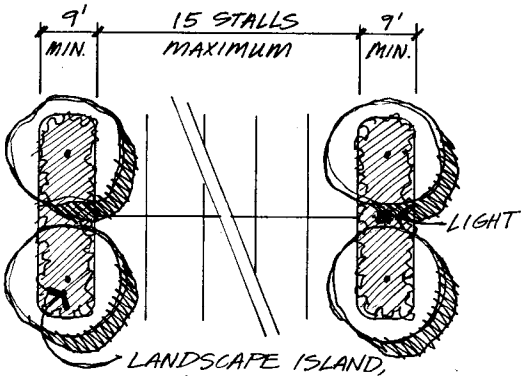


Figure 6-4 - Parking Islands

E. Plant materials shall be placed on end islands, entry drives, pedestrian walks and along islands which separate parking from drives. The landscape island should be designed to allow plant materials to survive and flourish given harsh conditions and the need to store snow during the winter. Landscape islands shall be at least 9 feet in width and the same length as adjacent parking spaces.

6.17 PARKING LOT SCREENS

6.17.1 Policy

Parking lots shall be screened from surrounding public streets, public sidewalks and trails, public parks and other properties that are used by the public.

6.17.2 Criteria

A. Whenever there are three (3) or more parking spaces on the property, the parking lot shall be screened for the entire length of the parking lot, which abuts a public street (excluding Alleys).

B. Berms, walls, fences, plants, planters or similar means shall be used to create the parking lot screen. Where structures such as walls or fences are used to create a screen, plants shall be located on the side of the structure which can be seen from surrounding streets, walks, parks, trails and other properties which are used by the public.

C. The screen around the parking shall be at least three (3) feet higher than the surface of the

parking lot. Where plants are used to create a screen, the plants should create a three-foot screen within three years from the time planted. (See Figure 6-5).

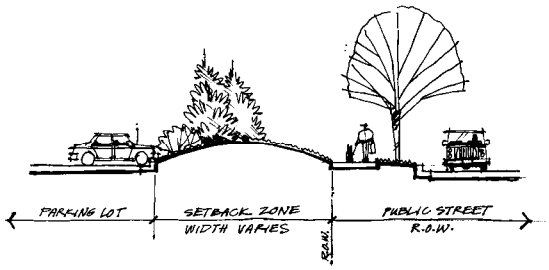


Figure 6-5 – Parking Lot Screening

D. Parking lot Setbacks are provided to mitigate the visual impacts of parking areas from adjacent property and public rights-of-way (refer to Table 6-1 for Setbacks). A minimum 3' high screen shall be provided between parking lots and public right-of-way. In addition, 4' to 6' high screens shall be provided between parking lots and the I-25 and US 34 right-of-way. The screen can be accomplished using one or a combination of the following: berms, landscaping, or wall. Height of screen shall be measured from the parking surface.

6.18 SNOW REMOVAL

Provision must be made for snow removal and storage on each nonresidential site. Pushing snow into the street or street medians is not permitted.

6.19 DRAINAGE

Site drainage must be compatible with adjacent property drainage and in accordance with the Concept Utility/Grading Plan component of the GDP. Excess run-off from the site shall be minimized with sites graded to provide positive drainage away from buildings and to drainage easements/systems and/or to street drainage systems. Storm drain detention requirements shall be accommodated within individual development sites, Houts Reservoir and Equalizer Lake (if possible in Parcels B & C) and possibly within regional detention areas. Each proposed Development Project must be evaluated for potential detention needs to avoid exceeding the carrying capacity of conveyance facilities, or creating off-site flow problems on adjacent downstream parcels. The City requires each Development Project to detain its developed storm flows at historic rates.

Existing drainage patterns and drainage conveyance easements are important site considerations, as reflected in the Conceptual Utility/Grading Plan component of the GDP. Proposed site drainage plans must address site drainage considerations as well as the relationship of site drainage to off-site drainage patterns and systems.

The basic concepts for drainage are:

A. Drainage shall be conveyed along dedicated streets, private drives and swales along property lines, or in Open Space corridors. Drainage will be surface drained where possible; however, some below-grade drainage using storm sewer piping and culverts may be required.

B. Surface drain systems and detention ponds are encouraged to be irregular in plan and graded to create an aesthetically pleasing character. Side slopes shall vary and avoid consistent side slopes. Steepest slopes should be no more than 3:1.

C. Retaining walls may be used in detention areas where existing topography demands this type of design solution. Refer to Section 6.13 for retaining wall information.

D. Drainage structures in sidewalks and bike paths must be placed flush with the surface, and grate patterns cannot have openings larger than three-eighths of an inch. Surface storm water or irrigation should not be discharged across sidewalks; and there should be no point discharges into curbs to prevent traffic-impeding surges into the street.

E. The City's water quality standards shall be incorporated into developments within the GDP.

6.20 UTILITIES, MECHANICAL EQUIPMENT, AND COMMUNICATION DEVICES

Visual and sound impacts of utilities, mechanical equipment, data transmission dishes, towers,

microwaves, and other services and equipment shall be minimized within the GDP. Radio transmitter towers and other similar equipment shall comply with the Municipal Code.

6.20.1 Permanent Utility Lines

Design and install all permanent utility lines underground. During construction and maintenance, minimize disruptions to other sites and businesses.

Berms (generally described as being higher than 2 feet and having side slopes steeper than 4:1) shall not be installed over the top of existing and/or proposed water, sanitary or storm main lines, unless approved otherwise by the applicable utility service provider.

6.20.2 Temporary Overhead Power and Telephone Lines

Overhead power and telephone lines are permitted during construction, but shall be removed prior to issuance of a certificate of occupancy (including the temporary certificate of occupancy).

6.20.3 Communication Devices and Mechanical Equipment

Wherever possible, mount data transmission and receiving telecommunication devices at ground level, to the rear of structures, and screen them from view from adjacent roadways, pedestrian paths, and Building sites.

In screening such devices and equipment, use architectural treatments in subdued colors that blend with the surroundings and landscaping.

Coordinate locations, screening, and landscape decisions with involved utility and service providers in order to allow adequate conditions for servicing these devices and equipment and to reduce visual impact.
If transmission and receiving devices or mechanical equipment are roof-mounted, locate them so they are not visible from the site, adjacent Buildings, and public view.

Communication devices visible from adjacent sites and Buildings shall be painted in a color compatible to the Primary Structure. If equipment cannot be painted it shall be screened using architectural screen walls or landscaping.

6.20.4 Transformers, Gas Meters

Electrical transformers and other utility boxes and equipment shall be substantially screened from public view with the use of landscaping, berming or screened enclosures. Where appropriate, screening shall be subject to approval from the City's Power Department and the Current Planning Division. Screening materials shall be compatible with the primary Building.

Coordinate locations, screening, and landscape decisions with involved utility companies in order to allow adequate conditions for service access. Conduits, meter sockets, and vents shall be painted to match Building surfaces and screens. While the meter socket may be painted, the meter itself cannot be painted.

Prior to approval of the Final Plat, the location of all vaults and transformers shall be shown on the landscape plan. Vaults shall have no bushes, shrubs or trees of mature growth within five (5) feet of either side of the short sides of the vaults. Bushes, shrubs and trees of mature growth may be located within ten (10) feet of either side of the long side of the vaults. Transformers shall have no bushes, shrubs or trees of mature growth within ten (10) feet of the sides and back of the transformers and within fifteen (15) feet of the front of the transformers. Transformers may be screened with landscaping to the extent allowed by the above dimensions, provided that it meets with the requirements of the local utility company.

Unless approved otherwise, all metering equipment including cabinets, breakers and main disconnects shall be located on an outside wall of the each structure.
The screening of utilities and mechanical equipment shall not create a safety hazard to either the general public or for the safe operations of the utility meter.
Locate transformers and gas meters away from major pedestrian routes and outdoor seating areas in order

to protect pedestrians and facility users in these locations.

6.20.5 Equipment Sound Levels

Select, locate, and install all mechanical and electrical equipment to not exceed the sound levels allowed under the Municipal Code.

Use landscape or architectural buffers to reduce the noise and visual impact of such equipment.

6.20.6 Installation of Ground-Level Structures

Install ground-level structures, such as manhole covers and grates, flush with the pavement. Grate spaces within pedestrian routes shall in accordance with the Americans with Disabilities Act, federal, State, the Municipal Code and LCUASS.

6.21 SERVICE AREAS

6.21.1 Policy

The visual impacts of service, delivery, trash, and outdoor equipment or storage areas shall be minimized, particularly relative to views from public roadways and along view corridors. Thoughtful placement and design of screening for these facilities is a priority for all sites.

6.21.2 Criteria

A. Loading docks, generators, trash containers, and service areas shall be screened or located out of view from adjacent streets, dissimilar land uses pedestrian pathways, and Open Space corridors.

B. Facilities must be fully screened from public view using a masonry wall (or similar) and gate to match the Primary Structure. Gate shall be constructed of solid metal panels and finished to match the Primary Structure.

C. Loading docks and services areas located within industrial areas do not need to be screened from other adjacent industrial areas. However, these loading/service areas shall be screened from public streets, sidewalks and other public view corridors.

D. Screening for loading docks and service areas should be a minimum height of six feet (6'), or as tall as the object which is being screened, and incorporate materials and finishes that match or are compatible with those of the Primary Structures. (See Figure 6-6).



Figure 6-6 - Trash Enclosures

E. Locate loading, service, and delivery areas so they do not encroach into Setbacks.

F. Locate parking areas for outdoor equipment, trucks, research trailers, service vehicles, etc. away from public parking lots and major pedestrian circulation routes. Unless out of view, screen these areas architecturally and/or with landscaping. Materials, supplies, trucks, or equipment being stored on a site must be concealed inside a closed Building or behind a visual screen approved by the City and the Centerra DRC. (See Figure 6-7).

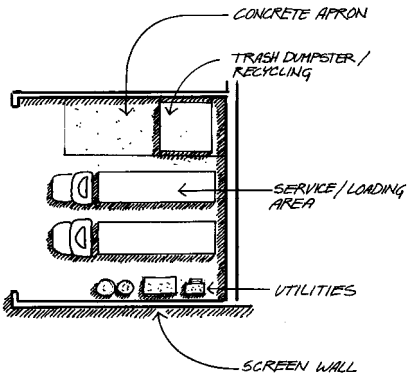


Figure 6-7 - Service Areas

G. Clearly identify all service entrances to discourage the use of main entrances for deliveries.

H. Service area shall be located outside of designated view corridors or fully screened from view.

I. Where possible, trash containers should be located within the building service area. Where trash enclosures are located outside of the building service area, they shall comply with the Setback requirements listed in Table 6-1.

6.22 OUTDOOR STORAGE

Outdoor Storage is only allowed with uses as specified in Section 1.3 and shall be restricted to defined areas clearly identified on the building permit plans. Such areas shall be screened from views from adjacent properties, public roadways and public pedestrian pathways.

6.23 CART STORAGE, VENDING MACHINES, ETC.

Cart corrals, cart storage, vending machines, ATM machines, newspaper racks, video and book return boxes, and telephones shall either be placed inside structures or shall be architecturally screened using the same materials and colors as the Primary Structure.

Placement, screening and illumination of outdoor vending machines, cart corrals and cart storage areas shall be reviewed and approved by the City and the Centerra DRC.

6.24 OUTDOOR SALES/DISPLAY

Outdoor sales areas are intended for the seasonal outdoor display of merchandise such as Christmas trees, pumpkins, etc. Outdoor sales/displays shall be reviewed and approved by the City and the Centerra DRC.

Displays of sheds, play equipment, spas and other similar products must be fully screened from public view.

Development Projects proposing outdoor sales/display of merchandise shall provide a detailed site plan illustrating the location(s), size, itemization of products to be displayed, quantity of each product, maximum stacking heights, and the duration of for each seasonal display.

6.25 SECURITY FENCES/WALLS

6.25.1 Policy

Fences and/or walls must be designed to relate to or continue the character of the GDP. Materials must be compatible with other architectural and landscape elements. Fence locations, elevations and designs shall be submitted and approved by the Centerra DRC and Current Planning Manager with building permit applications.

A fence will be constructed along I-25 as a requirement of the CDOT. The fence design is dictated by CDOT.

The following criteria do not apply to temporary construction fencing.

These criteria do not apply to MUNs. See Section 9 for permitted fencing and related requirements in those neighborhoods.

6.25.2 Criteria

A. Where security fencing is used in highly visible areas (access points, focal areas, adjacent to Common Open Space, etc.) the use of architectural metal fencing (wrought iron or similar) is required. Specific ornamental fence designs will be selected for use along Common Open Space and specific roadways within the GDP. The fence will be selected to provide a high degree of visual quality, low maintenance, security, and to present a consistent image. Where fencing is desired, the ornamental fence shall be used along public or Private Open Space areas and along the following street frontages.

   1. I-25.
   2. US 34.
   3. Arterial streets in nonresidential areas.
   4. Collector streets.

B. Chain link fences may be used for security if significant berming and landscaping can fully screen views of the fence **(**See Figure 6-8.**)**.

C. Where chain link fences are used, they shall be vinyl clad (or similar) and black in color except at athletic facilities and school sites (See6.26.2)

D. Chain link fencing with integral slats or fabric is not permitted.

E. Use of chain link fence will be reviewed by the Centerra DRC and the City.

F. Unless approved otherwise, security fences shall be a maximum of six (6) feet tall.

G. Fences adjacent to public streets must be setback a minimum of fifteen (15) feet, or the minimum required bufferyard widths from the right-of-way unless approved otherwise by the Centerra DRC and the City. Fences along I-25 and US 34 must be setback a minimum of 80 feet from the right-of-way or if required, per CDOT standards.

H. Wooden fences are prohibited in non-residential areas.

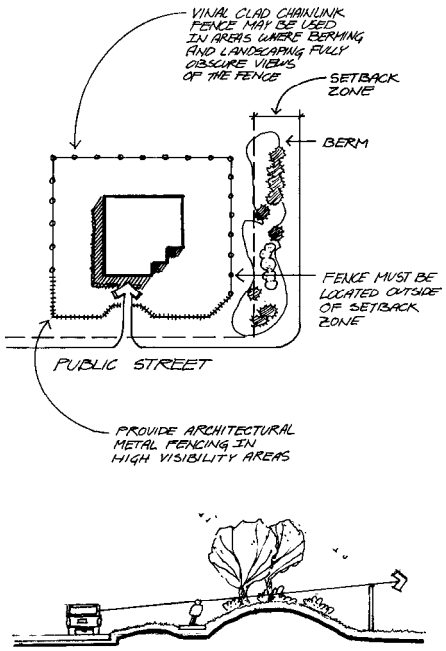


Figure 6-8 - Fencing

I. In areas visible to the public, fencing should be buffered with landscaping to ensure an attractive development. Buffering should be accomplished with a mixture of evergreen trees, shrubs, ornamental or deciduous canopy trees, and berms. Fence buffer designs shall be such that a minimum of 70% of the fence is obscured from vision within 3 years after planting.

6.26 SITE FURNISHINGS

The provision of site furnishings is required. Site furnishing components should enhance and respect the scale of the urban spaces in which they are placed. Lines should be simple, clean and harmonious with the adjacent architecture and landscaping.
The elements of the street furniture to be used include seating areas, tables, planters, bike racks shelters, information kiosks, newspaper dispensers, mail
boxes, trash containers, and public telephone stations. A consistent theme will be established within

individual villages, neighborhoods, developments, and Open Spaces by using common design elements, such as: site furnishings, lighting, monument signage and landscaping.

Selected colors and materials for site furnishings are to be compatible with the development theme, predominant colors, and materials of the surrounding environment.

Art items proposed for outdoor locations are encouraged.

6.27 SIGNAGE

The GDP is subject to the Centerra Planned Sign Program, which is attached as Appendix C.

6.27.1 Policy

Effective signs function not as a separate entity, but as an integral part of the environment. Signage shall be incorporated into the overall landscaping of the site.

6.27.2 Criteria

In addition to the Centerra Planned Sign Program, planned sign programs may be prepared for individual villages within the GDP as well as for the overall GDP. If so, sign programs will specify the types, shapes, sizes, lighting method and materials that are allowed for freestanding and wall-mounted signage. Development entry signage is anticipated on either side of major roadways near the edges of each parcel. The individual names will be consistent with the overall style of the sign. Individual property identification signs and directional signs will also be harmonious with the development theme. Unless otherwise approved, real estate signage, temporary signs, and other signage will comply with the City Sign Code, Chapter 18.50 of the Municipal Code as amended from time to time.

Signage that is not addressed in the Centerra Planned Sign Program or another subsequent sign programs shall comply with the Municipal Code and the recommendations of the U.S. 34 Corridor Plan unless approved otherwise by the City.

Unless otherwise approved, horizontal sign presentation of ground-mounted development identification signs is required throughout the GDP. Ground mounted signs shall have a maximum height of 12 feet, unless they are setback more than 75 feet from the edge of pavement; in such case, signs shall be allowed a maximum height of 15 feet.

Directional signage shall be provided for Buildings with addresses that are not visible from the public right-of-way. Directional signs shall comply with the governing planned sign program.

6.28 LIGHTING

6.28.1 Policy

The purpose of this section is the elimination of light trespass from the Building and the site, the improvement of night sky access and reduction of development impact on nocturnal environments.

A family of lighting fixtures will be developed for the overall GDP and for subvillages within the Development Project. Each element of the lighting design should contribute to the character of the entire system, strengthen relationships between parcels, increase the physical and psychological safety, and maintain a village-like atmosphere.

Site lighting shall meet the functional needs of the proposed land use without adversely affecting adjacent properties or the community. Minimize site lighting where possible.

6.28.2 Criteria

Building permit applications shall include a point-by-point illuminance plan indicating foot-candles calculations. The point-by-point illuminance plan shall illustrate the locations of proposed exterior light fixtures including but not limited to: ornamental pedestrian lights, wall mounted lights, and parking lot lights. The plan shall indicate photometric foot-candle light levels for sidewalks, plazas, parking areas, driveways and other high activity pedestrian areas. The photometric calculations shall be illustrated on a maximum ten-foot (10') grid within the areas stated

above, and extending twenty feet (20') beyond property boundary line. Refer to Table 6-7 for minimum lighting requirements.

Point-by-point illuminance plan calculations must be determined using a light loss factor of 1.0.

Light levels measured twenty (20) feet beyond the property line of the Development Project and adjacent rights-of-way shall not exceed one-tenth (0.1) footcandle as a direct result of the on-site lighting. Exceptions include situations where cross parking and shared access are incorporated into a specific Development Project.

For Retail Uses, lighting from interior spaces which projects in to exterior spaces shall be included in the photometric calculations on the site illuminance plan.

Interior lighting shall not be directed to illuminate exterior spaces. Interior lights visible from the exterior of the Building must not produce glare and shall not have visible light sources.

Exterior light fixtures including site and Building mounted fixtures shall be full cut off, with flat lenses and shielded (if needed) so that all of the light fa1ls upon either the surface of the structure to be illuminated or the ground.

Lighting systems shall be designed which do not produce direct, incident, or reflected light that interferes with the safe movement of motor vehicles on public streets, including:

A. Any light fixture not designed for street illumination that produces light that could interfere with the operation of a motor vehicle.

B. Any light that may be confused with or construed as a traffic control device.

C. Animated, flashing, or changing intensity lights.

Lights shall be located so as not to interfere with parking, backing, required trees within parking areas, and pedestrian or traffic flow. Light fixtures shall not be located within a sidewalk or trail which will not allow for a minimum of five (5) feet of unobstructed travel surface.

6.28.3 Normative Lighting Criteria

Parking lot and streetlights shall have a dark, anodized aluminum finish or a material with similar quality and durability.

Light poles heights shall be provided as follows:

A. Within small parcels, (5 acres in size or less) light fixtures shall have a maximum total height of 20 feet unless otherwise approved by the Centerra DRC and the Director, or his/her appointee.

B. Within large parcels it is often more cost effective and energy efficient to increase the light pole heights. Light fixtures for parking areas on sites larger than 5 acres in size (gross site area), parking in campus settings, or parking for industrial land uses, will be allowed a maximum total light fixture height of 37 feet (including concrete bases), provided said parcel incorporates pedestrian light fixtures adjacent to the Building entry and along pedestrian pathways between parking areas. If pedestrian light fixtures are not provided, a maximum total light fixture height of 30 feet will be permitted.

C. Pedestrian light fixtures shall not exceed 14 feet in height. Small ornamental embellishments may extend up to 16 feet.

D. Exceptions to light fixture heights may be permitted where it can be demonstrated that light poles will complement those on adjacent sites, or slight adjustments could significantly reduce the number of required fixtures.

Light fixture styles and lamp types should be selected to function for their intended use. The style of light standards and fixtures shall be consistent with the community development theme.

Design lighting to emphasize Building entrances. Integrate lighting that highlights approaches to Buildings, Building facades, architectural features and landscaping.

Full wall wash lighting is prohibited.
Soffit or canopy lighting shall be fully recessed and down directional.

Exterior Building mounted and site fixtures shall be full cut-off style with flat lenses only. Decorative low-wattage wall sconces, without cut-off characteristics, may be used on a limited basis, and will be reviewed by the City and the DRC on a case-by-case basis. Non-cut-off wall sconces shall have frosted lenses or similar in order to diffuse the light.

Directional lighting of signs, sculptures and other exterior features is allowed on a limited basis, and will be reviewed by the City and the DRC on a case-by-case basis.

Luminares located within a distance of 2.5 times its mounting height from the property boundary shall have shielding such that no light from that luminare extends more than twenty feet (20‘) outside of the property boundary. This requirement does not apply to parking lots/driveways for Buildings on separate lots which share access and/or parking. Luminares on development parcels located adjacent to Environmentally Sensitive Areas may have more restrictive shielding requirements as determined by the Centerra DRC and the City.

Design lighting with controls for consistent photocell or timed on-off functions.

6.28.4 Lighting Levels

With the exception of lighting for public streets, lighting used to illuminate Buildings, parking lots, walkways; plazas or the landscape shall be evaluated during the building permit process. The following table provides lighting criteria for outdoor facilities used at night. (See Table 6-7)

	Minimum horizontal illuminance	Maximum Uniformity Ratio (max. to min.)	Maximum average illuminance	Minimum vertical illuminance
Paths, plazas walkways**	0.1	20:1	0.5	0.1
Bicycle parking areas	0.1	20:1	0.5	0.1
Commercial parking areas	0.5	10:1	2 footcandles	0.2 footcandles
Industrial, office parking areas	0.2	10:1	1 footcandles	0.1 footcandles
Residential parking areas	0.1	20:1	0.5 footcandles	NA
Parking areas – schools	0.1	20:1	0.5 footcandles	NA

Notes:
* Lighting criteria is adapted from the IESNA, 8th Edition, Lighting Handbook.
** Excludes recreational trails and paths that are not typically used at night.

Maximum on-site lighting levels for Development Projects within the GDP shall not exceed ten (10) foot-candles excluding only the following Motorplex Centerra areas. Motorplex sites must comply with specific lighting guidelines approved by the Centerra DRC. Light levels for Motorplex inventory/merchandise display lots, as designated on the Centerra DRC and City approved plans, may not exceed twenty (20) footcandles and shall also comply with the following criteria:

a. Maximum average of ten (10) footcandles;
b. 10:1 maximum to minimum uniformity;
c. 5:1 average to minimum uniformity;
d. Front row (row closest to perimeter roadways) of inventory display areas shall have a 5:1 maximum to minimum uniformity.

Motorplex featured display pads as designated on the Centerra DRC and City approved plans may not exceed twenty (20) footcandles as measured on the hood of the displayed vehicle.

Table 6-7 Light Levels at Initial Installation*

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SECTION 7
ACCESS, CIRCULATION AND PARKING

7.1 INTRODUCTION

This section is intended to ensure that the parking and circulation aspects of developments are well designed with regard to safety, efficiency and convenience for vehicles, bicycles, pedestrians and transit, both within the GDP and to and from surrounding areas. This section provides Performance Standards for the development and redevelopment of property. In utilizing these regulations, the Applicant and other users should remain flexible in their approach to site design given the characteristics of the site, the nature of the use and the intent of these standards.

7.2 VEHICULAR ACCESS POINTS

7.2.1 Policy

Access to public streets shall be allowed if the following three criteria are complied with:

A. The future traffic predicted to use the proposed access point does not cause the Level of Service at any link, intersection or driveway access within the Traffic Study area to drop below the levels set forth in the Municipal Code.

B. Intersection spacing requirements are met;

C. The access spacing meets LCUASS, or as otherwise approved by the City Engineer (and the CDOT if required).

7.2.2 Criteria

A. Intersection and driveway spacing shall comply with LCUASS, unless otherwise approved by the City Engineer.

B. Key access points are indicated on the GDP Maps (Section 11). Proposed access locations contained in this GDP are conceptual in nature only, and are specifically exempt from any vesting (except for Boyd Lake Avenue access points). Access locations and operation shall be approved by the City Engineer after review of the supporting Development Projects and Traffic Studies.

C. Approval of any particular design plan by the City shall not relieve the Applicant from responsibility from compliance with the requirement of this Section. In the event a plan does not comply with the level of service standard after development or redevelopment occurs, the Applicant or landowner is obligated to take such further measures in the manner contemplated by its design, which are necessary to comply with the intent of these Performance Standards.

D. Fire apparatus access roads shall be provided and maintained in accordance with the provisions of the *Loveland Fire Department Development and Construction Requirements*.

E. Access to a state-regulated highway shall comply with the State Highway Access Code, 2 C.C.R. sec. 601-1. The Applicant shall submit to the Engineering Division copies of the approved access permits from CDOT prior to the approval of any plat that includes access to US 34.

F. No direct access to US 34 from Parcel A will be approved until the City receives a copy of the approved configuration and type of intersection traffic control from the CDOT for the safety upgrades needed at the interchange of I-25 and US 34.

G. Acceleration, deceleration and/or auxiliary turn lanes may be required if a Traffic Study finds that they are necessary to preserve safety and/or the traffic-carrying capacity of the existing street.

H. A Traffic Study shall be submitted to the City (unless waived by the Traffic Engineer) in accordance with LCUASS.

7.3 ROUNDABOUTS

7.3.1 Policy

Roundabouts are often an effective tool for traffic management. They are used largely to reduce motor vehicle speeds, increase capacity level, increase safety, and to reduce noise and air pollution. Therefore, the use of roundabouts will be considered at arterial/collector street intersections. The City Engineer shall approve the use and design of roundabouts.

7.3.2 Criteria

The configuration of proposed roundabouts should be designed by a licensed professional engineer. The engineer must have previous experience in designing roundabouts of comparable traffic capacity. Refer to the LCUASS roundabout design standards and required qualifications for the design engineer.

7.4 STREET HIERARCHY

7.4.1 Policy

Vehicular circulation within the GDP is designed to provide safe, understandable, and convenient access to all sites. The design of these routes is an important feature of the GDP, providing pleasing corridors used in guiding visitors and employees to each village, to individual parcels, and to each Building.

Primary access points to all sites are provided via an internal roadway system. The hierarchy of roadways emphasizes view corridors and features curvilinear sections to create continuous visual interest. Coordinated landscaping along major roads and at driveway entrances is also emphasized.

7.4.2 Criteria

The following criteria address basic planning concepts for arranging and designing arterial streets, collector streets, local streets, internal driveways, entry drives and service drives.

Roadways within the GDP will be designed to meet the *LCUASS – General Parameters and Technical Design Criteria of LCUASS*, with the following exceptions: Street cross sections for specific types of streets shown on Maps 8 and 9 in Section 11 of this GDP, but not included in the LCUASS Suburban Arterials and Urban Character Village Streets shall be allowed, subject to approval by the City Engineer.

A. ***Arterial Streets*** provide access through the development and connect directly with the primary perimeter roadways serving the surrounding area including US 34, Boyd Lake Ave., County Road 9, Rocky Mountain Avenue, County Road 24E and First Street. Arterial streets may be designed as divided or undivided, and feature streetscape and entryway landscaping

B. ***Collector Streets*** provide direct access from the arterials streets to residential neighborhoods or development parcels, and connects them with the perimeter roadways and other internal roadways within the development. Collector streets feature secondary entryways where they connect with the perimeter roadways, US 34/Eisenhower Blvd., Boyd Lake Avenue, County Road 9, Rocky Mountain Avenue, County Road 24E and First Street. Collector streets may be designed as divided or undivided roadways, and feature streetscape and entryway landscaping, similar to the arterial streets.

C. ***Local Streets*** provide access to Lots and can be shared by several Lots.

D. ***Entrance Drives*** provide direct access to individual Building drop-off and parking areas.

E. ***Service Drives*** provide access to loading and waste pick-up areas within individual sites or parcels. Service drives are encouraged to be separate from entrance drives.

7.5 TRAFFIC CALMING

Traffic calming measures may be implemented on collector and residential streets, as needed (based upon a current Traffic Study), such as, but not limited to, mini roundabouts or traffic circles, street narrowing, medians or other techniques, as approved by the City Engineer.

7.6 ALLEYS

Alleys are allowed in mixed use areas and in residential neighborhoods.

7.7 CUL-DE-SACS

"Hammerhead" cul-de-sacs are allowed (See Figure 7-1) in addition to standard cul-de-sacs.

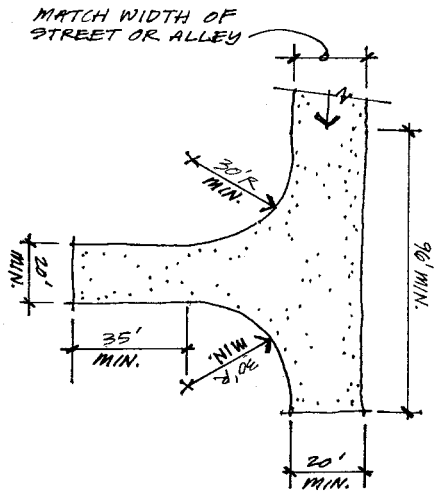


Figure 7-1 – Hammerhead Cul-De-Sac

7.8 MEDIAN TREATMENTS

Medians within public roadways are encouraged, but not required except in 4-lane arterial roadways.

Median width will vary. Median width shall be approved by the City Engineer.

Landscaped medians (except for medians within US 34) shall be maintained by the Centerra Metropolitan District No.1, the Developer or an owners association designated by the Developer. The City will provide no maintenance for landscaped medians.

7.9 EMERGENCY AND UTILITY ACCESS

7.9.1 Policy

Fire protection for the GDP is provided and administered by the City Fire Department. Police protection is provided by the City Police Department. For these and all other services requiring emergency or maintenance access, convenient and appropriate routes should be easily discernible and, when appropriate, clearly marked.

7.9.2 Criteria

Provide access for fire, police, ambulance, and other emergency vehicles to buildings in accordance with *Loveland Fire Department Development and Construction Requirements*. Such access shall be fully capable of supporting such vehicles.

Temporary fire access roads, turnarounds and second points of access may be used as part of an approved phased project or imminent public street improvements. Temporary access roads shall meet all other fire road access criteria.

Provide unobstructed access to utilities, including easements when required.

Where possible, connect emergency routes between adjacent properties.

7.10 MASS TRANSIT FACILITIES

7.10.1 Policy

The Developer anticipates the need to provide mass transit facilities to serve the residents, shoppers, visitors, and employees in the GDP. The plans include the integration of transit facilities within the GDP. Proposed facilities may include bus shelters along the arterials and possibly collectors in several areas throughout the GDP. Final locations of these facilities will be determined as development progresses. Some Buildings and development areas may generate such high volumes of transit use that stops may be required in these specific areas. These facilities will not be required until such time that a transit provider serves the GDP.

7.10.2 Criteria

Bus shelters shall be designed consistent with the architectural character for recognition purpose. Plans for bus shelters shall be approved by the future transit provider and by the Centerra DRC.

In areas where transit facilities are fully exposed to climatic conditions the shelter shall be designed with a solid roof, enclosed on one or more sides, and provide seating within the protected area. Landscaping can also be used as wind breaks around transit facilities.

Bus shelters shall be of appropriate size based on the potential number of users within their intended service area.

Advertising on bus shelters and bus benches is prohibited.

Locate bus shelters in close proximity to commercial retail areas and other Buildings that generate high volumes of transit use.

Locate bus shelters in close proximity to primary pedestrian walkways, which serve the surrounding businesses and neighborhoods.

Where possible, locate bus shelters behind the sidewalk so that the sidewalk passes between the shelter and the street.

In order to provide safe loading and unloading of buses, sidewalks shall be designed so that a paved surface is provided at both the front and rear doors of the bus when the bus is parked at the facility. Coordinate design of these facilities with the transit provider. (See Figure 7-2).

7.11 RESTRICTED-ACCESS DRIVES AND SECURED ENTRIES

7.11.1 Policy

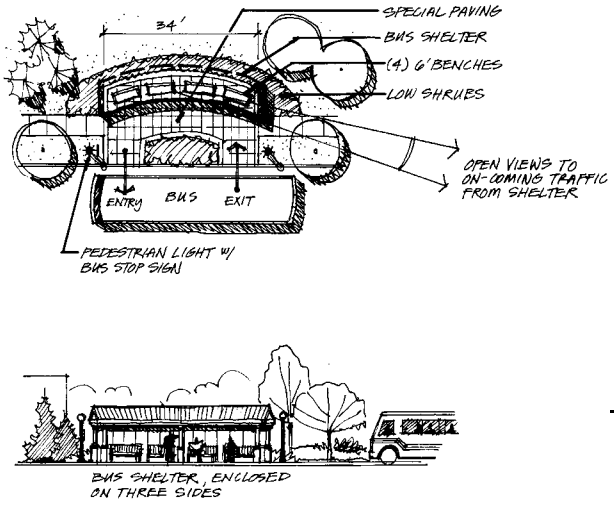


Figure 7-2 - Transit Stop

Some facilities may require secured entries in order to control access to an individual business or site. Such guardhouses and security gates shall be designed and located to be as visually integrated with the site and the Primary Structures.

7.11.2 Criteria

Guardhouses shall be located within a landscaped island and be bordered with plantings of trees and shrubs

Adequate stacking must be provided for cars entering a secured campus as determined by a Traffic Study. A minimum distance shall allow for at least 3 cars to be stacked waiting to obtain clearance for entry, therefore, guardhouses must be located a minimum of 60 feet behind the stop bar on the access drive. Perimeter security fencing shall step back away from the access road to provide greater visibility for exiting traffic and to create a more welcoming appearance.

Locate guardhouses so that crossing conflicts with major bicycle and pedestrian routes are minimized, and where queuing vehicles do not restrict visibility or cause hazardous conditions.

Provide a distinct pedestrian walkway at secured entries that is separate from the travel lanes.

Guardhouses shall meet the requirements of the Loveland Fire Department.

7.12 TRUCK TURNING REQUIREMENTS

7.12.1 Policy

Vehicle circulation shall be designed to provide safe and efficient turning movements for anticipated service and emergency vehicles. Design of individual parcels to accommodate truck access shall meet regulatory requirements for turning areas without sacrificing other important objectives of the Performance Standards, including minimizing pedestrian-vehicle conflicts, discouraging speeding, minimizing space devoted to street use, and relating roadways and oth-

er vehicle use areas to the site and natural topography.

7.12.2 Criteria

Design roadway turning areas, especially those anticipated for truck service and emergency vehicle access, to meet the required regulatory standards for minimum truck turning movements and area requirements including those established by the following agencies and others as applicable, as amended from time to time:

A. City (LCUASS).

B. Loveland Fire Department Development and Construction Requirements.

C. Mass transit provider (if present).

D. American Association of State Highway Transportation Officials (AASHTO) - Standards for Turning Roadway Design (including minimum turning path dimensions)

In general, design roadway-turning areas (for truck service and emergency vehicles) according to the following AASHTO standards:

A. Turning areas anticipated for single unit truck or bus access (including entry drives, drop-offs, and parking areas) shall use SU-30 turning dimensions (including 42 ft. minimum outside turning radius)

B. Minimum turning areas anticipated for semi trailer combination trucks access (with 40 ft. wheelbase) shall use WB-40 turning dimensions (including 40 ft. minimum outside turning radius)

C. Turning areas anticipated for larger semi trailer combination truck access (with 50 ft. wheel base) shall use WB-50 turning dimensions (including 45 ft. minimum outside turning radius)

D. Turning areas anticipated for emergency and fire truck access shall use B-40 turning dimensions (including 42 ft. minimum outside turning radius)

7.13 SIGHT TRIANGLES

7.13.1 Policy

Sites shall be designed so that plants and structures on the site do not interfere with the safe movement of motor vehicle traffic, bicycles or pedestrians.

7.13.2 Criteria

No plants, foliage, wall, fence or berm higher than twenty four (24) inches above the top of the curb shall be located within the sight distance triangle on any corner of the property adjoining an intersection. Sight distance triangles shall comply with the minimum sight distance requirements defined by the LCUASS.

7.14 PARKING LOTS

7.14.1 Policy

Parking lots shall be designed to be safe, efficient, convenient and attractive, considering use by all modes of transportation that will use the parking area (including cars, motorcycles, trucks, bicycles, and emergency vehicles).

7.14.2 Criteria

A. To the extent practical, pedestrians and vehicles shall be separated through provision of a sidewalk or walkway. Where complete separation of vehicles is not feasible, using landscaping, bollards, special paving, lighting and other means to clearly delineate pedestrian areas, shall minimize potential hazards.

B. Unobstructed vehicular access to and from a public street shall be provided for off-street parking spaces.

C. Parking lots shall be designed so that backing and turning movements associated with parking layout will minimize conflicts with traffic, either on or off site.

D. Parking lots with more than three parking spaces will provide adequate room to allow vehicles to

turn around within the parking lot and enter an adjoining street in a forward direction.

E. Parking stalls shall be clearly and permanently defined on the parking surface using asphalt paint. If an alternate method of defining parking spaces is desired it shall require approval from the City.

F. Where parking stalls overhang (bumpers overhang) into a peripheral sidewalk area, the sidewalk shall have a minimum width of seven (7) feet.

G. See also Section 6.28 for lighting requirements in parking areas.

H. Landscaped islands with raised curbs shall be used to define parking entrances, ends of parking aisles, the location of internal drives, and to provide pedestrian refuge areas and walkways, unless approved otherwise by the City.

I. Parking, loading, maneuvering and driving areas shall be paved with asphalt, concrete or similar dust free material approved by the City.

J. Loading and unloading facilities shall take place on site and not on public right-of-way. There shall be no backing of vehicles onto the public right-of-way from loading areas.

K. Drive-up and drive-through lanes shall be segregated from drive aisles and general parking areas.

L. Parking is prohibited within Setback zones. Refer to table 6-1 for Setbacks.

M. Refer to Section 6.17 for parking lot screening requirements.

7.15 PARKING DIMENSIONS

A. Parking lots shall be designed using the angles, layout and dimensions as indicated in the figure and tables below, unless otherwise approved by the City.

Parking Area Dimensions

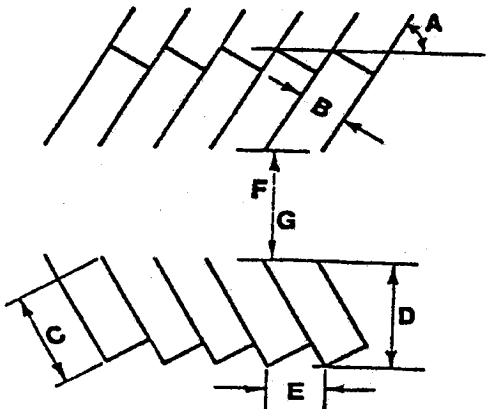


Figure 7-3

Standard Vehicle

A	B	C	D	E	F	G
0°	8	23	8	23	20	12
30°	8.5	20	17.4	17	20	15
45°	8.5	20	20.2	12	20	15
60°	9	19	21	10.4	24	20
90°	9	19	19	9	24*	20**

Compact Vehicle

A	B	C	D	E	F	G
0°	7.5	19	7.5	19	20	12
30°	7.5	16.5	14.8	15	20	15
45°	7.5	16.5	17	10.6	20	15
60°	8	16	17.9	9.2	24	20
90°	8	15	15	8	24*	20**

A. - ANGLE OF PARKING
B. - STALL WIDTH
C. - STALL LENGTH
D. - STALL DEPTH
E. - CURB LENGTH
F. - TWO-WAY DRIVE WIDTH OR DOUBLE LOADED DRIVE WIDTH
G. - ONE WAY DRIVE WIDTH OR SINGLE LOADED DRIVE WIDTH

* When garages are located along a driveway and are opposite other garages or buildings, the driveway width must be increased to 28 ft.

** When an overhang is allowed to reduce stall depth, aisle width must be increased to 22 feet.

Under special conditions these dimensions could Be varied with the City Engineer's approval.

Stall length can be reduced by 2' when overhang is provided.

For handicapped spaces, width shall be 13' with ramp access to walks.

B. Adequate turn around and backing areas shall be provided without disruption of circulation or parking facilities.

C. Parking spaces located across from each other, on opposite sides of a drive lane, should be located at the same angle to the drive lane.

D. Angle parking located on a drive lane with one common exit and entrance is discouraged, unless the angle of the parking space is ninety (90) degrees to the direction of travel.

7.15.1 Break Up Large Parking Lots

A. Large parking lots shall be divided into smaller sections by using landscape separators. Each section shall contain a maximum of two hundred (200) parking spaces. Landscape separators shall have a minimum width 15 feet (exclusive of sidewalks). (See Figure 7-4.)

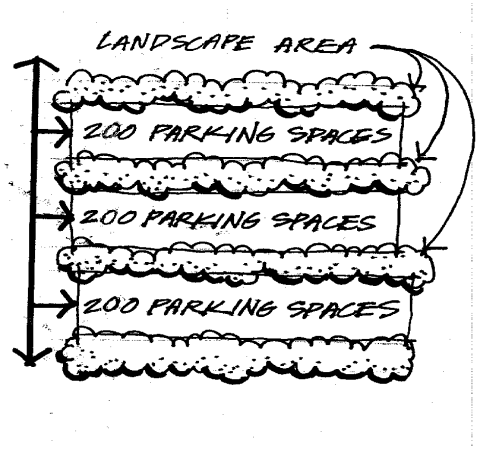


Figure 7-4 – Break Up Large Parking Areas

B. Landscape separators shall contain, as a minimum, one deciduous or evergreen tree per 700 square feet of landscapable area, or one tree per

35 lineal feet, whichever results in a greater number of trees. Trees can be planted formally or informally in groupings.

C. For parking lots with more than forty (40) spaces, parking bays shall extend no more than fifteen (15) parking spaces without an intervening tree, landscape island or landscape peninsula. (See Figure 7-5).

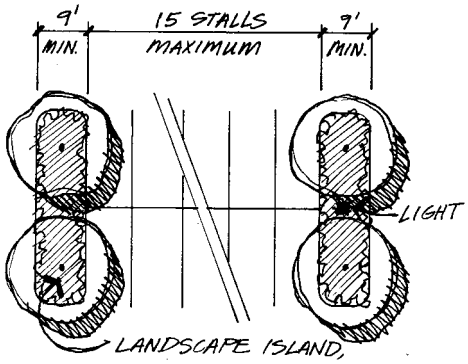


Figure 7-5 – Landscape Islands

7.16 COMPACT CAR PARKING

7.16.1 Criteria

A. Parking spaces designated for compact cars shall be at least eight (8) feet wide and fifteen (15) feet long.

B. Compact car spaces should be clustered in groups. The groups should be evenly distributed throughout the parking lot. However, compact car spaces should not be placed within the most accessible or highest turnover areas, such as directly in front of the building near the main entrance.

7.16.2 Policy

A. Be no more than twenty (20) percent of the total number parking spaces in each lot;

B. Compact car spaces shall be identified with a 'C' symbol. The compact car demarcation should be 2 square feet in size, be located at the rear of each compact car space and be clearly legible.

7.17 PARKING RATIOS

7.17.1 Policy

Adequate parking shall be provided to support individual projects within the GDP. If a specific use is not discussed the Parking Ratio will be determined on a case-by-case basis with Centerra DRC and City approval.

If development is within 1650' of an existing transit facility the minimum-parking ratio may be reduced subject to City approval.

In the event that a previously approved development is converted to a different land use, the number of existing and/or added stalls for the applicable use(s) shall meet the requirements of these Performance Standards.

Refer to Sections 9 and 10 for Parking Ratios in MUNs and residential neighborhoods. Refer to Section 6.16 for parking areas that exceed the recommended ratio.

7.17.2 Minimum Off-Street Parking Criteria

Alzheimers and Memory Care Facilities: 1 space for every 3 beds, plus 0.5 spaces per Employee on a major shift.

Assisted Living Facilities: 1 space for every 3 beds, plus 0.5 spaces per Employee on a major shift.

Athletic/Fitness/Recreation Facilities: 1 space/300 gross square feet of Building Floor Area.

Automotive Sales / Auto Dealerships: 1 space for every 450 gross square feet of Floor Area.

Bar/Tavern: 1 space for every 100 gross square feet of Floor Area.

Call Center: 6 spaces per 1,000 gross square feet of Building Floor Area.

Clinics: 1 space for each examination or treatment room plus 1 space for every 2 Employees or health care providers.

Colleges/Universities in a Campus Setting: 1 space for each Employee plus 1 space for every 5 students.

College/Universities in a Non-Campus Setting (for non-traditional commuting students including adult education, professional and/or technical training, continuing education, etc): 1 space for each classroom seat plus one space for each shift Employee.

Commercial/Retail Uses: 1 space/ 300 gross square feet of Building Floor Area.

Congregate Care Facilities and Congregate Care Housing Developments: 1 space for every 3 beds, plus 0.5 spaces per Employee on a major shift.

Convenience Store: One space for every 200 gross square feet of Floor Area.

Corporate Campus *(Office/R & D labs without light manufacturing or distribution):* 1 space per 250 gross square feet of gross Building Floor Area.

Corporate, Professional, and Multi-Tenant Offices (including Counseling Facilities)*:* 1-space/250 gross square feet of Building Floor Area.

Entertainment Facilities and Theatres*:* 1 space for every 3 seats in the principal place of assembly.

Fast Food Restaurant / Drive-Ins*:* 1 space for every 100 gross square feet of Floor Area.

Financial Services and Institutions: 1 space for every 250 gross square feet of Floor Area.

Flex Research and Development *(Flex Office with light manufacturing):3* space per 1,000 gross square feet of Building Floor Area.

Hospitals and Inpatient Behavioral Health Facilities: 2 parking spaces per bed plus one parking space per 300 square feet of outpatient clinics and service areas.

Hotel/Conference Center*:* 1 space/room x .80 (plus .75 space per daytime Employee).

Independent Living Communities: 1 space per unit plus one space for each major shift Employee.

Indoor Recreational Facilities (Not Including Theaters or Auditoriums): 1 space for every 200 gross square feet of Floor Area.

Light and Heavy Industrial Uses: 1 space for every 450 gross square feet of Floor Area or 1 for every 2 Employees, whichever is greater.

Medical Offices and Clinics: 1 space for every 200 gross square feet of Floor Area.

Medical Laboratories: 1 space for every 450 gross square feet of Floor Area.

Night Clubs: 1 space for every 4 seats plus two spaces for every 3 Employees on the maximum shift.

Nurseries / Child Care Centers: 1-parking space for each 450 gross square feet of Floor Area.

Nursing Care Facilities, Continuing Care Retirement Community: 1 parking space for every 3 beds plus one space per 2 major shift Employees.

Places of Worship: 1 space for every 4 seats in the principal place of assembly.

Public and Private Schools – Elementary*:* 2 spaces for each classroom.

Public and Private Schools - Senior High*:* 1 space for each 3 seats in the auditorium or principal place of assembly.

Public and Private Schools - Junior High: 2 spaces for each classroom.

Restaurant: 1-space/3 seats or 10 spaces/1000 gross square feet, whichever is greater.

Showroom Warehouse: 5 spaces for every 1,000 gross square feet of Floor Area.

Wholesale Commercial Uses/Warehouses: 1 space per 1,000 gross square feet for the first 100,000

gross square feet of Floor Area plus 1 space for every 5,000 gross square feet after the first 100,000 gross square feet.

7.18 ON-STREET PARKING

On-street parking will be allowed and encouraged on most residential local and residential collector streets to facilitate guest parking for houses and businesses fronting on those streets. On-street parking may not be counted to satisfy the minimum parking quantities described above unless approved by the Centerra DRC and the Director.

7.19 MOTORCYCLE PARKING

Motorcycle parking areas shall be paved with concrete, and signs shall be provided designating the area for motorcycle parking only.

A paved area measuring 9’ x 18’ will accommodate two motorcycles.

Parking lots with over 250 spaces shall provide 1% of total spaces as motorcycle parking. Parking lots with between 40 and 250 spaces shall provide a minimum of two motorcycle parking spaces. Parking lots with less that 40 spaces are not required to provide motorcycle parking spaces.

7.20 SHARED PARKING

Shared Parking will be allowed in situations where the individual land uses which share the parking spaces have differing peak parking demand times. A business or structure shall be allowed to share a maximum of 20% of its parking with another use. In these situations a parking demand study shall be prepared by a professional traffic engineer and submitted by the applicant documenting that the hours of actual parking demand for the proposed uses will not conflict and those uses will be served by adequate parking if Shared Parking reductions are authorized.

Shared Parking will also be allowed in situations where a business constructs additional parking that is above and beyond what is required to comply with the minimum parking standards. For example, the business is required to provide 100 spaces to meet the minimum standards, but the business builds 125 spaces. If agreed to by both parties, the excess 25 parking spaces may be shared with one or more adjacent businesses. A Shared Parking agreement shall be submitted with the Development Project, and recorded so that it will run with the land.

7.21 PARKING FOR FACILITIES WITH MULTIPLE WORK SHIFTS

A. Businesses with overlapping work shifts shall supply adequate on-site parking to accommodate the required parking for the total of the number of overlapping Employees.

B. Shifts changes shall be staggered so as to reduce the number of additional spaces required.

C. A parking management plan shall be submitted to the Centerra DRC and to the City for approval.

7.22 TRUCK TRAILER PARKING

Areas designated for semi trailer and large truck parking and loading shall be screened from view using architectural walls or a combination of landscaping, berming and walls. See Section 6.21.

Except during initial site construction, no parking is allowed for permanent or temporary storage of trucks, trailers, buses or semi-mobile equipment, with the exception of moving vans, etc., when in use.

7.23 PARKING STRUCTURES

Design of Parking Structures shall be such that they are minimized visually by earthen embankments and by limiting the overall height of the structure relative to the principal building. Maximum height of Parking Structures shall be forty-five feet (45') but never taller than the principal Building.

Proposed Parking Structures require specific approval from the City. Approval will be contingent, in part, upon trip generation and traffic loads generated by the proposed development and the development infrastructure’s capacity to handle the parking.

7.24 INTERIM PARKING LOTS

On-grade interim parking must be paved with an all weather material. It must be replaced with the permanent use within 24 months unless the City grants an extension. Internal parking lot landscaping is not required for interim parking areas. Perimeter landscape treatments shall be consistent with the landscape requirements for permanent parking lots. (See Figure 7-6).

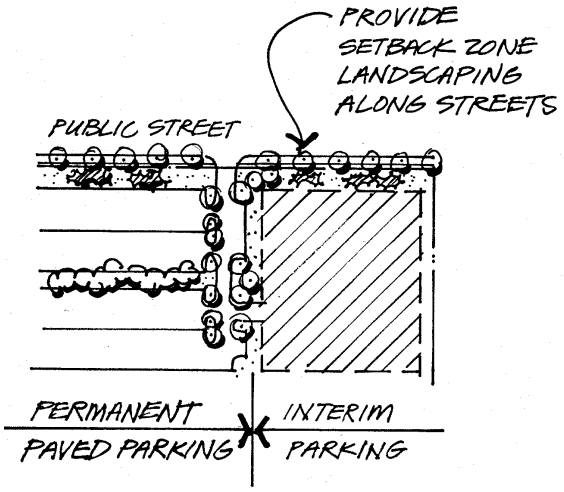


Figure 7-6 - Interim Parking Lot

7.25 HANDICAPPED ACCESS/PARKING/ SIGNS

7.25.1 Policy

The GDP is intended to be equally accessible to handicapped and non-handicapped persons, and owners and Applicants are expected to meet or exceed all requirements of the Americans with Disabilities Act (ADA), 1996, and all amendments thereto, in the design and development of individual parcels, sites, Buildings, and facilities.

Provide equal access in a manner that integrates handicapped-accessibility with ordinary accessibility, rather than separately.

7.26 BICYCLE PARKING

7.26.1 Policy

Except as allowed for in these standards, bicycle parking shall conform to the LCUASS and shall be provided within each commercial, retail, business, office, industrial, civic and multi-family residential Lot to encourage and accommodate alternative transportation modes.

7.26.2 Criteria

A. Bicycle parking facilities shall be located so as to provide safety, security and convenience for bicycle riders. Such facilities shall not interfere with, and be located a safe distance from, pedestrian and motor vehicular traffic.

B. Generally, a minimum number of bicycle parking spaces shall be provided, equal in number to five (5) percent of the total number of automobile parking spaces provided by the development, but not less than two (2). Developments Projects, which require 350 or more automobile parking spaces, a minimum of 16 bicycle parking spaces shall be provided. Development Projects such as these will be reviewed on a case-by-case basis by the City to determine the potential need for bicycle racks.

C. Garages may be used to satisfy needs for bicycle parking for Residential Uses.

D. Bicycle parking facilities should be located outside of a vehicular or pedestrian way and be protected and separated from motor vehicle traffic and parking lots by either a three (3) foot separation distance or a curb or other physical barrier.

E. For security reason bicycle-parking areas should be located so they are highly visible from Building entrances and convenient for Employees, yet not generally visible from roadways.

F. Bicycle parking facilities shall be designed to allow the bicycle frame and both wheels to be

securely locked to the parking structure. The structure shall be of permanent construction such as heavy gauge tubular steel and permanently attached to the pavement foundation.

G. If the bicycle facility is to be used at night it should be sufficiently illuminated. See Section 6.28 for minimum foot-candles required for bicycle parking areas.

H. Provide protection from the elements. Specific considerations include the following:

1. Shelters and bike lockers are encouraged but not required. Protected overhangs incorporated into a Building's design are a desirable solution.
2. Shelter design and materials should compliment the architectural design of the primary Building.

7.27 PEDESTRIAN CIRCULATION

7.27.1 Policy

Pedestrian and bicycle networks shall be designed to invite walking and bicycle use throughout the development**,** and to connect with regional systems in the area. Individual parcels and sites shall be integrated with the overall design to form a comprehensive network within the GDP. (See the Conceptual Amenity Map component of the GDP).

Pedestrians should be separated from vehicles and bicycles. Where complete separation of pedestrians and vehicles and bicycles is not possible, potential hazards shall be minimized through the use of techniques such as special paving, grade separations, pavement markings, signs, striping, bollards, median refuge areas, traffic calming features, lighting or other means to clearly delineate pedestrian areas, for both day and night use.

7.27.2 Criteria

Sidewalks and/or pedestrian paths shall be constructed and located in order to:

A. Provide a system of pedestrian movement to points both on and off site;

B. Provide a logical link between the origins and destinations of pedestrian traffic;

C. Provide a direct, convenient, safe, and visible pedestrian path between parking area and Building entrance.

D. Be constructed to channel storm water resulting from minor storm events away from the traveled surface to eliminate ponding on sidewalks and paths.

E. Paving materials shall be visually compatible with the architecture, durable, easily maintained (allow for snow removal), Non-slip, and accessible to the handicapped. Special paving materials such as interlocking brick color concrete pavers or colored and textured concrete and other similar materials are encouraged. Mortared brick paving is discouraged.

F. Sidewalks will be provided along public streets within the development. Walks on some local streets may be eliminated if duplicated by a nearby (within 150'), generally parallel trail.

G. Walks along public streets that are considered to be primary trails may be increased in width and provided on one side of the street only.

H. Continuous pedestrian walkways shall link street sidewalks (public sidewalks) with customer/visitor building entries through individual sites. At a minimum, walkways shall connect focal points of pedestrian activity such as, but not limited to, transit stops, street crossings, building and store entry points, and shall feature adjoining landscape areas for no less than fifty (50) percent of the length of the walkway. It is preferable that these connections be located within Open Space areas. Where it is necessary for the primary pedestrian access to cross drive aisles, parking lots, or internal roadways the pedestrian crossing shall emphasize and place priority on pedestrian access and safety. The material and layout of the pedestrian access shall be continuous as it crosses the driveway, with a break in continuity of the driveway paving and not in the pedestrian access way. The pedestrian crossings must be well marked using

low maintenance pavement treatments (such as scored concrete with an appropriate size score pattern of "human scale"), colored concrete, pavers, brick or other similar materials) and signs, striping, lighting, traffic calming techniques, median refuge areas or landscaping.

I. Where pedestrians and bicyclists share walkways, the pedestrian/bicycle system shall be designed to be wide enough to easily accommodate the amount of pedestrian and bicycle volumes that are anticipated. A minimum width of eight (8) feet shall be required and shall meet American Association of State Highway and Transportation Officials (AASHTO) guidelines, Guide for Development of Bicycle Facilities, August 1991, or any successor publication. Additional width may be required to accommodate higher volumes of bicycle and pedestrian traffic.

J. Design sidewalks around non-residential and Multi-Family Dwellings, parking areas, and along all public and private roadways, to be constructed of concrete and have an unobstructed width of no less than five feet (5').

7.27.3 Retail Pedestrian Circulation

In addition to the criteria listed in Section 7.27, retail areas shall provide the following:

A. Continuous pedestrian walkways, no less than five feet (5') in width, shall be provided from the public sidewalk or right-of-way to the principal customer entrance of all principal Buildings on a site. Walkways shall connect focal points of pedestrian activity such as, but not limited to, transit stops, street crossings, building and store entry points, and shall feature adjoining landscaped areas that include trees, shrubs, benches, flower beds, ground covers or other such materials for no less than fifty (50) percent of the length of the walkway.

B. Sidewalks, no less than eight (8) feet in width, shall be provided along the full length of the building along any façade featuring a customer entrance, and along any façade abutting public parking areas. Where appropriate, sidewalks shall be designed to accommodate landscaping, which could include some or all of the following: foundation plantings, planting areas not attached to the building, tree wells, flower pots, etc.).

7.28 RECREATIONAL TRAILS

7.28.1 Policy

Recreational trails should be planned to minimize conflicts with other modes of circulation, and engineered to meet performance characteristics of their identified uses. In general, pedestrian and bicycle trails should provide linkages between recreational and Open Space amenities. Facilitation and/or development of trails may be required of individual tract Applicants/owners in accordance with the General Conditions and Special Conditions.

See also the Conceptual Amenity Map (Section 11, Map 2) for conceptual trail locations. Exact trail locations will be determined with future subdivision plats and building permit applications.

Trails shown on the GDP maps will be ten feet in width and will be constructed of either concrete or an alternative soft pavement system (such as crusher- fines).

Refer to the LCUASS for design of public trails.
Trails should be universally accessible. Grades up to 5% can be used on standard trail sections (intersections should have grades below 3%). Grades above 5%, however, will not be considered accessible to wheelchair users.

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SECTION 8
NON-RESIDENTIAL ARCHITECTURAL STANDARDS

8.1 DESIGN PRINCIPLES

The goal of the non-residential architectural standards is to provide design standards that promote a high quality of life through the design of an integrated community. It is the desire to provide flexibility for architectural design and optimize site and Building functions, while achieving and maintaining a sense of design integrity through the development. The design of each parcel will be assessed for its suitability, site context, and intent toward the long-term vision and commitment to the community.

These standards shall apply to development within the GDP unless they are in conflict with standards in Section 9 (MUN) or Section 10 (Residential).

8.2 ARCHITECTURAL CHARACTER

The architectural character is intended to reflect a sense of high quality and timeless design. The language will be one that fits with the land and surrounding community. The materials will reflect the quality and the forms will reflect the timeless design.

These standards are intended to promote the design of an urban environment that is built to human scale to encourage attractive street fronts and other connecting walkways, while also accommodating vehicular movement.

Materials and forms will be selected to achieve the following goals:

A. Create a timeless design that has enduring forms and qualities.

B. Include a variety of finishes, textures and complimentary colors.

C. Provide state-of-the-art technologies that meet the needs of an advanced technology user group.

D. Develop images that are culturally relevant, fit within the context of the Loveland community the immediate surroundings and that are appropriately designed for the intended land use.

E. Provide a high level of craftsmanship in the construction of new developments.

F. Encourage creative design while maintaining the integrity of the culturally relevant design.

G. Design and build with maintenance in mind. Establish a maintenance framework that ensures a continuing high level of quality in the future.

8.3 SPECIFIC SITE DESIGN

Building design shall contribute to the uniqueness of a village, neighborhood, and/or the community with predominant materials, elements, features, color range and activity areas tailored specifically to the site and its context. In the case of a multiple Building development, each individual Building shall include predominant characteristics shared by all Buildings in the development so that the development forms a cohesive place within the village.

8.4 MATERIALS AND COLORS

In developing a continuity of image, it is important to establish a palette of image creators that will describe and reinforce the gradual evolution of image. Some of the design elements that will be used to create continuity are described below:

8.4.1 Building Materials

Exterior materials shall be chosen for their suitability, durability, visual continuity and context.

Building materials and color shall fit within their context. Please see Section 8.4.2 for a list of Building materials.

Building materials shall be selected to provide a variety of textures per Building facade, provide visual balance and avoid an excessive variety of materials.

Building materials shall provide greater visual and textural interest at Building entrances, architectural opportunities and areas that are highly visible to the public.

Building materials should generally absorb light rather than reflect light.

8.4.2 Approved Building Materials

A. Brick.
B. Textured and/or ground face concrete block, with integral color.
C. Textured architectural precast panels, painted and/or cast-in textures.
D. Site-cast or precast concrete panels, painted and/or cast-in textures.
E. Wood.
F. Natural stone and synthetic stone products.
G. Architecturally integrated metal wall panels.
H. Stucco.
I. Glazing – less than 65% reflectivity.
J. Smooth face concrete block, used in combination with other textural materials.
K. Other similar high quality materials, specifically approved by the City and the Centerra DRC.

8.4.3 Prohibited Materials and Treatments

Exposed neon or color tubing is prohibited except within approved signs.

8.4.4 Building Colors

Color palette should consider rich hues and a cohesive, unified theme throughout each planned development.

Monochromatic color schemes are discouraged.

Accent colors to be compatible with base colors and used appropriately.



Figure 8-1



Figure 8-2



Figure 8-3



Figure 8-4



Figure 8-5



Figure 8-6

Figures 8-1 through 8-6 are examples of several ways to reduce the apparent mass of a Building by stepping back Building facades, providing mass breaks, material changes.



Figure 8-7



Figure 8-8



Figure 8-9



Figure 8-10



Figure 8-11



Figure 8-12

Figures 8-6 through 8-12 are examples of designing for human scale at ground level for Building exposures relative to Building entrances, site entrances, parking areas, view corridors and landscape/site features.



Figure 8-13



Figure 8-14



Figure 8-15



Figure 8-16



Figure 8-17



Figure 8-18

Figure 8-13 through 8-18 represents examples of pleasing roof treatments including: stepped parapets; combination flat and sloped roofs; and full pitched roofs, all of which are acceptable treatments. Special roof form should be visible from major viewpoints.



Figure 8-19



Figure 8-20



Figure 8-21



Figure 8-22



Figure 8-23



Figure 8-24

Figures 19-24 are examples of base and top treatments.

8.5 FAÇADE TREATMENT

In order to add architectural interest and variety and avoid the effect of a single, long or massive wall with no relation to human size, the following standards shall apply:

8.5.1 Variation in Massing - General Standards:

A single, large, dominant Building mass shall be avoided.

Horizontal masses shall not exceed a height/ width ratio of 1 vertical to 3 horizontal without substantial variation in massing that includes a change in height and projecting or recessed elements of a significant nature.

Changes in mass shall be related to entrances, the integral structure and/or the organization of interior spaces and activities.

8.5.2 Large Retail Establishments:

"Large Retail Establishments" (buildings with 100 foot or longer front facade) are required to comply with the architectural design standards of this Section 8, as well as the following additional requirement:

Ground floor facades for Large Retail Establishments that have abutting pedestrian sidewalks/plazas shall have arcades, display windows, entry areas, trellis, awnings or other such features along no less than fifty (50) percent of their horizontal length.

Facades greater than one hundred (100) feet in length, measured horizontally, shall incorporate wall plane projections or recesses having a depth of at least 4 feet and extending at least twenty (20) percent of the length of the facade. No uninterrupted length of any facade shall exceed 30% of the façade's total length, or one hundred (100) horizontal feet, whichever is less.

8.5.3 In-Line Retail Stores:

In-Line Retail stores are required to comply with the architectural design standards of Section 8, as well as the following additional requirements:



Figure 8-25 - In-Line Retail

In-Line Retail uses shall incorporate Building components, such as columns, arcades, covered walkways, canopies, awnings and trellises which emphasize and denote its connecting pedestrian circulation patterns. (See Figure 8-25).

In-Line Retail uses shall incorporate seating and pockets of outdoor living areas that provide resting areas.

8.5.4 Facades

No facade that faces a public street or publicly accessed or Open Space shall have a blank featureless wall without including at least three (3) of the following:

A. Change in plane.
B. Change in color.
C. Change in texture, scoring, jointing, reveals or masonry pattern.
D. Windows.
E. Trellises, colonnades
F. Porticos, awnings or canopies.
G. Tower elements
H. Establish Building Bays using visual architectural features such as:
    1. Columns.
    2. Ribs or pilasters.
    3. Piers and fenestration pattern.

4. Or an equivalent element that subdivides the wall into human scale proportions.

A single element may not be used to satisfy all of the above requirements.

Side and rear facades of the Building shall include materials and design characteristics consistent with those on the front. Use of inferior or lesser quality materials for side or rear facades shall be prohibited except where facades are not visible from the public right of way or public or Common Open Space.

Service entrances shall be planned to be visually unobtrusive to site entries, Building entrances, and public right-of-ways.

Screen wall materials to be similar or complimentary to Building materials.

8.5.5 Awnings

Awnings shall be broken down to relate to individual structural Building Bays or window openings.

Awnings and/or canopies on primary and/or accessory structures shall not be constructed of translucent materials that "glow" if internally illuminated.

8.6 BASE TREATMENTS

Facades shall have a recognizable "base" consisting of three (3) or more of the following, (see Figures 8-19 through 8-24):

A. Thicker walls, ledges or sills.
B. Integrally textured materials such as stone, masonry, or aggregate concrete.
C. Integrally colored and patterned materials such as smooth-finished stone or block.
D. Lighter or darker colored materials, mullions or panels as compared to the upper façade.
E. Scoring / reveals.
F. Belly Band.
G. Modular store front on first floor.
H. Change in window pattern on first floor as compared to upper floor(s).
I. Raised planters attached or closely related to building – 20% of horizontal length of front facade.
J. Berming against base of building – 30" minimum height.
K. An equivalent element that provides a recognizable base as approved by the Centerra DRC and administratively by the City.

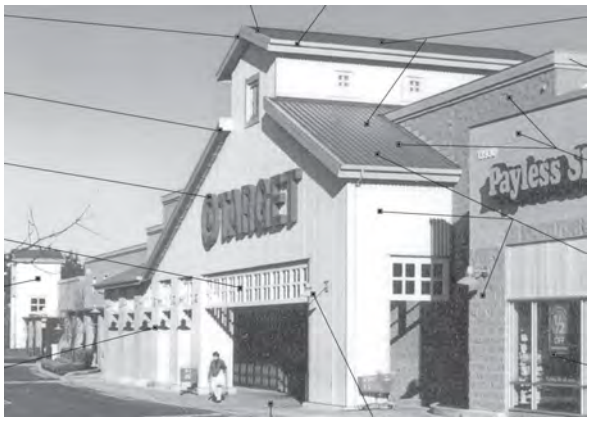


Figure 8-26 - Example of an architectural style (Target) that is more appropriate without a base. Example of integrated metal panels



Figure 8-27 - Example of modular store front on first floor



Figure 8-28 - Example of change of window pattern on first floor as compared to upper floor(s)



Figure 8-29 - Example of a "Belly Band" which defines the line between floors

8.7 ROOF AND TOP TREATMENTS

8.7.1 Policy

Crown the Building with a distinctive cap designed to cap the top of the Building.

Continuous flat parapets are prohibited, unless it can be demonstrated that facade massing breaks and other treatments create visual interest at the top of the Building.

Promote roofscaping diversity. Combination sloped and flat roofs create a pleasing 'roofscape' (Figures 8-13 through 8-18).

Rooftop mechanical units, dishes, and other miscellaneous equipment shall be screened from public view including surrounding public right-of-ways, surrounding public or Common Open Space and neighboring properties or they must be an integral part of the building design. Parapets or other architectural screening solutions shall be used. Screen material shall be of the same or compatible material texture and color to the Building architecture. Screening shall be equal to or taller than the element being screened unless specifically approved by the Centerra DRC and administratively by the City.

Integrated roof forms and mechanical screens are required.

Roof forms of porte cocheres, where used, shall be integrated with the roof forms of the primary Building. In no case shall a porte cochere be taller than the primary Building.



Figure 8-30 – Sloping roof forms may be used to satisfy the requirements for both "Building entrances" and "top treatments"

8.7.2 Top Treatments for Buildings

Non-residential Buildings with a flat roof shall have a recognizable "top" consisting of two (2) the following, (see Figures 8-19 through 8-24):

A. Three dimensional cornice treatment, other than just colored "stripes" or "bands," with integrally textured materials, such as stone or other masonry or differently colored material.

B. Sloping roof forms as a top treatment (see Figure 8-30).

C. Stepped cornice treatment (min of 2 steps).

D. Or an equivalent element that provides a recognizable top as approved by the Centerra DRC and administratively by the City.

8.8 BUILDING ENTRANCES

8.8.1 Policy

Primary Building entrances shall be clearly defined and provide shelter from the summer sun and winter weather. Building materials shall be selected to provide greater visual and textural interest at Building entries. Entrances shall be designed to integrate the wall signs with the design of the structure.

8.8.2 Criteria

Primary entrances shall be easily identifiable to both the vehicular visitor as well as the pedestrian (Figures 8-10, 8-11 and 8-17).

Building address(es) shall be clearly visible from the public right-of-way, as well as at the entrance of each door.

Architectural Articulation shall be evident at primary entrances. Textural and massing changes are required for visual interest as well as promoting the "human scale."

Primary entrances shall be protected from elements of weather.

Landscape features shall be provided at Building entrances, such as plazas, gardens, benches, landscape walls and /or artwork. (See Figures 8-7, 8-12 and 8-14).

Each principal building on a site shall have clearly defined, highly visible customer entrances featuring the following:

A. Customer entrances for "In-Line Retail", or attached retail, shall feature no less than three (3) of the items listed below:

B. Customer entrances for Buildings of less than 25,000 gross square feet (excluding "In-Line retail) shall include no less than five (5) of the items listed below:

C. Customer entrances for Buildings having 25,000 gross square feet, or more, shall include no less than seven (7) of the items listed below:

D. Where additional stores will be located in the principal building, each such store shall have at least one (1) exterior customer entrance, which shall feature no less than three (3) of the items in the following list:

1. Canopies, overhangs or porte cocheres.
2. Recesses/projections.
3. Arcades, porticos.
4. Raised cornice parapets over the door.
5. Peaked roof forms at entryway.
6. Arches.
7. Color change.
8. Texture change.
9. Material change.
10. Door(s) which provide a focal element at the entrance (see Figure 8-31).
11. Functional outdoor patios.
12. Windows which occupy an area of no less than two times the area of the entrance door(s).
13. Architectural details such as tile work, moldings, exposed trusses, columns and other similar details, which provide interest and are integrated into the Building structure and design.
14. Integral planters or wing walls that incorporate landscaped areas and/or places for sitting or enhanced landscaping.
15. Special features such as a sculpture, a water feature, or a similar element (excluding features or images which are trademarked or in some way related to a specific business such as a logo).



Figure 8-31 – Door(s) which provide a focal element at the entrance

8.9 ENCROACHMENTS

All encroachments into a public right-of-way shall be subject to an encroachment permit.

8.10 BUILDING MASSING/SCALE

Buildings shall relate well to each other, to the site, and adjacent properties.

Taller Buildings (4 stories or more) shall be stepped back or shall provide significant mass breaks to decrease the apparent mass of the building. Wider, longer buildings shall be stepped or broken in elevation by combination of massing breaks, color changes and/or material changes (See Figure 8-32).



Figure 8-32 - Facades on Buildings of 4 stories or more can be broken by a combination of massing breaks and/or material changes. Note the massing breaks which create the illusion of a stepped back appearance

8.11 ACCESSORY BUILDING

Accessory Buildings shall be similar in character and materials as primary Buildings, (see Figure 8-33).

Location of Accessory Buildings shall be master planned with initial site plan for City approval.



Figure 8-33 - Accessory Buildings shall be Similar in Character and Materials as Primary Building

8.12 TEMPORARY USES/STRUCTURES

Temporary structures are intended to provide a short-term location for: companies that wish to occupy future Buildings within the GDP; for seasonal uses, construction trailers; or for interim / preliminary expansions to existing facilities.

A temporary structure can be in place during the entitlement process and/or during construction of the permanent structure(s).

Temporary structure(s) will be located on lots with approved building permit applications (or pending approval). If it is not possible to locate the temporary structure on a lot with an approved building permit (due to construction processes or other reasons) the structure shall be located on a lot immediately adjacent, or in close proximity to, the permanent structure's lot.

Refer to Table 8-1 for temporary use/structure requirements.

8.12.1 Criteria

A. Temporary structures (excluding seasonal uses and construction trailers) shall be processed as set forth in the UDC. Seasonal uses and construction trailers must obtain an over-the-counter permit.

B. Architectural elevations of temporary structures shall be approved administratively by the City.

C. Landscaping for temporary structures shall be approved administratively by the City and will be negotiated with the City on a case-by-case basis.

D. Driveways and parking lots for temporary structures (excluding those for construction trailers) shall be surfaced with an all-weather, dust-free material, dust-free material (such as asphalt, concrete, or recycled asphalt) as necessary to meet the project traffic and emergency vehicle access and circulation needs. Construction trailers shall provide driveways and parking areas paved with an all weather material that meets the City's emergency vehicle and construction access requirements.

E. Parking Ratios shall comply with Section 7.17.

F. One or more temporary structures may be constructed on a Lot, provided that the gross square footage of temporary structure(s) on a single lot does not exceed 3000 gross square feet.

G. Temporary structures/uses shall be permitted within all of the land use categories as defined by the GDP.

H. Temporary structures must meet the requirements of the Americans with Disabilities Act (excluding temporary structures which are not open to the general public).

I. Temporary structures may not be used as a Dwelling.

Table 8-1 – Temporary Uses / Structures[1]

Type	Description	Approval Process	Review Requirements	Time Limitation
Seasonal	Retail sales with or without a stand for: fruit, fireworks, pumpkins, Christmas trees, rugs, animals, artwork, etc.	An "over-the-counter" permit w/ one inspection by building division. Separate permit required from fire department for fireworks. Applicants shall provide a copy of sales tax license issued from the City Clerk's office.	Retail sales must be an allowed use in zoning district for the location. Correct address of location, completed application. City-licensed contractor not required.	Per each use: maximum of 3 consecutive months every calendar year.
Temporary – Closed to the General Public	Construction trailers	An "over-the-counter" permit w / one inspection by building division. Building division to send a customer request for electric service, if temporary power is requested.	Correct address of location, completed application. City-licensed contractor not required.	1 year with 1 extension at the Director's discretion.
Temporary – Open to the General Public	Residential sales trailer, commercial sales or leasing trailers etc.	Routed to all referral agencies. Permit fees based on valuation. Inspection required by all referral agencies.	Structure to meet all Building Code & Americans with Disabilities Act requirements. Landscaping negotiated per site by Planning Division.	2 years with 1 extension at the Director's discretion.
Interim – Expansion	Modular structure located on a developed lot to expand an existing use, expansion of private classrooms.	Routed to all referral agencies. Permit fees based on valuation. All typical fees apply (permit fees, use tax, CEF, system impact fees, etc.) Temporary certificate of occupancy issued until the expiration date of the use.	Use is allowed in zoning district. All code requirements apply. Landscaping negotiated per site by Planning Division. All discretionary zoning approvals (SDP, Special Review, etc.) must be obtained before issuance of any building permit.	1 year with 1 extension at the Director/s discretion, **only** if substantial construction of permanent use/structure has commenced.
Interim – Preliminary	Retail & Non-Retail uses, per definitions in UDC. Modular structure located on a vacant site, prior to the construction of the permanent structure on same site.			

[1] **<u>All</u> signage to be reviewed under separate sign permit application.**

Construction trailers, seasonal stands (i.e., Christmas tree stands, firework stands, pumpkin stands, farmers markets, etc.) will be permitted, but are not required to conform to the architectural and landscape requirements of the GDP. However, where possible these uses should be located so that public views of the temporary use is softened by existing landscaping.

Development applications which include temporary structures shall submit the following: site plan indicating location of temporary structure, existing and proposed site features surrounding the proposed structure and architectural elevations (except elevations are not required for construction trailers).

8.12.2 Temporary Structure Uses

Uses permitted in temporary structures are:

A. Offices and clinics.
B. Banks, savings and loan, and finance companies.
C. Personal service shops.
D. Seasonal Uses.
E. Churches.
F. Child Care Centers.
G. Government or Semipublic uses.
H. Public and Private Schools, Education, Universities.
I. Printing Shops.
J. Plumbing, electrical, carpenter and other similar trade shops.
K. Homes sales/information.
L. Construction Trailer.
M. Other similar uses not listed herein as determined by the Community Development Director.

8.12.3 Temporary Structure Requirements

Temporary Structures shall meet the following requirements:

8.13 DRIVE THROUGH FACILITIES

Covered drive-up/drive-through facilities or porte-cocheres, whether attached or freestanding, shall be visually tied to the primary Building in architectural forms, colors and materials.

Mechanical equipment, such as pneumatic tubing and other similar equipment, shall be hidden from view.

Drive-through driveways are subject to the parking lot screening requirements. (see Section 6.17)

8.14 CONVENIENCE STORES AND GAS STATIONS

Convenience Stores and gas stations shall comply with all applicable GDP conditions and Performance Standards and, to the extent the GDP does not provide a standard or condition relating to a particular review criterion, with any applicable criterion of the Municipal Code.

Canopies shall not exceed a 24 foot height. Canopies shall be architecturally integrated with the Convenience Store Building and other Accessory Structures on the site through the use of the same or complementary materials, design motif and colors. (See Figure 8-34). Lighting fixtures or sources of light that are a part of the underside of the canopy shall be fully recessed into the underside of the canopy so as not to protrude below the canopy ceiling surface. The materials and color used on the underside of the canopy shall not be highly reflective, with the intent of minimizing the amount and intensity of light, which reaches beyond the site boundaries. The lighting criteria in Section 6.28 including the maximum of ten (10) footcandles shall apply to all areas below the canopy.



Figure 8-34 - Integrated Canopies

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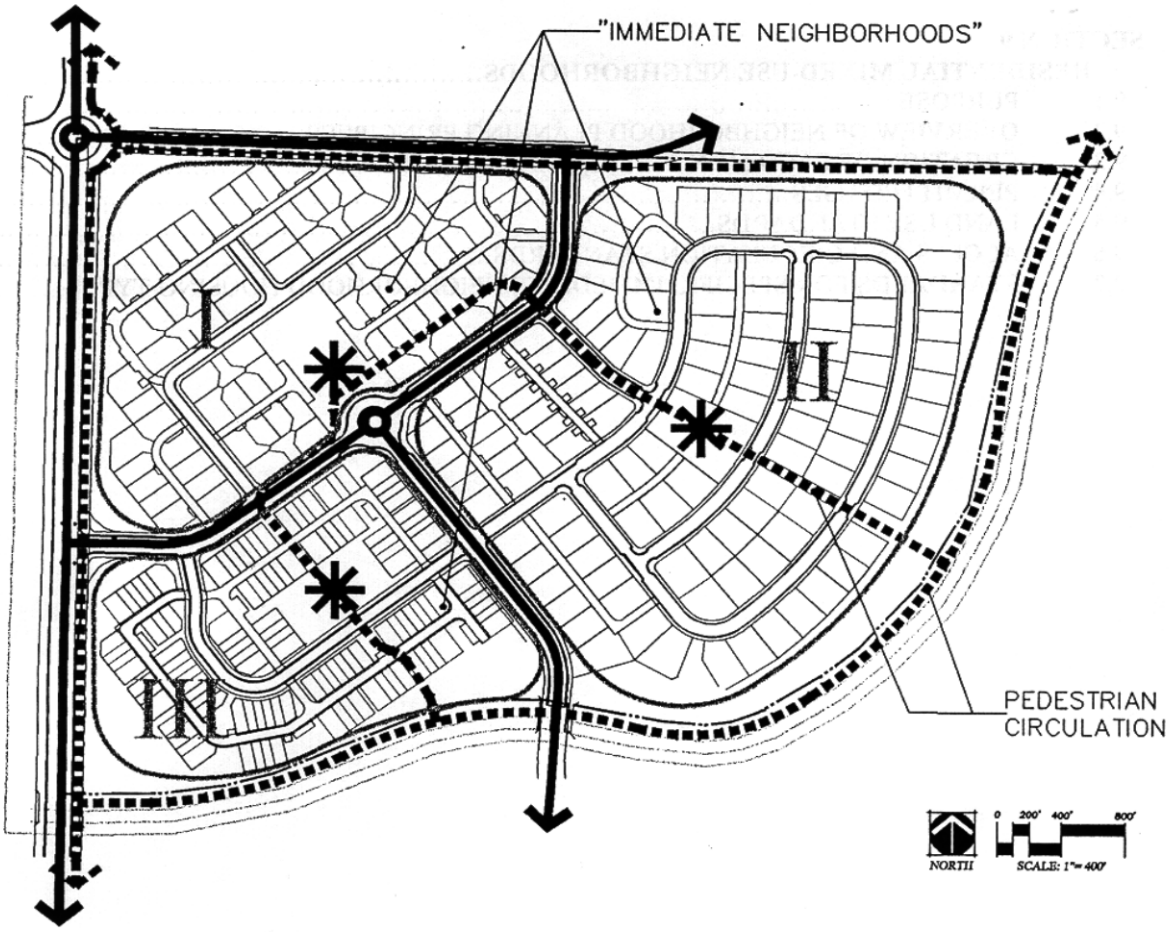
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RESIDENTIAL MIXED-USE NEIGHBORHOOD

(EXAMPLE)



- COMPRISED OF A VARIETY OF HOUSING TYPES IN 3 "IMMEDIATE NEIGHBORHOODS"
  - I SMALL LOT CLUSTERED HOUSING
  - II TOWNHOME AREA
  - III STANDARD AND SMALL LOT SINGLE FAMILY
- "CENTERS" (✱) WITHIN EASY WALKING DISTANCE OF MOST RESIDENTS
- "EDGES" DEFINED BY STREETS, NATURAL FEATURES, AND PERIMETER LANDSCAPING
- CONVENIENT LINKS TO ON-SITE CENTERS AND OFF-SITE DESTINATIONS

FIGURE 9-1

SECTION 9
RESIDENTIAL MIXED-USE NEIGHBORHOODS

9.1 PURPOSE

MUNs included in the GDP are intended to provide a setting for a mix of housing types. Residential uses may be combined with complementary and supporting land uses that serve and operate in harmony with the residential elements of a MUN. Performance Standards included in this section apply to all areas designated on the GDP as MUNs, and only to these areas. The primary goals of these MUNs are to:

A. Meet a wide range of everyday needs.

B. Include a variety of housing choices.

C. Invite walking to gathering places, services and conveniences; and

D. Provide convenient links to the larger community.

9.2 OVERVIEW OF NEIGHBORHOOD PLANNING PRINCIPLES

This GDP is intended to facilitate the creation of distinct MUNs within the context of an overall community identity that will complement existing neighborhoods in the City while establishing their own unique traditions, environment, and character. These MUNs are to comprise dwellings and related uses designed to serve a diverse population. MUNs will have definable Edges, Centers, walks and trails, Open Spaces, and will respect views and vistas. This will help to create a sense of place where land uses, landform, and community identity will be integrated. A MUN is made up of a group of sub areas, or Immediate Neighborhoods (see Figure 9-1). Each Immediate Neighborhood will include one or more housing types, and – in some circumstances – complementary non-residential uses. Planning principles to be used in the design of MUNs in the GDP will emphasize the following:

9.2.1 Pedestrian Orientation

A. At least 80% of the residential Dwelling Units of each MUN will be within a five to seven minute walk (1,650± feet) of a Center such as a pocket park (or larger public park), village green, plaza, garden, Urban Character Village, or other community gathering area; and within two to three minutes (660± feet) of at least one of the Common Open Space elements described in Section 9.5.11 A, B, and D.

B. Collector and arterial streets will feature detached walks with formal tree lawns, a minimum 6 feet in width, except where site conditions or special design needs (Urban Character Villages for example) indicate the need for an alternative.

C. A trail system will be integrated with other public walkways to link housing areas, Open Spaces, and Centers.

9.2.2 Links

Efficient and convenient vehicular and pedestrian links will connect residents with planned Centers (as described above) within the MUNs and to other non-residential areas in the GDP that provide services to these MUNs.

9.2.3 Neighborhood Identity

Neighborhood identity will be defined by elements such as Edges, entry features, streetscape treatments, architectural compatibility, Centers and/or other unique design elements.

9.2.4 Land Uses

A. A variety of housing types will be provided in each MUN.

B. The integration of certain non-residential uses such as schools, churches, daycare, Live/Work Structures, small-scale offices, clinics, and other neighborhood scale services will be encouraged in easily accessible locations.

9.3 CREATION OF EACH MUN

The creation of each MUN involves these steps:

9.3.1 Parcel Maps

The Parcel maps, included in Section 11 of the GDP, define the general geographic boundaries of each MUN. Geographic features approximate five minute walking radii, and anticipated collector street patterns are among the factors that determine general MUN size and shape at the GDP level.

9.3.2 MUNs

MUNs are further defined by a number of more intimate sub-areas - or Immediate Neighborhoods - identified through the Preliminary Plat process. In some cases (see Land Use Standards Section 9.5 below), a Preliminary Plat will be supplemented with a Context Diagram indicating planned relationships between the Immediate Neighborhoods that comprise a MUN.

9.4 PERMITTED USES

As listed in detail in Section 1, a variety of housing types, civic/public uses, parks and recreational uses, accessory uses, and a limited number of commercial uses are permitted as Uses-by-Right or Special Review in the MUNs included in this GDP.

9.5 LAND USE STANDARDS

9.5.1 Neighborhood Context

The Applicant for any Preliminary Plat in a MUN shall show how the Preliminary Plat will contribute to the make-up of that MUN. The Applicant shall submit – for review by the City, in conjunction with the Preliminary Plat approval process - a possible configuration (or alternative configurations) for the entire MUN on a Context Diagram, or reference an existing Context Diagram provided with a previous Preliminary Plat and on file with the City. This diagram shall include:

A. Potential land uses (other existing or anticipated Immediate Neighborhoods).

B. Pedestrian and vehicular circulation patterns.

C. Common Open Space areas.

D. Landscape standards for the affected MUN.

E. Schematic drainage and utility systems.

F. The general pattern of Lots and blocks and notations regarding anticipated unit orientation to help assure compatibility within and adjacent to Immediate Neighborhoods.

G. Other general planning considerations within the remainder of the MUN.

H. Linkages to areas immediately adjacent, important views and vistas, and any Environmentally Sensitive Areas (as identified with this GDP) located within 300 feet of the MUN shall also be included.

I. Demonstration of compatibility with existing adjacent uses.

J. The Context Diagram shall clearly indicate which elements are schematic and subject to change with future Preliminary Plats, and which elements are considered to be conditions of approval of the concurrent Preliminary Plat application.

K. The intended uses and potential use conversions that are the basis of the assumptions made in designing the proposed (or alternative) Lot sizes and site configurations. Housing types allowed shall be indicated specifically on each lot included in the currently proposed Preliminary Plat area, and in general for future development within the MUN.

9.5.2 Allowed Uses

Uses allowed in MUN's shall be as listed in Section 1.3.10 of this GDP.

9.5.3 Density/Intensity

A. Residential development in designated MUNs shall have a maximum density within the overall MUN of six (6) Dwelling Units per gross acre of land except for Sub Parcel D4 which may be developed to an overall density of twenty (20) dwelling units per gross acre of land

B. Any individual phase of development included on a single plat within an MUN may include up to a maximum of 40 Dwelling Units per gross acre of residential land in and Urban Character Village, subject, however, to the maximum density for the overall MUN set forth in Subsection 9.5.3.A, the maximum number of Dwelling Units for each GDP Parcel as set forth on Maps 4, 5, 6, and 7 in Section 11 of the GDP, and in Table 9-1.

C. Density may be transferred between MUNs. However, the density within any given MUN may not vary by more than 10% over the overall approved density for said MUN. The overall total number of units approved for this GDP may not be exceeded.

9.5.4 Mix of Housing

A range of the permitted housing types is required – as described in Section 9.5.5, Neighborhood Diversity below - in a MUN, unless determined by the applicant and the Current Planning Manager to be impractical due to site specific circumstances. Selections from the following list of housing types shall be used to satisfy this requirement:

A. Single Family Detached Dwellings.

B. Patio Homes and Zero Lot Line Homes.

C. Single-Family Attached Dwellings.

D. Live/Work Structures (within Urban Character Villages).

E. Multi-Family Dwellings which may include one or more of the following:

1. Multi-family condominiums.
2. Apartments.
3. Senior Housing of a Residential Nature.
4. Extended Stay Housing.
5. Co-Housing.
6. Other housing types meeting the definition of Multi-Family Dwellings.

F. Boarding Horses and Rooming Houses.

9.5.5 Neighborhood Diversity

The following criteria are intended to promote variety within a MUN.

A. Lot sizes and dimensions and/or other Building orientation and architectural elements are allowed to be varied between different housing types to avoid monotonous streetscapes.

B. A MUN of 30 or more acres may <u>not</u> be comprised only of single-family homes. Each such MUN of 30 or more acres shall include Townhomes, Multi-Family Dwellings, additional attached housing types, or other alternatives to single-family lots.

1. A minimum of two (2) housing types (as listed in Section 9.5.4 above) shall be required on any Preliminary Plat of thirty (30) or more Net Acres.

2. A minimum of three (3) housing types, including at least one (1) attached or multi-family housing type are required in any MUN of sixty (60) or more gross acres, and/or on any Preliminary Plat including sixty (60) or more Net Acres.

Each housing type used to meet the minimum number of required housing types in the development, shall constitute at least 10% of the total number of units included in that Preliminary Plat. Additional housing types may be provided without regard for this percentage requirement.

If more than one type of Multi Family Dwelling is provided, each shall be considered as a different housing type (A MUN comprising single family, apartments, and extended stay housing, for example would be providing three (3) housing types).

If Single Family Detached Dwellings are the only housing types included in the mix, then the difference between the average lot size for each type of Single Family Detached Dwelling shall be at least two thousand (2,000) square feet.

9.5.6 Lot Pattern

The Lot size and layout pattern for MUNs shall be designed to allow Buildings to face streets or to face landscaped areas with connecting walkways. Lots on the same block face shall orient to the adjacent street or connecting walkway in a manner that will establish a compatible pattern of building and entry orientation (a block face may have variety in orientation, but may not arbitrarily combine fronts, backs, and sides of homes).

9.5.7 Street Frontage

Staggered Setbacks, Alleys, front yard picket fences, or architectural features - such as porches, bay windows, recessed garages, or other forms of Architectural Articulation - that provide variety and interest along residential streetscapes shall be utilized. The methods used to achieve streetscape variety and interest shall be noted on each Preliminary Plat.

Single Family Detached Dwellings with garages protruding in front of a porch or the main living area of the house shall not dominate the streescape of any block. The intent is to minimize the visual impacts of garages and emphasize the front entries, porches and living areas of the houses.

When Single Family Detached Dwellings occur on a block face with an average frontage per unit of 45 feet or less, not more than eight (8) such detached units may occur in an uninterrupted row, unless otherwise approved by the Current Planning Manager. A row of units may be interrupted by a street, landscaped pedestrian walkway, view corridor, pocket park, natural area, or other Common Open Space type as described in 9.5.10.

9.5.8 Colors and Materials

Exterior finish materials shall be primarily wood, masonry (such as brick, stone, or higher quality textured concrete masonry units), composition lap siding, or other compatible materials. With applicable Preliminary Plats, a pallet of colors shall be provided for each Immediate Neighborhood and utilized within that area. Alternative, contrasting colors may be used for trim and details. The Current Planning Manager may approve additional colors, or substitute colors.

9.5.9 Urban Character Villages

A. One or more Urban Character Villages of at least one half acre, but not exceeding 20 acres (excluding any adjacent school or public park sites), shall be allowed within MUNs. Urban Character Villages (excluding any adjacent school or public park sites) shall not comprise greater than 25% of any MUN.

B. An Urban Character Village shall be allowed to locate as follows:

   1. In the interior of a residential area, provided that local or collector street connections allow convenient pedestrian and bicycle access to the Urban Character Village; or

   2. Along arterial streets, spaced at least 3/4 mile apart, and designed to provide convenient, and safe access from the adjacent neighborhood.

C. *Overall Design and Access.* Specific design standards are included below in Section 9.7 ***Standards for Specific Housing Types***. The design of Urban Character Villages – although at a greater level of intensity than the surrounding residential areas – shall be integrated with the neighborhood by respecting (but not necessarily matching) the design, scale, and materials of nearby residential Buildings; providing convenient auto and/or pedestrian linkages from surrounding residential areas; creating usable outdoor gathering spaces; orienting Building entrances to streets, courtyards/plazas, and/or small (side or rear) parking lots; and, complementing architectural themes and character of nearby Immediate Neighborhoods.

D. *Outdoor Spaces.* A publicly accessible outdoor space such as a small park, village green, plaza, pavilion, courtyard, or garden, shall be included within or adjacent to every Urban Character Village to provide space for outdoor gatherings, neighborhood events, and recreation.

9.5.10 MUN Open Spaces

In addition to meeting the definitions of Private Open Space and Common Open Space in Section 13, MUN open spaces have the function of providing aesthetic and/or recreational focus for the Immediate Neighborhood and MUN. At least 30% of the areas of each MUN in the GDP will be included in Open Space – with at least one half of that minimum area (15% of the MUN) devoted to Common Open Space areas. At least one acre/100 Dwelling Units will be provided as functional Open Space comprising multi-use turf play fields, community gardens, dog parks, common accessible lakefront areas, trail corridors, plazas, pavilions, picnic areas, benches, or other features for residents to enjoy. Facilities for the conveyance, detention, and water quality treatment of storm water may be integrated into Open Spaces. The design of such facilities shall not result in slopes or structural features that conflict with the intended recreational and/or civic purposes of the Open Space area.
Each MUN in the GDP will include *Open Play Areas* as described in "A" below, and include or have direct access (within 660 feet) to, at least two other open space types (B through F) as described on the following list:

A. *Open Play Areas:* Play areas typically including a reasonably flat, open area with dimensions of at least 80 x 100 feet. Planted and sloped areas may present additional or alternative recreational opportunities.

B. *Recreational Facilities:* Play structures, picnic facilities, sport courts, pools, or other constructed amenities may be appropriate, depending on the site opportunities and social/economic characteristics of the residents.

C. *Natural Areas:* Whether pre-existing on a site, or created by development, Open Spaces with a more natural character can have value as wildlife habitat as well as forms of outdoor recreation.

D. *Pedestrian Corridors:* Narrow Open Spaces can have considerable value when they provide convenient pedestrian routes to nearby destinations, or provide links for jogging or other recreational pursuits.

E. *Plazas:* Focal/gathering points in more intense development areas are appropriate for small open areas that may combine hardscape and landscape materials and features in a variety of ways.

F. *Gardens:* Common Open Spaces including specific planting areas with a special theme or function can add interest and identity to a neighborhood.

9.5.11 Landscape Design & Materials

As an alternative to City guidelines and Performance Standards, specific landscape design criteria may be developed for each MUN and approved as alternative compliance by the Current Planning Manager. Additional or alternative plant species –
beyond those included in the City Standards – may be used as appropriate to the site-specific conditions in the GDP.

The overall design theme in the MUNs within the GDP is to be based on a fairly informal/natural character perimeter and arterial streetscape treatment, interior local and collector streets characterized by formal street trees, and a number of small parks and Open Spaces with a variety of characteristics. Unless limited by auxiliary turn lanes or other specific constraints, formal tree lawns shall be a minimum of 6 feet wide on streets classified as collectors or arterials, and on local residential streets of 28 feet or less.

Landscape design shall incorporate some or all of the following xeriscape principles, including:

A. Grouping plants with similar water requirements together;

B. Limiting high-irrigation turf and plantings to high-use and/or high visibility areas;

C. Use of low-water demanding plants and turf where practical;

D. Use of indigenous plant materials, where appropriate and practical;

E. Use of efficient irrigation systems, including the use of non-potable irrigation water;

F. Use of mulches and soil improvements; and

G. Provision of programs for regular and attentive maintenance.

9.5.12 Accessibility

Pedestrian connections shall allow residents of surrounding blocks to gain access safely and easily to all Common Open Spaces – except certain Environmentally Sensitive Areas – within the MUN.

9.5.13 Ownership and Maintenance

Parks or other outdoor spaces may be dedicated to a public agency or be privately owned and maintained by the Applicant or an owners association. Public acceptance of such parks or outdoor spaces into the publicly owned system of open lands will be based on specific negotiation on an individual site basis**.**

9.5.14 SETBACKS

See Table 9-2 for minimum Building and parking Setbacks. See Table 9-3 for minimum Oil and Gas Facilities Setbacks. In some cases, in order to comply with the bufferyard requirements, increased Setbacks may be necessary

9.6 ACCESS AND CIRCULATION

9.6.1 Automobile, Bicycle and Pedestrian Circulation

Automobile, bicycle, and pedestrian circulation systems in the MUNs in the GDP will be based on the concepts of multiple links between adjacent neighborhoods, convenient access to jobs and services, and limiting extraneous through traffic from neighborhoods.

9.6.2 Access Performance Standards

Access Performance Standards will include:

A. Access ways between neighborhoods will not be limited to only those absolutely necessary to serve the property.

B. Roadways in MUNs will be designed to meet *the LCUASS Standards – General Parameters and Technical Design Criteria*, with the following exceptions:

1. Street cross sections for specific types of streets included with this GDP, but not included in LCUASS (Suburban Arterials and Urban Character Village Streets – including center medians where appropriate - for example) shall be allowed, subject to approval by the City Engineer.

2. The design speed shall exceed the posted speed by 5 mph on all collector roadways. The minimum design speed on collector roadways shall be 30 mph, except within Urban Character Villages, where the design speed for local or collector streets may be 25 mph, and the posted speed 20 mph.

C. Roundabouts will be considered at arterial/collector intersections.

D. Key access points from arterials will be as indicated on the GDP. Additional – possibly limited movement – access points will be considered subject to provision of a Traffic Study and approval of the City Engineer.

E. Traffic calming measures may be implemented on collector and residential streets, as needed (based upon a current Traffic Study), such as, but not limited to, small roundabouts or traffic circles, street narrowing, medians or other techniques.

F. Collector and local streets will facilitate access between MUNs and common destinations for residents.

G. On-street parking will be allowed and encouraged on most residential local and residential collector streets to facilitate guest parking for houses fronting on those streets. However, - except in Urban Character Villages - required parking shall be provided exclusively off-street, with the corresponding public street constructed primarily to accommodate vehicular traffic.

H. On-street bike lanes will be optional for all local streets and for collector streets with ADT's of less than 1000.

I. Alleys are encouraged.

J. Required fire access (20 feet unobstructed) may be provided through public streets, Alleys, private drives or a combination of those accessways. For buildings with a height greater than 30 feet, measured to the eave of the tallest roof surface, required access is minimum 26 feet unobstructed."

K. "Hammerhead" cul-de-sacs are allowed.

L. Parking within cul-de-sac bulbs is permitted, but will not be required if three or more parking spaces (not including tandem driveway spaces) per Dwelling Unit with frontage only on the cul-de-sac bulb provided.

M. Shared parking - including on-street parking in Urban Character Villages - in mixed-use areas shall be encouraged.

N. Setbacks for off-street parking areas of more than six spaces shall be the same as the Setbacks for the associated housing type (see Table 9-2), except that no Setback shall be required from Alleys, for tandem parking in front of residential garages, or for limited "drop-off" areas.

O. "Hybrid" Parking Programs (allowing bike parking, alternative modes, shared parking opportunities, or other means of reducing parking demand) will be defined for each preliminary plat including an Urban Character Village where on-street parking is used to meet parking requirements for work/business uses.

P. Bicycle parking for nonresidential uses shall be provided based on the anticipated demand of the uses served.

Q. Garages may be used to satisfy needs for bicycle parking for Residential Uses. In multi-family areas or other cases where not all the required automobile parking is provided in garages, bike parking at a rate of 8% of the required number of open-air automobile parking spaces (total required parking, less the number of garage spaces provided) shall be provided.

R. Walks and trails in residential neighborhoods shall be used in combination to create a viable pedestrian circulation system.

S. Walks on some local streets may be eliminated if duplicated by a nearby (within 150 feet), generally parallel trail. Walks along public streets that are considered to be primary trails may be increased in width and provided on one side of the street only.

Table 9-1 – Residential Minimum Open Space, Building Height, Dwelling Unit Per Acre Ratio, Lot Coverings

Land Use	**Minimum Open Space* Required**	**Maximum Height of Buildings and Structures****	**Maximum Dwelling Units per Gross Acre+**	**Max. Building Coverage** (coverage of individual lots, not entire platted area)
MUNs as a whole	30% of the total mixed-use neighborhood; including min. 1ac./100 d.u. Common Open Space	By Housing Type	6 (except sub-parcels D-4 which may develop at 20)	By Housing Type
Urban Character Village	10%	40 feet	40	90%
Multi-Family Dwellings	20%	60 feet	20 ++	60%
Single Family Attached Dwellings	15%	40 feet	16	85%
Patio Homes, Zero Lot Line Homes	15%	35 feet	8	65%
Single Family Detached Dwellings	20%	35 feet	6	50%

\+ Overall gross density of MUNs in the GDP (except D4) shall not exceed 6 Dwelling Units per acre. Density of individual development phases (Preliminary Plats) shall not exceed 20 Dwelling Units per gross acre (except as described below in footnote ++) or 40 Dwelling Units per gross acre in an Urban Character Village. Residential density within 300 feet of the centerline of Boyd Lake Avenue North of Frank Road in Subparcels C-1 and C-2 shall not exceed two (2) Dwelling Units per gross acre. Residential density within 300 feet of the County Road 3 right-of-way and along a portion of the north property boundary of Subparcel A5 shall not exceed three (3) Dwelling Units per gross acre.

++ Maximum density for Multi-Family Dwellings in certain Subparcels is 30 units/acre. See Section 11, Maps 4 through 7 for specific Subparcels where this maximum is allowed.

* At least ½ of the required Open Space (15% of the MUN) shall be Common Open Space. See Section 9.5.10 for additional details regarding various types of neighborhood Open Spaces.

** Certain architectural elements may exceed the height maximums listed here. See Section 13 definition for Building Heights.

Note: The Open Space and Coverage percentages and densities listed may be adjusted administratively by up to 10%, as long as the intent and total number of units allowed in the GDP is respected.

Table 9-2 – Residential Minimum Setbacks

	MINIMUM SEPARATION FROM							
Land Use	**Side Property Line***	**I-25 & US 34 ROW**	**Arterial Street ROW**	**Collector Street ROW**	**Local Street ROW & Private Road (back of curb) +**	**Alley ROW**	**Primary Structure to Accessory Structure**	**Common Open Space**
Urban Character Village Structures*	0’	80’	40’	0’	0’	0’	0’	0’
Mixed Use Village Center	0’ ***	I-25 - 80’ from ROW, US 34 per 34 Corr. Plan^^	15’	0’	0’	0’	0’	0’
Multi-Family Dwellings	15’	80’	40’	14’	14’	14’	6’ measured between eaves	0’
Ancillary Dwelling Units	Same as primary structure or as separately designated below							
Single Family Attached Dwellings	Side-0’, Corner Side-14’, Rear-4’,	80’	40’	Front –14’ Garage door -20’ from back of walk	Front-14’ Garage door -18’+	Structure - 6’ Garage- < 3’ or > 18’	6’ measured between eaves	0’
Patio Homes, Zero Lot Line Homes	**Side- 0’, Corner Side - 14’, Rear-8’,	80’	40’	Front –14’ Garage door -20’ from back of walk	Front-14’ Garage door -18’ +	Structure - 6’ Garage- < 3’ or > 18’	6’ measured between eaves	0’
Single Family Detached Dwellings	Side-5’, Corner Side- 14’, Rear-10’,	80’	40’	Front –14’ Garage door -20’ from back of walk	Front –14’ Garage door -18’ +	Structure - 6’ Garage- < 3’ or > 18’	6’ measured between eaves	0’
Other Housing Types	Side-5’, Corner Side – 14’, Rear – 10’	80’	40’	Front – 14’ Garage door – 20’ from back of walk	Front – 14’ Garage door – 18’ +	Structure - 6’ Garage- < 3’ or > 18’	6’ measured between eaves	0’

*The minimal Setbacks along street frontages in Urban Character Villages are contingent upon:

- Provision of utility easements of at least 14 feet along rear Alleys.
- The architectural and other design standards outlined below.

**If a zero foot side yard Setback is proposed, adequate utility, maintenance and access easements shall be provided on the Lot adjacent to the zero foot (0') setback.

*** 25' minimum adjacent to Single Family Detached and Single Family Attached buildings with two dwellings (excludes Single Family Attached buildings with three or more dwellings) Residential Uses.

^^ Refer to Section 6.11.3 of this GDP and the US 34 Corridor Plan for setbacks requirements along US 34 east of I-25.

Separation between principal Buildings and Accessory Structures shall be 6 feet minimum between eaves, except where 0 feet is noted above.

Urban Character Village setbacks shall apply to any housing types (Multi-Family Dwellings, Townhomes, etc.) and other uses included within the Urban Character Village as defined on the applicable Preliminary Plat.

0 feet side and rear yard Setbacks apply to Single Family Attached Dwellings, Single Family Detached Dwellings and Patio Home/Zero Lot Line Homes; and are to be considered in conjunction required separation from "Other Buildings" as noted in this table. Assured distances between Buildings shall result in an "assumed" property line meeting Building Code requirements for Building separation, and allow non-rated construction accordingly.

+ Setbacks to garage doors facing public streets (except Alleys) shall be 20 feet minimum from back of walk.

Table 9-3 – Minimum Setbacks for Oil and Gas Facilities

MINIMUM SETBACKS FOR A NEW OIL AND GAS FACILITY FROM EXISTING DEVELOPMENT

The minimum setbacks required for new oil and gas facilities from existing development shall comply with the setbacks within the Colorado Energy & Carbon Management Commission Rules and Regulations.

MINIMUM SETBACKS FOR NEW LAND USES FROM AN EXISTING WELL (REVERSE SETBACKS)

Land Use Zone	**Setbacks**
Critical Zone Permitted Uses-by-Right include: 1. Essential underground public utility facilities 2. Landscape, irrigation and Open Space	0’ to 200’ from the well head
Restricted Zone Permitted Uses-by-Right include: 1. Airport, heliport or helistop 2. Composting facility 3. Storage yard 4. Essential public utility uses, facilities, services and structures 5. Heavy Industrial Uses as described in this GDP 6. Wireless Telecommunications Facilities (all types) 7. Nursery or greenhouse 8. Recycling collection center 9. Self-storage 10. Street 11. Heavy Logistics center 12. Passenger motor vehicle sales or rental 13. Heavy motor vehicle sales or rental 14. Motorcycle, scooter or ATV sales or rental 15. Parks and Open Space Uses, including active recreation and restroom buildings which may include storage areas, pedestrian and bicycle trails, dog parks, and all other uses allowed in Parks and Open Space areas.	200’ to 500’ from the well head
Development Zone Permitted Uses-by-Right include: 1. Any approved Permitted Use-by-Right for the particular property as described in this GDP except for high occupancy Buildings as described below in the High Occupancy Building Zone.	500’ and beyond from the well head
High Occupancy Building Zone Permitted Uses-by-Right include: 1. Schools including pre-K through 12, community colleges and universities 2. Daycares 3. Churches 4. Theaters and entertainment venues 5. Outdoor assembly areas for events, concerts, etc.	1000’ and beyond from the well head

MINIMUM SETBACKS FOR PLUGGED AND ABANDONED WELLS

For Plugged and Abandoned Wells, the buffer shall be 50’ in width and 100’ in length, with the plugged and abandoned wellhead located in the center of the 50’ by 100’ buffer. Landscaping, parking lots, and Streets may be located within the buffer. There shall be no further setbacks for structures.

9.7 ENCROACHMENTS PERMITTED INTO THE MINIMUM SETBACKS

The following features shall be allowed within the minimum required Setbacks subject to the requirements of Section 7.13 Sight Triangles:

A. Landscaping and irrigation including trees and shrubs and other features of natural growth subject to planting offsets from utility lines as required by the City.

B. Fences or walls subject to height and other restrictions stated in this GDP and, if applicable, the City code.

C. Driveways and sidewalks.

D. Utilities
   1. Underground Utilities including service lines
   2. Aboveground Utilities including meters, ground mounted air conditioning units, satellite dishes and similar appurtenances as long as they are located so as to minimize visual intrusion and front yard lamp post fixtures.

E. Architectural features that do not extend more than two feet into a minimum required setback, including but not limited to cornices, canopies, awnings, eaves, gutters and downspouts. The total linear distance of these projections shall not exceed 50% of the length of the applicable side of the building.

F. Architectural design embellishments that do not extend more than two feet into a minimum required setback, including but not limited to bay windows, balconies and similar sized cantilever floor areas. The total linear distance of these projections shall not exceed 50% of the length of the applicable side of the building.

G. Chimneys, flues and residential ventilating ducts that do not extend more than two feet into a minimum required setback. The total linear distance of these projections shall not exceed 50% of the length of the applicable side of the building.

H. Open outside stairways, necessary landings together with railings that do not extend more than five feet into a required front or rear setback and/or not more than two feet into a minimum required side setback.

I. Covered porches, covered or uncovered decks, terraces and patios attached to a dwelling that do not extend more than five feet into a minimum required rear setback.

J. Window wells that do not extend more than three feet into a minimum required setback and/or private side yard drainage easement. In side yard locations the encroachment is allowed as long as there is sufficient space to accommodate the drainage flows between the abutting lots.

K. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, (provided the floor area does not exceed 80 square feet) shall be allowed to encroach in a REAR YARD SETBACK so long as the accessory structure is a minimum of 5’ from the rear property line and does not encroach in the minimum side yard setbacks.

9.8 STANDARDS FOR SPECIFIC IMMEDIATE NEIGHBORHOOD HOUSING TYPES

The following pages include basic architectural standards, Height and Setback limitations, parking requirements, and other Performance Standards for the various housing types and Urban Character Villages anticipated in the Immediate Neighborhoods that will comprise the MUNs in the GDP. General standards applicable to all housing types include:

A. Immediate Neighborhoods – and even individual blocks within Immediate Neighborhoods – may comprise more than one housing type.

B. While a variety of Building types may co-exist on the same block, the elements that define architectural character – scale, form, entryways,

building materials, and colors – should be coordinated, but not rigidly consistent within any given Immediate Neighborhood. The use of vertical siding shall be discouraged on homes of less than 2000 square feet of above grade floor area except when used in limited applications for accents and/or on small architectural features.

C. On any given block face no more than 15% of residential lots, which are served by an Alley, shall be permitted street loaded access to a garage. This requirement shall also – apply to at least 65% of Single Family Attached Dwellings and Multi-Family Dwelling units located on lots adjacent to Alleys. The Director may allow the above-required percentages to be reduced in order to allow implementation of a unique or desirable housing type that would otherwise be hampered by this requirement.

D. On Single Family Detached lots less than 65' in width the following criteria shall apply:

1. Homes with garage doors that are visible from a public street as part of the front building face shall have garages that meet one of the following three conditions:

a) A garage door shall be recessed from the front façade of the living portion of the house a minimum of 4' or,

b) A garage door shall be recessed from the front of a covered porch a minimum of 4' or,

c) A garage door may extend forward of either the living portion of the house or the front of a covered porch a maximum of 4' provided the front elevation of the house includes a front porch that is a minimum of 6' wide.

2. Homes with three car garages where the garage doors for the three stalls face a public street shall off set the garage door for the third car stall a minimum of 2' from the adjacent garage front façade. In addition, the garage doors shall not comprise more than 48% of one of the ground floor elevations facing a public street. Garages fronting on alleys (both public and private) are exempt from this condition.

3. Homes with two car garages – the garage doors shall not comprise more than 47% of one of the ground floor elevations facing a public street. Garages fronting on alleys (both public and private) are exempt from this condition.

4. Garage doors shall be painted the same color as the body of the house or a similar, complementary color. Bright accent colors drawing attention to the garage doors are prohibited.

5. Two story facades with garage doors fronting on a public street shall be articulated using one of the following design features:

a) Incorporate a roof feature or trellis above the garage door to visually separate the garage from the story above.

b) Step back the face of the wall on the story above the garage door to vary the massing.

c) Incorporate a projecting box bay window above the garage door to add articulation.

d) Other similar design elements as approved by the DRC and the Director.

Elevations that face an alley (both public and private) are exempt from this condition.

6. Homes located on adjacent lots where both homes have garages extending forward of a front porch or living area shall:

a) Have distinctively different architectural elevations (meaning different rooflines, massing, detailing, etc.) and

b) Provide a 2-foot front yard setback differential.

9.8.1 Urban Character Village

A. The provision of an Urban Character Village establishes a generally "urban" street character for at least a one block (300 feet ±) length. In the event of a conflict between the performance standards in Section 8, Non-Residential Architectural Standards, and Section 9, MUNs, specifically in Sections 8.3, 8.4, 8.5.5, 8.10, and 8.12, the Performance Standards in Section 9 shall supersede Section 8 of the GDP. Where not in conflict, non-residential uses within MUNs shall

comply with the provisions in Section 8, including Sections 8.1, 8.2, 8.5.4, 8.6, 8.7.2 (except B and C) 8.9, and 8.11. Alternative compliance to all portions of this section may be granted by the Director if the Director finds that the proposed alternative is in keeping with the neighborhood scale and character, and results in an architectural design that is equal to or better than that which would be achieved through the strict application of these standards.

1. Minimal (0 foot to 8 feet) Setbacks may be utilized in conjunction with appropriate street furniture and/or Architectural Articulation and design features (storefront character, projections indented entries, bays, similar massing of elements, and the like) along street frontages – assuming adequate utility easements are provided in other locations. Along street fronts with these minimal Setbacks, not less than three of the following elements shall be used within each 80 feet of frontage:
   a. Canopies or porticos.
   b. Overhangs.
   c. Recesses or projections.
   d. Arcades.
   e. Peaked roof forms.
   f. Balconies.
   g. Arches.
   h. Patios or plazas.
   i. Display windows
2. Raised cornice parapets over the door.
3. Outdoor seating or dining areas.
4. Integral planters or low walls including landscape areas and/or seating.
5. On-street parking – including diagonal or perpendicular parking, if approved by the City Engineer - is encouraged; minimal off-street parking is to be provided for non-residential uses.
6. Sidewalks (min. 5 feet wide) are required along public streets. Wider walkways will be provided, with formal street trees in grates, planters, or walls, where appropriate.
7. Street trees at an average minimum spacing of not more than 40 feet on center are required regardless of the width of walkway.
8. Landscape medians will be incorporated into primary streets within Urban Character Villages where appropriate.
9. Typically two or three story buildings should front on an Urban Character Village Street, although single story buildings with architectural character consistent with the design theme of the Urban Character Village shall be allowed, subject to approval by the Current Planning Manager.
10. Some "storefront" ground floor architectural character will be included where practical.
11. Coordinated street furniture will be used where appropriate.

B. Live/Work Structures (a residential use with a workspace) are allowed.
   1. Buildings may have a "storefront" character, typically with a "loft" above;
   2. Work/business areas are attached to adjacent unit, overhead loft, or independent lessee;
   3. Some patron parking is typically provided on-street, with tenant and employee parking in a side or rear Alley or small parking lot.

C. Single-Family Attached Dwellings row-houses are allowed.
   1. Entry will typically be from front "urban" street or side street;
   2. Parking/garage off rear Alley or side street.

D. Plazas and/or gardens:
   1. Small community gathering areas located within the Urban Character Village, typically as a focal point;
   2. May include hardscape elements - such as plazas, decks, fountains, seating areas or other hard surface features - in addition to "soft" landscape.

E. Additional housing types:

1. Medium, and higher density housing types (Multi-Family Dwellings, Senior Housing of a Residential Nature, Senior Housing of a Non-Residential Nature, Single Family Attached Dwelling, etc.) are encouraged on blocks within and adjacent to the Urban Character Village. Low density housing may also be included in limited quantities (25% or less of the housing within the Urban Character Village).

F. Ancillary Dwelling Units:

1. Ancillary Dwelling Units are encouraged on blocks in and adjacent to Urban Character Villages;
2. Not more than one Ancillary Dwelling Unit/primary unit will be allowed.

G. Architectural Elements:

1. Gable, hip, gambrel, or other sloped roof forms must be included unless otherwise approved as 'alternative compliance' by the Current Planning Manager;
2. Porches, bays, balconies and/or other architectural character elements shall be of a compatible design theme in the Urban Character Village.
3. Buildings shall either be similar in size and height, or, if larger, be articulated and subdivided into massing that is proportional to the mass and scale of other structures on the same block frontage. Exceptions shall be allowed when a specific deviation to the block height is intended to create visual interest.

H. Parking:

1. Residential off-street parking standards applicable to Dwelling Units within and adjacent to Urban Character Villages – except that a maximum of one (1) parking space/Ancillary Dwelling Unit may be required – are:
   a. 1.5 spaces/1 bedroom unit.
   b. 1.75 spaces/2 bedroom unit.
   c. 2 spaces/3+ bedroom unit.
   d. .25 spaces/d.u. guest parking (on-street parking may be counted)

2. Parking for non-residential uses shall be provided as follows:
   a. Minimum parking standards shall be 2 spaces per 1000 sq. ft. of non-residential floor area, or 50% of the current Municipal Code minimums, whichever is more.
   b. Maximum parking shall be the current Municipal Code minimums, unless a greater number is requested by the applicant and approved as 'alternative compliance" by the Current Planning Manager.
   c. On-street parking may be counted toward minimum, but not toward maximum, parking requirements for any given block of the Urban Character Village.
   d. No off-street parking will be allowed between the front Setback and the Urban Character Village Street (see cross section on Map 8 of 10 in Section 11). Off-street parking is to be concentrated on the sides and rears of Buildings fronting the Urban Character Village Street.
   e. In the case of Live/Work Structures, the residential parking provided may be counted toward the minimum parking required for the work/business portion of the unit. (For example, a Live/Work Structure with 1000 sq. ft. workspace may not be forbidden to provide additional spaces for patrons and employees.)

9.8.2 Multi Family Dwellings

A. Maximum lot or block Coverage - Listed in Table 9-1.

B. Minimum off-street parking (excludes on-site private drives where on-street parking may be counted to satisfy the requirement) provided shall be:

1. 2.0 spaces per Dwelling Unit with three or more bedrooms.
2. 2.0 spaces per Dwelling Unit with two bedrooms plus loft
3. 1.5 spaces per Dwelling Unit with two bedrooms.
4. 1.5 spaces per Dwelling Unit with one bedroom plus loft.
5. 1.0 space per Dwelling Unit with one bedroom.
6. 1.0 space per efficiency/studio Dwelling Unit.
7. .25 guest spaces per Dwelling Unit (on-street in public ROW, on-street on-site private drive or off-street parking on the same block shall be allowed to meet this criteria).

C. Landscaping design theme and plant materials utilized shall be consistent within each applicable Immediate Neighborhood.

D. Setbacks for garages or other Accessory Buildings may be reduced by 5 feet (except where conflicts with easements exist).

E. Building entries may be formal and elevated (porches) or low and understated.

F. Walkways connecting a Multi-Family Dwelling and adjacent public streets and other pedestrian facilities shall be provided.

G. Garages and driveways, if applicable:
1. Garages may be served from parking lot circulation drives, public streets, or Alleys, subject to the provisions of 9.7.D above.
2. Tandem garages and driveways are permitted.

H. Facades fronting on public streets, public or Common Open Space areas shall be articulated using at least two of the following elements:
1. Porches.
2. Balconies.
3. Bays.
4. Other offsets in the plane of the façade.

I. Building Height – Listed in Table 9-1.

J. Roofs shall be gabled, hipped, gambrel, or other sloping form. Minimum roof pitch for the major roof mass shall be 5:12; sloped roofs over porches, dormers, and/or other smaller architectural elements may have a lesser slope. Flat or lesser slope roof elements shall be permitted only on 30% or less of the roof area.

K. Exterior finish materials shall be primarily wood, masonry (such as brick, stone, or higher quality textured concrete masonry units), or composition lap siding. Exterior materials within each Immediate Neighborhood shall be similar and compatible, while allowing visual interest and variety.

L. Fences: Unless a neighborhood fencing standard guideline is approved administratively by the Director, the following criteria shall apply.

1. Picket fences, or other low (30" to 42"), "open" fencing may be used in private entry yards, subject to sight distance requirements along roadways.
2. In rear yards, side yards (behind the front yard Setback), and other areas where privacy and noise mitigation are desirable, fences up to 6'-3" in height will be allowed.
3. 6'-3" fences located on the property line of individual residential Lots will be limited to 40% of the total perimeter of the side and rear yard (excludes perimeter of side yards adjacent to front yard). Fences with a maximum height of 4' (4'-3" to top of posts) will be allowed for the remaining portions of the perimeter of the side and rear yard.

M. All multi family projects must comply with the Site Planning Criteria listed in Sections 6.8 through 6.28 of this GDP.

9.8.3 Additional Design Criteria for Multi Family Dwellings Over 25 DU/AC

A. Site Planning:

1. Avoid large expanses of parking lots and lining the perimeter of the site with surface parking and /or garages. Utilize smaller internal parking areas that relate directly to the buildings they are serving. Incorporate landscape islands with trees into parking areas and around garages.
2. Organize buildings around central green spaces and amenities.
3. Maximize pedestrian connections to surrounding trails and public sidewalks and provide internal circulation to amenities and central green spaces.
4. Orient buildings to present an architectural front door to surrounding public streets.

B. Architecture

1. Avoid large monolithic building massing. Create diversity using a variety of building forms and roof forms.
2. Celebrate identifiable building entries.
3. Provide useable private outdoor spaces for residents in the form of balconies, decks, patios, courtyards, etc.
4. Garage architecture shall be of the same quality and design as the primary structures.
5. Provide screening of air conditioning units and meters for apartment units and club house with screen walls and plant materials. Walls should utilize materials and colors from primary structures and shall not exceed five feet in height.

9.8.4 Single Family Attached (Townhouses)

A. Lot size and configuration:

1. Lots may be aligned in a conventional manner along public streets, clustered, or aligned along a landscaped walkway if Alley served.

B. Maximum Lot Coverage - Listed in Table 9-1.

C. Ancillary Dwelling Units:

1. Ancillary Dwelling Units are allowed.

D. Parking (off-street):

1. Two (2) spaces per primary Dwelling Unit, one (1) space per Ancillary Dwelling Unit where the adjacent street width is less than 28 feet.

E. Landscaping standards shall be consistent within each applicable Immediate Neighborhood. Street trees shall be included in each Immediate Neighborhood.

F. Home entries may be formal and elevated (porches) or low and understated.

G. Garages and driveways

1. Garages may be served from Alleys, side loaded, or accessed from the street, subject to the provisions of 9.7.D above.
2. Tandem garages and driveways are permitted.

I. Facades fronting on public streets, public or Common Open Space areas shall be articulated using at least two of the following elements:

1. Porches.
2. Balconies.
3. Bay windows.
4. Other offsets in the plane of the façade.

J. Building Height – Listed in Table 9-1.

K. Unless otherwise approved as ‘alternative compliance’, roofs shall be gabled, hipped, gambrel, or other sloping form. Minimum roof pitch for the major roof mass shall be 5:12; sloped roofs over porches, dormers, and/or other smaller architectural elements may have a lesser slope Flat or lesser slope roof elements shall be permitted only on 30% or less of the roof area.

L. Exterior finish materials shall be primarily wood, masonry (such as brick, stone, or higher quality textured concrete masonry units), or composition lap siding. Exterior materials within each Immediate Neighborhood shall be similar and compatible, while allowing visual interest and variety.

M. Fences: Unless a neighborhood fencing standard guideline is approved administratively by the Director, the following criteria shall apply.

1. Picket fences, or other low (30" to 42"), "open" fencing may be used in private entry yards, subject to sight distance requirements along roadways.
2. In rear yards, side yards (behind the front yard Setback), and other areas where privacy and noise mitigation are desirable, fences up to 6'-3" in height will be allowed.
3. 6'-3" fences located on the property line of individual residential Lots will be limited to 40% of the total perimeter of the side and rear yard (excludes perimeter of side yards adjacent to front yard). Fences with a maximum height of 4' (4'-3" to top of posts) will be allowed for the remaining portions of the perimeter of the side and rear yard.

9.8.5 Patio Homes/Zero Lot Line Homes

A. Lot size and configuration:
1. Lots may be aligned in a conventional manner along public streets, clustered, or aligned along a landscaped walkway if Alley served.

B. Maximum Lot Coverage – Listed in Table 9-1.

C. Ancillary Dwelling Units:

1. Ancillary Dwelling Units are allowed.

D. Parking (off-street):
1. Two (2) spaces per primary Dwelling Unit.
2. One (1) space per Ancillary Dwelling Unit where the adjacent street width is less than 28 feet.

E. Landscaping standards shall be consistent within each applicable Immediate Neighborhood. Street trees shall be included in each Immediate Neighborhood.

F. Home entries may be formal and elevated (porches) or low and understated.

G. Garages and driveways:

1. Garages may be served from Alleys, front loaded from adjacent streets or side loaded subject to the provisions of 9.7.D above.
2. Tandem garages and driveways are permitted.

I. Facades fronting on public streets, public or Common Open Space areas shall be articulated using at least two of the following elements (See Figure 9-2):

1. Porches.
2. Balconies.
3. Bay windows.
4. Other offsets, recesses and projections in the plane of the façade.



Figure 9-2 – Front Façade

J. Building Height – Listed in Table 9-1.

K. Unless otherwise approved as 'alternative compliance', roofs shall be gabled, hipped, gambrel, or other sloping form. Minimum roof pitch for the major roof mass shall be 5:12; sloped roofs over porches, dormers, and/or other smaller

architectural elements may have a lesser slope. Flat or lesser slope roof elements shall be permitted only on 30% or less of the roof area. Multiple roof lines shall be incorporated in the design of the front elevation. See Figure 9-3.

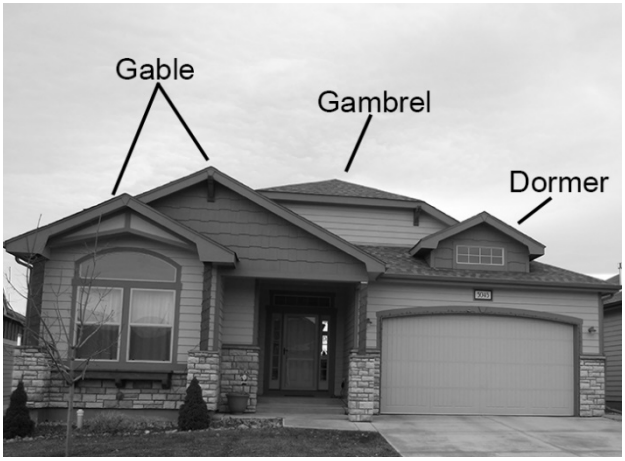


Figure 9-3 – Sloping Roof Forms

L. Exterior finish materials shall be primarily wood, masonry (such as brick, stone, or higher quality textured concrete masonry units), or composition lap siding. Exterior materials within each Immediate Neighborhood shall be similar and compatible, while allowing visual interest and variety. Multiple siding types (lap, shake, vertical board and batten) are encouraged to be used on different architectural elements of the house. See Figure 9-4.

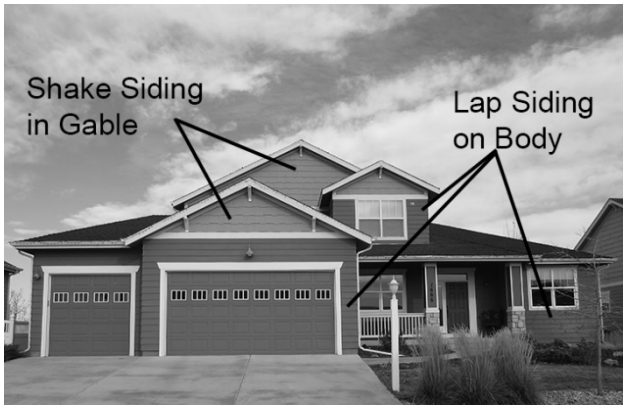


Figure 9-4 - Siding

M. Authentic use of trim and architectural accents in keeping with the overall design style of the house is required including window style and trim, belly bands defining floors and gable areas, corner trim boards, integrated designs for columns and railings, brackets, trusses, garage door detailing and windows. See Figure 9-5.

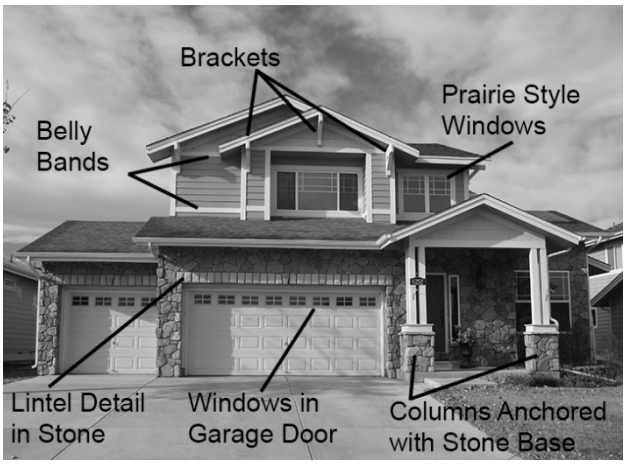


Figure 9-5 – Architectural Accents

N. Color palettes should be rich in medium hues with a minimum of three colors per house for the body, trim and accent. All rooftop vents and stacks shall be painted to match the color of the roof.

O. Fences: Unless a neighborhood fencing standard guideline is approved administratively by the Director, the following criteria shall apply.

1. Picket fences, or other low (30” to 42”), “open” fencing may be used in private entry yards, subject to sight distance requirements along roadways.
2. In rear yards, side yards (behind the front yard Setback), and other areas where privacy and noise mitigation are desirable, fences up to 6’-3” in height will be allowed.
3. 6’-3” fences located on the property line of individual residential Lots will be limited to 40% of the total perimeter of the side and rear yard (excludes perimeter of side yards adjacent to front yard). Fences with a maximum height of 4’ (4’-3” to top of posts) will be allowed for the remaining portions of the perimeter of the side and rear yard.

9.8.6 Single Family Lots

A. Lot size and configuration:

1. Lots may be aligned in a conventional manner along public streets, clustered, or aligned along a landscaped walkway if Alley served.

B. Maximum Lot Coverage - Listed in Table 9-1.

C. Ancillary Dwelling Units are allowed.

D. Parking (off-street):

1. Two (2) spaces per primary Dwelling Unit.
2. One (1) space per Ancillary Dwelling Unit where the adjacent street width is less than 28 feet.

E. Landscaping standards shall be consistent within each applicable Immediate Neighborhood. Street trees shall be included in each Immediate Neighborhood.

F. Home entries may be formal and elevated (porches) or low and understated.

G. Garages and driveways:

1. Garages may be served from Alleys, front loaded from adjacent streets or side loaded subject to the provisions of 9.7.D 1) through 4) above.
2. Tandem garages and driveways are permitted.

I. Facades fronting on public streets, public or Common Open Space areas shall be articulated using at least two of the following elements (See Figure 9-2):

1. Porches.
2. Balconies.
3. Bay windows.
4. Other offsets, recesses and projections in the plane of the façade.

J. Building Height – Listed in Table 9-1.

K. Unless otherwise approved as 'alternative compliance', roofs shall be gabled, hipped, gambrel, or other sloping form. Minimum roof pitch for the major roof mass shall be 5:12; sloped roofs over porches, dormers, and/or other smaller architectural elements may have a lesser slope. Flat or lesser slope roof elements shall be permitted only on 30 percent or less of the roof area. Multiple roof lines shall be incorporated in the design of the front elevation. See Figure 9-3.

L. Exterior finish materials shall be primarily wood, masonry (such as brick, stone, or higher quality textured concrete masonry units), or composition lap siding. Exterior materials within each Immediate Neighborhood shall be similar and compatible, while allowing visual interest and variety. Multiple siding types (lap, shake, vertical) are encouraged to be used on different architectural elements of the house. See Figure 9-4.

M. Authentic use of trim and architectural accents is required including window style and trim, belly bands defining floors and gable areas, corner trim boards, integrated designs for columns and railings, brackets, trusses, garage door detailing and windows. See Figure 9-5.

N. Color palettes should be rich in medium hues with a minimum of three colors per house for the body, trim and accent. All rooftop vents and stacks shall be painted to match the color of the roof.

O. Fences: Unless a neighborhood fencing standard guideline is approved administratively by the Director, the following criteria shall apply:

1. Picket fences, or other low (30" to 42"), "open" fencing may be used in private entry yards, subject to sight distance requirements along roadways**.**
2. In rear yards, side yards (behind the front yard setback), and other areas where privacy and noise mitigation are desirable, fences up to 6'-3" in height will be allowed.
3. 6'-3" fences located on the property line of individual residential Lots will be limited to

40% of the total perimeter of the side and rear yard (excludes perimeter of side yards adjacent to front yard). Fences with a maximum height of 4' (4'-3" to top of posts) will be allowed for the remaining portions of the perimeter of the side and rear yard.

9.9 ANCILLARY DWELLING UNITS

Ancillary Dwelling Units, where permitted, must meet the following conditions:

A. Attached or detached Ancillary Dwelling Units are included in the total number of Dwelling Units allowed in the GDP.

B. It must be on the same Lot, either attached or detached with another Dwelling Unit.

C. It must have a minimum of four hundred (400) square feet and cannot exceed one thousand fifty (1050) square feet of floor area. Additional floor area requirements shall be as indicated in the guidelines for the various housing types in the GDP.

D. It must have its own cooking and bathing facilities.

E. Portions of the Ancillary Dwelling Unit may be nearer the Front Lot Lines than portions of the principal Dwelling Unit.

F. Except as required by Building Code there shall be no required separation between Ancillary Dwelling Units except Setbacks as included in this GDP.

G. Ancillary Dwelling Units shall be limited in number to not more than 10% of the maximum number of Dwelling Units allowed in the applicable MUN. This shall be the only factor limiting the number of permits issued for Ancillary Dwelling Units during any calendar year.

H. An Ancillary Dwelling Unit must be in common ownership with the primary use or residence on the Lot; and may only be occupied by renters or family members of the owners of the primary use or residence.

I. Shall utilize the same utility services as the primary use or residence: Electric, water and sewer service must be from the primary Dwelling Unit(s) on the property. There shall not be separate utilities to the Ancillary Dwelling Unit. The primary dwelling on the subject Lot, in combination with the Ancillary Dwelling Unit shall pay all applicable plant investment fees customarily associated with new Dwelling Units.

J. It must be of the same architectural style, materials and colors as the principal dwelling so as to be architecturally compatible.

K. It must meet applicable Setback requirements of the GDP.

L. There can only be one Ancillary Dwelling Unit permitted per primary dwelling on the lot.

M. There shall be no off-street parking required where the street width is twenty-eight feet or greater.

N. Applicable Building Code requirements shall be met.

9.10 OTHER RESIDENTIAL TYPES

Co-Housing, Extended Stay Facilities, Senior Housing of a Residential Nature, Boarding Houses or Rooming Houses, single room occupancy dwellings, and other allowed housing types shall be designed to complement adjacent uses and shall meet the architectural standards applicable to other housing types within the Immediate Neighborhood and/or the non-residential standards in 9.10 below.

9.11 NON-RESIDENTIAL USES IN MUNs

A. Churches, schools, daycare facilities, commercial, retail, restaurant, office, and/or other allowed non-residential uses as listed in Section 1.3.10 shall be designed – on a case by case basis – to be compatible with the adjacent housing

types, and shall be integrated into Urban Character Villages when practical.

B. Excluding commercial, retail, and restaurant uses, the above uses may be provided outside Urban Character Villages with restrictions as noted in Section 1.

C. Non-Residential architectural standards in Section 8 shall apply to non-residential uses in MUNs with the following provisions:

1. As described in Section 9.7.1.
2. Unless otherwise approved by the Director, Building materials and colors shall be consistent or compatible with the residential materials and colors in the same Immediate Neighborhood.
3. Façade treatment, massing/scale, base and top treatments, and Building entrances shall be compatible with – but need not be identical to - the Residential Uses within the same Immediate Neighborhood, even if achieving that compatibility results in a design that does not meet a strict interpretation of Section 8. To the extent practical, non-residential facades shall include roof forms, window and door forms, and other features found in the surrounding MUN.

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SECTION 10
RESIDENTIAL

These standards apply to residential areas that are <u>not located within MUNs</u>.

10.1 PURPOSE

Residential neighborhoods included in the GDP are intended to promote variety and visual interest in areas predominantly characterized by residential development. Performance Standards included in this section apply to all areas designated on the GDP as residential neighborhoods, and only to these areas. Any conflicting non-residential standards included in Section 6, 7, 8 and 9 do not apply to residential neighborhoods.

10.2 PRIMARY GOALS

The primary goals of these residential neighborhoods is to:

A. Meet a wide range of everyday needs;

B. Include a variety of housing choices;

C. Invite walking to gathering places, services and conveniences; and

D. Provide convenient links to the larger community.

10.3 NEIGHBORHOOD PLANNING PRINCIPLES

This GDP is intended to facilitate the creation of distinct residential neighborhoods, within the context of an overall community identity that will complement existing neighborhoods in the City while establishing their own unique environment and character. These residential neighborhoods are to comprise a variety of dwellings to serve a diverse population. Residential neighborhoods will have definable edges, walks and trails, Open Spaces, and will respect views and vistas. This will help to create a sense of place where land uses, landform, and community identity will be integrated.

Planning principles to be used in the design of residential neighborhoods in the GDP will emphasize the following:

10.3.1 Pedestrian Orientation

Arterial and collector streets will feature detached walks with formal tree lawns except where site conditions or special design needs indicate the need for an alternative.

10.3.2 Linkages

A trail system will be integrated with other public walkways to link housing areas, Open Spaces, and non-residential uses.

Efficient and convenient vehicular and pedestrian links will connect residents with commercial areas and to other non-residential areas in the GDP that provide services to these residential neighborhoods.

10.4 INTENDED USES

As listed in detail in Sections 1, a variety of housing types, parks and recreational facilities, community facilities, accessory uses are permitted as Uses-by Right or Special Review Uses in the residential neighborhoods included in this GDP.

10.5 DENSITY AND INTENSITY

Residential development in designated residential neighborhoods shall have a density range of between two (2) and thirty (30) Dwelling Units per gross acre of land. Refer to Table 10-1 for the maximum density for each housing type.

10.6 LOT PATTERN / BUILDING LAYOUT PATTERN

The Lot size and layout pattern for residential neighborhoods shall be designed to allow Buildings to face streets or to face landscaped areas with connecting walkways. Lots on the same block face shall orient to the adjacent street or connecting walkway in a manner that will establish a compatible pattern of Building and entry orientation (a

block face should not arbitrarily combine fronts, backs, and sides of homes).

10.7 ACCESS AND CIRCULATION

Refer to Section 7 for access and circulation standards.

10.8 STREET FRONTAGES

For Single Family Detached Dwellings, a minimum 2 foot staggered Setback, Alleys or architectural features - such as porches, bay windows, or other forms of Architectural Articulation - that provide variety and interest along residential streetscapes shall be utilized.

For Single Family Attached Dwellings, a minimum 4 foot staggered Setback or architectural features - such as porches, bay windows, or other forms of Architectural Articulation - that provide variety and interest along residential streetscapes shall be utilized.

For Multi-Family Dwellings, Buildings shall be sited in such a way as to provide staggering and variety in overall massing and to avoid the creation of a "tunnel effect".

The methods used to achieve streetscape variety and interest shall be approved by the Director and noted on each Preliminary Plat.

Single Family Detached Dwellings with garages protruding in front of a porch or the main living area of the house shall not dominate the streescape of any block. The intent is to minimize the visual impacts of garages and emphasize the front entries, porches and living areas of the houses.

On any given block face, no more than 1 of every 4 residential Lots, which are served by an Alley, shall be permitted street loaded access to a garage.

10.9 OPEN SPACES

In addition to meeting the definitions of Private Open Space and Common Open Space in Section 13, Open Spaces shall have the function of providing aesthetic and/or recreational focus for the neighborhood.

At least 15% of the areas of each residential neighborhood in the GDP will be included in Common Open Space. Refer to Table 10-1 for minimum open space requirement for the various housing types.

At least one acre per 100 Dwelling Units shall be provided as Open Space comprising multi-use turf play fields, community gardens, dog parks, common accessible lakefront areas, trail corridors, plazas, pavilions, picnic areas, benches, or other features for residents to enjoy. Location of Open Space shall be easily accessible to all residents to the greatest extent possible.

Facilities for the conveyance, detention, and water quality treatment of storm water may be integrated into Open Spaces and natural areas. The design of such facilities shall not result in slopes or structural features that conflict with the intended recreational and/or civic purposes of the Open Space area.

Each residential neighborhood in the GDP shall include Open Play Areas as described in 'A' below, and shall include or have direct access (i.e. adjacent to or easily accessible via a trail, path or sidewalk) to at least two other open space types (as described in "B" through "E" below.

A. *Open Play Areas:* Play areas typically including a reasonably flat, open area of at least 80' x 100'. Planted and sloped areas may present additional or alternative recreational opportunities.

B. *Recreational Facilities:* Play structures, picnic facilities, sport courts, pools, or other constructed amenities may be appropriate, depending on the site opportunities and social/economic characteristics of the residents.

C. *Natural Areas:* Where pre-existing on a site, Open Spaces with a more natural character can have value as wildlife habitat as well as forms of outdoor recreation.

D. *Pedestrian Corridors:* Narrow Open Spaces can have considerable value when they provide convenient pedestrian routes to nearby destinations, or provide links for jogging or other recreational pursuits.

E. *Greenbelts/Common Open Space:* Unprogrammed green spaces or corridors not having pedestrian trails.

10.10 SEPARATION (BUFFERYARDS)

In some cases mitigation of the impacts of adjacent uses or activities may be needed. Refer to Section 15, Appendix A for bufferyard requirements.

10.11 LANDSCAPING

Residential Lots shall have a minimum of 1 deciduous tree within the front yard, two trees for corner lots. Street trees may be used to satisfy this requirement.

Refer to Section 6.15 for additional landscaping requirements.

10.12 STANDARDS FOR HOUSING TYPES

The following pages include basic architectural standards, height and Setback limitations, parking requirements, and other Performance Standards for the various housing types within the GDP. (See Tables 10-1, 10-2, and 10-3.)

Table 10-1
Open Space Requirements, Building Heights, Density and Building Coverage

Land Use	**Minimum Open Space Required *, +**	**Maximum Height of Buildings and Structures ****	**Maximum Units per Gross Acre**	**Max. Building Coverage (coverage of individual lots, not entire platted area)**
Multi-Family Dwelling	20%	60 feet	20 ++ +++	50%
Single Family Attached Dwelling	20%	40 feet	16	80%
Patio Homes, Zero Lot Line Homes	20%	35 feet	8	65%
Single Family Detached Dwellings	20%	35 feet	6	60%
Group Homes	25%	40 feet	16	40%

Notes:

* See Section 10.9 for details regarding various types of neighborhood Open Spaces.

** Certain architectural elements may exceed the Height maximums listed here. See "Building Height" definition in Section 13.

\+ The Open Space and coverage percentages and densities listed may be adjusted administratively by up to 10%, as long as the intent and total number of units allowed in the GDP is respected.

++ 25 units/acre will be allowed for Senior Housing of a Residential Nature. A minimum of 30% open space is required for these projects.

+++ Maximum density for Multi-Family Dwellings in certain Subparcels is 30 units/acre. See Section 11, Maps 4 through 7 for specific Subparcels where this maximum is allowed.

Table 10-2
Building and Parking Setbacks

	MINIMUM SETBACKS FROM							
Land Use	**Side or Back Property Line**	**I-25 & US 34 ROW**	**Arterial Street ROW**	**Collector Street ROW**	**Local Street ROW or Private Road**	**Alley ROW**	**Primary Structure to Accessory Structure**	**Common Open Space**
Ancillary Dwelling Units and Detached Garages	Same as primary structure or as separately designated below.							
Multi-Family Dwellings ***, +	Side-0', Corner Side-14', Rear-20',	80'	40'	30'	Public - 30', Private – 20'	Structure - 6' Garage- < 3' or > 18'	6' measured between eaves	0' +++
Single Family Attached Dwellings	* Side-0', Corner Side-14', Rear-20', '	80'	40'	Front-14' Garage door – 20'++	Front-14' Garage door - 18'++	Structure - 6' Garage- < 3' or > 18'	6' measured between eaves	0' +++
Single Family Detached Dwellings	Side-5' min., Corner Side-14', Rear-15',	80'	40'	Front –14' Garage door - 20'++	Front –14' Garage door - 18'++	Structure - 6' Garage- < 3' or > 18'	6' measured between eaves	0' +++
Patio Homes, Zero Lot Line Homes	** Side-0', Corner Side-14', Rear-15',	80'	40'	Front –14' Garage door - 20'++	Front –14' Garage door - 18'++	Structure - 6' Garage- < 3' or > 18'	6' measured between eaves	0' +++
Other Housing Types	** Side 5' min, Corner Side-14', Rear-10',	80'	40'	Front –14' Garage door - 20'++	Front –14' Garage door - 18'++	Structure - 6' Garage- < 3' or > 18'	6' measured between eaves	0' +++
Please See Footnotes on Next Page								

Table 10-2 Footnotes:	
*	0’ Setbacks apply to Patio Homes, Single Family Attached Dwellings with common walls and detached “Zero Lot Line” Homes and are to be considered in conjunction required separation from “Other Buildings” as noted in this table. Assured distances between Buildings shall result in an “assumed” property line meeting Building Code requirements for Building separation and allow non-rated construction accordingly.
**	The side yard Setback may be provided on both sides of each lot or, in the case of Zero Lot Line Homes, the total width of both side yard Setbacks may be provided on one side of each Lot. If a zero foot side yard Setback is proposed, adequate utility, maintenance and access easements shall be provided on the Lot adjacent to the zero foot Setback. The minimum separation between adjacent residential buildings (excluding Multi-Family Dwellings) shall be 6 feet between eaves.
+	Refer to Table 6-1 in Section 6 for Multi-Family Dwelling Setbacks in Mixed Use Village Centers.
++	Setbacks to garage doors facing public streets (except Alleys) shall be 20’ minimum from back of walk.
+++	A 0’ Setback is allowed when the setback and bufferyards are provided in the abutting Tract, Outlot or similar.

Table 10-3 – Minimum Setbacks for Oil and Gas Facilities

MINIMUM SETBACKS FOR A NEW OIL AND GAS FACILITY FROM EXISTING DEVELOPMENT	
The minimum setbacks required for new oil and gas facilities from existing development shall comply with the setbacks within the Colorado Energy & Carbon Management Commission Rules and Regulations.	
MINIMUM SETBACKS FOR NEW LAND USES FROM AN EXISTING WELL (REVERSE SETBACKS)	
Land Use Zone	**Setbacks**
Critical Zone Permitted Uses-by-Right include: 1. Essential underground public utility facilities 2. Landscape, irrigation and Open Space	0’ to 200’ from the well head
Restricted Zone Permitted Uses-by-Right include: 1. Airport, heliport or helistop 2. Composting facility 3. Storage yard 4. Essential public utility uses, facilities, services and structures 5. Heavy Industrial Uses as described in this GDP 6. Wireless Telecommunications Facilities (all types) 7. Nursery or greenhouse 8. Recycling collection center 9. Self-storage 10. Street 11. Heavy Logistics center 12. Passenger motor vehicle sales or rental 13. Heavy motor vehicle sales or rental 14. Motorcycle, scooter or ATV sales or rental 15. Parks and Open Space Uses, including active recreation and restroom buildings which may include storage areas, pedestrian and bicycle trails, dog parks, and all other uses allowed in Parks and Open Space areas.	200’ to 500’ from the well head
Development Zone Permitted Uses-by-Right include: 1. Any approved Permitted Use-by-Right for the particular property as described in this GDP except for high occupancy Buildings as described below in the High Occupancy Building Zone.	500’ and beyond from the well head
High Occupancy Building Zone Permitted Uses-by-Right include: 1. Schools including pre-K through 12, community colleges and universities 2. Daycares 3. Churches 4. Theaters and entertainment venues 5. Outdoor assembly areas for events, concerts, etc.	1000’ and beyond from the well head
MINIMUM SETBACKS FOR PLUGGED AND ABANDONED WELLS	
* For Plugged and Abandoned Wells, the buffer shall be 50’ in width and 100’ in length, with the plugged and abandoned wellhead located in the center of the 50’ by 100’ buffer; provided, that Landscaping, parking lots, and Streets may be located within the buffer. There shall be no further setbacks for structures.	

10.13 ENCROACHMENTS PERMITTED INTO THE MINIMUM SETBACKS

The following features shall be allowed within the minimum required Setbacks subject to the requirements of Section 7.13 Sight Triangles:

A. Landscaping and irrigation including trees and shrubs and other features of natural growth subject to planting offsets from utility lines as required by the City.

B. Fences or walls subject to height and other restrictions stated in this GDP and, if applicable, the City code.

C. Driveways and sidewalks.

D. Utilities
   1. Underground Utilities including service lines
   2. Aboveground Utilities including meters, ground mounted air conditioning units, satellite dishes and similar appurtenances as long as they are located so as to minimize visual intrusion and front yard lamp post fixtures.

E. Architectural features that do not extend more than two feet into a minimum required setback, including but not limited to cornices, canopies, awnings, eaves, gutters and downspouts. The total linear distance of these projections shall not exceed 50% of the length of the applicable side of the building.

F. Architectural design embellishments that do not extend more than two feet into a minimum required setback, including but not limited to bay windows, balconies and similar sized cantilever floor areas. The total linear distance of these projections shall not exceed 50% of the length of the applicable side of the building.

G. Chimneys, flues and residential ventilating ducts that do not extend more than two feet into a minimum required setback. The total linear distance of these projections shall not exceed 50% of the length of the applicable side of the building.

H. Open outside stairways, necessary landings together with railings that do not extend more than five feet into a required front or rear setback and/or not more than two feet into a minimum required side setback.

I. Covered porches, covered or uncovered decks, terraces and patios attached to a dwelling that do not extend more than five feet into a minimum required rear setback.

J. Window wells that do not extend more than three feet into a minimum required setback and/or private side yard drainage easement. In side yard locations the encroachment is allowed as long as there is sufficient space to accommodate the drainage flows between the abutting lots.

K. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, (provided the floor area does not exceed 80 square feet) shall be allowed to encroach in a REAR YARD SETBACK so long as the accessory structure is a minimum of 5' from the rear property line and does not encroach in the minimum side yard setbacks.

10.14 PARKING RATIOS

Group Homes/Group Care Facilities solely for the elderly or for handicapped persons: 0.5 (1/2) spaces per dwelling unit.

Group Homes/Group Care Facilities not solely for the elderly or for handicapped persons: Parking Ratios will be based on housing type listed below.

Multi-Family Dwellings: Minimum off-street parking (excludes on-site private drives where on-street parking may be counted to satisfy the requirement) provided shall be:

1. 2.0 spaces per Dwelling Unit with three or more bedrooms.
2. 2.0 spaces per Dwelling Unit with two bedrooms plus loft

3. 1.5 spaces per Dwelling Unit with two bedrooms.
4. 1.5 spaces per Dwelling Unit with one bedroom plus loft.
5. 1.0 space per Dwelling Unit with one bedroom.
6. 1.0 space per efficiency/studio Dwelling Unit.
7. .25 guest space per Dwelling Unit (on-street in public ROW, on-street on-site private drive or off-street parking on the same block shall be allowed to meet this criteria).

Single Family Detached Dwellings: Two (2) off-street spaces per primary Dwelling Unit; One (1) off-street space per Ancillary Dwelling Unit where applicable.

Single Family Attached Dwellings: Two (2) off-street spaces per primary Dwelling Unit; One (1) off-street space per Ancillary Dwelling Unit where applicable.

Senior Housing of a Residential Nature: See Section 7.

10.15 FACADES

A. Facades fronting on public streets or open space areas shall be articulated using at least two of the following elements (See Figure 10-1):

1. Porches;
2. Balconies;
3. Bays;
4. Walled courtyards;
5. Other off-sets, recesses and projections in the plane of the façade;
6. Other similar design elements.

Home or Building entries may be formal and elevated (porches) or low and understated.



Figure 10-1 – Front Facade

B. Single family detached dwellings less than 39' feet in width having two story facades with garage doors fronting on public streets shall be articulated using one of the following design treatments:

1. Incorporate a roof feature or trellis above the garage door to visually separate the garage from the story above it.
2. Step back the face of the wall on the story above the garage to vary the massing.
3. Incorporate a projecting box bay window above the garage door to add articulation.
4. Other similar design elements as approved by the DRC and the City.

10.16 ROOFS

A. Roofs shall be gabled, hipped, gambrel or other sloping form. Minimum roof pitch for the major roof mass shall be 5:12; sloped roofs over porches, dormers, and/or other smaller architectural elements may have a lesser slope. Flat or lesser slope roof elements shall be permitted only on 30% or less of the roof area. Multiple roof lines shall be incorporated in the design of the front elevation. See Figure 10-2.

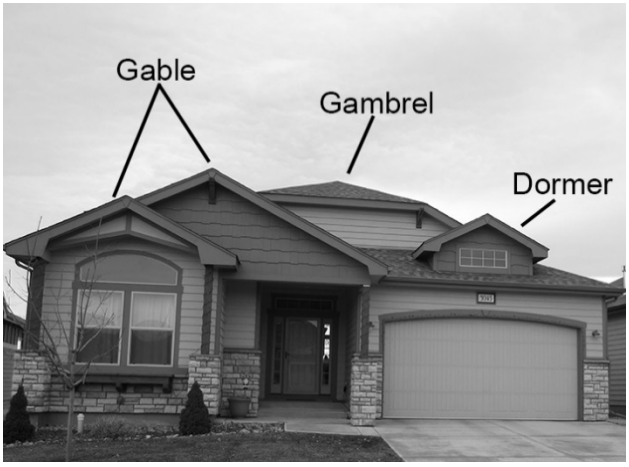


Figure 10.2 – Sloping Roof Forms


Figure 10-3 - Garage Recessed Behind the Front Facade

10.17 GARAGES

Garages and driveways, if applicable:

A. Garages for Multi-Family Dwellings may be served from parking lot circulation drives, public streets, or Alleys.

B. Tandem garages and driveways are permitted for Multi-Family Dwellings, Single Family Attached Dwellings, and Single Family Detached Dwellings.

C. Garages may be served from Alleys, front loaded from adjacent streets or side loaded.

D. No more than 25% of the residential Lots which are served by an Alley may be permitted street loaded access to the garage.

E. On Single Family Detached lots less than 65' in width the following criteria shall apply:

1. Homes with garage doors that are visible from a public street as part of the front building face shall have garages that meet one of the following three conditions:

a) A garage door shall be recessed from the front façade of the living portion of the house a minimum of 4' (See Figure 10-3) or,

b) A garage door shall be recessed from the front of a covered porch a minimum of 4' (See Figure 10-4) or,


Figure 10-4 - Garage Recessed Behind Front Porch

c) A garage door may extend forward of either the living portion of the house or the front of a covered porch a maximum of 4' provided the front elevation of the house includes a front porch that is a minimum of 6' wide (See Figure 10-5).



Figure 10-5 – Third Car Garage

2. Homes with three car garages where the garage doors for the three stalls face a public street shall off set the garage door for the third car stall a minimum of 2' from the adjacent garage front façade. (See Figure 10-5). In addition, the garage doors shall not comprise more than 48% of one of the ground floor elevations facing a public street. Garages fronting on alleys (both public and private) are exempt from this condition.

3. Homes with two car garages – the garage doors shall not comprise more than 47% of one of the ground floor elevations facing a public street. Garages fronting on alleys are exempt from this condition.

4. Garage doors shall be painted the same color as the body of the house or a similar, complementary color. Bright accent colors drawing attention to the garage doors are prohibited.

5. Home elevations that face a public street with a second story living area constructed above the garage and the front façade of the living area is on the same vertical plane as the garage below it shall use an architectural roof element to separate the garage from the second floor. Elevations that face an alley (both public and private) are exempt from this condition.

6. Homes located on adjacent lots where both homes have garages extending forward of a front porch or living area shall:

a) Have distinctively different architectural elevations (meaning different rooflines, massing, detailing, etc.) and
b) Provide a 2-foot front yard setback differential

10.18 REAR WALLS OF MULTI FAMILY GARAGES

To add visual interest and avoid the effect of a long blank wall with no relation to human size, accessibility needs or internal divisions within the Building, the following standards for minimum wall articulation shall apply:

A. Perimeter Garages

1. Length. Any garage located with its rear wall along the perimeter of a development and within sixty-five (65) feet of a public right-of-way or the property line of the development site shall not exceed eighty-five (85) feet in length. A minimum of seven (7) feet landscaping must be provided between any two (2) such perimeter garages.

2. Articulation. No rear garage wall that faces a street or adjacent development shall exceed thirty (30) feet in length without including at least one (1) of the following in at least two (2) locations:
   a. Change in wall plane of at least six (6) inches,
   b. Change in material or masonry pattern,
   c. Change in roof plane,
   d. Windows,
   e. Doorways,
   f. Thicker walls, ledges or sills,
   g. An equivalent element that subdivides the wall into proportions related to human scale and/or the internal divisions within the Building. (See Figure 10-6).



Figure 10-6 – Multi Family Garages

10.19 EXTERIOR FINISHES AND MATERIALS

A. Exterior finish materials shall be primarily masonry (such as brick, stone, or higher quality textured concrete masonry units) or composition (or similar) lap siding. T111 vertical siding is discouraged in single family residential areas. Exterior materials within each neighborhood shall be similar and compatible, while allowing visual interest and variety. Multiple siding types (lap, shake, vertical board and batten) are encouraged to be used on different architectural elements of the house.

B. Authentic use of trim and architectural accents in keeping with the overall design style of the house is required including window style and trim, belly bands defining floors and gable areas, corner trim boards, integrated designs for columns and railings, brackets, trusses, garage door detailing and windows. See Figure 10-7.



Figure 10-7 – Architectural Elements

10.20 COLORS

A palette of colors shall be provided for each neighborhood and utilized within that area. Color palettes should be rich in medium hues with a minimum of three colors per house for the body, trim and accent. All rooftop vents and stacks shall be painted to match the color of the roof. The Centerra DRC and Director may approve additional colors or substitute colors at later dates.

10.21 FENCES

Unless a neighborhood fencing standard guideline is approved administratively by the Director, the following criteria shall apply.

A. Picket fences, or other low (30" to 42"), "open" fencing may be used in private entry yards, subject to sight distance requirements along roadways.

B. In rear yards, side yards (behind the front yard setback), and other areas where privacy and noise mitigation are desirable, fences up to 6'-3" in height will be allowed.

C. 6'-3" fences located on the property line of individual residential Lots will be limited to 40% of the total perimeter of the side and rear yard (excludes perimeter of side yards adjacent to front yard). Fences with a maximum height of 4' (4'-3" to top of posts) will be allowed for the remaining portions of the perimeter of the side and rear yard.

10.22 MULTI FAMILY SITE PLANNING CRITERIA

A. All multi family projects must comply with the Site Planning Criteria listed in Sections 6.8 through 6.28 of this GDP.

10.23 ADDITIONAL DESIGN CRITERIA FOR MULTI FAMILY DWELLINGS OVER 25 DU/AC

A. Site Planning

1. Avoid large expanses of parking lots and lining the perimeter of the site with surface parking and /or garages. Utilize smaller internal parking areas that relate directly to the buildings they are serving. Incorporate landscape islands with trees into parking areas and around garages.
2. Organize buildings around central green spaces and amenities.
3. Maximize pedestrian connections to surrounding trails and public sidewalks and

provide internal circulation to amenities and central green spaces.

4. Orient buildings to present an architectural front door to surrounding public streets.

B. Architecture

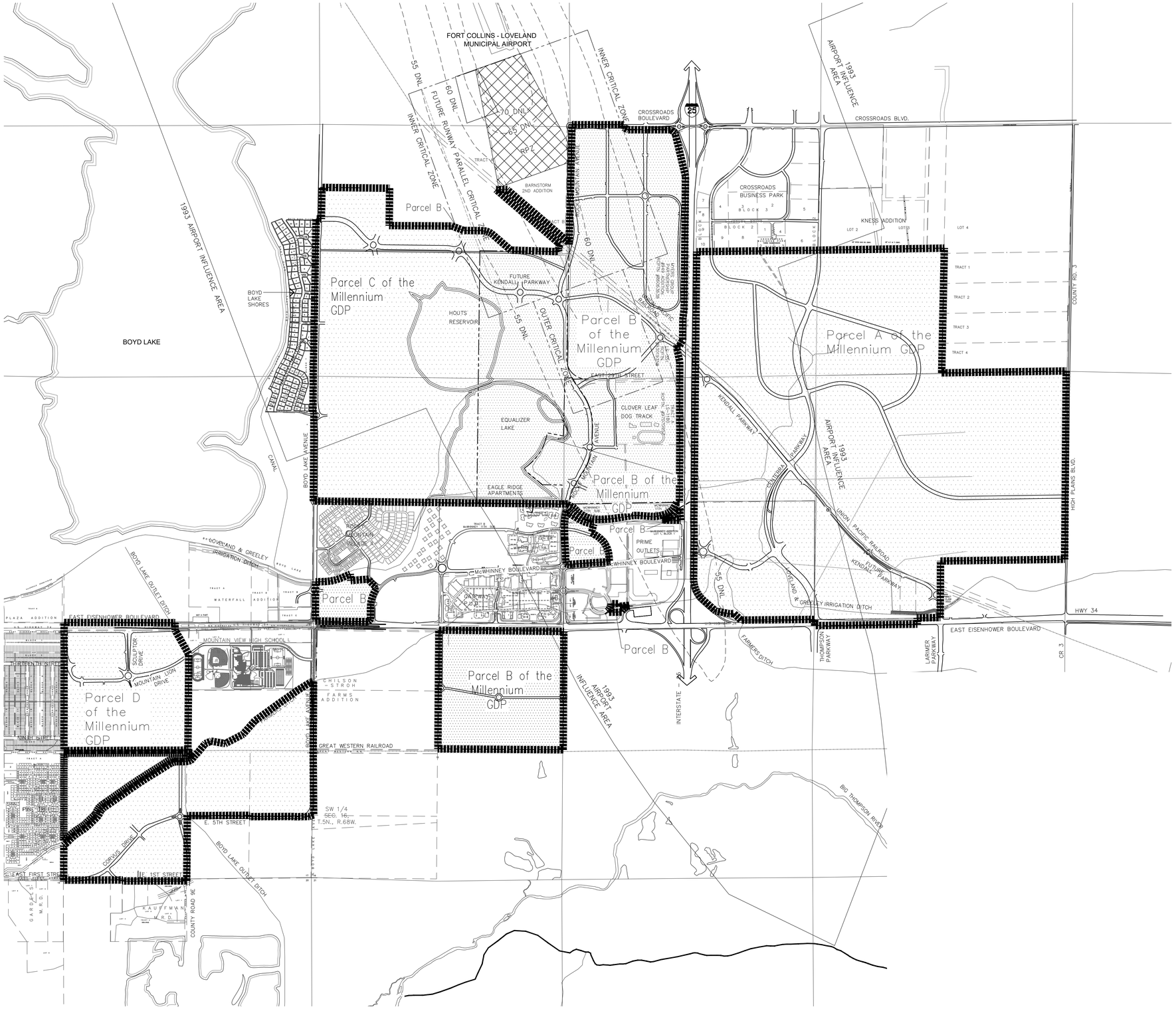
1. Avoid large monolithic building massing. Create diversity using a variety of building forms and roof forms.
2. Celebrate identifiable building entries.
3. Provide useable private outdoor spaces for residents in the form of balconies, decks, patios, courtyards, etc.
4. Garage architecture shall be of the same quality and design as the primary structures.
5. Provide screening of air conditioning units and meters for apartment units and club house with screen walls and plant materials. Walls should utilize materials and colors from primary structures and shall not exceed five feet in height.

MILLENNIUM GDP AMENDMENTS:

GENERAL NOTES:

1. APPROVAL OF THIS GDP CONSTITUTES A VESTED PROPERTY RIGHT PURSUANT TO ARTICLE 68 OF TITLE 24, C.R.S., AS AMENDED, AND SECTION 18.14.03.15 OF THE LOVELAND UNIFIED DEVELOPMENT CODE AS AMENDED.

2. SEE SECTION 15, APPENDIX D FOR MORE DETAILED AMENDMENT DESCRIPTIONS.



NORTH

SCALE: 1" = 1000'

0 500' 1000' 2000'

KEY MAP

GENERAL DEVELOPMENT PLAN

MILLENNIUM GDP

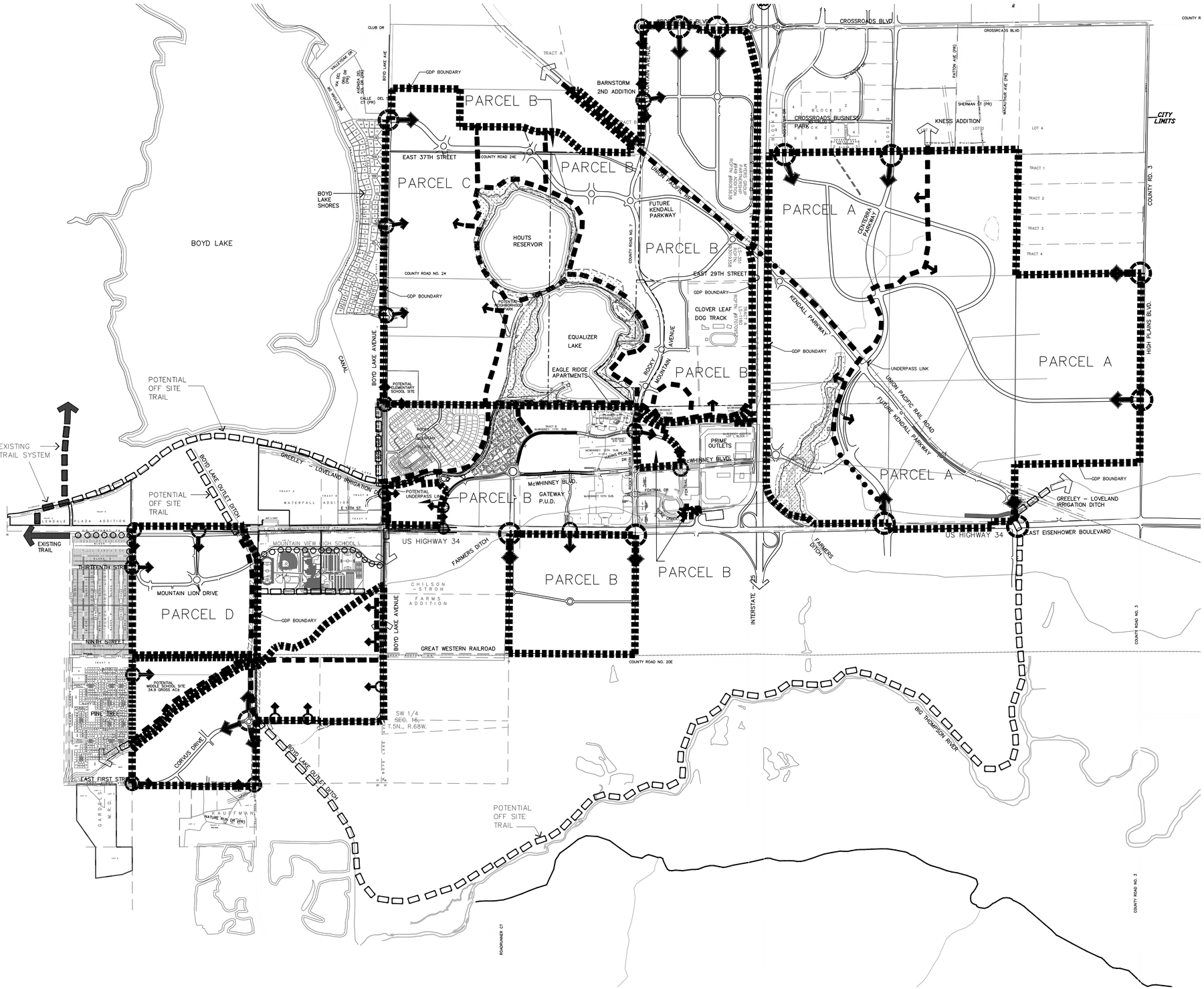
ELEVENTH MAJOR AMENDMENT

LOVELAND, COLORADO

MAP 1 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 –

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LEGEND

- CONCEPTUAL TRAILS ALONG ROADWAY
- CONCEPTUAL TRAILS ALONG ROADWAY (BY OTHERS)
- CONCEPTUAL TRAILS WITHIN OPEN SPACE
- CONCEPTUAL FUTURE TRAILS (BY OTHERS)
- BUFFER ZONE
- WETLANDS
- CONCEPTUAL ACCESS POINT (locations to be determined at time of development approval)

NORTH

SCALE: 1" = 1000'

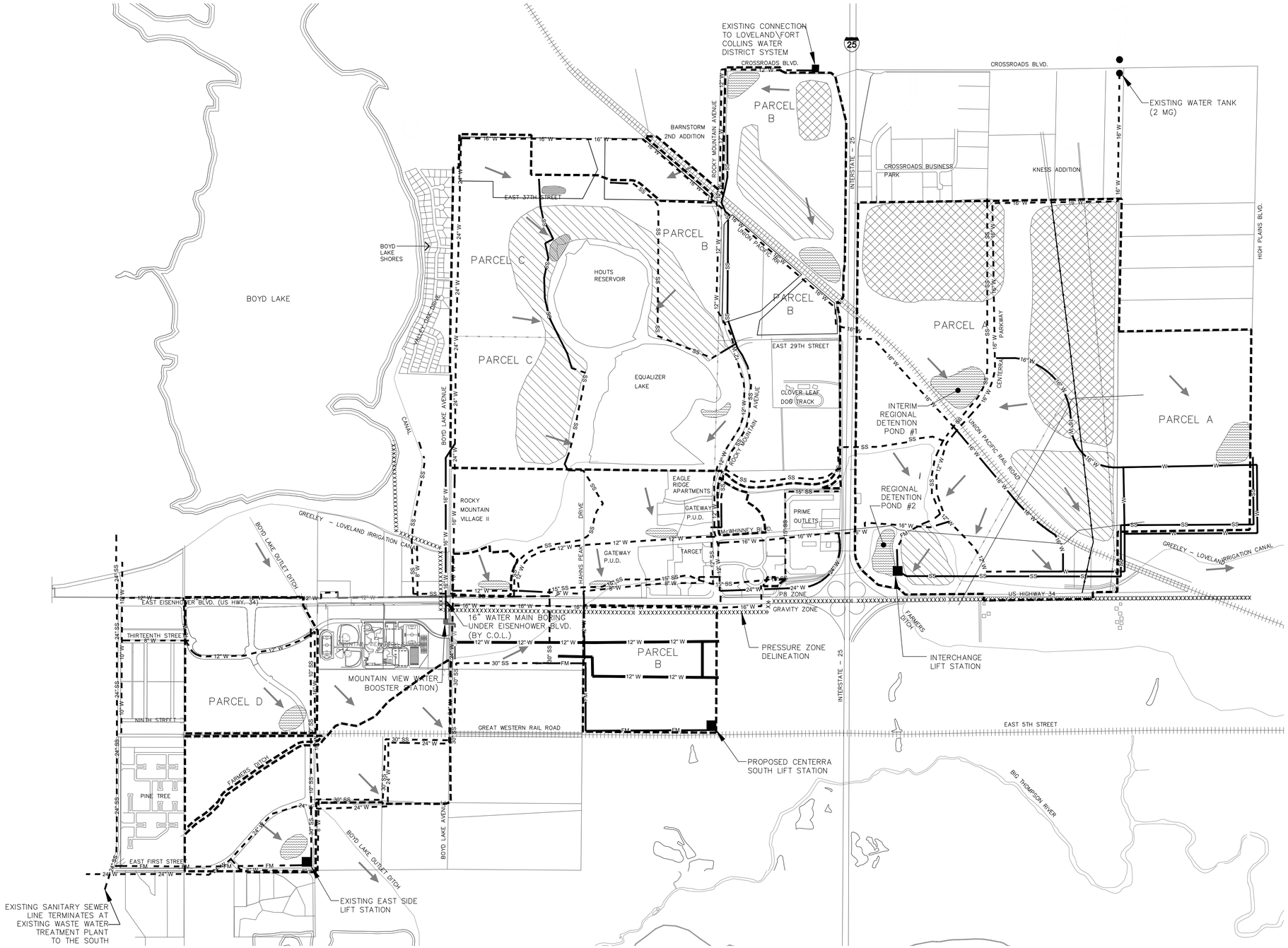
0 500' 1000' 2000'

CONCEPTUAL AMENITY MAP
GENERAL DEVELOPMENT PLAN
MILLENNIUM GDP
ELEVENTH MAJOR AMENDMENT
LOVELAND, COLORADO

MAP 2 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 –

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LEGEND

- GDP BOUNDARY
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER
- PROPOSED WATER
- EXISTING WATER
- PROPOSED FORCE MAIN
- EXISTING FORCE MAIN
- DRAINAGE FLOW DIRECTION
- POTENTIAL CUT AREAS
- POTENTIAL FILL AREAS
- POTENTIAL REGIONAL DETENTION POND

UTILITY NOTES:

1) WATER SERVICE WILL BE PROVIDED BY THE CITY OF LOVELAND. WATER DISTRIBUTION INFRASTRUCTURE SHALL BE DESIGNED AND CONSTRUCTED AS PER CURRENT CITY OF LOVELAND STANDARDS.

2) WASTEWATER SERVICE WILL BE PROVIDED BY THE CITY OF LOVELAND. GRAVITY SEWER SYSTEMS AND SEWER LIFT STATIONS, IF REQUIRED, SHALL BE DESIGNED AND CONSTRUCTED AS PER CURRENT CITY OF LOVELAND STANDARDS.

McWHINNEY

SCALE: 1" = 1000'

NORTH 0 500' 1000' 2000'

CONCEPTUAL UTILITY – GRADING MAP

GENERAL DEVELOPMENT PLAN

MILLENNIUM GDP

ELEVENTH MAJOR AMENDMENT
LOVELAND, COLORADO

MAP 3 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 –

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CROSSROADS BUSINESS PARK

KNESS ADDITION

30' SETBACK MINIMUM

GDP BOUNDARY

EXISTING STORM PIPE

CENTERRA PARKWAY

1000'

UNION PACIFIC RR

PARKWAY

EXISTING BRIDGE

POTENTIAL PEDESTRIAN LINK

POTENTIAL SEPARATED CROSSING OF INTERSTATE

RESIDENTIAL USES PERMITTED BY RIGHT IN THIS HATCHED AREA ONLY

A3

EXISTING OIL WELL

A2

EXISTING OIL WELL

20' AT&T EASEMENT
FIBER OPTICS LINE, DIRECT BURY CABLE
APPROXIMATELY FOUR FEET COVER
CONTACT:
AT&T
ATTN: BRUCE KELLY
P.O. BOX 348
MEAD, CO 80542
970/ 535-4461 (LOCAL ENG.) OR
800/ 252-1133 (AT&T-CABLE HAZARD CENTER)

BUFFER AREA
RESIDENTIAL DEVELOPMENT LIMITED TO A MAXIMUM OF 10 DU/ACRE WITHIN THIS HATCHED AREA

GDP BOUNDARY

1300'

PETROLEUM LINE EASEMENT
PETROLEUM LINE, 8 INCH DIA.
APPROXIMATELY THREE FEET COVER
CONTACT:
ROCKY MOUNTAIN PIPELINE SYSTEMS
ATTN: JASON P. MIERS
P. O. BOX 4648
HOUSTON, TX 77210-4648
(713) 993-5207

A5

CLOVER LEAF DOG TRACK

KENDALL PARKWAY

RESIDENTIAL RAILROAD BUFFERYARD
60' MINIMUM - 100' MAXIMUM SETBACKS (REFER TO APPENDIX A, SECTION 15)

FUTURE ROW

COMMON OPEN SPACE

75' BUFFER

1993 AIRPORT INFLUENCE AREA

A4

A8

UNION PACIFIC RAIL ROAD

WAPA POWER LINE

BUFFER AREA
RESIDENTIAL DEVELOPMENT LIMITED TO A MAXIMUM OF 3 DU/ACRE WITHIN THIS HATCHED AREA

GREELEY & LOVELAND IRRIGATION DITCH

FUTURE KENDALL PARKWAY

55 DNL

COMMON OPEN SPACE

75' BUFFER

UNION PACIFIC RAILROAD COMPANY
JON DEVISH-CONTRACT REPRESENTATIVE
1416 DODGE ST., ROOM 1100
OMAHA, NE 68179-1100
(402) 997-3546

A6

A7

GREELEY & LOVELAND IRRIGATION COMPANY
RON BRINKMAN- MANAGER
808 23rd AVENUE
GREELY, CO. 80631
PHONE (970) 352-0495
FAX (970) 352-2457

PRIME OUTLETS

A1

CITY OF GREELEY WATERLINE

ENVIRONMENTALLY SENSITIVE AREA (TYPICAL)

WETLANDS (TYPICAL)

FARMERS DITCH

55 DNL

GREELEY & LOVELAND IRRIGATION DITCH

GDP BOUNDARY

GREELEY & LOVELAND IRRIGATION DITCH

EAST EISENHOWER BOULEVARD

HIGH PLAINS BOULEVARD (NORTH COUNTY ROAD 3)

MAP 4 OF 10 LAND USE LEGEND

SUB-PARCEL:	ACRES:	USES-BY-RIGHT:	SPECIAL REVIEW USES:	MAXIMUM DENSITY FOR ANY INDIVIDUAL PHASE ON A SINGLE PLAT (RESIDENTIAL USE ONLY):	MAXIMUM # RESIDENTIAL UNITS:	OTHER FOOTNOTES:
A1	185	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT IN A MUN) PARKS AND OPEN SPACE	HEAVY INDUSTRIAL	MUVC + RES (NOT IN A MUN) 30 DU/AC ++	1250	** ***
A2	185	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL LIGHT INDUSTRIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT IN A MUN) RESIDENTIAL MIXED-USE NEIGHBORHOOD PARKS AND OPEN SPACE	HEAVY COMMERCIAL HEAVY INDUSTRIAL	MUVC + RES (NOT IN A MUN) 30 DU/AC ++ RES (MUN) 30 DU/AC +++	880	
A3	213	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL HEAVY INDUSTRIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL MIXED-USE NEIGHBORHOOD RESIDENTIAL (NOT IN A MUN) PARKS AND OPEN SPACE		MUVC + RES (NOT IN A MUN) 30 DU/AC ++ RES (MUN) 30 DU/AC +++	1000	** ***
A4	100	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE			0	
A5	158	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL RESIDENTIAL (NOT IN A MUN) RESIDENTIAL MIXED-USE NEIGHBORHOOD PARKS AND OPEN SPACE		RES (NOT IN A MUN) △ RES (MUN) 30 DU/AC △△	632	
A6	47	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT IN A MUN) RESIDENTIAL MIXED-USE	HEAVY COMMERCIAL	MUVC + RES (NOT IN A MUN) 30 DU/AC ++ RES (MUN) 30 DU/AC +++	664	*
A7	32	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT IN A MUN) RESIDENTIAL MIXED-USE NEIGHBORHOOD PARKS AND OPEN SPACE		MUVC + RES (NOT IN A MUN) △ RES (MUN) 30 DU/AC △△	127	*
A8	144	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT in a MUN) PARKS AND OPEN SPACE	HEAVY INDUSTRIAL	MUVC + RES (NOT IN A MUN) 30 DU/AC ++ RES (MUN) 30 DU/AC +++	688	
SUB-TOTAL	1,064					
EISENHOWER BLVD.(US 34) R.O.W.	8	NA	NA			
COMMON OPEN SPACE	76	PARKS & OPEN SPACE				
RAILROAD R.O.W.	18	NA	NA			
TOTAL	1,166					

\+ THE DENSITY OF INDIVIDUAL PHASES OF DEVELOPMENT WITHIN A MIXED USE VILLAGE CENTER WITH RESIDENTIAL USES SHALL NOT BE RESTRICTED PROVIDED THAT THE MAXIMUM NUMBER OF DWELLING UNITS IS NOT EXCEEDED.

++ 30 DWELING UNITS PER ACRE FOR MULTI-FAMILY DWELLINGS. ALL OTHER MAXIMUM DENSITIES PER TABLE 10-1.

+++ 30 DWELING UNITS PER ACRE FOR MULTI-FAMILY DWELLINGS. ALL OTHER MAXIMUM DENSITIES PER TABLE 9-1.

△ MAXIMUM DENSITIES PER TABLE 10-1.

△△ MAXIMUM DENSITIES PER TABLE 9-1.

* PARCELS A6 AND A7 ARE TO BE PREDOMINANTLY RESIDENTIAL. NON-RESIDENTIAL USES WILL BE SECONDARY AND COMPLEMENTARY TO THE RESIDENTIAL USES.

** SINGLE FAMILY DETACHED DWELLINGS ARE PROHIBITED.

*** THE TOTAL MAXIMUM ACRES COMBINED IN SUB-PARCELS A1 AND A3 OF RESIDENTIAL USES (EXCLUDES RESIDENTIAL IN A MIXED USE STRUCTURE) IS 107 ACRES. PLEASE REFER TO SPECIAL CONDITION NO. 14 IN APPENDIX 2-1.

GENERAL NOTES:
1. A MAXIMUM OF 3,781 DWELLING UNITS WILL BE PERMITTED IN PARCEL A. IN ADDITION, SUB PARCELS WILL NOT EXCEED MAXIMUM NUMBERS STATED IN THE TABLE ABOVE.
2. A MAXIMUM OF 8,100,000 SQUARE FEET OF COMMERCIAL/ INDUSTRIAL USE WILL BE PERMITTED IN PARCEL A.
3. EXISTING AGRICULTURAL LAND USES TO BE ALLOWED AS LEGAL NON-CONFORMING USES.

LEGEND

- CONCEPTUAL TRAIL ALONG ROADWAY
- CONCEPTUAL TRAIL ALONG ROADWAY (BY OTHERS)
- CONCEPTUAL TRAIL WITHIN OPEN SPACE
- CONCEPTUAL TRAIL WITHIN OPEN SPACE (BY OTHERS)
- BUFFER ZONE
- ENVIRONMENTALLY SENSITIVE AREAS RATED 6 OR HIGHER
- ENVIRONMENTALLY SENSITIVE AREAS
- CONCEPTUAL VEHICULAR ACCESS POINT (locations to be determined at time of development approval)

NORTH 0 200' 400' 800'

SCALE: 1" = 400'

PARCEL A
GENERAL DEVELOPOMENT PLAN
MILLENNIUM GDP
ELEVENTH MAJOR AMENDMENT
LOVELAND, COLORADO

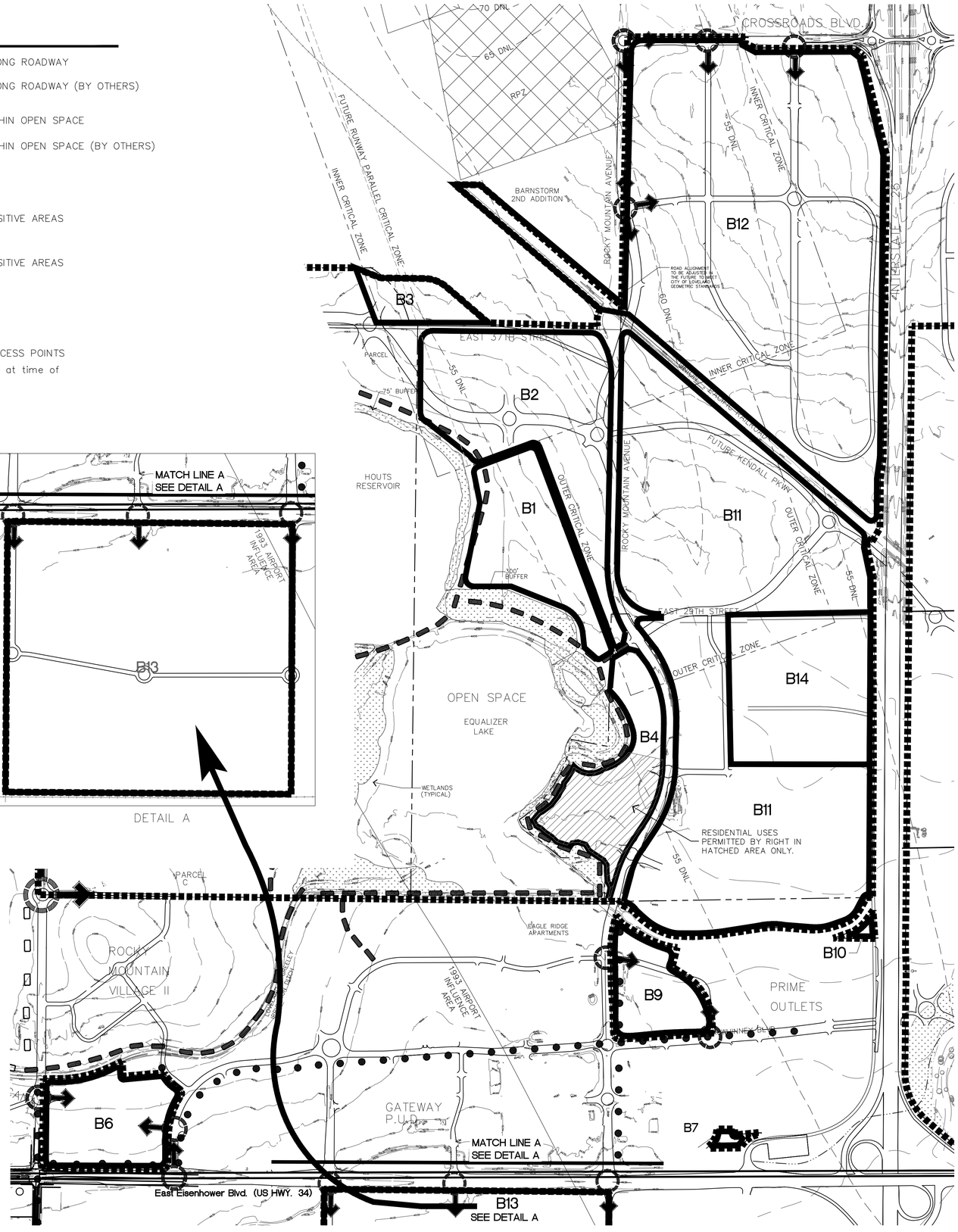
MAP 4 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 -

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LEGEND

- CONCEPTUAL TRAIL ALONG ROADWAY
- CONCEPTUAL TRAIL ALONG ROADWAY (BY OTHERS)
- CONCEPTUAL TRAIL WITHIN OPEN SPACE
- CONCEPTUAL TRAIL WITHIN OPEN SPACE (BY OTHERS)
- BUFFER ZONE
- ENVIRONMENTALLY SENSITIVE AREAS RATED 6 OR HIGHER
- ENVIRONMENTALLY SENSITIVE AREAS RATED 5 OR LOWER
- WETLANDS
- CONCEPTUAL VEHICULAR ACCESS POINTS (locations to be determined at time of development approval)



LAND USE LEGEND

SUB-PARCEL:	ACRES:	USES-BY-RIGHT:	SPECIAL REVIEW USES:	MAXIMUM DENSITY FOR ANY INDIVIDUAL PHASE ON A SINGLE PLAT (RESIDENTIAL USE ONLY):	OTHER FOOTNOTES:
B1	31	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL LIGHT INDUSTRIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT IN A MUN) RESIDENTIAL MIXED-USE NEIGHBORHOOD PARKS & OPEN SPACE	HEAVY COMMERCIAL HEAVY INDUSTRIAL	MUVC + RES (NOT IN A MUN) 30 DU/AC + + RES (MUN) 30 DU/AC + + +	Δ
B2	59	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL MIXED-USE VILLAGE CENTER (MUVC) PARKS & OPEN SPACE	HEAVY INDUSTRIAL	MUVC +	* **
B3	9	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE	HEAVY INDUSTRIAL		*
B4	25	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT IN A MUN) RESIDENTIAL MIXED-USE NEIGHBORHOOD PARKS AND OPEN SPACE		MUVC + RES (NOT IN A MUN) 30 DU/AC + + RES (MUN) 30 DU/AC + + +	Δ *
B6	23	INSTITUTIONAL/CIVIC/PUBLIC HEAVY COMMERCIAL LIGHT COMMERCIAL PARKS AND OPEN SPACE			
B7	1	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL PARKS AND OPEN SPACE			
B9	16	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE			
B10	1	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE			
B11	183	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE	HEAVY INDUSTRIAL		*
B12	189	BUSINESS PARK USES			* * *
B13	151	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL MIXED-USE VILLAGE CENTER (MUVC) RESIDENTIAL (NOT IN A MUN) RESIDENTIAL MIXED-USE NEIGHBORHOOD PARKS AND OPEN SPACE	HEAVY INDUSTRIAL	MUVC + RES (NOT IN A MUN) 30 DU/AC + + RES (MUN) 30 DU/AC + + +	
B14	42	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE	HEAVY INDUSTRIAL		*
SUBTOTAL	730				
RAILROAD	13		NA		
COMMON OPEN SPACE	119		NA		
R.O.W	21		NA		
TOTALS	883				

\+ THE DENSITY OF INDIVIDUAL PHASES OF DEVELOPMENT WITHIN A MIXED USE VILLAGE CENTER WITH RESIDENTIAL USES SHALL NOT BE RESTRICTED PROVIDED THAT THE MAXIMUM NUMBER OF DWELLING UNITS IS NOT EXCEEDED.

\+ + 30 DWELING UNITS PER ACRE FOR MULTI-FAMILY DWELLINGS. ALL OTHER MAXIMUM DENSITIES PER TABLE 10-1.

\+ + + 30 DWELING UNITS PER ACRE FOR MULTI-FAMILY DWELLINGS. ALL OTHER MAXIMUM DENSITIES PER TABLE 9-1.

Δ SINGLE FAMILY DETACHED DWELLINGS ARE PROHIBITED.

* USES WITHIN THE AIRPORT CRITICAL ZONE SHALL BE CONSISTENT WITH THE USE TABLE SHOWN ON THE PARCEL B-12 AIRPORT DEPICTION AND THE EXAMPLES OF APPLICATIONS OF USE TABLE ATTACHED TO APPENDIX 3-1 OF THE GDP AS ATTACHMENTS 2 AND 3, RESPECTIVELY. FOR PURPOSES OF THIS NOTE, THE TERM "SCHOOLS" IN SUCH USE TABLE REFERS TO K-12 SCHOOLS, BUT DOES NOT REFER TO HIGHER EDUCATION SCHOOLS, BUSINESS SCHOOLS, TRADE SCHOOLS OR VOCATIONAL SCHOOLS.

* * WITHIN DESIGNATED MIXED-USE VILLAGE CENTERS, RESIDENTIAL USES ARE NOT ALLOWED.

* * * USES-BY-RIGHT WITHIN PARCEL B-12 SHALL BE CONSISTENT WITH THE USE TABLE AND HEIGHT RESTRICTIONS SHOWN ON THE PARCEL B-12 AIRPORT DEPICTION PURSUANT TO SPECIAL CONDITIONS IN APPENDIX 3-1 OF THE GDP. THE TERM "SCHOOLS", AS USED IN THE USE TABLE ON THE PARCEL B-12 AIRPORT DEPICTION, REFERS TO K-12 SCHOOLS, BUT DOES NOT REFER TO HIGHER EDUCATION SCHOOLS, BUSINESS SCHOOLS, TRADE SCHOOLS OR VOCATIONAL SCHOOLS.

GENERAL NOTES:
1. ALL EXISTING AGRICULTURAL USES TO BE ALLOWED AS LEGAL NON-CONFORMING USES.
2. A MAXIMUM OF 9,608,000 SQUARE FEET OF COMMERCIAL/INDUSTRIAL USES WILL BE PERMITTED IN PARCEL B.
3. A MAXIMUM OF 3,357 DWELLING UNITS WILL BE PERMITTED IN PARCEL B.

SCALE: 1" = 500'

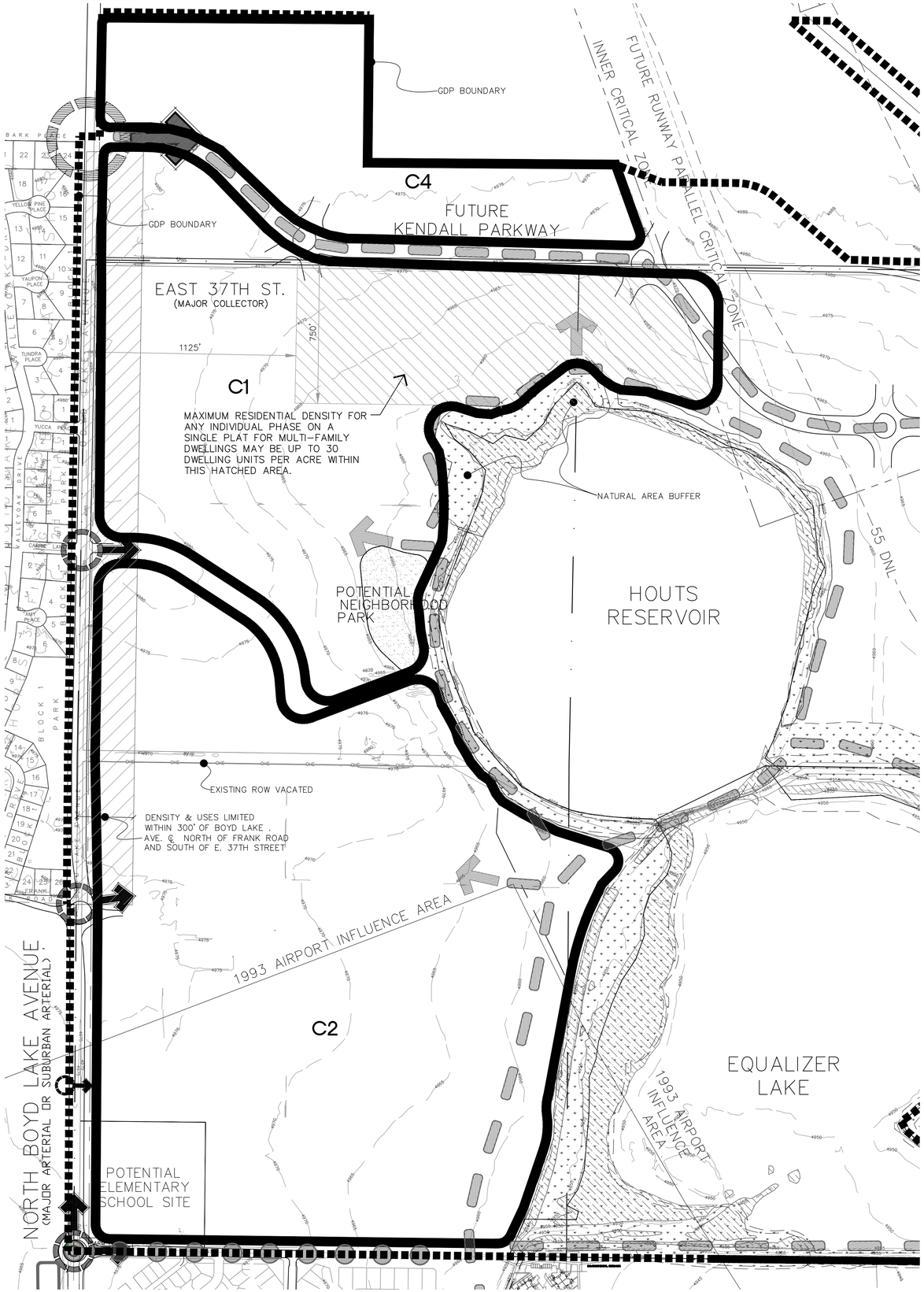
NORTH 0 250' 500' 1000'

PARCEL B
GENERAL DEVELOPMENT PLAN
MILLENNIUM GDP
ELEVENTH MAJOR AMENDMENT
LOVELAND, COLORADO

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CURRENT THROUGH MAJOR AMENDMENT 11 -

Q:\DEN\Projects\0178-00\CAD Centerra\Projects\0178-00 General Services_Correspondence\Transmittals\CWC\Millennium GDP\Modified to CWC plot colors\2017-02-10\2025-01\14 Mjr Amendment 11\mod-Map5-Parcel-B_MCW_71012.dwg



LAND USE LEGEND

SUB-PARCEL:	ACRES:	USES-BY-RIGHT:	SPECIAL REVIEW USES:	MAXIMUM DENSITY (RESIDENTIAL USE ONLY):	OTHER FOOTNOTES:
C1	125	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE RESIDENTIAL MIXED USE NEIGHBORHOOD RESIDENTIAL (NOT IN MUN)	HEAVY COMMERCIAL HEAVY INDUSTRIAL	6 DU/AC (FOR OVERALL SUB-PARCEL) ** ***	*
C2	200	INSTITUTIONAL/CIVIC/PUBLIC RESIDENTIAL MIXED USE NEIGHBORHOOD PARKS AND OPEN SPACE		6 DU/AC (FOR OVERALL SUB-PARCEL) **	
C4	51	INSTITUTIONAL/CIVIC/PUBLIC LIGHT COMMERCIAL HEAVY COMMERCIAL LIGHT INDUSTRIAL PARKS AND OPEN SPACE	HEAVY INDUSTRIAL		
SUBTOTAL	376				
LAKES	106	NA			
TOTAL:	482				

* USES WITHIN THE AIRPORT CRITICAL ZONE SHALL BE CONSISTENT WITH THE USE TABLE SHOWN ON THE PARCEL B-12 AIRPORT DEPICTION, AND THE EXAMPLES OF APPLICATIONS OF USE TABLE ATTACHED TO APPENDIX 3-1 OF THE GDP AS ATTACHMENTS 2 AND 3, RESPECTIVELY. FOR PURPOSES OF THIS NOTE, THE TERM "SCHOOLS" IN SUCH USE TABLE REFERS TO K-12 SCHOOLS, BUT DOES NOT REFER TO HIGHER EDUCATION SCHOOLS, BUSINESS SCHOOLS, TRADE SCHOOLS OR VOCATIONAL SCHOOLS.

** MAXIMUM DENSITIES PER TABLE 9-1 AND TABLE 10-1.

*** FOR NORTHERN PORTION OF C1 ONLY (SEE MAP) A MAXIMUM DENSITY OF UP TO 30 DU/AC SHALL BE PERMITTED FOR MULTI-FAMILY DWELLINGS WITHIN ANY INDIVIDUAL PHASE OF DEVELOPMENT INCLUDED ON A SINGLE PLAT. ALL OTHER MAXIMUM DENSITIES PER TABLE 9-1.

GENERAL NOTES:

1.) A 10-ACRE PARCEL SHALL BE LOCATED WITHIN PARCEL C-2 FOR A FUTURE ELEMENTARY SCHOOL. THE ACTUAL SCHOOL SITE LOCATION SHALL BE DETERMINED WITH FUTURE DEVELOPMENT APPLICATIONS.

2.) LAKE AREAS INCLUDE THE PORTION OF HOUTS RESERVOIR AND THE EQUALIZER LAKE WEST OF THE DEMISING LINE BETWEEN PARCELS B AND C.

3.) A MAXIMUM OF 1,500 DWELLING UNITS WILL BE ALLOWED IN PARCEL C

4.) A MAXIMUM OF 900,000 S.F. NON-RESIDENTIAL USES WILL BE ALLOWED IN SUB-PARCELS C4 AND THAT PORTION OF SUB-PARCEL C1 WHICH IS BOTH MORE THAN 2000 L.F. EAST OF BOYD LAKE AVE. AND NORTH OF HOUTS RESERVOIR. A MAXIMUM OF 58,000 GROSS S.F. NON-RESIDENTIAL USES WILL BE ALLOWED IN SUB-PARCELS C1 (EXCLUDING A PORTION OF SUBPARCEL C1 NOTED ABOVE) & C2.

LEGEND

- CONCEPTUAL TRAILS ALONG ROADWAY
- CONCEPTUALTRAILS ALONG ROADWAY (BY OTHERS)
- CONCEPTUAL TRAILS WITHIN OPEN SPACE
- CONCEPTUAL FUTURE TRAIL (BY OTHERS)
- WETLANDS
- BUFFER ZONE
- CONCEPTUAL VEHICULAR ACCESS POINTS (locations to be determined at time of development approval)
- POTENTIAL PARK SITE

NOTE: 1. SEE GDP TEXT FOR ADDITIONAL REQUIREMENTS, GUIDELINES, AND STANDARDS.

PLEASE ALSO REFER TO:
- Residential Street Sections, Map 8

NORTH 0 150' 300' 600'

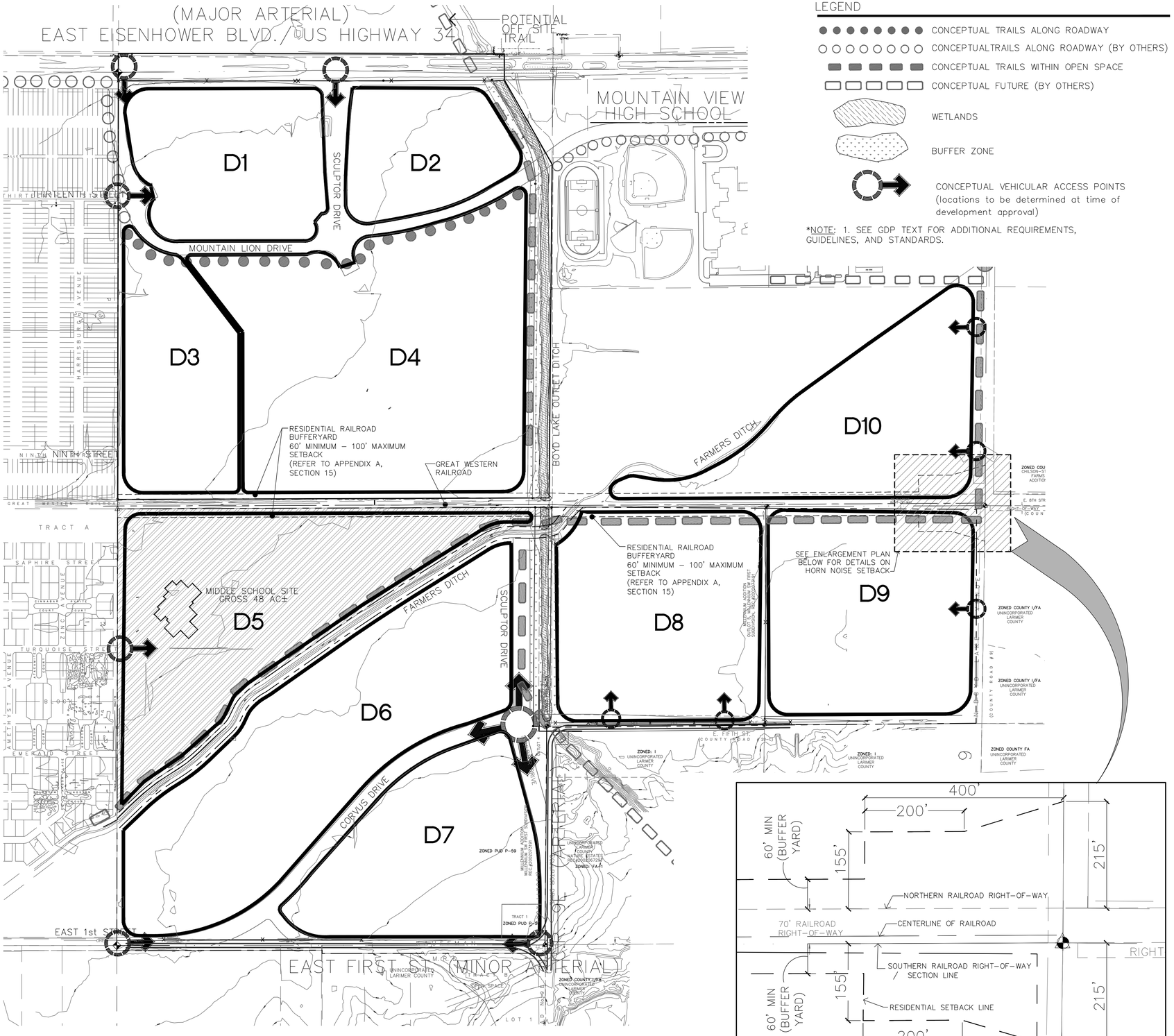
SCALE: 1" = 300'

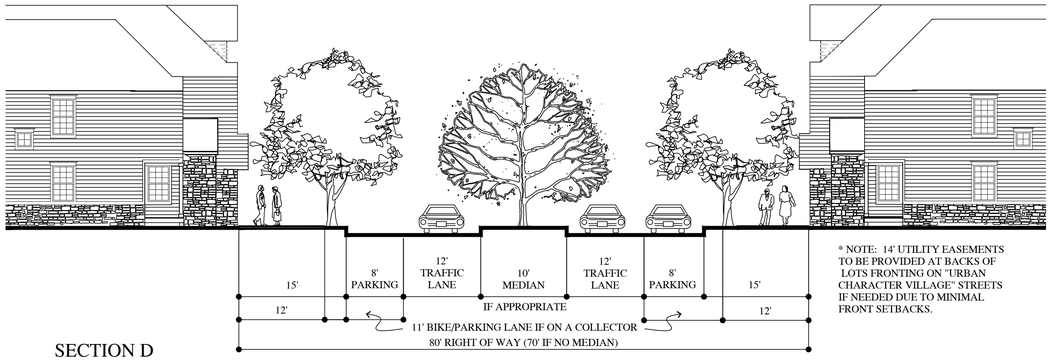
PARCEL C
GENERAL DEVELOPMENT PLAN
MILLENNIUM GDP
ELEVENTH MAJOR AMENDMENT
LOVELAND, COLORADO

MAP 6 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 -

Q:\DEN\Projects\0178-00 CMD Centerra\Projects\0178-00 General Services_Correspondence\Transmittals\CWC\Millennium GDP\Modified to CWC plot colors\2017-02-10\2024-0621 MJr Amendment 11\mod-Map6-Parcel-C_MCW_52212.dwg

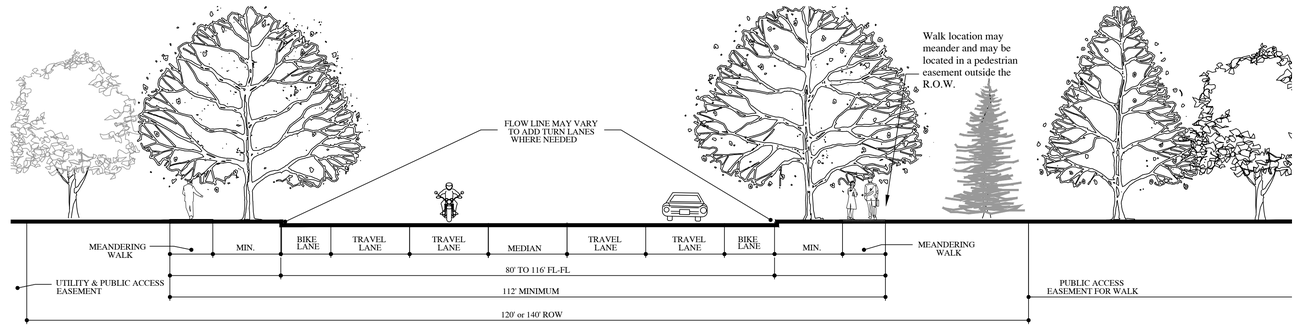

(MAJOR ARTERIAL)
EAST EISENHOWER BLVD./ US HIGHWAY 34
POTENTIAL OFF SITE TRAIL
MOUNTAIN VIEW HIGH SCHOOL
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
SCULPTOR DRIVE
MOUNTAIN LION DRIVE
THIRTEENTH STREET
NINTH STREET
HARRISBURG AVENUE
RESIDENTIAL RAILROAD BUFFERYARD 60' MINIMUM – 100' MAXIMUM SETBACK (REFER TO APPENDIX A, SECTION 15)
GREAT WESTERN RAILROAD
BOYD LAKE OUTLET DITCH
FARMERS DITCH
RESIDENTIAL RAILROAD BUFFERYARD 60' MINIMUM – 100' MAXIMUM SETBACK (REFER TO APPENDIX A, SECTION 15)
SEE ENLARGEMENT PLAN BELOW FOR DETAILS ON HORN NOISE SETBACK
TRACT A
SAPHIRE STREET
TURQUOISE STREET
AMETHYST AVENUE
EMERALD STREET
MIDDLE SCHOOL SITE GROSS 48 AC±
CORVUS DRIVE
EAST 1st STREET
EAST FIRST ST. (MINOR ARTERIAL)
E. FIFTH ST.
COUNTY ROAD #9
ZONED: I UNINCORPORATED LARIMER COUNTY
ZONED: I UNINCORPORATED LARIMER COUNTY
ZONED COUNTY FA UNINCORPORATED LARIMER COUNTY
ZONED COUNTY I/FA UNINCORPORATED LARIMER COUNTY
ZONED COUNTY I/FA UNINCORPORATED LARIMER COUNTY
ZONED PUD P-59
ZONED: FA-1
ZONED: I/FA
ZONED COUNTY I/FA UNINCORPORATED LARIMER COUNTY
OPEN SPACE
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
LOT 20
LOT



* NOTE: 14' UTILITY EASEMENTS TO BE PROVIDED AT BACKS OF LOTS FRONTING ON "URBAN CHARACTER VILLAGE" STREETS IF NEEDED DUE TO MINIMAL FRONT SETBACKS.

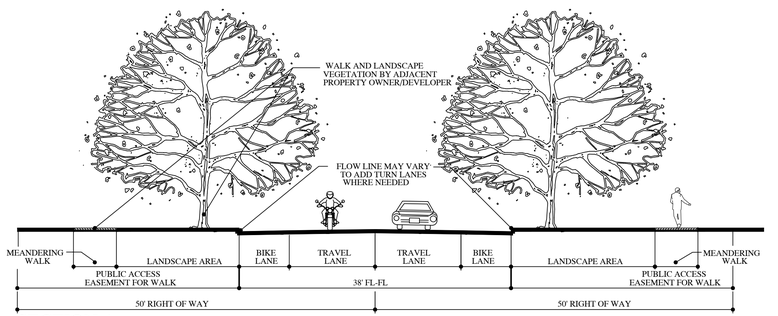
SECTION D
URBAN CHARACTER VILLAGE STREET (OPTIONAL)

SCALE 1"= 10'



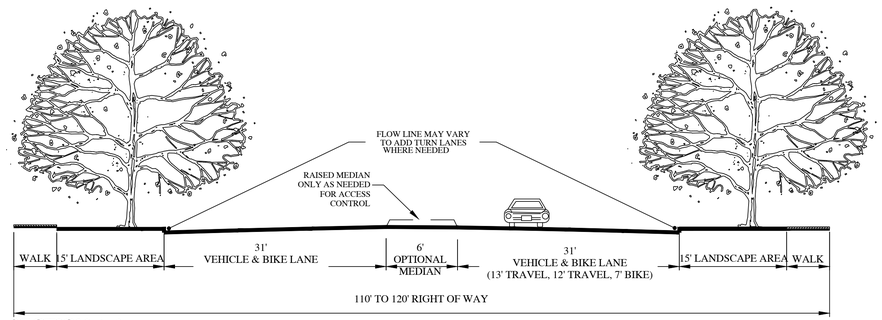
SECTION C
MAJOR ARTERIAL - IF APPLICABLE

SCALE 1"= 10'



SECTION A
MINOR ARTERIAL - IF APPLICABLE

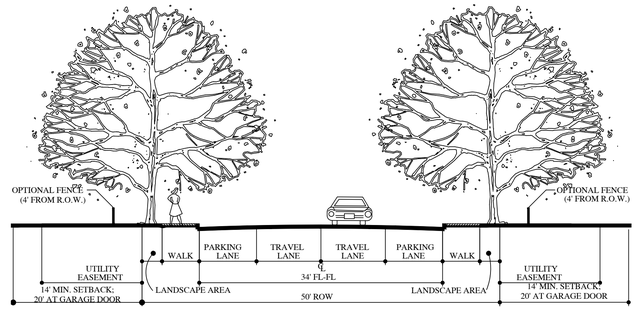
SCALE 1"= 10'



SECTION A-1
SUBURBAN ARTERIAL (N. BOYD LAKE AVENUE)

SCALE 1"= 10'

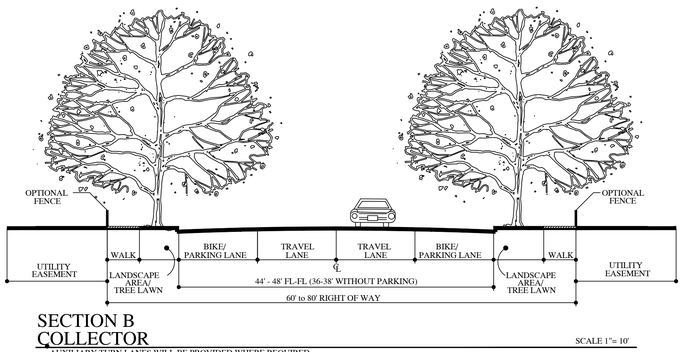
(WHERE ROUNDABOUTS ARE USED AT COLLECTOR INTERSECTIONS)



SECTION F
LOCAL STREET

SCALE 1"= 10'

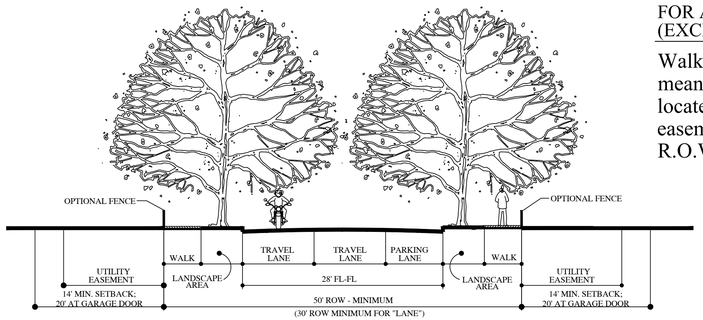
WHERE NO ALLEYS ARE SERVING LOTS, AND LOTS FRONT BOTH SIDES OF STREET.



SECTION B
COLLECTOR

SCALE 1"= 10'

AUXILIARY TURN LANES WILL BE PROVIDED WHERE REQUIRED.



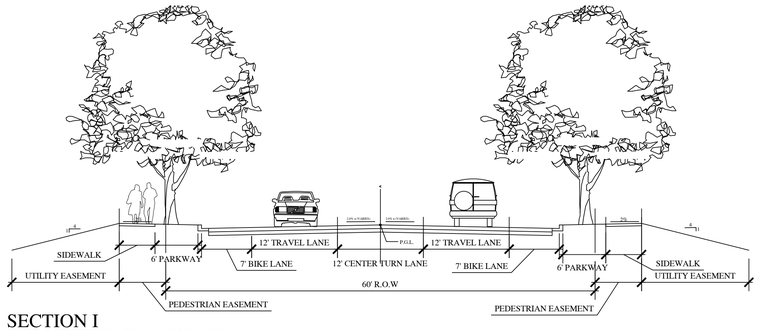
(30' ROW MINIMUM FOR "LANE")

SECTION E
LOCAL STREET OR LANE

SCALE 1"= 10'

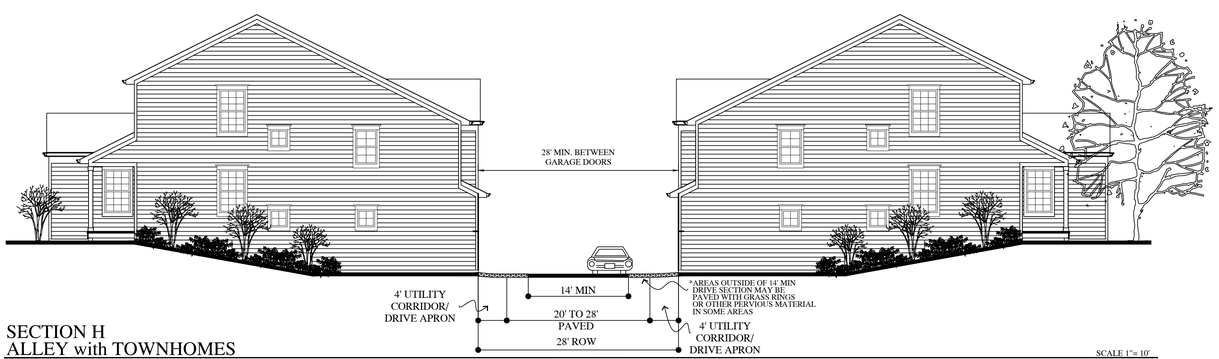
FOR ALL ROADWAY TYPES (EXCLUDING ALLEYS):

Walk location may meander and may be located in a pedestrian easement outside the R.O.W.



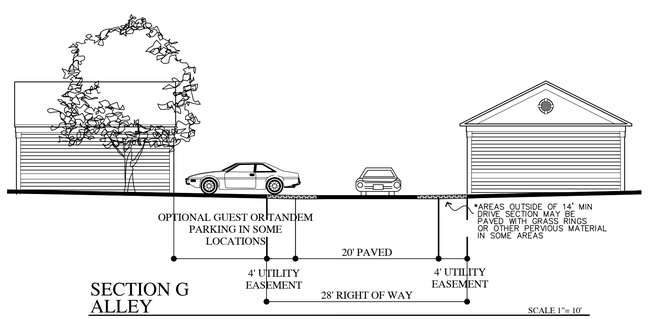
SECTION I
COLLECTOR ROADWAY
PEDESTRIAN EASEMENT OUTSIDE OF RIGHT-OF-WAY

SCALE 1"= 10'



SECTION H
ALLEY with TOWNHOMES

SCALE 1"= 10'



SECTION G
ALLEY

SCALE 1"= 10'

PROTOTYPICAL STREET CROSS SECTIONS
GENERAL DEVELOPMENT PLAN

MILLENNIUM GDP

ELEVENTH MAJOR AMENDMENT
LOVELAND, COLORADO

MAP 8 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 –

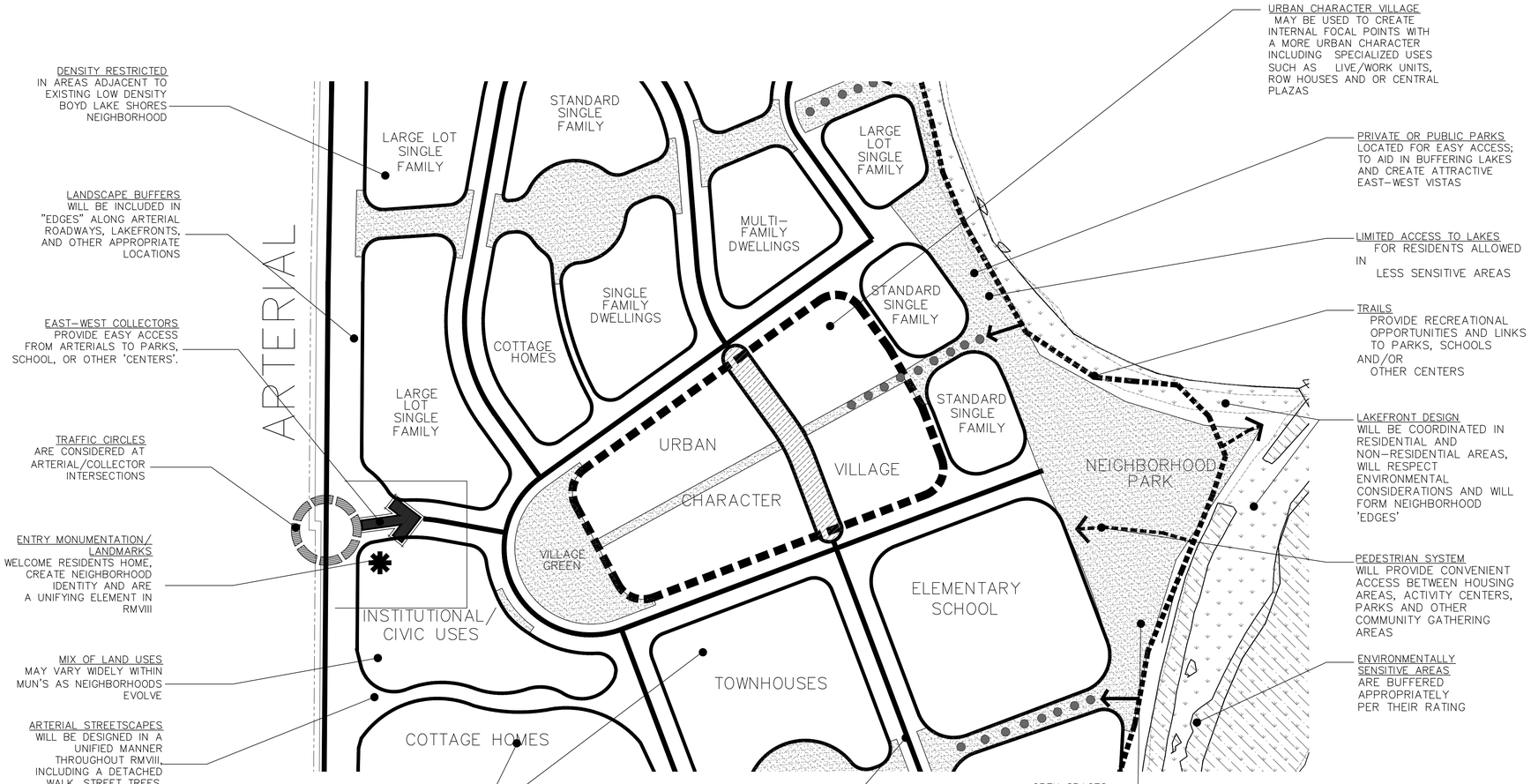
\\merrick.com\cos\DEN\Projects\0178-00 CWD Centerra\Projects\0178-00 General Services_Correspondence\Transmittals\CWC\Millennium GDP\Modified to CWC plot colors\2017-02-10\2024-0621 MJ Amendment 11\Mod-Map8-7828ELE3_MCW_71012.dwg



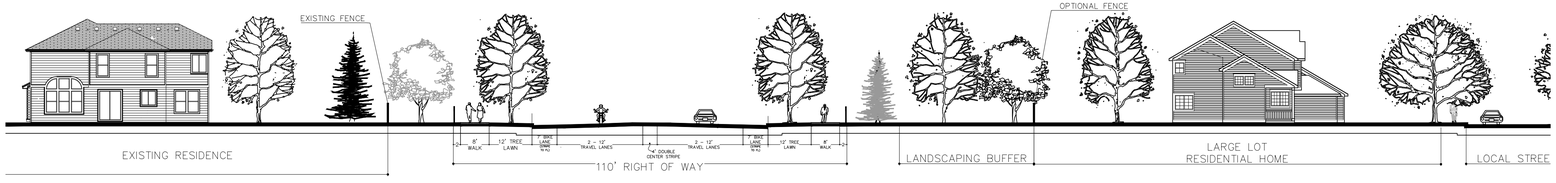
CROSS SECTION "B": EXAMPLE URBAN CHARACTER VILLAGE

SCALE 1" = 20'

* THESE ARE EXAMPLES ONLY. ACTUAL LAND USE PATTERNS, CIRCULATION SYSTEMS AND OTHER PLANNING ELEMENTS MAY VARY AS ALLOWED IN THIS G.D.P.

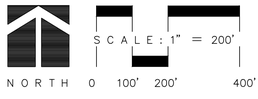


PLANNING CONCEPTS



CROSS SECTION "A": EXAMPLE RELATIONSHIP WITH EXISTING NEIGHBORHOOD

SCALE 1" = 20'



RESIDENTIAL MIXED-USE PLANNING CONCEPTS

GENERAL DEVELOPMENT PLAN

MILLENNIUM GDP

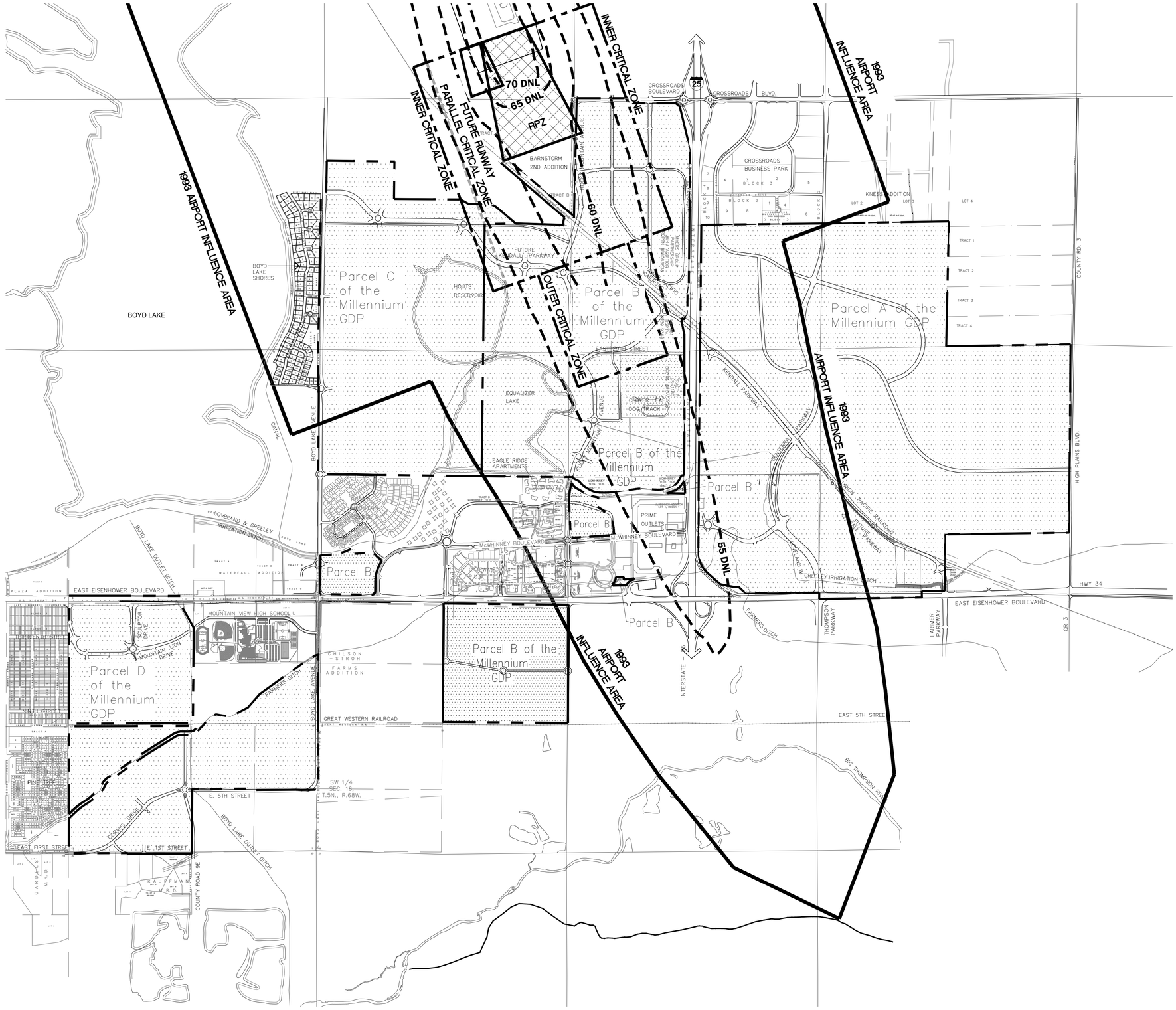
ELEVENTH MAJOR AMENDMENT

LOVELAND, COLORADO

MAP 9 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 –

\\merrick.com\ces\DEN Projects\0178-00 CMD Centerra\Projects\0178-00 General Services_Correspondence\Transmittals\CMC\Millennium GDP\Modified to CWC plot colors\2017-02-10\2024-0621 MJ Amendment 11\Mod-Map9-MUN-neighborhood_MCW_71012.dwg



LEGEND

60 DNL DAY NIGHT AVERAGE SOUND LEVEL NOISE CONTOUR
CRITICAL ZONE
FUTURE CRITICAL ZONE
RUNWAY PROTECTION ZONE (RPZ)

NOTES:
1993 AIRPORT INFLUENCE AREA: THE AREA DEPICTED ON FIGURE 4.6.C. OF THE CITY OF LOVELAND COMPREHENSIVE MASTER PLAN DATED OCTOBER 18, 1994 AS AMENDED ON FEBRUARY 18, 2003 WHICH WAS APPROVED AND VESTED BY THE AMENDED AND RESTATED ANNEXATION AND DEVELOPMENT AGREEMENT FOR THE MILLENNIUM GENERAL DEVELOPMENT PLAN EFFECTIVE JULY 11, 2006.

AIRPORT LINES: THE NOISE CONTOURS, BOUNDARIES OF THE RUNWAY PROTECTION ZONE, CRITICAL ZONE APPROVED BY THE FAA IN THE 2006 MASTER PLAN UPDATE FOR THE AIRPORT, BUT SPECIFICALLY NOT INCLUDING THE BOUNDARIES OF THE AIRPORT INFLUENCE AREA.

NORTH 0 500' 1000' 2000'
SCALE: 1" = 1000'

AIRPORT INFLUENCE AREA & AIRPORT LINES
GENERAL DEVELOPMENT PLAN
MILLENNIUM GDP
ELEVENTH MAJOR AMENDMENT
LOVELAND, COLORADO

MAP 10 of 10

CURRENT THROUGH MAJOR AMENDMENT 11 –

\\merrick.com\cos\DEN\Projects\0178-00 CWD Centerra\Projects\0178-00 General Services_Correspondence\Transmittals\CWC\Millennium GDP\Modified to CWC plot colors\2017-02-10\2024-0821 MJ Amendment 11\Vmod-Map10-Airport-Map_MCW_71012.dwg

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SECTION 12
REGULATORY PROCEDURES

12.1 GENERAL PROVISIONS

12.1.1 Regulatory Procedures

The Regulatory Procedures set forth in this Section 12 define submittal requirements and Review Timelines for Development Projects within the GDP, including but not limited to, processes for administrative and Public Review of Development Projects containing Uses-by-Right and Special Review Uses and of Minor Subdivisions, GDP Sketch Plats, Final Plats, combined GDP Sketch Plats and Final Plats, Modifications of Standards, Alternative Compliance, Appeals, Major Amendments and Minor Amendments. These Regulatory Procedures shall govern all development within the GDP, as set forth in the GDP.

The provisions of the UDC and Municipal Code shall apply to all projects within the GDP; provided, that the Controlling Documents shall govern all development within the GDP, and the Regulatory Procedures shall supersede any City guideline, plan, procedure, policy, requirement, or UDC or Municipal Code provision that they are In Conflict With or Inconsistent With, except when the matter implicates life safety requirements and/or a direct threat to the public health, safety, or welfare, as determined by the Director and Utilities or Public Works, as applicable, or Fire.

Interpretative authority for the applicability of the UDC and Municipal Code is set forth in Section 12.2.2.C.

12.1.2 Centerra Design Review Committee

The Regulatory Procedures incorporate a review process by the Centerra DRC, a private committee created for the purpose, among others, of evaluating Development Projects within the GDP, for compliance with the GDP and the Design Guidelines.

The legal documents which establish the Design Guidelines and grant the Centerra DRC the authority to review Development Projects within the GDP, are on file with the City. The Centerra DRC shall at all times be comprised of a minimum of three voting members. Voting members shall include the Developer DRC Representative, and two additional individuals, which may include any combination of the following: a registered architect, a certified planner, a registered landscape architect, a licensed Colorado professional civil engineer, a sustainability consultant and/or other appropriate design professional, each as appointed by the Developer. Additionally, the Centerra DRC shall include the City DRC Appointee. The role of the Centerra DRC in the evaluation of development within the GDP is described in detail in Section 12.3.1. The role of the City DRC Appointee shall be to review all documents provided by the Centerra DRC related to each Development Project reviewed by the Centerra DRC prior to attendance at the Centerra DRC meeting; to submit written comments to the Centerra DRC at the meeting, which comments need not be a substitute for the City's review and entitlement process, but which should describe any significant issues identified by the City; to report to the City as needed regarding Development Projects considered by the Centerra DRC. The City DRC Appointee may serve as the Director's designee for purposes of approving a Modification of Standards, Alternative Compliance, or other alternative solution, as applicable; provided however, that the City DRC Appointee's decision may be appealed to the Director in writing within 10 Days of the City DRC Appointee's decision. The Director shall make a final determination on the appeal as soon as practicable.

12.1.3 Rules of Construction

Unless otherwise specified, all meanings attributed to defined terms in the GDP shall be equally applicable

to both the singular and plural forms of the terms so defined. The use of any pronoun with respect to gender shall include the neutral, masculine and feminine.

Common words including but not limited to "may," "must," "shall," and "will" shall have the meaning ascribed to them in Section 13 notwithstanding the fact that they are not capitalized throughout the GDP.

All references to "Days" shall refer to calendar days, unless otherwise specified herein.

12.2 REVIEW STANDARDS

12.2.1 Controlling Documents

A. The primary review standards for Development Projects within the GDP are: the Special Conditions which are applicable to Development Projects within designated GDP Parcels and are attached as appendices to Sections 2 through 5; the General Conditions which are applicable to all Development Projects within the GDP and are attached as an appendix to Section 1; and the Performance Standards for architecture, site planning, Landscaping, streetscape and signage which are applicable to all Development Projects and are contained in Sections 6 through 10, and 16. In addition, the provisions of the Restated Agreement, including, but not limited to provisions regarding Vested Property Rights, govern all Development and Development Projects within the GDP.

B. In the event of a conflict or inconsistency between provisions of the Controlling Documents applicable to a Development Project, the following hierarchy shall prevail: (1) the Restated Agreement; (2) the Special Conditions; (3) the General Conditions; (4) any Modification of Standards or Alternative Compliance; and (5) any other provision of the GDP.

C. If the Centerra DRC has issued a decision letter that finds the Development Project (including any Modification of Standards or Alternative Compliance) does not comply with the GDP and/or Design Guidelines, the City will defer its acceptance for review of such Development Project in accordance with the process set forth in Section 12.3.1.B.

12.2.2 City Review/Approval Authority

A. The City shall have the regulatory authority to interpret and enforce the Controlling Documents and any provisions of the UDC and the Municipal Code as may apply relative to the GDP. However, the City shall seek to effectuate the intent of the Controlling Documents and the GDP goals set forth in Section 1.1.2.

B. Section 12.2.2.A shall not be construed as a waiver by the Applicant of any right to challenge a City interpretation or the City's denial of a Development Project. If applicable, any such challenge shall first be processed as an Appeal in accordance with Section 12.4.

C. Where any exception to the applicability of the GDP may be applicable or the GDP is In Conflict With or Inconsistent With the Municipal Code, UDC or other engineering standards adopted by the City in writing, the City staff person reviewing the Development Project shall immediately notify the Director. In such event, the Developer DRC Representative and the Director shall together expeditiously determine and mutually agree on the best solution that furthers the GDP goals set forth in Section 1.1.2, which may include an amendment to the GDP, or an alternative solution that is neither in the GDP, the UDC, the Municipal Code, nor other engineering standards adopted by the City in writing. If the Developer DRC Representative and the Director are unable to agree upon a solution, the City Manager shall determine which solution furthers the GDP goals set forth in Section 1.1.2. The process set forth in Section 12.2.2.C shall not apply to any matter that implicates life safety requirements and/or a direct threat to the public health, safety, or welfare, as specified in Section 12.1.1.

12.2.3 Deviations from Performance Standards

If an Applicant desires to deviate from the requirements of a Performance Standard, the Applicant shall prepare an application for either a Modification of Standards or Alternative Compliance following the review process set forth in Figure 12.1 and Section 12.3.1.A below. An application for a Modification of Standards or Alternative Compliance may be submitted as a preliminary application prior to the submittal of a Development Project, or together with the submittal of such Development Project, which shall follow the review process set forth in Section 12.3.1.

A. For any quantifiable standard, such as height, setbacks, number of trees, and the like, the Centerra DRC and Director together may grant a Modification of Standards so long as the proposed modification is no more than a 20% deviation from the required quantifiable standard, furthers the GDP goals set forth in Section 1.1.2, and the Centerra DRC has issued a decision letter in accordance with Section 12.3.1.B.

B. For standards which are not quantifiable, the Centerra DRC and Director together may grant an Alternative Compliance so long as the proposed modification will not harm the public health, safety or welfare, furthers the GDP goals set forth in Section 1.1.2, and the Centerra DRC has issued a decision letter in accordance with Section 12.3.1.B. In approving Alternative Compliance, the Centerra DRC and Director shall find that the proposed alternative plan accomplishes the purposes of the Performance Standard for which Alternative Compliance is sought equally or better than a plan which complies with the Performance Standard, furthers the GDP goals set forth in Section 1.1.2, and the Centerra DRC has issued a decision letter in accordance with Section 12.3.1.B.

C. If an application for a Modification of Standards or Alternative Compliance is submitted as a preliminary application prior to a submittal of a Development Project to the City, an applicant shall receive a decision letter from the Centerra DRC in accordance with Section 12.3.1.B relating to a Modification of Standards or Alternative Compliance. Any subsequent application to the City for a Development Project shall include the Centerra DRC's decision letter relating to the Modification of Standards or Alternative Compliance.

D. If an application for a Modification of Standards or Alternative Compliance is not submitted as a preliminary application prior to a submittal of a Development Project, it shall be incorporated into the Development Project, which shall follow the review process set forth in Section 12.3.1.

E. For any Modification of Standards or Alternative Compliance for which the Centerra DRC has issued a decision letter in accordance with Section 12.3.1.B, the Centerra DRC and the Director shall together and mutually agree to grant any Modification of Standards or Alternative Compliance. If granted, Modification of Standards and Alternative Compliance requests shall be clearly acknowledged on the approved Development Project document; however, such notes on GDP Sketch Plats, combined GDP Sketch Plats and Final Plats, and Final Plats are prohibited. The City shall keep records of any Development Project that includes a Modification of Standards or Alternative Compliance request.

F. If the Centerra DRC and/or Director denies a requested Modification of Standards or Alternative Compliance, the Applicant may Appeal such denial to the Planning Commission for a final decision, subject only to a right of Appeal to the City Council by the Applicant. The Appeal procedure shall be as set forth in Section 12.4.1.

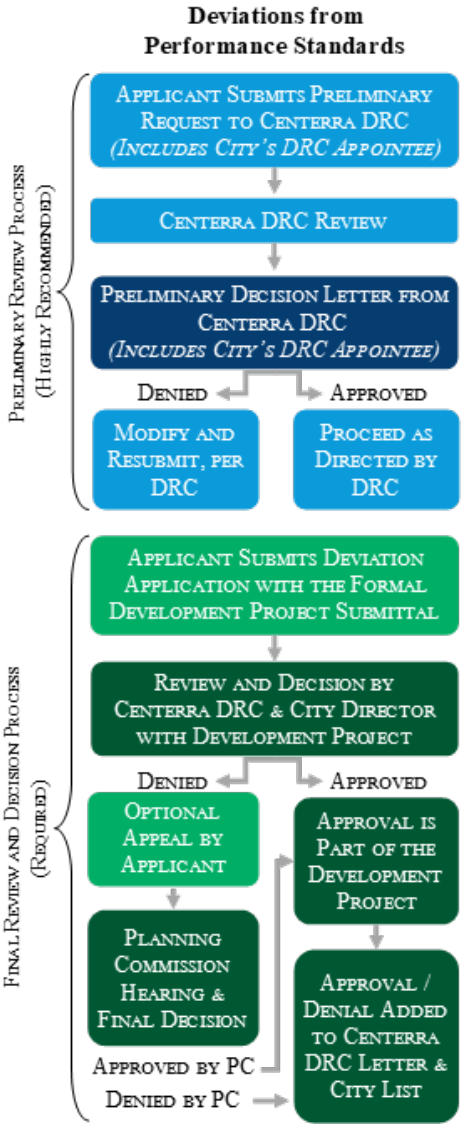


Figure 12.1

12.2.4 Development Contiguity

Proposed Development Projects shall meet the contiguity requirements of the Comprehensive Plan, to the extent reasonably feasible.

12.3 REVIEW PROCESS

12.3.1 Centerra DRC Review

A. The preliminary application for Development Projects review shall be submitted to the Centerra DRC. The Centerra DRC shall review the Development Project application in accordance with the Centerra DRC's policies and procedures in effect at the time the application is submitted to ensure compliance with the GDP and the Design Guidelines.

B. All Development Projects within the GDP submitted to the City shall be accompanied by a letter from the Centerra DRC stating its recommendation for final approval of the proposed Development Project, with or without conditions, based upon its compliance with the GDP, including whether the Development Project complies with the Design Guidelines, and a copy of the documents reviewed by the Centerra DRC upon which its recommendation was made. If the Centerra DRC has issued a decision letter that finds the Development Project does not comply with the GDP and/or the Design Guidelines, the City will (1) recommend to the Applicant that he or she attempt to resolve any issues with the Centerra DRC and (2) unless a specific review or approval timeline is required by State or Federal law or regulation, including any such requirement as adopted or incorporated into the UDC or Municipal Code, defer its review of such Development Project, including without limitation, any Modification of Standards or Alternative Compliance, until the Centerra DRC has issued a decision letter that finds the Development Project complies with the GDP and the Design Guidelines. Notwithstanding the foregoing, if the Applicant and the Centerra DRC have not resolved the issue(s) regarding the Development Project within 60 days after the Centerra DRC has received the City's recommendation to resolve the issue(s) regarding the Development Project, the Centerra DRC shall notify the City, the City and the Centerra DRC shall together expeditiously determine and mutual agree on the best solution that furthers the GDP goals set forth in Section 1.1.2, and

the City may accept for review such Development Application, and approve it or approve it with conditions in accordance with the procedures set forth herein. If the Centerra DRC and the City are unable to agree upon a solution, the City Manager shall determine which solution furthers the GDP goals set forth in Section 1.1.2.

C. The Centerra DRC review process for applications for Modification of Standards and Alternative Compliance shall follow the review process set forth in Figure 12.1. Whether as a standalone application or part of a concurrent application, Development Projects which incorporate a Modification of Standards or Alternative Compliance shall be accompanied by a letter from the Centerra DRC in accordance with Section 12.3.1.B.

D. The Centerra DRC may assign certain review and decision-making responsibilities for residential and non-residential Development Projects to an individual or a subcommittee of the Centerra DRC as authorized by the Centerra DRC, provided that that the City has been given written notice of such assignment.

E. The City shall accept the statement of the Centerra DRC regarding compliance with the GDP, unless the City provides a letter to the Centerra DRC describing the ways in which the Development Project does not comply with applicable provisions of all Controlling Documents and any applicable provisions of the UDC and/or the Municipal Code. In such event, the City and the Centerra DRC shall together expeditiously determine and mutually agree on the best solution that furthers the GDP goals set forth in Section 1.1.2, which may include an amendment to the GDP, or an alternative solution that is neither in the Controlling Documents, the UDC, the Municipal Code, nor any other engineering standards adopted by the City in writing; provided, however that, if the City and the Centerra DRC are unable to agree upon a solution as to the Controlling Documents, the City Manager shall determine which solution furthers the GDP goals set forth in Section 1.1.2. The process set forth in this Section shall not apply to any matter that implicates life safety requirements and/or a direct threat to the public health, safety, or welfare, as specified in Section 12.1.1.

F. The City DRC Appointee described in Section 12.1.2 shall coordinate comments from the City's Development Review Team and deliver the comments, when available, including but not limited to comments relating to engineering, planning, and transportation, for inclusion in the Centerra DRC review process.

G. After an Applicant has submitted a Development Project to the City, the Centerra DRC shall act as a referral agency, and at the request of either the Developer DRC Representative or the City DRC Appointee, may submit in writing a request to the Director to participate in a meeting with the City's Development Review Team, to ensure that the Development Project remains compliant with the GDP and Design Guidelines for each round of review. If the Director denies the request to attend a meeting with the City's Development Review Team, the Director shall provide the Developer DRC Representative's request with written justification of the denial. If the Centerra DRC determines that the Development Project no longer complies with the Centerra DRC's decision letter, the City's review shall follow the process set forth in Section 12.3.1.B.

12.3.2 Complete Application to the City

A. For purposes of these Regulatory Procedures, a Complete Application is defined as a Development Project submittal for which all of the following requirements have been met:

1. The Applicant has submitted a completed development application form for the type of application(s) being submitted; and

2. The Applicant has submitted every item listed on the approved Submittal Checklist for the type of development application(s) being submitted, unless such item has been waived by the designated City official as set forth on the applicable Submittal Checklist, except that tables itemizing the deviations from the controlling provisions of the (i) GDP or (ii) UDC and/or the Municipal Code, shall be required; and

3. Submittal Checklists for Development Projects will be approved, and may be modified, administratively by the Director upon notice to Developer without amendment of the GDP. Notwithstanding the foregoing, any modifications to Submittal Checklists shall not apply to applications submitted prior to such modification; and

4. The Applicant has submitted the documentation from the Centerra DRC as required by Section 12.3.1; and

5. The Applicant has paid all required fees for the type of development application(s) being submitted.

B. If an Applicant desires to develop a project containing a land use that is not specifically listed as either a Use-by-Right or Special Review Use for any Subparcel of the GDP, the Applicant shall obtain a determination from the Director as to the proper categorization of the desired use prior to submittal of a Development Project which contains such use. The Director's determination shall be based upon the similarity of or compatibility with the desired use to the character of the uses specifically listed for the Subparcel in which the new use is desired. A use which is not Similar in character to or Compatible with a specifically listed Use-by-Right or Special Review Use shall not be permitted. A use shall be subject to the same standards and procedures as the use to which it was compared for the purposes of the favorable determination.

12.3.3 Development Projects

The City agrees to conduct review of applications within the Review Timelines for the applicable application type (Administrative Review, Public Review) as set forth in more detail in Section 12.3.6; provided that the Director may modify the Review Timelines for submitted, accepted, and future applications administratively at any time. All Development Projects shall be preceded by a Concept Review Meeting unless waived by the Director.

A. **Uses-by-Right**

The land use legends on Maps 4, 5, 6 and 7 of Section 11 contain a list of Uses-by-Right for each Subparcel.

1. Administrative Review. Development Projects for Uses-by-Right shall be processed in accordance with the Review Timelines for Administrative Review:

   (a) The Review Timelines for Administrative Review have separate requirements for Development Projects with Uses-by-Right which fit within any of the following categories:

      (i) Those located on a previously platted Lot;

      (ii) Those submitted with a Boundary Line Adjustment, or Lot merger;

      (iii) Those submitted with a Minor Subdivision;

      (iv) Those submitted with a GDP Sketch Plat followed by a Final Plat; or

      (v) Those submitted with a combined GDP Sketch Plat and Final Plat.

2. Public Review.

   (a) A Development Project for a Use-by-Right which includes any one or more of the uses

listed in subsections (i) through (vi) below shall be processed in accordance with the Review Timelines for Public Review, which processes require a public hearing before the Planning Commission:

(i) Any single Building over 60 feet in height directly abutting one or more existing platted or built Single Family Detached or Single Family Attached residential properties, or with only an intervening street of collector or smaller street classification;

(ii) Any single Building over 100,000 gross square feet containing a Heavy Industrial Use;

(iii) Any single Building over 50,000 gross square feet directly abutting one or more existing platted or built Single Family Detached or Single Family Attached residential properties, or with only an intervening street of local or smaller street classification;

(iv) Any Heavy Commercial Use directly abutting one or more existing platted or built Single Family Detached or Single Family Attached residential properties or with only an intervening street of collector or smaller street classification;

(v) Any Heavy Industrial Use abutting one or more existing platted or built residential properties or with only an intervening street of collector or smaller street classification; or

(vi) Veterinary facilities, Animal Clinics, Small Outdoor Use, and/or Pet Day Care Facilities with outdoor use Adjacent to any existing platted or built residential neighborhood.

(b) A Development Project for a single non-phased use which includes a combined gross square footage of 500,000 non-residential square feet or more shall be subject to Public Review in accordance with the Review Timeline, which process requires public hearings before the Planning Commission and the City Council as necessary to be consistent with the GDP.

(c) The Public Review processes for the uses listed in (a) and (b) above shall include a neighborhood meeting and public hearings; provided, however, that projects with Administrative Review do not require a neighborhood meeting. Notice of the neighborhood meeting shall be given in accordance with the requirements of Section 12.3.7.B. Notice of the public hearings shall be given in accordance with the requirements of Section 12.3.7.A. Where required, notification of mineral estate owners in the property shall be given in accordance with the requirements of Section 12.3.8.

In connection with the uses listed in (a) above, the Planning Commission may deny, approve or approve with conditions the proposed use and the action of the Planning Commission shall be final, subject only to a right of Appeal to the City Council pursuant to Section 12.4.2.

In connection with the use referred to in (b) above, the action of the Planning Commission shall be in the form of a recommendation to the City Council. The City Council may deny, approve or approve with conditions the proposed use as defined in the following paragraph.

(d) Public Review by the Planning Commission and the City Council of the development plan or Development Project, pursuant to these Regulatory Procedures, shall be limited to a review of the Context Diagram, site plan, landscape plan and architectural elevations,

any other supporting documentation reasonably required by the City, and any other evidence submitted at the hearing for the purpose of determining compliance with the Controlling Documents.

B. **Special Review Uses**

The land use legends shown on Maps 4, 5, 6 and 7 of Section 11 contain a list of Special Review Uses for each Subparcel.

1. Development Projects for Special Review Uses shall be subject to the review timelines for adaptable uses as set forth in the UDC.

2. The Review Timelines have separate requirements for Development Projects with Special Review Uses which fit within any of the following categories:

   (i) Those located on a previously platted Lot;

   (ii) Those submitted with a Boundary Line Adjustment or Lot Merger;

   (iii) Those submitted with a GDP Sketch Plat followed by a Final Plat; or

   (iv) Those submitted with a combined GDP Sketch Plat and Final Plat.

3. The Director shall evaluate Special Review Uses for compliance with the GDP and applicable criteria of the UDC or Municipal Code.

C. **Use-by-Right and Special Review Use Combinations**

An application for a Development Project containing both Uses-by-Right and Special Review Uses shall be subject to the review process described in Section 12.3.3.B.

D. **Changes in Use**

Changes in the use of an existing Building on an existing Lot to a Use-by-Right are subject to the City's building permit process and any applicable provisions of Title 15 of the Municipal Code.

E. **Other Allowed Processes**

1. Rezoning. In lieu of the procedures set forth herein for plans with Uses-by-Right and Special Review Uses, an Applicant may elect to rezone its property out of the GDP and to another planned unit development or other zoning designation permitted under the UDC. In such event, the Applicant shall comply with all applicable submittal and processing requirements of the UDC, including but not limited to a requirement that the Applicant provide satisfactory evidence that applicable adequate community facilities will be achieved.

F. **Final Execution of Documents**

Once received, the City shall execute all final documents and submit for recording, as applicable, within 14 Days of receipt by the City of such documents properly executed by all necessary parties except the City, provided that all other applicable City requirements have been met.

12.3.4 Plats

A. **Administrative Review**

1. All applications for plats (including applications for Minor Subdivisions, GDP Sketch Plats, Final Plats, combined GDP Sketch Plats and Final Plats, simple plats, Lot Mergers, and Boundary Line Adjustments) shall be administratively reviewed and a decision made thereon by the Director. Public hearings before the Planning Commission or the City Council are not required for any plat unless otherwise required by State statute, or by a Special Condition of this GDP or

in event that the administrative decision on the plat is appealed as provided herein.

2. An application for a plat that is not accompanied by an application for a Development Project shall be subject to the Review Timelines.

3. An application for a plat that is accompanied by an application for a Development Project containing Uses-by-Right and/or Special Review Uses, shall apply the applicable Review Timelines.

4. An application for a plat shall be preceded by a Concept Review Meeting.

B. **Replats**

In the event a plat is submitted in which the desired Development Project does not include all of the property within a legal parcel, the remaining property which is not then being developed may be shown as an Outlot on the plat which shall require replatting prior to City approval of any Development Project within such Outlot.

C. **Final Execution of Documents**

From the date the City receives all the stamped/sealed and signed plat and associated documents, the City shall have 14 Days to sign and record the necessary plat and associated documents, provided that all other applicable City requirements have been met.

12.3.5 Building Permits

Notwithstanding the timeframes for the submittal, processing and issuance of building permits (excluding grading permits) contained in the Review Timelines and as set forth in Section 12.3.6, the following requirements shall apply:

A. If approved by the Director, applications for nonresidential building permits may be submitted concurrently with a resubmittal of a subdivision plat application or SDP, or after approval and recordation of the Final Plat. Applications for residential building permits will only be accepted by the City for processing after approval and recordation of the Final Plat.

B. If approved by the Director, applications for residential master architectural plans may be submitted concurrently with the subdivision plat; provided, however, that building permits will be issued only after the subdivision plat is recorded and all applicable City building permit requirements have been met, as modified by General Condition No. 9.

C. Provided all applicable City building permit requirements have been met, as modified by General Condition No. 9, building permits for nonresidential buildings shall be issued after the installation of adequate Infrastructure Improvements in accordance with General Condition No. 9 and the Review Timelines.

12.3.6 Review Timelines

A. The Review Timelines provide important expectations for the review of development applications. Said Review Timelines may be modified or waived, administratively by the Director without amending the GDP. The City shall expedite the review of applications occurring within the GDP boundaries and make every reasonable effort to meet the Review Timelines. It is expected that Applicants also comply with the submittal timelines.

B. The Review Timelines are meant to be the maximum Review Timelines and shall not be construed as limiting the ability of the City to process any application in a shorter period of time.

C. In the event the City determines that it cannot complete its written comments and make them available to the Applicant within the timeframes set forth

in the Review Timelines, the City may retain a consultant to perform the necessary project review within such required timeframe. The City may require that the Applicant pay the cost of such consultant, provided that such payment is consistent with the City's then-existing general policy for payment of outside consultants by developers.

If there are instances in which the City is unable meet the timelines for any Development Project, the City DRC Appointee shall inform the Applicant in writing as to the adjusted review schedule. In the event that the Director determines that there are circumstances which prevent the City from meeting timelines over an extended period of time, the Director shall provide the Developer DRC Representative with a written justification and clear expectation as to the extent and duration of the extension of timelines.

D. In the event that the City adopts amendments to the procedural requirements of the UDC or otherwise approves a more streamlined review process for the GDP which effectively shortens the Review Timelines for one or more types of Development Projects, the Developer may submit an amendment to the Regulatory Procedures which would permit such new process to be an alternative permitted process under the Regulatory Procedures. Such amendment may be administratively approved by the Director in his discretion to apply either to a particular Development Project or to all future Development Projects within the GDP of a Similar type.

12.3.7 Public Notice Requirements

A. Unless otherwise provided for within the UDC, Municipal Code, or provision of state law, at least 15 Days prior to any hearing required by these Regulatory Procedures, public notification shall be given pursuant to the UDC.

12.3.8 Mineral Estate Owner Notification

Where required, the notification of mineral estate owners shall be given in accordance with the requirements of C.R.S. §24-65.5-101 et seq., as amended.

The public notice requirements of Section 12.3.7.A shall not be applicable to "initial public hearings" before the Planning Commission for the limited purpose of hearing objections of mineral estate owners pursuant to any Special Conditions of this GDP.

12.4 APPEALS

12.4.1 Modifications of Standard/Alternative Compliance /Uses-by-Right subject to an Administrative Review/Boundary Line Adjustments/Lot Mergers/ Minor Subdivision/ Final Plats/ Minor Amendments

A. Third party Appeals are not permitted with regard to the Director's administrative decision on an application for a Modification of Standards, an application for Alternative Compliance, a Development Project containing a Use-by-Right subject to Administrative Review, a Boundary Line Adjustment, a Lot Merger, a Minor Subdivision, a Final Plat, or a Minor Amendment.

B. Appeals with regard to the Centerra DRC's decision on an application for a Modification of Standards, an application for Alternative Compliance, or a decision letter by the Centerra DRC that finds that the Development Project conflicts with the Design Guidelines shall follow the process set forth in Section 12.3.1.B.

C. In the event that the Director denies an application or approves any such application with conditions that are not acceptable to the Applicant, the Applicant shall have the right to Appeal the Director's decision to the Planning Commission. The only grounds for Appeal shall be (i) that the Director did not have competent evidence to support his or her decision, or (ii) that the Director did not properly interpret or apply the applicable review standards. The Appeal shall

state the grounds upon which the Applicant is relying and the specific facts that support such grounds.

D. Appeals by the Applicant of an administrative decision by the Director shall be submitted in writing with the Director within 10 Days of the receipt of the Director's decision. The Planning Commission shall hold a hearing on the Appeal on the first available meeting date, as determined by the Director, following the filing of the Appeal and shall either reverse, modify or uphold the decision by the Director. The hearing before the Planning Commission shall be de novo (i.e. a new hearing in which the Planning Commission is entitled to hear and consider new evidence and testimony). Written notice of the Appeal hearing shall be given in accordance with the requirements of Section 12.3.7.A. The Director may adopt supplementary administrative procedures for such Appeals which are not In Conflict With or Inconsistent With these provisions. The decision of the Planning Commission shall be final unless it is appealed in writing by the Applicant to the City Council as provided in Subsection E. below.

E. Appeals of a decision of the Planning Commission shall be filed in writing with the Development Services Department within 10 Days of the Planning Commission's decision. The City Council shall hold a hearing on the Appeal at the next available meeting, as determined by the City Manager, after the Planning Commission's decision. The hearing before the City Council shall be on the record, i.e. limited to evidence which was before the Planning Commission at the time its decision was made. Written notice of the Appeal hearing shall be given in accordance with the requirements of Section 12.3.7.A and the City Council shall either reverse, modify or uphold the decision of the Planning Commission.

12.4.2 Public Review

A decision of the Planning Commission may be appealed to the City Council by the Applicant, an adjoining property owner, a property owner who received mailed notice of an application for which a neighborhood meeting was required, and attended the neighborhood meeting or provided written comments to the Director before the Planning Commission's decision, or a property owner who received mailed notice of public hearing and either participated in the public hearing or provided written comments to the Director at or before the public hearing. The process for any such Appeal shall be the process described in Section 12.4.1.D, except that public notice of the hearing shall be given in accordance with the requirements of Section 12.3.7.A.

12.4.3 GDP Sketch Plats/Combined GDP Sketch Plats and Final Plats

A. The administrative decision of the Director on an application for a GDP Sketch Plat or a combined GDP Sketch Plat and Final Plat may be appealed to the Planning Commission by the Applicant, an adjoining property owner; a property owner who received mailed notice of an application for which a neighborhood meeting was required, and attended the neighborhood meeting or provided written comments to the Director before the Director's decision; or a property owner who received mailed notice of public hearing and either participated in the public hearing or provided written comments to the Director at or before the public hearing. The process for any such Appeal shall be the process described in Section 12.4.1.C, except that public notice of the Appeal hearing shall be given in accordance with the requirements of Section 12.3.7.A.

B. A decision of the Planning Commission pursuant to Section 12.4.3.A may be appealed to the City Council by the Applicant, an adjoining property owner; a property owner who received mailed notice of an application for which a neighborhood meeting was required, and attended the neighborhood meeting or provided written comments to the Director before the Director's decision; or a property owner who

received mailed notice of public hearing and either participated in the public hearing or provided written comments to the Director at or before the public hearing. The process for any such Appeal shall be the process described in at Section 12.4.1.D, except that public notice of the hearing shall be given in accordance with the requirements of Section 12.3.7.A.

12.4.4 Special Review Use Approvals

The administrative decision on a Special Review Use may be appealed to the Planning Commission by the Applicant, an adjoining property owner; a property owner who received mailed notice of an application for which a neighborhood meeting was required, and attended the neighborhood meeting or provided written comments to the Director before the Director's decision; or a property owner who received mailed notice of public hearing and either participated in the public hearing or provided written comments to the Director at or before the public hearing. The process for any such Appeal shall be the process described herein at Section 12.4.1.C and 12.4.1.D, except that public notice of the hearing shall be given in accordance with the requirements of Section 12.3.7.A.

12.5 AMENDMENTS

12.5.1 Amendments to the GDP

A. Consent to Amendments

The Controlling Documents shall, in accordance with the terms of the Restated Agreement, only be amended or terminated by the City with the consent in writing of the Developer, or any affiliated entity in which the Developer has a majority interest, and those third parties, if any, to whom the Developer has specifically granted, in writing, the right to approve such amendment or termination.

B. Major Amendments

A Major Amendment shall be subject to review and approval by the Planning Commission and City Council in accordance with the UDC. Public notice of the hearings and neighborhood meeting shall be given in accordance with the UDC. For Major Amendments that directly affect less than the entire GDP, the public notice requirement shall be specific to the Parcels or Subparcels of the GDP affected by the Major Amendment as determined by the Director in his or her reasonable discretion.

C. Minor Amendments

Minor Amendments shall be reviewed administratively, and a final decision made thereon by the Director without requiring the approval by the Planning Commission or the City Council.

12.5.2 Amendments to Uses-by-Right, Special Review Uses, and Plats

A. Uses-by-Right

Proposed amendments to a Development Project containing a Use-by-Right for which a building permit has been issued shall be reviewed in accordance with the same process by which the Development Project was approved. In the event, however, that the amendment proposes a use set forth in Section 12.3.3.A.2, the proposed amendment shall be subject to the Public Review process set forth therein.

B. Special Review Uses

Proposed modifications to an approved Special Review Use shall be reviewed in accordance with the applicable section of the UDC related to adaptable uses, except that public notice of any required hearing shall be given in accordance with Section 12.3.7.A.

C. Plats

Proposed modifications or amendments to an approved Minor Subdivision, GDP Sketch Plat, Final Plat, or Combined GDP Sketch Plat and Final Plat

shall be processed in accordance with the same process by which the plat was approved.

SECTION 13

TERMS AND DEFINITIONS

Note 1: Definitions not included in this Section 13 or in the Restated Agreement, shall be in accordance with the Municipal Code, unless said definitions are in conflict or inconsistent with the provisions of the GDP and/or the Restated Agreement.

Note 2: The words and phrases in this Section 13, when used in the GDP, shall have the meanings set forth in this section, except where the context indicates otherwise.

"Accessory Building" or "Accessory Use" means a structure or use on a parcel that is secondary in nature to the Primary Structure or use, for example, a detached garage next to a residence or the retail sales of promotional clothing in conjunction with an eating and drinking establishment or public parking lots, pump stations, meters, maintenance facilities and landscape compounds, etc., together with the related primary uses. Indoor accessory uses are those uses (i.e. cafeteria, office) that occupy 10 percent or less of the gross square footage of the structure. If an indoor use occupies more than 10 percent of the gross square footage of the structure it shall be evaluated separate from the Primary Use for parking and other amenities.

"ACF Regulations" means the provisions of the Municipal Code relating to adequate community facilities as now existing in Chapter 16.41 and which are found at Exhibit A of the Restated Agreement.

"Adjacent" means abutted, abutting, to be adjacent; touch or join at the edge or border.

"Administrative Review" means the approved processes for the review of Development Projects for Uses-by-Right as defined in Section 12.2.2A.1 of the Regulatory Procedures. Neighborhood meeting and appeal procedures are outlined in the Regulatory Procedures.

"Adult Day/Respite Care Facilities" means nonresidential facilities providing for the care, supervision, protection and social activities of persons over eighteen (18+) years of age during normal daytime working hours and allowing overnight stay on a short-term basis as a subordinate function.

"Agricultural Activity" or "Agriculture" means farming, including plowing, tillage, cropping, installation of best management practices, seeding, cultivating or harvesting for the production of food or fiber products (except commercial logging and timber harvesting operations); the grazing or raising of livestock (except in feedlots); aquaculture; sod production; orchards; Christmas tree plantations; nurseries; and the cultivation of products as part of a recognized commercial enterprise provided such activities do not include a retail component.

"Airport" means the Fort Collins-Loveland Municipal Airport.

"Airport Influence Area" means those areas depicted on the maps in Section 11 of the GDP, which areas are within the Airport Influence Area of the Airport depicted on Figure 4.6.C. of the City of Loveland Comprehensive Master Plan dated October 18, 1994 as amended on February 18, 2003, which was the latest amendment thereto at the time the Restated Agreement was approved. The boundaries of the Airport Influence Area depicted on the maps in Section 11 of the GDP were approved by the Restated Agreement effective July 11, 2006 and such boundaries serve as

the basis for Special Conditions applicable to certain GDP parcels or Subparcels because of their proximity to the Airport.

"Airport Lines" mean the noise contours and the boundaries of the runway protection zone and critical zone approved by the FAA in the 2006 Master Plan Update for the Airport and depicted on the maps in Section 11 of the GDP, but specifically do not include the boundaries of the Airport Influence Area. The Airport Lines shall be applicable to all parcels and Subparcels of the GDP.

"Airport Master Plan" means the May, 1993 Airport Master Plan Update for the Airport.

"Alley" means a minor way used primarily for vehicular service access to the back or side of properties abutting on a street, or in some cases properties fronting on an open space area with a connecting walkway.

"Alternative Compliance" means a demonstration that a Performance Standard of this GDP is met by an alternative means, whether or not such means is explicitly enumerated in the applicable Performance Standard. The Centerra DRC may find that a project complies with a Performance Standard by means of Alternative Compliance. In approving Alternative Compliance, the Centerra DRC and Director shall find that the proposed alternative plan accomplishes the purposes of the Performance Standard for which Alternative Compliance is sought equally or better than a plan which complies with the Performance Standard, and furthers the GDP goals set forth in Section 1.1.2 of the GDP.

"Alzheimers Facilities" means residential facilities specifically designed to care for people with dementia.

"Ancillary Dwelling Unit" or "Accessory Dwelling Unit" means a Dwelling Unit located on the same Lot, either attached or detached, with another Single Family Attached Dwelling or Single Family Detached Dwelling, and in common ownership with the Primary Use or residence on the Lot. Ancillary Dwelling Units shall contain more than 1050 square feet.

"Animal Clinic Small Indoor Use" means any facility maintained by or for the uses of a licensed veterinarian in the diagnosis, treatment or prevention of animal diseases wherein the animals are limited to dogs, cats, or other comparable household pets and wherein the overnight care of said animals is prohibited except when necessary in the medical treatment of the animal.

"Animal Clinic Small Outdoor Use" means any facility, with an enclosed fenced outdoor area for use by the animals adjoining the facility, maintained by or for the uses of a licensed veterinarian in the diagnosis, treatment or prevention of animal diseases wherein the animals are limited to dogs, cats, or other comparable household pets and wherein the overnight care of said animals is prohibited except when necessary in the medical treatment of the animal.

"Antenna" means any exterior apparatus or apparatuses designed for telephonic, radio, data, Internet or television communications through the sending and/or receiving of electromagnetic waves including equipment attached to a tower or building for the purpose of providing personal wireless services including, for example, "cellular," "enhanced specialized mobile radio" and "personal communications services" telecommunications services, and its attendant base station. For purposes of this chapter, the term "antenna" shall not include an antenna used by an amateur radio operator or "ham" operator, nor an exterior antenna or satellite dish used for the private or

non-commercial reception of television or radio signals.

"Appeal" means a request for a review of the decision of the City DRC Appointee or Centerra DRC, or a request for a review of the administrative decision of the Director or a decision of the Planning Commission. Appeal procedures are outlined in the Regulatory Procedures.

"Applicant" means the owner of a building site or an owner's authorized representative for the purpose of making application for approval of a Development Project to the Centerra DRC or the City.

"Architectural Articulation" means a manner of joining walls that makes the united parts clear distinct and precise in relation to each other. This may include recesses, projections, and other elements that produce undulations designed to discourage flat planes.

"Assisted Living Facilities" means residences for seniors that provide a range of services including room, board and at least the following: personal services, protective oversight, social care and regular supervision available on a 24-hour basis.

"Auto Dealership" means an establishment primarily engaged in the sale, rental, service, repair, storage or salvage of automobiles and trucks.

"Avigation Easement" means the conveyance of a specified property interest in the airspace over real property in the form set forth as Attachment No. 1 to Appendix 3-1 and Appendix 4-1 of the GDP.

"Bay" or "Building Bay" means a wall plane projection or recess that forms an articulated wall surface on a building elevation, and that can be formed by pilasters, columns or other vertical elements such as a group of windows. Building Bay does not mean a service bay for autos or trucks and does not mean a bay window.

"Bed and Breakfast Establishments" means lodging facilities, typically restricted to 3-8 rooms, with the proprietor residing on the premises.

"Boarding Houses or Rooming Houses" means a Building or portion thereof which is used to accommodate, for compensation, three or more boarders or roomers, not including members of the occupant'' immediate family who might be occupying such Building.

"Boundary Line Adjustment" means the relocation or adjustment of a Lot line, which meets the applicable requirements of the GDP and the Municipal Code.

"Building" means any permanent structure built for the shelter or enclosure of persons, animals, chattels or property of any kind and includes both the main portion of a structure built for permanent use, as well as all projections and extensions thereof. Such projections and extensions include, but are not limited to, garages, outside platforms and docks, carports, canopies, enclosed malls, and porches. Buildings have the following characteristics:

- Is permanently affixed to the land;
- Has one (1) or more floors and a roof; and
- Is bounded by either open space or the Lot lines of a Lot.

"Building Code" means the International Building Code as adopted by the City pursuant to Chapter

15.08 of the Municipal Code and any amendments thereto.

"Building Coverage" means the actual "footprint" of all buildings on the Lot at grade or at plaza level. Building Coverage is measured to the exterior faces of building walls. Lot areas covered by plazas, pedestrian malls, and/or landscaping shall not constitute Building Coverage. Similarly, building area situated over plazas, pedestrian malls, or landscaping shall constitute Building Coverage.

"Building Frontage" means that side of a Building that faces and is parallel to or most nearly parallel to a public or private street. The length of the frontage is determined by measuring along the outside walls of the Building.

"Building Height". When measured in feet, Building Height refers to the vertical distance between the average finished grade at the base of the building or structure (see below) and: 1) the highest point of the coping of a flat roof; 2) the deck line of a mansard roof; or 3) the average height level between the eaves and ridge line of a gable, hip or gambrel roof, or the highest point of a curved roof. In the case of fences or walls, Building Height shall be measured on the side with the least vertical exposure above finished grade to the top of the fence or wall. For the purpose of this definition "ground surface" shall include sidewalks, and "finished grade" as a point of measure shall mean either of the following, whichever yields a greater height of building or structure.

- The elevation of the highest ground surface within a five foot horizontal distance from the exterior wall of the Building, when there is less than a ten foot difference between the highest and lowest ground surface within a five foot horizontal distance from said wall.
- An elevation ten feet higher than the lowest ground surface within a five foot horizontal distance from the exterior wall of the Building, when there is greater than a ten foot difference between the highest and lowest ground surface within a five foot horizontal distance from said wall.

The following structures and features shall not be considered when calculating Building Height measured in feet under this definition:

- Chimneys, smokestacks or flues that cover no more than five percent of the horizontal surface area of the roof;
- Cooling towers and ventilators that cover no more than five percent of the horizontal surface area of the roof;
- Elevator bulkheads and stairway enclosures;
- Fire towers;
- Utility poles and support structures;
- Belfries, spires and steeples;
- Monuments and ornamental towers.
- The upper story of a building, if the floor area of that story does not exceed 20% of the area of the Building footprint, may exceed the otherwise required Building Height by up to 15'.

"Business Park Uses" means that list of specific uses set forth at Section 1.3.8 of the GDP.

"Call Center" means a central place where customer and other telephone calls are handled by an organization, usually with some amount of computer automation. Typically, a call center has the ability to handle a considerable volume of calls at the same time, to screen calls and forward them to someone qualified

to handle them, and to log calls. Call Centers are used by mail-order catalog organizations, telemarketing companies, computer product help desks, and any large organization that uses the telephone to sell or service products and services.

"CDOT" means the Colorado Department of Transportation.

"CEF" means those capital expansion fees imposed on development by the City for the purpose of funding growth-related capital costs pursuant to the Municipal Code.

"Center" in a MUN refers to an activity node that typically serves as a focal point or community gathering site, and may take the form of a park, village green, plaza, garden, or an Urban Character Village as described in Section 9.5.9. See MUN.

"Centerra DRC" means the Centerra Design Review Committee, a private committee created for the purpose, among others, of evaluating Development Projects within the GDP, for compliance with the GDP and the private design standards adopted by the Centerra DRC.

"Centerra South MFA" means the Master Financing and Intergovernmental Agreement (Centerra South) by and among Centerra South Development, Inc., Centerra Properties West, LLC, VDW Properties, LLC, the City, and the LURA, dated June 8, 2023, as may be amended and on file with the City.

"City" means the city of Loveland, Colorado, or the area within the territorial limits of the city of Loveland, Colorado.

"City Attorney" means the city attorney appointed by the City Council or that person's designee.

"City Council" means the body constituting the city council of the City.

"City DRC Appointee" means a City staff member who serves as a non-voting member of the Centerra DRC and a designated representative of the Director, who shall be appointed by the Director.

"City Engineer" means the engineering manager of the City's Department of Public Works or that person's designee.

"City Manager" means the duly appointed manager of the City or that person's designee.

"Clubs and Lodges" means organizations of persons for special purposes or for the promulgation of sports, arts, literature, politics, or other common goals, interests or activities, characterized by membership qualifications, dues or regular meetings, excluding clubs operated for profit and/or places of worship or assembly.

"Co-Housing" shall mean a residential area, to be owned partially or completely as a cooperative by the residents, designed as a cohesive unit with shared common facilities.

"Common Areas" means that real property, if any, shown on any present or subsequently recorded plat of the property or buildings that are intended to be devoted to the common use and enjoyment of the owners and occupants of the GDP. Such common areas may include, but are not limited to, private access easements, utility easements, drainage easements,

open space, private drives, lawns, sidewalks, landscaping, exercise paths, street furniture, green belt structures, and recreational and athletic facilities.

"Community Facilities" means public, private, or private nonprofit facilities which are primarily intended to serve the recreational, educational, cultural or entertainment needs of a neighborhood or the community as a whole, and/or capital improvements including, but not limited to facilities for providing necessary urban services. The term Community Facilities shall include community parks, schools and golf courses and may also include neighborhood parks, trails, natural areas, environmental centers, open spaces, wetlands or similar types of uses.

"Compatible" means harmonious or visually pleasing with another object. Compatible does not mean the same, matching or equal.

"Complete Application" means and refers to an application for a Development Project which complies with the requirements of Section 12.3.2.

"Comprehensive Plan" means the City's master plan for the physical development of the City entitled Create Loveland adopted on July 19, 2016 by Resolution #R-65-2016, and all amendments thereto.

"Concept Review Meeting" means a meeting with the Director, representative appointed by the Centerra DRC for any Development Project, and the applicable reviewing departments at the City, to (1) ensure the applicant is familiar with the procedural and substantive requirements of the UDC; (2) coordinate with representatives from agencies and departments with an administrative interest in the development in order to discuss issues concerning the development early in the review process; and (3) review the applicant's concept plan and identify application requirements.

"Conference / Convention Center" means a facility used for business or professional conferences and seminars, often with accommodations for sleeping, eating and recreation.

"Congregate Care Facilities" means facilities for seniors that combine private living quarters with centralized dining services, shared living spaces, and access to social and recreational activities. Many congregate care facilities offer transportation services, personal care services, rehabilitative services, spiritual programs, and other support services.

"Congregate Care Housing Developments" means multiple-unit housing buildings (private rooms or full apartments) for seniors that integrate private living units with the availability of optional congregate meals, socialization activities, and a range of non-health-related supportive assistance such as housekeeping, counseling and transportation.

"Context Diagram" means a map or plan accompanying a proposed Development Project that illustrates the existing and proposed development surrounding the proposed Development Project as described in Sections 6 and 9 of the GDP.

"Continuing Care Retirement Communities" means multiple-living style complexes for seniors that include independent living units (apartments and/or cottages), social activities, congregate meals, supportive assistance and personal care on one campus. Assisted Living Facilities and Nursing Care Facilities may also be included within the same campus.

"Controlling Documents" means collectively the Restated Agreement and the GDP, including, but not limited to, the Special Conditions, the General Conditions and the Performance Standards.

"Convenience Store" means a retail establishment whose principal business is the retail sale of gasoline and other petroleum products, as well as the accessory sales of food items and other consumable goods, and where the floor area devoted to the display and sales of non-petroleum products exceeds four hundred (400) square feet.

"Corporate and Professional Offices " means single Building sites as well as "corporate campuses" consisting of multiple Buildings for single and multi-tenant office users with uses that include, but are not limited, to a mix of headquarters or branch offices, research and development facilities, laboratory facilities and manufacturing and distribution facilities and Accessory Uses to theses facilities which may include, but are not limited to, cafeterias, delicatessens, private health clubs and day care facilities.

"County" means the County of Larimer, Colorado.

"Current Planning Manager" means the manager of the City's Current Planning Division or that person's designee.

"Days" shall mean calendar days unless otherwise specifically noted.

"Density" is a measure of the intensity of development in terms of the number of dwelling units per acre of land.

"Design Guidelines" mean the private design standards and guidelines adopted by the Centerra DRC pursuant to various private restrictive covenants, as may be amended from time to time. The Design Guidelines are located at https://www.centerra.com/design-guidelines.

"Developer" means Realberry Real Estate Services, LLC, a Colorado limited liability company f/k/a McWhinney Real Estate Services Inc., a Colorado corporation.

"Developer DRC Representative" means an individual who serves as head of the Centerra DRC, who shall represent the Developer.

"Development" means any man made change to improved or unimproved real estate, including but not limited to, construction of Buildings and other structures, mining, dredging, filling, grading, paving, excavation and drilling operations.

"Development Project" means and refers to any application for development within the GDP including, but not limited to, applications for building permits, changes of uses, Site Development Plans including those containing Uses-by-Right or Special Review Uses, sign permits, Boundary Line Adjustments, Lot Mergers, GDP Sketch Plats, combined GDP Sketch Plats and Final Plats, and Final Plats.

"Development Review Team" or "DRT" means a team that is organized by the Director and composed of City staff and representatives of referral agencies that have an interest in or that may be affected by a proposed application for development approval.

"Director" means the City's Director of Development Services or that person's designee.

"Double Frontage Lot" means any lot which abuts two or more streets other than a corner lot, which abuts two intersecting streets.

"Duplex" – See definition for Single Family Attached Dwelling.

"Dwelling Unit" means one or more rooms, including kitchen facilities or kitchen area (kitchen does not need to be a separate room but will include, at a minimum, a sink, stove and refrigerator), and at least one bathroom, designed, occupied or intended for occupancy as separate quarters for the use of a family for living, cooking and sanitary purposes, located in a Single Family Detached Dwelling, Single Family Attached Dwelling, Patio Home/Zero Lot Line Home or Multi-Family Dwelling, Live/Work Structure or mixed use building. The term Dwelling Unit shall not include Hotels, Motels, tents or other structures designed or used primarily for temporary occupancy. Any Dwelling Unit except Ancillary Dwelling Units shall be deemed to be the Principal Use or building.

"Edges" in a MUN means the elements that define the perceived limits of the larger neighborhood. Edges may be formed by perimeter arterial landscape treatment, lakefront areas, storm drainage facilities, certain collector (or other) streets, and/or Open Space corridors. Strategically placed public uses such as parks and school sites may function as both centers and edges. Edges between adjacent residential neighborhoods need not be rigidly defined. See MUN.

"Employees" means the total number of persons reasonably anticipated to be employed in a Building or on land during normal periods of use. This includes employees having overlapping work shifts.

"Entertainment Facilities and Theaters" means a Building, Buildings or parts thereof devoted to showing motion pictures or dramatic, musical or live performances.

"Environmental Entities" means and includes the HPF and the HPEC.

"Environmentally Sensitive Area" or "Environmentally Sensitive Areas" means and refers to those areas identified in the Environmentally Sensitive Areas Reports applicable to the Subparcels of the GDP.

"Environmentally Sensitive Areas Report" or "ESAR" means and refers to a report prepared by a qualified biologist, which identifies Environmentally Sensitive Areas within a property and recommends mitigation measures for development purposes. ESAR's applicable to the Subparcels of the GDP are listed in Sections 2 through 5. A copy of each ESAR is included in Section 14.

"Extended Stay Housing" means Dwelling Units intended to be rented/leased for periods of up to six months.

"Extent Feasible" or "Extent Practicable" or "Extent Possible" means that, under the circumstances, reasonable efforts have been undertaken to comply with the standards, that the costs of compliance clearly outweigh the potential benefits to the public or would unreasonably burden the proposed project, and reasonable steps have been undertaken to minimize potential harm or adverse impacts resulting from noncompliance with the standard.

"FAA" means the Federal Aviation Administration.

"FHWA" means the Federal Highway Administration.

"Final Plat" means the plat of certain described land prepared in accordance with the requirements of the Municipal Code, as an instrument for recording real estate interests in the Larimer County Records. The final plat shall serve as the "plat" for purposes of C.R.S. § 31-23-215.

"Flex Office/R&D/Industrial/Warehouse" means a Building where a portion of the Building area is devoted to office uses that support the principal industrial, warehouse and/or R&D use, and/or a portion of the Building area devoted to inventory, fabrication, research or distribution.

"Floor Area Ratio" or "FAR" means the gross floor area of all Buildings or structures on a Lot divided by the Lot area, expressed as a ratio.

"Floor Area" means the gross area of the Building measured along the outside wall of the Building including each floor level and interior balconies, but excluding garages and enclosed automobile parking areas; exterior unenclosed balconies; basements; and one half the area for storage and display area in commercial uses for hard goods.

"Front Lot Line" means the property line dividing a Lot from a street except Lots bordered by more than one street or Lots that front an open space with a connecting walk. On Lots bordered by more than one street, the building official shall determine the Front Lot Line requirements, subject to the following limitations:

- At least one Front Lot Line shall be established creating one front yard Setback as required generally in the GDP.
- Any other yard area abutting on a street shall have a minimum corner Setback as required in the GDP.

"General Condition" or "General Conditions" means and refers to those conditions of development which are applicable to all Development Projects within the GDP in accordance with the Controlling Documents and are which set forth in Appendix 1-1 to Section 1 of the GDP.

"General Offices" means offices for professional use such as physicians, dentists, lawyers, architects, engineers, artists, musicians, designers, teachers, accountants, or others who through training are qualified to perform services of a professional nature and where no storage or sale of merchandise is conducted.

"GDP" means the Millennium General Development Plan – Fifth Amendment and Restatement and all amendments thereto.

"GDP Sketch Plat" or "Preliminary Plat" means the plat of a proposed subdivision and specified supporting materials, drawn and submitted in accordance with the Regulatory Procedures, for the purpose of reviewing and evaluating the proposal prior to submission of a Final Plat. A sketch plat is not a plat for purposes of C.R.S. §31-23-215. GDP Sketch Plats may be combined with Final Plats, in which case, the review process for Final Plats shall apply.

"Grocery Store" means a retail establishment primarily selling food, as well as other convenience and household goods.

"Gross Acreage" means the total area within a parcel, typically measured to the centerline of adjacent streets, which includes any public dedications for parks, schools or other public use.

"Gross Density" means the number of Dwelling Units per gross acre of land.

"Group Homes / Group Care Facilities" means residences or facilities licensed by or operated by a governmental agency, and specifically including State licensed foster care homes, for the purpose of providing special care or rehabilitation due to homelessness, physical condition or illness, mental condition or illness, elderly age or social, behavioral or disciplinary problems, provided that authorized supervisory personnel are present on the premises.

"Health and Fitness Clubs" means organizations of persons for special purposes or for the promulgation of sports, fitness, recreation, arts, politics or other common goals, interests or activities, characterized by membership qualifications, dues or regular meetings.

"Heavy Commercial Uses" means those uses set forth in Section 1.3.4 of the GDP.

"Heavy Industrial Uses" means those uses set forth in Section 1.3.7 of the GDP.

"Heavy Manufacturing" means manufacturing that is engaged in the basic processing and manufacturing of materials or products predominantly from extracted or raw materials, petrochemical and rubber refining, primary metal mining or similar uses.

"HPEC" means the High Plains Environmental Center, a Colorado nonprofit corporation, or any successor thereto.

"HPF" means the High Plains Foundation, a Colorado nonprofit corporation, or any successor thereto.

"Hotel" and "Motel" means a Building designed for temporary occupancy in which there are ten or more guest rooms and in which no provision is made for cooking in any individual room or suite. A motel or hotel room or suite which includes cooking facilities shall be considered a dwelling unit.

"Housing Type" shall mean the various types of residential development including, but not limited to, Single Family Attached Dwellings, Single Family Detached Dwellings, Townhomes, Condominiums, Patio Homes, Zero Lot Line Homes, Multi-Family Dwellings, apartments, Mixed Use Residential, Live/Work Structures, Co-Housing, Senior House of a Residential Nature and Extended Stay Housing.

"I-25" means Interstate Highway No. 25.

"Immediate Neighborhood" means a cohesive subarea of a MUN which is typically comprised of one or two (or sometimes more) housing types, possibly with compatible supporting non-residential uses; have related architectural character; and are usually between eight and thirty acres in size. See MUN.

"Improvements" include, but are not limited to, any and all buildings, out-buildings, roads, driveways, parking areas, fences, screening walls, retaining walls, loading areas, signs, utilities, lawns, lighting, landscaping, and walkways, including all those located on building sites and common areas, as well as

any construction, work, or treatment done or applied to any of the property in connection therewith.

"In Conflict With" or "Inconsistent With" or "in conflict with" or "inconsistent with" means:

- Where a matter is addressed in the GDP, and the UDC or Municipal Code is silent, the GDP shall govern;
- Where the GDP is silent on a specific Performance Standard, but contains other standards addressing the same general subject, it should be viewed as an intent for the GDP to occupy the field with regard to such subject, and the GDP shall govern; provided that, as set forth in Section 12.1.1, if the GDP lacks specific standards that would materially, adversely impact the City's ability to review Development Projects relating to oil and gas development standards, water or wastewater development standards, stormwater standards, electric standards, airport influence area development standards, transportation design standards, adequate community facility standards that are rationally related and roughly proportional to demand created by a Development Project, and standards associated with nonconforming uses, those standards in the UDC or Municipal Code shall govern;
- Where the GDP contains a Performance Standard or any other applicable standard which is different than the UDC or Municipal Code, the GDP shall govern, consistent with Section 12.1.1;
- Where the GDP is silent on a specific Performance Standard, or any other applicable standard, and the subject matter, or standard, is addressed in the UDC or the Municipal Code, but not in the GDP, the UDC or Municipal Code, as applicable, shall govern consistent with Section 12.1.1.

"In-Line Retail" means attached retail stores.

"Independent Living Communities" means communities for seniors that include Single-Family Detached Dwellings, Single-Family Attached Dwellings, condominiums, and/or apartments where the residents maintain an independent lifestyle.

"Indoor Recreation Use" means exercise and athletic facilities, and amusement and recreational services, such as billiard and pool parlors, dance studios, martial art schools, and arts and crafts studios, but not including bowling alleys or establishments which have large-scale gymnasium-type facilities for such activities as tennis, roller or ice skating, and/or competitive swimming.

"Infrastructure" means those man-made structures which serve the common needs of the population, such as: potable water systems, potable water wells serving a system, non-potable water systems for irrigation; waste water disposal systems, solid waste disposal sites or retention areas; storm drainage systems; utilities; bridges; roadways; bicycle paths and trails; pedestrian sidewalks, paths and trails.

"Institutional/Civic/Public Uses" means those uses set forth in Section 1.3.1 of the GDP.

"Landscaping" or "Landscaped" means any combination of living plants such as trees, shrubs, plants, vegetative ground cover or turf grassed, and may include structural features such as walkways, fences, benches, works of art, reflective pools, fountains or the like. Landscaping shall also include irrigation systems, mulches, topsoil use, soil preparation, re-vegetation or the preservation, protection and replacement of existing trees.

"Larimer County Records" means the records of the Clerk and Recorder of Larimer County, Colorado.

"LCUASS" means the Larimer County Urban Area Street Standards adopted by the City, and all amendments thereto.

"Level of Service" means the level of service standards as defined in the Municipal Code.

"Light Commercial Uses" means those uses listed in Section 1.3.3 of the GDP.

"Light Industrial Uses" means those uses listed in Section 1.3.6 of the GDP.

Light Manufacturing" means manufacturing that is predominantly from previously prepared materials, of finished products or parts, including processing, fabrication, assembly, treatment, packaging, incidental storage, sales and distribution of such products provided all manufacturing activities are contained within a building.

"Live / Work Structure" means a Building incorporating a Dwelling Unit with a first floor (and possibly second-floor) retail, office, or other non-residential use allowed as a part of an Urban Character village in a MUN or as part of a residential neighborhood not within a MUN.

"Lot" means a portion of a subdivision intended as a unit for transfer of ownership or for development, which has access to a public right-of-way.

"Lot Merger" means any merger of one or more lots or tracts into a single resulting lot.

"LURA" shall mean the Loveland Urban Renewal Authority.

"Major Amendment" shall mean an amendment to the GDP to: (a) permit a use not identified in a GDP Parcel or Subparcel as a Use-by-Right, a Special Review Use, or a use approved by the Director pursuant to Section 12.3.2.B of the Regulatory Procedures; (b) decrease the amount of commonly-owned, but not dedicated, open space within the GDP by more than 10%; (c) change any requirement for the payment of money or the dedication of land or other property rights to the City or the public; (d) materially relocate any public facility or improvement; (e) increase residential density by more than 5% in any GDP Parcel; and (f) increase nonresidential Building square footage by more than 5% in any GDP parcel.

"Major Subdivision" or "Subdivision" means all subdivisions not falling within the definition of a Minor Subdivision, and which are not Boundary Line Adjustments or lot mergers. Except where otherwise specified or where the context requires otherwise, the term subdivision as used herein shall mean Major Subdivision.

"Master Plan" means the City's master plan for the physical development of the City entitled *Create Loveland* adopted on July 19, 2016 by Resolution #R-65-2016, and all amendments thereto.

"Maximum Extent Feasible" means that no feasible and prudent alternative exists, and all possible efforts to comply with the standard or minimize potential harm or adverse impacts have been undertaken.

"May" when used, will be given its permissive meaning.

"Metropolitan District" includes all existing and future metropolitan districts within the GDP, but not limited to, the Centerra Metropolitan Districts and the Van deWater Metropolitan Districts.

"MFA" means the Centerra Master Financing and Intergovernmental Agreement by and among the City, the LURA, Centerra Properties West, LLC, the Centerra Metropolitan District No. 1, The Centerra Public Improvement Collection Corporation and The Centerra Public Improvement Development Corporation dated January 20, 2004 and on file with the City.

"MFA Commercial Area" means that real property legally described on Exhibit "B" to the MFA, subject to addition of future inclusions and deletion of future exclusions approved by the City Council. The MFA Commercial Area is the same as the area included in the Centerra Metropolitan District No. 2 and the area subject to The US 34/Crossroads Corridor Renewal Plan.

"Minor Amendment" means any amendments to this GDP which do not meet the definition of a Major Amendment.

"Minor Subdivision" means the division of land into no more than four additional lots.

"Mixed Use Residential" means residential uses located in the same Building with non-residential uses.

"Mixed Use Residential Building" means a Building containing Mixed Use Residential uses in which the floor area of the non-residential uses shall be reasonably equivalent to, or greater than, the floor area of the first floor of such Building, exclusive of any parking floor area located on the first floor of the Building.

"Mixed Use Structure" means a Building intended to house multiple tenants of varying uses, such as retail, office, and/or residential. Mixed Use Structures accommodate residential and non-residential uses as distinct tenants rather than being designed to allow individual tenants to mix residential uses with non-residential uses in a single lease space as is the case with Live/Work Structures.

"Mixed Use Village Center" means a concentration of development that provides a combination of uses in the same general area of a community and/or within a single Building. For example, a mixed-use Building could have several floors. On the bottom floor, the space could be dedicated to retail or offices. The remaining floors could be apartments or condominiums. Another example would be a retail district that is closely related to offices, Multi-Family Dwellings and Single Family Attached Dwellings, with each use located within separate structures creating a dense urban concentration.

"Modification of Standard" is a deviation from or an approved noncompliance with any Performance Standard as set forth in Section 12.2.3, which shall further the GDP goals set forth in Section 1.1.2 of the GDP.

"Multi-Family Dwelling" means a Building or lot with six or more separate Dwelling Units, two stories or more in Height located on a single Lot. The units may be sold as condominiums or cooperatives, or for rental as apartments. A Multi-Family Dwelling does not include Single Family Attached Dwellings, Townhomes, Hotels, Motels, or Live/Work Structures.

"MUN" means a residential mixed-use neighborhood which is a residential area – typically of 50 to 160 acres - comprising one or more interconnected

Immediate Neighborhoods designed to be served with a common collector street system, and typically having identifiable edges and one or more Centers within walking distance (1650'±) of most neighborhood residents. In this context an Immediate Neighborhood is a cohesive sub-area within a mixed-use neighborhood frequently (but not always) made up of one or two housing types. Edges are elements such as major streets, open space corridors, lakes, or other geographic features that define the perceived limits of the larger neighborhood. Centers serve as focal points or community gathering sites, and may include parks, village greens, plazas, gardens, or Urban Character Villages.

"Municipal Code" means the City of Loveland Municipal Code, as amended from time to time.

"Must" means compliance is mandatory, unless the context requires otherwise.

"Neighborhood Support / Recreational Facilities" means recreation / pool facilities and/or meeting rooms intended for the use and enjoyment of residents and guests of the adjacent neighborhood.

"Net Acre" means the area of developable land of a site, excluding land being dedicated for public rights-of-way or other public uses (i.e., schools, and parks).

"Net Density" means the number of Dwelling Units per net acre of land.

"Non-Residential Environmental Fees" means those HPEC fees imposed at the time of building permit issuance on the square footage of non-residential Buildings in accordance with the applicable Special Conditions.

"Nursing Care Facilities" means health institutions that are planned, organized, operated and maintained to provide facilities and health services with related social care to inpatients who require regular medical care and twenty-four-hour per day nursing services for illness, injury or disability. Nursing Care Facilities may specialize in short term or acute nursing care, intermediate or long term skilled nursing care.

"Oil and Gas Facility" means equipment or improvements that are used or installed at an oil and gas location for the exploration, production, withdrawal, gathering, treatment or processing of oil or gas, and which shall include, without limitation, operating, shut-in, or abandoned wells, any and all storage, separation, treating, dehydration, artificial lift, compression, pumping, metering, monitoring, aboveground flowlines, and other equipment directly associated with oil wells, gas wells, or injection wells. However, "Oil and Gas Facility" shall not include aboveground or underground power supply, underground flow lines, or underground water lines or abandoned wells that the Director finds will not, as a matter of law, be reopened or reentered in the future for any type of oil and gas operation without the City's prior written consent.

"Open-Air Farmers Market" means a permanent or temporary/seasonal outdoor market held in an open area or in a structure where groups of individual sellers offer for sale to the public such items as fresh produce, seasonal fruits, fresh flowers, arts and craft items, and food and beverages (but not to include second-hand goods) dispensed from booths located on-site.

"Open Space" means either Private Open Space or Common Open Space, or a combination thereof.

"Open Space, Common" means areas within a Development Project, not included in Lots or golf courses

and includes drainageways, active and passive Recreation Spaces including Accessory Uses related to the operation of such facilities such as toilet/locker rooms and parking lots, platted Outlots, landscaped areas, landscaped entries, landscaped roofs, landscaped right- of-ways, lakes, ponds, bikeways, trails, sidewalks, plazas, ditch corridors and other irrigation facilities.

"Open Space, Private" means those areas within each individual Lot not covered by Building, parking or driveways and includes all open areas, drainageways, active and passive Recreation Spaces including related Accessory Uses, all landscaped areas, landscaped entries, landscaped roofs, landscaped islands, lakes, ponds, bikeways, trails, sidewalks, plazas, courtyards, irrigation facilities, and structural parking covered by plazas. See also Section 6.6 and 6.7.

"Outdoor Storage" means the keeping, in an unroofed area, of equipment, goods, junk, material, merchandise or vehicles in the same place for more than twenty-four (24) hours.

"Outdoor Storage, Recreational Vehicles, Boats, and Trucks" means the keeping, in an unroofed area, recreational vehicles, boats and trucks in the same place for more than twenty-four (24) hours.

"Outlot" means a portion of land included in a subdivision that is not intended for development with Buildings containing residential, commercial or industrial uses. It may or may not have public right-of-way access. Common uses include, but are not limited to, easements, recreation gardens, Common Open Space or drainage detention. Nothing herein prevents an Outlot from being further subdivided into smaller Lots provided it meets all City requirements therefor.

"Parcel", "parcel" or "GDP Parcel" means Parcel A, B, C or D, as shown on Maps 4 through 7 in Section 11 of the GDP.

"Parking Garage or "Parking Structure" means an off-street parking area within a Building.

"Parking Ratio" means the number of parking spaces required in relation to some measure of development intensity – the number of bedrooms in a Dwelling Unit, number of Dwelling Units, or amount of square footage. With the exception of certain restrictions in Urban Character Villages, the parking ratio requirements in this GDP are minimums. Additional parking may be provided at the developer's discretion providing other standards are met. Within certain areas of MUNs – as noted in this GDP – the required parking may include all allowed on street parking on the adjacent side of each surrounding local or collector street.

"Parks and Open Space Uses" means those uses listed in Section 1.3.9 of the GDP.

"Patio Home" means a primarily Single Family Detached Dwelling that is built on or close to the Lot's outer boundary(s) and having either a small front yard or small back yard. The yard maintenance may or may not be handled by a neighborhood association.

"Performance Standards" means the performance standards contained in Section 6 through 10 and 16 of the GDP, which address design considerations including, but not limited to, architectural, site planning, landscaping, streetscape and sign elements for all development within the GDP.

"Personal and Business Service Shops" means shops primarily engaged in providing services generally involving the care of the person or such person's apparel or rendering services to business establishments such as laundry or dry-cleaning retail outlets, portrait/photographic studios, beauty or barber shops, employment service, or mailing or copy shops.

"Personal Wireless Services" and "Personal Wireless Service Facilities," means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services and the facilities for the provision of such services, as defined in Title 47, United States Code, Section 332, as amended from time to time.

"Pet Day Care Facility" means a facility providing such services as canine day care for all or part of a day, obedience classes, training, grooming and /or behavioral counseling, provided that overnight boarding is not permitted.

"Planned Capital Improvements" means a capital improvement or an extension or expansion of a capital improvement which does not presently exist, but which is included within a capital improvement program.

"Planned Retail Center" means a retail development containing two or more individual tenants and more than 25,000 gross square feet.

"Planning Commission" means the Planning Commission of the City as duly constituted by law.

"Plugged and Abandoned Well" means an Oil and Gas Facility that has had the permanent plugging of a well, the removal of its associated production facilities, and the abandonment of its flowline(s), since 2014.

"Principal Structure" or "Primary Structure" means a structure in which is conducted the main or Principal Use of the Lot on which said Building is located.

"Principal Use" or "Primary Use" means the primary or predominant use of any Lot or Tract, as permitted under the GDP.

"Print Shops" means an establishment in which the principal business consists of duplicating and printing services using photocopy, blueprint or offset printing equipment, and may include the collating of booklets and reports.

"Public Facilities" means public transportation systems or facilities, water systems or facilities, wastewater systems or facilities, storm drainage systems or facilities, fire, police and emergency systems, electric utilities, gas utilities, cable facilities or other public facilities.

"Public Review" means the approved processes for the review of Development Projects for Uses-by-Right as defined in Section 12.3.3.A.2 of the Regulatory Procedures.

"Public Use" or "Public Area" means any use intended to be conducted in a facility or upon land which is owned by and operated for public use by school districts or by city, county, state or federal governments.

"Public Works Director" means the director of the City's Department of Public Works or that person's designee.

"PVH Agreement" means the PVH Annexation Agreement by and among the City, its Water, Wastewater and Sewer Enterprises, Centerra Office Partners, LLC, Centerra Properties West, LLC, Cloverleaf Development Corporation, Hahn Development Company, LLC, and Poudre Valley Health Care, Inc. dated April 8, 2003 and recorded in the records of the Larimer County Clerk and Recorder on June 3, 2003 at Reception No. 2003-0067059.

"PVH Commercial Area" means that real property depicted and described on Exhibits F-1 and F-2 to the PVH Agreement.

PVH Project" means the Hospital and Related Facilities as defined in the PVH Agreement to be constructed on the PVH Property.

"PVH Property" means that real property subject to the PVH Agreement and approved for development of the PVH Project, the legal description of which is attached to the PVH Agreement as Exhibits A-2, B and D.

"Recreational Facilities" means structures, or open areas including features and/or equipment specifically intended for recreational use.

"Recreational Space" means space, which is designed for active or passive recreational use for more than three (3) families. This may include indoor spaces: Recreational Facilities or structures and their Accessory Uses located in approved areas, including but not limited to game rooms, swimming pools, gymnasiums, bowling alleys, exercise rooms and tennis and racquetball courts; If the Recreational Space is to be owned an/or maintained by an association, residents of the Development Project for which the facility is planned shall automatically become members without additional charge.

"Regulatory Procedures" means those regulatory procedures set forth in Section 12 of the GDP which define submittal requirements and review processes for Development Projects within the GDP, including but not limited to, processes for Administrative Review and Public Review of Development Projects containing Uses-by-Right, and processes for Special Review Uses, subdivision plats, Variations, Appeals and amendments.

"Research and Development Facilities" means single Building sites as well as multiple Building complexes for users involved in high technology research and development. Uses may include, but not be limited to, computer hardware and software development, biomedical research, pharmaceutical manufacturing, environmental or otherwise "high-technology" engineering. Accessory Uses may include those involved in the receipt, storage and distribution of products and materials required in the manufacturing process incidental to the research and development use and similar uses related thereto.

"Research Laboratories" means a Building or group of Buildings in which are located facilities for scientific research, investigation, testing or experimentation, but not facilities for the manufacture or sale of products except as incidental to the main purpose of the laboratory.

"Residential Environmental Fees" means those HPEC fees imposed at the time of building permit issuance on the square footage of Dwelling Units in accordance with the applicable Special Conditions.

"Residential Uses" means those uses listed in Section 1.3.2 and Section 1.3.10.B of the GDP.

"Restated Agreement" shall mean the Amended and Restated Annexation and Development Agreement for the Millennium GDP and any future amendments thereto.

"Restaurant, Drive-In" means any establishment in which the principal business is the sale of foods and beverages to the customer in a ready-to-consume state and in which the design or principal method of operation of all or any portion of the business is to allow food or beverages to be served directly to the customer in a motor vehicle without the need for the customer to exit the motor vehicle.

"Restaurant, Fast Food" means any establishment in which the principal business is the sale of food and beverages to the customer in a ready-to-consume state, and in which the design or principal method of operation includes both of the following characteristics: food and beverages are usually served edible in containers or in paper, plastic or other disposable containers: The consumption of food and beverages is encouraged or permitted within the restaurant Building, elsewhere on the premises or for carryout. This type of business commonly has a drive-through facility.

"Restaurant, Indoor and Outdoor" means any establishment in which the principal business is the sale of food and beverages to customers in a ready-to-consume state: where fermented malt beverages, and/or malt, special malt or vinous and spirituous liquors may be produced on the premises and an accessory use; and where the design or principal method of operation includes one (1) of both of the following characteristics: customers are served their food and/or beverages by a restaurant employee at the same table or counter at which the items are consumed; and customers are served their food and/or beverages by means of a cafeteria-type operation where the food or beverages are consumed within the restaurant Building or within a fenced in outdoor seating area on the sidewalk or other open area adjoining the restaurant premises.

"Retail Establishment" or "Retail Store" means the sale or rental of goods or merchandise to the general public for personal or household consumption or to services incidental to the sale or rental of such goods or merchandise. Retail establishments over 10,000 square feet include power centers and life style centers.

"Review Timelines" means the timelines set forth on Appendix F of Section 15 in which the City agrees to conduct its review of applications.

"Right-of-Way" or "ROW" means an interest in real property conveyed to the public, the City and/or public utilities which have been constructed or will be constructed, for public transportation, drainage or utility improvements including but not limited to street paving, curb and gutter, sidewalks, bicycle lanes and buried or overhead utilities.

"School District" means the Thompson R2-J School District.

"School District IGA" means the Intergovernmental Agreement Concerning Land Dedication or Fees In Lieu for School Purposes between the School District and the City dated January 23, 1996.

"Senior Housing of a Non-Residential Nature" means housing for seniors that does not include residential Dwelling Units except for the uses described below.

Individual living quarters may include a private or shared bedroom and a bathroom, a common living room, dining room, kitchen, supportive services and/or personal care services. Examples of these facilities include: Adult Day/Respite Care Facilities; Alzheimers Facilities; Assisted Living Facilities; Congregate Care Housing Developments; Congregate Care Facilities; Continuing Care Retirement Communities; Group Homes/Group Care Facilities; Nursing Care Facilities and other similar facilities.

"Senior Housing of a Residential Nature" means housing for seniors where individual living quarters are considered residential Dwelling Units. Housing types may include: Single Family Detached Dwellings, Single Family Attached Dwellings, Condominiums and Multi-Family Dwellings. These housing types may integrate private Dwelling Units with optional congregate meals, socialization activities and a range of non-health-related supportive assistance such as housekeeping, counseling and transportation. Examples of these facilities could include: Adult Day/Respite Care Facilities; Alzheimers Facilities; Assisted Living Facilities; Congregate Care Housing Developments; Congregate Care Facilities; Continuing Care Retirement Communities; Independent Living Communities, Nursing Care Facilities and other similar facilities.

"Setbacks" means the required distance between the furthermost projection of a structure or parking lot and the property line of the lot on which the structure or parking lot is located. Required setbacks shall be unobstructed from the ground to the sky except as specified in Sections 6.3, 9.7 and 10.13.

"Shall" means compliance is mandatory, unless the context requires otherwise.

"Shared Parking" means required parking that is provided both on-site and private lot where the same parking spaces are assigned to more than one (1) use at one (1) time.

"Similar" means resembling each other in some ways. Similar does not mean the same or equal. However, it does mean substantially equal in terms of visual appearance and/or quality of materials, as determined by the Director.

"Single Family Attached Dwelling " means a Dwelling Unit which may be individually owned and which shares a common wall with one or more Dwelling Units, which may be – but are not required to be – on fee-simple Lots, attached in groups of two to six units. Buildings shall be three stories or less in height. Units commonly have direct access to outdoor area.

"Single Family Detached Dwelling" means a detached Building, arranged and designed as a single Dwelling Unit other than a mobile home. Examples include: Single Family Detached Dwellings, Patio Homes, Zero Lot Line homes and other similar dwellings.

"Site Development Plan" or "SDP" means a plan for the development of a site, approval of which is required prior to or concurrent with the issuance of site work permits or building permits, approved in accordance with Section 18.17.11 of the UDC, as amended.

"Small Lot Cottage" means a Dwelling Unit, individually owned, which may or may not share a common wall with one or more Dwelling Units and which shall be on fee simple Lots. Utility metering may be grouped and private laterals may cross property lines.

Performance standards for "Single Family Attached Dwelling" shall apply.

"Special Condition" or "Special Conditions" means and refers to those conditions of development which are applicable to Development Projects within designated parcels or Subparcels of the GDP in accordance with the Controlling Documents and as set forth as Appendices 2-1, 3-1, 4-1 and 5-1 to Sections 2 through 5, respectively, of the GDP.

"Special Review Uses" or "special review uses" means those uses listed in the land use legends on Maps 4, 5, 6 and 7 of the GDP which are reviewed in accordance with Section 12.3.3.B.

"Start of Construction" means and includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within one hundred eighty days of the permit date. The actual start means the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of temporary structures or Accessory Buildings, such as garages or sheds not occupied as Dwelling Units or not part of the main structure.

"State" means the state of Colorado.

"Street" or "Streets" means those roadways including, but not limited to, arterial, collector, cul-de-sac, local and private streets, as defined in the Municipal Code or the City's applicable street standards (currently LCUASS).

"Submittal Checklist" or "Submittal Checklists" means those lists of items that are required to make a Complete Application as approved and amended by the Director.

"Subparcel" means a defined portion of Parcel A, B, C or D as defined in Sections 2, 3, 4 and 5 of the GDP. For example, the land included in the areas depicted as A-1, A-2 or A-3, etc., as shown on Map 4 in Section 11 of the GDP, are Subparcels.

"Technical Standards" means those technical standards, specifications and regulations contained in or adopted by the City pursuant to the Municipal Code for the construction of Buildings and public improvements (e.g., streets, sanitary sewer, water, storm water improvements, and the like).

"Townhome" – See definition for Single Family Attached Dwelling.

"Tract" means a portion of a subdivision intended as, but not limited to, a unit for transfer of ownership or for development, typically being substantially larger than a Lot and intended for large scale development, future subdivision into smaller Lots, or preservation as open space or buffer yards, in accordance with dedications or notes on the plat.

"Traffic Study" or "TIS" means a traffic impact study, the requirements of which are set forth in LCUASS.

"Transit Facility" means a bus stop, bus terminals, transfer points or depots without vehicle repair or storage.

"Transportation Engineering Division" means the engineering and transportation division of the City's Department of Public Works.

"Transportation Plan" means the City of Loveland 2020 Transportation Plan as amended or superseded.

"Two Family Attached Dwelling" See definition for Single Family Attached Dwelling.

"UDC" means the City of Loveland Unified Development Code, as amended from time to time.

"Urban Character Village" means a mixed-use Immediate Neighborhood planned with design elements that create a more "urban," and less "suburban," streetscape. These elements may include minimal front Setbacks, a block face dominated by building frontages rather than parking areas, pedestrian amenities, "downtown/storefront" architectural elements, outdoor seating areas and/or other small community gathering areas. A variety of uses are permitted within an Urban Character Village to create and protect an appropriate character, refer to Section 9.7.1 for examples of these uses and additional planning criteria.

"US 34" means and refers to United States Highway 34.

"Uses-by-Right" means those uses listed in the land use legends on Maps 4, 5, 6 and 7 of the GDP which are reviewed in accordance with Section 12.3.3.A or 12.3.3.C.

"Variation" means a grant of relief from the requirements of the Performance Standards that permits construction in a manner that would otherwise be prohibited by the GDP.

"Vehicle Major Repair, Servicing and Maintenance" means any Building, or portion thereof, where heavy maintenance activities such as engine overhauls, automobile/truck painting, body or fender work, welding or the like are conducted. Such use shall not include the sale of fuel, gasoline or petroleum products.

"Vehicle Minor Repair, Servicing and Maintenance" means the use of any Building, land area, premises or portion thereof, where light maintenance activities such as engine tune-ups, lubrication, carburetor cleaning, brake repair, car washing, detailing, polishing or the like are conducted.

"Vested Property Rights" means the right to undertake and complete the development and use of property in the GDP under the terms and conditions of the Controlling Documents and applicable law.

"Vesting Period" means the various periods of Vested Property Rights afforded Parcels and Subparcels within the GDP as set forth in Section 7 of the Restated Agreement.

"Warehouse" means a Building used primarily for the storage or goods or materials.

"Warehouse and Distribution" means a use engaged in storage, wholesale, and distribution of manufactured products, supplies or equipment, including accessory offices or showrooms, including incidental retail sales, but excluding bulk storage of materials

that are explosive or that create hazardous or commonly recognized offensive conditions.

"Will" means compliance is mandatory, unless the context requires otherwise.

"Wireless Telecommunication Facility" means any freestanding facility, Building, pole, tower or structure used to provide only wireless telecommunication services, and which consists of, without limitation, antennae, equipment and storage and other accessory structures used to provide wireless telecommunication services.

"Wireless Telecommunications Services" means services providing for the transmission of wireless communications utilizing frequencies authorized by the Federal Communications Commission for paging systems, enhanced specialized wireless telecommunications, personal communication services or cellular telephone.

"Workshop and Custom Small Industry" means a facility wherein goods are produced or repaired by hand, using hand tools or small-scale equipment, including small engine repair, furniture making and restoring, upholstering, custom care or motorcycle restoring or other similar uses.

"Zero Lot Line Home" is a Building or structure which satisfies one of the following criteria: 1) a structure with at least one (1) wall coterminous with the Lot line, which wall may include footings, eaves and gutters that may encroach onto the abutting Lot under the authority of an encroachment and maintenance easement; or 2) a Building or structure that is generally "centered" between its own side Lot lines, and using cross maintenance and access agreements each property owner is entitled to use a portion of one adjacent Lot; or 3) a similar condition to #2 above, but having unequal side yard Setbacks.

GDP SUB-PARCEL	RELATED ENVIRONMENTAL REPORT
Parcel A2, A3, B1, B2, B4, C1, C2, C3, D1, D2, D3, D4, D5, D6, D7, D8	Original Millennium GDP Cedar Creek – January 1999
Parcel A1, A4	Centerra East Property Ecological Resource Consultants – July 18, 2003 rev. Nov. 20, 2003 and FlyWater Consulting, Inc. – November 6, 2006 FlyWater Consulting, Inc. – October 11, 2007
Parcel B10, B11	Parcels E, F and G of the Millennium GDP Cedar Creek and Associates – August 17, 2000 and Environmental and Natural Areas Report – Cloverleaf Addition Wildland Consultants – January 2000
Parcel B12	Myers Group No. 949 3rd Subdivision Ecological Resource Consultatns – February 4, 2005
Parcel A5, B3, C4	Spreng Property and Colorado College Ecological Resource Consultants – June 8, 2004 Flywater Consulting, Inc. – February 12, 2008
Parcel B6	Rocky Mountain Village II Development ENSR Corporation – January 2000
Parcel B7, B9, & D9	No Report
Parcel A6, A7	FlyWater Consulting, Inc. – October 11, 2007
Parcel B13	FlyWater Consulting, Inc. – October 11, 2007

Parcel B14	FlyWater Consulting, Inc. – February 12, 2008
Parcel D10	Ecological Resource Consultants – April 17, 2017

ENVIRONMENTALLY SENSITIVE AREAS AND WETLAND REPORT FOR THE ROCKY MOUNTAIN VILLAGES III PROPERTIES

Prepared
by
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Fort Collins, Colorado

Prepared
for
McWhinney Enterprises
Loveland, Colorado

January 1999

ENVIRONMENTALLY SENSITIVE AREAS AND WETLAND REPORT FOR THE ROCKY MOUNTAIN VILLAGES III PROPERTIES

INTRODUCTION AND LOCATION

This report documents the evaluation of environmental conditions at the Rocky Mountain Villages III properties in Loveland in accordance with City of Loveland Planning Department guidelines for preparation of an Environmentally Sensitive Areas Report (Attachment D - 9/23/98). This report includes an evaluation of three separate parcels proposed for development. The properties are all located in Township 5 North, Range 68 West. The western-most parcel consists of approximately 480 acres in Section 17 (W 1/2 & NW 1/4 of SE 1/4). The central parcel is comprised of approximately 665 acres and occupies portions of Section 9 (N 1/2), Section 4 (S 1/2), and Section 10 (NW 1/4). The eastern-most and largest parcel consists of approximately 960 acres and occupies portions of Section 10 (E 1/2), Section 11 (W 1/2), Section 2 (SW 1/4), and Section 3 (SE 1/4). The locations of each parcel are shown on Figure 1. The proposed development parcels consist primarily of cultivated land except for drainages, irrigation ditches, reservoirs, reservoir margins.

Wetland surveys and field evaluations of habitats were completed by Cedar Creek personnel on November 5, 6, 10, and 11, 1998. Observations recorded included: major vegetation communities / wildlife habitats present within the property; dominant flora associated with each community / habitat; unique habitat features; and observations of wildlife species and/or definitive sign. Wildlife presence and habitat use was based on on-site observations and habitat presence in conjunction with the known habitat requirements of potential wildlife species. Once the field reconnaissance was completed, environmentally sensitive areas and other habitats were delineated from color aerial photographs of the properties. Wetland surveys were completed to satisfy Corps of Engineers guidelines (Environmental Laboratory, Department of the Army 1987) for determination of "jurisdictional" wetlands. The results of these survey are also summarized in this report. Detailed mapping of jurisdictional wetlands is provided on the General Development Plan maps for Parcels A, B, C, and D.

This report summarizes the findings of the field surveys, identifies environmentally sensitive areas on the properties, discusses potential impacts associated with the proposed development, and provides recommendations for mitigation.

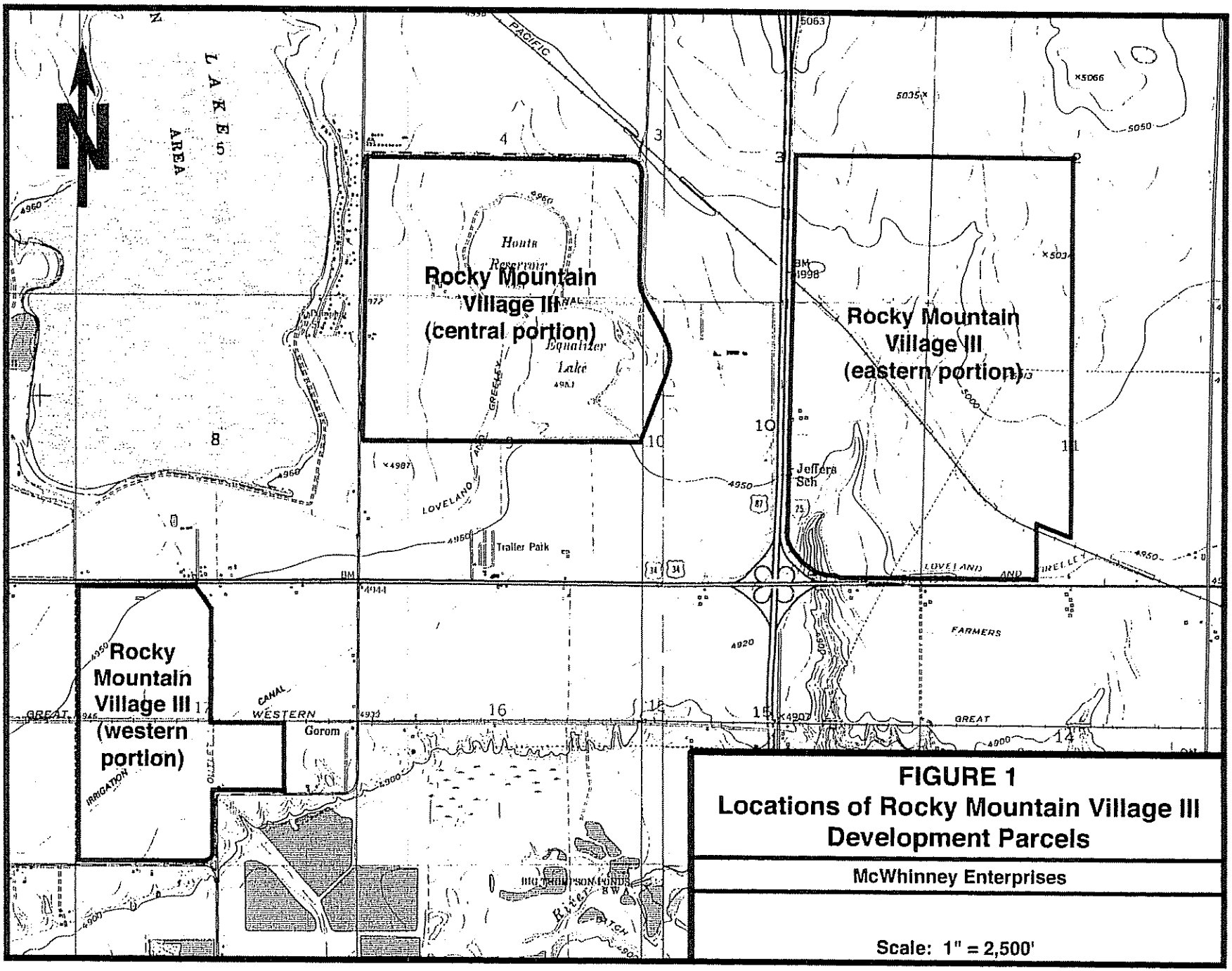


FIGURE 1
Locations of Rocky Mountain Village III Development Parcels

McWhinney Enterprises

Scale: 1" = 2,500'

HABITAT CONDITIONS AND ENVIRONMENTALLY SENSITIVE AREAS

Western Portion

This development parcel is nearly level and is comprised almost entirely of actively cultivated cropland (see Figure 2). Areas defined as environmentally sensitive by City of Loveland guidelines are limited to an irrigation ditch (Farmers Ditch) and the Outlet Ditch that carries overflow water from Boyd Lake to the Big Thompson River. There are no other drainages, areas of wildlife habitat, or other Natural Areas (*In the Nature of Things, Loveland's Natural Areas* - October 1996) in this parcel that would qualify as environmentally sensitive areas (see Figure 3).

According to the *Soil Survey of Larimer County Area, Colorado* (SCS 1980), predominant soils in the area include Aquepts, Nunn clay loam, and Stoneham loam. These are not highly erosive soils; runoff is slow to medium and the hazard of wind or water erosion is slight to moderate. No slopes over 20 percent, land formerly used for landfill operations or hazardous industrial use, or fault areas were identified on the property.

Wetlands associated with the Farmers Ditch were not delineated because wetlands supported in active irrigation ditches are not classified as jurisdictional by the Corps of Engineers. In addition, since active cultivation approaches to the edge of this narrow ditch and there is minimal vegetation cover, this ditch has little value as wildlife habitat or as a movement corridor.

The only jurisdictional wetlands on the property were located within the Outlet Ditch. At the time of the survey, there was flowing water (6 to 10 inches deep) in the bottom of ditch and wetlands were restricted to the edges of the flowing channel and the side-slopes of the ditch (see Figure 2). There were also some minor inclusions of uplands on the ditch banks. Wetland herbaceous vegetation within the ditch was characterized by reed canarygrass (*Phalaris arundinacea*), common cattail (*Typha latifolia*), hemp dogbane (*Apocynum cannabinum*), showy milkweed (*Asclepias speciosa*), field horsetail (*Equisetum arvense*), and Emory sedge (*Carex emoryi*). Several large, mature plains cottonwoods (*Populus sargentii*) also grow within the ditch (see Figure 2). There were individual box elder trees (*Acer negundo*) and scattered pockets of coyote willow (*Salix exigua*), red hawthorn (*Crataegus erthyropoda*), and wild plum (*Prunus americana*) along the ditch, as well.

The Outlet Ditch was classified as an environmentally sensitive area because it supports wetlands and mature cottonwood trees. Based on the rating system used in *In the Nature of Things, Loveland's Natural Areas* (ratings of 1 to 10 with 10 indicating highest value and 1 indicating lowest habitat value), the outlet ditch was given a rating of "3." Although the ditch contains wetlands and several large trees, its overall

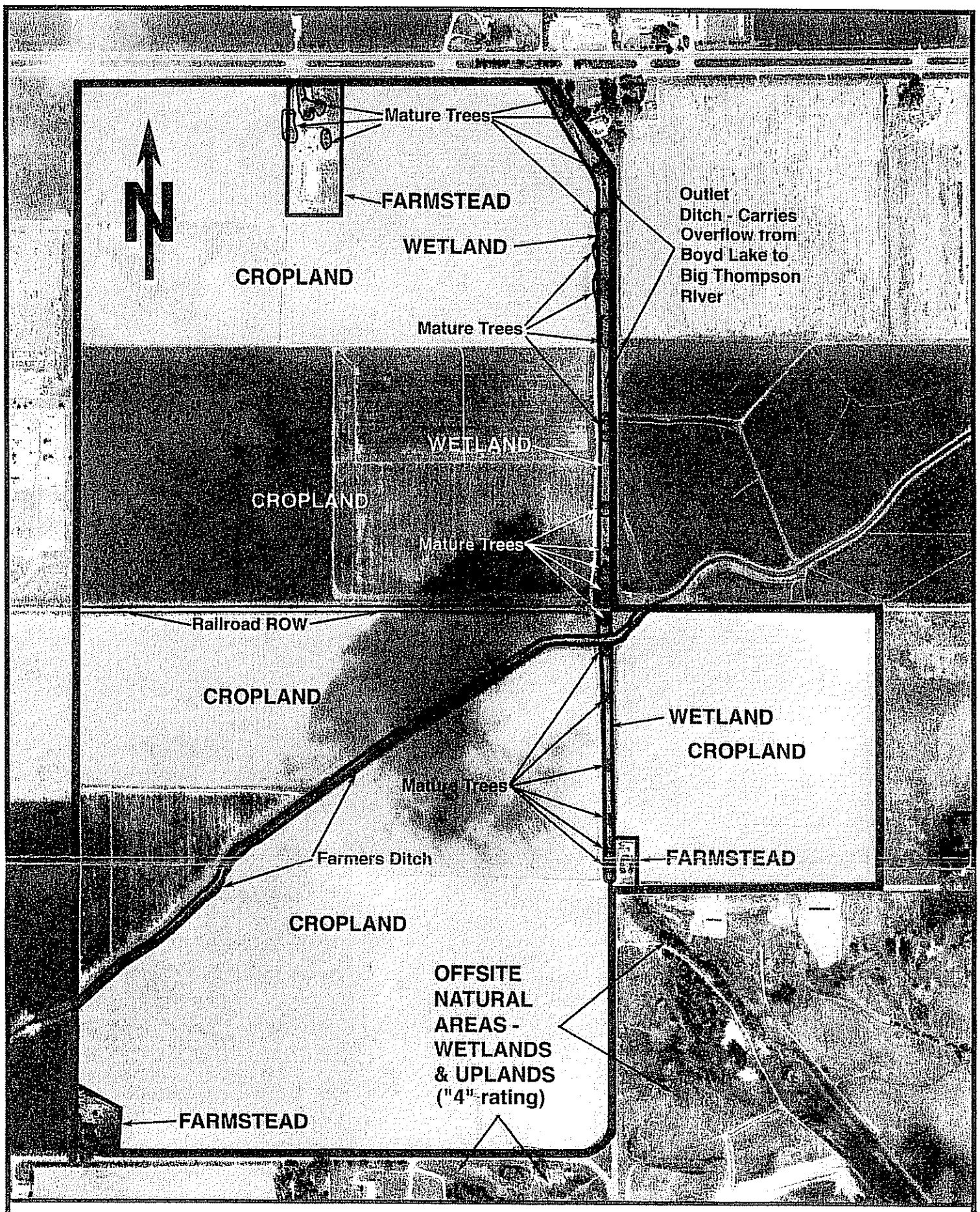


FIGURE 2
Habitat Mapping

Rocky Mountain Village III - Western Portion

McWhinney Enterprises

Scale: 1" = 600'

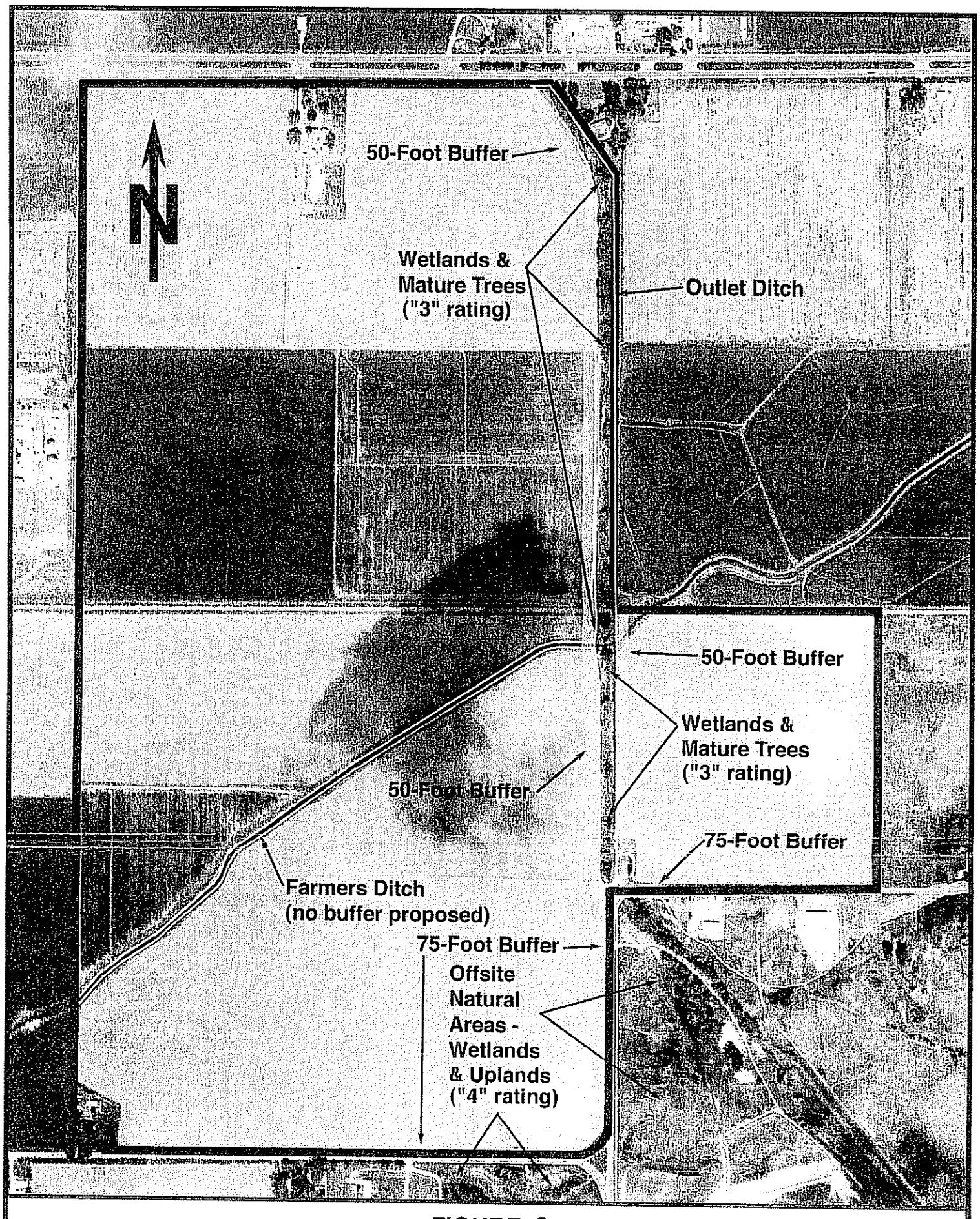


FIGURE 3
Environmentally Sensitive Areas

Rocky Mountain Village III - Western Portion

McWhinney Enterprises

Environmentally Sensitive Areas Rated 5 or Below (Recommend 50 to 75-foot buffer to protect natural resources)

Scale: 1" = 600'

habitat value is limited by its narrow configuration, lack of adjacent natural habitats, its close proximity to croplands, and its lack of continuity with other natural areas.

Habitat between the outlet ditch edge and cropland is restricted to a narrow strip of ground supporting primarily non-native and annual weedy species such as smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*), prostrate knotweed (*Polygonum aviculare*), common mullein (*Verbascum thapsus*), yellow foxtail (*Setaria glauca*), field bindweed (*Convolvulus arvensis*), prickly lettuce, (*Lactuca serriola*), common dandelion (*Taraxacum officinale*), Canada thistle (*Cirsium arvense*), and musk thistle (*Carduus nutans*). These areas and adjacent croplands have limited wildlife habitat value and would not be classified as environmentally sensitive areas.

It should be noted that two areas classified as Natural Areas (Sites #14 and #15 with a "4" rating) in *In the Nature of Things, Loveland's Natural Areas* exist adjacent to the southeast corner of the property (see Figures 2 and 3). These areas contain a mixture of wetlands and uplands, and the area east and south of County Road 9E has undeveloped land continuity with the Big Thompson River corridor to the south. These areas lack continuity with the Rocky Mountain Village III Western Portion, however, because of the presence of County Road 9E.

Wildlife Use and Corridors

The only potential wildlife movement corridor on the property is the Outlet Ditch. This ditch is hydrologically linked to Boyd Lake and the Big Thompson River, but it does not provide a continuous wildlife movement corridor between these two areas due to disruption by Highway 34 at the north edge of the property and by County Road 9E at the south edge of the property. The greatest potential for wildlife movement to and from the property is most likely to occur across County Road 9E from the Big Thompson River corridor. County Road 9E is a two-lane road with relatively low traffic volume. Wildlife movement between the property and the Boyd Lake area to the north is unlikely since wildlife would have to cross a four-lane, high-speed highway (Highway 34) with high traffic volumes. In addition, the size of the Outlet Ditch culvert under Highway 34 is insufficient in size to permit passage by most wildlife species.

Wildlife use of the property is limited primarily to urban-adapted songbirds, small and medium-sized mammals (rodents, red fox, raccoon, striped skunk), and reptiles and amphibians. Open-country raptor species such as great-horned owl and red-tailed hawk may use the large trees in the Outlet Ditch as perch sites, although suitable hunting habitat is limited by adjacent croplands. No evidence of past raptor nesting activity (stick nests, nest cavities, or whitewash) was noted during the field survey. Wildlife species noted during the field survey included common snipe, great-horned owl, American robin, and American kestrel along the Outlet Ditch. A dead red fox was also found along the edge of the Outlet

Ditch. Canada goose droppings between a harvested cornfield and the Outlet Ditch indicated considerable use of the area by Canada geese.

Croplands have little value for wildlife because of seasonal cultivation or mowing and the lack of forage and cover. As a wheat or corn crop matures, croplands may receive limited use by species such as white-tailed deer, raccoon, striped skunk, ring-necked pheasant, common grackle, red-winged blackbird, and western meadowlark. Once the crop is harvested and cover is removed, wildlife use of this habitat is limited to occasional use by rodents, songbirds, and waterfowl such as Canada goose that forage for remnant wheat or corn kernels left by harvest operations.

No habitat for any state or federally listed threatened or endangered species exists within or near the Western Portion property. Suitable habitat for Ute ladies-tresses' orchid (*Spiranthes diluvialis*) and Preble's meadow jumping mouse (*Zapus hudsonius preblei*) is not present along the wetlands within the Outlet Ditch due to the steep side-slopes. Wintering bald eagles in the region may occasionally perch in large cottonwoods along the ditch, but surrounding croplands do not provide suitable winter foraging habitat.

Central Portion

This nearly level development parcel is composed of actively cultivated cropland and two irrigation reservoirs (Houts Reservoir and Equalizer Lake), as well as wetland, disturbed/weedy, grassland, and rabbitbrush/grassland habitats (see Figure 4). Cropland, disturbed weedy areas, and rabbitbrush/grassland do not meet any criteria for classification of environmentally sensitive areas. Cropland is seasonally disturbed and lacking vegetation cover between late fall and spring. It provides minimal wildlife habitat except for occasional foraging by Canada geese after harvest.

Disturbed/weedy areas have been cleared of native vegetation and revegetated by primarily weedy and non-native grasses and forbs. Dominant vegetation in these areas included kochia (*Kochia scoparia*), prickly lettuce (*Lactuca serriola*), flixweed (*Descurainia sophia*), Canada thistle (*Cirsium arvense*), intermediate wheatgrass (*Agropyron intermedium*), western wheatgrass (*Agropyron smithii*), and cheatgrass (*Bromus tectorum*). The disturbed weedy area on the west side of Houts Reservoir (see Figure 4) also contained scattered trash piles, old car bodies, and abandoned farm implements, particularly at the south end.

The two rabbitbrush/grassland habitat parcels on the west side of Equalizer Lake appeared to have had some surface disturbance in the past and currently support a mixture of native shrubs and non-native weedy species. Dominant vegetation in this habitat was rubber rabbitbrush (*Chrysothamnus nauseosus*), fringed sagebrush (*Artemisia frigida*), broom snakeweed (*Gutierrezia sarothrae*), winterfat (*Eurotia lanata*),

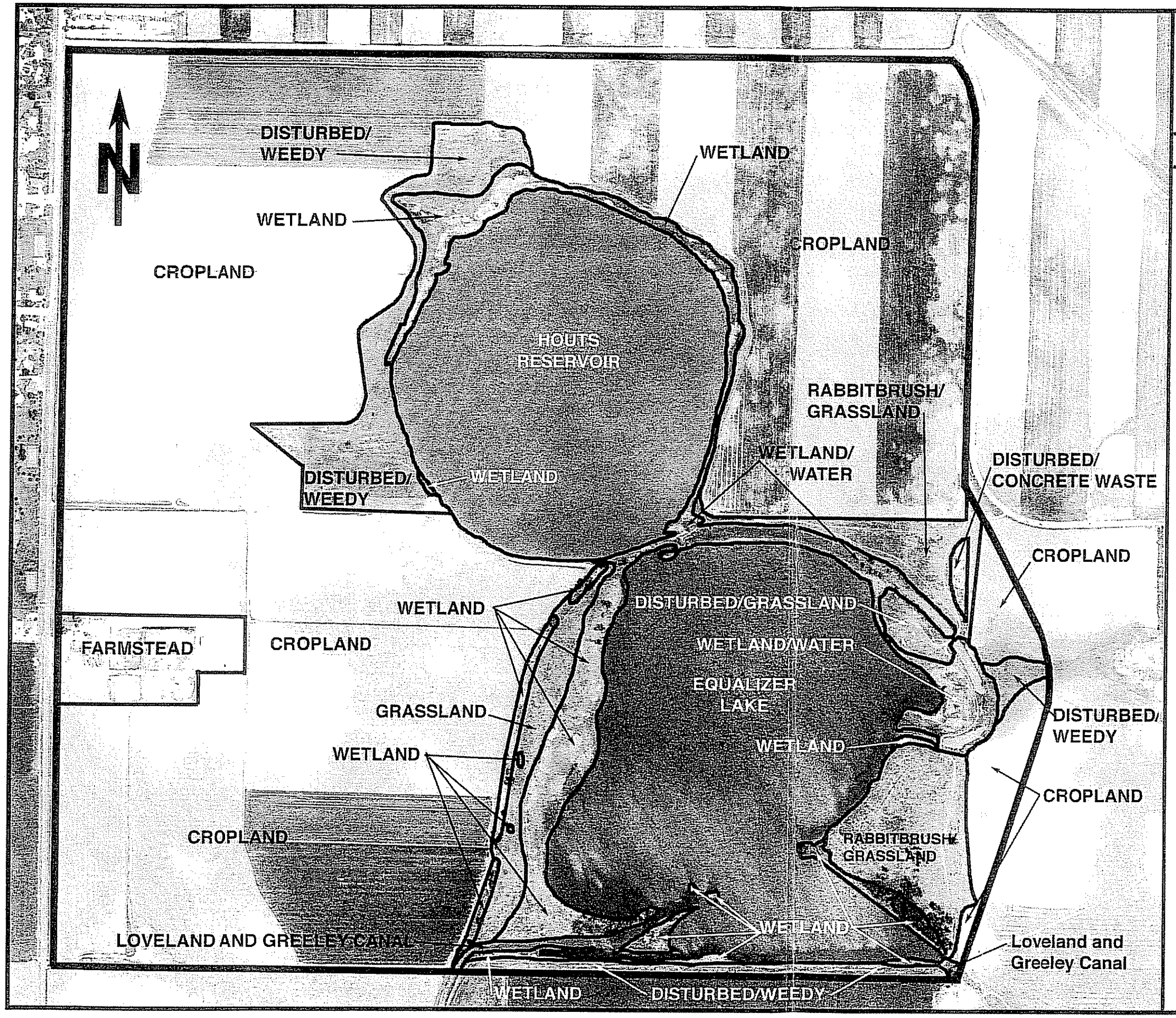


FIGURE 4
Habitat Mapping

Rocky Mountain Village III - Central Portion

McWhinney Enterprises

Scale: 1" = 600'

crested wheatgrass (*Agropyron cristatum*), cheatgrass, kochia, and Russian thistle (*Salsola kali*). These two habitat areas also contain prairie dog burrows, but observed burrow openings were in disrepair, and there was no evidence of recent occupation by prairie dogs. It is unknown if the prairie dog town had been poisoned or if plague or some other disease had caused the loss of prairie dogs in this area. This habitat is not unique in the region, and with the lack of a prairie dog population its value as hunting habitat for open-country raptors or mammalian predators is limited.

Houts Reservoir and Equalizer Lake are both classified as Natural Areas and were given overall ratings of "5" and "6," respectively in *In the Nature of Things, Loveland's Natural Areas* . Other areas on the property that were determined to qualify as environmentally sensitive areas based on field surveys and City of Loveland guidelines were lake shoreline areas that support wetlands and mature trees. There are no other drainages, areas of important wildlife habitat, or other natural areas (*In the Nature of Things, Loveland's Natural Areas*) in, or adjacent to, this parcel that would qualify as environmentally sensitive areas (see Figures 4 and 5).

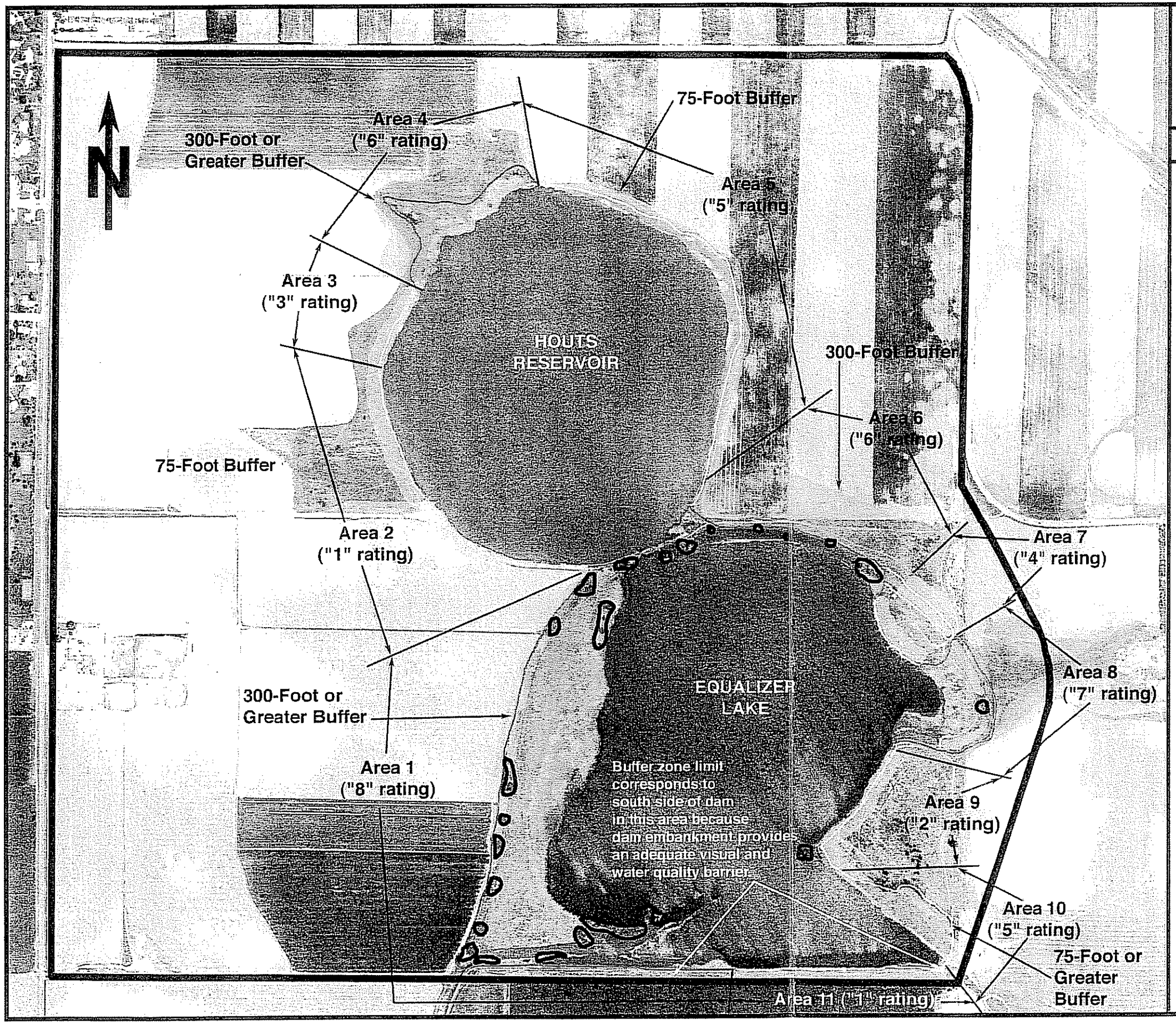
According to the *Soil Survey of Larimer County Area, Colorado* (SCS 1980), predominant soils in the area include Aquepts, Heldt clay loams, Kim loam, Nunn clay loams, and Ulm clay loam. Most of these soil units are not highly erosive soils; runoff is slow to medium and the hazard of wind and water erosion is slight to moderate. However, most of the east side of Houts Reservoir is classified as Heldt clay loam, 3 to 6 percent slopes. Runoff is rated as rapid by the SCS for this unit, with the hazard of wind erosion moderate and the hazard of water erosion severe. The field survey indicated proper surface management of this cropland area, and no problem erosion areas were observed. No slopes over 20 percent, land formerly used for landfill operations or hazardous industrial use, or fault areas were identified on the property.

Seasonal drawdowns in both lakes subject the shoreline areas to large fluctuations in water levels. As with many of the irrigation reservoirs in the region, these conditions and other management practices (e.g., rip-rapped shorelines) have limited the establishment of wetland habitats along some portions of the shoreline, especially at Houts Reservoir. The overall ratings of "5" and "6" for Houts Reservoir and Equalizer Lake, respectively, do not provide an accurate assessment of the wetlands and other natural habitats adjacent to the lakes since the ratings take into account wetlands that are marginal or non-existent along portions of the shoreline areas. In order to provide a more accurate, site-specific assessment of the overall habitat quality of shoreline wetland habitats and environmentally sensitive areas adjacent to the lakes, a ranking scheme, similar to that used in *In the Nature of Things Loveland's Natural Areas*, was developed to classify distinct shoreline segments. These rankings were then evaluated to determine appropriate recommendations for buffer zones, land use management, and adjacent development. Wetland shoreline habitat and associated upland natural areas were rated as Highest ("6" to "8" ratings),

FIGURE 5
Environmentally Sensitive Areas

Rocky Mountain Village III - Central Portion

McWhinney Enterprises



Environmentally Sensitive Areas Rated 6 or Higher (Recommend 300-foot buffer from operating high water line)

Environmentally Sensitive Areas Rated 5 or Lower (Recommend 75-foot buffer from operating high water line)

Areas of Mature Trees

Scale: 1" = 600'

Moderate ("3" to "5" ratings), or Lowest ("1" to "2" ratings) habitat quality (see Figure 5) based on the following considerations.

- Highest Quality ("6" to "8" ratings) - Extensive areas (≥ 75 feet wide) with a diversity of dense, herbaceous wetland vegetation (cattails, sedges, grasses, forbs etc.) cover including occasional stands of mature cottonwood and willow trees and some inclusions of natural upland vegetation.
- Moderate Quality ("3" to "5" ratings) - Areas with moderate herbaceous wetland vegetation cover 5 to 75 feet wide intermixed with mudflats and/or mostly young trees and/or shrubs (willows).
- Lowest Quality ("1" to "2" ratings) - Areas with minimal or no wetland vegetation establishment or disturbed shoreline areas such as rip-rapped embankments.

Rankings and boundaries of shoreline/wetland habitats are shown on Figure 5. The characteristics and rationale for the rating of each shoreline area are described in the following sections.

Area 1. This area supports the highest quality and most diverse habitat area around the perimeter of either lake and was assigned a rating of "8." It consists of a broad wetland zone that intergrades with upland grasslands and then is bordered on the western edge by wetlands that have formed in an abandoned segment of the Loveland and Greeley Canal. The current functioning inlet from the Loveland and Greeley Canal is located at the south end of Area 1 at the southwest corner of Equalizer Lake.

Scattered individuals of large, mature plains cottonwoods (*Populus sargentii*) and peach-leaf willow (*Salix amygdaloides*) trees grow at the north and south ends of Area 1 and along the abandoned ditch segment. The wetland/shoreline zone supports a broad, dense stand of common cattail (*Typha latifolia*). Representative vegetation in wetland transition zone between these wetlands and adjacent upland grasslands consisted of foxtail barley (*Hordeum jubatum*), three-square (*Scirpus americanus*), alkali muhly (*Muhlenbergia asperifolia*), showy milkweed (*Asclepias speciosa*), saltgrass (*Distichlis stricta*), sea-blite (*Suaeda depressa*), curly dock (*Rumex crispus*), and common lambsquarters (*Chenopodium album*). Blue grama (*Bouteloua gracilis*), western wheatgrass, crested wheatgrass, and kochia were the dominant species supported in upland grassland habitat between the two wetland areas. Wetlands within the abandoned portion of the Loveland and Greeley Canal were represented primarily by reed canarygrass (*Phalaris arundinacea*), common cattail, coyote willow (*Salix exigua*), and Emory sedge. The old canal segment is a ditch contained within elevated berms that create a water quality and visual barrier between Area 1 and adjacent cropland.

Area 1 supports suitable nesting and foraging habitat for waterfowl and shorebirds, small mammal habitat, songbird nesting and foraging habitat, raptor perch sites and hunting habitat as well as hunting habitat for red fox, coyote, raccoon, and striped skunk. Although a number of the larger trees are of suitable size and configuration to support raptor nesting activity, no evidence of raptor nests (i.e. stick nests, nest cavities, and whitewash accumulations) was noted in any of the larger trees in this area.

Area 2. This area is the lowest rated ("1" rating) lake shoreline area. Most of this area exhibits recent surface disturbance and compacted soils with a high coarse fragment content. There are no wetlands supported in this shoreline segment, and portions have been rip-rapped with concrete blocks. Existing vegetation cover is provided primarily by low-lying annual weeds. Because of the lack of vegetation cover, wetlands, and shoreline mud flats, this area is unsuitable for use by waterfowl, shorebirds, and most other wildlife species.

Area 3. Most of this area consists primarily of disturbed/weedy habitat, although a thin strip (<5-10 feet wide in most places) of wetland vegetation, consisting primarily of common cattail, is also supported along the shoreline zone. This area was given a habitat rating of "3." Vegetation cover provided by the cattail stands as well as the grasses and forbs in the adjacent upland strip may provide sufficient cover to support waterfowl nesting use. The cattail stands, although narrow, have sufficient height to provide a visual barrier between adjacent uplands and waterfowl on the surface of the reservoir.

Area 4. Although no shrub or trees are supported in this area, the wetland zone is relatively broad (≥ 75 feet, and it supports a diversity of herbaceous wetland species. Wetland habitat extends nearly 400 feet from the reservoir edge along a shallow drainage that feeds into this shoreline zone from adjacent uplands (see Figures 4 and 5). Wetlands along the shoreline area consist of dense stands of common cattail, while along the shallow drainage a more diverse mix of cattails and other wetland species such as three-square, Baltic rush (*Juncus balticus*), foxtail barley, sand spurrey (*Spergularia marina*), saltgrass, and reed canarygrass are supported. Area 4 was determined to provide suitable habitat for waterfowl and shorebird nesting and foraging. This area was given a rating of "7" because of the width of the wetland zone, the diversity of wetland vegetation present, and its importance as wildlife habitat.

Area 5. Wetlands in this area consist of dense, stands of cattails intermixed with pockets of mostly bare mudflats. Most wetlands are less than 75 feet in width, and the diversity of wetland vegetation is limited. The narrow wetland transition zone between the cattail stands and adjacent upland cropland supports primarily narrow, linear stands of foxtail barley and reed canarygrass. No shrubs or trees grow along this area. Wildlife use of this area is similar to Area 3 but possibly more extensive because of the broader band of wetland vegetation. A habitat rating of "5" was assigned to this area.

Area 6. This area is mixture of wetlands and open water habitat that has been created by an inoperable portion of the Loveland and Greeley Canal. This portion of the ditch appeared to have supplied water to Equalizer Lake in the past but now has open water connections to the lake and therefore contains surface water at the same level as the lake. Narrow bands of wetland vegetation exist along both of the ditch embankments. Pockets of wetland and upland shrubs such as coyote willow, chokecherry (*Prunus virginiana*), and skunkbush sumac (*Rhus trilobata*) are also supported along the top of the interior ditch

embankment. A few large plains cottonwood trees grow at each end of Area 6 as well. The total width of the wetlands in conjunction with the open water ditch area equals or exceeds 75 feet along most of the length of Area 6. The mixture of a protected open water area in combination with wetlands and shrubs and trees creates a relatively diverse habitat area, and Area 6 was given a rating of "6."

This area was judged to provide nesting, loafing, and foraging habitat for waterfowl and shorebirds; small mammal habitat, songbird nesting and foraging habitat, and raptor perch sites. Although a number of the larger trees are of suitable size and configuration to support raptor nesting activity, no evidence of raptor nests (i.e. stick nests, nest cavities, and whitewash accumulations) was noted in any of the larger trees in this area.

Area 7. This area, like Area 6, also contains a portion of the old Loveland and Greeley Canal but wetland and woody vegetation development along the canal and lake shoreline is much more limited than in Area 7. The central upland portion between the lake shoreline and the canal is a mowed grassland area with little cover or suitability as wildlife habitat. This disturbed/grassland area is used by the Greeley and Loveland Irrigation Company as a picnic area. The adjacent shoreline is used for fishing and boat launching and docking. Area 7 was given a habitat rating of only "4" because of the lack of woody vegetation, minimal wetland development, and human disturbance factors. Wildlife use of Area 7 is limited open-country songbirds and resting and foraging by waterfowl when human disturbance is lacking.

Area 8. This area contains the southern most segment of the inoperable portion of the Loveland and Greeley Canal. It encircles three sides of a small bay on the east side of Equalizer Lake (see Figure 5) and occupies a lower topographic position than Area 7 to the north and Area 9 to the south. As a result, wetland development is much more extensive and diverse in this area. Wetland habitat is nearly continuous for 300 feet from the lake edge to the east side of the canal except for open water portions of the canal and a narrow dirt road that parallels the west side of the canal. Dense stands of common cattail are supported in the more saturated portions of this wetland while coyote willow, Emory sedge, reed canarygrass, blue vervain (*Verbena hastata*) were dominant along the wetland periphery. A large multi-trunked peach-leaf willow tree also grows near the eastern edge of this area (see Figure 5). This area was given a habitat rating of "7" because of the presence of pockets of open water, inclusions of woody vegetation, and the width and diversity of wetlands.

The disturbed/weedy area on the east side of Area 8 (see Figure 4) is of interest because much of this area was delineated as wetland by ENSR in 1997 (*Equalizer Lake Property Wetland Delineation*, October 1997). The site was classified as an "atypical" wetland because it had been farmed and the soil profile disturbed by cultivation. Wetland surveys completed by Cedar Creek in 1998 recorded some sites dominated by wetland associated plants including yellow foxtail (*Setaria glauca*) and foxtail barley in this

area. Other sites were dominated by upland species such as Canada thistle, common sunflower (*Helianthus annuus*), cheatgrass, and horseweed (*Conyza canadensis*). However, Cedar Creek surveys did not find any evidence of hydric soils or wetland hydrology. The situation was discussed with Terry McKee of the U.S. Army Corps of Engineers, and he indicated that the area was probably a wetland/upland transition zone and should be classified as non-wetland based on current evidence that all three criteria (vegetation, soils, and hydrology) for wetland determination were not met.

Area 8 was judged to provide suitable nesting, foraging, and loafing habitat for waterfowl and shorebirds, small mammal habitat, songbird nesting and foraging habitat, and raptor perch sites and foraging habitat. A stick nest of a size and configuration suggesting use by long-eared owl was located in the peach-leaf willow tree in this area.

Area 9. Wetland establishment is minimal to non-existent in this area. Wetlands have not formed in this area because a nearly vertical shoreline embankment (5 to 6 feet high) separates uplands from the operating high water line of the lake. Pockets of wetland (too small to map) have formed only where portions of the shoreline embankment have slumped into lake. This shoreline appears to be subjected to continuous erosion from wave action in the lake. Old car bodies, tractor tires, and crumpled culverts have been placed in the lake shallows, possibly in an effort to slow embankment erosion. This area was given a habitat rating of "2" because of the lack of wetlands and the steep shoreline embankment that limit the suitability of this area as wildlife habitat. Wildlife use of this area is likely restricted to shorebird foraging during periods when lower lake water levels expose shoreline mudflats.

Area 10. The shoreline embankment in this area is also nearly vertical in most areas, but it is lower (4 to 5 feet) in height than in Area 9, and some wetland development has occurred above the embankment edge. A dense stand of young plains cottonwoods is also supported in this area. These trees are relatively even-aged and ranged in size from 4 to 8 inches diameter at breast height (dbh). Total canopy cover within the densest portions of this tree stand was estimated at 75 to 80 percent. Most of this cotttonwood stand grows within the wetland zone, but some portions of the stand are supported outside of the wetland boundary (see Figure 4). Cottonwood stands outside the wetland were included within the area identified as environmentally sensitive (see Figure 5) because these trees add vegetational structural diversity and result in an increase wildlife habitat diversity in this area.

Dominant vegetation species within the wetland portion of this area were plains cottonwood, reed canarygrass, coyote willow, and curly dock. In the non-wetland portion dominant understory species were cheatgrass, Canada thistle, kochia, and crested wheatgrass. This area was given a rating of "5" because of the mix of wetlands and young cottonwood trees that create a diverse but relatively small habitat parcel. This area was judged to be most suitable for use as songbird nesting, perching, and foraging habitat.

There could also be some shorebird foraging use of this area during periods when reduced lake water levels expose shoreline mudflats.

The Loveland and Greeley Canal exits Equalizer Lake at the south end of this area and the southeast corner of the property.

Area 11. This shoreline area is composed primarily of a concrete, rip-rapped dam embankment that supports a very narrow strip of reed canarygrass wetland at its east end. Wetlands are non-existent in the remainder of this area, and overall habitat quality is low because of the dirt packed road surface along the top of the dam and the lack of vegetation cover except for weedy annual species. This area was given a habitat rating of only "1" since vegetation cover and suitable foraging areas are lacking for most wildlife species

Wildlife Use and Corridors

The property is surrounded by roadways and actively cultivated cropland and the only potential movement corridor that connects this property to other natural areas is the Loveland and Greeley Canal. The canal extends from the southeast corner of Boyd Lake to the southwest corner of Equalizer Lake, but its value as a wildlife movement corridor between these two areas is severely limited by surrounding croplands and developments that have restricted the development of any suitable vegetation cover along its entire length. This corridor is also disrupted by Boyd Lake Avenue. Similar constraints exist with respect to the canal's viability as a movement corridor where it exits the southeast corner of the property. In addition, this segment of the canal is interrupted by the I-25 corridor before it reaches the natural area in the southeast corner of the Eastern Portion of the Rocky Mountain Village III development area (see following section).

Habitat suitability for various wildlife groups and species was summarized for each distinct shoreline area in the preceding sections. Although the diversity of wildlife using the area is relatively low during the late fall season when the field surveys were completed, a number of species were observed in association with the two lakes and natural areas around the lake perimeters. Waterfowl use of the area was also probably reduced by the fact that most of Equalizer Lake had been drained at the time of the survey. The area greatest value is in providing important habitat for migrating and summer resident waterfowl and shorebirds. Dave Graves with the Greeley and Loveland Irrigation company indicated that waterfowl use of the lakes is extensive from spring through late fall. Lake margins and marshy areas provide resting and foraging areas for waterfowl, shorebirds, and wading birds, including species such as American white pelican and great blue heron. Waterfowl and shorebirds observed on the lake surface and at lake margins included Canada goose, mallard, northern shoveler, gulls, and killdeer.

Other avian species observed were northern harrier, ring-necked pheasant, short-eared owl, great horned owl, belted kingfisher, northern flicker, hairy woodpecker, American crow, western meadowlark, black-capped chickadee, and song sparrow. Raccoon tracks were noted at several locations around the lake perimeters, and Nuttall's cottontail were seen in rabbitbrush/grassland habitat as well as in disturbed/weedy areas with denser vegetation cover.

Potential or known habitat for three federally listed threatened species exists within the property boundaries. Suitable habitat for Ute ladies-tresses' orchid and Preble's meadow jumping mouse exists along the upland margins of the cattail stands where grass/forb wetlands or moist meadow areas exist, primarily along the west side of Equalizer Lake in Area 1 and along the eastern margin of Area 8. Suitable habitat in Area 8 and the south edge of the Equalizer Lake dam embankment were surveyed for Ute ladies-tresses' orchid by ENSR in 1997 with negative results (*Ute Ladies-Tresses' Orchid Survey Equalizer Lake Property*, October 1997).

Wintering bald eagles use the two lakes for foraging habitat. Wintering bald eagles in the region feed on dead and crippled geese or ducks on open or frozen reservoirs. Large cottonwood trees around the perimeter of Equalizer Lake provide suitable perch sites for these foraging eagles. Dave Graves with the Greeley and Loveland Irrigation Company indicated that trees at the south end of Area 1 are the most frequently used perch sites by wintering eagles.

Eastern Portion

This development parcel is gently sloping to the southwest with a more defined drainage in the southwest corner of the property (see Figures 1 and 6). The property is composed almost entirely of cropland except for the southwest drainage portion and a small wetland depression in the northeast corner (see Figure 6). Areas defined as environmentally sensitive by City of Loveland guidelines are limited to two irrigation ditches (Farmers Ditch and the Loveland and Greeley Canal), the small wetland depression in the northeast corner of the property, and the drainage in the southwest corner of the property (see Figure 7). The drainage in the southwest corner of the property is listed as a Natural Area #99 (with a rating of "7") in *In the Nature of Things, Loveland's Natural Areas* . There are no other drainages, areas of important wildlife habitat, or other Natural Areas (*In the Nature of Things, Loveland's Natural Areas*) in this parcel that would qualify as environmentally sensitive areas.

According to the *Soil Survey of Larimer County Area, Colorado* (SCS 1980), predominant soils in the area include Fort Collins loam, Kim loam, Nunn clay loam, Weld silt loam, and Wiley silt loam. These are not highly erosive soils; runoff is slow to medium and the hazard of wind or water erosion ranges from slight to moderate for these soils. No land formerly used for landfill operations or hazardous industrial use or fault areas were identified on the property. Slopes over 20 percent do exist, however, within the lower

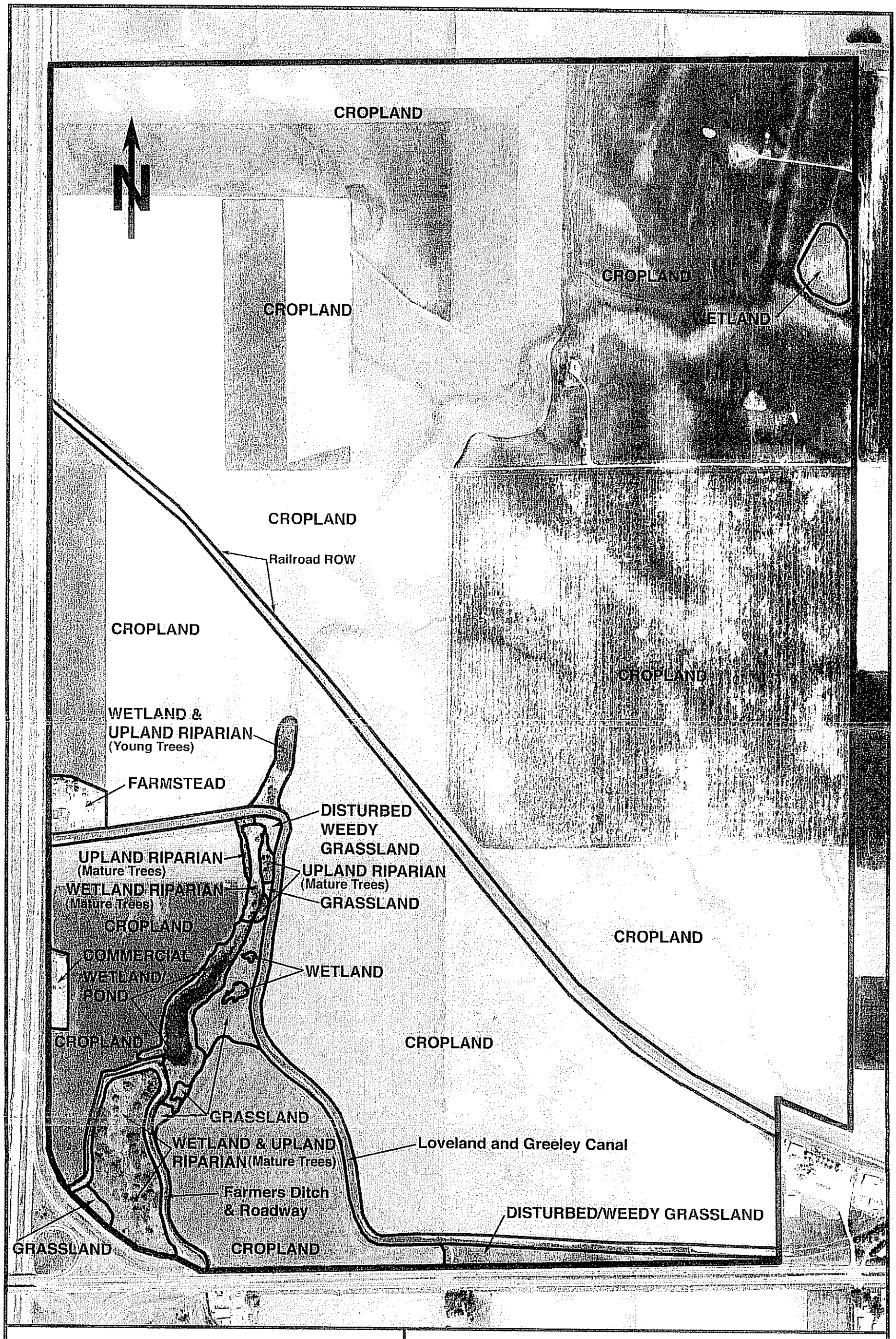


FIGURE 6
Habitat Mapping

Rocky Mountain Village III - Eastern Portion

McWhinney Enterprises

Scale: 1" = 600'

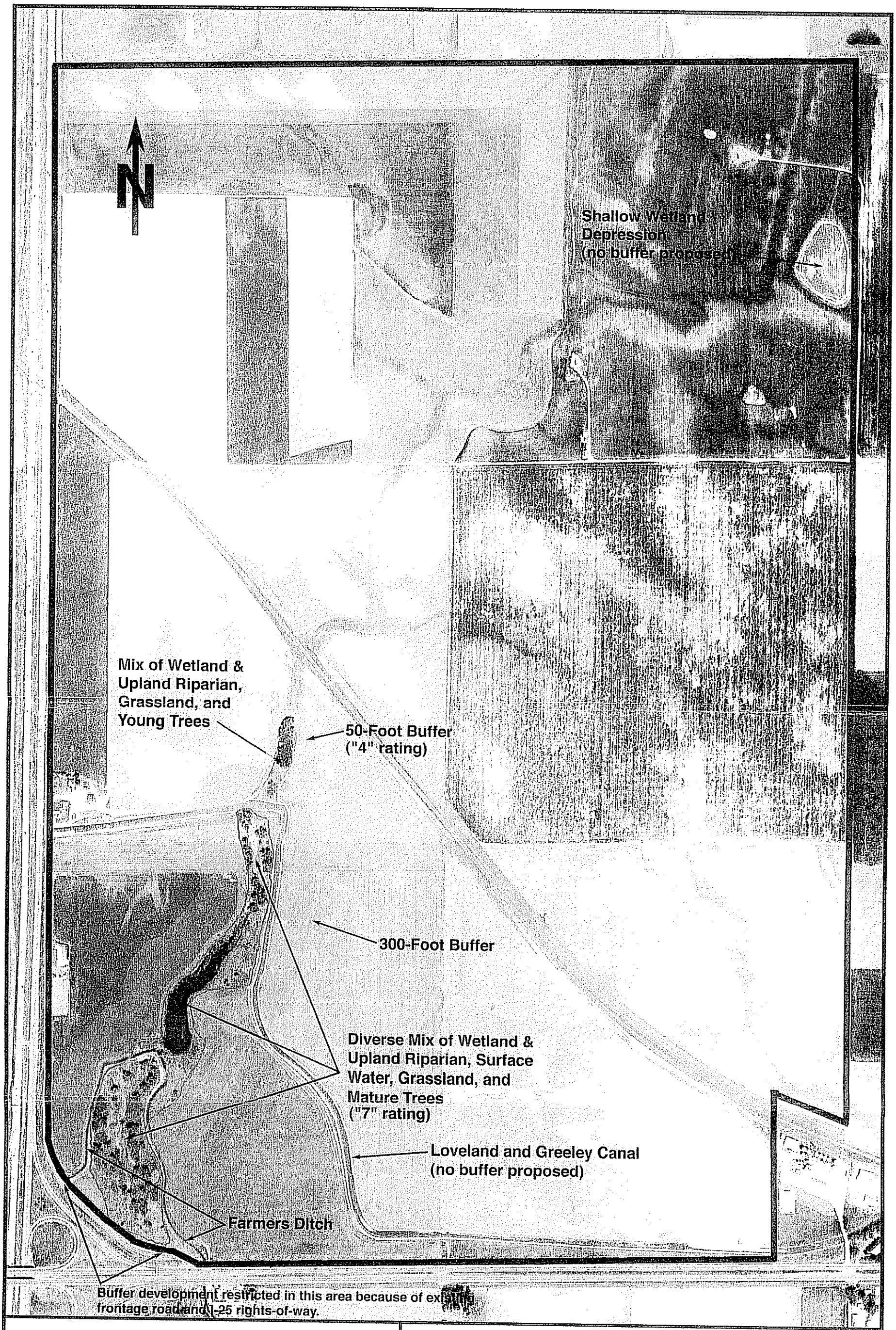


FIGURE 7
Environmentally Sensitive Areas

Rocky Mountain Village III - Eastern Portion

McWhinney Enterprises

Environmentally Sensitive Area Rated 6 or Higher (Recommend 300-foot buffer to protect natural resources)

Environmentally Sensitive Area Rated 5 or Lower (Recommend 50-foot buffer to protect natural resources)

Scale: 1" = 600'

segment of the drainage in Natual Area #99 (see Figure 1). These slopes are confined within the area already defined as environmentally sensitive because of the presence of wetlands and important other habitats.

Wetlands associated with the Farmers Ditch and the Loveland and Greeley Canal were not delineated because wetlands supported in active irrigation ditches are not classified as jurisdictional by the Corps of Engineers. In addition, since active cultivation approaches to the edges of most segments of these ditches and there is minimal vegetation cover, these ditches have little value as wildlife movement corridors or wildlife habitat, except where they are in close proximity to Natural Area #99. The ditches were classified as environmentally sensitive, however, because irrigation ditches are identified as environmentally sensitive areas by City of Loveland guidelines (Appendix D).

Wetlands were located on the property within Natural Area #99 and in a small cropland depression near the northeast property corner (see Figure 6). The northeast corner wetland may not be considered jurisdictional by the Corps of Engineers since it has apparently established as a direct result of irrigation water collection in a depression surrounded by cropland. This wetland has been cultivated in the past, but appears to accumulate too much moisture to support the crops planted on adjacent, more upland sites. Vegetation supported in this wetland included yellow foxtail, smartweed (*Polygonum* sp.), and small pockets of common cattail. Total vegetation cover was relatively sparse (15 to 25 percent), and there was no woody vegetation growing at this site. Although this area was classified as wetland, it has minimal value as wildlife habitat because of small size, seasonal cultivation, minimal vegetation cover, and surrounding cropland.

In contrast, wetlands within Natural Area #99 support a variety of wetland species and the mixture of these wetlands with the existing pond, grasslands, and upland riparian areas create a very diverse wildlife habitat area. Wetland in this area are located along the drainage bottom, around the periphery of the pond, and on side-slopes near the irrigation ditches. Wetlands on the side-slopes have likely been created from seepage from adjacent irrigation ditches and may not be classified as jurisdictional by the Corps of Engineers. These wetlands do create additional habitat diversity within the site, however. Representative wetland species recorded in the more saturated sites and around the pond margins were coyote willow, common cattail, pondweed (*Potamogeton* sp.), watercress (*Nasturtium officinale*), Baltic rush, three-square, Nebraska sedge (*Carex nebracensis*), swamp milkweed (*Asclepias incarnata*), smartweed, and willowherb (*Epilobium* sp.). At less saturated wetland sites, reed canarygrass, teasel (*Dipsacus sylvestris*), clustered field sedge (*Carex praegracilis*), Emory sedge, switchgrass (*Panicum virgatum*), foxtail barley, hemp dogbane, alkali muhly, field mint (*Mentha arvensis*), showy milkweed, and Nuttall's sunflower (*Helianthus nuttallii*) were representative species. In many areas of the lower and upper segments of the drainage, there is also an overstory of mature plains cottonwood and peach-leaf willow.

Upland riparian areas within the drainage support plains cottonwoods, chokecherry, Wood's rose (*Rosa woodsii*), western snowberry (*Symphoricarpos occidentalis*), rubber rabbitbrush, and skunkbush sumac in the overstory and a mixture of native and non-native species such as smooth brome, cheatgrass, western wheatgrass, slender wheatgrass (*Agropyron trachycaulum*), crested wheatgrass, Indian grass (*Sorghastrum nutans*), Canada wildrye (*Elymus canadensis*), Kentucky bluegrass (*Poa pratensis*), Canada thistle, and Virgin's bower (*Clematis ligusticifolia*) in the understory.

The entire drainage area between the Loveland and Greeley Canal and Highway 34 and the I-25 frontage road was included as an environmentally sensitive area with a rating of "7" because of the presence of wetlands and the diversity of wildlife habitat created by the mix of wetlands, riparian uplands, and grassland habitats. An even higher habitat rating would be appropriate for this area if it was not surrounded by croplands and roadways and had some connection to other natural areas.

To the northeast of the Loveland and Greeley Canal, habitat in the drainage is less diverse and vegetation is dominated by young plains cottonwoods (4 to 8 inches dbh) and reed canarygrass in the wetland portion and by young plains cottonwoods and smooth brome in the non-wetland portions. This area was given a lower habitat rating ("4") because of reduced vegetation diversity, its narrow configuration, and adjacent croplands (see Figure 7).

Wildlife Use and Corridors

There are no wildlife movement corridors from natural areas in the Eastern Portion to other natural areas. Potential movement to and from the property along the Farmers Ditch is blocked by I-25 and Highway 34. Active cultivation approaches right up to the edge of the Loveland and Greeley Canal and there is minimal vegetation cover. Potential movement along this ditch is blocked by I-25 at the western property edge and by Highway 34 approximately 2 miles east of the Eastern Portion. The I-25 underpass for the Union Pacific Railroad right-of-way is large enough to permit wildlife passage, but there is minimal cover along the right-of-way between the northeast corner of Boyd Lake and the Eastern Portion as a result of active cultivation along the entire length of this right-of-way segment.

Natural Area #99 supports suitable nesting and foraging habitat for waterfowl and shorebirds, small mammal habitat, songbird nesting and foraging habitat, raptor perch sites and hunting habitat as well as hunting habitat for red fox, coyote, raccoon, and striped skunk. Suitable breeding and foraging habitat for a variety of amphibians and reptiles is also present. Although a number of the larger trees are of suitable size and configuration to support raptor nesting activity, no evidence of raptor nests (i.e. stick nests, nest cavities, and whitewash accumulations) was noted in any of the larger trees in this area.

Wildlife species observed during the field surveys included mallard, red-tailed hawk, American kestrel, great horned owl, belted kingfisher, northern flicker, blue jay, black-billed magpie, American robin, western meadowlark, black-capped chickadee, American goldfinch, and Nuttall's cottontail

Potential habitat for two federally listed threatened species exists within Natural Area #99. Suitable habitat for Ute ladies-tresses' orchid exists along the margins of cattail stands and other saturated areas where wetland vegetation cover is less than 2 feet tall. Suitable habitat for Preble's meadow jumping mouse exists along the upland margins of wetlands where grass/forb wetlands or moist meadow areas exist, especially along the west side of the drainage.

Wintering bald eagles could perch in the large cottonwoods along the drainage, but surrounding croplands and highway corridors do not provide suitable winter foraging habitat for bald eagle.

IMPACTS OF DEVELOPMENT AND MITIGATION RECOMMENDATIONS

Specific development plans were not available at the time of report preparation, but a general assessment of potential impacts to environmentally sensitive areas can be made based the development envelopes proposed in the General Development Plan (GDP).

Western Portion

Impacts. The south half of this development parcel is proposed for residential development while the north half would be developed to commercial retail and a residential park. None of the proposed developments would directly affect environmentally sensitive areas in the Outlet Ditch or Natural Areas #14 and #15 to the south of the development. Indirect impacts could occur as a result of surface water runoff from developed sites into the Outlet Ditch or Natural Areas #14 and #15. The loss of irrigation water application on the property could also have an effect on wetlands in Natural Areas #14 and #15.

The Outlet Ditch has an elevated berm along most of its length, and it is unlikely that surface runoff from developed areas would reach the ditch and affect water quality, especially if Best Management Practices (BMPs) are employed to control runoff during and after construction. There is the potential that irrigation may provide some surface water recharge to wetlands in Natural Areas #14 and #15, and that loss of this water may result in drier conditions in these wetlands. **However, this potential impact is unlikely since County Road 9E currently prevents any surface flow off the property from reaching Natural Areas #14 and #15. No data on groundwater conditions are available for this area, but it is assumed that subsurface recharge must support the wetlands in Natural Area #15 since there is no up gradient surface flow connection to this area because of the presence of County Road 9E. The most likely source of this**

subsurface recharge would be from Natural Area #14. Wetlands in Natural Area #14 appear to be supported primarily from surface flow and seepage from the Outlet Ditch. Project development would have no effect on hydrologic conditions and wetlands in Natural Area #14 since flow from the Outlet Ditch would be maintained to this area.

Mitigation. In order to further protect wetlands and trees in the Outlet Ditch and urban wildlife use of this ditch, a minimum setback of 50 feet is recommended from the **top of the existing ditch embankment** (see Figure 3). A 50-foot buffer is sufficient to protect water quality in the ditch since the edges of the ditch are bermed. Development should not intrude into the buffer zone, but a footpath or trail system would be appropriate for this corridor. The buffer zone should be planted, at a minimum to self-sustaining grass cover. Plantings of native grasses and shrubs would further enhance the corridor as wildlife habitat for urban adapted species.

If road crossings are required over the Outlet Ditch, these crossings should avoid areas in the ditch that support trees. Culverts under **any new roadways over the ditch** should be sized to permit wildlife movement along the ditch.

There are limited opportunities for enhancement or impacts to Natural Areas #14 and #15 because of separation by County Road 9E. A 75-foot setback **from the west and north edges of County Road 9E** is recommended to minimize an abrupt shift from these natural areas to development. However, creation of attractive natural areas within this buffer may not be appropriate. Creation of natural areas on the west and north sides of County Road 9E would encourage wildlife movement across County Road 9E and increase the risk of wildlife road-kills. **Plantings of turf grass in this buffer area would be appropriate, but plantings of trees and shrubs should be emphasized to provide some visual screening between development sites and Natural Areas #14 and #15.**

No mitigation is proposed for the Farmer's Ditch since this ditch is not a suitable wildlife corridor and it provides minimal wildlife habitat.

Detailed preliminary design plans will be prepared to address each sensitive area, required buffers, mitigation measures, and road crossing recommendations. These plans will be prepared prior to, or in conjunction with, the approval of a Preliminary Plat for any building lots or development features adjacent to or within 300 feet of identified sensitive areas.

Central Portion

Impacts. The area to the west of the lakes is proposed for residential development, while the area to the east of the lakes is proposed for commercial development. None of the proposed developments would directly affect the lakes or environmentally sensitive habitats identified around the lake perimeters. Indirect impacts to wildlife use of these areas could occur from increased human presence and recreational use of the lakes and shoreline habitats.

Erosion, runoff, and general disturbance from construction may produce some indirect, temporary impacts on water quality in the lakes and adjacent wetland / shoreline habitats if erosion is unchecked. However, standard construction mitigation measures and BMPs such as fabric silt fences, catchment basins, hay bales, berms, and other standard sediment and surface runoff control measures should be sufficient to prevent any substantial sediment transport or liquid spills into the lake or shoreline areas.

Depending on surface configuration after final grading and other factors such as street alignment, street runoff and nutrient-laden runoff from fertilized lawns could flow into shoreline / wetland areas and may alter the water quality of Houts Reservoir and Equalizer Lake. However, overall water quality of surface runoff into the lakes should be improved because of the following.

- Watering for residential and commercial landscaping would require a reduced volume of water over current agricultural irrigation practices.
- Reduced quantities of agricultural chemicals would be used for landscaping as opposed to existing croplands.
- Recommended setbacks (see below) from the operating high water lines and proposed developments will be sufficient to intercept and retain sediment and potentially toxic substances (e.g. herbicides, pesticides, etc.) in sheet flow runoff from developed sites.

Mitigation. In order to further protect wetlands, mature trees, and other environmentally sensitive areas around the lakes, development setbacks of 75 to 300 feet or more are recommended from the operating high water lines of the lakes (see Figure 5). These recommendations are consistent with or exceed guidelines provided for lake shoreline setbacks provided in *City of Loveland Open Lands Plan* (Open Lands Steering Committee et al. 1996). Proposed setbacks would also protect any potential habitat for bald eagle, Ute ladies-tresses' orchid, and Preble's meadow jumping mouse.

Lake access should only be permitted in shoreline areas with minimal or no wetlands, and recreational trail systems should avoid the higher rated wildlife habitat areas. Free-roaming pets should be prohibited and lease laws strictly enforced along trail systems to minimize dog and cat/wildlife interactions.

More specific recommendations for each rated shoreline segment are provided in the following sections.

- Area 1. A setback of 300 feet or more is recommended for this area. The setback should correspond to the western edge of the abandoned Loveland and Greeley Canal. This ditch has elevated berms that create good visual and water quality barriers between the natural areas and proposed development sites. **Additional setbacks may be employed from the outside edge of the ditch, but these setbacks are not necessary to protect important habitat features within the recommended buffer zone. The recommended buffer would also be sufficient to protect potential Preble's meadow jumping mouse habitat within the natural area since suitable habitat ends abruptly in the abandoned ditch. Prohibition of free-roaming pets within the buffer zone and adjacent areas would preclude any potential indirect impacts to Preble's meadow jumping mouse from predation by pets.** Because of the high quality of wildlife habitat in this area, there should be no development of trail systems within the buffer zone. Selective placement of one or two short lengths of elevated boardwalk for wildlife viewing and education may be appropriate, **but siting and construction of any boardwalks should be carefully planned in coordination with natural resource experts to avoid impacts to areas of highest quality and important wildlife use areas. No other developments or park features should be considered for this buffer zone.**

  Where possible, plantings of a mixture of native upland vegetation and more formal landscaping would be suitable for additional development setbacks in this area. Trail and recreational site development would be appropriate for the area between the buffer zone and developed sites. **Interpretative and educational signs should be placed at regular intervals along the outside edge of the buffer zone. The signs should stress the need for no human intrusion into important habitat areas. The placement of split-rail or similar type of fencing with wire mesh along the lower portion may also be necessary along the buffer edge to further discourage intrusion by humans and pets.**

- Area 2. Because of the low habitat quality of this shoreline area, this would be the best area on Houts Lake to develop more formal recreational facilities such as picnic areas and docks for non-motorized boat use. The 75-foot buffer zone should be planted to native vegetation or landscaped to protect lake water quality. **Because wildlife habitat quality is low along this area and other areas designated by yellow on Figure 5, buffer recommendations are directed primarily at protecting water quality in both lakes rather than preserving wildlife habitat. Therefore, buffers proposed for yellow designated areas are not intended to limit all human intrusion or developments. Limited trail development, human recreation activities, and the integration of detention and other storm management features would be appropriate within the proposed 75-foot development setbacks.**

  Trail development could connect the two 75-foot development setback at the south end of Houts Reservoir via the dam between Houts and Equalizer. The dam faces consist primarily of rip-rap with minimal wetland or other habitat development. The dam is currently used as a road crossing for use in dam maintenance and operation by the Greeley and Loveland Irrigation Company. This use is likely to continue, and occasional pedestrian use of this road as a trail is unlikely to create additional adverse impacts to wildlife use of the area. One exception is that bald eagles may use the large cottonwood trees in the vicinity of the dam for winter perch sites while foraging at the two reservoirs. In this situation it would be appropriate to place a seasonal restriction on pedestrian use of this segment of the trail so that disturbance to bald eagle winter perch sites would be avoided.

- Area 3. A setback of 75 feet is recommended for this area. This would be an appropriate area for establishment of shoreline platforms for wildlife viewing. Platforms should be designed similar to a blind so that wildlife viewing is not disruptive to waterfowl on the lake surface. This area could also have trail or recreational site development outside of, but adjacent to, the buffer zone. Existing vegetation within the buffer zone should be maintained. Existing disturbed areas or areas dominated by annual weeds should be replanted to native upland vegetation.

- Area 4. A setback of 300 feet or more is recommended for this area. There should be no development intrusion into the buffer zone, but trail development within the buffer zone but outside of the wetland areas would be appropriate. Current cropland portions of the buffer zone should be planted to native upland vegetation.

- Area 5. This shoreline zone is similar to Area 3 and the same recommendations would apply to this area.

- Area 6. A setback of 300 feet is recommended for this area. It is recommended that no development occur in the buffer zone except for **trail** construction outside of the wetland areas. Existing vegetation within the buffer zone should be maintained. Existing cropland areas within the buffer zone should be replanted to native upland vegetation.

- Area 7. A setback of 75 feet is recommended for the shoreline zone and ditch wetlands in this area. Because of past use of this area as an undeveloped recreational site, this would be an appropriate area for development of a picnic area and similar recreational facilities. Docks for non-motorized boating use of this lake are not recommended because of the extent and quality of wetlands and waterfowl nesting habitat around the perimeter of Equalizer Lake. It is recommended that boat use be restricted to Houts Reservoir and that Equalizer Lake be maintained primarily as waterfowl and shorebird habitat.

- Area 8. A setback of 300 feet is recommended for this area. Because of the high diversity of wetlands and pockets of open water habitat in this area, this area represents high quality waterfowl nesting, resting, and foraging habitat. It should be preserved with no trail disturbance or other development intrusions. **The 300-foot buffer would be sufficient to protect wetlands and potential Preble's meadow jumping mouse habitat to the west of the ditch and narrow peripheral wetlands on the east side of the ditch. Currently cropland disturbance encroaches right up to the edge of existing wetlands. Native revegetation for this area is proposed only for those portions of the buffer zone that have been disturbed by cultivation. No revegetation measures are recommended for delineated wetland areas or other undisturbed sites within the buffer area.**

- Area 9. A setback of 75 feet is recommended for this area. **As indicated on Figure 4 this area currently supports rabbitbrush / grassland. The areas appears to have had some surface disturbance in the past but is currently returning to a mostly native dominated community. It is recommended that existing vegetation be maintained in the buffer zone and left to continues to progress naturally toward a native community. However, supplemental plantings of native shrubs and trees would be appropriate for this area.** This would be another **suitable** area for adjacent development of recreational facilities such as picnic areas or trails.

- Area 10. A buffer zone of 75 feet or more is proposed for this area. The 75-foot buffer zone should be extended to include the cottonwood tree stands in this area. Trail development would be appropriate in this area but trail placement should avoid tree removal. However, some selective thinning of trees may be necessary in denser portions of the tree stand to improve stand vigor.

- Area 11. No specific recommendations are provided for this area because of poor habitat quality and because dam maintenance and operation would preclude any development or enhancement measures. **Pedestrian movement across this area to access trail systems to be established on both sides of Equalizer Lake would be suitable recreational use in this area as long as a trail would be compatible with dam maintenance and operation by the Greeley and Loveland Irrigation Company. The dam faces consist primarily of rip-rap or disturbed weedy soil surfaces with minimal wetland or other habitat development. Trail design, barrier placement, and educational signs would be used to prevent human intrusion into higher quality habitat areas (red zone in Figure 5) on the west side of the reservoir.**

Detailed preliminary design plans will be prepared to address each sensitive area, required buffers, mitigation measures, native plantings, educational features, viewing platforms, and trail design as well as long-term maintenance and management of sensitive natural areas. These plans will be prepared prior to, or in conjunction with, the approval of a Preliminary Plat for any building lots or development features adjacent to or within 300 feet of identified sensitive areas. Specifications for native revegetation planting schedules, soil preparation, weed control, irrigation needs, etc. will also be provided at this time.

Eastern Portion

Impacts. This area is proposed for commercial, manufacturing, and light industrial development. None of the proposed developments would directly affect Natural Area #99. The small wetland depression in the northeast corner may be lost to development, but this would have little effect on important wildlife habitats since the existing wetland has minimal wildlife habitat value. This depression may have some potential for creation of more extensive and higher quality wetlands if the site needs to be developed for surface water detention.

Indirect impacts to wildlife use of Natural Area #99 could occur from increased human presence and recreational use.

Erosion, runoff, and general disturbance from construction may produce some indirect, temporary impacts on water quality in Natural Area #99 if erosion is unchecked. However, standard construction mitigation measures and BMPs such as fabric silt fences, catchment basins, hay bales, berms, and other standard sediment and surface runoff control measures should be sufficient to prevent any substantial sediment transport or liquid spills into this area.

Depending on surface configuration after final grading and other factors such as street alignment, street runoff and nutrient-laden runoff from fertilized landscaped areas could flow into wetland areas in Natural Area #99 and may alter the water quality in the existing pond.

Mitigation. In order to further protect wetlands, mature trees, and other natural habitats within Natural Area #99, a development setback of 300 feet from important habitat areas is recommended (see Figure 7). This setback would be sufficient to protect water quality in the drainage and wildlife use of the area. A development setback of 300 feet is the general recommendation of the City of Fort Collins and the Colorado Division of Wildlife to protect important waterfowl habitat and is also sufficient to minimize disturbance to songbird nesting habitat and raptor perch sites. Proposed setbacks would also protect any potential habitat for Ute ladies-tresses' orchid and Preble's meadow jumping mouse. A setback of 300

feet is the current guideline used by the U.S. Fish and Wildlife Service for protecting known habitat areas of Preble's meadow jumping mouse.

The portion of the drainage north of the Loveland and Greeley Canal received a much lower habitat rating, and a 50-foot buffer is recommended to protect existing vegetation and wetlands in this area. It is recommended that no development occur within the 50-foot buffer but the creation of trails or picnic areas would be appropriate within or near this buffer zone.

It is recommended that there be no intrusion by trails or other recreational facilities within the red-lined zone (see Figure 7). A foot path or trail system around the perimeter of the red-lined zone but within the buffer zone would be appropriate. No other development should occur within the buffer zone, and this area should be planted and maintained to create and adjacent area of native upland habitat to maintain the integrity of the buffer zone and increase habitat diversity in the area.

Detailed preliminary design plans will be prepared to address each sensitive area, required buffers, mitigation measures, native plantings, and trail design as well as long-term maintenance and management of sensitive natural areas. These plans will be prepared prior to, or in conjunction with, the approval of a Preliminary Plat for any building lots or development features adjacent to or within 300 feet of identified sensitive areas. Specifications for native revegetation planting schedules, soil preparation, weed control, irrigation needs, etc. will also be provided at this time.

Since only commercial developments are proposed for the Eastern Portion, free-roaming cats and dogs should not be a significant problem to wildlife in Natural Area #99. However, lease laws should be strictly enforced along developed trail systems to minimize dog and cat/wildlife interactions.

No mitigation is proposed for the Loveland and Greeley Canal since this canal is not a suitable wildlife corridor and it provides minimal wildlife habitat.

RESUME OF REPORT PREPARER

CEDAR CREEK ASSOCIATES, INC.

T. MICHAEL PHELAN

EXPERIENCE ABSTRACT

Employed since 1974 as an environmental consultant. Responsibilities include service as corporate officer, project manager, permitting specialist, wildlife ecologist, vegetation survey technical assistant, and technical editor. Project management activities include client/agency liaison, project risk analyses, interdisciplinary coordination, subcontractor supervision, personnel management, cost control, and quality assurance.

Career accomplishments include authorship of, or technical contribution to:
45 EIS/EA Documents • **75** Wetland Delineations/Evaluations • **8** Mine Permit Reviews/Revisions • Permit Strategy Development/Preparation for Numerous Projects • **80** Wildlife Baseline or Monitoring Studies/Technical Sections • **50** Threatened and Endangered or "High Federal Interest" Wildlife Species Studies • Over **100** Wildlife Surveys Emphasizing Big Game, Raptors, Waterfowl, or Upland Game Birds • **32** Wildlife Impact Assessments • **27** Wildlife Mitigation/Habitat Management Plans • **7** Biological Assessments • **10** Vegetation Surveys • **3** Published Wildlife Manuals, **2** for the USFWS and **1** for the Office of Technology Assessment, U.S. Congress

Types of projects have included:
Hard Rock Mines • Coal Mines • Wetland Delineations/Enhancement • Corridor Analyses • Water Developments • Oil, Gas, and Synfuels Projects • Abandoned Mines • Power and other Industrial Plants • Timber Harvest • Housing Developments

Involved in over **200** projects including work in:
Rocky Mountains • Desert Southwest • Pacific Northwest • Intermountain Region • Northern Great Plains • Appalachia • Alaska • California • Missouri • Kansas • Oklahoma • Texas

EDUCATION AND CERTIFICATIONS

B. A., Zoology, University of California, Los Angeles, 1971
Post-graduate Studies, Biology and Ecology, San Diego State University, 1972-1974
Certified Wildlife Biologist - The Wildlife Society
Certified in Habitat Evaluation Procedures (HEP) - U.S. Fish and Wildlife Service
Certified in Black-footed Ferret, Southwestern Willow Flycatcher, and Preble's Meadow Jumping Mouse Survey Techniques - U.S. Fish and Wildlife Service
Desert Tortoise Survey and Examination Techniques

EMPLOYMENT HISTORY

Cedar Creek Associates, Inc. - 1982 to Present
Environmental Research and Technology, Inc. - 1976 to 1982 (presently ENSR Corporation)
Self-employed Environmental Consultant - 1974 to 1976

REPRESENTATIVE CLIENTS

Atlantic Richfield Co. (CO) • Atlas Minerals, Inc. (OR) • BHP-Utah International Inc. (UT) • Carlota Copper Co. (AZ) • Chevron Shale Oil Co. (CO) • Cities of Boulder, Fort Collins, and Loveland (CO) • Diamond Shamrock Corp. (AK) • Energy Fuels Co. (CO, SD) • Exxon Minerals Co. (NM) • FMC Corp. (NV, WY, MT) • Freeport Gold Co. (NV) • Getty Mining Co./Twentymile Coal Co. (CO) • Getty Oil Co. (CO) • Homestake Mining Co. (NV) • Kensington Venture (AK) • Koppers Co. (TN) • LAC Minerals, Inc. (NV) • L. Berger/Federal Bureau of Prisons (CO) • Meridian Minerals Co. (SD, CA, ID) • Montana DEQ (MT) • Newmont Gold Co. (OR, NV) • North American Coal Co. (ND) • Northern Border Pipeline (IA) • Office of Technology Assessment, U.S. Congress (Western U. S.) • Peabody Coal Co. (AZ, CO, WY) • Rocky Mountain Energy Co. (WY) • Simons, Li & Associates, Inc. (CO, UT, WA, Africa) • TerraMatrix Inc./ACZ (CO, NV, UT, WA) • U.S. Bureau of Land Management (MT, NV, UT) • U. S. Fish and Wildlife Service (Western U.S., WVA) • U.S.Forest Service (AK, CO, ID, MT, NV, WA) • U.S. Sprint (CA, OR, WA) • Utah Division of Oil, Gas and Mining (UT) • Western Area Power Administration (CO, NE)

EXPERIENCE SPECIFICS

Mr. Phelan's education and several years of environmental and regulatory compliance experience has facilitated his development of specialized multi-disciplinary skills for projects in mining (coal, hard rock, and synfuels), industrial and urban developments, corridor assessments, wetland evaluation and restoration, and water developments. Areas of expertise include permitting and project management, wildlife ecology, wildlife impact assessment and mitigation planning, habitat evaluation and enhancement, range ecology, bond determination, report/permit document preparation, literature review, and technical editing.

PERMITTING AND PROJECT MANAGEMENT. Mr. Phelan has been actively involved in all phases of permit development. Permitting and management responsibilities have included personnel scheduling and management, strategy formulation, client/agency liaison, regulatory compliance evaluation, subcontractor supervision, cost control, quality assurance, and technical document editing for a variety of projects, including development of, or input to, mine permit applications and NEPA compliance documents (EAs and EISs). In addition, Mr. Phelan has successfully reviewed, edited, and revised sections of mine permit applications to achieve compliance for applications previously submitted by other firms and deemed inadequate by the regulatory agency. Mr. Phelan's permitting experience and related interactions with regulatory agencies for development projects and associated permit submittals have provided him with a working understanding of the policies and regulations of state and federal agencies such as the BLM, COE, OSMRE, WDEQ, CMLRD, UDOGM, USFS, USFWS and NRC, among others. Mr. Phelan's project management experience has been gained on projects ranging from single discipline to large interdisciplinary studies for mining and other development projects.

WILDLIFE ECOLOGY. Mr. Phelan has completed wildlife studies for a wide range of projects including: hard rock mines, surface and underground coal mines, synfuel developments, wetland assessments and restoration, corridor analyses, water developments, abandoned mines, and municipal disturbances. Technical capabilities include: baseline inventories; habitat assessment and restoration; wetland delineation; evaluation of threatened and endangered species populations; wildlife impact assessment and mitigation planning; literature review, and authorship of wildlife technical manuals. Wildlife mitigation plans prepared by Mr. Phelan have emphasized restoration and mitigation for wildlife habitats in desert, rangeland, shrubland, woodland, subalpine, and wetland ecosystems. Specific areas of concern addressed by these plans have included raptor nesting habitat, upland game bird and waterfowl breeding and nesting areas, big game winter range, and critical habitat for threatened and endangered species as well as species of "High Federal Interest." Beyond the capabilities listed above, Mr. Phelan's technical skills include the design and implementation of: big game aerial surveys, big game browse utilization transects, aerial and ground surveys for raptor nests, daytime and night spotlight surveys for black-footed ferrets, other predator inventories, small and medium-sized mammal trapping, avian strip transects, surveys for migratory birds of "High Federal Interest," upland game bird breeding and nesting surveys, waterfowl counts and nesting surveys, wetland mapping and habitat evaluation, herpetofauna surveys, aquatic sampling studies, and tissue sample collection for trace element analysis. In addition, Mr. Phelan has reviewed and analyzed mitigation options for waterfowl mortality on toxic mine tailings ponds.

RANGE ECOLOGY. Technical capabilities in this field include photo interpretation/community mapping and field measurement of plant density, ground cover, plant composition, and current annual production. Mr. Phelan has participated in the design and establishment of revegetation test plots constructed to determine the effects that season of seeding, slope, species selection, and seedbed material characteristics would have on revegetation success. He also has been involved in soil sampling projects to assess soil characteristics and nutrient levels.

PUBLICATIONS

Phelan, T. M., S. R. Viert, and S. G. Long. 1986. Wildlife technologies for western surface coal mining. Office of Technology Assessment, U. S. Congress, Washington, D. C. 183 pp.+ appendices.

Phelan, T. M. and S. R. Viert. 1986. Prairie dog and black-footed ferret surveys in northeast and east-central Utah. Cedar Creek Associates, Inc., Fort Collins, Colorado. Report prepared for the Bureau of Land Mangement, Salt Lake City, Utah. 31 pp. + appendices.

Contributing Author to:

Moore, R., and T. Mills. 1977. An environmental guide to western surface mining, part two: impacts, mitigation, and monitoring. Western Energy and Land Use Team, U. S. Fish and Wildlife Service Publication FWS/OBS - 78/04. Misc. pagings.

Mountain West Research, Inc. 1979. Fact book for western coal/energy development. Missouri River Basin Commission, Resource and Land Investigations program (RALI). Misc. pagings.

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Centerra East Property
CITY OF LOVELAND
NATURAL AREA 99 ANALYSIS

Larimer County, Colorado

July 18, 2003

Revised November 20, 2003

INTRODUCTION

Ecological Resource Consultants, Inc. (ERC) conducted a site specific analysis of the City of Loveland mapped Natural Area 99 and associated buffer zone area on the Property known as Centerra East (Property). The Property is located east of Interstate 25 in the east half of Section 10 and the southwest quarter of Section 11, Township 5 North, Range 68 West, Larimer County, Colorado (Latitude 40° 24' 30" N, Longitude 104° 59' 00" W). The Property is on the northeast corner of the I-25 and Highway 34 intersection. A Site Location Map is included as Figure 1. The Natural Area analysis was conducted as part of the master plan development proposed for the Property to document existing conditions and provide recommendations for Natural Area buffer zones to adequately protect the Natural Area from further degradation. The Property is owned by McWhinney Enterprises (2725 Rocky Mountain Ave., Suite 200, Loveland, CO, 80538 (970.962.9990)).

GENERAL SITE CONDITIONS

The Property has an average elevation of approximately 4,950 feet above mean sea level (amsl). The Property is comprised of fairly level farmland with the exception of a natural intermittent drainage, a fragmented tributary to the Big Thompson River, crossing the Property from the northeast to the southwest Property corner. A majority of the Property is cultivated land with two large, active irrigation ditches that convey water flowing southeast: the Farmers Ditch and the Loveland and Greeley Canal. The Union Pacific Railroad is located north of the Natural Area. The Property is bounded by commercial development and the I-25 frontage road to the west, agricultural land to the north and east, and Highway 34 to the south. According to the USGS water feature description, the natural drainage is characterized as an intermittent drainage, the pond as a perennial pond, and the irrigation channels by name. The weather during the investigation was warm and sunny, soils were thawed and vegetation growth was in the early blooming stages.

City of Loveland Natural Area 99

Natural Area 99 has been identified on the Centerra East Property by the City of Loveland study In The Nature of Things (1993) (refer to Figure 2 and Figure 3). The study defines a *Natural Area* as undeveloped lands containing potential natural values such as wildlife habitat, plant diversity and wetlands. Natural Area 99 is ranked as having an overall habitat Rating of 7 (refer to **Figure 2** and **Table 1**).

Habitat Types Classification present on the Centerra East Property per In the Nature of Things includes the Wetland (Cattail Marsh, Sedge/Rush), Aquatic (Modified Drainage, Open Water), Grassland (Grass/Forb), Shrubland (Plains Shrubland), Forest (Cottonwood Grove, Scattered Deciduous Trees), Agricultural (Cropland, Irrigation Ditch) and Miscellaneous Types (Weedy/Disturbed).

The following is a summary of natural attributes and numerical rating for Natural Area 99 as presented in In the Nature of Things. ERC concurs with the following ratings per site specific analysis.

Table 1. Numerical Rating for Natural Area 99

Natural Attribute	Numerical Rating*
Overall Habitat Rating	7
Wetland Rating	7
Animal Diversity	6
Plant Diversity	7
Songbird Rating	7
Raptor Rating	5
Waterbird Rating	6
Mammal Rating	6
Reptile. Amphib. Rating	7
Enhancement Potential	medium

*Numerical rating system based on a scale of 1 (low) to 10 (high).

NATURAL AREA 99 SITE SPECIFIC ANALYSIS

ERC performed a site specific analysis and delineation of Natural Area 99 on the Property July 2, 2003 (refer to Buffer Zone Map). Previously more generalized analyses of Natural Area 99 have been conducted and documented in the City of Loveland's In The Nature of Things (1993) and in the Millennium General Development Plan (GDP), Environmentally Sensitive Areas and Wetland Report prepared by Cedar Creek Associates, Inc. (1999).

Natural Area 99 was delineated roughly following the main drainage way from the railroad crossing extending south approximately 3,3300 linear feet south to the intersection with Highway 34. Natural Area 99 was delineated covering an area of 24.12 acres, which is comprised of 12.04 acres of wetland habitat (includes 2.91 acres of open water), 4.08 acres of upland riparian habitat, 6.04 acres of meadow, 0.51 acre of upland shrub habitat and 1.45 of miscellaneous access roads and irrigation canals. A Natural Area boundary was delineated based on a transition from naturalized native vegetation to significantly disturbed, cultivated land.

Natural Area 99 is entirely surrounded bordered by agricultural lands and Ditch maintenance roads. The agricultural land use (refer to **Figure 3**) is primarily irrigated farming (**Photo 9** and **Photo 12**), dryland farming (**Photo 8** and **Photo 10**), grazing, the Loveland and Greeley Canal (**Photo 7**), and the Farmers Ditch (**Photo 4**). The Natural Area 99 habitat has been fragmented by irrigation channels, ditch maintenance road crossings, intrusion by agricultural practices as well as surrounding roadways and development. Currently, the majority of the hydrology in the area drains towards the natural drainage with limited treatment.

Wetland Habitat

ERC completed a jurisdictional delineation on May 27, 2003. The jurisdictional delineation was conducted following the methodology enumerated in the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). The jurisdictional delineation has been verified by the US Army Corps of Engineers (July 11, 2003).

The jurisdictional wetland habitat includes open water, a modified natural intermittent drainage (tributary to the Big Thompson River), cattail marsh, rush/sedge dominated areas and weedy/disturbed areas (refer to **Appendix B**).

The Farmers Ditch and the Loveland and Greeley Canal appear to have a significant affect on the local groundwater hydrology and therefore have a significant influence on the wetland hydrology within the project limits. The irrigation canals convey a significant quantity of water along the upslope side of the low-lying wetlands associated with the natural drainage way identified on site. The extent to which sustaining wetland hydrology is from irrigation water, natural groundwater or irrigation recharge is unclear at this point and would require further groundwater hydrology analysis.

The wetland habitat identified onsite delineates wetland habitat associated with the natural drainage (**Photo 1**), including a small pond (**Photo 2**), and associated with the surrounding irrigation ditches. The wetland habitat along the drainage banks is comprised of rush/sedge dominated areas and weedy/disturbed areas along the wetland periphery. Weed species found within the wetland boundary include houndstongue (*Cynoglossum officinale*), common teasel (*Dipsacus sylvestris*), Canada thistle (*Cirsium arvense*), musk thistle (*Carduus nutans*), and Russian olive trees (*Elaeagnus angustifolia*). Dominant vegetation of the wetland habitat onsite is canary reed grass (*Phalaris arundinacea*), broad-leaf cattail (*Typha latifolia*), Baltic rush (*Juncus balticus*), water sedge (*Carex aquatilus*), clustered field sedge (*Carex praegracilis*), peach-leaf willow (*Salix amygdaloides*), plains cottonwood (*Populus deltoides*), common teasel, houndstongue, false Solomon's seal (*Smilacina stellata*), Nebraska sedge (*Carex nebrascensis*), and curly dock (*Rumex crispus*). The wetland area south of Farmers Ditch consists of the natural drainage and wetlands associated with the drainage and Farmers Ditch. A narrow, defined stream of flowing surface water approximately six inches deep meanders through the channel bottom, which is confined by relatively steep vegetated banks (**Photo 1**). The drainage channel is densely vegetated by a monotypic cattail stand throughout the channel bottom. The stream drains under Highway 34 into a small pipe culvert located at the south terminus of the wetland. North of the Farmers Ditch is a small, man-made pond encompassed by a narrow cattail fringe that continues north along and within the drainage channel, creating a dense, monotypic cattail stand with minimal surface water toward the north terminus of the open water (**Photo 2**). A small, inactive pumphouse that is partially collapsed remains on the southeast edge of the pond. The dense cattail marsh continues north, confined by the channel banks and terminates at the Loveland and Greeley Canal Ditch maintenance road (**Photo 3**). North of the Loveland and Greeley Canal is the north terminus of the wetland habitat, where the natural drainage is not defined by steep banks and surface water is not evident. A dense cluster of large, mature peach-leaf willow and plains cottonwood trees dominate the wetland and continue to dominate the Natural Area a short distance north toward the railroad (**Photo 5**). Sustaining hydrology of this wetland appears to be from a naturally high groundwater table as well as a potential influence from the irrigation ditches.

Wetland habitat within Natural Area 99 provides local and migratory wildlife with foraging, nesting, and roosting habitat. The open water within the wetland habitat is used by various species of waterfowl for feeding, resting and breeding. The dense vegetation of the wetland habitat anchors the soils, preventing soil erosion and filters impurities from percolating water, improving water quality.

Upland Riparian Habitat

The upland habitat onsite is composed of cottonwood groves, scattered deciduous trees, plains shrubland, grass/forb habitat, cropland, irrigation ditches and weedy/disturbed areas. The upland habitat is suffering from the encroachment of aggressive weedy plant species.

Large, mature trees of various species are located along the natural drainage throughout the study area. These trees are typical riparian remnants from the fragmented tributary to the Big

Thompson River, and non-native volunteer species, which have established or are landscape trees planted by the previous landowners. The Natural Area sections south of the Farmers Ditch and north of the Loveland and Greeley Canal contain stands of mature deciduous trees along the east and west banks of the natural drainage. The Natural Area north of Farmers Ditch and south of the Loveland and Greeley Canal contains scattered mature deciduous trees. The mature trees species identified include plains cottonwoods and peach-leaf willow trees. Some of the trees have become quite large, up to 75+ feet in height and three feet in diameter and provide quality localized habitat for wildlife.

The upland riparian habitat is found in low-lying areas (relative to the road and agricultural lands) bordering the wetland habitat usually densely vegetated and diverse in vegetative structure (**Photo 1** and **Photo 3**). Typical upland riparian habitat within Natural Area 99 consists of large, mature plains cottonwood and peach-leaf willows with a dense shrub or grass/forb understory. The shrub understory is dominated by dense chokecherry (*Prunus virginiana*) stands, Wood's rose (*Rosa woodsii*) and snowberry (*Symphoricarpos albus*). The grass/forb understory is dominated by smooth brome (*Bromus inermis*), creeping bentgrass (*Agrostis stolonifera*), clustered field sedge, false Solomon's seal, Canada thistle, and poison ivy (*Toxicodendron rydbergii*). The grass/forb understories are being encroached upon by various weedy species that include common teasel, yellow sweet clover (*Melilotus officinalis*), musk thistle, Canada thistle, leafy spurge (*Euphorbia esula*), and houndstongue.

Although the surrounding agricultural land was not delineated as part of Natural Area 99, agricultural land is not insignificant habitat. Open fields, including agricultural crops, provide ideal hunting habitat for raptors, owls and foraging habitat for small mammals (Bird Atlas, 1998).

The mature trees and dense groundcover throughout the riparian area provide cover, foraging, nesting and roosting habitat for wildlife. The soils are stabilized by the extensive root systems of the large trees and dense understory of shrubs and graminoids. The vegetative cover and anchoring root systems prevent soil erosion, sedimentation within the drainage and increase filtration of water impurities.

Plains Shrubland

Plains shrubland habitat exists in small patches on high points along the northeast and southwest banks of the natural drainage. The shrubland located on the northeast bank is dominated by rabbit brush (*Chrysothamnus nauseosus*) and scarlet falsemallow (*Sphaeralcea coccinea*) (**Photo 3**). This area is sparsely vegetated and adjacent to dryland crops. The shrubland located in the southwest portion of the Natural Area is dominated by Wood's rose and snowberry. This area is densely vegetated by the shrubs and graminoids such as creeping bentgrass, smooth brome, and wild licorice (*Glycyrhizza lepidota*). A meadow containing a mixture of wetland and upland plant species surrounds the shrubland with the exception of the Ditch maintenance road along the north. The surrounding mesic meadow vegetated by dominant species such as creeping bent grass, clustered field sedge and false Solomon's seal.

The shrubland habitats provide cover and foraging habitat for wildlife. The densely vegetated shrubland located along the southwest bank of the drainage anchors the soils, preventing sedimentation and erosion. The shrubland located along the east bank of the drainage provides soil stabilization with the deep taproot of the rabbitbrush.

Meadow

The meadow habitat within Natural Area 99 includes upland grassland and grass/forb habitat (**Photo 1 and Photo 4**). The grassland is dominated by smooth brome, crested wheatgrass

(*Agropyron cristatum*), orchard grass (*Dactylis glomerata*), wild licorice, stinging nettle (*Urtica dioica*), hare barley (*Hordeum leporinum*) and wild lettuce (*Lactuca serriola*). Small meadow areas influenced by irrigation in the upland habitat of Natural Area 99 are dominated by clustered field sedge, curly dock, showy milkweed (*Asclepias speciosa*), smooth scouring rush (*Equisetum laevigatum*) and Baltic rush accompanied by various upland grasses previously listed. The meadow habitat is invaded by weedy plant species throughout the Natural Area, especially along the roads and agricultural interface (**Photos 8-11**). Weedy species within the meadow habitat include yellow sweetclover, common teasel, houndstongue, saltcedar (*Tamarix ramosissima*), Canada thistle, musk thistle and downy brome (*Bromus tectorum*).

Meadow habitat serves as nesting, cover and foraging habitat for wildlife. Meadow habitat is ideal habitat for foraging because of the high production of graminoid seeds. The soils are stabilized by the dense vegetation, preventing erosion, and sedimentation. Meadow habitat also has high filtering capabilities of runoff.

Noxious Weeds

Noxious Weed is a legally defined term by the State of Colorado that refers to specific plant species which have been designated for mandatory control by branches of local, state or federal government due to the harm, actual or potential, that the species is capable of inflicting upon the resources and values of society (State of Colorado, Dec. 2001). The following list of species have been identified within Natural Area 99 that are on the State Noxious Weed list:

- Downy Brome (*Bromus tectorum*)
- Flixweed (*Descurainia sophia*)
- Common Mullein (*Verbascum thapsus*)
- Common Teasel (*Dipsacus fullonum*)
- Houndstongue (*Cynoglossum officinale*)
- Kochia (*Kochia scoparia*)
- Saltcedar (*Tamarix ramosissima*)
- Russian Olive (*Elaeagnus angustifolia*)

The following species found within Natural Area 99 have been identified in the Colorado Noxious Weed Act (1996 Supp.) as species in the top ten prioritized weed species for the State of Colorado:

- Canada Thistle (*Cirsium avervense*)
- Hoary cress (*Cardaria draba*)
- Leafy Spurge (*Euphorbia esula*)
- Musk Thistle (*Carduus nutans*)

Wildlife

Wildlife can utilize the general landscape in a multitude of ways. Wildlife can use specific habitats as areas of permanent inhabitance, seasonal inhabitance, migratory routes, breeding, and foraging. Natural Area 99 forms a relatively isolated refuge for a variety of wildlife. The natural area is fragmented to the north by the railroad, to the south by Highway 34 limiting wildlife movement through the area. Interstate 25 limits wildlife movement in the west to east direction. Wildlife movement from the east is generally open but is limited from large expanses of open agricultural fields and the crossing of wide irrigation canals.

During the site visits on May 26, 2003 and July 2, 2003, various wildlife species were observed using the habitat on the Property. A majority of the species were avian species that consisted of the white pelican, blue heron, double-breasted cormorant, mallard, kill deer, red wing blackbird, barn swallow, western tanager, red-tail hawk and great-horned owl. Although one pair of great-horned owls were observed within the Natural Area during the site visit, nests were not found. Snakes, frogs, cottontail, and coyote were also observed onsite. Most likely, various additional species of birds, reptiles, amphibians and small mammals common to the Loveland area inhabit and utilize Natural Area 99.

The riparian corridor of the natural drainage, including the man-made pond is regularly used by avian species and home to local reptiles and amphibians. The shrubs and trees within the riparian area are used by songbirds for nesting and by raptors for roosting and hunting the nearby agricultural fields and meadow habitat. Waterfowl use the pond area for foraging and possibly nesting. The pond area and wetland area are inhabited by various species of reptiles and amphibians. The reptiles and amphibians require surface water and wetland habitat for reproduction and shelter.

Natural Area 99 contains habitats conducive to avian, amphibian and reptilian species. The surface water and dense wetland habitat cover are ideal for amphibians and reptiles. The fragmented habitat limits the mammalian use of the area to primarily small mammals. Avian species use the Natural Area most frequently due to the ease of avian migration although the habitat is fragmented. The large trees, open water and wetland habitat are good quality nesting, roosting and foraging habitats for avian species.

THREATENED, ENDANGERED AND SPECIES OF CONCERN (TES) SCREENING

ERC conducted a site specific Threatened, Endangered and Species of Concern (TES) Screening for the Property. Field investigations conducted on May 28, 29 and July 2 examined specific site characteristics which may support TES or provide potential habitat for TES. In addition, existing literature and databases were reviewed to determine the presence of identified species of concern and species listed as threatened or endangered under the Endangered Species Act of 1973, as amended (ESA).

A sensitive species and habitat assessment of the Property area was conducted and reported to ERC by the Colorado Natural Heritage Program (CNHP). The CNHP database classifies Boyd Lake as a General Biodiversity Interest. No TES species or CNHP Potential Conservation Areas were documented on the Centerra East Property, however, the whooping crane and Preble's meadow jumping mouse have been documented in the local region (refer to **Appendix C**).

The following species have been identified as potential inhabitants of the Property based on general habitat requirements and US Fish and Wildlife Service Ecological Services Colorado Field Office charts (effective May 20, 2003), *Federally Listed and Candidate Species and Their Status in Colorado*, Larimer County:

- Bald Eagle (*Haliaeetus leucocephalus)*- Listed Threatened
- Black-footed ferret (*Mustela nigripes*)-Listed Endangered
- Black-tailed prairie dog (*Cynomys ludovicianus*)-Candidate for Listing
- Colorado butterfly plant (*Guara neomexicana* ssp. *coloradensis*)-Listed Threatened
- Eskimo curlew (*Numenius borealis*)-Listed Endangered
- Mountain plover (*Charadrius montanus*)-Proposed Threatened

- Preble's meadow jumping mouse (*Zapus hudsonius preblei*)-Listed Threatened
- Ute ladies'-tresses (*Spiranthes diluvialis*)-Listed Threatened
- Whooping crane (*Grus americana*)-Listed Endangered

Bald eagle

The bald eagle is listed as federally threatened under the ESA. Bald eagles are usually winter residents of Colorado. These raptors are commonly found in lower elevation grasslands and semi-deserts near prairie dog towns and open water (i.e. rivers, reservoirs). Neither Bald eagle nests nor individuals were observed within or near the study area boundaries during the investigation, therefore, any change of use on the Property would not adversely affect the continued existence or available habitat of this species.

Black-footed ferret

The black-footed ferret is listed as federally endangered under the ESA. The ferret is dependent on black-tailed prairie dog colonies for food, shelter and rearing young. According to the *Black-footed Ferret Survey Guidelines for Compliance with the Endangered Species Act* (US Fish and Wildlife Service, 1989), black-footed ferrets require over 80 acres of active black-tailed prairie dog towns or complex for a sustainable population. A prairie dog town or complex of this size does not exist on the Property or in surrounding areas. Neither black-footed ferrets nor their specific habitat was observed on or surrounding the study area, therefore any change in use of Property would not adversely affect the continued existence or available habitat of this species.

Black-tailed prairie dog

The black-tailed prairie dog is currently a candidate species for listing under the ESA. Prairie dogs have become an important political, social, economic, and ecological issue in the Front Range region of Colorado. Nationally, less than 2 percent of pre-settlement prairie dog populations exist today, due to a combination of habitat loss and targeted extermination. The US Fish and Wildlife Service has determined that adding the black-tailed prairie dog to the federal list of threatened or endangered species is "warranted but precluded" at this time due to administrative and fiscal limitation within the agency (City of Broomfield, 2001). Short-grass species commonly eaten by prairie dogs include buffalo grass and blue grama. Prairie dogs play an important role in the overall ecosystem, not only creating an unique ecosystem for their species, but they also create habitat and are a food source for a number of other federally and state-listed threatened or endangered species. No prairie dog colonies exist onsite; therefore any change in use of Property would not adversely affect the continued existence or available habitat of this species.

Colorado butterfly plant

The Colorado butterfly plant is listed as federally threatened under the ESA. This plant species is a short-lived, perennial herb endemic to moist soils in mesic or wet meadows of floodplain areas in southeastern Wyoming, north central Colorado, and extreme western Nebraska, between elevations of 5,800 feet and 6,000 feet (Spackman et. al., 1997). This early to mid-seral stage species occurs primarily in habitats created and maintained by streams active within their floodplains, with vegetation that is relatively open and not overly dense or overgrown. The disturbance of riparian areas that contain native grasses by agricultural conversion, water diversions, channelization, and urban development threaten the species existence (Federal Register, 2000). The floodplain vegetation within the Property boundary is atypical of the butterfly plant habitat. The average elevation of the site is 4,950 amsl, which is uncharacteristic of typical habitats. The drainage bottom does not contain subirrigated meadows due to the minimal surface flows and the steep banks confining the drainage. The Property's hydrology sources include irrigation channels, which are a primary threat to the butterfly plant. Any change in use

on the Property would not adversely affect the continued existence or available habitat of this species

Eskimo curlew

The Eskimo curlew is listed as federally endangered under the ESA. This avian species is nearly extinct due to over hunting while winter and migratory stopover habitat has been degraded by agricultural and commercial development. Historic migration patterns suggest a spring route through central plains with stopovers in tallgrass prairies and less frequently in mixed-grass prairies. The stopover habitats are not present onsite or in surrounding properties and the curlew is not known to use the site for a migration corridor (Bird Atlas, 1998). Any change in use on the Property would not adversely affect the continued existence or available habitat of this species.

Mountain plover

The mountain plover is proposed to be listed under the ESA. This plover species is approximately nine inches in length, exhibits an unbanded neck, light brown dorsal area accompanied by white underparts. Potential habitat for plovers consists of sparsely vegetated or barren level terrain, prickly pear cactus pads and prairie dog colonies. The Property does not contain habitat conducive to plovers, therefore any change in use on the Property would not adversely affect the continued existence or available habitat of this species.

Preble's meadow jumping mouse

The Preble's meadow jumping mouse (PMJM) is listed as a federally threatened species under the ESA. The mouse's range extends from southwestern Wyoming through eastern Colorado generally below 7,600 feet. Armstrong et.al. (1997) described typical mouse habitats as "well-developed plains riparian vegetation with relatively undisturbed grassland and a water source in close proximity." Also noted was a preference for "dense herbaceous vegetation consisting of a variety of grasses forbes and thick shrubs" (Fish and Wildlife, Service 1999). The CNHP database search resulted in one observation of the PMJM in 1895 (Report Generated: June 24, 2003). The location is not Section-specific due the time period and the credibility of the observer is unknown. The US Fish and Wildlife Service (USFWS) PMJM database lists two trapping efforts proximate to the Property with negative results. Farmer's Ditch at County Road 17 was trapped in 2001 with no evidence of PMJM populations and the Big Thompson, west of I-25 concluded with negative results. Preble's meadow jumping mouse habitat does not exist on the Property. The natural channel on the Property does not have the typical characteristics of PMJM habitat and no PMJM populations are known to exist on nearby potential habitat, therefore, any change in use on the Property would not adversely affect the continued existence or available habitat of this species

Ute ladies'-tresses

The Ute ladies-tresses orchid (Orchid) is listed as federally threatened under the ESA. The Orchid occurs in seasonally moist soils and wet meadows near springs, lakes, or perennial streams and their associated floodplains below 6,500 feet elevation in certain areas in Utah, Colorado, Idaho, Wyoming, and Nevada. Typical sites include old stream channels and alluvial terraces, subirrigated meadow and other sites where the soil is saturated to within 18" of the surface at least temporarily during the spring or summer growing seasons. Sites that do not require an Orchid survey included highly disturbed or modified sites such as highway rights-of-way, upland sites including prairie dog towns, shortgrass prairie and sagebrush rangeland, sites entirely inundated by standing water including monocultures of cattails or Olney's three-square. The subject Property contains a network of irrigation ditches, lacks alluvial soils, subirrigated meadows, and is dominated by monocultures of cattails where the channel is not inundated by

surface water. This site is uncharacteristic Orchid habitat. Any change in use on the Property would not adversely affect the continued existence or available habitat of this species

Whooping crane

The whooping crane is listed as a federally endangered species under the ESA. The adult crane is a relatively large white bird approximately 50 to 56 inches tall with a wingspan of 87 to 90 inches with an average weight of 15 pounds. The bird is distinguished by its outstretched neck in flight. Cranes typically live in mudflats around reservoirs and in agricultural areas, while wintering they live on salt flats that are dominated by coastal salt grass. Their nesting grounds are wetland communities dominated by bulrush. In Colorado the crane occurs only as migrants, stopping over in the San Luis Valley for four to six weeks during February and March and in the western valleys, especially Mesa, Delta and Gunnison Counties (CDOW). The CNHP database search lists a whooping crane observation in 1982 in Section 16, southwest of the Property, most likely on the Big Thompson River, 1.5 miles southwest of the site. The Centerra East Property does not contain wetland habitat dominated by bulrush, mudflats or a perennial, natural drainage. Due to atypical habitat and no evidence of whooping crane use onsite any change in use on the Property would not adversely affect the continued existence or available habitat of this species.

- No significant wildlife habitat of concern was identified on the Property, nor was the presence of threatened/endangered species or potential habitat.

EXISTING BUFFER ZONE CONDITIONS

ERC evaluated the general quality and functional value of the originally recommended 300 foot buffer zone surrounding Natural Area 99. Generally the existing buffer zone is highly disturbed by irrigation easements as well as active farming and lacks vegetative structural diversity.

The irrigation ditches and associated roads are adjacent to most of the Natural Area's periphery. The roads are vegetated along the sides and through the center. The irrigation ditches both typically have vegetated banks. These vegetated areas consist of a mixture of native and weedy species including: reed canary grass, crested wheat grass, smooth brome, stinging nettle, wild lettuce, western wheat grass (*Pascopyrum smithii*), orchard grass, hare barley, showy milkweed, clustered field sedge, curly dock, common teasel, yellow sweetclover, downy brome, musk thistle, yellow toadflax, saltcedar, common dandelion (*Taraxacum officinale*) and Canada thistle. The Farmers Ditch is approximately ten feet wide, runs north along the southwestern Natural Area 99 boundary, then bisects Natural Area 99 and continues south along the southeastern boundary (refer to Figure 1). The Loveland and Greeley Canal (Canal) is a large irrigation canal, approximately twenty feet wide. The Canal flows from the west, bisects the north portion of Natural Area 99, continues south along the southwestern boundary, then west into the agricultural land (refer to Figure 1). Both irrigation channels have vegetated banks dominated by upland, wetland and weed plant species. The Loveland and Greeley Canal banks are eroded and less vegetated than the Farmers Ditch (**Photos 4-6**). Two Ditch maintenance roads follow the south bank of each irrigation channel, often defining the Natural Area 99 boundary (refer to Sheet 1). The agricultural lands within the buffer zone limits consist of alfalfa fields west of Natural Area 99 and dryland farming to the east.

Wildlife habitat, water quality and soil stability of the Natural Area are compromised by the degraded condition of the buffer zone. Weedy plant species dominating the buffer zone do not provide a nutritious food source or ideal cover for local wildlife species. Limited wildlife species, such as raptors, small mammals and snakes, currently use the buffer zone for hunting and possibly for a travel corridor. The sparse vegetation along the buffer zone provides little soil

stabilization during heavy rain events and run-off. Soil erosion along the periphery of Natural Area 99 could cause degraded habitat quality due to deterioration of current vegetated slopes. The buffer zone could contribute to poor water quality through sedimentation and lack of filtration due to inadequate vegetation. The sediment deposition into Natural Area 99 from erosion of the buffer zone further degrades the quality of habitat within the Natural Area. Currently, the buffer zone lacks shrubs, trees and dense, native vegetation that is characteristic of higher quality wildlife habitat and stable soils.

NATURAL AREA DISTURBANCES ASSOCIATED WITH DEVELOPMENT

Commercial development is proposed for the western portion of the site between Interstate 25 and the eastern side of Natural Area 99 and bordering the east side. An access road is also proposed to cross the natural area. The proposed preliminary development includes commercial buildings, parking lots, associated Ditch maintenance roads and general infrastructure improvements. Disturbance to natural areas typically associated with this type of development includes water quality degradation, alteration in vegetation species composition, light/noise disturbances wildlife, habitat fragmentation/degradation and general pollution.

Site development often results in a significant increase in concentration and volume of runoff produced from an increase of impervious surfaces such as roofs, roads and parking lots. Pollutant loads from a developed site can often have a negative effect on local water systems by increasing water temperatures, depleting dissolved oxygen, creating unbalanced water chemistry and increasing sediment loads, hydrocarbons and heavy metals. Light from streetlights, parking lot lights, headlights and other lights linked to commercial development cause visual disturbance to the wildlife inhabiting or using the neighboring Natural Area. Human activity and noise such as automobiles, trucks, voices, littering, pets, visual stimuli (i.e. movement, bright clothes, etc.) and wandering into the Natural Area also degrades the quality of the natural area habitat. Earth disturbance associated with site grading can often create optimal conditions for invasive/noxious weed establishment. During grading operations and soil disturbance local weed sources can typical establish an area rapidly. Once established these weed communities can migrate into Natural Areas, out competing native vegetation and possibly altering the composition of the native plant community.

BUFFER ZONE RECOMMENDATIONS

The City of Loveland Development Code requires the establishment of buffer zones surrounding natural habitat areas and special features for all development located within 500 feet of such features. Buffer zone requirements of the Code that apply to the study area include a recommended 180-300 foot buffer zone associated with *Wetlands with a rating of 6 or higher for water birds, wetland or overall habitat* which have been identified in Natural Area 99 located on the Property. The Millennium General Development Plan (GDP), Environmentally Sensitive Areas and Wetland Report (Cedar Creek Associates, Inc., January 1999) summarizes the existing condition and general value of Natural Area 99 as well as recommends a general 300-foot general buffer zone to protect Natural Area 99. The US Fish and Wildlife Service, Colorado Division of Wildlife and US Army Corps of Engineers do not require nor regulate a buffer zone for Natural Areas, wetlands or habitat of those species not listed as TES.

Natural Area 99 is a remnant tributary of the Big Thompson River that has been fragmented by development and degraded by agriculture. The Natural Area is utilized by primarily by avian species and small mammals typically adapted to urban areas. No TES species inhabit Natural Area 99 nor does potential habitat for any TES species exist within the Property boundaries. No

raptor nests or sensitive breeding sites were found within Natural Area 99. The fragmentation and surrounding development are currently limiting the overall functional value of Natural Area 99. The open water, fringe wetlands and mature cottonwood gallery onsite does provide relatively higher quality habitat for wildlife.

Buffer zones are intended to preserve or enhance the ecological character or function and wildlife use of the natural or special features and to minimize or adequately mitigate the foreseeable impacts of development. The establishment of an arbitrary 300 foot buffer zone along the Natural Area 99 boundary will not necessarily adequately protect the resources of the natural area. The existing buffer zone is of relatively low quality due to sparse native ground cover, active farming practice, irrigation canals, presence of weeds and lack of vegetative structural diversity. The functional effectiveness of the existing buffer zone is significantly limited in its capability to protect the Natural Area regardless of width.

The preliminary development plan proposes a 75 foot buffer zone between the edge of development and the edge of the Natural Area. In order to mitigate against any potential adverse environmental impacts to the Natural Area resulting from a reduced buffer zone, site specific buffer zone restoration measures could be implemented which would adequately protect the resources of the Natural Area. By establishing a site specific, higher functional value buffer zone, the buffering capabilities of the zone can be achieved over less of a horizontal distance.

A buffer zone enhanced with vegetative structural diversity utilizing native grasses, shrubs and tree can offset the adverse effects of developmental impacts on the Natural Area. The increased vegetative structural diversity can create a natural screen between the Natural Area and the development, which aids in reducing the noise pollution, light pollution, visual stimuli, and wind-driven litter associated with development. Additional vegetation within the buffer zone combined with water quality and detention features would decrease sedimentation and provide additional runoff filtration. Re-vegetating the buffer zone and eradicating the aggressive weed species could increase the wildlife habitat quality of the Natural Area by extending the foraging habitat, shelter, and nesting habitat.

In order to create an optimal buffer zone for the study area, restoration efforts must focus on eradication of noxious weeds including Russian olive trees, establishment of native grasses, shrubs and trees creating structural vegetative diversity and improved wildlife habitat.

Implementation of the following site-specific improvements could protect the Natural Area's resources. Although greater distances between the Natural Area and human activity is ideal, it is not always practical.

1. All non-native/noxious weed species should be eliminated from the buffer zone and Natural Areas.
2. The buffer zone should be reseeded with a native seed mix which promotes vegetative structural diversity, species richness, runoff retention and wildlife forage and cover.
3. Native trees and shrubs such as cottonwood trees, peach-leaf willow and chokecherry should be strategically planted to provide a shading, visual/noise screen as well as to reduce light from entering the natural areas. Dense groupings of shrub planting are recommended which also create additional structural diversity promoting wildlife habitat.
4. The buffer zone should be identified within the development plan through the use of an open type fence such as split rail and signs, to discourage routine human disturbance.
5. The buffer zone should be managed, eliminating routine mowing, and implementing weed control and routine litter control.

6. All developmental stormwater runoff should be treated prior to discharge into local drainages.
7. Wildlife habitat improvement structures could be installed throughout the Natural Area.

Natural Area 99 would benefit more from an enhanced 75 foot buffer zone as opposed to an unimproved 300 foot buffer zone. The current buffer zone consists of poor quality habitat and has poor functional value especially pertaining to water quality. Natural Area 99 is identified in In The Nature of Things as having a medium habitat enhancement potential (refer to **Figure 4** and **Table 1**). Habitat enhancement potential ranking (i.e., low, medium, high) refers to the potential of feasible habitat enhancement without regard to financial feasibility, Property ownership, water rights, etc. (City of Loveland, October 1996). The enhanced buffer zone could stabilize soils, decrease sedimentation, increase water filtration, decrease erosion and improve habitat quality. The revegetation of the buffer zone could create a natural screen between the human disturbances, development disturbances, and re-establish native vegetation, and vegetative structural diversity. An overall net increase in the Natural Area habitat quality could be achieved with an enhanced buffer zone, where degradation could occur with an arbitrary 300 foot unimproved buffer zone.

SUMMARY

Natural Area 99 is a comprised of various vegetation and wildlife communities associated with a remnant and fragmented tributary drainage to the Big Thompson River. The Natural Area contains wetland and riparian habitat, dry shrubland habitat, meadows and large mature deciduous trees. The Natural Area is utilized by a variety of locally common avian and small mammal, reptile, and amphibian species adapted to urban areas. No TES species or their potential habitat was found onsite. Wildlife movement is limited through the area due to fragmentation by I-25, Highway 34 and the railroad. Preliminary development plans propose a reduced buffer zone from 300 feet to 75 feet surrounding the Natural Area. The reduced buffer zone with a site specific buffer zone restoration plan should not result in any additional adverse impacts to the Natural Areas and with proper implementation, could increase the functional value of the resource.

Sincerely,

Ecological Resource Consultants, Inc.





David J. Blauch
V.P., Senior Ecologist

Céline M. Pliessnig
Staff Ecologist

Enclosures:
Figure 1. Site Location Map
Figure 2. Overall Habitat Quality Map
Figure 3. Agricultural Uses Map
Figure 4. Habitat Enhancement Potential Map
Natural Area and Buffer Zone Map
Appendix A. Photographic Documentation
Appendix B. Jurisdictional Wetland Delineation Report
Appendix C. Colorado Natural Heritage Program Environmental Review

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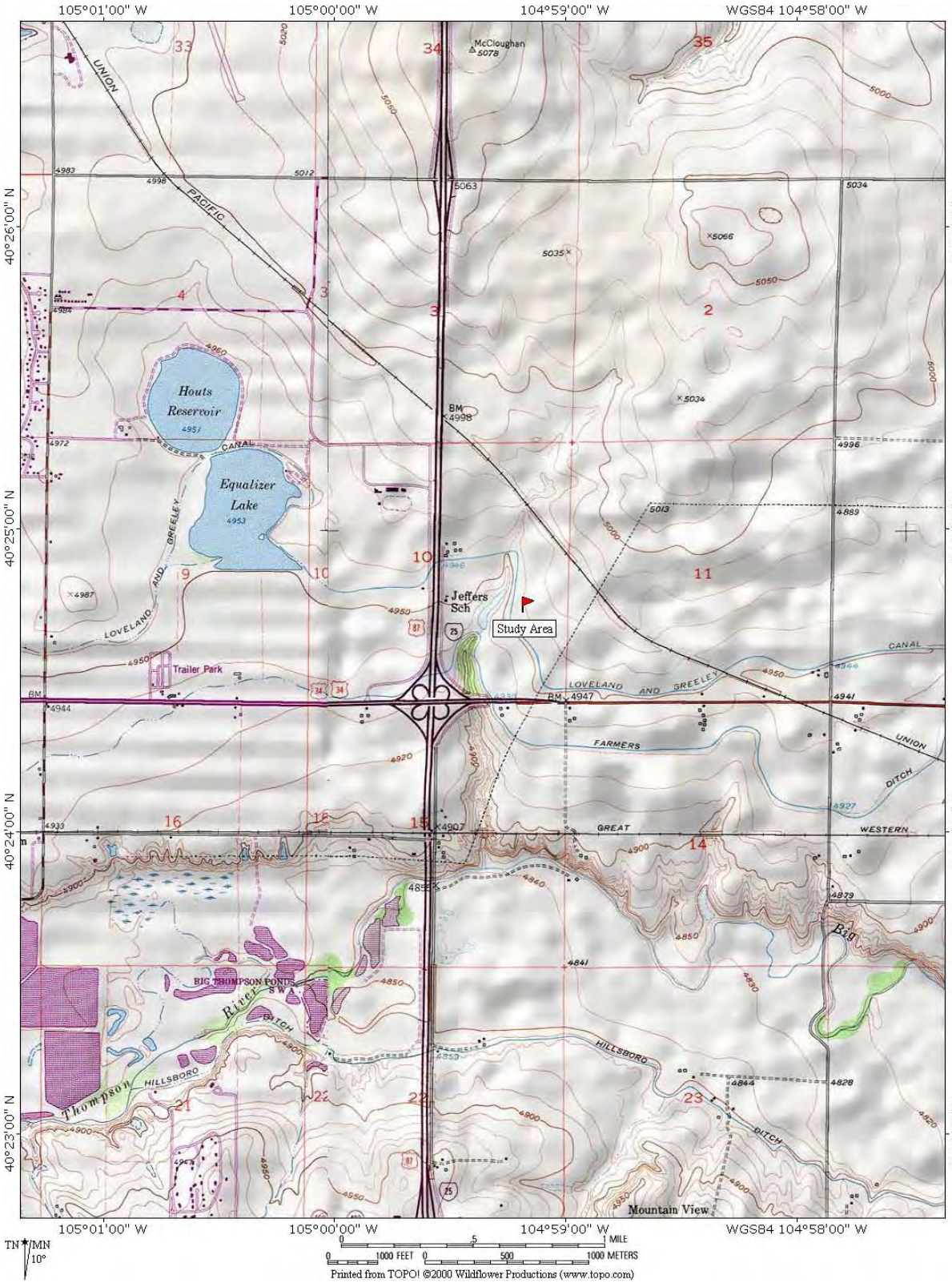
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FIGURE 1. Site Location Map



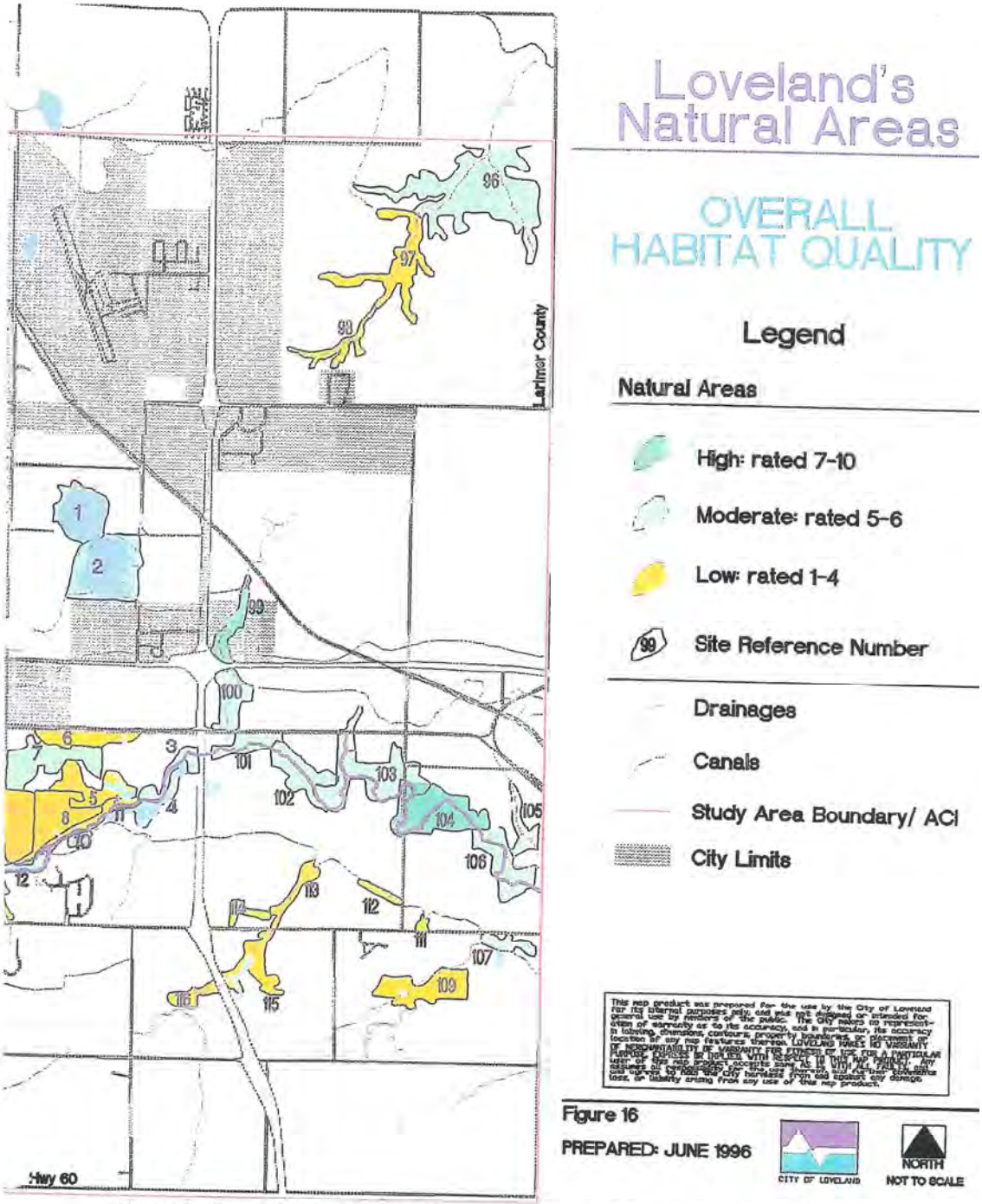


Figure 2. Overall Habitat Quality Map. *In The Nature of Things: Loveland's Natural Areas.* Revised October 1996. City of Loveland.

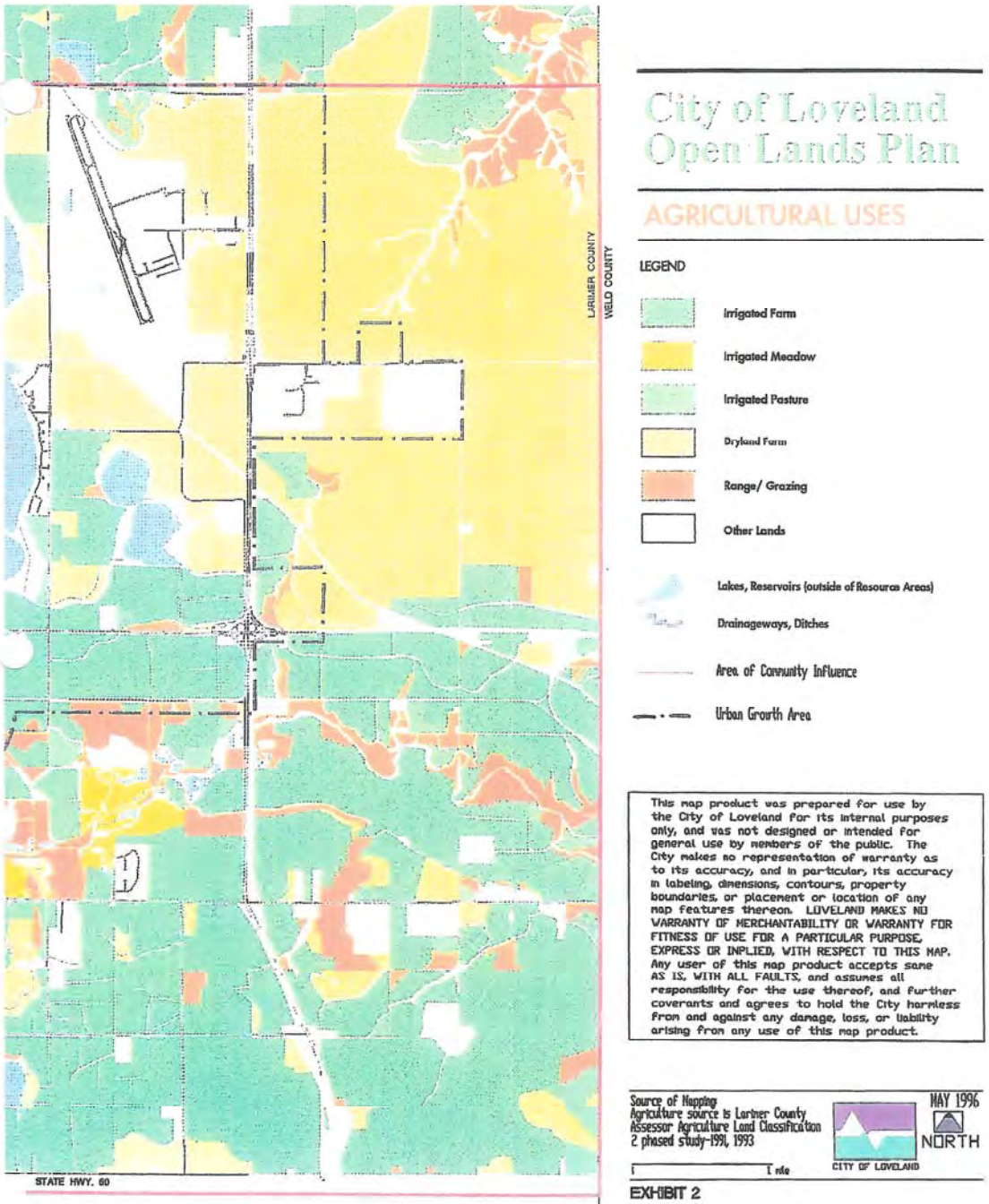


Figure 3. Agricultural Uses Map. *City of Loveland Open Lands Plan.* June 1996. Long Range Planning Division, City of Loveland.

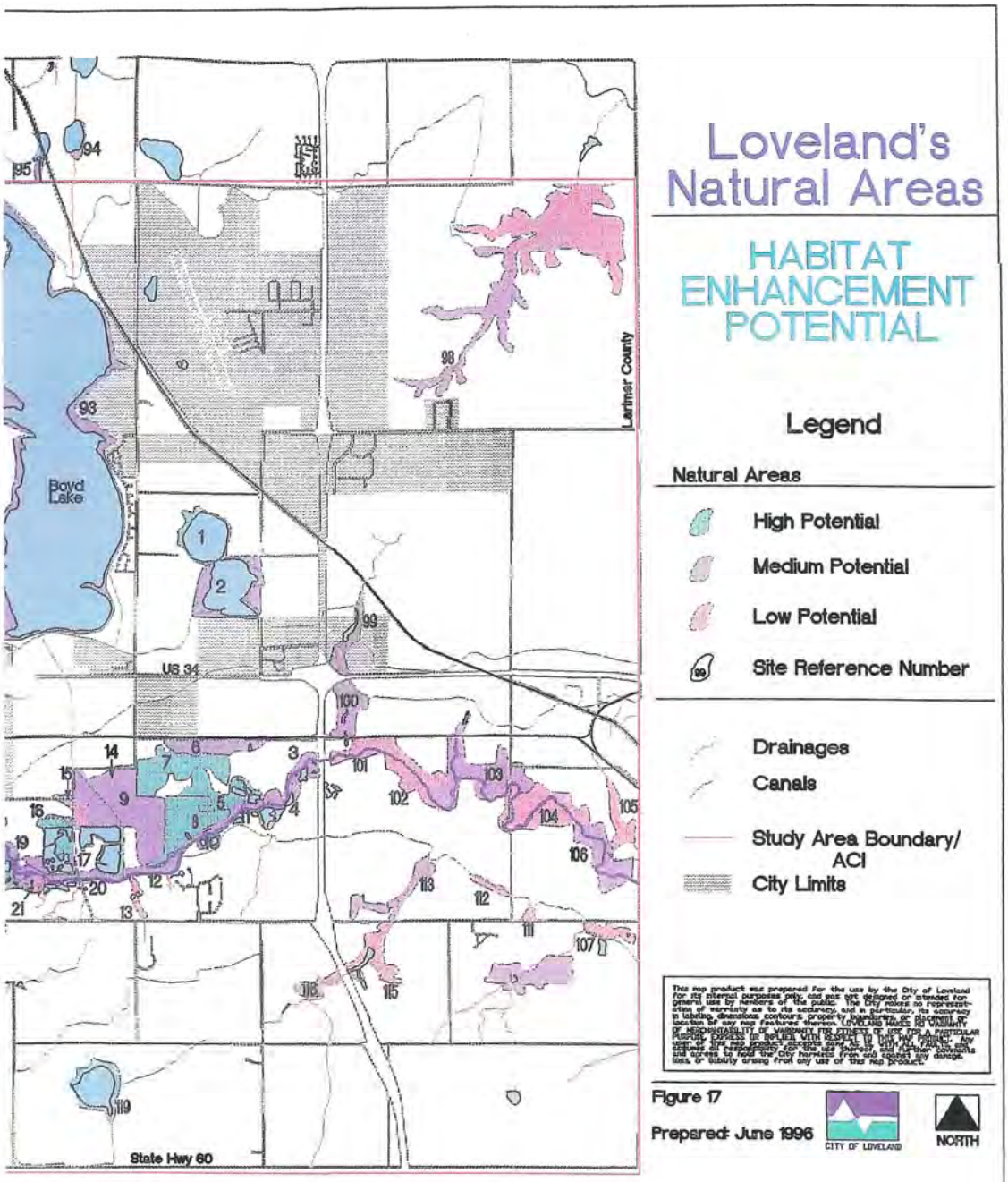
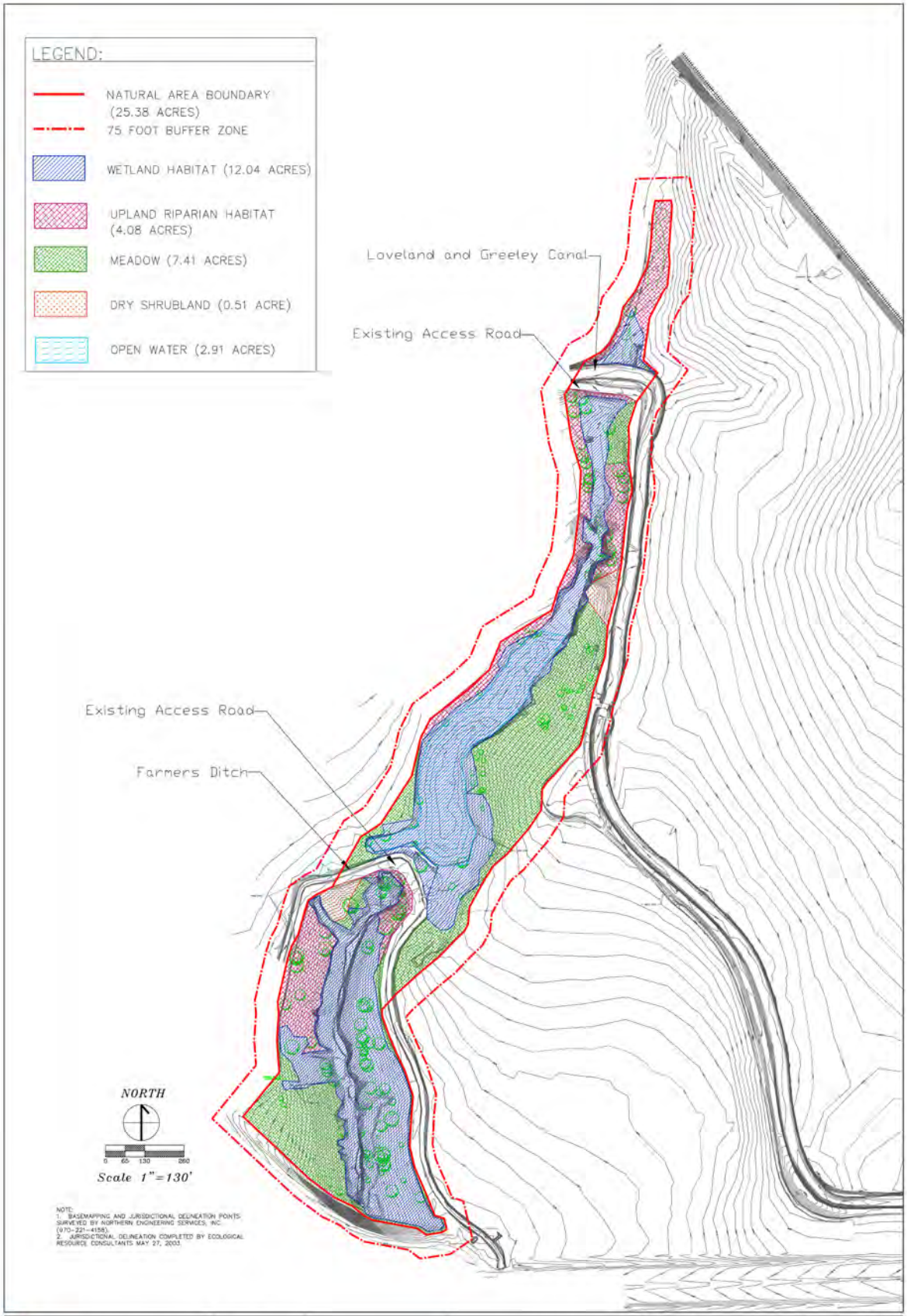


Figure 4. Habitat Enhancement Potential Map. *In The Nature of Things: Loveland's Natural Areas.* Revised October 1996. City of Loveland.

NATURAL AREA AND BUFFER ZONE MAP



Ecological Resource Consultants, Inc.
4920 Tesla Court, Boulder, CO 80301
(720) 564-0788

Centerra East
Larimer County, Colorado

Natural Area and Buffer Zone Map

SHEET 1

APPENDIX A
PHOTOGRAPHIC DOCUMENTATION



Photo 1. The natural drainage onsite is narrow and densely vegetated.



Photo 2. A man-made pond north of the Farmers Ditch, used by various water fowl.



Photo 3. The densely vegetated natural channel north of the pond and south of the Loveland and Greeley Canal. Shrubland habitat is apparent on the east bank.



Photo 4. Farmers Ditch and the Ditch maintenance road bisecting the Natural Area south of the pond.



Photo 5. The Loveland and Greeley Canal bisecting the Natural Area.



Photo 6. The Loveland and Greeley Canal and Ditch maintenance road along the east Natural Area boundary.



Photo 7. The Loveland and Greeley Canal on the west perimeter of the Natural Area, bordered by dryland farming to the east.



Photo 8. Dryland farming along the northeast border of the Natural Area.



Photo 9. Irrigated crops along the northwestern Natural Area perimeter.



Photo 10. Dryland farming along the southeastern perimeter of the Natural Area in the background defined by the mature deciduous trees.



Photo 11. Ditch maintenance road along the eastern Natural Area boundary and west bank of Farmers Ditch, looking north.



Photo 12. Irrigated alfafa fields along the western Natural Area boundary. Dryland crops along the eastern Natural Area boundary are in the background.

APPENDIX B
JURISDICTIONAL WETLAND REPORT

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
DENVER REGULATORY OFFICE, 9307 SOUTH WADSWORTH BOULEVARD
LITTLETON, COLORADO 80128-6901

July 11, 2003

Mr. David Blauch
Ecological Resource Consultants, Inc.
4920 Tesla Court
Boulder, CO 80301

RE: Centerra East Property, Preliminary Jurisdictional Determination, Unnamed Wetland Tributary to the Big Thompson River
Corps File No. 200380023

Dear Mr. Blauch:

I have reviewed this project located in the SE ¼ of Section 10, T5N, R68W, Larimer County, Colorado on behalf of McWhinney Enterprises. This review was in accordance with Section 404 of the Clean Water Act under which the U.S. Army Corps of Engineers regulates the discharge of dredged and fill material, and any excavation activities associated with a dredged and fill project, into waters of the United States. Waters of the United States include ephemeral, intermittent and perennial streams, their surface connected wetlands and adjacent wetlands and certain lakes, ponds, irrigation and drainage ditches that have a nexus to interstate commerce. Under the authority of the Clean Water Act, a preliminary Jurisdictional Determination has determined that the unnamed wetland tributary to the Big Thompson River may be waters of the U.S.

Based upon the ruling by the Supreme Court in the matter of Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, No. 99-1178 (January 9, 2001), the Department of the Army's (DA) regulatory authority over isolated, non-navigable, intrastate waters has been eliminated **if** the sole nexus to interstate commerce was use of the waters by migratory birds. It is apparent under the ruling above that the DA does not have the authority to regulate work in the Loveland and Greeley Canal or the Farmer's Ditch. No permit or other authorization by the DA is required for work in Loveland and Greeley Canal or the Farmer's Ditch. Although a DA permit will not be required for work in the Loveland and Greeley Canal or the Farmer's Ditch, this does not eliminate the requirement that you obtain any other applicable Federal, state, tribal or local permits as required.

Our office considers your July 9, 2003 wetlands delineation report and map for this project accurate and acceptable.

If a proposed activity requires work within the above-described waters of the U.S., a proponent of the project should notify this office for proper Department of the Army permits. This jurisdictional delineation is valid for a period of five years from the date of this letter unless new information warrants revision of the determination before the expiration date.

If you have any questions concerning this matter, please call me at (303) 979-4120 and **reference Corps File No. 200380023**.

Sincerely,

Terry McKee

Terry McKee
Natural Resource Specialist

tm

Copies Furnished:

EPA

JURISDICTIONAL WETLAND DELINEATION

FOR THE

CENTERRA EAST PROPERTY
LOVELAND, LARIMER COUNTY, COLORADO

JULY 11, 2003

Prepared By:
Ecological Resource Consultants, Inc.
4920 Tesla Court
Boulder, CO 80301
(720) 564-0788

INTRODUCTION

Ecological Resource Consultants, Inc. (ERC) completed a jurisdictional delineation on May 27, 2003 on the property known herein as the Centerra East Property (property) The property is located east of Interstate 25, east of the town of Loveland, in the east half of Section 10 and the southwest quarter of Section 11, Township 5 North, Range 68 West, Larimer County, Colorado (Latitude 40° 24' 30" N, Longitude 104° 59' 00" W). The property is on the northeast corner of the I-25 and Highway 34 intersection. The property can be accessed from two dirt roads that follow irrigation ditches. A Site Location Map is included as **Figure 1**. The jurisdictional delineation was completed at the request of the project engineer Northern Engineering Services, Inc. (420 South Howes, Suite 202, Fort Collins, CO, 80521, Contact Stan Myers (970-221-4158)). The Property is owned by McWhinney Enterprises (2725 Rocky Mountain Ave., Suite 200, Loveland, CO, 80538 (970.962.9990)).

Site Conditions

The Centerra East Property has an average elevation of approximately 4,950 feet above mean sea level (amsl). The property is comprised of fairly level farmland with the exception of the natural drainage crossing the property from the northeast to the southwest property corner. A majority of the property is cultivated land with two large, active irrigation ditches that convey water flowing southeast: the Farmers Ditch and the Loveland and Greeley Canal. The Farmers Ditch contained flowing surface water while the Loveland and Greeley Canal contained minimal stagnant water at the time of the field investigation (refer to Photos 5 and 9). The Union Pacific Railroad marks the north extent of the study area. The property is bounded by commercial property and the I-25 frontage road to the west, agricultural land to the north and east, and Highway 34 to the south. According to the USGS water feature description, the natural drainage is characterized as an intermittent drainage, the pond as a perennial pond, and the irrigation channels by name. The weather during the delineation was warm and sunny, soils were thawed and vegetation growth was in the early blooming stages.

Jurisdictional Delineation

The jurisdictional delineation was conducted following the methodology enumerated in the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). During the field inspection, dominant vegetation was recorded, representative hydrologic indicators were noted and soil samples were examined for hydric indicators. Areas determined jurisdictional were identified in the field with pink "WETLAND BOUNDARY" ribbon. Each point was sequentially labeled alpha-numerically (i.e. A1, A2). Each point was then surveyed by Northern Engineering Services, 420 South Howes Street, Suite 202, Fort Collins, Colorado (970-221-4158) and incorporated into the enclosed mapping (refer to Jurisdictional Wetland Delineation Maps, Sheets 1 and 2).

Identified Jurisdictional Areas

A total of 12.04 acres of jurisdictional habitat was delineated along the natural drainage corridor within the Centerra East Property boundaries. The natural drainage bisects the property from northeast to southwest and is fragmented (from north to south) by the Union Pacific Railroad, the Loveland and Greeley Canal and the Farmers Ditch.

The Farmers Ditch and the Loveland and Greeley Canal appear to have a significant affect on the local groundwater hydrology and therefore have a significant influence on the wetland hydrology within the project limits. The irrigation canals convey a significant quantity of water along

the upslope side of the low-lying wetlands associated with the natural drainage way identified on site. The extent to which sustaining wetland hydrology is from irrigation water, natural groundwater or irrigation recharge is unclear at this point and would require further groundwater hydrology analysis.

Although the wetland parameter of hydrology is in question throughout much of the area, the wetland boundary was determined based upon a dominance of hydrophytic vegetation, the presence of hydric soils and topography. The uncertainties associated with the hydrological influence of the irrigation canals on the local groundwater table limit the ability to differentiate between what may be the historic natural drainage corridor and what areas may be man-induced wetlands. Until irrigation is removed and a more detailed groundwater hydrology study can be conducted, the entire delineated wetland area must be considered jurisdictional. If irrigation is removed and a groundwater hydrology study indicates near surface groundwater is not present, then a portion of the delineated wetland areas may be considered non-jurisdictional and therefore not regulated under Section 404 of the Clean Water Act.

Upland inclusions exist within the overall mapped wetland boundary, should disturbances be proposed in these areas, a more detailed micro-delineation might be appropriate. Most of the upland inclusions are found on the east bank of Wetland A (refer to Photo 2). The upland areas are entirely encompassed by wetland habitat and are dominated by upland vegetation. Two prominent upland inclusions located in this area are estimated to measure 100 feet long by 30 feet wide, and 40 feet wide by 40 feet long.

WETLAND A PALUSTRINE EMERGENT PERSISTENT

The 5.71 acre area identified with wetland flags A1-A134 delineates the southern reach of the natural drainage and associated wetlands north until the Farmers Ditch crossing (refer to Sheet 2). At point A42 is the culvert from the Farmers Ditch into the wetland, controlled by a head gate. The wetland habitat is dominated by canary reed grass, broad-leaf cattail, common teasel (*Dipsacus sylvestris*), false Solomon's seal, water sedge, clustered field sedge, Baltic rush and curly dock (refer to Photo 1). Sustaining hydrology of this wetland appears to be from a naturally high groundwater table as well as a potential influence from the Farmers Ditch. Although primary hydrological indicators where not identified during the field analysis hydrology was assumed through secondary indicators of hydric soils in combination with a dominance of hydrophytic vegetation. The wetland boundary was determined by dominance of hydrophytic vegetation, presence of hydric soils and topographic breaks (refer to Data Forms T1-T9, T14). The wetland habitat continues on the north side of the Farmers Ditch and is delineated by flags C1-C10 and B1-B91.

WETLAND B RIVERINE/PALUSTRINE EMERGENT PERSISTENT

The 5.23 acre wetland habitat identified by flags B1-B91 delineates wetland habitat associated with the natural drainage, including a small pond (2.91 acres) immediately north of Wetland C and the Farmers Ditch (refer to Sheet 1). The pond is separated from Wetland C by a berm (refer to Photo 3). A narrow cattail fringe encompasses the pond and continues north along and within the drainage channel, creating a monotypic cattail stand with minimal surface water (refer to Photo 4). Dominant vegetation of this wetland is canary reed grass, broad-leaf cattail, Baltic rush, water sedge, clustered field sedge and peach-leaf willow. Sustaining hydrology of this wetland appears to be from a naturally high groundwater table as well as a potential influence from the irrigation canals. Although primary hydrological indicators were not identified during the field analysis hydrology was assumed through secondary indicators of hydric soils in combination with a dominance of hydrophytic vegetation. The wetland boundary was determined by hydrophytic

vegetation breaks, presence of hydric soils and topography (refer to Data Forms T10, T13, T15). The wetland habitat continues north to Wetland E (refer to Sheet 1).

WETLAND C PALUSTRINE EMERGENT PERSISTENT

Area C1-C10 is a 0.17 acre continuation of Wetlands A and B (refer to Sheet 1). This wetland is associated with the Farmers Ditch bank dividing Wetlands A and B, extending into a low-lying area of the north ditch bank. The Farmers Ditch contained approximately one foot of surface water during the site visit and headgates that control hydrology to and from Wetlands A and B (refer to Photo 5). Dominant vegetation in this wetland includes canary reed grass, water sedge, broad-leaf cattail and peach-leaf willow. The wetland hydrology is the Farmers Ditch and the pond north of the berm. The wetland boundary was determined by dominance of hydrophytic vegetation and presence of hydric soils (refer to Data Form T11). Wetland habitat continues south into Wetland A and north to Wetland B.

WETLAND E PALUSTRINE EMERGENT PERSISTENT

The 0.60 acre wetland identified with flags E1-E19 is a continuation of Wetland B to an area surrounded by barbed wire fencing (refer to Sheet 1). Dominant vegetation of this wetland is broad-leaf cattail, Baltic rush, clustered field sedge, smooth scouring rush, water sedge, false Solomon's seal, and peach-leaf willow (refer to Photo 7). Sustaining hydrology of this wetland appears to be from a naturally high groundwater table as well as a potential influence from the Loveland and Greeley Canal. Although primary hydrological indicators where not identified during the field analysis hydrology was assumed through secondary indicators of hydric soils in combination with a dominance of hydrophytic vegetation. The wetland boundary was determined by the presence of hydric soils, dominance of hydrophytic vegetation and topography. Wetland habitat continues north across the Loveland and Greeley Canal as Wetland F.

Wetland F Palustrine Emergent Persistent

The 0.33 acre wetland identified with flags F1-F9 is associated with the Loveland and Greeley Canal and the natural drainage (refer to Sheet 2). The wetland habitat extends from the north bank of the Canal into the large plains cottonwood stand in the remnant drainage channel (refer to Photo 8). Dominant plant species of this wetland include canary reed grass, sandbar willow, plains cottonwood, and water sedge. Sustaining hydrology of this wetland appears to be from a naturally high groundwater table as well as a potential influence from the Loveland and Greeley Canal. Although primary hydrological indicators where not identified during the field analysis hydrology was assumed through secondary indicators of hydric soils in combination with a dominance of hydrophytic vegetation. The wetland boundary was determined by the presence of hydric soils, dominance in hydrophytic vegetation and topography (refer to Data Form T13).

Hydrophytic Vegetation

Table 1 lists the dominant hydrophytic vegetation identified in the above delineated wetlands.

Table 1. Identified Hydrophytic Vegetation

Scientific Name	Common Name	Rg. 5 Indicator Status*
Carex aquatilus	water sedge	OBL
Carex praegracilis	clustered field sedge	FACW
Carex nebrascensis	Nebraska sedge	OBL
Elaeagnus angustifolia	Russian olive	FAC
Juncus balticus	Baltic rush	OBL
Lemna minor	lesser duckweed	OBL
Phalaris arundinacea	reed canary grass	FACW+
Populus deltoides	plains cottonwood	FAC
Salix amygdaloides	peach-leaf willow	FACW
Typha latifolia	broad-leaf cattail	OBL
Smilacina stellata	false Solomon's seal	FAC
Rumex crispus	curly dock	FACW
Agrostis stolonifera	creeping bentgrass	FAC+
Cynoglossum officinale	houndstongue	NI
Scientific Name	**Common Name**	**Rg. 5 Indicator Status***
Toxicodendron rydbergii	poison ivy	FAC

*OBL=obligate wetland-occurs an estimated 99% in wetlands
FACW=facultative wetland-occurs an estimated 67%-99% in wetlands
FAC=facultative-equally occurs in non-wetlands as wetlands
NI=No indication

UPLANDS

The majority of the land within the parcel limits consists of active farmland. Upland habitat adjacent to the wetland habitat on the Centerra East Property consists of native and weedy plant species. The upland plant species include choke cherry (*Prunus virginiana*), Wood's rose (*Rosa woodsii*), wild licorice (*Glycyrrhiza lepidota*), common teasel, Canada thistle (*Cirsium arvense*), musk thistle (*Carduus nutans*), snowberry (*Symphoricarpos albus*), flixweed (*Descurainia sophia*), rabbit brush (*Chrysothamnus nauseosus*), smooth brome (*Bromus inermis*), hare barley (*Hordeum leporinum*), alfafa (*Medicago sativa*), and crested wheat grass (*Agropyron cristatum*).

AREA D

The 0.07 acre area delineated by flags D1-D7 is an isolated area with a slight dominance of hydrophytic plant species and may receive hydrology from the upslope Loveland and Greeley Canal (refer to Photo 6). Soils in this area do not meet the criteria established defining hydric soils and therefore do not meet the criteria of a jurisdictional wetland area (refer to Data Form T12). This area is located upslope from and east of the natural drainage and west of the adjacent Canal (refer to Sheet 1). The dominant vegetation includes young plains cottonwood trees, Russian olive, clustered field sedge, Canadian thistle, smooth brome, and a small 4 square foot patch of broad-leaf cattail remnants in a small man-made hole associated with irrigation. This area does not meet the hydric soil characteristics in defining a jurisdictional wetland.

Summary

ERC has identified 12.04 acres of jurisdictional habitat within the limits of the Centerra East Property. Five jurisdictional areas have been delineated in the field and mapped on the enclosed Jurisdictional Delineation Maps (Sheets 1 and 2). Much of the wetland habitat delineated is influenced by irrigation practices but all areas exhibit jurisdictional wetland characteristics, with the exception of Area D. In the event further hydrological studies are conducted and determine the sole source of sustaining hydrology is irrigation induced, jurisdictional wetland habitat may be reduced. No characteristics of significantly high quality wetland have been identified such as the presence of histosols or fens. The identified Jurisdictional wetland areas are regulated by the US Army Corps of Engineers (Corps). Activities that result in disturbance of these areas will require prior authorization from the Corps under Section 404 of the Clean Water Act.

Sincerely,

Ecological Resource Consultants, Inc.





Senior Principal, Ecologist

Celine Pliessnig
Staff Ecologist

Enclosures: Photographic Documentation
Figure 1. Site Location Map
Jurisdictional Delineation Maps
Wetland Determination Data Forms

Cc: Stan Myers, Northern Engineering Services, Inc.

REFERENCES

Cowardin, L.M., V. Carter, F.C. Golet, & E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States (FWS/OBS-79/31).* Office of Biological Services, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C.

Environmental Laboratory. *1987 Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1, U.S. Army Corps of Engineer Waterways Experiment Station. Vicksburg, MS.

Kollmorgen Instruments Corp. 1990. *Munsell Soil Color Charts.* Baltimore, MD

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U.S. Fish & Wildlife Service. 1994. *National List of Plant Species that Occur in Wetlands (Regions 4, 5 & 8)*, published by Resource Management Group, Inc., Grand Haven, MI

Western Society of Weed Science, The Western United States Land Grant Universities Cooperative Extension Services and the University of Wyoming. Weeds of the West. 9th addition, 2000.

PHOTOGRAPHIC DOCUMENTATION



Photo 1. Wetland A, looking north up the drainage from the frontage road.



Photo 2. Looking east across Wetland A from the upland habitat.



Photo 3. The pond in Wetland B, north of the berm between the Wetland C and Wetland B.



Photo 4. The main channel of Wetland B, looking north.



Photo 5. Wetland C and the associated Farmers Ditch, looking to the east.



Photo 6. Area D, upslope from Wetland B and downslope from the Loveland and Greeley Canal.



Photo 7. Wetland E looking south at Wetland B from the Loveland and Greeley Canal.

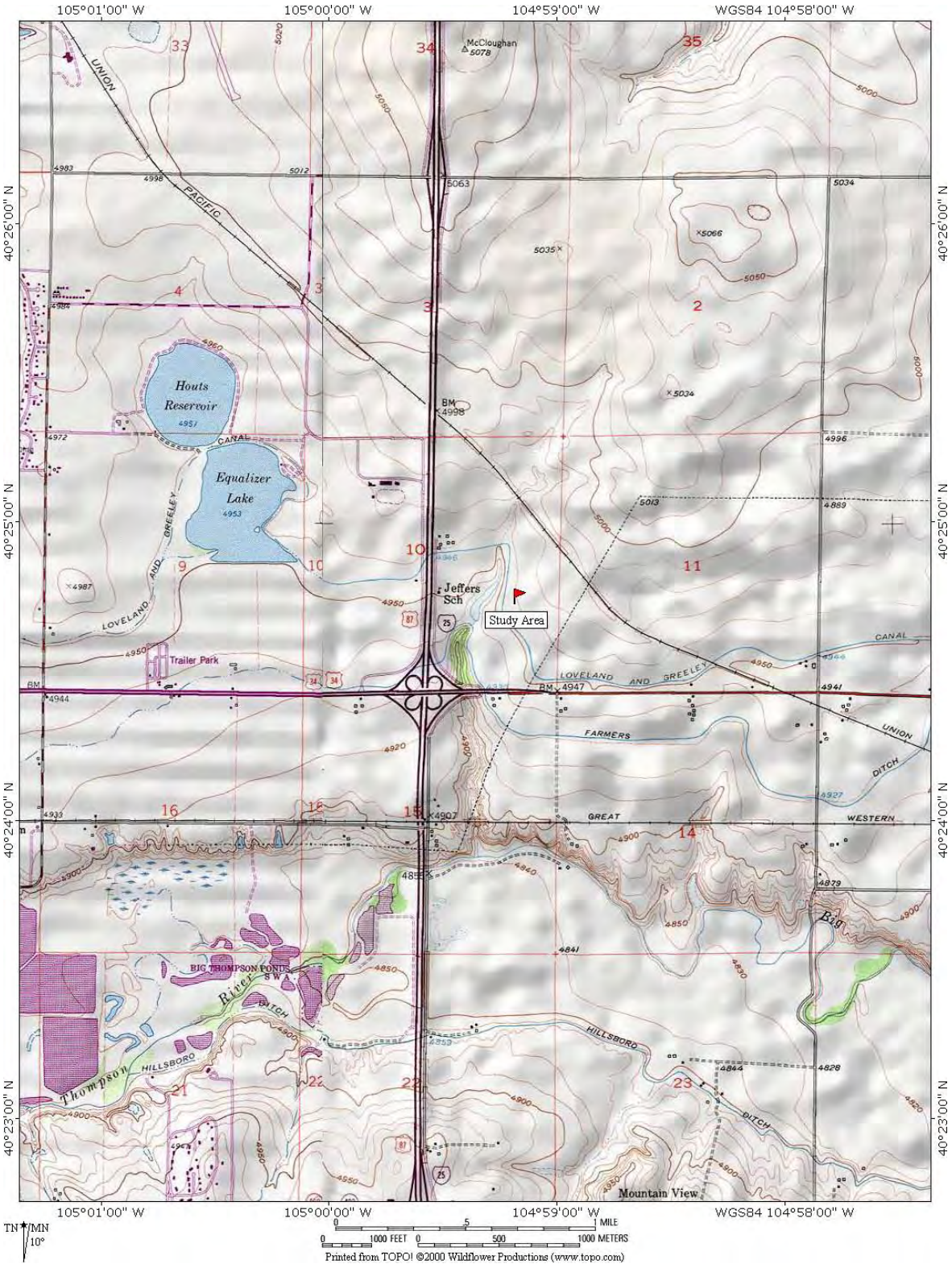


Photo 8. Wetland F on the north bank of the Loveland and Greeley Canal.

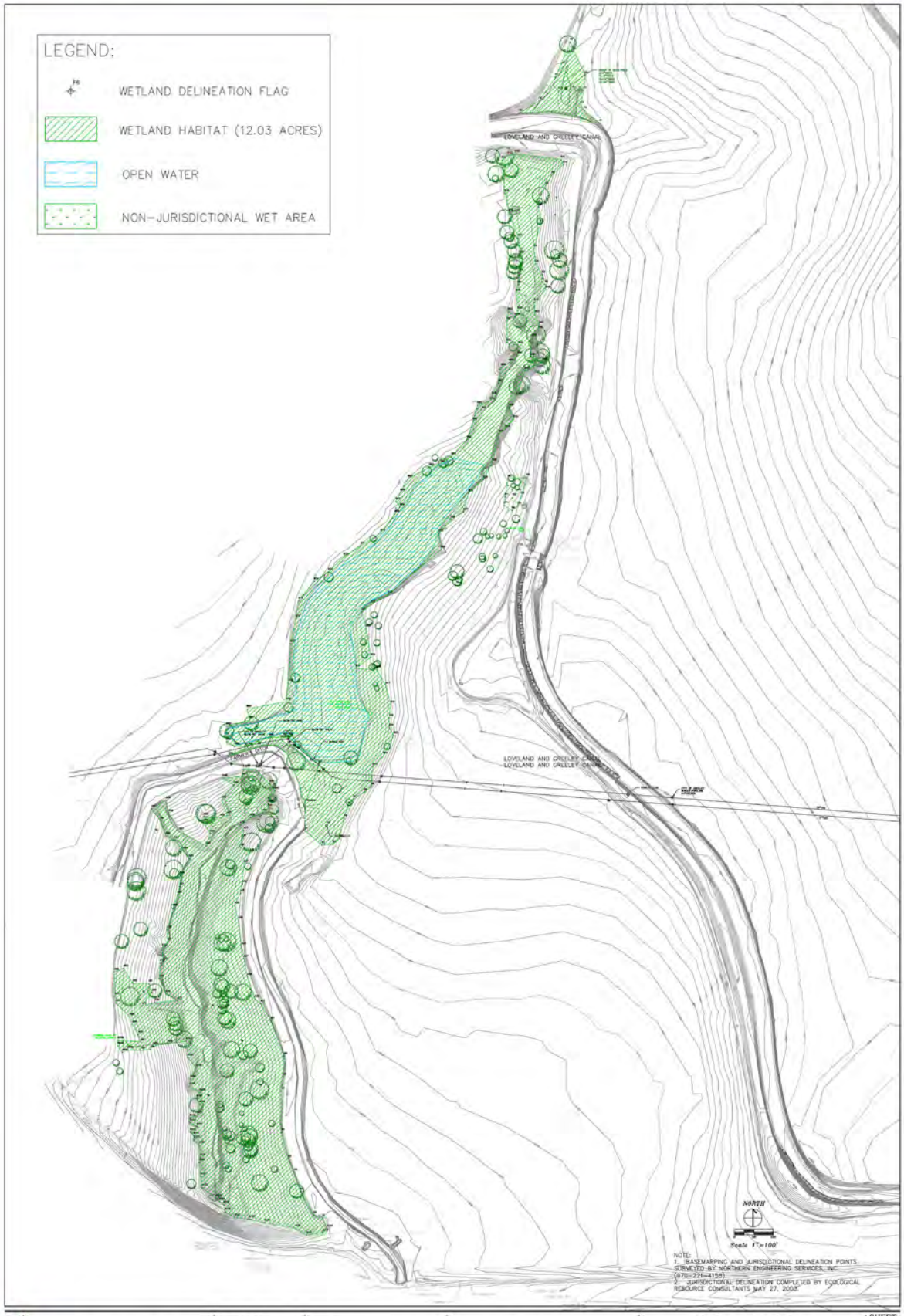


Photo 9. The Loveland and Greeley Canal, looking south, with the natural drainage channel (Wetland B) to the east.

FIGURE 1. Site Location Map



JURISDICTIONAL DELINEATION MAPS



Ecological Resource Consultants, Inc.
4920 Tesla Court, Boulder, CO 80301
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Centerra East
Larimer County, Colorado

Delineation Map
Jurisdictional Wetland

SHEET 1

APPENDIX C
COLORADO NATURAL HERITAGE PROGRAM ENVIRONMENTAL REVIEW

June 23, 2003

David Blauch
Ecological Resource Consultants, Inc.
4920 Tesla Court
Boulder, CO 80301

Dear David:

The Colorado Natural Heritage Program (CNHP) is in receipt of your request for information regarding the proposed Centerra East project. In response, I have searched our Biological and Conservation Datasystem (BCD) for natural heritage elements (occurrences of significant natural communities and rare, threatened or endangered plants and animals) documented from the vicinity of the area specified in your request, specifically the east half of Section 10 and the southwest quarter of Section 11, Township 5 north, Range 68 west, Larimer County, Colorado.

The enclosed report describes natural heritage resources known from this area and gives location (by Township, Range, and Section), precision information, and the date of last observation of the element at that location. This report includes elements known to occur within the specified project site, as well as elements known from similar landscapes near the site. Please note that "precision" reflects the resolution of original data. For example, an herbarium record from "4 miles east of Colorado Springs" provides much less spatial information than a topographic map showing the exact location of the occurrence. "Precision" codes of Seconds, Minutes, and General are defined in the footer of the enclosed report.

The report also outlines the status of known elements. We have included status according to Natural Heritage Program methodology and legal status under state and federal statutes. Natural Heritage ranks are standardized across the Heritage Program network, and are assigned for global and state levels of rarity. They range from "1" for critically imperiled or extremely rare elements, to "5" for those that are demonstrably secure.

You may notice that some occurrences do not have sections listed. Those species have been designated as "sensitive" due to their rarity and threats by human activity. Peregrine falcons, for example, are susceptible to human breeders removing falcon eggs from their nests. For these species, CNHP does not normally provide location information beyond township and range. Please contact us should you require more detailed information for sensitive occurrences.

There is one CNHP designated Potential Conservation Areas located within the vicinity of your project area (see enclosed map). In order to successfully protect populations or occurrences, it is necessary to delineate conservation areas. These conservation areas focus on capturing the ecological processes that are necessary to support the continued existence of a particular element of natural heritage significance. Conservation areas may include a single occurrence of a rare element or a suite of rare elements or significant features.

The goal of the process is to identify a land area that can provide the habitat and ecological processes upon which a particular element or suite of elements depends for their continued existence. The best available knowledge of each species' life history is used in conjunction with information about topographic, geomorphic, and hydrologic features, vegetative cover, as well as current and potential land uses. The proposed boundary does not automatically exclude all activity. It is hypothesized that some activities will cause degradation to the element or the process on which they depend, while others will not. Consideration of specific activities or land use changes proposed within or adjacent to the preliminary conservation planning boundary should be carefully considered and evaluated for their consequences to the element on which the conservation unit is based.

The Colorado Division of Wildlife has legal authority over wildlife in the state. CDOW would therefore be responsible for the evaluation of and final decisions regarding any potential effects a proposed project may have on wildlife. If you would like more specific information regarding these or other vertebrate species in the vicinity of the area of interest, please contact the Colorado Division of Wildlife.

The information contained herein represents the results of a search of Colorado Natural Heritage Program's (CNHP) Biological and Conservation Data System (BCD), and can be used as notice to anticipate possible impacts or identify areas of interest. Care should be taken in interpreting these data. Sensitive elements are currently known from within the proposed project area, and additional, but undocumented, elements may also exist (see enclosed report). Please note that the absence of data for a particular area, species, or habitat does not necessarily mean that these natural heritage resources do not occur on or adjacent to the project site, rather that our files do not currently contain information to document their presence. CNHP information should not replace field studies necessary for more localized planning efforts, especially if impacts to wildlife habitat are possible.

Although every attempt is made to provide the most current and precise information possible, please be aware that some of our sources provide a higher level of accuracy than others, and some interpretation may be required. CNHP's data system is constantly updated and revised. Please contact CNHP for an update or assistance with interpretation of this natural heritage information.

The data contained in the report is the product and property of the Colorado Natural Heritage Program (CNHP), a sponsored program at Colorado State University (CSU). The data contained herein are provided on an as is, as available basis without warranties of any kind, expressed or implied, including (but not limited to) warranties of merchantability, fitness for a particular purpose, and non-infringement. CNHP, CSU and the state of Colorado further expressly disclaim any warranty that the data are error free or current as of the date supplied.

Sincerely,

Michael Menefee
Environmental Review Coordinator

Enc.

Colorado Natural Heritage Program Environmental Review

Locations and Status of Rare and / or Imperiled Species known from or likely to occur within the vicinity of the Centerra East Project Area in Larimer County, Colorado

Report Generated: 24 June 2003

taxonomic group	scientific name	common name	prec	last obs	town/range	section	grank	srank	ESA	fed stat	st stat
Birds	GRUS AMERICANA	WHOOPING CRANE	G	1982-02-28	006N067W	16	G1	SAN	(LE,XN)		E
Birds	HIMANTOPUS MEXICANUS	BLACK-NECKED STILT	G	1981-06-11	006N067W	16	G5	S3B,S2N	(PS)		
Mammals	ZAPUS HUDSONIUS PREBLEI	MEADOW JUMPING MOUSE SUBSP.	G	1895-07-23	005N069W		G5T2	S1	LT	FS	T
Mollusks	ANODONTA GRANDIS	GIANT FLOATER	M	1993-09-22	006N068W	32	G5	S1			
Vascular Plants		DWARF MILKWEED									
Vascular Plants	RORIPPA COLORADENSIS	COLORADO WATERCRESS	G	1895-06-99	006N067W	20	GH	SH			

precision codes: S = "seconds", location known within 100m; M = "minutes", location known within 1 mile; G = "general", location known within 5 miles

NATURAL AREA 99 RATING AND USES

Prepared for:

McWhinney Enterprises
2725 Rocky Mountain Avenue, Suite 200
Loveland, Colorado

Prepared by:

FlyWater consulting, inc.
4900 Dakota Drive
Fort Collins, CO 80528

November 6, 2006

INTRODUCTION

This report documents the findings of the Habitat Ratings of the northern and southern sections of Natural Area 99 (NA99), presents Sensitive Area Zones that include buffers, and recommends permitted uses within each Sensitive Area Zone. NA99 and the surrounding development are shown in Figure 1. The zoning and use recommendations are based on several City of Loveland (City) regulatory documents.

REGULATORY

NA99 and the buffer that surrounds it are not regulated by the U. S. Army Corps of Engineers (Corps), U. S. Fish and Wildlife Service or the Colorado Division of Wildlife. Only the City regulates the natural area and the surrounding buffer. The Corps does take jurisdiction of the wetlands identified within the natural area under Section 404 of the Clean Water Act.

CITY OF LOVELAND GUIDANCE

Several City documents present guidance for development around and uses within a natural or sensitive area. The documents include:

- In the Nature of Things 1993 – revised 1996
- Loveland Municipal Code – amended 9/26/2006
- Parks and Recreation Master Plan 2001
- Open Lands Plan – March 2003

In the Nature of Things identified NA99 as having an overall rating of "7" ("10" represents pristine); animal diversity rating of "6"; wetland rating of "7"; and a plant diversity rating of "7". A complete summary of the above documents is presented in Appendix A.

PREVIOUS STUDIES

Several documents have been combined into the Millennium Document GDP to guide development with regards to NA99. The documents and previous studies are located in Section 14 Environmental Sensitive Area Reports (ESAR) of the Millennium Document and include:

- Cedar Creek – January 1999
- Ecological Resource Consultants (ERC) – July 2003 revised November 2003

The Cedar Creek study divided NA99 into a north section and a south section with the GLIC ditch being the divide. The north section received an overall rating of "4" due to a lack of plant diversity, narrow configuration and no buffer area to active agriculture. A setback of 50 feet was proposed for the north section. The south section received an overall rating of "7" and was in agreement with what was posted in the *In the Nature of Things* and recommended a 300 foot setback.

The ERC study confirmed the overall habitat rating of "7" for the south section. It also proposed a reduced setback of 75 feet for both the north and south sections from the 300 foot setback proposed in

the Cedar Creek study due to the observation ". . .the existing buffer zone is highly disturbed by irrigation easements as well as active farming and lacks vegetative structural diversity." A complete summary of the above documents is presented in Appendix B.

RECENT SITE EVALUATION

Wetland impacts associated with essential elements for the Centerra development (including roadway access, utilities, and stormwater improvements) were permitted through the Corps and completed on site. The natural area north of GLIC was comprised of a small wetland and a grove of mature cottonwoods. Impacts to the small wetland for stormwater improvements have eliminated the wetland component of the north NA99 area. Therefore, a reevaluation of the habitat rating for the north area was performed.

The original habitat ratings were completed as a relative assessment with other natural areas. In order to maintain this relative assessment, the south section of NA99 was also assessed using the information from the previous studies. FlyWater consulting, inc. (FlyWater) performed site assessments on 8/1/06, 8/14/06, 8/29/06, and 10/19/06. The north section of NA99 was observed to exhibit an overall habitat rating of "2" due to the lack of plant diversity, lack of scrub cover for small mammal habitat, and lack of wetland area for reptiles and amphibians. The complete site assessments for the north and south sections of NA99 are presented in Appendix C. A figure showing the north and south areas of NA99 is presented as Figure 2.

SENSITIVE AREA ZONES

Following the ERC study, a drawing showing open water, wetland, natural area, and buffer areas was produced for NA99. This drawing is presented as Figure 3. Although the sensitive area was broken into several habitat zones as described, little regulatory guidance was presented relating to acceptable public uses within each zone. Following is a description of each habitat zone:

Zone 1A and 1B

Zones 1A and 1B are defined by Corps jurisdictional boundaries. Zone 1A is the open water component and is defined by the extents of open water. Zone 1B is defined by the jurisdictional extents of the vegetated wetland areas within NA99. The vegetation consists of wet meadow, cattail and sedge/rush marshes.

Zone 2

Zone 2 represents the natural area. The boundaries of Zone 2 extend from the jurisdictional wetland boundary to the delineated boundary of NA99. The vegetation is upland meadow, shrub thickets and mature stands of trees –particularly cottonwoods.

Zones 3A and 3B

Zones 3A and 3B delineate the buffer boundaries for the natural area. Zone 3A extends from the natural area boundary outward and is intended as a buffer for the natural area. Zone 3B extends from the 3A boundary outward and is intended as a transition zone.

As a result of the recent site evaluations of the north and south sections of NA99, a revised drawing showing the proposed habitat zones for NA99 is presented as Figure 4. The proposed buffer is maintained and totally encloses the natural area.

RECOMMENDATIONS

Using guidance from the City regulations and the site specific Millennium Plan, the following are enhancement and activity recommendations for each of the habitat zones.

Zone 1A and 1B

Zone 1A will be managed to maintain areas of open surface water. Removal of accumulated sediment and control of the invasive spread of cattails are a priority for this zone enhancement. Because of the sensitive nature of this zone, no public activities are recommended. Zone 1B will be enhanced by the control of weedy species. Once the native wetland plants have been established in the disturbed areas, no long term enhancements are recommended. Again, the sensitive nature of these zones results in the recommendation of passive wildlife viewing from other zones or bridges.

Zone 2

Natural Areas with an overall habitat rating of "6" and above should have a weed eradication plan implemented for enhancement. Further enhancement opportunities could result from additional native plantings of grasses/herbs, shrubs, and trees. Acceptable public activities in the higher rated natural areas include hard trails on a case by case basis, soft trails, pedestrian bridges, educational signage, benches, sculptures, and wildlife viewing. The intent is a passive or observatory use by the public.

Areas with overall ratings of "5" and below should employ a management plan to eradicate weeds and increase the diversity of plant life within the natural area. In particular for the north section of NA99, focus should be placed on planting shrubs and utilizing drainage to increase the potential of wetland plants. These areas can be used in a more programmatic or active/interactive way. Acceptable public activities include hard and soft trails, pedestrian bridges, educational signage, benches, sculptures, and wildlife viewing.

Zones 3A and 3B

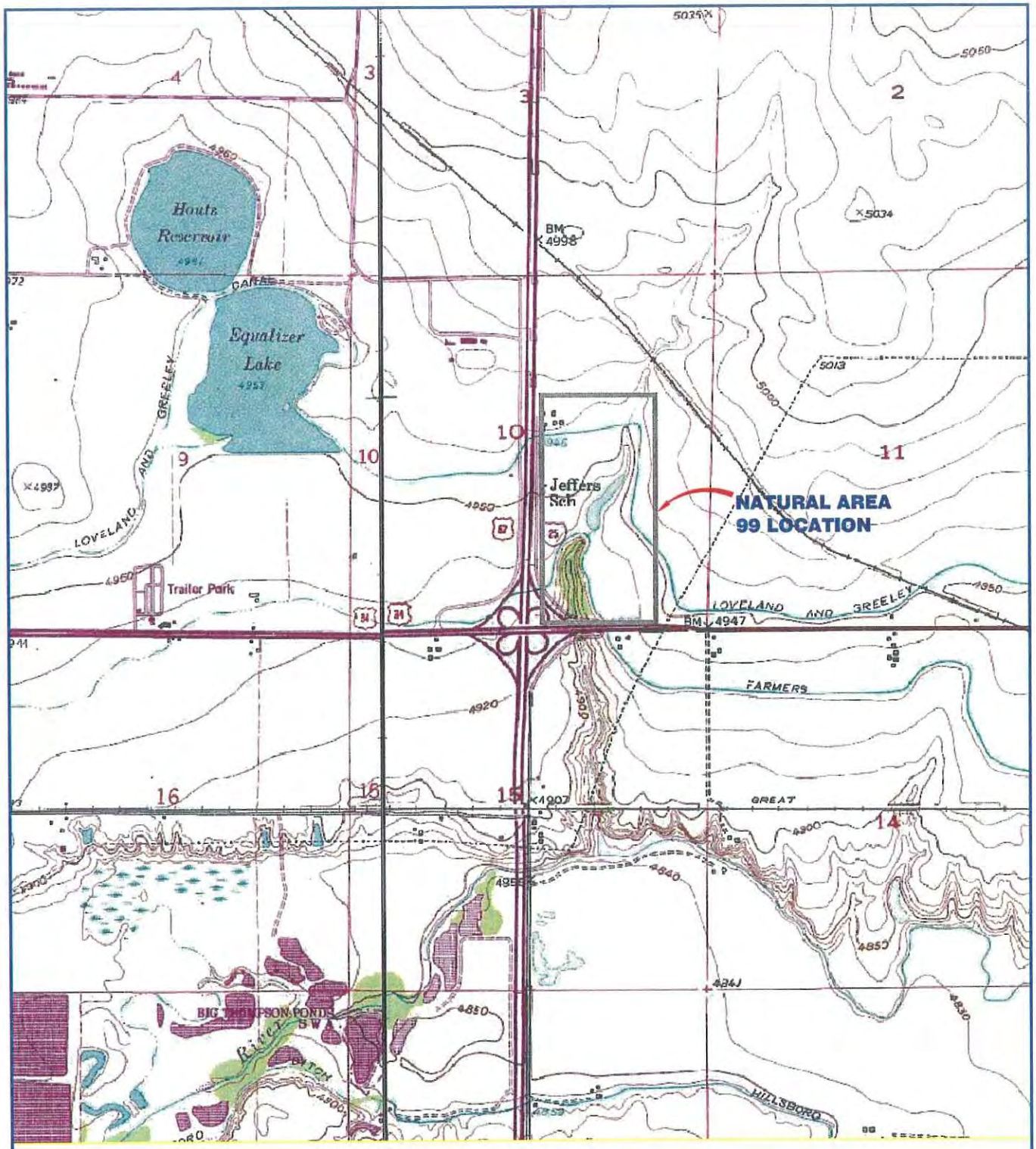
In natural areas with an overall habitat rating of "6" and above in Zones 3A and 3B, enhancement should focus on weed eradication and developing the buffer for wildlife screening. Wildlife screening employs the use of native shrubs and trees to develop thickets and groves in the buffer areas. Public activities acceptable within Zones 3A and 3B include hard and soft trails (low level path lighting is

acceptable adjacent to developed areas for public safety), educational signage, benches, nodes, sculptures, and wildlife viewing.

Areas having a rating of "5" and below should employ weed eradication and developing the buffer for wildlife screening in Zones 3A and 3B. Trees and shrubs should be planted in these zones especially adjacent to buildings, parking facilities, and/or roads. Public activities acceptable in Zones 3A and 3B for areas with ratings of "5" or below include hard and soft trails (low level path lighting is acceptable adjacent to developed areas for public safety), water features, educational signage and out-buildings, benches, nodes, sculptures, and wildlife viewing.

In general, NA99 south of GLIC should focus on planting native vegetation, and focus public activities toward the passive use of the area including the use of minimal soft trails in the natural area, and perimeter trails in the buffers to protect the valuable sensitive area. NA99 north of GLIC is less sensitive receiving a rating of "2" and can therefore be used to "immerse" the public in the natural areas. Enhancement including the planting of trees and shrubs can greatly improve the diversity of the sensitive area.

Figures



8000 4000 0 8000

SCALE IN FEET

FIGURE 1: VICINITY MAP

Date:	11/01/06
Job No:	05-211
Drawn:	CBF
Design:	CBF
Checked:	CBF
File:	NA99 Vicinity Map
Scale:	1"=8000'+/-

McWhinney Enterprises

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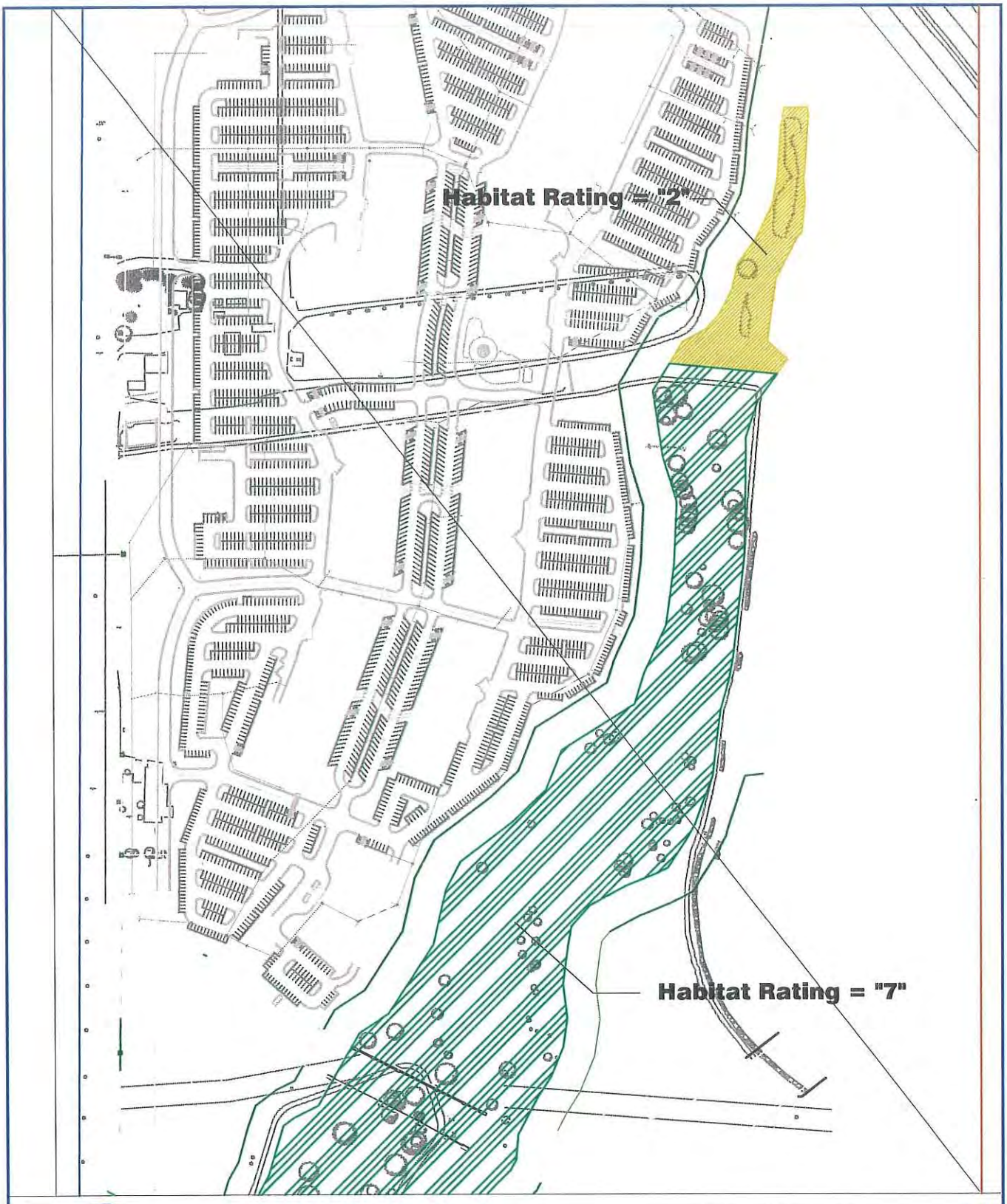


FIGURE 2: NATURAL AREA 99 RATINGS

Date:	11/06/08
Job No:	05-211
Drawn:	cbf
Design:	
Checked:	cbf
File:	
Scale:	1"=300'+/-

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FIGURE 3: PREVIOUS HABITAT ZONES

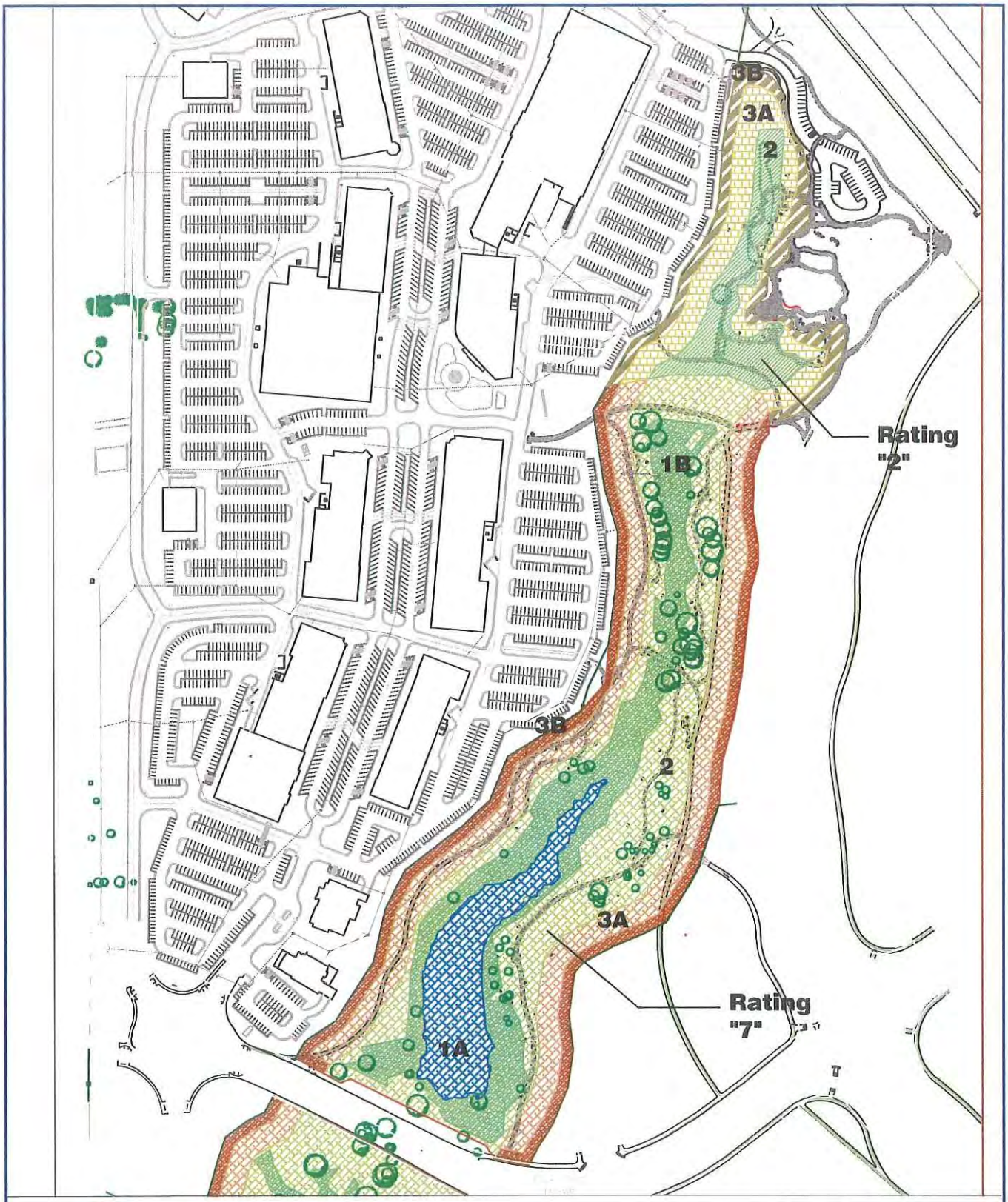
Date:	11/06/06
Job No:	05-211
Drawn:	cbf
Design:	
Checked:	cbf
File:	
Scale:	1"=300'+/-

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300 150 0 300

SCALE IN FEET

FIGURE 4: REVISED HABITAT ZONES

Date:	01/16/07
Job No:	05-211
Drawn:	cbf
Design:	
Checked:	cbf
File:	
Scale:	1"=300'+/-

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Appendix A

In the Nature of Things

In the Nature of Things was a report of a study completed in 1993 and updated in 1996 that defined and identified Natural Areas within the City. The following is a summary from the document pertaining to NA99 and guidance to acceptable uses within a sensitive area:

- Evaluations do not, in any way, imply future land uses, development constraints, property values, or acquisition potential.
- NA99 has overall rating of 7; animal diversity rating of 6; wetland rating of 7; and a plant diversity rating of 7.
- Wetlands in NA99 are supported by irrigation runoff and seepage from adjacent irrigation ditch.
- NA99 enhancement possibilities rated at medium.
- If development occurred adjacent to NA99, the site could provide an excellent open space and buffer area – should be planted with riparian shrubs and native trees to improve buffer.
- Visitors to Natural Areas can:
  - Tread lightly
  - Avoid disturbing wildlife
  - Keep pet under control so as to not disturb wildlife
- Developers near Natural Areas can:
  - Obtain information on the wildlife and plants and make such information a central part of the development planning process
  - Accept the challenge of using the development process to protect and sustain nature.
  - Protect and enhance Natural Areas

Parks and Recreation Master Plan 2001

Introduction - Natural Areas (Open Space) The Natural Areas Division is involved with the planning, management, acquisition and operations of the Open Lands Program. Funding for the program is received from a quarter-cent Larimer County sales tax through 2018 for the operation, maintenance and acquisition activities.

Inventory - Natural Areas - In 1999, the Parks and Recreation Department assumed management responsibility for the City's Open Space/Natural Areas Program. Loveland's natural areas are funded through the Larimer County Open Space Sales Tax, a portion of which is allocated to each municipality in the county based on a population/sales tax formula. This tax is in effect until 2018 for the planning, acquisition, management and maintenance of open land areas. The Natural Areas program works with interested landowners and forms partnerships with other local and state governments and land trusts to preserve significant open lands characterized by unique natural environments. Twenty-seven natural areas have currently been preserved as open space including land along the Big Thompson River and City recreational trail, agricultural lands, and former gravel ponds, providing unique natural features and scenic view sheds.

Condition of Existing Facilities – Natural Areas - It is the goal of the natural areas program to restore and maintain natural areas properties to a status as near as possible to their native condition. Several recent property acquisitions required significant cleanup of debris and noxious weeds. Planting of native vegetation, including grasses, forbs, shrubs, and trees, follows these cleanups to prevent the reestablishment of weeds. Following restoration, certain natural areas are accessible to the public. Agricultural properties will continue to be farmed following acquisition whenever possible.

Standards, Guidelines, and Policies – Open Space/Natural Areas - Conservation and preservation of natural areas; no defined service area; resource determines size, use and accessibility. The City manages open space areas separately from the park system, but there are open space areas within and bordering several park and trail locations. A separate Open Lands Master Plan governs the Open Lands Program.

Standards, Guidelines, and Policies – Trails - Trails are off-road (non-motorized) recreational routes typically constructed of concrete, which are 10 feet in width. Paved trails supplement commuter routes and provide linkages within the community. Most trails are located along drainage ways, irrigation canals or through acquired open space. The Recreation Trail may also be constructed through residential developments with the intent to encircle the City in a connecting loop. Loveland's trail standard is one-half paved mile of trail per 1,000 population.

Non-Paved or soft surface trails will be constructed where possible along all new trail routes. These trails generally run parallel to the paved trails and will vary in width and will be constructed to avoid impacts to environmentally sensitive areas. Demand for non-paved trails is increasing to accommodate walkers, joggers and mountain bikers where appropriate.

Implementation Plan - Natural Areas -
Rewrite and update the City of Loveland Open Lands Plan of 1996 Staff will analyze results from the first 5 years of the Open Lands Plan and assess the next 5 to 10 years for preservation of additional open space, as well as the management of open space currently owned. City Council needs to provide priority direction for use of limited resources and varied possibilities for focus including growth management, natural area and wildlife habitat preservation and public use of these areas. This will be a 2002 staff project with the Open Lands Commission.
Restoration of Recently Acquired Open Space Parcels Management and maintenance plans will be established and implemented for three recently acquired parcels along the Big Thompson River, as well as for additional properties acquired in the future.
Assist with Trail Connections and Corridors on or Near Open Space Natural Areas staff will coordinate with Parks staff to identify and acquire trail easements on open space and natural areas and vice versa.
Acquire and Preserve Open Lands and Natural Areas Based on the priorities of the Open Lands Plan, lands will be purchases or preserved as they become available and funding permits. If development plans are proposed in or around Loveland, discussions with the developers will occur during the planning and development review process.

Policy Questions - Use of Natural Areas - There are several policy questions, that exist regarding the use of purchased or conservation easements of natural areas. Are these areas a growth management tool? Should natural areas be more available for public use and environmental education? As Loveland continues to increase its inventory of natural areas, these questions will need answers to adequately prepare maintenance and management plans for each site. The 2002 updated Open Lands Plan should address these issues.

Open Lands Plan – March 2003

Introduction - The purpose of this plan is to present the current status of the open lands program and to outline future land preservation in the Loveland area.

Vision - Loveland's vision is that the community will continue to view parks and open lands as important for humans and all living things, and these special places will remain an integral part of the lifestyles of the City's

citizens and visitors. This philosophy will include a balanced approach to planning, seeking ways to conserve natural resources while meeting the needs of a community that will continue to grow in coming years. The City looks forward to the day when the existing system of developed and undeveloped parks, trails and open lands will be expanded throughout the community, becoming part of Loveland's image and identity. Some open lands should be accessible to all people for recreational use while others should be left relatively undisturbed, preserving their natural values. The City will protect open lands that are contiguous, and will add new lands that are connected to previously protected areas, to allow wildlife movement and thus better protect high-value habitat. When appropriate, open lands in and around the community will be used for educational purposes as well as for relaxation, beautification and recreation.

Public Access - To protect sensitive wildlife habitat, wetlands and other natural resources, some open lands may not be open to direct public access, but may instead be of great value by providing visual access. Natural areas that have higher natural resource values may be accessible from viewing areas along the edges, while areas of lower habitat quality may have more direct public access. Trails and other facilities will be developed in open lands areas with less sensitive resources to accommodate public uses such as hiking, picnicking, wildlife viewing and other recreational uses. Future facilities will be designed to minimize undue impact to natural resources.

Proposed Natural Areas Trails - The City's Natural Areas Program may develop trails on open lands. These trails will be planned with consideration of wildlife and other natural resource values and will not enter areas that are of particular importance or sensitivity. Decisions regarding which areas will receive trails, and their exact alignment, will be determined in the future on a case-by-case basis, as part of the management planning process. . . .It is anticipated that most of these trails would be natural soft surface trails.

Environmentally Sensitive Areas Reports - Title 18 of the Loveland Municipal Code covers zoning, the development review process, performance standards, and zoning districts. Currently, the City is revising and updating this section of the code. The City of Loveland 1994 Comprehensive Master Plan Section 4.2 and Municipal Code Section 18.41 state that all proposed developments in or adjacent to natural areas, as identified by In The Nature Of Things and updated in this Open Lands Plan, are required to submit an Environmentally Sensitive Areas Report (ESAR) for review and approval by the Current Planning Division and the Parks and Recreation Department.

Natural Areas Division Policies

14. Hunting shall not be permitted on open lands or natural areas owned by the City of Loveland (Section 9.48.010 of the Loveland Municipal Code).

21. Signage for natural areas and open lands shall identify the property as open lands and provide rules and regulations applicable to the property.

23. Restoration and revegetation of open lands, if necessary, shall be performed in accordance with a baseline inventory and management plan prepared by staff or outside contractors for each property.

Appendix A —Recommendations for Big Thompson Corridor are split into whether the natural area has a rating of "6" or above or "5" and below. Ratings of "6" and above will be included in the Resource Protection Area and development will not be allowed; buffer widths are 50 feet. Ratings of "5 and below will be included in the 50 foot buffer to the Resource Protection Area.

Recommendations for Lake Edges and Ditches are also split into whether the natural area has a rating of "6" or above or "5" and below. Ratings of "6" and above should have buffer widths are 300 feet. Ratings of "5 and below should have 75 foot buffer widths and can have trails.

Comprehensive Master Plan – December 2003

Concept of Plan - LU:2.8 The current natural areas system includes the foothills, the lakes, parks and recreation areas, streams and irrigation canals, and the Big Thompson River floodplain. As the city grows out from the center, these natural areas need to be preserved and enhanced.

Use Plan Details - The Land Use Plan identifies critical natural areas in the city and within the city's future growth areas. These include the many lakes, the Hogback, and the Big Thompson River Flood Plain. In addition, there are many irrigation canals, streams, and tributaries that are important opportunities to provide linear open spaces as development takes place.

Future Planning Opportunities - This approach is important if the City wishes to accomplish its objective of proactively planning for areas under development pressure, while preserving natural areas. There are areas that need to be looked at more specifically by the City Council and Planning Commission, working with the property owners, to develop a strategy for the future that all can agree on.

Loveland Municipal Code – amended 9/26/2006

The Loveland Municipal Code also provides guidance in relation to natural and sensitive areas. The following is a summary from the document pertaining to NA99 and guidance to acceptable uses within a sensitive area:

Section 7.18.030 - Weeds, cutting & removal - It shall be an affirmative defense to a violation of this section that the land upon which the vegetation is growing is City owned property and has been designated by the Director of the Parks and Recreation Department of the City as a natural area, wildlife corridor, or wetlands, or that the land upon which the vegetation is growing is dedicated public or private open lands as determined by the manager of the City's Long Range Planning and Natural Resources Division. (Ord. 4274 § 1 (part), 1997)

Section 16.08.010 - Definitions - "Environmentally sensitive areas" means an area with one or more of the following characteristics: (1) slopes in excess of twenty percent; (2) floodplain; (3) soils classified as having high water table; (4) soils classified as highly erodible, subject to erosion or highly acidic; (5) land incapable of meeting percolation requirements; (6) land formerly used for landfill operations or hazardous industrial use; (7) fault areas; (8) stream corridors; (9) estuaries; (10) mature stands of vegetation; (11) aquifer recharge and discharge areas; (12) habitat for wildlife; or any other area possessing environmental characteristics similar to those listed here.

Section 16.16.030 A. 2. - Review procedures, general – Concept Review of a Sketch Plan – Concept Review Team Meeting – i. The location and extent of any known environmentally sensitive areas, any reasonably anticipated impacts on these areas, and any other proposed corresponding mitigation. Another concept review team meeting may be necessary if the applicant makes substantial changes to the original sketch plan. The

concept review team may discuss with the applicant the submittal requirements, and waivers to the submittal requirements, if appropriate.

Section 16.20.030 - Subdivision review standards – C. The subdivision preserves natural features and environmentally sensitive areas of the site to the extent possible.

Section 16.24.080 - Water courses - In the event that the subdivision is traversed by any water course or channel, stream or creek, or is contiguous to the shoreline of a lake or a reservoir the subdivider shall provide sufficient easements, by dedication, or tracts of land separate for individual lots, acceptable to the city, to care for such surface and storm water and the disposal thereof and sufficient building setbacks or landscape or natural buffers as determined by the city. (Ord. 4444 § 1 (part), 1999; Ord. 4298 § (part), 1997)

Section 16.40.015 - Grading permit allowed - (2) for overlot grading that meets the criteria for the issuance of a grading permit set forth in the building code adopted by the City, provided that the Director finds (i) that the grading activity will not disturb any natural areas as defined in the City of Loveland Comprehensive Master Plan, and (ii) that the grading activity will not disturb any environmentally sensitive areas as defined in the Loveland Municipal Code. (Ord. 5107 § 1, 2006)

Section 18.30.040A. 2. - Development standards – Campus-Type Character - Unified Open Space: Projects shall include a unifying internal system of pedestrian-oriented paths, open spaces and walkways that function to organize and connect buildings, and provide connections to common origins and destinations (such as transit stops, restaurants, child care facilities and convenience shopping centers). The development plan shall utilize open space and natural features that serve as buffers and transitions to adjacent area(s). Development plans shall include at least 20 percent of the gross site area devoted to common open space features, including features such as common area landscaped buffers, parks or plaza spaces, entrance treatments, natural areas, or wetlands, but excluding any open space or landscaped areas within required building setbacks or parking lots. Areas dedicated to storm water drainage may also be counted toward meeting the open space requirement, provided they are designed to be recreation space or as an attractive site feature incorporating a naturalistic shape and/or landscaping.

Section 18.32.020 - Definitions - H. Open Lands/ Natural Area – Shall mean all areas as described in the City of Loveland Open Lands Plan or as further described in the Parks and Recreation Master Plan, as these plans are adopted and may be amended.

Section 18.32.030 - Uses permitted by right - E. Open Lands/Natural Areas

Appendix B

Cedar Creek – January 1999

- Active cultivation approaches to the edges of most segments of the ditches and there is minimal vegetation cover, these ditches have little value as wildlife movement corridors or wildlife habitat.
- Area between the Loveland and Greeley Canal and Highway 34 has rating of 7 due to diversity of wildlife habitat created by mix of wetlands, riparian uplands, and grasslands. Rating would have been higher if connected to other natural areas.
- Area North of Loveland and Greeley Canal has a rating of 4 due to reduced vegetation, narrow configuration, and adjacent cropland.
- There are no wildlife movement corridors to other Natural Areas – movement blocked by I-25 and Hwy 34.
- Setback of 300 feet recommended – from City of Fort Collins general guidance.
- Setback of 50 feet for Natural Area north of GLIC
- Trails and picnic areas appropriate in buffer zones
- No development within buffer zone
- Planted and maintained with native upland vegetation
- Detailed preliminary plans and specs for planting, soil prep, and weed control will be submitted prior to approval of Preliminary Plat
- Since surrounding development is commercial, free roaming cats and dogs are minimized – lease law should be implemented

Ecological Resource Consultants – July 2003 revised November 2003

- Natural Area 99 is a remnant and fragmented tributary drainage to the Big Thompson River.
- No TES species or CNHP Potential Conservation Areas were documented on the Centerra East Property.
- Drainage is intermittent and pond is perennial
- Ratings are as follows:

Natural Attribute	*Numerical Rating**
Overall Habitat Rating	7
Wetland Rating	7
Animal Diversity	6
Plant Diversity	7
Songbird Rating	7
Raptor Rating	5
Waterbird Rating	6
Mammal Rating	6
Reptile. Amphib. Rating	7
Enhancement Potential	medium

- Natural Area 99 is entirely surrounded bordered by agricultural lands and Ditch maintenance roads.
- The Natural Area 99 habitat has been fragmented by irrigation channels, ditch maintenance road crossings, intrusion by agricultural practices as well as surrounding roadways and development.
- The majority of the hydrology in the area drains towards the natural drainage with limited treatment.
- The upland habitat is suffering from the encroachment of aggressive weedy plant species.
- Generally the existing buffer zone is highly disturbed by irrigation easements as well as active farming and lacks vegetative structural diversity.

- City of Loveland Development Code recommends 180-300 foot buffer zone associated with Wetlands with a rating of 6 or higher for water birds, wetland or overall habitat which have been identified in Natural Area 99.
- Proposes a 75 foot buffer zone between the edge of development and the edge of the Natural Area. By establishing a site specific, higher functional value buffer zone, the buffering capabilities of the zone can be achieved over less of a horizontal distance. The following were recommended:
  - All non-native/noxious weed species should be eliminated from the buffer zone and Natural Areas.
  - The buffer zone should be reseeded with a native seed mix which promotes vegetative structural diversity, species richness, runoff retention and wildlife forage and cover.
  - Native trees and shrubs such as cottonwood trees, peach-leaf willow and chokecherry should be strategically planted to provide a shading, visual/noise screen as well as to reduce light from entering the natural areas. Dense groupings of shrub planting are recommended which also create additional structural diversity promoting wildlife habitat.
  - The buffer zone should be identified within the development plan through the use of an open type fence such as split rail and signs, to discourage routine human disturbance.
  - The buffer zone should be managed, eliminating routine mowing, and implementing weed control and routine litter control.
  - All developmental stormwater runoff should be treated prior to discharge into local drainages.
  - Wildlife habitat improvement structures could be installed throughout the Natural Area.

Appendix C

Sensitive Area Habitat Evaluation Sheet

Site ID: Natural Area 99 – North of GLIC

Dates of Field Evaluation (investigator):

8/1/06 (Matt Schlitzer), 8/14/06 (Matt Schlitzer), 8/29/06 (Bradley Florentin)
10/19/06 (Bradley Florentin)

Overall Habitat Rating:	2	**Wetland Rating:**	0
Animal Diversity:	2	**Plant Diversity:**	1

Site Location: *S10, T5N, R68W*

Site Description:

Small grove of cottonwoods surrounded by weedy grasses and forbes.

Habitat Types:

FOR

Forest – Riparian Forest, Cottonwood Grove, Scattered Deciduous Trees:

Mature cottonwood Grove – no other species of native trees present

GRA

Grassland – Grass/Forb:

smooth brome, creeping bentgrass, kochia, prickly lettuce

Miscellaneous Types

Weedy/Disturbed,

This area has been historically cultivated. Cultivation has ceased and the areas have been disturbed for use as water quality and detention ponds required for surrounding development.

Threatened and Endangered Species:

None

Songbirds: 3

nesting habitat – observed: black-billed magpie, American robin, American goldfinch

Raptors: 2

perch sites – observed red-tailed hawk

Waterbirds: 1

nesting habitat – none observed

Mammals: 1

This area has no scrub community for small mammal cover and is fragmented and narrow – observed raccoon

Herptiles (amphibians and reptiles): 0

There is not persistent surface water or wetland habitat for reproduction and shelter. The water source is runoff from the surrounding development. There may be intermittent pools of water in the bottom of the detention and water quality basins and some fringe wetlands may develop.

Other Wildlife: 0

Nearby Habitats:

I-25 & Development

Pristine Quality: 0

Human Use: 0

Human Disturbance: 0

Enhancement Possibilities:

Medium

Wetland Functions:

Special Features:

Wildlife Conflict:

Corridor:

This portion of Natural Area 99 is disconnected from any wildlife corridors.

Any critical INFO needed?

Literature:

Ownership:

Private

Sensitive Area Habitat Evaluation Sheet

Site ID: Natural Area 99 – South of GLIC

Dates of Field Evaluation (investigator):

8/1/06 (Matt Schlitzer), 8/14/06 (Matt Schlitzer), 8/29/06 (Bradley Florentin)
10/19/06 (Bradley Florentin)

Overall Habitat Rating:	7	**Wetland Rating:**	7
Animal Diversity:	6	**Plant Diversity:**	7

Site Location: *S10, T5N, R68W*

Site Description:

Very diverse wetland swale with open water, large trees & shrub canopy.

Habitat Types:

AQA

Aquatic – Open Water, Ephemeral Drainage: Vegetation listed below observed on site by FlyWater.

". . .coyote willow, common cattail, pondweed, watercress, Baltic rush, threesquare, Nebraska sedge, swamp milkweed, smartweed, and willowherb."[2]

"canary reed grass, broad-leaf cattail, Baltic rush, water sedge, clustered field sedge, peach-leaf willow, plains cottonwood, common teasel, houndstongue, false Solomon's seal, Nebraska sedge, and curly dock."[3]

FOR

Forest – Riparian Forest, Cottonwood Grove, Scattered Deciduous Trees: Vegetation listed below observed on site by FlyWater.

". . .mature plains cottonwood and peachleaf willow..."[2]

". . . mature trees species identified include plains cottonwoods and peach-leaf willow trees. . ."[3]

GRA

Grassland – Grass/Forb: Vegetation listed below observed on site by FlyWater.

". . .smooth brome, cheatgrass, western wheatgrass, slender wheatgrass, crested wheatgrass, Indian grass, Canada wildrye, Kentucky bluegrass, Canada thistle, and Virgin's bower."[2]

". . .smooth brome, creeping bentgrass, clustered field sedge, false Solomon's seal, Canada thistle, poison ivy, common teasel, yellow sweet clover, musk thistle, leafy spurge, houndstongue, wild licorice crested wheatgrass, orchard grass, stinging nettle, hare barley, wild lettuce, curly dock, showy milkweed, smooth scouring rush, and downy brome.."3

WET

Wetland – Cattail Marsh, Sedge/Rush, Willow Shrubland: Vegetation listed below observed on site by FlyWater.

". . .reed canarygrass, teasel, clustered field sedge, Emory sedge, swithcgrass, foxtail barley, hemp dogbane, alkali muhly, field mint, showy milkweed, and Nuttall's sunflower. . ."[2]

". . .houndstongue, common teasel, Canada thistle, , musk thistle, and Russian olive trees."[3]

SHR

Shrubland – Plains Shrubland, Riparian Shrubland: Vegetation listed below observed on site by FlyWater.

"chokecherry, Wood's rose, western snowberry, rubber rabbitbrush, and skunkbush sumac"[2]

". . .dense chokecherry stands, Wood's rose, snowberry, rabbit brush, and scarlet falsemallow."[3]

AGR

Agricultural – Irrigation Ditch

". . .since active cultivation approaches to the edges of most segments of these ditches and there is minimal vegetation cover, these ditches have little value as wildlife movement corridors or wildlife habitat, except where they are in close proximity to Natural Area #99."[2]

Threatened and Endangered Species:

None

Songbirds: 7

"nesting and foraging habitat – observed belted kingfisher, northern flicker, blue jay, black-billed magpie, American robin, western meadowlark, black-capped chickadee, American goldfinch"[2]

"The shrubs and trees within the riparian area are used by songbirds for nesting – Observed: kill deer, red wing blackbird, barn swallow, western tanager"[3]

Observed Red winged blackbird - FlyWater

Raptors: 5

"perch sites and hunting habitat – observed red-tailed hawk, American kestrel, great horned owl"[2]

"The shrubs and trees within the riparian area are used by . . .raptors for roosting and hunting the nearby agricultural fields and meadow habitat – observed: red-tail hawk and great-horned owl"[3]

Observed red-tailed hawk - FlyWater

Waterbirds: 6

"nesting and foraging habitat – observed mallard"[2]

"Waterfowl use the pond area for foraging and possibly nesting. Observed: white pelican, blue heron, double-breasted cormorant, mallard"[3]

Mammals: 6

"small mammal and hunting habitat – observed Nuttall's cottontail"[2]

"The fragmented habitat limits the mammalian use of the area to primarily small mammals. Observed: cottontail, and coyote"[3]

Raccoon - FlyWater

Herptiles (amphibians and reptiles): 7

"breeding and foraging habitat"[2]

"The reptiles and amphibians require surface water and wetland habitat for reproduction and shelter. Observed: Snakes, frogs"[3]

Other Wildlife: 0

Nearby Habitats:

I-25 & Agricultural

Pristine Quality: 0

Human Use: 0

Human Disturbance: 0

Enhancement Possibilities:

Medium

Wetland Functions:

This site is a long, relatively narrow unit with a core of cattail marsh supported by irrigation runoff and seepage from the adjacent irrigation ditch. The site forms an interesting complex of vegetation types, including scattered large mature plains cottonwoods, extensive understory of snowberry and large stands of cattails. Other shrub stands also provide habitat for wildlife. The northern portion of the site supports a large shallow pond with wetland margins. This site potentially could be considered part of a corridor associated with the irrigation ditch. Potential improvements for this site could include use of the irrigation water to further enhance or expand wetlands and maintenance of the pond. If development occurred adjacent to the site, the site could provide an excellent open space and buffer area, but should be planted with riparian shrubs and native trees to further protect and buffer the area. The wetlands here provide water quality benefits, including sediment and nutrient retention, and provide important wildlife habitat. Portions of the site appear to receive heavy applications of herbicide most likely associated with irrigation ditch maintenance.[1]

Special Features:

Wildlife Conflict:

Corridor:

"There are no wildlife movement corridors from natural areas in the Eastern Portion to other natural areas."[2]

Any critical INFO needed?

Literature:

Design Workshop, Inc., ERO Resources Corp., Stoecker Ecological Consulting, Inc., "In the Nature of Things – Loveland's Natural Areas". December 1993. Revised October 1996.
Phelan, T. Michael, "Environmentally Sensitive Areas and Wetland Report for the Rocky Mountain Villages III Properties", Cedar Creek Associates. January 1999.
Ecological Resource Consultants, Inc., "Centerra East Property City of Loveland Natural Area 99 Analysis". November 2003.

Ownership:

Private

MILLENNIUM GDP –AMENDMENT # 2

Sign-off sheet

Indicated Type of Amendment:	~~Major~~ Minor
If Major, date of City Council Approval:	Not Applicable
Indicate Sections Effected by Amendment:	~~1 2 3 4 5 6 7 8 9 10 11 12 13~~ 14 ~~15~~
Footer Date Corresponding to Updated, Amended Sections:	November 6, 2006 – Section 14, Natural Area 99 Rating and Use

Description of the Amendment:

Section 14, shall be amended to add the Natural Area 99 revised rating and associated acceptable uses. The revised ratings and acceptable uses have been approved by the Centerra DRC. The following items are included for review and reference regarding the Minor Amendment:

1. Natural Area 99 Rating and Use
2. Appendix A – City of Loveland Guidance
3. Appendix B – Previous Studies
4. Appendix C – Site Evaluation
5. DRC approval letter

The Section references above are revised and reprinted with approval of this amendment. A complete copy of the amendment is filed with the City of Loveland Planning Department. A copy of this "Sign-off Sheet" shall be included in **Appendix 'D' in Section 14 of the Millennium GDP**.

Owner Signatures:

The following signatures provide acknowledgement that the above reference amendment was received and approved by the ownership team and is now incorporated into the Millennium General Development Plan:

Douglas Hill — 12.19.06

Doug Hill
McWhinney Enterprises

Date

Staff Use Only:

The following signature provides acknowledgement that the above reference amendment was received and approved through the appropriate City process and is now incorporated into the Millennium General Development Plan:

City of Loveland Director of Community Services
(or his/her designee)

1/19/07

Date

ENVIRONMENTALLY SENSITIVE AREAS REPORT
FOR
PARCELS E, F, AND G OF THE MILLENNIUM GDP

Prepared
by
Cedar Creek Associates, Inc.
Fort Collins, Colorado

Prepared
for
McWhinney Enterprises
Loveland, Colorado

August 17, 2000

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Appendix A - Resume of Preparer

1.0 INTRODUCTION AND LOCATION

This report documents the evaluation of environmental conditions at Parcels E, F, and G of the Millennium GDP in accordance with City of Loveland Planning Department guidelines for preparation of an Environmentally Sensitive Areas Report (ESAR).

The parcels addressed by this report consist predominantly of agricultural land in Sections 3, 4 and 10 of Township 5 North, Range 68 West. Parcel E occupies approximately 128 acres in the South 1/2 of the North 1/2 of Section 4. Parcel F consists of approximately 89 acres in the Southeast 1/4 of Section 3. Parcel G is located in the Northeast 1/4 of the Southwest 1/4 of Section 10 and includes approximately 1 acre. The parcel locations are depicted on Figure 1.

Parcels E and F are bordered by existing roadways, agricultural land, and a Union Pacific Railroad right-of-way. An existing roadway, commercial development, an irrigation canal, and agricultural land adjoin Parcel G. The following sections describe the methodology used to complete the field work and summarize the findings of the surveys.

2.0 METHODOLOGY

A reconnaissance of the parcels and evaluation of habitat conditions was completed on August 15, 2000 by Cedar Creek Associates, Inc. (Cedar Creek) personnel. The objective of this survey was to collect sufficient habitat characterization data to prepare an Environmentally Sensitive Areas Report for submittal to the City of Loveland.

The field survey completed for the ESAR included walking transects through the parcels and vehicular travel on perimeter roads so that the entire area within and adjacent to each parcel was viewed. Habitat unit boundaries were delineated on existing color aerial photographs obtained for each parcel (date of photography: September 22, 1999). Habitat boundaries were based primarily upon the dominant vegetation present and/or land use within each development parcel. Observations recorded during the field survey included: major vegetation communities / wildlife habitats present within the property; dominant flora associated with each community / habitat; unique habitat features; and observations of wildlife species and/or definitive sign. Wildlife presence and habitat use was based on on-site observations and habitat presence in conjunction with the known habitat requirements of potential wildlife species. A qualitative assessment of drainage patterns, irrigation canals, slopes over 20 percent, and other site characteristics associated with environmentally sensitive areas defined by City of Loveland guidelines was also completed in the field. *Soils of Larimer County Area, Colorado* (SCS 1980) was consulted to determine site-specific soil conditions of each parcel.

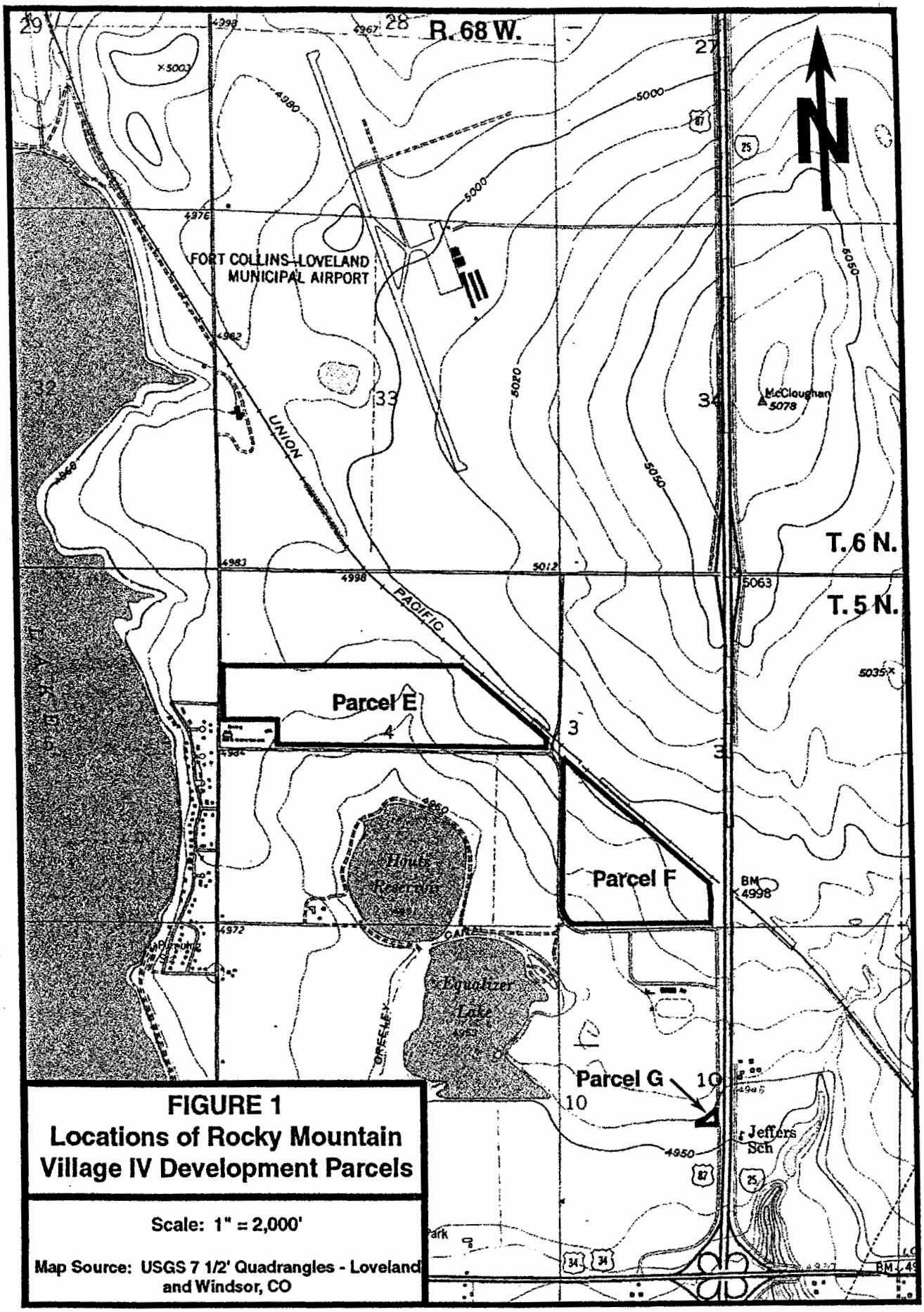


FIGURE 1
Locations of Rocky Mountain Village IV Development Parcels

Scale: 1" = 2,000'

Map Source: USGS 7 1/2' Quadrangles - Loveland and Windsor, CO

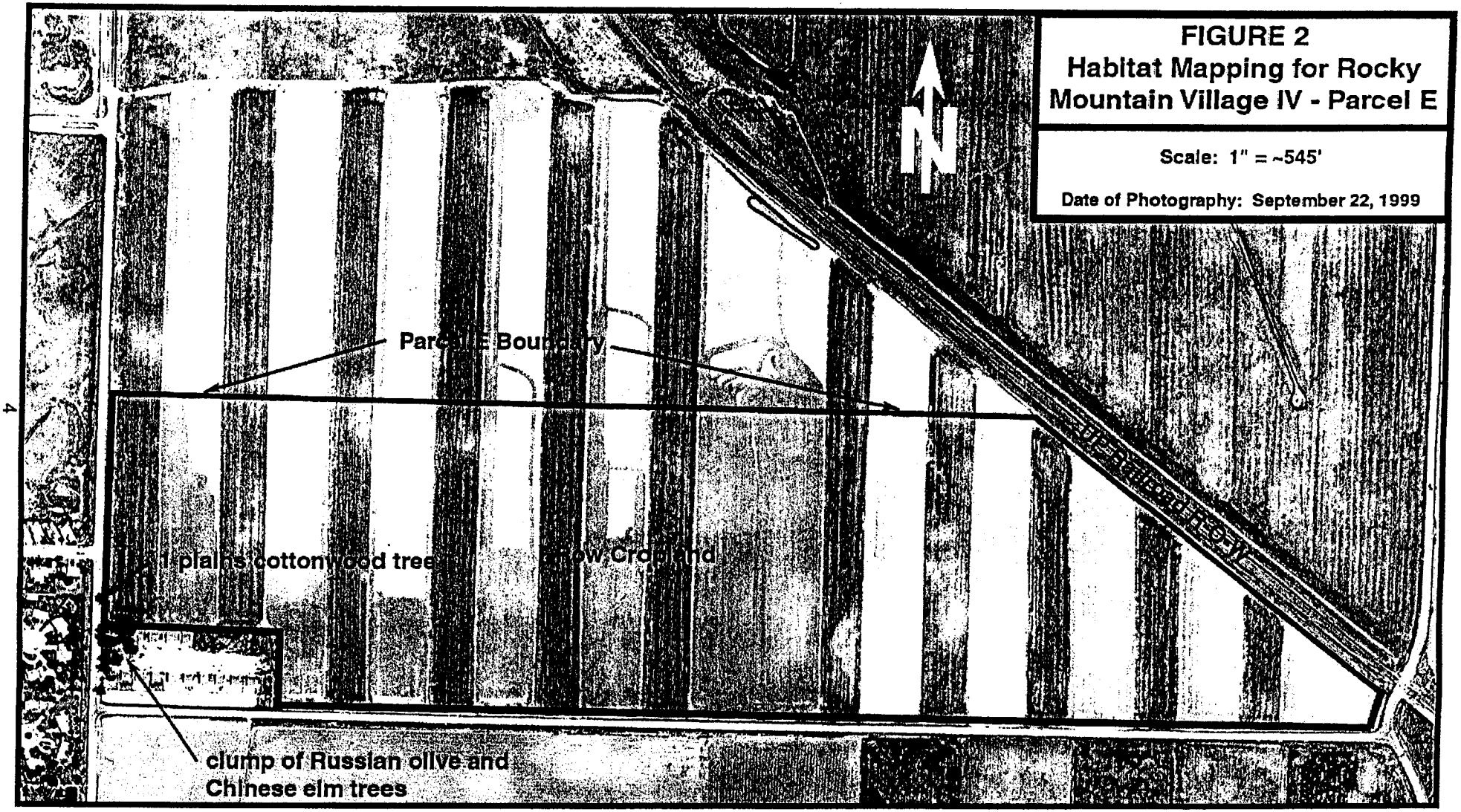
3.0 HABITAT CONDITIONS AND ENVIRONMENTALLY SENSITIVE AREAS

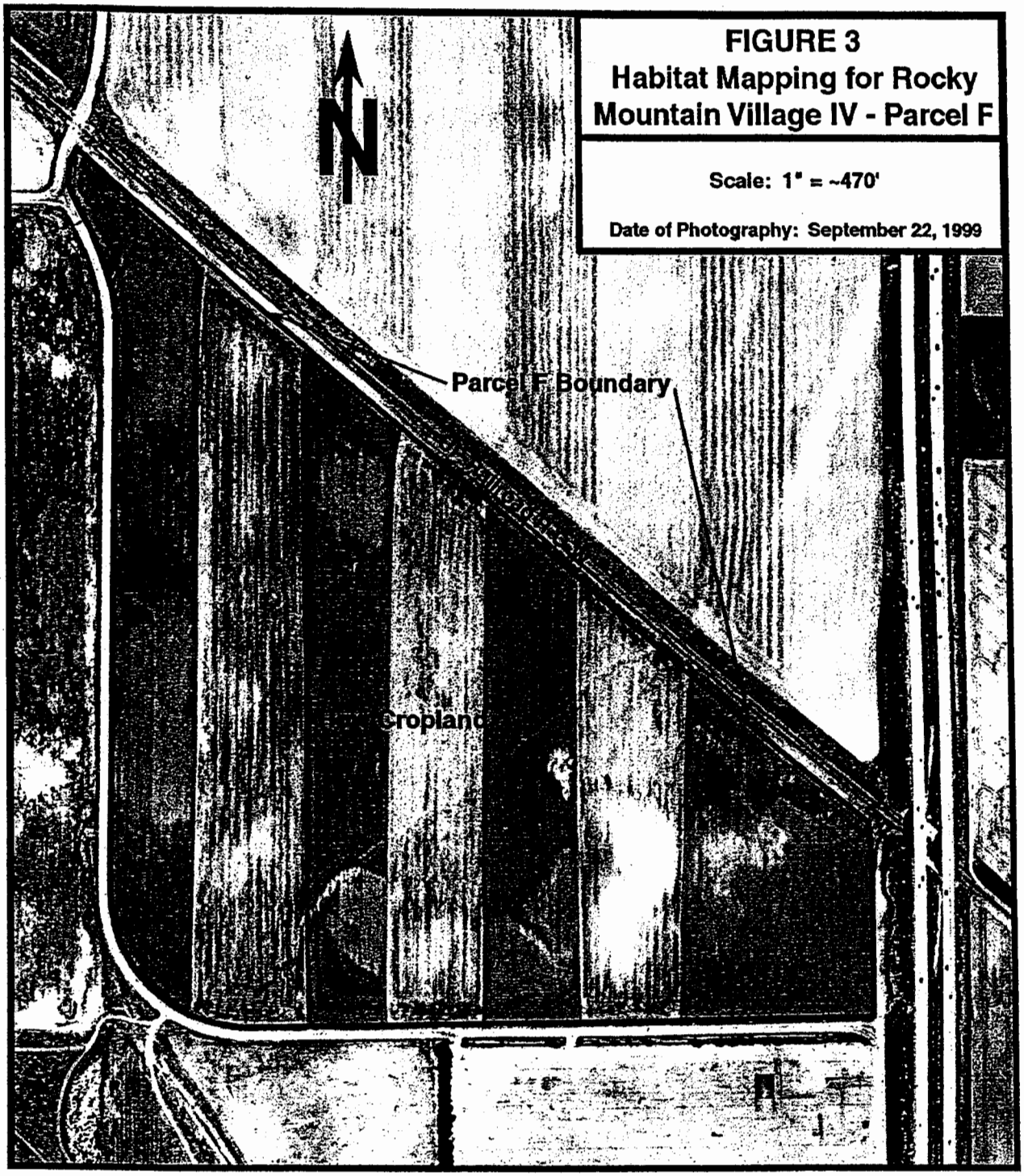
The nearly level to gently sloping parcels addressed by this report are composed primarily of agricultural fields except for Parcel G which consists of a house, large garage, and associated formal landscaping bordered on the north by the Loveland and Greeley Canal. Row cropland and residential were the only habitat types identified in Parcels E, F, G. The location and extent of these habitats within the parcel boundaries are shown on Figures 2, 3, and 4. Row cropland and residential areas do not meet any criteria for classification of environmentally sensitive areas. In addition, there are no environmentally sensitive areas (as defined by City of Loveland guidelines) adjacent to any of the parcels except for the Loveland and Greeley Canal along the northern and western edge of Parcel G. The following sections summarize the habitat characteristics within Parcels E, F, and G and address environmentally sensitive areas on or near each development parcel.

3.1 Parcel E Habitat Discussion

Parcel E is bordered by the Union Pacific Railroad right-of-way and row cropland on the east, row cropland on the north, County Road 24E and row cropland on the south, and Boyd Lake Avenue and existing residences on the west. As indicated on Figure 2, row cropland occupies the entire parcel. At the time of the survey the property was comprised of alternating strips of fallow cropland and wheat stubble. Cultivation practices have resulted in the removal of native vegetation and establishment of agricultural crops as well as the invasion of plants consisting primarily of non-native, weedy grass and forb species in fallow sites and around the perimeter of the fields. The strips of fallow cropland were dominated by weedy species including field bindweed (*Convolvulus arvensis*), kochia (*Kochia scoparia*), common sunflower (*Helianthus annuus*), and Canada thistle (*Cirsium arvense*). The field borders were dominated by these species in addition to cheatgrass (*Bromus tectorum*), crested wheatgrass (*Agropyron desertorum*), and Russian thistle (*Salsola kali*). The strip of right-of-way land between cropland and the railroad bed was vegetated primarily by crested wheatgrass and kochia. Photos 1 and 2 provide representative views of row cropland in Parcel E and the railroad right-of-way, respectively.

No woody vegetation is present on Parcel E except for a single plains cottonwood (*Populus sargentii*) tree near the southwest corner (see Figure 2). This tree is approximately 2 feet in diameter at breast height (dbh) and 40 feet tall. No evidence of past raptor nesting activity was noted in the tree, and it is unlikely that it would provide a suitable raptor nest site because of its proximity to Boyd Lake Avenue. A single tree does not meet the environmentally sensitive area criteria for mature stands of vegetation, although it has some wildlife value for perching and possibly nesting by songbirds. The only other woody vegetation adjacent to Parcel E are the stands of trees associated with an existing residence and other housing at the southwest property corner. A number of large Russian olive (*Elaeagnus angustifolia*) and


FIGURE 2
Habitat Mapping for Rocky Mountain Village IV - Parcel E
Scale: 1" = ~545'
Date of Photography: September 22, 1999
N
Parcel E Boundary
plains cottonwood tree
clump of Russian olive and Chinese elm trees


FIGURE 3
Habitat Mapping for Rocky Mountain Village IV - Parcel F
Scale: 1" = ~470'
Date of Photography: September 22, 1999
N
Parcel F Boundary
Cropland

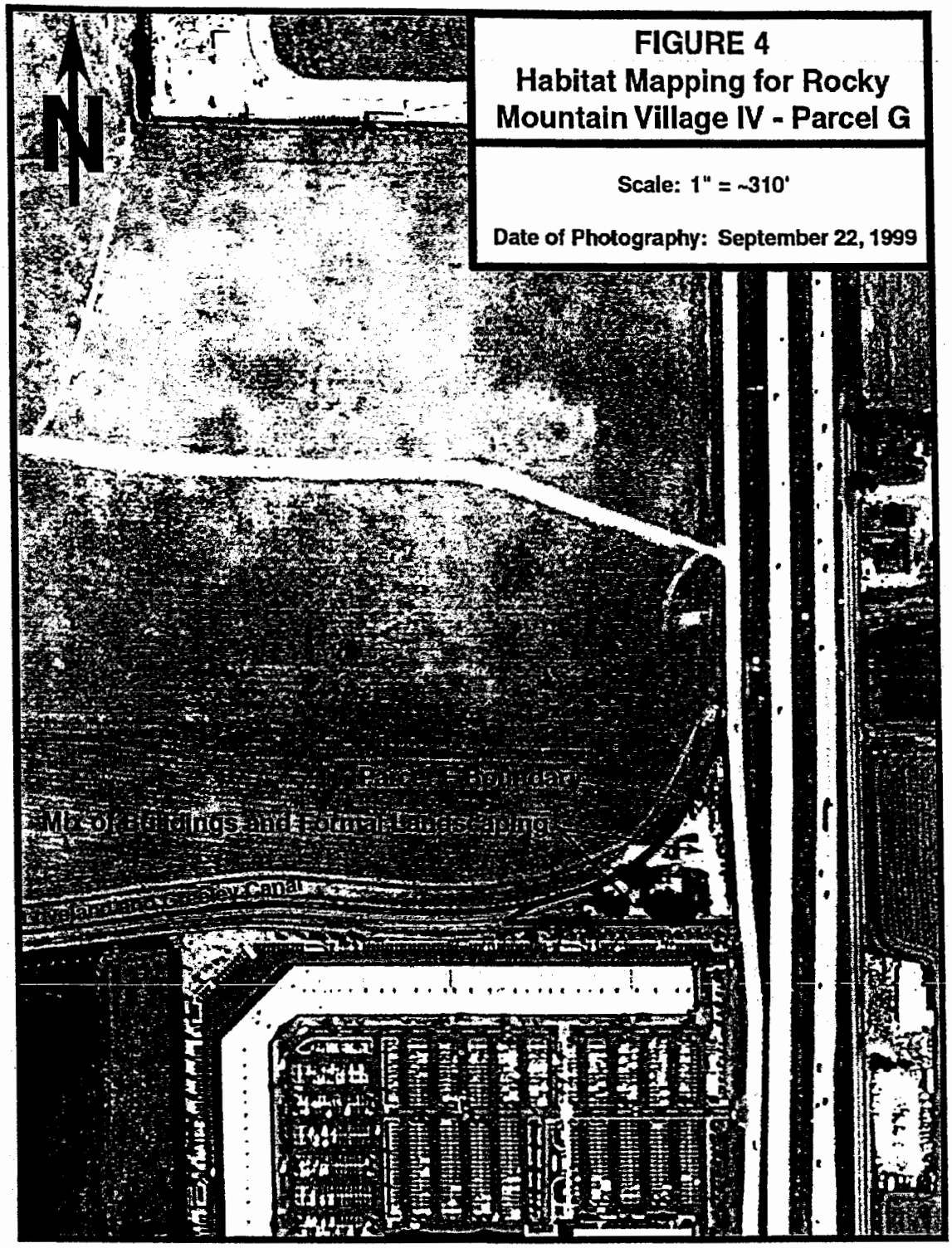

N
FIGURE 4
Habitat Mapping for Rocky Mountain Village IV - Parcel G
Scale: 1" = ~310'
Date of Photography: September 22, 1999



Photo 1. Representative View of Row Cropland in Parcel E. (View is from southeast corner of the parcel looking west.)



Photo 2. View of Union Pacific Railroad Right-of-way Along the East Side of Parcel E. (View is from southeast corner of the parcel looking northwest.)

Chinese elm (*Ulmus pumila*) trees exist as part of the formal landscaping of this area. Both species are non-native to the region. No evidence of raptor nesting activity was also observed in these trees, and it is unlikely they would be suitable for raptor nesting use because of their proximity to human activity, buildings, and Boyd Lake Avenue.

Slopes are nearly level to gently sloping throughout all of Parcel E. Soil Conservation Service soil map units within Parcel E are Nunn clay loam, 1 to 3 percent slopes; Ulm clay loam, 0 to 3 percent slopes; and Wiley silt loam, 1 to 3 percent slopes. Runoff on these soils is slow to medium and the hazard of erosion is moderate. No problem erosion areas were noted during the field survey.

Row cropland has limited value as wildlife habitat, especially when it is not near areas of natural habitat, since vegetation cover and food sources are present primarily on a short-term basis due to seasonal harvesting and cultivation. Vegetation cover is generally lacking from fall through early spring.

3.2 Parcel F Habitat Discussion

Parcel F is bordered by the Union Pacific Railroad right-of-way and row cropland on the north; Interstate 25 on the east; County Road 24E, the Clover Leaf Dog Track, and fallow cropland on the south; and County Road 7 and row cropland on the west. As indicated on Figure 3, row cropland occupies the entire parcel. At the time of the survey the property was comprised of alternating strips of fallow cropland and wheat stubble, and habitat conditions on this parcel and in the adjacent railroad right-of-way were similar to those described for Parcel E. No woody vegetation is present on or adjacent to Parcel F. Photo 3 provides a representative view of row cropland in Parcel F.

Slopes are nearly level to gently sloping throughout all of Parcel F. Soil map units within Parcel F are Stoneham loam, 3 to 5 percent slopes; Weld silt loam, 0 to 3 percent slopes; and Wiley silt loam, 3 to 5 percent slopes. Runoff on these soils is slow to medium and the hazard of water erosion is moderate. No problem erosion areas were noted during the field survey.

Wildlife use and habitat value of row cropland in Parcel F is similar to that described for Parcel E.

3.3 Parcel G Habitat Discussion

This small, approximate 1 acre parcel is comprised primarily of a residential building, large garage, paved and graveled driveways, and residential landscaping (see Figure 4 and Photo 4). Parcel G is bordered by the Loveland and Greeley Canal and row cropland on the north; a frontage road and Interstate 25 on the east; and shopping mall outlet stores on the south. Parcel G currently serves as the business office for the Greeley and Loveland Irrigation Company. Vegetation within this area consists of primarily of turf lawn and plantings of ornamental trees and shrubs. Stands of scattered patches of weeds also grow around



Photo 3. Representative View of Row Cropland in Parcel F. (View is from southeast corner of the parcel looking west.)

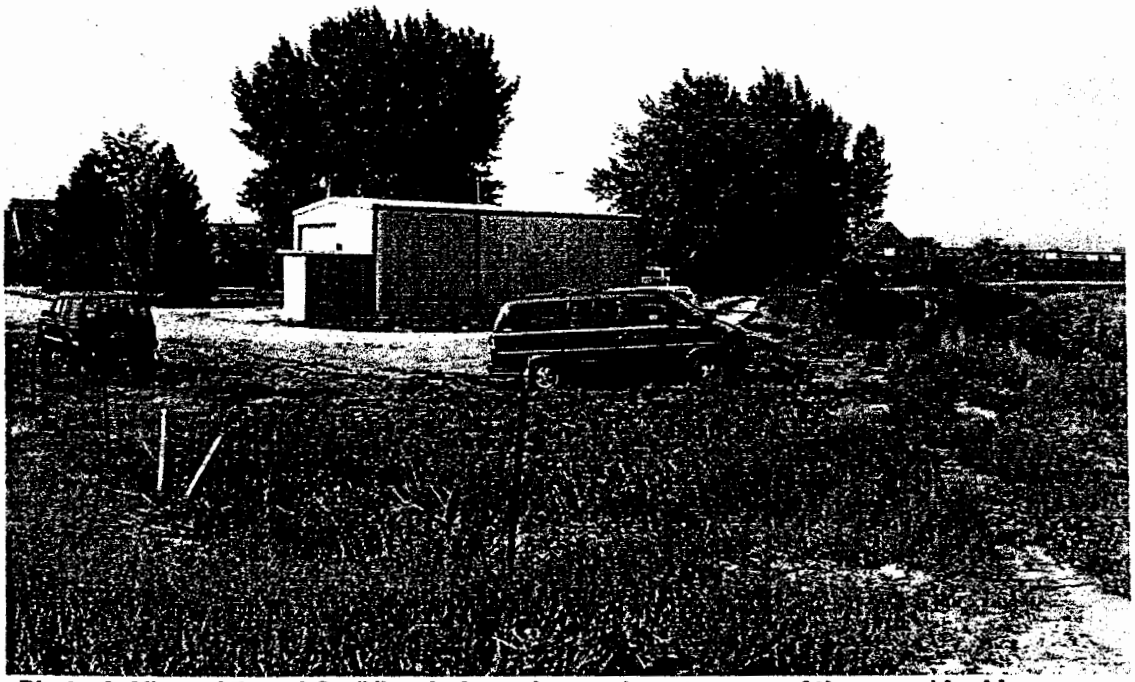


Photo 4. View of Parcel G. (View is from the northeast corner of the parcel looking southwest. Note Loveland and Greeley Canal on right side of photo and outlet mall buildings in far background.)

the perimeter of the sites as well as along the upland edges of the Loveland and Greeley Canal. A few mature plains cottonwood trees also grow the periphery of the residence (see Figure 4 and Photo 4). There is minimal vegetation and no woody vegetation cover along segment of the Loveland and Greeley Canal that borders Parcel G. The canal was classified as environmentally sensitive, however, because irrigation ditches and canals are identified as environmentally sensitive areas by City of Loveland guidelines (Appendix D).

Slopes are relatively level on all of Parcel G. The only soil map unit within this parcel is Nunn Clay loam, 1 to 3 percent slopes. Runoff on this soil is slow to medium, the hazard of wind erosion is slight, and the hazard of water erosion is moderate. No problem erosion areas were noted during the field survey.

Because of existing human disturbance in this area as well as adjacent shopping mall outlet store development and roadways, the primary value of this area as wildlife habitat is for perching and nesting use by urban adapted songbirds. Mature native cottonwood trees in this parcel qualify as an environmentally sensitive feature based on City of Loveland guidelines.

3.4 Wetlands

None of the soil mapping units within the parcels are classified as hydric soils although some units can contain hydric inclusions. The field reconnaissance determined that no wetlands were present within any of the development parcels based on the lack of any evidence of soil, vegetation, or hydrologic characteristics indicating wetland presence. A thin strip of wetland vegetation consisting primarily of reed canarygrass (*Phalaris arundinacea*), Emory's sedge (*Carex emoryi*), and showy milkweed (*Asclepias speciosa*) grows along the inside edge of the Loveland and Greeley Canal embankment where it borders the north boundary of Parcel G. These canal wetlands would not likely be considered jurisdictional wetlands by the Corps of Engineers since water in the canal is used primarily for irrigation purposes.

3.5 Land Within Or Affecting Floodway and Flood Fringe Boundaries

The existing drainage pattern is the result of a relatively shallow gradient to the southwest. Since there are no defined drainages on any of the parcels, runoff occurs primarily as sheet flow across croplands toward the southwest. No evidence of floodways was noted on the parcels. Flood features and flood fringe boundaries, if such exist, are discussed in separate documents submitted for these parcels.

3.6 Irrigation Canals and Ditches

No irrigation canals occur within the boundaries of the project area, however, the Loveland and Greeley Canal runs along the north and west boundaries of Parcel D (see Figure 1 and 4). Row cropland portions

of Parcels E and F have been cultivated for dryland winter wheat production, and no irrigation ditches were evident on these two parcels.

3.7 Water Courses, Stream Corridors, or Estuaries

No estuaries or perennial or intermittent streams are located within or near the parcel boundaries.

3.8 Operating High Water Line

There are no water bodies on the three parcels, therefore there are no operating high water lines within the parcel boundaries.

3.9 Existing Slopes Over Twenty Percent

The project area is characterized by a nearly level to gently sloping topography having overall slopes ranging from nearly level to a maximum of 5 percent. No slopes over 20 percent occur within any of the parcel boundaries.

3.10 Soils With a High Water Table, Being Highly Erodible, Subject to Erosion, or Highly Acidic

Soils overlying the project area, as mapped by the SCS (now the Natural Resources Conservation Service, 1980), are comprised entirely of upland soil series. These are not classified as hydric soils or as having a seasonal high water table. Erosion hazards range from slight to moderate. None of the soils within the development parcels are classified as highly acidic.

3.11 Aquifer Recharge and Discharge Areas, Land Incapable of Meeting Percolation Requirements, Land Formerly Used for Landfill Operations or Hazardous Industrial Use, and Fault Areas

These topics were not included as a part of the work assigned to Cedar Creek, and no discussions related to these topics are presented in this report.

4.0 WILDLIFE USE AND CORRIDORS

As indicated, row croplands have limited value for wildlife because of seasonal cultivation and the lack of forage and cover. As a wheat crop matures, croplands may receive limited use by a few species for foraging purposes. Once the crop is harvested and cover is removed, crop residue remaining after harvest provides a food source for small mammals, songbirds, and some waterfowl and game bird species. These areas may also be occasionally hunted by open-country raptors. Vegetation cover is generally lacking from fall through early spring.

4.1 Wildlife Observed on Site

Winter wheat had already been harvested at the time of the field reconnaissance, and as a consequence there was little wildlife cover available. The only species observed on Parcel E and F were western meadowlark and mourning dove. Parcel G was not surveyed for wildlife because of private property considerations. Expected wildlife use of this area is described in the following section.

4.2 Representative Wildlife Expected to Occur on Site

Deer mouse, western harvest mouse, prairie vole, and ground squirrels are the only species likely to establish resident populations in row cropland and the weedy edge areas. Songbirds such as western meadowlark, Brewer's blackbird, American crow, common grackle, and horned lark will also occasionally use cropland habitats. Species such as raccoon, striped skunk, ring-necked pheasant, mourning dove, and Canada goose will occasionally move into croplands to seek prey or feed on leftover grain. Dryland or unflooded cropland is of limited foraging value for most waterfowl species, however. Raptors potentially hunting over row croplands include American kestrel, red-tailed hawk, northern harrier, and Swainson's hawk.

In Parcel G planted trees and shrubbery are likely to be used by urban adapted avian species such as northern flicker, black-billed magpie, European starling, American robin, common grackle, black-capped chickadee, house finch, and house sparrow.

4.3 Habitat for Threatened and Endangered Species

Because of past cultivation practices or residential and commercial development, habitat for threatened, endangered or other sensitive species does not exist on or adjacent to Parcels E, F, and G.

4.4 Movement Corridors and Physical Linkages to Other Natural Areas or Open Space

Cultivation and residential development has resulted in the loss of native vegetation, and there is little opportunity for the development of suitable security or movement cover for most species of wildlife. The properties are surrounded by roadways, actively cultivated cropland, and commercial development, and the only possible wildlife movement corridors exist along the Loveland and Greeley Irrigation Ditch and the Union Pacific Railroad right-of way. However, the suitability of these features as wildlife corridors is limited by a general lack of suitable vegetation cover. Active cultivation approaches right to the edge of the railroad right-of-way and the irrigation canal. The I-25 underpass for the Union Pacific Railroad right-of-way is large enough to permit wildlife passage, but there is no suitable cover along the right-of-way between the northeast corner of Boyd Lake (Natural Area #93) and Natural Area #99 (Design Workshop et al. 1993) on the east side of Interstate 25.

The Loveland and Greeley Canal provides a hydrologic connection between the south end of Boyd Lake and the southeast corner of Equalizer Lake (Natural Area #2) and then connects to the north end of Natural Area #99 east of the development parcels and Interstate 25. Again, there is little vegetation cover along these segments of the canal due to cultivation practices, and the canal currently has minimal value as a wildlife movement corridor. The continuity of the canal is also disrupted by Boyd Lake Avenue and Interstate 25 The canal was classified as environmentally sensitive, however, because irrigation ditches and canals are identified as environmentally sensitive areas by City of Loveland guidelines (Appendix D).

Open space borders portions of each development parcel (see Figures 2, 3, and 4), but this open space occurs primarily in the form of agricultural fields. The closest non-cultivated areas of open space to Parcels E, F, and G exist around the perimeters or Houts Reservoir and Equalizer Lake. A characterization of these areas was provided in an earlier environmentally sensitive areas report (Cedar Creek Associates, Inc. 1999) submitted previously to the City of Loveland for the Millennium GDP.

5.0 ASSESSMENT OF POTENTIAL IMPACTS OF PROPOSED DEVELOPMENT

Although specific development plans have not been developed for Parcels E, F, and G, development of these parcels would not result in any impacts to important wildlife habitats, corridors, or natural areas because these parcels and adjacent sites are comprised entirely of row cropland, roadways, and residential and commercial developments.

6.0 RECOMMENDED MITIGATION

Specific mitigation measures cannot be completed at this time because development plans have not been finalized. However, because of current land uses and habitat conditions within each parcel, the need for development of wildlife mitigation measures will be limited. A few general mitigation recommendations are provided below based on existing habitat conditions within and adjacent to the the development parcels.

- The mature cottonwood tree at the southwest corner of Parcel E and in Parcel G should be preserved unless there is a potential risk of falling decadent trees or limbs to human safety. It is recommended that these trees be incorporated into open space portions of the project area to maintain their suitability for nesting and perching habitat for songbirds. Their suitability as raptor perch sites will be marginal, except for urban-adapted species such as great horned owl and red-tailed hawk, once project development occurs.

- Woody plantings and setbacks should be employed along the Loveland and Greeley Canal and the Union Pacific Railroad right-of-way to enhance these features as potential wildlife movement corridors. As development progresses in this area the canal and railroad right-of-way may remain as the only potential movement linkages between Natural Areas #2, #93, and #99.

7.0 REFERENCES CITED

Cedar Creek Associates, Inc. 1999. Environmentally sensitive areas and wetland report for the Rocky Mountain Village III properties. Revised May 1999. Report previously submitted to the City of Loveland as part of the millennium GDP.

Design Workshop, Inc., ERO Resources Corp., and Stoecker Ecological Consultants, Inc. 1993. In the Nature of Things - Loveland's Natural Areas. Prepared for the City of Loveland, Loveland, Colorado, 37 pp. + Appendices.

Soil Conservation Service (SCS). 1980. Soil Survey of Larimer County Area, Colorado. Soil Conservation Service. Fort Collins, Colorado. 174 pp. + maps.

APPENDIX A

RESUME OF PREPARER

CEDAR CREEK ASSOCIATES, INC.

T. MICHAEL PHELAN

EXPERIENCE ABSTRACT

Employed since 1974 as an environmental consultant. Responsibilities include service as corporate officer, project manager, permitting specialist, wildlife ecologist, vegetation survey technical assistant, and technical editor. Project management activities include client/agency liaison, project risk analyses, interdisciplinary coordination, subcontractor supervision, personnel management, cost control, and quality assurance.

Career accomplishments include authorship of, or technical contribution to:
45 EIS/EA Documents • **75** Wetland Delineations/Evaluations • **8** Mine Permit Reviews/Revisions • Permit Strategy Development/Preparation for Numerous Projects • **80** Wildlife Baseline or Monitoring Studies/Technical Sections • **50** Threatened and Endangered or "High Federal Interest" Wildlife Species Studies • Over **100** Wildlife Surveys Emphasizing Big Game, Raptors, Waterfowl, or Upland Game Birds • **32** Wildlife Impact Assessments • **27** Wildlife Mitigation/Habitat Management Plans • **7** Biological Assessments • **10** Vegetation Surveys • **3** Published Wildlife Manuals, **2** for the USFWS and **1** for the Office of Technology Assessment, U.S. Congress

Types of projects have included:
Hard Rock Mines • Coal Mines • Wetland Delineations/Enhancement • Corridor Analyses • Water Developments • Oil, Gas, and Synfuels Projects • Abandoned Mines • Power and other Industrial Plants • Timber Harvest • Housing Developments

Involved in over **250** projects including work in:
Rocky Mountains • Desert Southwest • Pacific Northwest • Intermountain Region • Northern Great Plains • Appalachia • Alaska • California • Missouri • Kansas • Oklahoma • Texas

EDUCATION AND CERTIFICATIONS

B. A., Zoology, University of California, Los Angeles, 1971
Post-graduate Studies, Biology and Ecology, San Diego State University, 1972-1974
Certified Wildlife Biologist - The Wildlife Society
Certified in Habitat Evaluation Procedures (HEP) - U.S. Fish and Wildlife Service
Certified in Black-footed Ferret, Southwestern Willow Flycatcher, and Preble's Meadow Jumping Mouse Survey Techniques - U.S. Fish and Wildlife Service
Desert Tortoise Survey and Examination Techniques

EMPLOYMENT HISTORY

Cedar Creek Associates, Inc. - 1982 to Present
Environmental Research and Technology, Inc. - 1976 to 1982 (presently ENSR Corporation)
Self-employed Environmental Consultant - 1974 to 1976

REPRESENTATIVE CLIENTS

Atlantic Richfield Co. (CO) • Atlas Minerals, Inc. (OR) • BHP-Utah International Inc. (UT) • Carlota Copper Co. (AZ) • Chevron Shale Oil Co. (CO) • Cities of Boulder, Fort Collins, and Loveland (CO) • Diamond Shamrock Corp. (AK) • Energy Fuels Co. (CO, SD) • Exxon Minerals Co. (NM) • FMC Corp. (NV, WY, MT) • Freeport Gold Co. (NV) • Getty Mining Co./Twentymile Coal Co. (CO) • Getty Oil Co. (CO) • Homestake Mining Co. (NV) • Kensington Venture (AK) • Koppers Co. (TN) • LAC Minerals, Inc. (NV) • L. Berger/Federal Bureau of Prisons (CO) • Meridian Minerals Co. (SD, CA, ID) • Montana DEQ (MT) • Newmont Gold Co. (OR, NV) • North American Coal Co. (ND) • Northern Border Pipeline (IA) • Office of Technology Assessment, U.S. Congress (Western U. S.) • Peabody Coal Co. (AZ, CO, WY) • Rocky Mountain Energy Co. (WY) • Simons, Li & Associates, Inc. (CO, UT, WA, Africa) • TerraMatrix Inc./ACZ (CO, NV, UT, WA) • U.S. Bureau of Land Management (MT, NV, UT) • U. S. Fish and Wildlife Service (Western U.S., WVA) • U.S.Forest Service (AK, CO, ID, MT, NV, WA) • U.S. Sprint (CA, OR, WA) • Utah Division of Oil, Gas and Mining (UT) • Western Area Power Administration (CO, NE)

EXPERIENCE SPECIFICS

Mr. Phelan's education and several years of environmental and regulatory compliance experience has facilitated his development of specialized multi-disciplinary skills for projects in mining (coal, hard rock, and synfuels), industrial and urban developments, corridor assessments, wetland evaluation and restoration, and water developments. Areas of expertise include permitting and project management, wildlife ecology, wildlife impact assessment and mitigation planning, habitat evaluation and enhancement, range ecology, bond determination, report/permit document preparation, literature review, and technical editing.

PERMITTING AND PROJECT MANAGEMENT. Mr. Phelan has been actively involved in all phases of permit development. Permitting and management responsibilities have included personnel scheduling and management, strategy formulation, client/agency liaison, regulatory compliance evaluation, subcontractor supervision, cost control, quality assurance, and technical document editing for a variety of projects, including development of, or input to, mine permit applications and NEPA compliance documents (EAs and EISs). In addition, Mr. Phelan has successfully reviewed, edited, and revised sections of mine permit applications to achieve compliance for applications previously submitted by other firms and deemed inadequate by the regulatory agency. Mr. Phelan's permitting experience and related interactions with regulatory agencies for development projects and associated permit submittals have provided him with a working understanding of the policies and regulations of state and federal agencies such as the BLM, COE, OSMRE, WDEQ, CMLRD, UDOGM, USFS, USFWS and NRC, among others. Mr. Phelan's project management experience has been gained on projects ranging from single discipline to large interdisciplinary studies for mining and other development projects.

WILDLIFE ECOLOGY. Mr. Phelan has completed wildlife studies for a wide range of projects including: hard rock mines, surface and underground coal mines, synfuel developments, wetland assessments and restoration, corridor analyses, water developments, abandoned mines, and municipal disturbances. Technical capabilities include: baseline inventories; habitat assessment and restoration; wetland delineation; evaluation of threatened and endangered species populations; wildlife impact assessment and mitigation planning; literature review, and authorship of wildlife technical manuals. Wildlife mitigation plans prepared by Mr. Phelan have emphasized restoration and mitigation for wildlife habitats in desert, rangeland, shrubland, woodland, subalpine, and wetland ecosystems. Specific areas of concern addressed by these plans have included raptor nesting habitat, upland game bird and waterfowl breeding and nesting areas, big game winter range, and critical habitat for threatened and endangered species as well as species of "High Federal Interest." Beyond the capabilities listed above, Mr. Phelan's technical skills include the design and implementation of: big game aerial surveys, big game browse utilization transects, aerial and ground surveys for raptor nests, daytime and night spotlight surveys for black-footed ferrets, other predator inventories, small and medium-sized mammal trapping, avian strip transects, surveys for migratory birds of "High Federal Interest," upland game bird breeding and nesting surveys, waterfowl counts and nesting surveys, wetland mapping and habitat evaluation, herpetofauna surveys, aquatic sampling studies, and tissue sample collection for trace element analysis. In addition, Mr. Phelan has reviewed and analyzed mitigation options for waterfowl mortality on toxic mine tailings ponds.

RANGE ECOLOGY. Technical capabilities in this field include photo interpretation/community mapping and field measurement of plant density, ground cover, plant composition, and current annual production. Mr. Phelan has participated in the design and establishment of revegetation test plots constructed to determine the effects that season of seeding, slope, species selection, and seedbed material characteristics would have on revegetation success. He also has been involved in soil sampling projects to assess soil characteristics and nutrient levels.

PUBLICATIONS

Phelan, T. M., S. R. Viert, and S. G. Long. 1986. Wildlife technologies for western surface coal mining. Office of Technology Assessment, U. S. Congress, Washington, D. C. 183 pp.+ appendices.

Phelan, T. M. and S. R. Viert. 1986. Prairie dog and black-footed ferret surveys in northeast and east-central Utah. Cedar Creek Associates, Inc., Fort Collins, Colorado. Report prepared for the Bureau of Land Mangement, Salt Lake City, Utah. 31 pp. + appendices.

Contributing Author to:

Moore, R., and T. Mills. 1977. An environmental guide to western surface mining, part two: impacts, mitigation, and monitoring. Western Energy and Land Use Team, U. S. Fish and Wildlife Service Publication FWS/OBS - 78/04. Misc. pagings.

Mountain West Research, Inc. 1979. Fact book for western coal/energy development. Missouri River Basin Commission, Resource and Land Investigations program (RALI). Misc. pagings.

ENVIRONMENTAL AND NATURAL AREAS ASSESSMENT REPORT- CLOVERLEAF ADDITION

Prepared For:
Landmark Engineering. Ltd.
3521 West Eisenhower Blvd.
Loveland, Colorado 80537

Prepared By:
Wildland Consultants, Inc.
622 East 8th Street
Loveland, CO 80537

January, 2000

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Environmental and Natural Areas Assessment- Cloverleaf Addition

1.0 Introduction and Description of the Study Area

This Environmental and Natural Areas Assessment Report was completed to comply with requirements of the City of Loveland Long Range Planning and Natural Resources Division. The Long Range Planning and Natural Resources Division has developed guidelines for preparing environmental assessments for developments that have the potential to impact natural areas. This report summarizes potential impacts to the environment from construction of the Cloverleaf Addition. The proposed development includes 6 development parcels, including the existing Cloverleaf Kennel Club (see attached site plan). The total annexation area is approximately 120 acres. The development will include commercial, retail, and light industrial uses. Approximately 20 acres will be planned open space in the form of landscaped detention areas and small parks. Approximately 41 acres will be zoned DR (Developing Resource), with no plans for further development at this time. The exact development design will be determined during future planning.

The project is located in eastern Loveland just east of Interstate 25. The project is bordered on the west by a proposed extension of Rocky Mountain Avenue, on the east by the Interstate 25 Frontage Road, on the south by the Loveland-Greeley Canal, and on the north by County Road 24. The attached site plan details the project location and site specifications. The development site includes agricultural lands, and the existing site of the Cloverleaf Kennel Club.

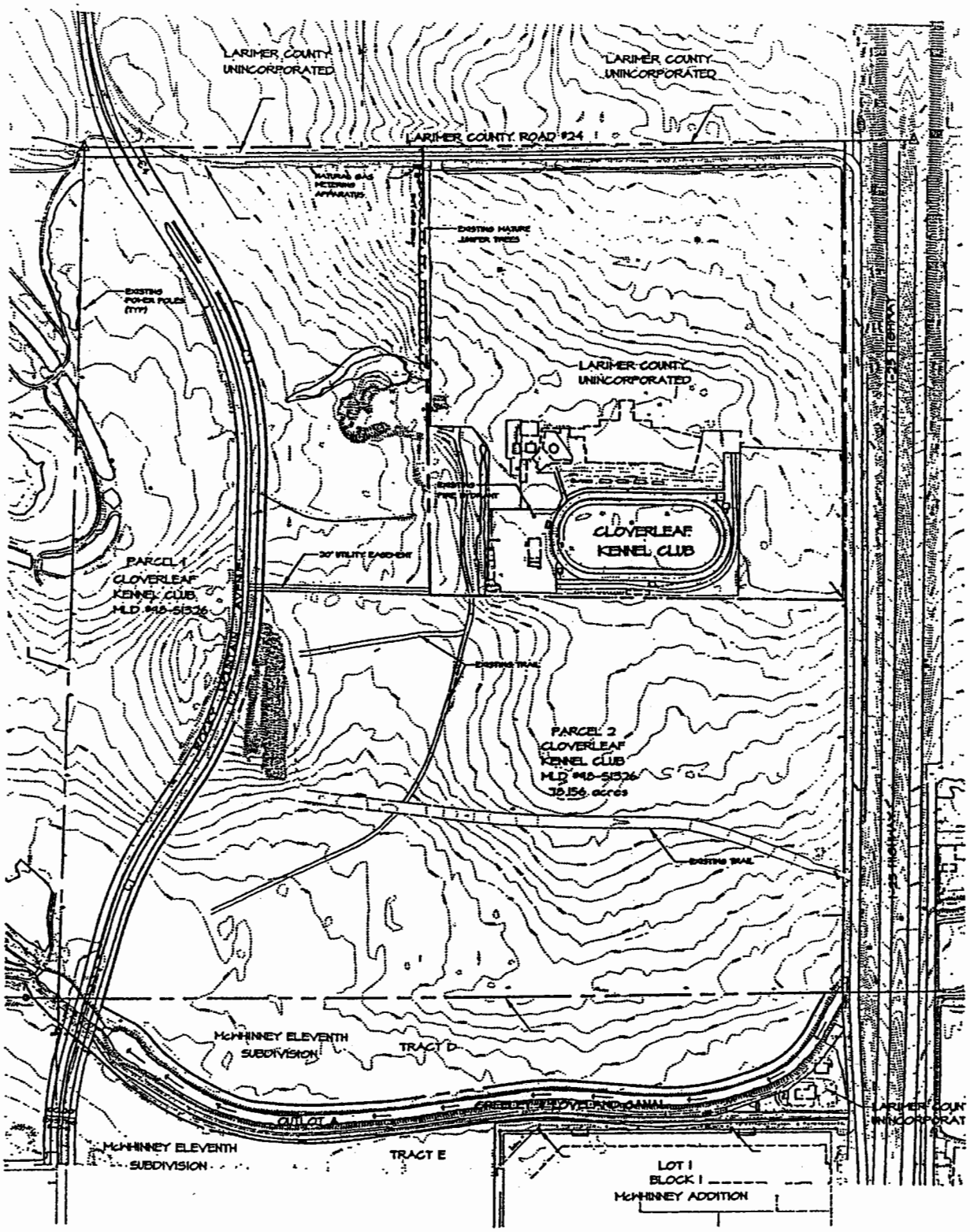
The nearest identified natural areas to the project include Equalizer Lake (#2) located approximately 100 to 400 feet west of the project area, Houts Lake (#1) located approximately 900 feet northwest of the project area, and a wetland drainage (#99) located approximately 600 feet east of the project area (Design Workshop et al. 1996).

For this report the study area includes the development site and also the three nearest natural areas (1,2,99).

2.0 Site Inventory

2.1 Vegetation Types, Wetlands-

Except for the Cloverleaf Kennel Club, the entire site is fallow agricultural land used in the recent past for growing winter wheat (Attachment A, Photograph 1). Weedy plants dominate this fallow land. Common plants include sunflower, kochia, field bindweed, Canadian thistle, wheat, and Russian thistle. The margins of the Loveland-Greeley Canal support a mix of introduced and native plant species including smooth brome grass, volunteer ryegrass, foxtail barley, showy milkweed, dandelion, salsify, and other grasses and forbs (Attachment A, Photograph 2). The canal supports limited wetland vegetation near the waterline, including prairie cordgrass, sedge, and American threesquare. The



CLOVERLEAF ADDITION

SITE MAP EXHIBIT

NORTH

NTS

vegetation along the ditch is controlled by annual burning and spraying. The ditch banks are heavily rip-rapped. There are no trees or shrubs along the ditch.

Two small wetlands have developed in small drainage ditches that receive water from the Kennel Club parking lot (Attachment A, Photograph 3). These wetlands are located just west of the Kennel Club parking lot. These wetlands are very small, less than 0.02 of an acre in size. The wetlands are of poor quality. Dominant plants include cattail, curly dock, Canadian thistle, and blue vervain.

The only trees and shrubs on the site are associated with the Cloverleaf Kennel Club. The entire Kennel Club is surrounded by tree and shrub plantings. Except for landscaped areas there is no vegetation on the Kennel Club site.

There are no rare plant species on the site. The site does not support any rare plant communities, or native plant communities.

2.2 Wildlife and Wildlife Corridors-

The project area provides habitat to wildlife species adapted to agricultural lands. No unique or key wildlife habitats occur on the site. Wildlife species likely to use the area periodically include: coyote; red fox; raccoon; striped skunk; a variety of small mammals (deer mouse, house mouse, jackrabbit, cottontail rabbit); a variety of birds (mallard, Canada goose, meadow lark, mourning dove, house finch, English sparrow, horned lark, black-billed magpie, starling, American kestrel, ring-necked pheasant, killdeer and others); and a few reptiles (western terrestrial garter snake, gopher snake)(Andrews and Righter 1992, Colorado Division of Wildlife 1990, Fitzgerald et al. 1994, Hammerson 1982). Wildlife species or signs of species observed on the site during a December , 1999 field reconnaissance included: English sparrow, domestic pigeon, ring-necked pheasant, Canada goose, deer mouse, red fox, cottontail rabbit, muskrat, and raccoon. The most common nesting bird species on the site are likely to be the meadow lark, and mourning dove. No raptor nests occur on the site. Raptors use the area occasionally for foraging.

Canada geese use the agricultural lands for feeding and resting. Mallards and a few other duck species use the Loveland-Greeley Canal in small numbers.

The site does not provide habitat to any threatened, endangered, or rare wildlife or plant species. There are no prairie dogs on the project area.

Currently wildlife can move freely through the area. The Loveland-Greeley Canal provides a marginal movement corridor through the area for small mammals and some bird species. Raccoon, muskrat, striped skunk, and deer mice are the most common mammals along the ditch. However, the habitat value of the canal is low. The vegetation adjacent to the canal is limited in extent and quality. There are no trees or shrubs along the canal.

Nearby identified natural areas include numbers 1,2, and 99 (Design Workshop et al. 1993). Equalizer Lake (#2) has a moderate overall habitat rating of 6 and is located approximately 100 to 400 feet west of the project area. Houts Lake (#1) has a moderate overall habitat rating of 5 and is located approximately 900 feet northwest of the project area. The wetland drainage and pond (#99) has a high overall habitat rating of 7 and is located approximately 600 feet east of the project area (Design Workshop et al. 1996). The proposed development parcels are separated from Houts and Equalizer Reservoirs by existing agricultural lands, the proposed extension of Rocky Mountain Avenue, and intensive proposed development. The proposed development parcels are separated from the wetland drainage and pond by Interstate-25.

2.3 Soils and Geologic Hazards-

Dominant soils on the site include the Nunn clay loam, the Wiley silt loam, and the Stoneham loam (SCS 1980). The Nunn clay loam and Wiley loam cover the majority of the site. These farmland soils occur on nearly level ground, runoff is slow to medium, and wind and water erosion hazard is slight to moderate. The Nunn clay loam soils exhibit moderate limitations for dwellings with basements, and severe limitations for building without basements, small commercial buildings, and local roads and streets. The limitations are due to shrink-swell potential, and low strength soils. The Wiley loam exhibits moderate limitations for dwellings with basements, buildings without basements, small commercial buildings, and local roads and streets. A moderate limitation indicates that soil problems can be minimized with planning and engineering features. A severe limitation indicates that soil problems will require intensive planning, design, and maintenance features during and after construction.

There are no known geologic hazards on or near the project area. The site is nearly level with no steep slopes, or rock outcrops.

2.4 Drainage Patterns, Floodway, and Flood Fringe Boundaries

The project area drains generally to the south and east. There are no natural drainage areas on the site. The project area is located outside all 100-year floodplains of local streams, rivers, and lakes. The entire project area is located upslope of the Loveland-Greeley canal. Canal flooding will drain to the south and east to lower elevations off of the project area

3.0 Assessment of Project Impacts

3.1 Vegetation Types, Wetlands-

Construction of the Cloverleaf General Development Plan will result in the conversion of approximately 92 acres of agricultural land to urban uses. Of these 92 acres, 78 acres are included with this annexation, and 13.7 acres were previously annexed (McWinney 11th Subdivision). No native plant communities, or rare plants will be impacted by project construction.

Two small wetlands (less than 0.02 acres) will be filled by project construction. These small wetlands were formed by stormwater runoff from the Kennel Club Parking lot. These wetlands are of poor quality and provide limited vegetation diversity. Because of their small size and poor quality, wetland avoidance and or mitigation should not be a priority. The Army Corps of Engineers will not require wetland mitigation to fill these small wetlands.

3.2 Wildlife and Wildlife Corridors-

Project construction will result in the conversion of approximately 78 acres of agricultural land to urban uses. Some wildlife species currently using the area will be displaced and replaced with species adapted to urban areas (American robin, house finch, English sparrow, starling). No unique or key wildlife habitats will be lost with project construction. Canada geese should continue to utilize landscaped open space areas on the site after construction.

The corridor associated with the Loveland-Greeley Canal will be buffered from development with detention and open space areas. As urban development in the area increases animals sensitive to human presence (red fox, coyote, great blue heron, and raptors) will use and move along the canal with less frequency. However, the current habitat values of the canal are low. Project construction should have minimal impacts to wildlife movement along the canal.

The wildlife values of the two small wetlands on the site are low. The wetlands are isolated and are not large enough to provide important wildlife habitat. No special protection measures or mitigation is recommended for removal of the wetlands on the site.

Nearby identified natural areas include numbers 1,2, and 99 (Design Workshop et al. 1993). Equalizer Lake (#2) is located approximately 100 to 400 feet west of the project area. Houts Lake (#1) is located approximately 900 feet northwest of the project area. The proposed development parcels are separated from Houts and Equalizer Reservoirs by existing agricultural lands, the proposed extension of Rocky Mountain Avenue, and intensive proposed development. The wetland drainage and pond (#99) is located approximately 600 feet east of the project area (Design Workshop et al. 1996). The proposed development parcels are separated from the wetland drainage and pond by Interstate-25.

No direct impacts to these natural areas and the wildlife using these areas will occur with construction of this subdivision. As the general area becomes more urbanized these natural areas may be not be used as extensively by species that are sensitive to human presence and development.

3.3 Soils and Geologic Hazards

The moderate to severe soil limitations on the site will require special design features for streets and building foundations. The nearly level site will not be subject to significant soil erosion. There are no geologic hazards on the site. No impacts to the project are expected due to soil limitations or geologic hazards. Project construction will result in the loss of approximately 78 acres of farmland soils.

3.4 Drainage Patterns, Floodway and Flood Fringe Boundaries

All storm water drainage systems will conform with requirements of the City of Loveland. Stormwater runoff will be channeled to an open space/detention areas around the periphery of the site. The detention areas will allow the stormwater to naturally settle and filter before discharge.

No impacts to the project from future flooding are anticipated. The project is located outside of the 100-year floodplain of all local streams, rivers, and lakes. The project is located above the Loveland-Greeley Canal. The majority of any potential canal flooding will move to the south and east to lower elevations off of the project area.

4.0 Recommendations: Protection Measures, Mitigation, Enhancement

No developments of open lands are possible without impacts to the environment. Project construction will result in the conversion of approximately 78 acres of agricultural land to urban uses. Some wildlife species using the development area will be displaced. Urban adapted wildlife species will continue to use the subdivision. The project will impact no unique or key wildlife habitats, native vegetation communities, or identified natural areas. Two very small poor quality wetlands will be removed. Wildlife use of the wildlife corridor associated with the Loveland-Greeley Canal will continue after project construction. As the area becomes more urbanized wildlife species that are sensitive to human presence will use the canal with less frequency.

No major mitigation or enhancement measures are proposed for the site because no important natural area will be impacted. The following general enhancement measure is proposed for the canal buffer zone and open space/detention areas on the site:

- A buffer zone will be created between the development lots and the Loveland-Greeley Canal. This buffer zone will contain detention areas, and a trail. The canal buffer zone will be landscaped with native shrubs and trees (chokecherry, rabbitbrush, wild rose, plains cottonwood, willow, and possibly other species) as appropriate. All plantings will be completed outside of the area where the ditch company completes vegetation maintenance and control. To reduce water usage and costs the buffer area will be planted with drought tolerant grass species. No impact to vegetation associated with the Loveland-Greeley Canal will occur with project construction.

- Detention areas will include native plant species in the landscape design. Plantings of native trees and shrubs will be made along detention areas to provide visual enhancements and wildlife habitat. Where possible wetlands will be allowed to develop naturally within detention areas.
- Appropriate permits will be obtained from the Army Corps of Engineers for filling the small wetlands on the site. Because of the small size and poor quality of the wetlands no mitigation or wetland buffer zones are proposed.

5.0 Literature Cited

Andrews, R. and R. Righter. 1992. Colorado Birds. Museum of Natural History, Denver, CO. 442pp.

Colorado Division of Wildlife. 1990. Colorado Mammal Distribution, Latilong Study. Denver, CO.

Design Workshop, Inc., ERO Resources Corp., and Stoeker Ecological Consulting, Inc. 1993. In the Nature of Things, Loveland's Natural Areas. 37pp.

Fitzgerald, J.P., C.A. Meaney, D.M. Armstrong. 1994. Mammals of Colorado. Denver Museum of Natural History and University Press of Colorado. 467pp.

Hammerson, G.A. 1982. Amphibians and Reptiles in Colorado. Colorado Division of Wildlife. Denver, CO. 130pp.

Soil Conservation Service. 1980. Soil Survey of Larimer County.

U.S. Army Corps of Engineers. 1989. Wetland Delineation Manual.

Attachment A
Site Photographs



Photo 1- View to north across fallow agricultural land.



Photo 2- View to the east of small wetland.



Photo 3- View to east of the Loveland-Greeley Canal, southern site boundary.

Attachment B
Wildland Consultants, Inc.
Qualifications

Wildland Consultants, Inc. (WCI) was established in 1993 to provide high quality environmental and ecological consulting services to private industry, cities, counties, and government agencies. We specialize in helping clients to comply with the National Environmental Policy Act (NEPA), the Endangered Species Act, the Clean Water Act (Section 404 wetlands regulations), city and county zoning and land use regulations, and other federal, state, and local environmental regulations. WCI has completed work throughout the western states. We specialize in working with land use planning, real estate development, oil and gas, mining and other large development projects. Our mission is to provide quality environmental and ecological consulting services at a reasonable rate.

PROFESIONAL CAPABILITIES

Wildland Consultants, Inc. offers the following services:

- Preparation of Environmental Impact Statements and Environmental Assessments
- Wetland delineations, wetland mitigation planning, 404 Permitting with the Army Corps of Engineers
- Endangered Species Act compliance including rare species inventories, Section 7 Consultation with the U.S. Fish and Wildlife Service, and preparation of Biological Assessments
- Mitigation Planning
- Baseline ecological studies (terrestrial and aquatic)
- Project Management

REPRESENTATIVE PROJECT EXPERIENCE

Land Use, Construction and Development

- City of Loveland and EDAW Corporation – Big Thompson Corridor Study. Completed an analysis of wildlife values of natural areas along the Big Thompson River from the foothills east to Interstate 25 through Loveland, Colorado. Each natural area was ranked for value to wildlife.

- City of Fort Collins, Larimer County, and EDAW Corporation- Fossil Creek Reservoir Regional Park Management Plan. Ecological advisors for a management plan for a regional natural area and park along Fossil Creek Reservoir. Key issues included buffer zones for bald eagle roosts, grreat blue heron rookeries, and waterbird habitats. Developed shoreline, grassland, and riparian revegetation plans.

- City of Loveland, Horseshoe Lake Development. Advised the City of Loveland concerning development buffer zones to protect sensitive resources including wetlands, a heron rookery, and other wildlife habitat. Negotiated with developer to develop buffer zones to protect wildlife and wetlands.

- City of Loveland - Spite Natural Area. Completed a baseline inventory and general enhancement plan for a city owned natural area along the Big Thompson River.

- City of Berthoud and Balloffet and Associates, Inc. - Heron Lakes Development. Completed a Wildlife Impact Evaluation for a proposed housing and golf course development along Lonetree, McNeil, and Welch Reservoirs. Key issues included buffer zones to protect a heron rookery, wetlands and riparian habitat, and important waterfowl and waterbird habitat. Advised the City of Berthoud on buffer zone widths and uses needed to protect sensitive wildlife species.

- Mariana Butte LLC and the City of Loveland- Lakeside Nine Development EA. Completed an EA to evaluate environmental impacts from the 7-acre lakeside development in Loveland, Colorado. Key issues included lakeside buffer zones, water quality impacts, and wildlife habitat loss.

- McStain Enterprises, Inc. and the City of Loveland- Rocky Mountain Village II Development EA. Completed an EA to analyze environmental impacts from the proposed 70-acre residential development in Loveland, Colorado. Key issues included impacts to prime farmlands, and adjacent natural areas.

- Taft Carlisle LLC and the City of Loveland- Thompson Valley Addition EA. Completed an EA to analyze environmental impacts from the proposed 130-acre shopping center development in Loveland, Colorado. Key issues included wetlands, and riparian buffer zones, and rare species.

- Waterford Place LLC and the City of Loveland- Waterford Place Development EA, and Wildlife Enhancement Plan. Completed an EA to analyze environmental impacts from the proposed 80-acre development along the Big Thompson River. Key issues included riparian habitats, and buffer zones. Developed a wildlife enhancement plan to improve habitat values of the riparian zone along the Big Thompson River.. Worked with the City of Loveland and the developer to negotiate a donation of 10-acres of riparian habitat to the City.

- Fountainhead II and the City of Loveland- Silver Shores Subdivision EA, and Enhancement Plan. Completion an EA to analyze environmental impacts from the 5 acre development located adjacent to Westerdall Lake. Key issues included wetlands, and buffer zones. Prepared an enhancement plan for shoreline wetland and riparian vegetation.

- Country Club Plaza LLC and the City of Greeley- Country Club Plaza Development EA. Completed an EA, wetland permitting, and enhancement plan for an EA to analyze impacts from the 80-acre shopping center development. Key issues included impacts to a prairie dog colony, and riparian habitat adjacent to a small drainage. Developed an enhancement plan to improve habitat values of a riparian zone on the site.

Wetlands

- Boxelder Sanitation District- Sewage Plant Bank Stabilization Project. Completed a wetland delineation, wetland mitigation plan, 404 Permitting, Preble's meadow jumping mouse and Ute ladies' tresses surveys for a bank stabilization and stream bed alteration project along the Cache la Poudre River, Fort Collins, Colorado.

- Boxelder Sanitation District- CDOT Utility Easement Wetland Permitting. Completed a wetland delineation, and 404 Permitting with the Corps of Engineers for the sewage line expansion along I-25 east of Fort Collins, CO.

- City of Greeley, Public Works Department, Country Club West Wetland Delineation, Wetland Mitigation Plan, 404 Permitting. Completed a wetland delineation for a City of Greeley natural area and wetland mitigation site. Purpose of the delineation was to determine if Corps of Engineers mitigation requirements were met on the site. Prepared a wetland mitigation plan to meet COE requirements. Completed 404 Permitting for the project.

- Drexel Barrel & Co. and Mountain Vista LLC- Mountain Vista Development. Completed a wetland delineation, wetland mitigation plan, 404 permitting, Ute ladies' tresses surveys for the 180-acre multifamily development in Greeley, Colorado.

- Donaldson and Company, and Cooper Slough Hunting Club. Completed a wetland delineation along Cooper Slough in eastern Fort Collins, CO.

- Donaldson and Company, Wisemen Brothers Development. Completed a wetland mitigation plan and 404 Permitting with the Corps of Engineers, for a 10.8 acre wetland area along a tributary to Sheep Draw in Greeley, Colorado.

- Western Property Advisors, Inc., Mountain Vista Development. Completed wetland delineation, wetland mitigation plan, and wetland permitting with the Army Corps of Engineers for the 80-acre golf course development.

- Public Service Company- Front Range Gas Transmission Project. Completed wetland delineation and 404 permitting for the 53-mile long natural gas pipeline located in Greeley, Colorado.

- Taft Carlisle, LLC- Thompson Valley Addition. Completed wetland delineation and 404 Permitting for the 160 acre shopping center and housing development in Loveland, Colorado. Completed surveys for Preble's meadow jumping mice and Ute ladies' tresses orchids on the site.

- Stream Team Ltd. and Coal Ridge LLC, Coal Ridge Golf Course Development. Completed a wetland delineation and permitting for the proposed 321-acre golf course development, Firestone, Colorado.

Threatened and Endangered Species-

- Development Projects Colorado Front Range- Preble's meadow jumping mouse trapping, Ute Ladies tresses surveys. Project management and principal investigators for completing Preble's meadow jumping mouse and Ute ladies' tresses orchid surveys for over 30 development, pipeline, and related projects along the Colorado Front Range. Coordinated survey requirements and results with the U.S. Fish and Wildlife Service, and Army Corps of Engineers. Clients included: Public Service Company of Colorado, Diamond Shamrock, City of Greeley, City of Loveland, Everitt Companies, McLeod USA, EDAW, Landmark Engineering Ltd., and Western Property Advisors, Inc.

- Threatened and Endangered Species Surveys, and Section 7 Consultation- Completed rare species surveys, raptor surveys, preparation of Biological Assessments, and consultation with the U.S. Fish and Wildlife Service for over 30 large oil and gas projects, mining projects, and utility projects in the western states. Clients included: Diamond Shamrock, Chevron, Northern Colorado Water Conservancy District, Public Service Company of Colorado, AT&T, Conoco, Exxon, McLeod USA, City of Broomfield, City of Loveland, City of Greeley, and many others.

KEY PERSONEL

Eric Berg, President, Project Manager, Wildlife Biologist

Education, Certifications: B.S. Wildlife Biology, Colorado State University
M.S. Range/Wildlife Management, Washington State University
Certified Wildlife Biologist, Certified Professional Wetland Scientist

Expertise – Over 18 years of experience in:

- Preparation of Environmental Impact Statements and Environmental Assessments
- Threatened and Endangered Species studies, Section 7 Consultation with the U.S. Fish and Wildlife Service, preparation of Biological Assessments
- Baseline wildlife and vegetation studies
- Wetland delineations, permitting, and wetland mitigation planning
- Mitigation planning
- Project management

Rollin Daggett, Aquatic Ecologist, Project Manager

Education, Certifications: B.S. Zoology, Syracuse University
M.S. Aquatic Biology, University of Newfoundland

Expertise – Over 20 years of experience in:

- Preparation of Environmental Impact Statements and Environmental Assessments
- Threatened and Endangered Species studies
- Baseline aquatic and fisheries studies
- Mitigation planning
- Project management

Troy Gerhardt, Ph.D, Terrestrial Ecologist

Education, Certifications: M.S. Zoology, Duke University
Ph.D. Ecology, Colorado State University

Expertise - Over 7 years of experience in:

- Baseline ecological studies
- Threatened and endangered species studies
- Wetland studies

Brad Johnson, Ph.D, Terrestrial Ecologist

Education, Certification: Ph.D. Ecology, Colorado State University
Certified Professional Wetland Scientist

Expertise- Over 10 years experience in:

- Wetland delineations, and wetland permitting with the COE
- Wetland mitigation plans, wetland revegetation plans, wetland restoration
- Wetland inventories and analysis
- Baseline vegetation studies
- Threatened and endangered species studies

AFFILIATIONS, CERTIFICATIONS, LICENSES

Certified Wildlife Biologist, The Wildlife Society
Certified Professional Wetland Scientists, Society of Wetland Scientists
Approved by the U.S. Fish and Wildlife Service to complete surveys for Ute ladies tresses orchid, Preble's meadow jumping mouse, black-footed ferret, desert tortoise, and Mexican spotted owl
Licensed by the Colorado Division of Wildlife, and U.S. Fish and Wildlife Service to complete trapping for Preble's meadow jumping mouse
Approved by the Corps of Engineers to complete wetland delineations and permitting

Ecological Resource Consultants, Inc
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Preliminary

Environmentally Sensitive Areas Report

for the

Myers Group No. 949 3rd Subdivision Property

Loveland, Larimer County Colorado

February 4, 2005

Prepared for:
McWhinney Enterprises
2725 Rocky Mountian Avenue, Suite 200
Loveland, Colorado 80538

ERC Project # 175-051

Preliminary Environmentally Sensitive Areas Report

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INTRODUCTION

Ecological Resource Consultants, Inc. (ERC) has prepared this Preliminary Environmentally Sensitive Areas Report for a parcel of land proposed for potential future development, known herein as the Myers Group No. 949 3rd Subdivision Property (Site). The Site is located in the vicinity of City of Loveland in Larimer County Colorado. This assessment was conducted to identify natural features and/or, ecologically sensitive areas which may occur on or around the Site. Natural features and/or ecologically sensitive areas in the context of this assessment may include: City of Loveland Natural Areas, stream corridors, wetlands, mature stands of vegetation, natural vegetation communities, significant habitat for wildlife and threatened, endangered or species of concern.

ERC performed an onsite assessment of the Site on February 2, 2005 with subsequent literature review. The weather was sunny, clear and cool, soils thawed and vegetation was dormant. The onsite assessment included documentation of potential wetland habitat, major vegetation communities, dominant flora associated with each community, unique natural features, wildlife habitats and observations of wildlife species.

GENERAL SITE DESCRIPTION

The Site is located in the northwest ¼ of Section 3, Township 5 North, Range 68 West in Loveland, Larimer County, Colorado (40° 25' 53" Latitude, 105° 59' 48" Longitude). The Site is bound by I-25 to the east, Crossroads Blvd to the north, Rocky Mountain Ave to the west and the Union Pacific Railroad to the south. The Site includes approximately 170-acres of relatively level, undeveloped agricultural land at an average elevation of 5020 feet above mean sea level (msl). No structures, facilities or buildings were present on the Site although earthwork and building construction was underway on adjacent properties. The Site is devoid of any significant natural features, vegetation or habitat as a result of historic agricultural land practices. Dominant vegetation across the site consists of weeds and cover crop stubble. The Site has been in agricultural production at least dating back to the 1960's.

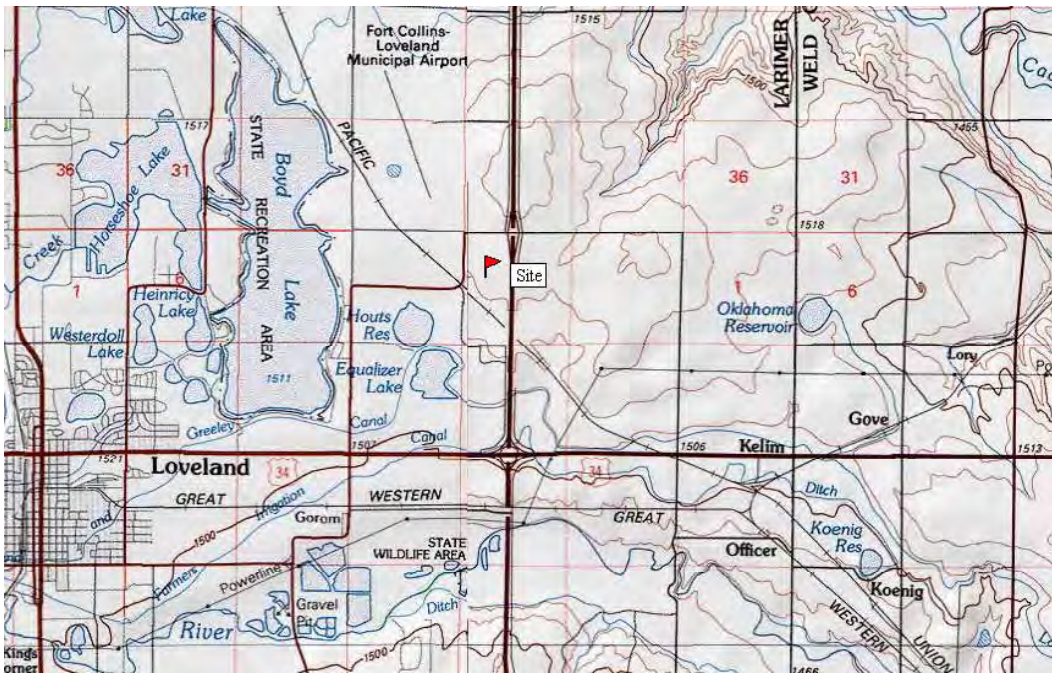


Figure 1. Vicinity Map

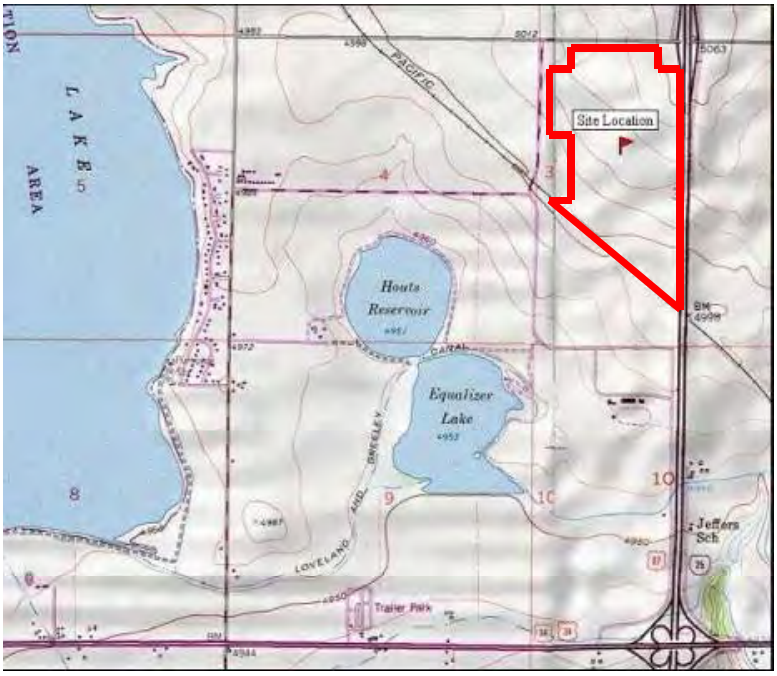


Figure 2. USGS 7.5 Minute Series Topographic Map of the Site

ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS

The US Army Corps of Engineers (USACE) regulates wetlands under Section 404 of the Clean Water Act. The Clean Act (33CFR Sec 328.3 b) defines wetlands as "*those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions*". ERC conducted a preliminary routine wetland delineation on the Site following the methodology enumerated in the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) to identify the presence/absence of jurisdictional wetlands. During the field inspection, dominant vegetation was recorded, representative hydrologic indicators were noted and soil samples were examined for hydric indicators. In order for an area to be classified as a jurisdictional wetland the following three parameters must be present: (1) >50% of the dominant vegetation must be hydrophytic, (2) soils must exhibit hydric characteristics within the upper 12" of the soil profile and (3) indications of wetland hydrology must be present.

The Site does not contain jurisdictional wetlands. The Site is devoid of natural vegetation from agricultural land practices. No hydrophytic vegetation was identified. No natural defined drainages or topographic low-lying areas are present. Review of USGS topographic maps and aerial photography do not depict the presences of drainages, streams, ponds, lakes or marsh areas on the Site. The Larimer County Soil Survey identifies the dominant soil type as Weld Silt Loam (0-3% slope) with inclusions of Wiley Silt Loam (0-3% slope). The Weld Series consists of deep, well drained soils that formed in uniform textured silty, wind-deposited materials and are found on uplands. Weld series soils have a slow runoff potential and slight hazard of erosion. Weld or Wiley soil series are not listed as Hydric Soils in Colorado (NRCS, 1995) nor were hydric soil characteristics identified onsite.

- **No jurisdictional wetlands occur on the Site**

CITY OF LOVELAND NATURAL AREAS

The City of Loveland has established standards to protect known natural habitat areas and special features prior to City approval of a proposed development plan. The standards are intended to protect natural habitat areas and special features both on a site and in the vicinity of a site. Any proposed development site that contains, or is within 500 feet of a natural habitat area or special feature requires an ecological characteristic study to document existing ecological condition of a site. The location of natural areas have been identified in The City of Loveland's, In the Nature of Things (Revised Oct, 1996). This document defines Natural Areas as undeveloped lands containing potential natural values such as wildlife habitat, plant diversity and wetlands. 129 Natural areas are identified in the study and rated. Numeric quality ratings were given to 14 environmental attributes. The ratings range from 1 (considered low) to 10 (considered high).

No City of Loveland Natural Areas are identified on the Site. Houts Reservoir (Natural Area 1) and Equalizer Lake (Natural Area 2) are located over 2,000 feet southeast from the closest corner of the Site. Houts Reservoir is of relatively high ecological value but has an overall habitat rating of 5. Boyd Lake (Natural Area 93) at its shortest distance is approximately 1-mile west of the Site. Boyd Lake Natural Area is considered of relatively high ecological value with an overall habitat rating of 8.

- **No City of Loveland Natural Areas are identified on or within 500 feet of the Site.**

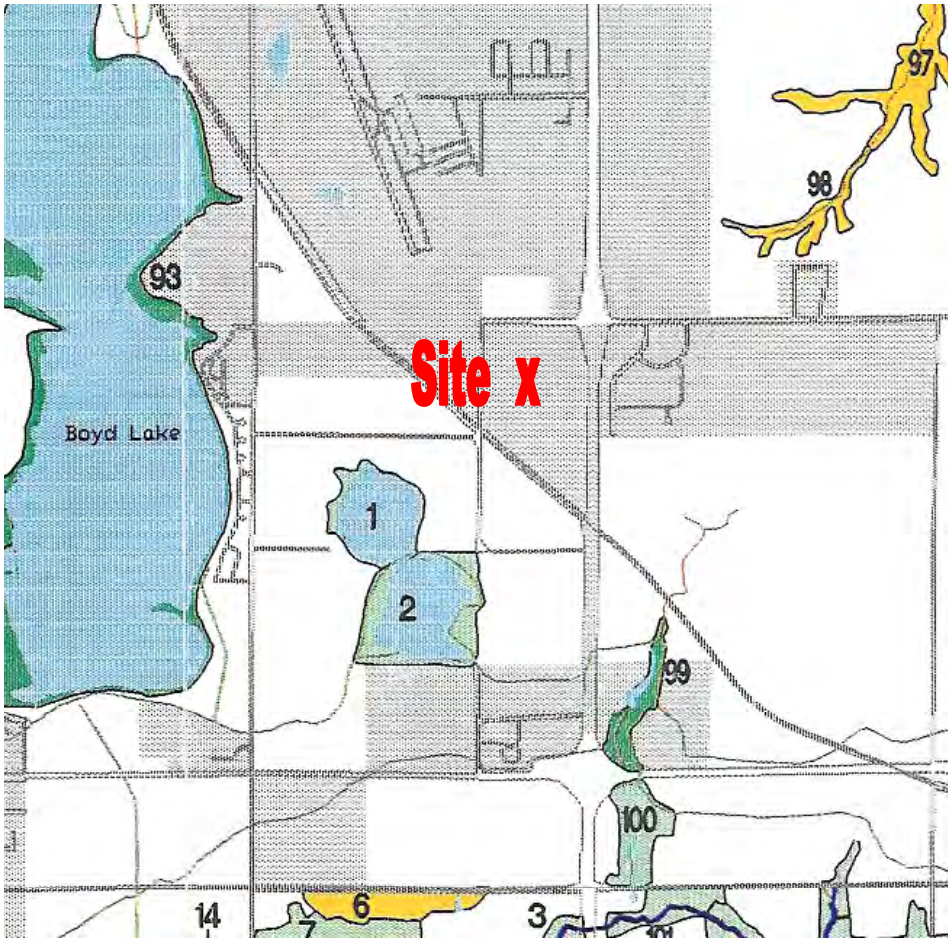


Figure 3. City of Loveland Natural Areas *(In the Nature of Things, 1996)*

SCREENING OF THREATENED, ENDANGERED, AND SPECIES OF CONCERN

The Endangered Species Act (ESA) of 1973 was enacted by the United States to conserve the ecosystems upon which endangered and threatened species depend and to conserve and recover listed species. Under the law, species may be listed as either "endangered" or "threatened". The ESA is administered by the US Fish and Wildlife Service. The following threatened, endangered or of concern species have been identified as potential inhabitants or that the county is within the historical range of the species based on general habitat requirements and US Fish and Wildlife Service Ecological Services Colorado Field Office Summary Charts (F*ederally Listed and Candidate Species and Their status in Colorado Summary Chart for Larimer County, effective May 20, 2003*),

- Bald Eagle (*Haliaeetus leucocephalus)*- Listed Threatened
- Interior least tern (*Sterna antillarum athalossos*)- Listed Endangered
- Piping plover (*Charadruis melodus*)- Listed Threatened
- Colorado butterfly plant (*Guara neomexicana* ssp. *coloradensis*)-Listed Threatened
- Preble's meadow jumping mouse (*Zapus hudsonius preblei*)-Listed Threatened
- Ute ladies'-tresses (*Spiranthes diluvialis*)-Listed Threatened
- Whooping crane (*Grus americana*)-Listed Endangered
- Black-tailed prairie dog (*Cynomys ludovicianus*)-State Species of Concern
- Other State Species of Concern

A brief species profile and presence/absence determination is provided for each species based on literature review and specific habitat requirements.

Bald eagle

The bald eagle is listed as federally threatened under the ESA. Bald eagles are usually winter residents of Colorado. These raptors are commonly found in lower elevation grasslands and semi-deserts near prairie dog towns and open water (i.e. rivers, reservoirs). Neither Bald eagle nests nor individuals were observed on or near the Site during the assessment. Bald eagles are known to frequent the lands immediately surrounding Houts Reservoir, Equalizer Lake and Boyd Lake. Any change of land use on the Site should not adversely affect the continued existence or available habitat of this species.

Interior least tern

The interior least tern (Tern) is listed as a federally endangered species under the ESA. Tern habitat consists of sparsely vegetated sand and gravel bars in wide river channels or salt flats along shorelines. The breeding range of the Tern has extended from Texas to Montana and from eastern Colorado and New Mexico to southern Indiana. Nesting habitat is usually located well above the water line on wide, sparsely vegetated sandbars and shores. Any change in land use on Site should not adversely affect the continued existence or available habitat of this species.

Piping plover

The piping plover (Plover) is listed as federally endangered under the ESA. The Colorado Plover population is a breeding population arriving in April and leaving by the end of May. Breeding habitat includes sparsely vegetated, wide sandy shorelines, sandbars in rivers and sandy wetland pastures. Typically, vegetative cover in potential nesting habitat is less than five percent. Any change in land use on the Site should not adversely affect the continued existence or available habitat of this species.

Colorado butterfly plant

The Colorado butterfly plant is listed as federally threatened under the ESA. This plant species is a short-lived, perennial herb endemic to moist soils in mesic or wet meadows of floodplain areas in southeastern Wyoming, north central Colorado, and extreme western Nebraska, between elevations of 5,800 feet and 6,000 feet (Spackman et. al., 1997). This early to mid-seral stage species occurs primarily in habitats created and maintained by streams active within their floodplains, with vegetation that is relatively open and not overly dense or overgrown. Site elevation and existing vegetation on the Site is atypical of the butterfly plant habitat. Any change in land use on the Site should not adversely affect the continued existence or available habitat of this species.

Preble's meadow jumping mouse

The Preble's meadow jumping mouse (PMJM) is listed as a federally threatened species under the ESA. The PMJM range extends from southwestern Wyoming through eastern Colorado generally below 7,600 feet. Armstrong et.al. (1997) described typical PMJM habitats as "well-developed plains riparian vegetation with relatively undisturbed grassland and a water source in close proximity." Also noted was a preference for "dense herbaceous vegetation consisting of a variety of grasses, forbes and thick shrubs" (Fish and Wildlife Service, 2004). PMJM habitat does not exist on the Site. Any change in land use on the Site should not adversely affect the continued existence or available habitat of this species.

Ute ladies'-tresses

The Ute ladies'-tresses orchid (Orchid) is listed as federally threatened under the ESA. The Orchid occurs in seasonally moist soils and wet meadows near springs, lakes, or perennial streams and their associated floodplains below 6,500 feet elevation in certain areas in Utah, Colorado, Idaho, Wyoming, and Nevada. Typical sites include old stream channels and alluvial terraces, subirrigated meadow and other sites where the soil is saturated to within 18" of the surface at least temporarily during the spring or summer growing seasons. Orchids do not typically occur on highly disturbed or modified sites such as highway rights-of-way, upland sites including prairie dog towns, shortgrass prairie and sagebrush rangeland, sites entirely inundated by standing water including monocultures of cattails or Olney's three-square. The Site does not exhibit characteristics typical of the Orchid habitat. Any change in land use on the Site should not adversely affect the continued existence or available habitat of this species.

Whooping crane

The whooping crane (Crane) is listed as a federally endangered species under the ESA. Cranes typically live in mudflats around reservoirs and in agricultural areas. While wintering they live on salt flats that are dominated by coastal salt grass. Their nesting grounds are wetland communities dominated by bulrush. In Colorado the Crane occurs only as a migrant, stopping over in the San Luis Valley for four to six weeks during February and March and in the western valleys, especially Mesa, Delta and Gunnison Counties (CDOW). The Site does not contain habitat typically utilized by the Crane. Any change in land use on the Site should not adversely affect the continued existence or available habitat of this species.

Black-tailed prairie dog

The black-tailed prairie dog is currently listed as a state species of special concern by the CDOW. Prairie dogs have become an important political, social, economic, and ecological issue in the Front Range region of Colorado. Nationally, less than 2 percent of pre-settlement prairie dog populations exist today, due to a combination of habitat loss and targeted extermination. Short-grass species commonly eaten by prairie dogs include buffalo grass and blue grama. Prairie dogs play an important role in the overall ecosystem, not only creating an unique ecosystem for their species, but they also create habitat and are a food source for a number of other federally and state-listed threatened or endangered species. No prairie dog colonies exist on the Site. Any

change in land use on the Site should not adversely affect the continued existence or available habitat of this species.

Other State Species of Concern

The Colorado Division of Wildlife (CDOW) has identified State Species of Special Concern, which are species or subspecies of native wildlife populations that are currently vulnerable in their Colorado range and have the potential to become threatened or endangered species (CNHP, 1999). State Species of Special Concern are not protected under State regulations but the 'take' of individuals and disturbance of their habitat is strongly discouraged. Colorado Species of Special Concern which may exist on or utilize the Site are listed as follows, although these species were not directly observed on the Site. Any potential land use changes are recommended to avoid disturbance or the 'take' of these species.

- Common garter snake (*Thamnophis sirtalis*)
- Ferruginous hawk (*Buteo regalis*)
- Mountain plover (*Charadrius montanus*)
- Swift fox (*Vulpes velox*)
- Western snowy plover (*Charadrius alexandrinus nivosus*)

- **The Site does not exhibit the presence or potential habitat of threatened, endangered or species of concern.**

GENERAL HABITAT DESCRIPTION AND WILDLIFE USE

An assessment was conducted on the Site to identify and document the presence of natural vegetation communities, the presence of wildlife and potential wildlife use or habitat. The Site was traversed on February 2, 2005 by ERC and observations documented.

Wildlife can utilize the general landscape in a multitude of ways. Wildlife can use specific habitats as areas of permanent inhabitance, seasonal inhabitance, migratory routes or as a temporary shelter, or for foraging. Agricultural land typically is not considered of high ecological value to wildlife but this type of habitat does provide many beneficial values. These lands can provide forage and hunting grounds, refuge, nesting, food sources and provide general "open space".

The Site is comprised entirely of active agricultural land, primarily historically utilized for dryland farming. Routine cultivation has prohibited the development of any significant natural features or vegetation on the Site. No natural grasslands or shrub and tree communities exist on the Site. Dominant vegetation across the Site consists of weeds and cover crop stubble. Noxious weeds are present along the perimeter of the Site. Agricultural land, although limited in habitat and vegetation species diversity, does provide a unique and important component in the environment. Surrounding residential and commercial development and roadways accompanied by lack of vegetation cover limits the utilization of the Site by wildlife. The Site is primarily utilized by avian species and small mammals for foraging. Some waterfowl may also use the site for resting and foraging due to its close proximity to Houts Reservoir, Equalizer Lake and Boyd Lake due to the open undeveloped nature of the Site. During the site assessment numerous locally common upland birds were observed across the Site.

Houts Reservoir (Natural Area 1), the adjacent property to the southwest provides habitat for a wide array of waterfowl and raptors including red-tailed hawks (*Buteo jamaicensis*), bald eagles (*Haliaeetus leucocephalus*), geese (*Branta canadensis*), blue heron (Andea herodias), mallards, teals and American White Pelican (*Pelecanus erthrorhynchos*) which may only utilize the Site in passing. The use of the Site by any wildlife is limited due to the lack of structure, cover, natural vegetation and routine agricultural land practices. Mammal use is also limited on the Site due to the relatively lack of any significant connecting movement corridors. The Site is relatively isolated by surrounding development and roadways. Although not directly observed smaller mammals common to the region such as coyote (*Canis latrans*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), skunk (*Mephitus spp*.), rabbits (*Sylvilagus spp*.), squirrels (*Sciurus spp*.), mice (*Peromysucus spp*.), and voles (*Microtus spp.*) may utilize the Site.

- **No significant natural vegetation communities, wildlife habitat (or wildlife) exist on the Site.**

MIGRATORY BIRD TREATY ACT

Migratory birds are protected under the Migratory Bird Treaty Act of 1918 (MBTA) (16 U.S.C. 730-712). The MBTA makes it illegal for anyone to *take, possess, import, export, transport, sell, purchase barter, or offer for sale, purchase, or barter any migratory bird, or the parts, nests, or eggs of such a bird* except under the terms of a valid permit issued pursuant to Federal regulations. In Colorado all birds except for the European starling (*Sturna vulgaris*), house sparrow (*Passer domesticus*), and rock dove (*Columba livia*) are protected under the MBTA. A total of 523 migratory bird species are known to occur in the Mountain-Prairie Region (Region 6, Montana, Wyoming, Utah, North Dakota, South Dakota, Nebraska, Kansas and Colorado); 320 of the 523 migratory bird species are known to breed in USFWS Region 6.

This screening does not guarantee migratory bird nests do not exist or will not be encountered during future activities. If the "take" of any migratory bird species or nests is required in the future, notification for examination should be made to ERC or the USFWS, Non-game Migratory Bird Coordinator (Stephanie Jones) at (303) 236-8155 ext 253. Future coordinators of land use activities should be aware that the "take" of an occupied nest requires a Nest Depredation Permit, issued by the U.S. Fish and Wildlife Service, before removing, disturbing or destroying any occupied nest on the Property.

- Migratory birds do exist in the general vicinity of the Site and may potentially nest in the open agricultural lands within the Site. Such birds are protected under the MBTA, and killing or possession of these birds (or their parts and nests) is prohibited under the MBTA.



Figure 4. Site Aerial Photography June 2003.
Depicts current agricultural land use practices and lack of natural features or environmentally sensitive areas onsite.



Photo 1. View east along the southern Site boundary and UP Railroad towards I-25 in the background.



Photo 2. View southwest across the Site towards Houts Reservoir, Equalizer Lake and Long's Peak in the distance.



Photo 3. View south along the western Site boundary (Rocky Mountain Ave).



Photo 4. View northwest across the Site. Note the lack of any natural features.



Photo 5. View north across the Site. Note the agricultural land use and lack of any natural features.



Photo 6. View south across the Site. Note the agricultural land use and lack of any natural features.

SUMMARY

Ecological Resource Consultants, Inc. has prepared this Preliminary Environmentally Sensitive Areas Report for the Myers Group No. 949 3rd Subdivision Property (Site). This Report was conducted to identify natural features and/or, ecologically sensitive areas which may occur on or around the Site. Natural features and/or ecologically sensitive areas in the context of this Report may include: City of Loveland Natural Areas, stream corridors, wetlands, mature stands of vegetation, natural vegetation communities, significant habitat for wildlife and threatened, endangered or species of concern.

A summary of findings is provided as follows:

- The Site is primarily abandon agricultural land with no significant natural features or vegetation
- No jurisdictional wetlands exist on the Site
- No City of Loveland Natural Areas are identified on the Site or within 500 feet
- No significant natural vegetation communities, wildlife habitat or wildlife was identified on the Site
- The Site does not exhibit the presence or potential habitat of threatened, endangered or species of concern protected under the Endangered Species Act
- Migratory birds do exist in the general vicinity of the Site and may potentially nest in the open agricultural lands within the Site. Such birds are protected under the Migratory Bird Treaty Act (MBTA), and killing or possession of these birds (or their parts and nests) is prohibited under the MBTA.
- Any proposed future land use changes should not have a potential adverse effect on "environmentally sensitive areas" as defined by the City of Loveland.

This study has been prepared by:

Ecological Resource Consultants, Inc.



David J. Blauch, Senior Ecologist

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Preliminary Ecological Assessment

for the

Colorado College Property

and the

Spreng Property

Loveland, Colorado

June 8, 2004

Prepared for:
McWhinney Enterprises
2725 Rocky Mountain Avenue, Suite 200
Loveland, Colorado 80538

ERC Project # 175-047

Preliminary Ecological Assessment

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INTRODUCTION

Ecological Resource Consultants, Inc. (ERC) has prepared this Preliminary Ecological Assessment for two individual parcels of land proposed for potential future development, known herein as the Colorado College Property and the Spreng Property. The properties are located in the vicinity of City of Loveland in Larimer County Colorado. This assessment was conducted to identify natural features and/or, ecologically sensitive areas which may occur on or around the properties. Natural features and/or ecologically sensitive areas in the context of this assessment may include: stream corridors, wetlands, mature stands of vegetation, natural vegetation communities, significant habitat for wildlife and threatened, endangered or species of concern.

ERC performed an onsite assessment of each property on May 14, 2004 with subsequent literature review. The weather was sunny, clear and warm, soils thawed and vegetation was emerging and/or in bloom. Onsite assessments included documentation of wetland habitat, major vegetation communities, dominant flora associated with each community, unique natural features, wildlife habitats and observations of wildlife species.

GENERAL SITE DESCRIPTION

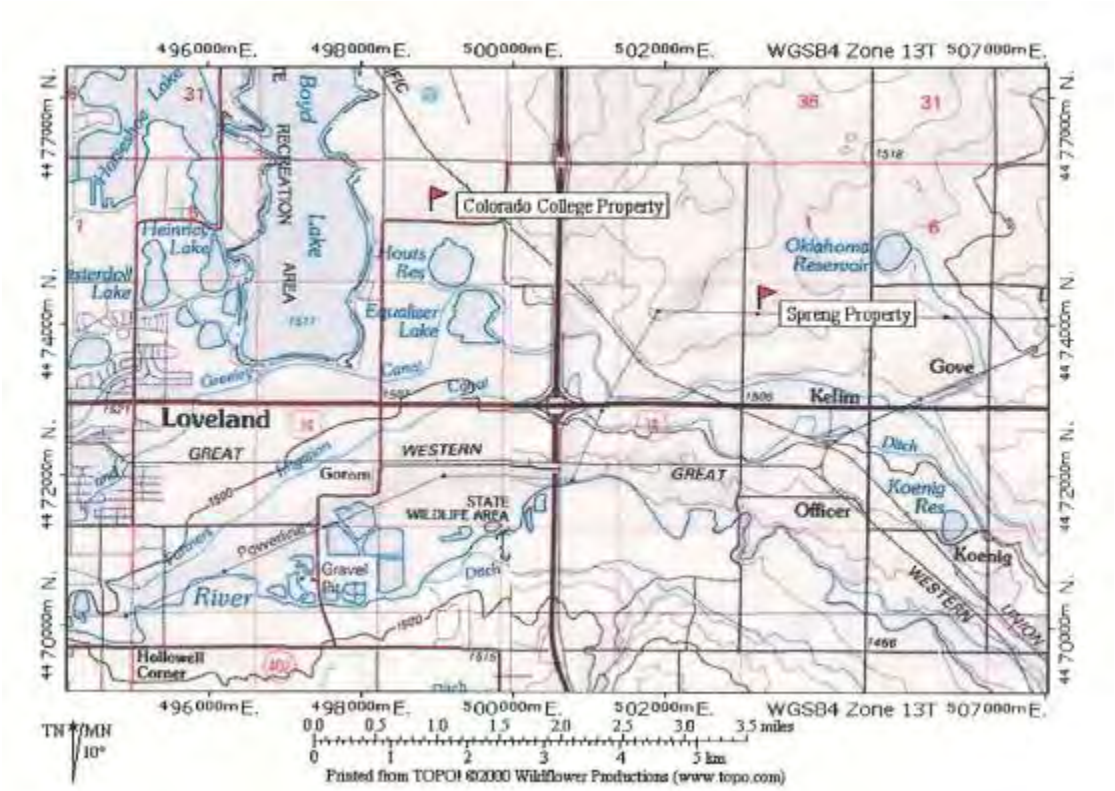
Colorado College Property

The Colorado College Property is located in the northern half of Section 4, Township 5 North, Range 68 West in Loveland, Larimer County, Colorado (40° 22’ 56” Latitude, 105° 08’ 57” Longitude), on the north side of County Road 24E. The property includes 127.1 acres of relatively level, undeveloped agricultural land at an average elevation of 4975 feet above mean sea level (msl). No structures, facilities or buildings were present on the property. The Union Pacific Railroad borders the property along the northeast, County Road 24E forms the southern property boundary and County Road 9 (Boyd Lake Avenue) forms the western boundary. The property is devoid of any significant natural features, vegetation or habitat as a result of routine agricultural land practices. The property has been in agricultural production at least dating back to the 1960’s.

Spreng Property

The Spreng Property is located east of Interstate 25, east of the City of Loveland, in the northeast quarter of Section 11, Township 5 North, Range 68 West, Larimer County, Colorado (Latitude 40° 25’ 52” N, Longitude 104° 58’ 52” W) at an average elevation of 5000 feet msl. The property can be accessed from the intersection of HWY 34 and CR 3. From the intersection follow CR 3 north, approximately 0.5 miles. The property is located on the west side of CR 3. A high tension power line bisects the center of the property from east to west. A dirt road encompasses the northern, western and southern boundaries providing access. The property occupies 160.4 acres of land and is devoid of any significant natural features, vegetation or habitat as a result of routine agricultural land practices. The property has been in agricultural production at least dating back to the 1960’s.

Figure 1. Vicinity Map



ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS

The US Army Corps of Engineers (USACE) regulates wetlands under Section 404 of the Clean Water Act. The Clean Act (33CFR Sec 328.3 b) defines wetlands as "*those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal circumstance4s do support, a prevalence of vegetation typically adapted for life in saturated soil conditions*". ERC conducted a preliminary routine wetland delineation on each of the two properties following the methodology enumerated in the *1987 Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987) to identify the presence/absence of jurisdictional wetlands. During the field inspection, dominant vegetation was recorded, representative hydrologic indicators were noted and soil samples were examined for hydric indicators. In order for an area to be classified as a jurisdictional wetland the following three parameters must be present: (1) >50% of the dominant vegetation must be hydrophytic, (2) soils must exhibit hydric characteristics within the upper 12" of the soil profile and (3) indications of wetland hydrology must be present.

Colorado College Property

The Colorado College property does not contain jurisdictional wetlands. The property is devoid of natural vegetation from agricultural land practices. No hydrophytic vegetation was identified. No defined drainages or topographic low-lying areas are present. Review of USGS topographic maps and aerial photography do not depict the presences of drainages, streams, ponds, lakes or marsh areas on the property. The Larimer County Soil Survey identifies the dominant soil type as Ulm Clay Loam (0-3% slope) with inclusions of Wiley Silt Loam and Nunn Clay Loam. Ulm Clay Loam is a nearly level, deep, well-drained soil that formed in mixed alluvium from shale.

Nunn and Wily soils are also deep, well drained soils. These soils are typically used for irrigated and dryland farmed crops and for pasture and native grasses. Ulm, Wiley or Nunn soil series are not listed as Hydric Soils in Colorado (NRCS, 1995) nor were hydric soil characteristics identified onsite.

- **No jurisdictional wetlands occur on the Colorado College Property**





Photo 1 and 2. Example of dryland agricultural practices on the Colorado College Property and absences of potential wetland habitat.

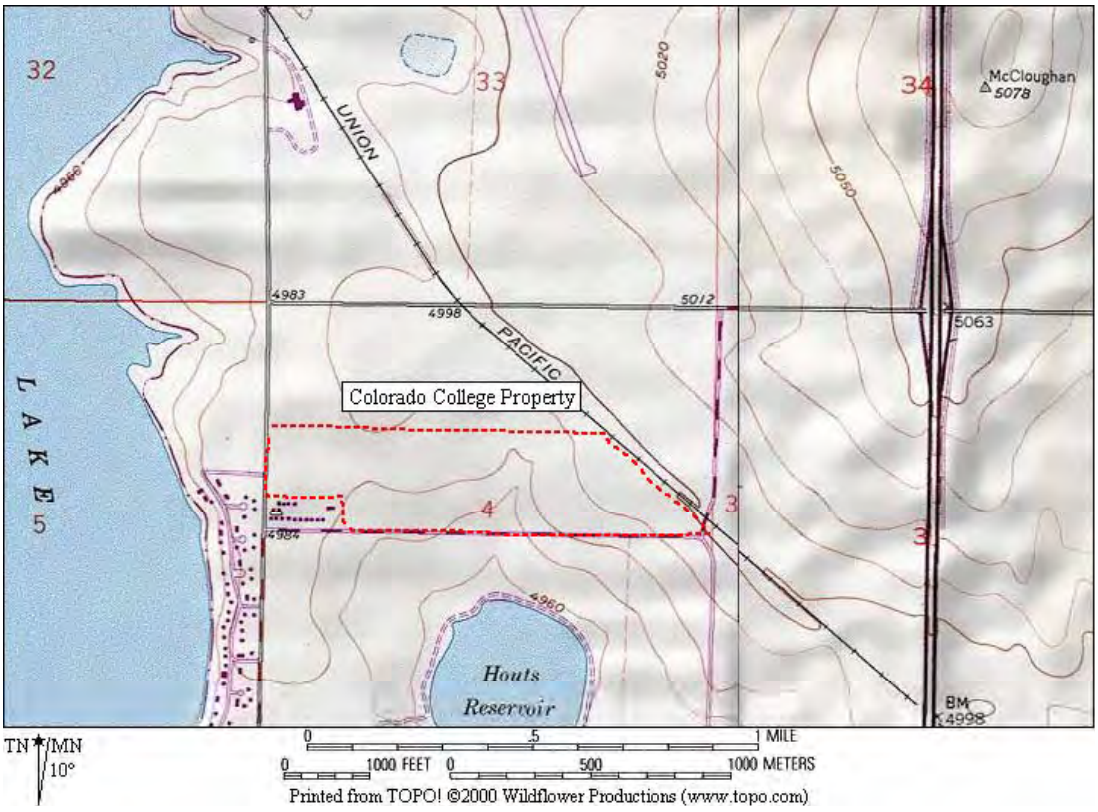


Figure 2. USGS 7.5 Minute Series Topographic Map of the Colorado College Property

Spreng Property

The Spreng property does not contain jurisdictional wetlands. The property is devoid of natural vegetation from routine agricultural land practices. No hydrophytic vegetation was identified. No defined drainages or topographic low-lying areas are present. Review of USGS topographic maps and aerial photography do not depict the presences of drainages, streams, ponds, lakes or marsh areas on the property. The Larimer County Soil Survey identifies the dominant soil type as Weld Silt Loam with inclusions of Wiley Silt Loam. Weld Silt Loam is a nearly level, deep, well-drained soil that formed in uniform textured, silty, wind deposited material. Wiley soils are also deep, well drained soils. These soils are found in upland areas and are typically used for irrigated and dry land farmed crops. Weld and Wiley soils are not listed as Hydric Soils in Colorado (NRCS, 1995) nor were hydric soil characteristics identified onsite.

- **No jurisdictional wetlands occur on the Spreng Property**





Photo 3 and 4. Example of dryland agricultural practices of the Spreng Property and absence of potential wetland habitat.

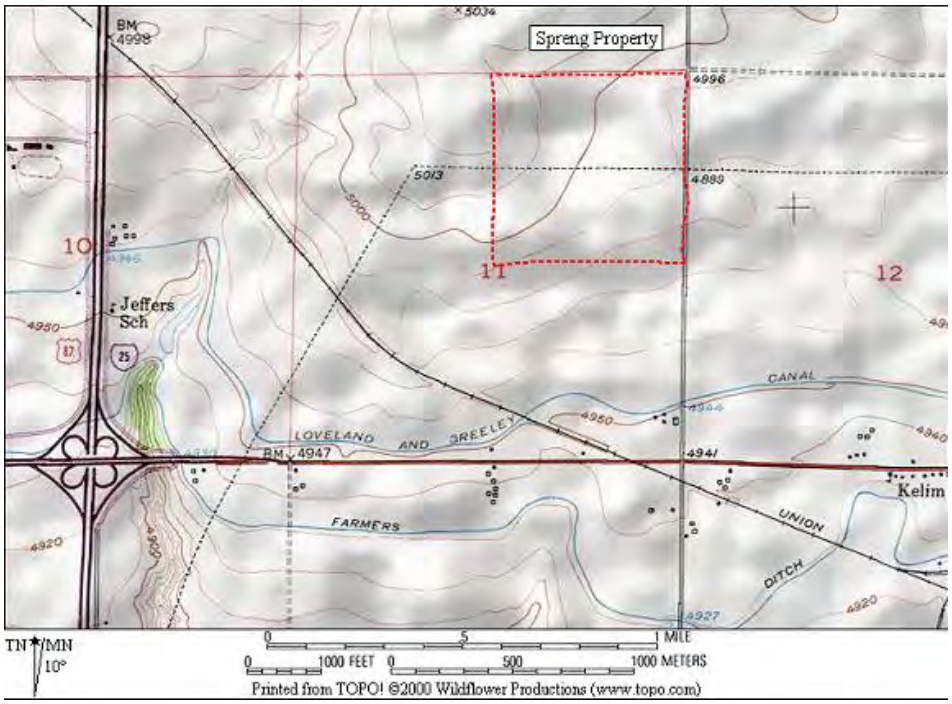


Figure 3. USGS 7.5 Minute Series Topographic Map of the Spreng Property

CITY OF LOVELAND NATURAL AREAS

The City of Loveland has established standards to protect known natural habitat areas and special features prior to City approval of a development plan. The standards are intended to protect natural habitat areas and special features both on a site and in the vicinity of a site. Any proposed development site that contains, or is within 500 feet of a natural habitat area or special feature requires an ecological characteristic study to document existing ecological condition of a site. The location of natural areas have been identified in The City of Loveland's, In the Nature of Things (Revised Oct, 1996). This document defines Natural Areas as undeveloped lands containing potential natural values such as wildlife habitat, plant diversity and wetlands. 129 Natural areas are identified in the study and rated. Numeric quality ratings were given to 14 environmental attributes. The ratings range from 1 (considered low) to 10 (considered high).

Colorado College Property

No City of Loveland Natural Areas are identified on the Colorado College Property. Boyd Lake (Natural Area 93) at its shortest distance is approximately 1,100 feet south of the property. Houts Reservoir (Natural Area 1) is located approximately 850 feet south of the property. Boyd Lake Natural Area is considered of relatively high ecological value with an overall habitat rating of 8. Houts Lake is also of relatively high ecological value but has an overall habitat rating of 5.

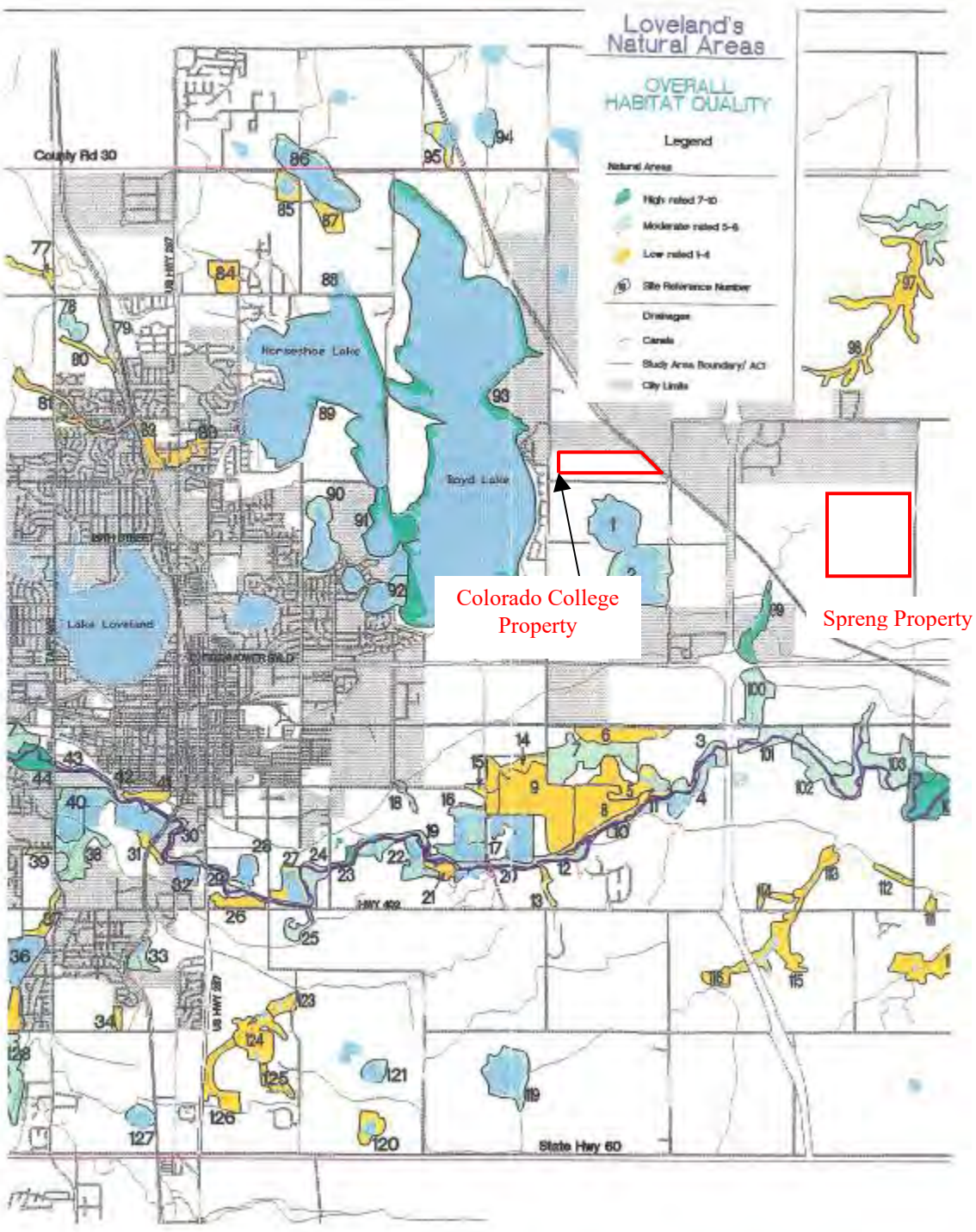
- **No City of Loveland Natural Areas are identified on the Colorado College Property nor within 500 feet of the property.**

Spreng Property

No City of Loveland Natural Areas are identified on the Spreng Property. Natural Area 99 is the closest Natural Area to the property located over 4,000 feet to the southwest.

- **No City of Loveland Natural Areas are identified on the Spreng Property nor within 500 feet of the property.**

Figure 4. City of Loveland Natural Areas *(In the Nature of Things, 1996)*



SCREENING OF THREATENED, ENDANGERED, AND SPECIES OF CONCERN

The Endangered Species Act (ESA) of 1973 was enacted by the United States to conserve the ecosystems upon which endangered and threatened species depend and to conserve and recover listed species. Under the law, species may be listed as either "endangered" or "threatened". The ESA is administered by the US Fish and Wildlife Service. The following threatened, endangered or of concern species have been identified as potential inhabitants or that the county is within the historical range of the species for each of the two properties based on general habitat requirements and US Fish and Wildlife Service Ecological Services Colorado Field Office Summary Charts (F*ederally Listed and Candidate Species and Their status in Colorado Summary Chart for Larimer County, effective May 20, 2003*),

- Bald Eagle (*Haliaeetus leucocephalus)*- Listed Threatened
- Black-footed ferret (*Mustela nigripes*)-Listed Endangered
- Black-tailed prairie dog (*Cynomys ludovicianus*)-Candidate for Listing
- Colorado butterfly plant (*Guara neomexicana* ssp. *coloradensis*)-Listed Threatened
- Eskimo curlew (*Numenius borealis*)-Listed Endangered
- Preble's meadow jumping mouse (*Zapus hudsonius preblei*)-Listed Threatened
- Ute ladies'-tresses (*Spiranthes diluvialis*)-Listed Threatened
- Whooping crane (*Grus americana*)-Listed Endangered

A brief species profile and presence/absence determination is provided for each species based on literature review and specific habitat requirements.

Bald eagle

The bald eagle is listed as federally threatened under the ESA. Bald eagles are usually winter residents of Colorado. These raptors are commonly found in lower elevation grasslands and semi-deserts near prairie dog towns and open water (i.e. rivers, reservoirs). Neither Bald eagle nests nor individuals were observed within or near each of the two properties during the assessment. Therefore any change of land use on the properties should not adversely affect the continued existence or available habitat of this species.

Black-footed ferret

The black-footed ferret is listed as federally endangered under the ESA. The ferret is dependent on black-tailed prairie dog colonies for food, shelter and rearing young. According to the *Black-footed Ferret Survey Guidelines for Compliance with the Endangered Species Act* (US Fish and Wildlife Service, 1989), black-footed ferrets require over 80 acres of active black-tailed prairie dog towns or complex for a sustainable population. A prairie dog town or complex of this size does not exist on either of the properties nor in the surrounding areas. Neither black-footed ferrets nor their specific habitat was observed on or surrounding the properties. Therefore any change in land use on the properties should not adversely affect the continued existence or available habitat of this species.

Black-tailed prairie dog

The black-tailed prairie dog is currently a candidate species for listing under the ESA. Prairie dogs have become an important political, social, economic, and ecological issue in the Front Range region of Colorado. Nationally, less than 2 percent of pre-settlement prairie dog populations exist today, due to a combination of habitat loss and targeted extermination. The US Fish and Wildlife Service has determined that adding the black-tailed prairie dog to the federal list of threatened or endangered species is "warranted but precluded" at this time due to administrative and fiscal limitation within the agency (City of Broomfield, 2001). Short-grass species commonly eaten by prairie dogs include buffalo grass and blue grama. Prairie dogs play

an important role in the overall ecosystem, not only creating an unique ecosystem for their species, but they also create habitat and are a food source for a number of other federally and state-listed threatened or endangered species. No prairie dog colonies exist on the properties; therefore any change in land use should not adversely affect the continued existence or available habitat of this species.

Colorado butterfly plant

The Colorado butterfly plant is listed as federally threatened under the ESA. This plant species is a short-lived, perennial herb endemic to moist soils in mesic or wet meadows of floodplain areas in southeastern Wyoming, north central Colorado, and extreme western Nebraska, between elevations of 5,800 feet and 6,000 feet (Spackman et. al., 1997). This early to mid-seral stage species occurs primarily in habitats created and maintained by streams active within their floodplains, with vegetation that is relatively open and not overly dense or overgrown. The disturbance of riparian areas that contain native grasses by agricultural conversion, water diversions, channelization, and urban development threaten the species existence (Federal Register, 2000). Vegetation within the properties is atypical of the butterfly plant habitat. The average elevation of the properties is uncharacteristic of typical habitats. Any change in land use on the properties should therefore not adversely affect the continued existence or available habitat of this species

Eskimo curlew

The Eskimo curlew is listed as federally endangered under the ESA. This avian species is nearly extinct due to over hunting. Further, winter and migratory stopover habitat has been degraded by agricultural and commercial development. Historic migration patterns suggest a spring route through central plains with stopovers in tallgrass prairies and less frequently in mixed-grass prairies. Typical stopover habitats are not present on the properties or in surrounding properties and the curlew is not known to use the area as a migration corridor (Bird Atlas, 1998). Any change in land use on the properties should therefore not adversely affect the continued existence or available habitat of this species.

Preble's meadow jumping mouse

The Preble's meadow jumping mouse (PMJM) is listed as a federally threatened species under the ESA. The mouse's range extends from southwestern Wyoming through eastern Colorado generally below 7,600 feet. Armstrong et.al. (1997) described typical mouse habitats as "well-developed plains riparian vegetation with relatively undisturbed grassland and a water source in close proximity." Also noted was a preference for "dense herbaceous vegetation consisting of a variety of grasses, forbes and thick shrubs" (Fish and Wildlife Service, 2004). The Colorado Natural Heritage Program database search resulted in one observation of the PMJM in 1895 (Report Generated: June 24, 2003). The location is not section-specific due the time period and the credibility of the observer is unknown. The US Fish and Wildlife Service (USFWS) PMJM database lists two trapping efforts proximate to the properties with negative results. Farmer's Ditch at County Road 17 was trapped in 2001 with no evidence of PMJM populations and the Big Thompson, west of I-25 was trapped with negative results. Preble's meadow jumping mouse habitat does not exist on the properties. Therefore, any change in land use should not adversely affect the continued existence or available habitat of this species.

Ute ladies'-tresses

The Ute ladies'-tresses orchid (Orchid) is listed as federally threatened under the ESA. The Orchid occurs in seasonally moist soils and wet meadows near springs, lakes, or perennial streams and their associated floodplains below 6,500 feet elevation in certain areas in Utah, Colorado, Idaho, Wyoming, and Nevada. Typical sites include old stream channels and alluvial terraces, subirrigated meadow and other sites where the soil is saturated to within 18" of the surface at least temporarily during the spring or summer growing seasons. Orchids do not

typically occur on highly disturbed or modified sites such as highway rights-of-way, upland sites including prairie dog towns, shortgrass prairie and sagebrush rangeland, sites entirely inundated by standing water including monocultures of cattails or Olney's three-square. The properties do not exhibit characteristics typical of the Orchid habitat. Any change in land use on the properties should therefore not adversely affect the continued existence or available habitat of this species

Whooping crane

The whooping crane is listed as a federally endangered species under the ESA. The adult crane is a relatively large white bird approximately 50 to 56 inches tall with a wingspan of 87 to 90 inches and an average weight of 15 pounds. The bird is distinguished by its outstretched neck in flight. Cranes typically live in mudflats around reservoirs and in agricultural areas. While wintering they live on salt flats that are dominated by coastal salt grass. Their nesting grounds are wetland communities dominated by bulrush. In Colorado the crane occurs only as a migrant, stopping over in the San Luis Valley for four to six weeks during February and March and in the western valleys, especially Mesa, Delta and Gunnison Counties (CDOW). The Colorado Natural Heritage Program database search lists a whooping crane observation in 1982 in Section 16 most likely in the vicinity of the Big Thompson River. The properties do not contain habitat typically utilized by the whooping crane. Due to atypical habitat and no evidence of whooping crane use on the properties, any change in land use on the properties should not adversely affect the continued existence or available habitat of this species.

- **The properties do not exhibit the presence or potential habitat of threatened, endangered or species of concern.**

COLORADO NATURAL HERITAGE PROGRAM ENVIRONMENTAL REVIEW

A review of the Colorado Natural Heritage Program (CNHP) Biological and Conservation Data system for natural heritage resources (occurrence of significant natural communities and rare, threatened or endangered plants and animals) was conducted for the general vicinity of the two properties. The CNHP maintains a state-wide database recording identified species, status, location, and the date of last observation of rare and/or imperiled species. Review of the data identified several known occurrences of rare and/or imperiled species known or likely to occur within the general vicinity of the properties. Grouped taxonomically the species that occur in the general vicinity includes one species of amphibian- *Bufo Boreas* (Southern Rocky Mountain population), one species of mammal- *Zapus Hundsonius preblei*, two plant species- *Physaria Bellii and Rorippa coloradensis* and one natural plant community- Foothills Ponderosa Pine Scrub woodlands (CNHP, 2004). These occurrences are not located on or in the immediate vicinity of the properties.

- **No known rare and/or imperiled species are documented in the Colorado Natural Heritage Program Biological and Conservation Database System on the properties.**

GENERAL HABITAT DESCRIPTION AND WILDLIFE USE

An assessment was conducted on each of the two properties to identify and document the presence of natural vegetation communities, the presence of wildlife and potential wildlife use or habitat. Each property was traversed on May 14, 2004 by ERC and observations documented.

Wildlife can utilize the general landscape in a multitude of ways. Wildlife can use specific habitats as areas of permanent inhabitance, seasonal inhabitance, migratory routes or as a temporary shelter, or for foraging. Agricultural land typically is not considered of high ecological

value to wildlife but this type of habitat does provide many beneficial values. These lands can provide forage and hunting grounds, refuge, nesting, food sources and provide general "open space".

Colorado College Property

The Colorado College Property is comprised entirely of active agricultural land. The property appears to be utilized primarily for dryland farming. Routine cultivation prohibits the development of any significant natural features or vegetation on the property. No natural grasslands or shrub and tree communities exist on the property. Noxious weeds are present along the perimeter of the property. Agricultural land, although limited in habitat and vegetation species diversity, does provide a unique and important component in the environment. Surrounding residential and commercial development and roadways accompanied by lack of vegetation cover limits the utilization of the property by wildlife. The property is primarily utilized by avian species and small mammals for foraging. Some waterfowl may also use the site for resting and foraging due to its close proximity to Houts and, Equalizer Reservoirs and Boyd Lake due to the open undeveloped nature of the property. During the site assessment numerous common upland birds were observed across the property including western kingbird (*Tyrannus verticalis*), killdeer (*Charadrius vociferus*), American robin (*Turdus migratorius*), sparrows and wrens.

Houts Reservoir (Natural Area 1), the adjacent property to the south provides habitat for a wide array of waterfowl and raptors including red-tailed hawks (*Buteo jamaicensis*), bald eagles (*Haliaeetus leucocephalus*), geese (*Branta canadensis*), blue heron (Andea herodias), mallards, teals and American White Pelican (*Pelecanus erthrorhynchos*) which may only utilize the property in passing. The use of the property by mammals is limited due to the lack of structure, cover, natural vegetation and routine agricultural land practices. Mammal use is also limited on the property due to the relatively lack of any significant connecting movement corridors. The property is relatively isolated by surrounding development and roadways. Although not directly observed smaller mammals common to the region such as coyote (*Canis latrans*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), skunk (*Mephitus spp.*), rabbits (*Sylvilagus spp.*), squirrels (*Sciurus spp.*), mice (*Peromysucus spp.*), and voles (*Microtus spp.*) may utilize the property.

- **No significant natural vegetation communities, wildlife habitat (or wildlife inhabit) exist on the Colorado College Property.**



Photo 5. View north along Boyd Lake Ave



Photo 6. View west along CR 24E



Photo 7. View north across the property



Photo 8. View northwest along RR tracks



Photo 9. View northwest across property



Photo 10.View south from Boyd Lake Ave

Photo 5-10. View of agricultural land of the Colorado College Property. Note the lack of any natural features or vegetation.



Figure 5. Colorado College Property Aerial Photography June 2003. Depicts current agricultural land use practices and lack of natural features or environmentally sensitive areas onsite. Also depicts location of nearby Boyd Lake (Natural Area 93) and Houts Reservoir (Natural Area 1).

Spreng Property

The Spreng Property is comprised entirely of active agricultural land. The property appears to be utilized primarily for dryland farming. Routine cultivation prohibits the development of any significant natural features or vegetation on the property. No natural grasslands or shrub and tree communities exist on the property. Agricultural land, although limited in habitat and vegetation species diversity, does provide a unique and important component in the environment. Surrounding residential and commercial development and roadways accompanied by lack of vegetation cover limits the utilization of the property by wildlife. The property is primarily utilized by avian species and small mammals for foraging. During the site assessment numerous common upland birds were observed across the property including western kingbird (*Tyrannus verticalis*), killdeer (*Charadrius vociferus*), American robin (*Turdus migratorius*), magpie (*Pica pica*) and red-tailed hawk (*Buteo jamaicensis*). The use of the property by mammals is limited due to the lack of structural cover, natural vegetation and routine agricultural land practices. Mammal use is also limited due to the relative lack of any significant connecting movement corridors. Surrounding development and roadways relatively isolates the property. Although not directly observed smaller mammals common in the region such as coyote (*Canis latrans*), red fox (*Vulpes vulpes*), raccoon (*Procyon lotor*), skunk (*Mephitus spp.*), rabbits (*Sylvilagus spp.*), squirrels (*Sciurus spp.*), mice (*Peromysucus spp.*), and voles (*Microtus spp.*) may utilize the property.

- **No significant natural vegetation communities, wildlife habitat or (or wildlife inhabit) on the Spreng Property.**



Photo 11. View west from CR3



Photo 12. View west from CR3



Photo 13. View north along CR3



Photo 14. View south west

Photo 11-14. View of agricultural land of the Spreng Property. Note the lack of any natural features or vegetation.



Figure 6. Spreng Property Aerial Photography June 2003. Depicts current agricultural land use practices and lack of natural features or environmentally sensitive areas.

SUMMARY

Ecological Resource Consultants, Inc. has prepared this Preliminary Ecological Assessment for the Colorado College and Spreng Properties located in the vicinity of the City of Loveland, Larimer County, Colorado. The assessment was conducted to identify potential natural features and/or, ecologically sensitive areas which may occur on or around each property.

A summary of findings is provided as follows:

Colorado College Property

- The property is primarily agricultural land with no natural features or vegetation
- Jurisdictional wetlands do not exist
- No significant natural vegetation communities, wildlife habitat or wildlife was identified
- No City of Loveland Natural Areas are identified on the property or within 500 feet
- The property does not exhibit the presence or potential habitat of threatened, endangered or species of concern protected under the Endangered Species Act

Spreng Property

- The property is primarily agricultural land with no natural features or vegetation
- Jurisdictional wetlands do not exist
- No significant natural vegetation communities, wildlife habitat or wildlife was identified
- No City of Loveland Natural Areas are identified on the property or within 500 feet
- The property does not exhibit the presence or potential habitat of threatened, endangered or species of concern protected under the Endangered Species Act

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This study has been prepared by:

Ecological Resource Consultants, Inc.



David J. Blauch, Senior Ecologist

McWhinney Enterprises, Inc.
Loveland, Colorado



Enviromentally Sensitive Areas Report - Rocky Mountain Village II Development (North Boyd Lake and East Eisenhower Boulevard)

ENSR Corporation
January 2000
Document Number 8711-135-200

8711-135-200

ENVIRONMENTALLY SENSITIVE AREAS REPORT - ROCKY MOUNTAIN VILLAGE II DEVELOPMENT (NORTH BOYD LAKE AND EAST EISENHOWER BOULEVARD)

Prepared for

MCWHINNEY ENTERPRISES, INC.
Loveland, Colorado

Prepared by

ENSR
Fort Collins, Colorado

Karen Caddis-Bennett
Prepared By

Phil Hackney
Reviewed By

January 2000

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1.0 STUDY AREA

This report summarizes the evaluation of environmental conditions at the Rocky Mountain Village II property in Loveland based upon guidelines established by the City of Loveland Planning Department for preparation of an Environmentally Sensitive Areas Report as defined in Attachment D (City of Loveland 1998). The subject property proposed for development is an approximately 26-acre area located southwest of Equalizer Lake in Larimer County, Colorado. The property is located in the City of Loveland (City) in the SW¼ of Section 9 (SW¼ S9), Township 5 North, Range 68 West (T5N, R68W), at approximately 40° 24' 30" north latitude and 105° 01' 00" west longitude. The location of the property is shown on Figure 1.

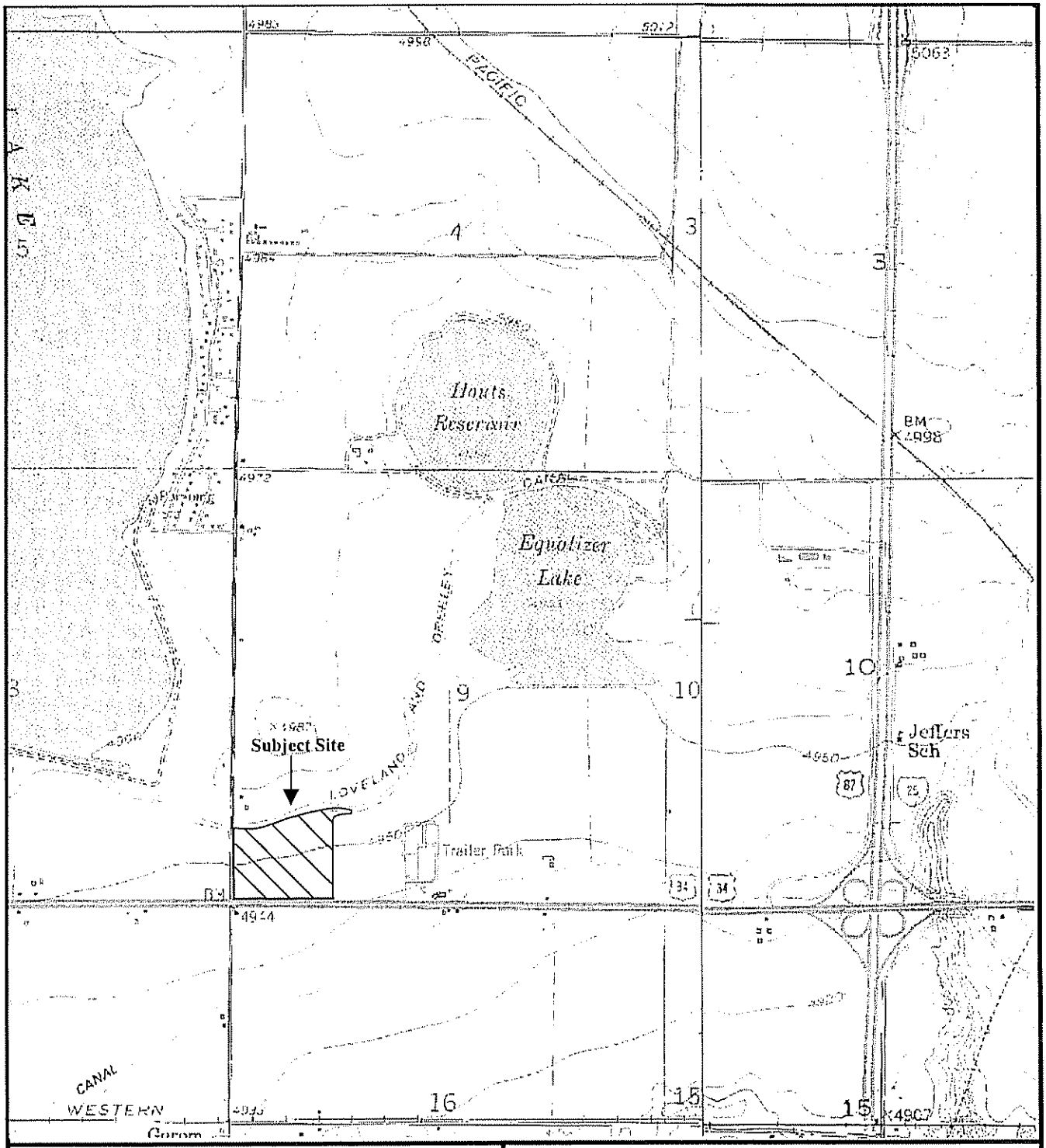
Retail facilities are proposed for development on the property. Two 2-laned paved roadways, McWhinney Boulevard and Piney River Road, are also being proposed for construction along the eastern boundary of the subject property (Figure 1). According to McWhinney Enterprises representatives, potential environmental effects from these highways have been previously evaluated under the Rocky Mountain Village Second Subdivision environmental report.

A field survey of the property was conducted by Karen Caddis-Burrell, a field biologist with ENSR Corporation, on September 16, 1999. Credentials for Ms. Caddis-Burrell are provided in Appendix A. Observations recorded included: major vegetation types and wildlife habitats found on the property, dominant flora, wildlife species and/or wildlife sign observed, unique habitats (including water features), and the presence of dumping or other potentially hazardous material disposal activities.

Prior to the site visit, the City of Loveland's planning reports, In the Nature of Things, Loveland's Natural Areas and the Open Lands Plan, were reviewed to determine if the property is located within areas identified by the City as significant natural areas (City of Loveland 1996a,b). The review indicated that the property was not included in the City's listing of locations containing important natural areas.

Although habitat quality in the property area was not ranked by the City in its planning documents, a portion of the development property lies adjacent to the Loveland and Greeley Canal (Canal) and within the area defined in the City's planning document Open Lands Plan as a long term project area targeted for protection of viable agricultural lands (City of Loveland 1996a).

According to the Open Lands Plan, the City is interested in ditch and canal areas for their environmental importance as wildlife habitat, wildlife corridors, recreation/trail linkages, and for their function as irrigation water suppliers. In an effort to protect agricultural use, agricultural



Source: USGS 7 1/2 Minute Topographic Quadrangles, Loveland, Colorado 1962 (Revised 1984), Windsor, Colorado 1950 (Revised 1969)

N

SCALE
1:24,000

0 — 1 mile

ENSR

FIGURE 1
SITE LOCATION MAP
McWhinney Enterprises
Rocky Mountain Village II Development Property
Larimer County, Colorado

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activity is encouraged by the City in areas identified as Viable Agricultural Lands (City of Loveland 1996b).

Currently, the property consists of irrigated cropland. The site is bordered on the east by cropland and on the west by Boyd Lake Road and Crystal Rapids Water Slide Park. The property is bordered on the north by the Canal, an abandoned farmstead, and irrigated pasture and on the south by U.S. Highway 34 (Eisenhower Boulevard) and cropland (see photographs in Appendix B).

Although no wetland delineations were conducted as part of the field reconnaissance, approximately 2,950 linear feet of non-jurisdictional waters of the U.S. associated with the Canal were identified on the northern border of the property. The Canal carries water from Boyd Lake to Equalizer Reservoir and east towards Greeley. A small seep area associated with leakage from an irrigation pipe draining from the south side of the Canal also was identified on the northern portion of the property. The results of these observations are summarized in Chapter 2.0 of this report. This report also discusses other field observations, identifies environmentally sensitive areas on the property, identifies potential impacts associated with the proposed project, and provides recommendations for mitigation of potential impacts.

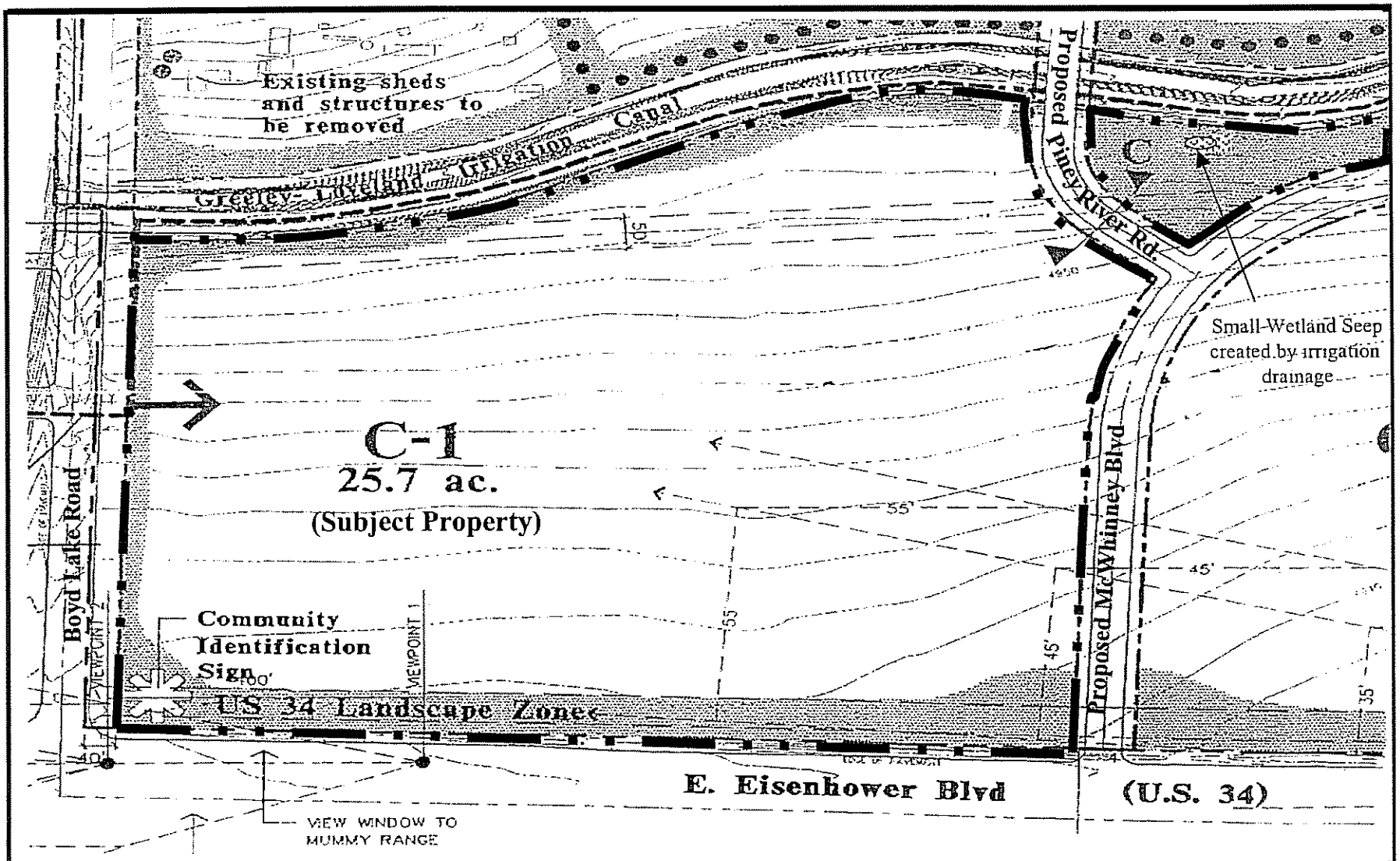
2.0 SITE INVENTORY

The subject property currently consists of actively cultivated irrigated cropland. The property is bordered on the north by the Canal (see Figure 2). The Canal is considered environmentally sensitive according to the City of Loveland's guidelines. Based upon review of City planning documents, no other areas of wildlife habitat or Natural Areas were identified on the property that would qualify as environmentally sensitive areas (City of Loveland 1996a,b).

The property was planted in sugar beets during the site survey and is generally level. The City's open lands goals for irrigated croplands include keeping prime farmland in agriculture, particularly irrigated cropland (City of Loveland 1996b). Cropland may receive limited use by wildlife, such as the American robin, striped skunk, and raccoon. Once the crop is harvested, use would decline except for limited foraging of remnant crops.

No mature stands of deciduous trees were identified in the cropland; however, several large, mature plains cottonwood trees (*Populus sargentii*) were observed along the section of the Canal that lies adjacent to the property, particularly in the area adjacent to an existing abandoned farmstead. Herbaceous vegetation along the Canal's interior banks is characterized by reed canarygrass (*Phalaris arundinacea*), prairie cordgrass (*Spartina pectinata*), sunflower (*Helianthus* sp.), foxtail barley (*Hordeum jubatum*), showy milkweed (*Asclepias speciosa*), curly dock (*Rumex crispus*), and broad-leaved cattail (*Typha latifolia*). Vegetation along the outer banks of the Canal included kochia (*Kochia scoparia*), sunflower, curly dock, showy milkweed, field bindweed (*Convolvulus arvensis*), Canada thistle (*Cirsium arvense*), prairie cordgrass, and bluegrass (*Poa* sp.).

The main canal is approximately 50 feet wide with a second, smaller canal lying approximately 10 feet to the south. A two-track roadway runs between the two ditches. The top banks of the main canal lie about 5 to 8 feet above open water. Open water in the main canal was approximately 25 feet wide. The width of the smaller canal was about 10 feet. Water depth in both canals could not be determined due to turbidity. Within the ordinary high water level in the main canal, which lies approximately 2 feet higher than the open water on either side of the ditch, wetland vegetation, including reed canarygrass and prairie cordgrass, was observed. Both of these species are facultative wet hydrophytic indicator plants. Although no formal wetland delineation was conducted as part of this environmental site review, it appears that an area of approximately 2 feet in width on each side of both canals supports poor to moderate quality wetlands. As described in 33 Code of Federal Regulations Section 328 and based on discussions with U.S. Army Corps of Engineers (COE) personnel, irrigation ditches and canals located in uplands are considered non-jurisdictional waters of the U.S. and wetlands located



Source: McWhinney Enterprises 10/13/99

Approximate Scale - 1" = 200'

- Subject Property

- Wetland

N

ENSR

FIGURE 2

Property Map

McWhinney Enterprises

Rocky Mountain Village II Development Property, Larimer Co., CO

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within these areas are not regulated by the COE. However, these areas are considered potential environmentally sensitive areas as defined in the City of Loveland's Environmentally Sensitive Areas Report, Attachment D, since they support wetlands and mature trees. Although the Canal is not rated by the City, the rating system identified in In the Nature of Things, Loveland's Natural Areas (City of Loveland 1996a) was used by ENSR's field biologist to rate the area. On a scale of 1 to 10, with 1 indicating the lowest value, that portion of the Canal located on the subject property was given a rating of 3. Although wetlands and several mature trees are located in the Canal, its value is restricted by its narrow linear configuration, prior disturbance, limited plant and animal diversity, and bisection by the Boyd Lake Road.

Although the Canal crosses Boyd Lake Road, it still appears to provide limited wildlife habitat and a corridor connection between Boyd Lake and Equalizer Reservoir as evidenced by wildlife sign observed along the Canal. Boyd Lake Road is a low to moderately traveled two-lane paved roadway that would allow limited wildlife movement.

Wildlife using the Canal area include small and medium-sized mammals, amphibians, and birds. Raccoon tracks and scat were observed on the Canal banks. Ground squirrels and their burrows were seen on the canal slopes and a pied-billed grebe, several mallards, and bullfrogs were observed swimming in the Canal.

No evidence of past raptor nesting activity (stick nests, cavity nests, whitewash) was observed during the field survey; however, a female American kestrel and a male northern harrier were seen flying over the study area during the site visit. Leaves were present on the trees during the time of the survey, making it more difficult to locate nests. Raptors may use the mature trees in the area for perching. Other animals that may frequent the property could include red fox, coyote, voles, field mice, pheasant, garter snakes, bull snakes, and various bird species such as meadow larks, sparrows, pigeons, Canada geese, and mourning doves.

No suitable habitat for Ute Ladies'-tresses orchid (*Spiranthes diluvialis*), a Federally threatened species, was observed in the study area. The evaluation was completed by Karen Caddis-Burrell, a U.S. Fish and Wildlife Service (USFWS)-certified orchid surveyor. Orchid habitat evaluation criteria used during the survey followed that identified in the November 1992 letter from the USFWS outlining survey requirements (USFWS 1992). No habitat for other state or Federally listed threatened or endangered species was observed within or adjacent to the property. Wintering bald eagles may perch in the mature cottonwoods along the ditch; however, no suitable winter foraging habitat was identified on the property or on adjacent cropland.

A small seep area associated with seepage from an irrigation pipe was observed on the south bank of the Canal approximately 2,000 feet east of Boyd Lake Road. The seep area lies adjacent

to the cultivated field. The ground is saturated in the seep area, which is approximately 15 feet long by 10 feet wide. Coyote willow (*Salix nigra*) and showy milkweed were observed in the area. Both of these species are wetland indicator plants. No formal wetland delineation was conducted in this area.

As identified on Natural Resources Conservation Service (NRCS) maps of the area, soils in the subject property predominantly consist of the Nunn clay loam association with 0 to 1 percent slopes and 1 to 3 percent slopes. Erosion hazard is slight on these soils and run-off is slow to medium. No eroded areas were observed during the site visit. The shrink swell potential of the soil is moderate to severe. Nunn clay loam soils are not susceptible to flooding in this area with a depth to the seasonal high water table of 6 feet or greater (NRCS 1980). According to U.S. Geological Survey (USGS) documents, depth to the water table in the study area is 10 to 20 feet below the general land surface (Hillier and Schneider, Jr. 1979). Drainage is generally towards the Big Thompson River to the south. No aquifer recharge and discharge areas, high water lines, or percolation restrictions have been identified for the property (Shelton and Rogers 1987).

No slopes over 20 percent, areas located in close proximity to downstream waterbodies, or land formerly used for landfill operations or hazardous industrial use were observed during the site visit. No fault areas were identified in the vicinity of the property during review of USGS maps of the area (Shelton and Rogers 1987).

Historic aerial photographs taken in 1973, 1979, and 1985 indicated that the primary historic use of the property has been agriculture. No evidence of hazardous material dumping or industrial use was observed on these photographs or was identified during a hazardous industrial use review conducted in the vicinity of the subject property in 1997 (EDR 1997).

Boyd Lake and Equalizer Reservoir lie within 1,000 feet and 2,000 feet, respectively, of the property. Both areas have been classified as Natural Areas with a rating of 8 and 6, respectively, in In the Nature of Things, Loveland's Natural Areas report (City of Loveland 1996a). These areas are connected with the property and each other by the Canal.

3.0 POTENTIAL IMPACTS OF PROPOSED DEVELOPMENT

Specific development plans were not available at the time this report was prepared; however, a general assessment of potential impacts was made based upon general development scenarios identified by McWhinney Enterprises, Inc. Development currently proposed at the property includes construction of retail facilities. Two paved two-lane roadways (McWhinney Boulevard and Piney River Road) are also proposed for construction adjacent to the property. According to McWhinney Enterprises, effects from this highway development have been evaluated under other Environmentally Sensitive Areas Reports (ESAR's), including the Rocky Mountain Village Second Subdivision Environmental Report. As currently designed, the proposed McWhinney Boulevard would parallel approximately 500 feet of the Canal along the northeastern boundary of the subject property (see Figure 2) before turning south and connecting with U.S. Highway 34. The roadway would be located within 100 to 300 feet of the Canal for approximately 500 feet of its length. The proposed Piney River Road would cross the Canal and intersect with McWhinney Boulevard at the northeast corner of the property.

Indirect effects could occur as a result of construction noise and increased access to the area. Construction of the proposed development would result in the loss of approximately 26 acres of prime farmland soils to urban use. No native plant communities or significant wildlife habitats would be directly impacted.

The severe to moderate soil limitations associated with shrink-swell soils may require special construction design features for streets and building foundations on the property. The potential for heavy erosion should be limited and no geologic hazards were identified for the area.

The project area is located outside of the 100-year floodplain for local streams, rivers, and lakes. Potential flooding of the Canal could result in run-off south onto the property. The Canal has an elevated berm along its length that should prevent surface runoff from developed areas from reaching the ditch and potentially affecting water quality.

The City recommends a construction setback of 25 to 75 feet from the operating high water line of lake, ditch, and canal areas that have a natural areas rating of 5 or less (City of Loveland 1996b). The subject property is currently not rated by the City; however, evaluation by the ENSR field biologist suggests a proposed natural area rating of "3" for the Canal area. This rating is based mainly upon the lack of species diversity, limited habitats available for wildlife, and its existing disturbance levels.

Construction noise could potentially disturb wildlife and nesting birds along the Canal if conducted during the breeding and nesting period; construction could also disturb raptors foraging in the

area. The increase in traffic and human activity and noise in the area following completion of the development could disturb or reduce hunting, nesting, and breeding by wildlife in the canal area. Wildlife movement along the Canal may be reduced due to increased human presence and construction.

The nearest identified natural area, Boyd Lake, is separated from the property by Boyd Lake Road and fields. No direct impacts to this natural area and the wildlife utilizing the lake are expected to occur as a result of construction on the property. As the general area becomes more urbanized, wildlife species sensitive to human presence and development may not use the area as extensively.

The proposed development would remove the irrigation piping supplying water to the small seep area located along the northern portion of the property. This would remove the seep's water source and probably result in the loss of the seep area.

4.0 PROTECTION MEASURES AND MITIGATION

Based upon review of the City's Natural Areas plan, the City recommends that development near lakes or waterways that have a natural areas rating of 5 or lower by the City, such as the Canal, include a setback or easement area of 25 to 75 feet from the operating high waterline. The City also recommends that any development proposals submitted to the City that involve ditches or lake edges should include a restoration and enhancement plan. The City also recommends that irrigation as provided by the ditches be protected and that some of the ditches could serve as recreation and trail linkages (Loveland 1996b).

McWhinney Enterprises' development plans for the area would include a buffer zone of approximately 25 to 75 feet from the Canal's southern normal operating high water line boundary.

A bike trail is proposed for construction along the Canal as described in a separate environmental and natural areas assessment report for the Rocky Mountain Village II Development proposed by McStain Enterprises, Inc. (Wildland Consultants 1998). The Canal buffer zone would be landscaped with native shrubs and trees, including chokecherry, rabbitbrush, wild rose, as appropriate. All planting would be completed outside of the area where ditch maintenance would occur.

Breeding and nesting birds probably use the Canal area most heavily between the end of March and the end of September. Raptors would likely forage in the area year round; however, it is expected that the heaviest foraging use would occur between mid to late November and early March. Wherever feasible, construction near the Canal area would be scheduled to occur during the non-breeding and nesting seasons.

Construction techniques appropriate for development in the expansive soils in the property area would be implemented. Standard construction mitigation techniques and Best Management Practices, such as silt fences, catchment basins, should prevent sediment transport or runoff into the Canal. The Canal has an elevated berm along its length that should prevent surface runoff from developed areas from reaching the ditch and potentially affecting water quality. Overall water quality could be improved due to a reduced volume of water for commercial landscaping versus agricultural irrigation, and reduced quantities of agricultural chemical application.

Since only commercial development is planned on the property, predation of wildlife species by cats and dogs should not be a significant problem. Lease laws, however, should be strictly enforced along developed trail systems to minimize domestic animal and wildlife interactions.

Development of the proposed action could result in the disturbance of the small seep area associated with leakage from irrigation pipes and the canal that lies on the northern portion of the property. This area, which is approximately 10 feet by 15 feet in size, has not been delineated and appears to be of poor quality in regards to vegetative diversity and potential use by wildlife. Construction of the development would remove the seep's water source and result in the probable loss of the seep. The seep area would not be filled as part of the construction and development work is expected to be located at least 25 feet away from the area. No mitigation related to this seep area is recommended.

5.0 REFERENCES

City of Loveland. 1996a. In the Nature of Things, Loveland's Natural Areas. December 1993, revised 1996. Report and Appendix.

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Shelton, D. and W. Rogers. 1987. Environmental and Engineering Geology of the Windsor Study area, Larimer and Weld Counties, Colorado. Colorado Geological Survey Publication, Environmental Geology 6.

USDA-NRCS-FS. Soil Survey of Larimer County Area, Colorado. December 1980.

U.S. Fish and Wildlife Service. Ute Ladies-Tresses' Orchid Survey Guidelines. L. Carlson, Colorado State Supervisor. November 23, 1992.

Wildland Consultants, Inc. 1998. Rocky Mountain Village II Environmental and Natural Areas Assessment Report. Prepared for McStain Enterprises, Inc. June 1998.

APPENDIX A

FIELD BIOLOGIST AND REPORT PREPARER'S RESUME

Karen M. Caddis-Burrell

Years Experience: 19

Technical Specialties

- NEPA Permitting and Compliance
- Project Coordination and Management of Multidisciplinary Environmental Studies
- Wetland Delineation
- Environmental, Biological, and Geological Research, Lab and Field Support
- Technical Writing and Editing
- Environmental Assessments
- Mapping and Surveying

Professional History

- ENSR
- Parsons & Associates
- Cominco American
- Salisbury & Dietz

Education

- BS (Resource Management/Conservation Education) Colorado State University
- BA (Major - Physical Geography and Journalism; Minor - Anthropology) Eastern Washington University, cum laude

Professional Registrations and Affiliations

- National Association of Wetland Scientists
- USFWS Certified for Black-Footed Ferret Clearance Surveys
- USFWS Certified for Mexican Spotted Owl Clearance Surveys
- Completed US Army Corps of Engineers Wetland Delineation Training
- USFWS Certified for Ute Ladies'-Tresses Orchid Surveys
- OSHA 29 CFR 1910.120(e) (3)(i) 40-hour Health and Safety Training

Representative Project Experience

TransColorado Gas Transmission Co., BLM, and Forest Service, Wetlands Delineation/Listed Species Surveys, Colorado, New Mexico Field supervisor and biologist supervising and conducting wetland delineations and surveys for federally-listed threatened and endangered plant and animal species as required by the U.S. Fish & Wildlife Service in compliance with the Endangered Species Act. Surveys included Mexican spotted owl, Unita Basin hookless cactus, Debeque milkvetch, giant hellaborine,and maidenhair fern. The project consisted of a third-party EIS for the 300-mile TransColorado Natural Gas Pipeline and over 100 miles of access roads between Meeker, Colorado, and Bloomfield, New Mexico, for the BLM and Forest Service. Surveys included aerial reconnaissance, use of GPS, parabolic dishes, and owl call imitations. Also worked with the NRCS and the US Army Corps of Engineers and

researched and prepared revegetation tables as part of a reclamation plan for the proposed pipeline route. Supervised up to 15 field technicians transplanting Unita Basin hookless cactus as part of pipeline mitigation. Over 1,500 cactus were transplanted with a 90 percent survival rate as of 1999. The number of new populations identified during the surveys have resulted in review by the USFWS of the cactus' listed status. Wetland delineations identified over 200 wetlands. Also served as cultural resources task supervisor for the $3.5 million cultural resources effort along the route.

TST, Inc. of Denver, Wetlands Delineation, Colorado. Wetlands delineator for a proposed condominium development located adjacent to the Wolf Creek Pass Ski Area. The delineation involved survey of approximately 300 acres of subalpine peat bog wetlands. The US Army Corps of Engineers provided a jurisdictional determination on the site that concurred with all field findings.

Wolf Creek Pass Ski Corporation, Ski Area Expansion Wetlands Delineation, Colorado. Wetlands delineator for a proposed expansion of the Wolf Creek Pass Ski Area located in the Alberta Park area near Wolf Creek Pass, Colorado. The assessment involved evaluation of approximately 100 acres of subalpine wetland areas located approximately 10,000 feet above sea level.

Karsh and Fulton, P.C., Wetlands Investigation at Winterpark, Colorado, Colorado. Wetlands investigation of a proposed real estate development property in the Village of Winterpark. Investigation included an evaluation of the need for additional wetlands delineation at the property.

McWhinney Enterprises, Inc., Equalizer Lake Development, Colorado Wetlands delineator and biological investigator for a proposed development located near Equalizer Lake, Colorado. Investigation at the site involved conducting a wetlands delineation survey and preparing a weltands report for the appoximately 10-acre site, preparing an environmental and natural areas report to be submitted to the City of Loveland, completing a Ute Ladies'-Tresses Orchid survey and report for the site, and conducting a site visit with City of Loveland planning representatives.

McWhinney Enterprises, Inc., Biological Assessment/Wetland Delineation, Colorado. Biological investigator and wetland delineator for a proposed business development located west of the Loveland Outlet Mall near Loveland, Colorado. Investigation involved preparing an environmental and natural areas assessment report to be submitted to the City of Loveland as part of the client's development plan.

Western Mobile, Inc., Gravel Pit Wetlands Delineation, Colorado. Wetlands delineator for a proposed gravel pit located north of Greeley, Colorado. Survey identified several acres of wetlands and provided information on proposed wildlife mitigation and habitat enhancement at the site.

BHA Design, Inc., Biological Consulting, Colorado. Provided biological consulting regarding the proposed Eagle Condominium development adjacent to Equalizer Lake along Colorado's Front Range. Met with City of Loveland, Colorado officials regarding the potential for a variance to the city's requirement for 300-foot buffers along lake edges.

Lost Creek Oil and Gas Company, Oil and Gas, Species Surveys, Wetland Delineation, Wyoming. Field biologist, recreation and visual resources task specialist, and wetlands delineator for a 200-mile long pipeline route from Lysite, Wyoming south to Wamsutter, Wyoming. Conducted presence/absence surveys, including helicopter reconnaissance, for sage grouse and raptors. Assisted in prairie dog town density surveys and in black-footed ferret surveys. Wetland delineations included 5 proposed and alternative crossings of the Sweetwater River.

Duke Energy, Wetlands Delineation/Sensitive Species Survey, Oklahoma. Wetlands delineator and field biologist for a proposed power plant project. Conducted delineations along the South Canadian River, south of Oklahoma City, Oklahoma, and surveyed for interior least tern and shiner habitat.

Northern Border, oil and gas/FERC/wetlands delineation and reclamation, Illinois, Iowa, Indiana. Wetlands delinetor and reclamation monitoring along pipeline route through Iowa and Illinois (Chicago Project) and Illinois and Indiana (Project 2000). Supervised 3 teams of wetlands delineators conducting review of over 200 wetlands along the pipeline routes. Completed over 50 wetland delineations along the two routes.

KN Energy, Sensitive Plant Surveys, Colorado. Field biologist responsible for conducting sensitive plant surveys, including the DeBeque milkvetch, Debeque phacelia, and Unita Basin hookless cactus, along the proposed DeBeque Spur Line Pipeline route adjacent to the Colorado River near DeBeque, Colorado.

ENRON Corp., Sensitive Species Surveys, Arizona, New Mexico. Field biologist responsible for delineating habitat and surveying for sensitive species, including desert tortoise, black-footed ferret, and threatened and endangered plants, along proposed Transwestern Pipeline Project routes in northern Arizona and New Mexico.

DOE and Washington Water Power Co., WWP/B.C. Hydro Transmission Interconnect EIS, Washington. Measured and typed vegetation, evaluated wetlands, and assessed hydrological data through aerial photo interpretation along transmission lines from Spokane, Washington, to Trail, British Columbia.

BLM and Uintah and Grand Counties Special Districts, Cisco to Ouray Highway (U.S. 191) EIS, Utah. Soils task specialist for a BLM third-party EIS for construction of a proposed 88-mile highway across Book Cliffs between Cisco and Ouray, Utah. Researched, wrote, and edited soils baseline, impact, and mitigation sections. Also assisted with editing of project description.

Brohm Mining Corp. and Forest Service, Gilt Edge Mine, Anchor Hill Expansion Project EIS, South Dakota. Assistant project manager for third-party EIS and field biologist for raptor and vegetation ground surveys on the project site and within the surrounding 5-mile study area near Deadwood, South Dakota. Also conducted audio call-response surveys for goshawks. The vegetation survey consisted of inventorying plant species and communities and locating rare plants, including an endangered club moss. The surveys were part of a 2-year study required by the state for the gold mine expansion project. Hydrology impacts were the main issue in the EIS.

APPENDIX B

PHOTOGRAPHS

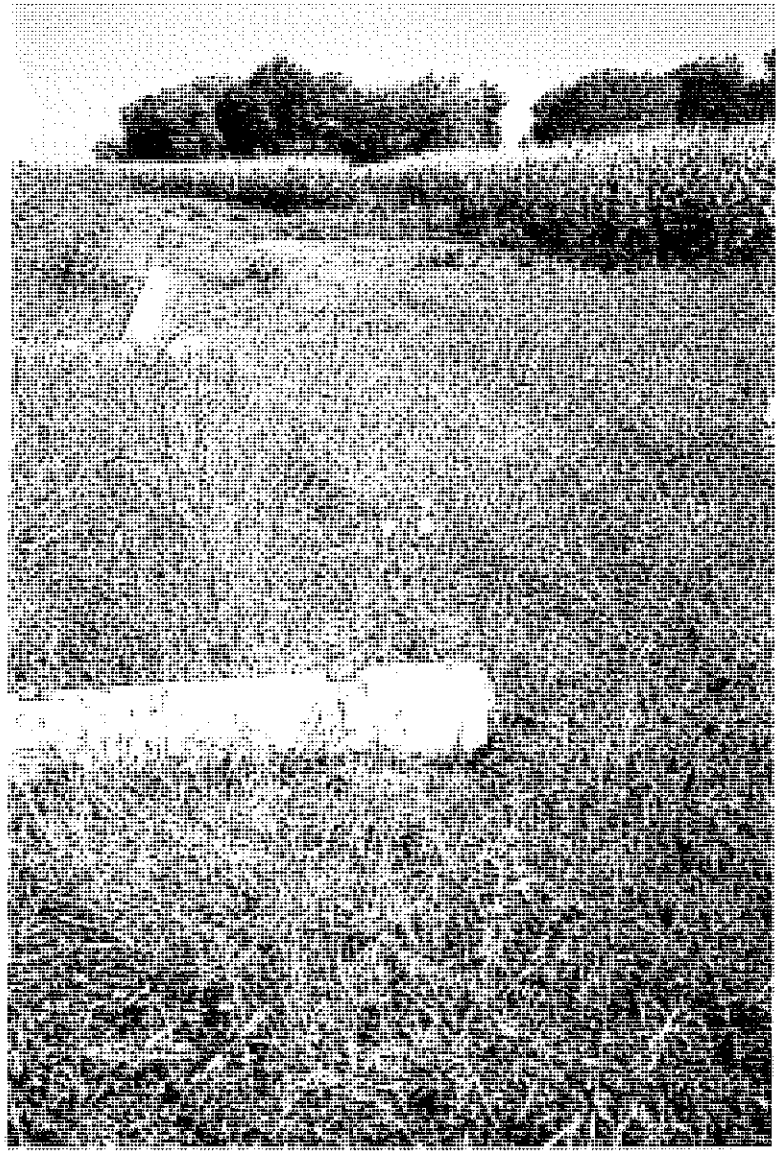


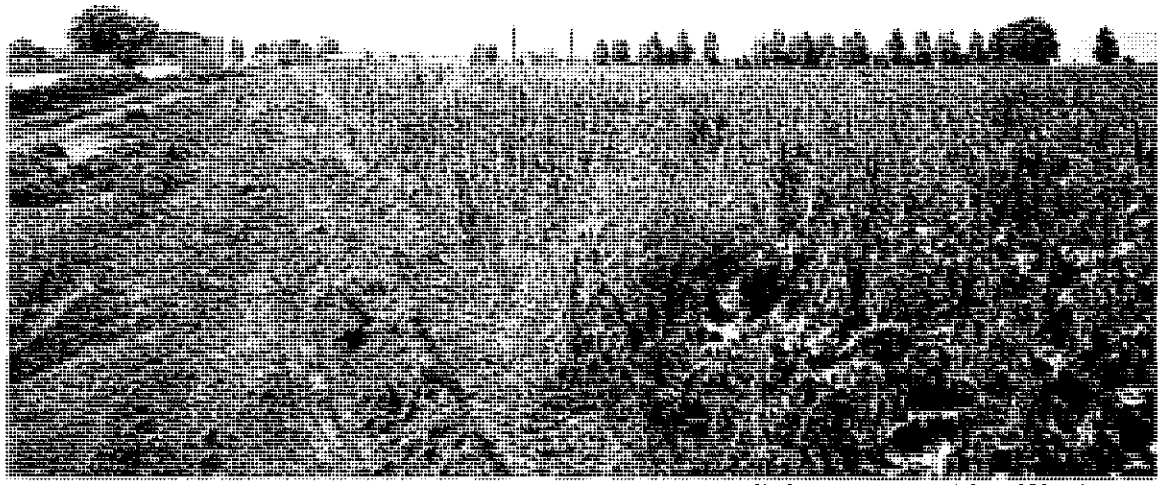
Southeast Corner of Subject Property Looking Northwest.



Northwest Corner of Subject Property Looking Southeast
Loveland and Greeley Canal in Foreground.

Seep Area on the Northern Border of Subject Property Looking East.





Southern Boundary of Subject Property Along Highway 34 Looking West.



Northeast Corner of Subject Property Looking Southwest.

October 11, 2007

Environmentally Sensitive Areas Report

This report documents the findings of the field investigations performed by FlyWater consulting, inc. (FlyWater) on three parcels making up the Grange Addition for the presence of environmentally sensitive areas on October 2 and 3, 2007 by Bradley Florentin. Parcel B-13 (approx. 150 acres) lies on the south side of Highway 34 east of Boyd Lake Avenue, the parcel in addition to Parcel A-1 (approx. 17 acres) lies on the north side of Highway 34 east of Centerra Parkway, and Parcels A-6 and A-7 (approx. 79 acres) lies north of Highway 34 west of High Plains Boulevard as shown in Figure 1.

Study Area

Parcel B-13

A tract of land located in the Northeast Quarter of Section 16, Township 5 North, Range 68 West of the 6th Principal Meridian, County of Larimer, State of Colorado.

Addition to Parcel A-1

A tract of land located in the Southwest Quarter of Section 11, Township 5 North, Range 68 West of the 6th Principal Meridian, County of Larimer, State of Colorado.

Parcels A-6 and A-7

A tract of land located in the Southeast Quarter of Section 11, Township 5 North, Range 68 West of the 6th Principal Meridian, County of Larimer, State of Colorado.

Site Inventory

This section describes the natural characteristics of the site with respect to any "environmentally sensitive areas".

Parcel B-13

The Parcel B-13 is currently irrigated using water from the Farmer's Ditch to cultivate alfalfa and hay. Kochia grows between the irrigated crop fields within the parcel. There are no natural drainages on the parcel. The Farmer's Ditch flows through the northwestern corner and approximately 150 feet of the ditch are located on the parcel before flowing under Highway 34 and continuing in a concrete lined channel north of the highway. The ditch sustains a three to four foot buffer monoculture of reed canary grass on either side on the parcel. The buffer is shown in Figure 2. There are a few lone trees planted in association with farm buildings existing on the property.

Canals and ditches can provide access and movement corridors for wildlife when they connect larger habitat areas. Active cultivation on the parcel approaches the edges of the Farmers Ditch on Parcel B-13 and there is minimal vegetative cover outside the three to four foot reed canary grass buffer. The ditch

is concrete lined with landscaped areas to the edge of the ditch north of Highway 34. The Farmer's Ditch is enclosed in a box culvert in several locations between Highway 34 and Centerra Parkway. Access and movement of wildlife is extremely limited if not nonexistent along the Farmer's Ditch as a result. The vegetation along the Farmer's Ditch is thought by the U.S. Army Corps of Engineers (COE) staff to be non-jurisdictional (official determination is expected in November 2007) further reducing the habitat value of the parcel.

Addition to Parcel A-1

The addition to Parcel A-1 is currently not being utilized and appears to have been a gravel parking area in the past. The GLIC irrigation ditch flows from west to east along the southern portion of this parcel. Kochia and upland grasses grow in the area outside the GLIC. There are no natural drainages on the parcel. Approximately 550 feet of the ditch are located on the parcel. The ditch sustains wetland vegetation including reed canary grass within the banks of the GLIC as shown in Figure 3. There is no stands of mature trees or shrubs on the parcel.

Canals and ditches as discussed above can provide access and movement corridors for wildlife when they connect larger habitat areas. Upland weeds and grasses extend to the edge of the GLIC where an old gravel parking lot and dry land farming previously existed. The GLIC has no wetland vegetation outside the steep ditch banks. Access and movement of wildlife can only occur within the banks of the GLIC – as a result access and movement of wildlife is extremely limited if not nonexistent. The GLIC is thought by the U.S. Army Corps of Engineers staff to be non-jurisdictional (official determination is expected in November 2007) further reducing any habitat value of the parcel.

Parcels A-6 and A-7

Parcels A-6 and A-7 are currently being dry farmed. At the time of observation, the parcels had been recently plowed. No vegetation was observed. There are no natural drainages on the parcel. No areas within Parcels A-6 or A-7 qualify as a jurisdictional wetland. There are no characteristics that indicate Parcels A-6 and A-7 have any environmentally sensitive areas associated with them.

Assessment of Potential Impacts of Proposed Development

Parcel B-13

Potential widening of Highway 34, development, and/or the addition of a cross street impacting the Farmer's Ditch will have little impact to wildlife utilizing the Farmer's Ditch as a movement corridor due to its proximity to Highway 34 and the lack of any significant tree and/or shrubs. Only approximately 150 feet of the ditch extend south of Highway 34, limiting the amount of wildlife in this portion of the ditch. Further limiting the use of the ditch by wildlife on this parcel is the fact that the ditch is culverted under Highway 34 and is concrete lined north of the highway eliminating a destination for the wildlife. Development will have little or no effect on the wildlife utilizing the Farmer's Ditch on Parcel B-13.

Addition to Parcel A-1

Past utilization of the parcel as a gravel parking area and dry land farming to the edge of the GLIC significantly limited the use of the GLIC as a wildlife corridor. Development, whether manicured landscaping or paved areas to the edge of the GLIC, would have little impact to the potential of wildlife using the GLIC as a corridor.

Parcels A-6 and A-7

There are no environmentally sensitive areas on Parcels A-6 and A-7 so there will be no impact to environmentally sensitive areas due to development of Parcels A-6 and A-7.

Recommendation: Protection Measures, Mitigation, Enhancement

The habitats encountered on Parcel B-13 and the addition to Parcel A-1 are extremely limited and were only investigated to determine if the areas were considered jurisdictional by the COE and because canals are labeled as environmentally sensitive areas in the Loveland Municipal Code. The canals (Farmer's Ditch and GLIC, respectively) are rarely used as corridors due to multiple culverts, limited vegetative cover near the canals, and the canals location near large transportation corridors such as Highway 34 and I-25. As such, there is little to protect or mitigate. Enhancement options such as buffers vegetated with native shrub and/or tree species would be isolated and ineffective for these parcels.

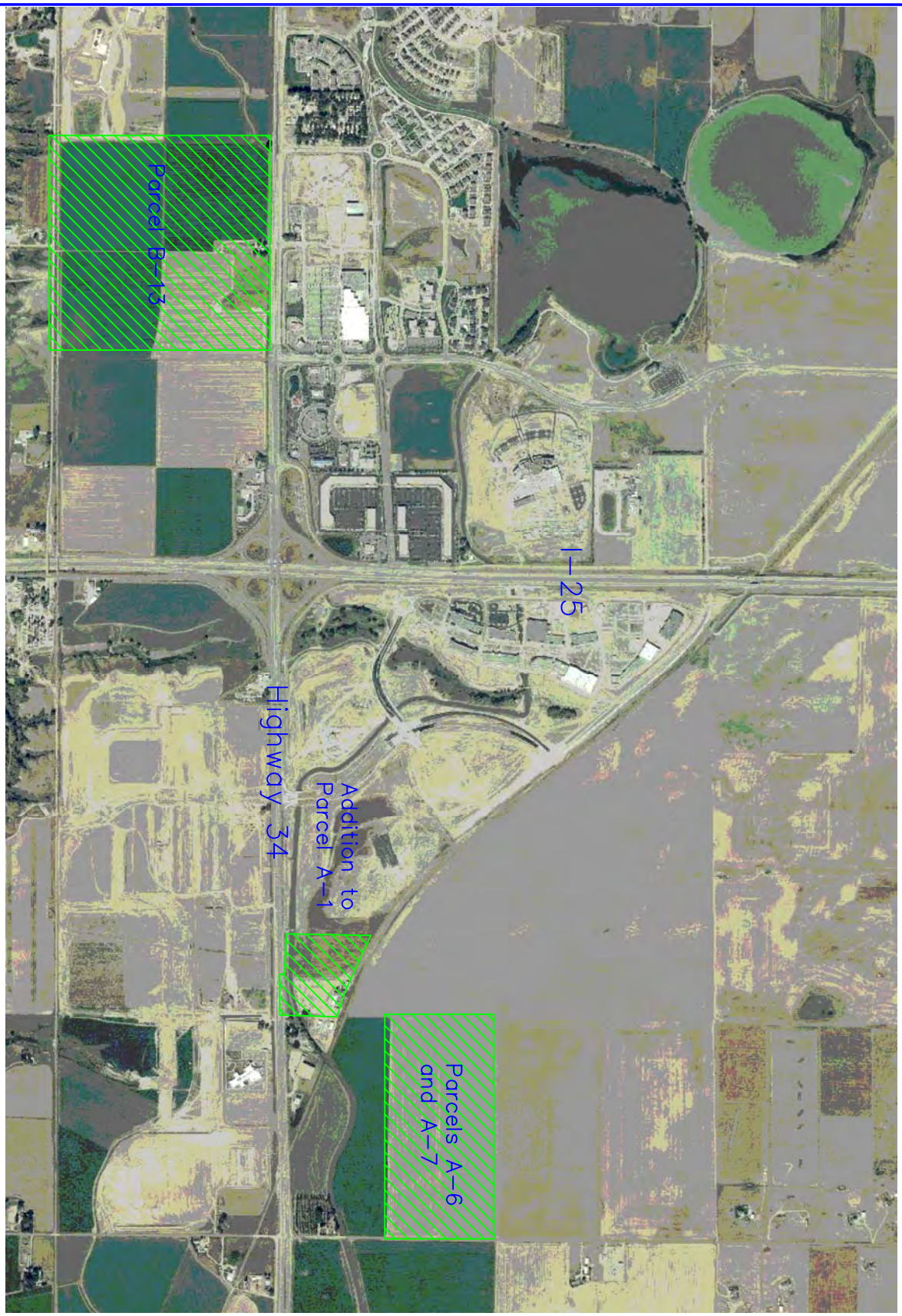


Figure 1: Vicinity Map

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Job No:	
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Design:	
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Scale:	N.T.S.

McWhinney Enterprises

Environmentally Sensitive Areas

FlyWater consulting, inc.
4605 South CR 3F
Fort Collins, Colorado 80528
(970) 231-5498
www.flywaterconsulting.com

by: LineDesign



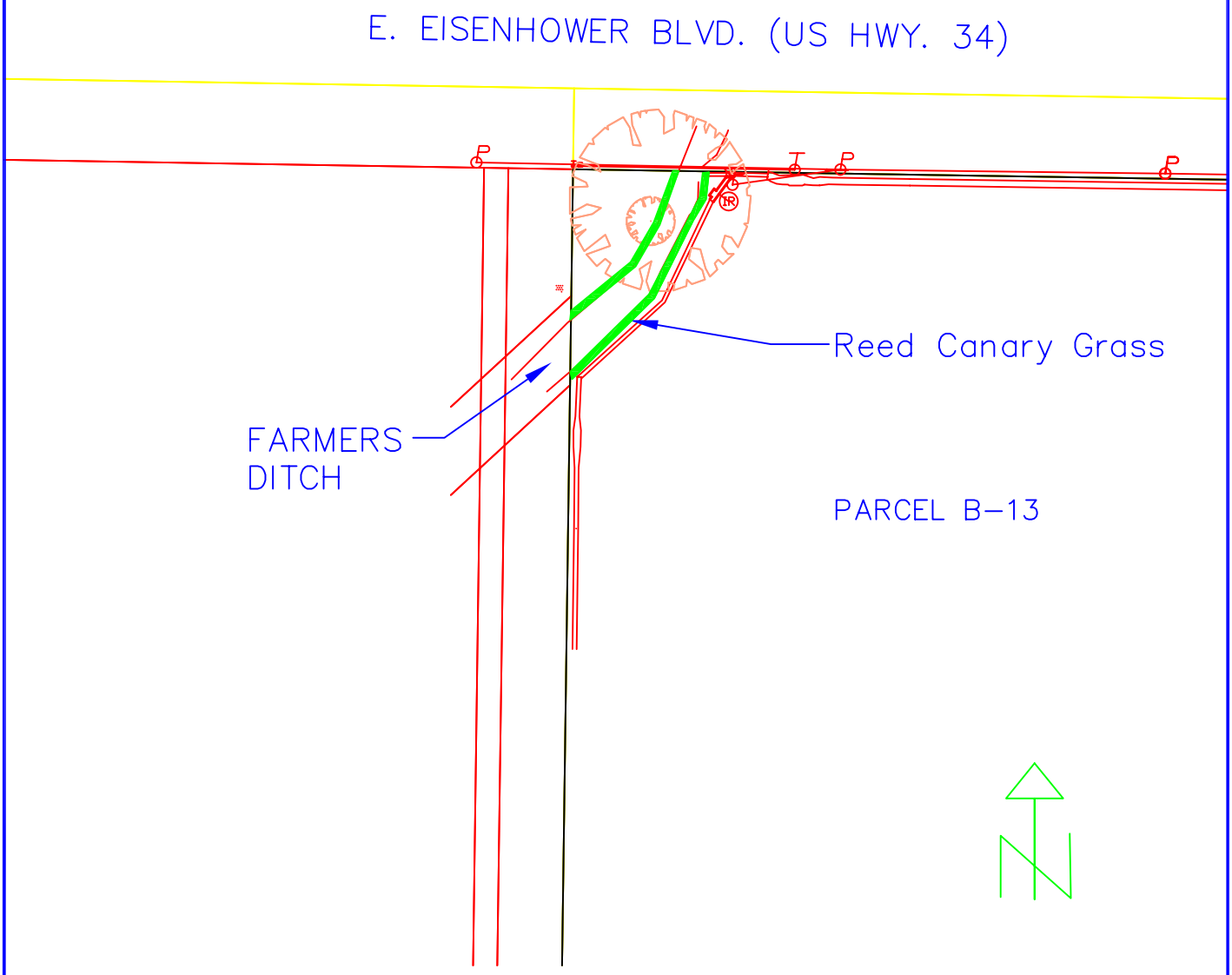


Figure 2: Farmer's Ditch

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Design:	
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File:	
Scale:	N.T.S.

McWhinney Enterprises
Parcel B-13
Environmentally Sensitive Areas

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www.flywaterconsulting.com

by: LineDesign



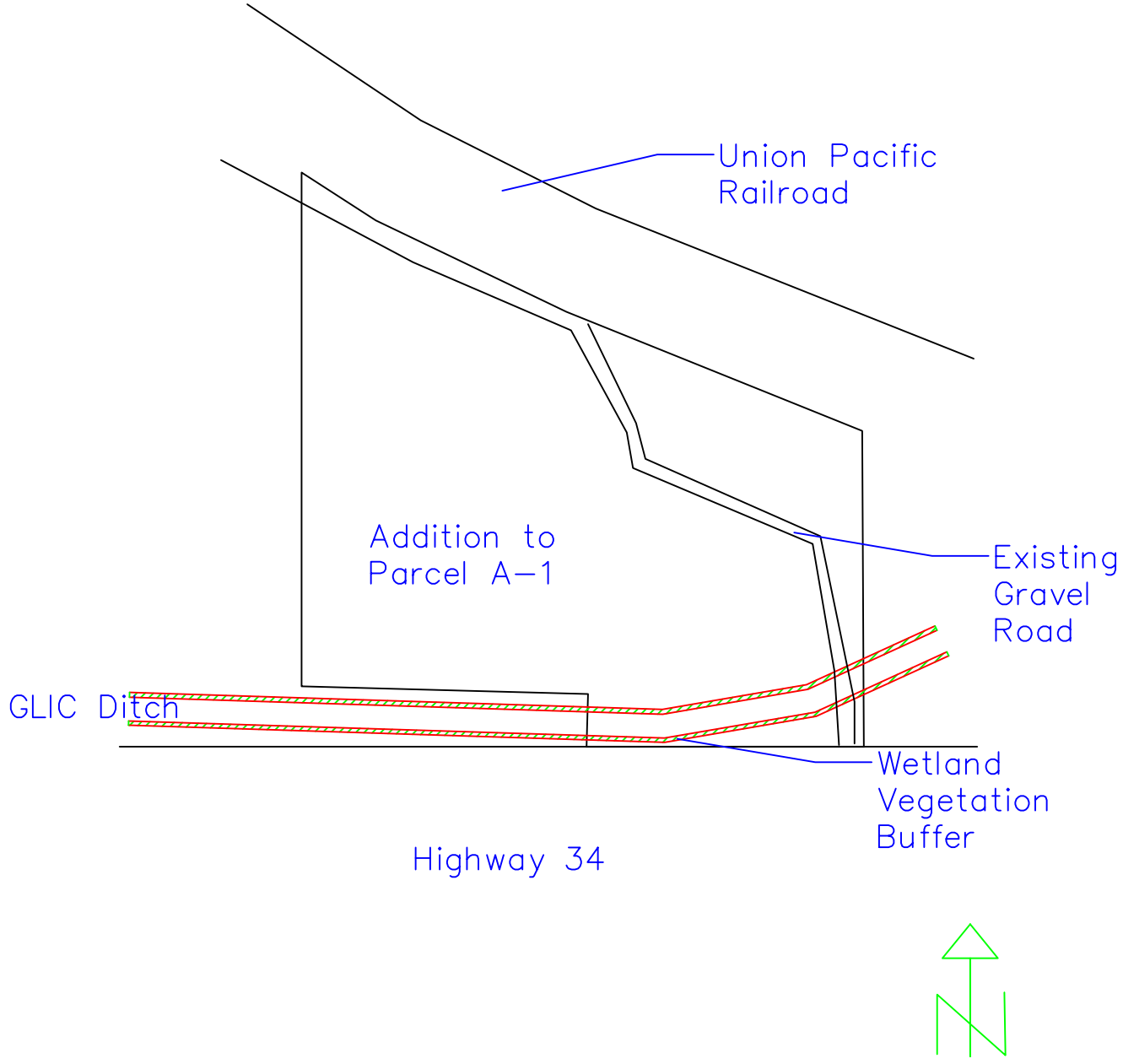


Figure 3: GLIC Ditch

Date:	10/11/07
Job No:	
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Design:	
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File:	
Scale:	N.T.S.

McWhinney Enterprises
Addition to Parcel A-1
Environmentally Sensitive Areas

FlyWater consulting, inc.
4605 South CR 3F
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www.flywaterconsulting.com

by: LineDesign

February 12, 2008

Environmentally Sensitive Areas Report

This report documents the findings of the field investigations and previous environmental report review (Environmental and Natural Areas Assessment Report – Cloverleaf Addition Jan 2000 by Wildland Consultants) performed by FlyWater consulting, inc. (FlyWater) on two additional parcels for the Grange Addition for the presence of environmentally sensitive areas on January 10, 2008 and February 6, 2008 by Bradley Florentin. Cloverleaf East (approx. 40 acres) lies on the west side of the I-25 Frontage Road and north of the Greeley-Loveland Irrigation Canal (GLIC). The Cloverleaf West parcel (approx 5 acres) lies on the northeast corner of Boyd Lake Avenue and East 37th Street. Each of these parcels is shown in Figure 1.

Study Area

Cloverleaf East

A tract of land located in the Northwest Quarter of Section 10, Township 5 North, Range 68 West of the 6th Principal Meridian, County of Larimer, State of Colorado.

Cloverleaf West

A tract of land located in the Northwest Quarter of Section 4, Township 5 North, Range 68 West of the 6th Principal Meridian, County of Larimer, State of Colorado.

The study area also includes the nearest City of Loveland Natural Areas – 1, 2, and 99. Natural Area 1 is Houts Reservoir (approx. 1,000 feet northwest of Cloverleaf East and 1,000 southwest of Cloverleaf West), Natural Area 2 is Equalizer Lake (approx. 400 feet west of Cloverleaf East), and Natural Area 99 is approx. 600 feet east and across I-25 from Cloverleaf East.

Site Inventory

This section describes the natural characteristics of the site including vegetation type, soils types, drainage patterns and wildlife corridors.

Cloverleaf East

The Cloverleaf East parcel has planted trees and shrubs along with minimal landscaped areas. The remainder of the parcel is paved or building. According to the SCS soils map the parcel is mainly made up of Nunn clay loam, 1 to 3 percent slopes which has the following properties and qualities: Slope: 1 to 3 percent, Depth to restrictive feature: More than 80 inches, Drainage class: Well drained, Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr), Depth to water table: More than 80 inches, Frequency of flooding: None, Frequency of ponding: None, Calcium carbonate, maximum content: 15 percent, Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm), Available water capacity: Very high (about 18.9 inches) . The drainage tends to sheet flow to the west and is collected in a small depression on the next parcel west. The drainage finally drains to Equalizer Lake.

The parcel has fallow agricultural land that is adjacent to it. Therefore, wildlife adapted to agricultural lands or suburban development may utilize the property as a corridor. Wildland

Consultants (January 2000) identified several animals that may utilize the site including: coyote, red fox, raccoon, striped skunk, deer mouse, house mouse, jackrabbit, cottontail rabbit, and muskrat. Birds that may utilize the parcel include: mallard, Canada goose, meadowlark, mourning dove, American kestrel, black-billed magpie, starling, horned lark, English sparrow, house finch, ring-necked pheasant, domestic pigeon, and killdeer. No raptor nests have been observed on the parcel but use the surrounding areas for foraging. No rare, threatened or endangered species have been observed or are thought to utilize the parcel. There are no prairie dogs on this parcel.

Cloverleaf West

The Cloverleaf West parcel contains a home and several sheds historically used to house greyhounds. The areas of the parcel not taken up by buildings are landscaped yard, dirt parking and dirt exercise areas for the dogs now covered in kochia. According to the SCS soils map the parcel is mainly made up of Nunn clay loam, 0 to 1 percent slope which has the following properties and qualities: Slope: 0 to 1 percent, Depth to restrictive feature: More than 80 inches, Drainage class: Well drained, Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr), Depth to water table: More than 80 inches, Frequency of flooding: None, Frequency of ponding: None, Calcium carbonate, maximum content: 15 percent, Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm), Available water capacity: Very high (about 18.9 inches)

The parcel has active agricultural land that is adjacent to it. Therefore, wildlife adapted to agricultural lands or suburban development may utilize the property as a corridor. The animals that may utilize the site including: coyote, red fox, raccoon, striped skunk, deer mouse, house mouse, jackrabbit, cottontail rabbit, and muskrat. Birds that may utilize the parcel include: mallard, Canada goose, meadowlark, mourning dove, American kestrel, black-billed magpie, starling, horned lark, English sparrow, house finch, ring-necked pheasant, domestic pigeon, and killdeer. No raptor nests have been observed on the parcel but use the surrounding areas for foraging. No rare, threatened or endangered species have been observed or are thought to utilize the parcel. There are no prairie dogs on this parcel.

Assessment of Potential Impacts of Proposed Development

Cloverleaf East

The parcel is already developed as a dog track with landscaped areas and a large parking lot. Redevelopment of this parcel will have no additional impact to native vegetation species. The redevelopment will also not change how the parcel is currently utilized by wildlife. There are no wetlands or canals so the Army Corps of Engineers will not take any jurisdiction over any parts of the parcel. Furthermore, there will be no additional adverse impacts to Natural Areas 1, 2, or 99 through the re-development of this parcel.

Cloverleaf West

Past utilization of this parcel to house and exercise greyhounds left most of the vegetation stripped. Recent inactivity has allowed a large population of kochia to establish. The parcel is already developed and redevelopment of this parcel will have no additional impact to native vegetation species. The redevelopment will also not change how the parcel is currently utilized

by wildlife. There are no wetlands or canals so the Army Corps of Engineers will not take any jurisdiction over any parts of the parcel. Furthermore, there will be no additional adverse impacts to Natural Areas 1, 2, or 99 through the re-development of this parcel.

Recommendation: Protection Measures, Mitigation, Enhancement

Each of these parcels has been developed in the past. There are no "open areas" associated with wildlife or native vegetation. There are no jurisdictional wetlands or environmentally sensitive areas on either of the parcels. Redevelopment of the parcels will result in no greater impact to the wildlife or vegetation than currently exists. Therefore, mitigation is not necessary.



Figure 1: Vicinity Map

Date:	2/12/08
Job No:	
Drawn:	
Design:	
Checked:	
File:	
Scale:	N.T.S.

McWhinney Enterprises
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Grange Addition Addendum #1

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ENVIRONMENTALLY SENSITIVE AREAS REPORT

FOR
HOUTS RESERVOIR "AREA 4"
LARIMER COUNTY, COLORADO

FEBRUARY 6, 2018

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ERC Project #175-1704

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1.0 INTRODUCTION

Ecological Resource Consultants, Inc. (ERC) has prepared this Environmentally Sensitive Areas Report for the Houts Reservoir "Area 4" (study area). This report (herein 2018 ESAR) was prepared on behalf of McWhinney. This assessment was conducted to identify natural features and/or environmentally sensitive areas which may occur on or within the vicinity of the study area as well as to define reservoir buffer zone setbacks. The 2018 ESAR has been prepared to specifically address elements outlined in the *City of Loveland's Current Planning Division – Environmentally Sensitive Areas Report* document (updated June 2016) (herein Loveland ESAR). The requirement for this information is in accordance with the following policies and codes: The Loveland Colorado 2005 Comprehensive Plan (Section 3.2), the 2014 Parks and Recreation Master Plan (Appendix E) and the Loveland Municipal Code (Chapters 18.41 and 16.20). Specifically, the 2018 ESAR addresses the following items:

1) Study Area
2) Site Inventory
    - Mature stands of vegetation
    - Jurisdictional (USACE) or non-jurisdictional wetlands
    - Wildlife habitat areas and corridors
    - Natural Areas identified in the City of Loveland Natural Areas Sites Report (2008)
    - Physical linkages to other natural areas or open spaces
    - Existing drainage patterns and floodway and flood fringe boundaries
    - Irrigation canals, ditches, and watercourses
    - Existing slopes over 20%
    - Soils having a high water table or being highly erodible
    - Land formerly used for landfill operations or hazardous industrial use
    - Fault areas, aquifer recharge or discharge areas
    - Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))
    - Stream corridors or estuaries
    - Land incapable of meeting percolation requirements
3) Assessment of Potential Impacts of the Proposed Development; and
4) Recommendations for Protection Measures, Mitigation and Enhancement.

Cedar Creek Associates, Inc. previously completed an Environmentally Sensitive Areas and Wetland Report for the study area dated January 1999. The 1999 Report identified environmentally sensitive areas on a large scale covering three parcels (including all of Houts and Equalizer Reservoirs) totaling over 2,105 acres. For Houts Reservoir, the 1999 Report re-evaluated the City Natural Areas Report established Overall Habitat Rating value of "5" with new rating values ranging from "1" to "6." Specifically for Area 4 and the study area subject of this 2018 ESAR, the 1999 Report assigned an Overall Habitat Rating of "6" and recommended a 300 foot setback from the operating high water mark. During initial assessment of the study area as part of the 2018 ESAR, it was noted that conditions may have changed from the 1999 Report and therefore warranted an update. The findings and recommendations of the 1999 Report have been

considered as a baseline herein while also considering current existing conditions. The following 2018 ESAR report serves as an update to the 1999 Report to evaluate in more detail current physical characteristics of environmentally sensitive areas specific to Area 4 in accordance with the most current and up to date methodologies, available data, guidelines and regulations.

2.0 STUDY AREA

According to the Loveland ESAR the study area must include all land within the proposed development boundary plus adjacent land identified as natural areas or wetlands or as other significant natural features included in the definition of "environmentally sensitive areas" that are likely to be affected by the proposed development. The study area and location are described as follows.

This 2018 ESAR is specifically intended to evaluate the shoreline and associated wetlands along Houts Reservoir "Area 4" and therefore does not include an evaluation of adjacent lands or specific parcels associated with potential future development or offsite Area 5 (to the east) or Area 3 (to the southwest). The study area is located on the east side of North Boyd Lake Avenue approximately 1.5 miles north of the intersection with East Eisenhower Boulevard in the City of Loveland, Larimer County, Colorado in the *Big Thompson* watershed (HUC 10190006). More specifically, the study area is located in **Section 4, Township 5 North, Range 68 West**, in Larimer County (**latitude 40.426288° north, longitude -105.012959° west**). The study area is located within a small area on the east side of North Boyd Lake Avenue, south of East 37th Street and comprises cultivated cropland (mowed hay field), upland herbaceous grassland and an emergent wetland fringe along the north side of Houts Reservoir. Refer to **Figure 1** and **Figure 2** for a location map and US Geological Survey (USGS) topographic map of the study area.

A 6 to 8 foot wide gravel trail bisects the western portion of the study area, along the edge of the mowed hay fields. The majority of the study area is comprised of upland herbaceous grassland. The eastern boundary of the study area comprises the open water and emergent wetland perimeter of Houts Reservoir. In addition, it appears that an upland swale was recently constructed through the study area that comes from a culvert under East 37th Street and drains to Houts Reservoir. The swale is approximately 20 feet wide at the bottom, non-vegetated, and was dry with no signs of flow at the time of the field evaluation. The swale was likely constructed as part of regional drainage improvements for future development in the vicinity of the study area. The vicinity of the study area is predominantly agricultural land exhibiting similar characteristics and land use as the study area.

The following section provides a summary of elements evaluated for the City of Loveland ESAR requirements, as outlined below in **Table 1**. Based on the Loveland ESAR assessment results, the Site Inventory Map is provided as **Figure 3**.

Table 1. Site Inventory Elements and Loveland ESAR Assessment Results.

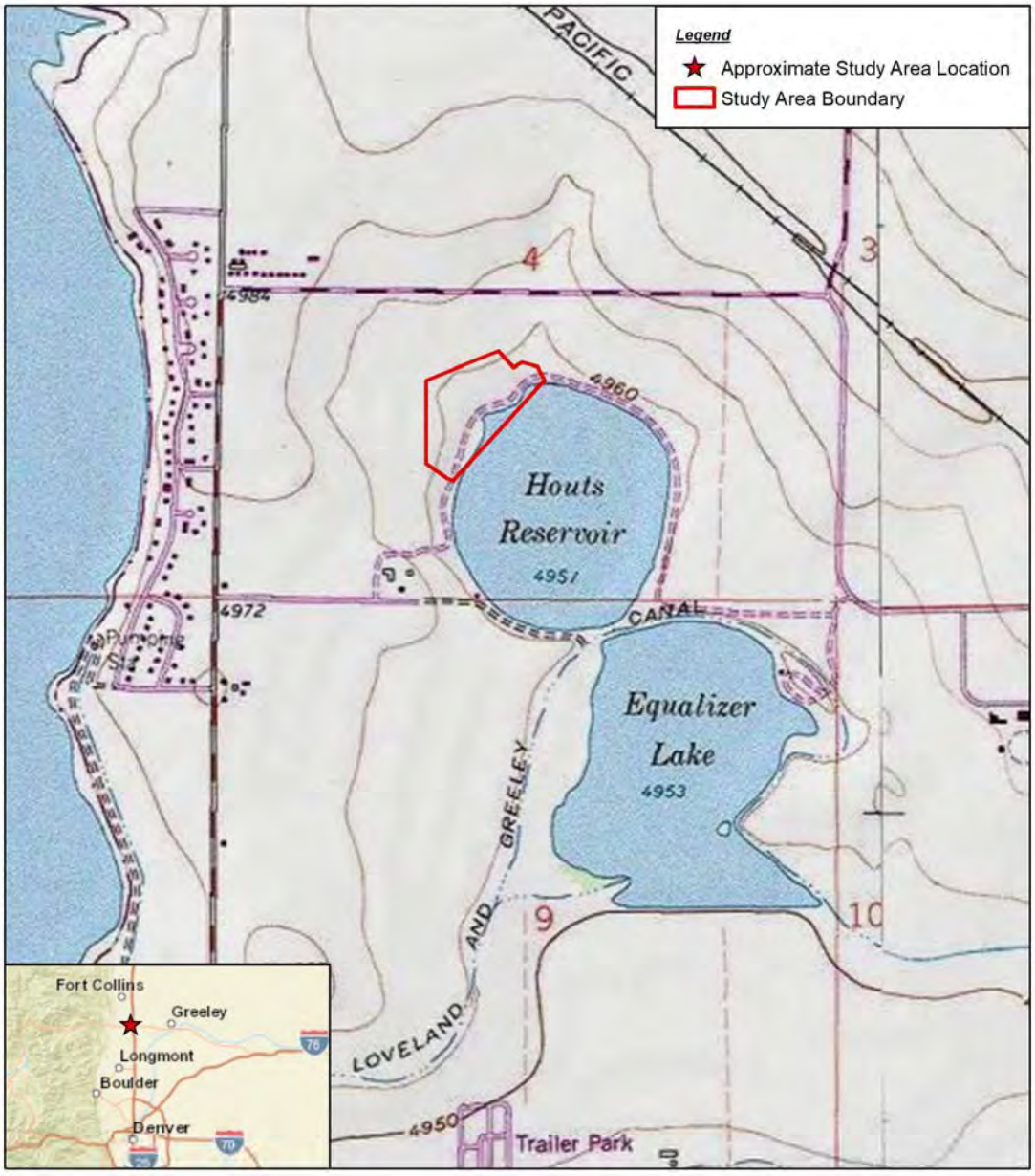
Site Inventory Elements	Assessment Results
Mature stands of vegetation	**Refer to Section 2.1, Figure 3.** An abandoned tree farm within the western portion of the study area contains sparse overstory saplings that are either dead or in very poor condition. Because the trees were planted with the intent of being sold commercially and are currently in deteriorated condition, they have not been considered mature stands of vegetation and should not be considered natural features.
Jurisdictional (USACE) or non-jurisdictional wetlands	**Refer to Section 2.2, Figure 3.** The study area contains potentially jurisdictional palustrine emergent wetland (PEM) and palustrine open water (POW) habitats associated with Houts Reservoir.
Wildlife habitat areas and corridors	**Refer to Section 2.3, Figure 3.** No wildlife migration corridors are mapped by the CPW within the study area or within the vicinity of the study area (CPW 2017). Generally, there are features within the study area that provide a variety of habitat components for waterfowl, local songbirds, raptors, amphibians, reptiles and small mammals; however, the majority of habitat within the study area comprises upland herbaceous grassland and cultivated cropland which is somewhat degraded with regards to wildlife use and is limited in use by current land use activities, community composition and habitat fragmentation. Within the study area, the herbaceous wetland vegetation community and open water of Houts Reservoir provide a variety of important wildlife habitat values.
Natural Areas identified in the City of Loveland Natural Areas Sites Report (2008)	**Refer to Section 2.4, Figure 3.** The eastern portion of the study area and immediate vicinity are located within/adjoining Houts Reservoir which is identified as a City of Loveland natural area (City of Loveland 2008). Houts Reservoir has been given an overall rating of "5" in the City of Loveland Natural Areas Sites Report (2008).
Physical linkages to other natural areas or open spaces	**Figure 3.** Wetland/open water habitat associated with Houts Reservoir continues outside of the study area to the northeast and southeast therefore is considered a physical linkage to other natural areas such as downstream wetlands.
Existing drainage patterns and floodway and flood fringe boundaries	There is no mapped FEMA floodway within the study area or vicinity (City of Loveland 2017).

Site Inventory Elements	Assessment Results
Irrigation canals, ditches, and watercourses	A recently constructed upland swale occurs within the study area. This swale appears to be a man-made stormwater feature; however, does not appear to convey flows at this time therefore has not been considered a natural feature.
Existing slopes over 20%*	The study area does not contain any existing slopes over 20% (NRCS 2017).
Soils having a high water table or being highly erodible*	**Figure 3.** The NRCS soil survey identifies two soil types within the study area, outside of the open water, and includes Ulm clay loam, 0 to 3 percent slopes and Nunn clay loam, wet, 1 to 3 percent slopes. The two mapped soil types are not classified highly erodible (NRCS 2017). Hydric soils do exist within the PEM wetland fringe of Houts Reservoir.
Land formerly used for landfill operations or hazardous industrial use*	Based on previous environmental reports (Cedar Creek Associates, Inc. 1999), review of available Google Earth imagery (1999-2017) and historic topographic mapping (1905-1985) (USGS 2017c) the study area does not appear to have been formerly used for landfill operations or hazardous industrial use.
Fault areas, aquifer discharge areas*	The study area is not located in a fault area (USGS 2017a) or aquifer discharge area (USGS 2017b).
Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))	**Refer to Section 2.5, Figure 3.** The operating high water line of Houts Reservoir occurs within the study area. The boundary was delineated based on site-specific characteristics of OHWM.
Stream corridors or estuaries	**Figure 3.** There are no stream corridors or estuaries located within the study area or vicinity.
Land incapable of meeting percolation requirements*	The study area does not contain land incapable of meeting percolation requirements (NRCS 2017).

*Literature based review. ERC has not completed detailed site specific analysis for this Site Inventory.



Prepared By: ERC *5672 Juhls Drive* *Boulder, CO 80301* *(303) 679-4820* *ERC #: 175-1704*	**FIGURE 1.** **LOCATION MAP** **HOUTS RESERVOIR "AREA 4"** **LARIMER COUNTY, COLORADO**	*Prepared For:* *McWhinney*



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FIGURE 2.
USGS TOPOGRAPHIC MAP

HOUTS RESERVOIR "AREA 4"
LARIMER COUNTY, COLORADO

Prepared For:
McWhinney

2.1 MATURE STANDS OF VEGETATION

Vegetation within the study area is comprised predominantly of upland herbaceous grassland dominated by tall wheatgrass (*Thinopyrum ponticum*) intermixed to a lesser degree with western wheatgrass (*Pascopyrum smithii*), mexican-fireweed (*Bassia scoparia*), lamb's-quarters (*Chenopodium album*), prickly lettuce (*Latuca serriola*), smooth brome (*Bromus inermis*) and field pennycress (*Thlaspi arvense*). This community occurs throughout the central portion of the study area. The eastern boundary of the study area is comprised of emergent wetland habitat dominated by broad-leaf cat-tail (*Typha latifolia*) and reed canary grass (*Phalaris arundinacea*) and open water of Houts Reservoir. The western boundary of the study area is comprised of cultivated cropland dominated by mowed mixed herbaceous vegetation used for the agricultural production of hay and an abandoned tree farm. The tree farm contains rows of approximately 10 foot tall green ash (*Fraxinus pennsylvanica*) saplings and honey locust (*Gleditsia triacanthos*) saplings which are either dead or in very poor condition. Because the trees were likely planted with the intent of being sold commercially and are currently in deteriorated condition, they have not been considered mature stands of vegetation and should not be considered natural areas.

- An abandoned tree farm within the western portion of the study area contains sparse overstory saplings that are either dead or in very poor condition. Because the trees were planted with the intent of being sold commercially and are currently in deteriorated condition, they have not been considered mature stands of vegetation and should not be considered a natural features. Refer to **Figure 3** for the location of the abandoned tree farm.
- The immediate vicinity of the study area exhibits similar land use and vegetative cover, and has been determined to not contain any mature stands of vegetation.

2.2 JURISDICTIONAL (USACE) OR NON-JURISDICTIONAL WETLANDS

A previous wetland delineation was completed within the study area as outlined in the 1999 Report which identified wetland habitat as part of field work completed in 1998 along the shoreline of Houts Reservoir. Wetland delineation methodology, level of accuracy or detailed physical characteristics were not provided in the 1999 Report. Generally, the US Army Corps of Engineers (USACE) considers wetland delineations to be valid for a period of 5 years as habitat characteristics can change over time. Upon initial evaluation, it was determined that site specific characteristics of wetland habitat may have changed since the 1999 Report and therefore warranted an up to date, detailed, aquatic resource delineation and identification of the ordinary high water mark (OHWM) (or operating high water line) of the reservoir.

On August 29, 2017, ERC conducted a formal routine onsite delineation of aquatic resources within the approximately 15 acre study area located in the City of Loveland, Larimer County, Colorado. A total of 5.21 acres of aquatic resources were identified and mapped within the study area characterized as palustrine emergent (PEM) and palustrine open water (POW) wetland habitat. The aquatic resource area characterized as POW wetland habitat comprises the northern portion of Houts Reservoir defined by OHWM and the PEM portion comprises adjoining fringe wetland habitat.

Methodology

The aquatic resource delineation was conducted following the methodology enumerated in the *1987 Corps of Engineers Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) (herein referred to as "Supplement") (Environmental Laboratory 1987, USACE 2010).* During the field inspection, dominant vegetation was recorded, representative hydrologic indicators were noted and soil samples were examined for hydric indicators. At the time of the field evaluation, the conditions observed within the survey area were typical for the region and sufficient indicators of vegetation, soils and hydrology were observed to make a wetland determination.

The USACE and the Environmental Protection Agency (USEPA) jointly define wetlands as: "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [40 CFR 230.3(t)]. Three general environmental parameters define a wetland. These parameters must include the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Except under certain situations, evidence of a minimum of one positive wetland indicator from each of the above parameters must be identified in order to make a positive wetland determination.

In addition, waters of the US are also defined as areas that *"include essentially all surface waters such as rivers, streams and their tributaries, all wetlands adjacent to these waters, and all ponds, lakes and reservoirs".* The boundaries of some waters of the US (i.e., such as streams or lakes) are further defined by the ordinary high water mark (OHWM). The OHWM is characterized as "the line on the shores established by the fluctuations of water and indicated by physical characteristics such as: a clear natural line impressed on the bank, shelving, changes in the character of the soil, wetland vegetation, the presence of litter and debris, and other appropriate means that consider the characteristics of the surrounding areas" (USACE 2005). These definitions are the basis of this delineation method.

Areas that do not meet any one of the wetland parameters (hydrophytic vegetation, hydric soils and/or wetland hydrology) or non-vegetated stream channel/open water (OHWM) were classified as a non-wetland (upland) and mapped as such.

Any area determined to be potential waters of the US was delineated in the field with pink pin flags and ribbon identified with 'WETLAND BOUNDARY' printed on it and sequentially labeled alpha-numerically (i.e. A1, A2…). In addition to the outer wetland boundary, the inner OHWM boundary along Houts Reservoir was also field flagged as part of the delineation, specifically for this 2018 ESAR. The wetland boundary and OHWM boundary were later surveyed by King Surveyors, Inc. of Windsor, Colorado. All areas that have been investigated in the field are mapped on the Aquatic Resource Delineation Map dated August 29, 2017 included as **Appendix A**.

A formal aquatic delineation report has not been completed for this project and verification from the USACE has not been obtained; however, the aquatic resource delineation mapping is considered current and accurate per USACE current standards.

Results

The PEM fringe wetland habitat comprises an area extending landward from within the POW of Houts Reservoir. Hydrology within this area appears to be supported by Houts Reservoir when water storage within the reservoir is at nearly full capacity. This fringe wetland area is defined by subtle topographic depressions that blend in to the OHWM of Houts Reservoir. At the time of delineation, water levels within the reservoir were high and the PEM fringe was saturated to the surface and/or contained surface water (approximately 2-12 inches) throughout a majority of the wetland boundary. The vegetation community within the PEM fringe habitat is dominated by reed canary grass (*Phalaris arundinacea*), broad leaf cattail (*Typha latifolia*) coastal salt grass (*Distichlis spicata*), fox-tail barley (*Hordeum jubatum*), and Baltic rush (*Juncus Balticus*), intermixed with few other non-dominant herbaceous hydrophytic species. Soils within this area are clay loam textured, depleted, and contained redox concentrations within both the pore linings and matrix meeting criteria for hydric soil indicator F3 (Depleted Matrix). At the time of delineation, primary wetland hydrology indicators of A1 (Surface Water) and C3 (Oxidized Rhizospheres Along Living Roots) were observed, in addition to secondary hydrology indicators of D2 (Geomorphic Position), and D5 (FAC-Neutral Test). The PEM wetland habitat within the study area meets the criteria for wetland based on the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. Refer to **Photos 1-2** below for characteristics of the PEM wetland fringe habitat within the study area. It should be noted that the PEM wetland fringe habitat is highly variable containing a mix of hydrophytic (wetland species) as well as upland weed species and bare ground. This mix of species indicates seasonal variations in soil moisture (both wet and dry) directly correlating to varying water surface elevations of Houts Reservoir.



Photo 1. Overview southwest at PEM fringe habitat in the eastern portion of the study area. Approximate wetland boundary depicted by the blue line. Approximate OHWM of Houts Reservoir depicted in yellow.



Photo 2. Overview north from the southern boundary of the study area. Approximate PEM wetland fringe boundary shown in blue and approximate OHWM of Houts Reservoir depicted in yellow.

The POW wetland habitat within the study area comprises the northern portion of Houts Reservoir, as defined by the OHWM. The delineation of OHWM at Houts Reservoir was based on physical characteristics that correspond to the line on the shore established by the fluctuations of water including changes in character of the soil, and changes in species and overall health of wetland vegetation.

At the time of delineation, Houts Reservoir appeared to be at nearly full water storage capacity. A narrow band of vegetation dominated by broad leaf cattail (*Typha latifolia*) exists within the OHWM that ranges from 10 to 30 feet wide which defines a majority of the OHWM boundary. Few areas of the OHWM boundary were defined by subtle topographic breaks. Water levels along the OHWM varied throughout the boundary from approximately 2 to 6 inches in areas where it was clearly defined by topographic breaks, and other areas contained approximately 12 inches of surface water where the OHWM was defined by the narrow band of cattail vegetation. Cattails within this narrow band appear to be healthy in terms of growth and vigor, whereas cattails within the PEM wetland fringe exhibited sparse cover and stunted growth, indicating a lack of hydrology to support this obligate species within the dryer, emergent fringe due to fluctuating water levels within Houts Reservoir. Vegetation along the OHWM fringe is variable containing a mix of cattails as well as upland weed species indicating seasonal variations in hydrology (both wet and dry) directly correlating to varying water surface elevations of Houts Reservoir. In addition, there appears to be a discontinuous berm along the outer OHWM boundary that has eroded over time allowing additional hydrology from Houts Reservoir to infiltrate into the PEM wetland fringe habitat. Refer to **Photos 3-4** below for characteristics of the POW habitat within the study area.

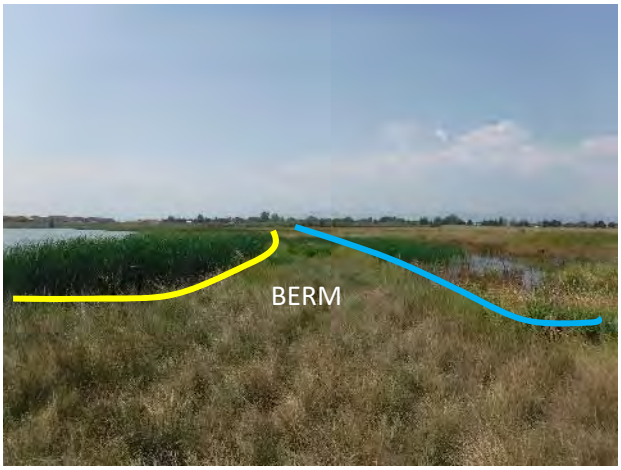


Photo 3. Overview west of the OHWM of Houts Reservoir (depicted in yellow) comprising a narrow band of healthy cattail vegetation. Approximate boundary of PEM fringe wetland habitat depicted in blue.



Photo 4. Overview south at the OHWM of Houts Reservoir (depicted in yellow) defined by a narrow band of dense cattail vegetation. The foreground of the photo shows the sparse and stunted cattail vegetation typical within the inundated portions of the PEM wetland fringe habitat.

2.3 WILDLIFE HABITAT AREAS AND CORRIDORS

Historic and current land use associated with agricultural practices has restricted the development of any significant natural vegetation communities within the study area, which limits the overall quality of potential wildlife habitat. The cultivated cropland habitat which is present across the western portion of the study area has largely replaced the native shortgrass prairie habitat which would have been present in this region. Herbaceous non-native species or ruderal native species which permeate the upland grassland vegetation community generally do not provide quality habitat for most wildlife. In general, agriculture practices have altered the structure, function, community composition, and habitat value of

land within the study area. Upland habitat within the study area exhibits no (natural) overstory canopy trees, no midstory shrubs, and only a moderate herbaceous understory cover. The upland herbaceous vegetation community can provide a variety of wildlife habitat features such as cover, forage and nesting habitat, and acts as a movement corridor for various mammals, raptors, and migratory birds.

Wetlands can provide a variety of wildlife habitat features such as cover, forage or nesting habitat, and can act as a movement corridor for various small mammals, amphibians, birds and reptiles. The predominant wetland habitat type which occupies the eastern portion of the study area is emergent wetland dominated by broad-leaf cat-tail, soft-stem club-rush and reed canary grass. Although somewhat limited in vegetative diversity, a number of wildlife values are associated with this wetland habitat type including food, nesting, brooding, cover and refuge for wildlife (Gucker 2008). The general structural characteristics of the open water including a large unobstructed water surface area, seasonal water source and emergent vegetation does create a relatively unique and higher quality habitat in an otherwise arid and agricultural landscape. The central portions of the wetland are typically inundated seasonally which provides added wildlife benefits from habitat variety and deeper seasonal water for amphibians, birds and reptiles. Broad-leaf cat-tail is extremely important to common muskrats. It provides a major food source and important nesting habitats and materials. Waterfowl and other marsh birds throughout the region use broad-leaf cat-tail habitats extensively. In Colorado, broad-leaf cat-tail habitats are important nesting cover and habitat for soras, Virginia rails, blackbirds, and marsh wrens (Kingery 2008). Many waterfowl including: American white pelican (*Pelecanus erythrorhynchos*), blue-winged teal (*Anas discors*) and great blue heron (*Ardea herodias*) among others are known to regularly utilize the open water portions of Houts Reservoir.

- Generally, there are features within the study area and the surrounding area that provide a variety of habitat components for waterfowl, local songbirds, raptors, amphibians, reptiles and small mammals; however, the majority of habitat within the study area comprises upland herbaceous grassland and cultivated cropland which is somewhat degraded with regards to wildlife use and is limited in use by current land use activities, community composition and habitat fragmentation.
- Within the study area, the herbaceous wetland vegetation community and open water of Houts Reservoir provide a variety of important wildlife habitat values. Refer to **Figure 3** for the approximate location of potential wetland habitat mapped within the study area.

2.4 NATURAL AREAS IDENTIFIED IN THE CITY OF LOVELAND NATURAL AREAS SITES REPORT (2008)

The City of Loveland along with several consultants issued a report in July 2008 titled *In the Nature of Things: City of Loveland Natural Areas Sites* (City of Loveland 2008) that identifies natural areas in and around Loveland. Natural areas are defined as undeveloped lands containing potential natural values such as wildlife habitat, plant diversity, and wetlands. ERC reviewed the report and associated mapping to determine if the study area or the vicinity is located within or adjacent to any of these designated natural areas. The results are summarized below.

- The fringe wetland habitat within the study area is located within Site 1 – Houts Lake natural area (City of Loveland 2008) (see below).

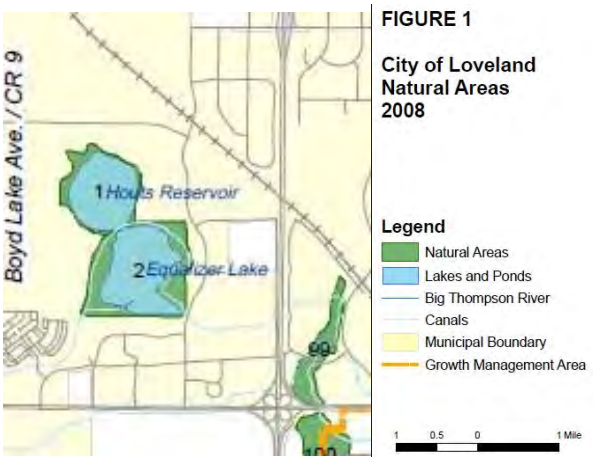


FIGURE 1

City of Loveland Natural Areas 2008

- The lake is described as a large open water body surrounded by active agricultural lands. Trees and shrubs and generally lacking. A fringe of wetland vegetation is present along the northwest shoreline. The large amount of open water is valuable to waterfowl, especially as resting habitat for migrating species. A portion of the adjacent agricultural lands appears to be inundated, which would provide feeding habitat for shorebirds as well as waterfowl. The agricultural lands themselves provide feeding habitat for waterfowl using the lake. The CPW notes that ducks and geese rest on the lake and feed extensively in nearby fields. The lack of significant emergent wetland vegetation limits the lake's potential for water-quality improvement. The creation of large wetland areas would improve this function. This may be an important enhancement suggestion for the long-term health of the aquatic ecosystem, as it appears that runoff from the agricultural lands enters the lake and may overload it with nutrients over time. The addition of shrubs and trees around the lake would increase songbird and raptor habitat (City of Loveland 2008).
- Houts Reservoir has been given an overall rating of "5" in the City of Loveland Natural Areas Sites Report (2008).
- Site 1 is located within the study area therefore is depicted on the Site Inventory Map (**Figure 3**).

2.5 OPERATING HIGH WATER LINE

The 2014 City of Loveland Parks & Recreation Master Plan (Appendix E) defines the operating high water line as that elevation which is arrived at by taking the sum of the high water elevation in the months of May and June for the last 5 years and dividing by 10. The Master Plan further notes that every lake and its surrounding area are unique, and actual lake shore configurations will need to be adapted to fit individual circumstance. To define the operating high water line, ERC first attempted to contact the reservoir operator, Greely and Loveland Irrigation Company (GLIC); however, no information was available as to a defined legal operating high water line elevation. Based on survey data, the spillway on Equalizer Reservoir (Houts and Equalizer are connected via culvert and headgate) is known to be at elevation 4954.4 feet. This spillway elevation does not appear to correspond to the site-specific characteristics observed during the aquatic resource delineation. It should be noted that the Equalizer Reservoir (and therefore Houts Reservoir) water surface elevation is controlled by adjustable headgates operating below the

spillway, and the spillway is only intended for emergency overflow. Therefore, ERC defined the operating high water line based on site-specific characteristics utilizing the USACE definition of ordinary high water mark (OHWM as described in **Section 2.2**). The operating high water line and OHWM appear to be at a slightly lower elevation (approximately 4953.8 feet) as compared to the spillway elevation (4954.4 feet). This slightly lower elevation, based on site-specific characteristics, corresponds well with the normal operation of Equalizer Reservoir, which is just below the spillway elevation via releases from the lower headgate.

As part of the formal aquatic resource delineation completed by ERC on August 29, 2017 (refer to **Section 2.2**), the OHWM was mapped based on specific physical characteristics observed in the field which correspond to the line on the shore established by the fluctuations of water which included changes in the character of the soil, changes in the vegetation community and a dense ring of cattail vegetation along the shoreline. Based on the field evaluation, the delineated OHWM (as mapped by ERC in **Appendix A**) is considered to be the operating high water line for Houts Reservoir as defined by the Master Plan.

- The operating high water line of Houts Reservoir occurs within the study area therefore is depicted on the Site Inventory Map (**Figure 3**). The boundary was delineated based on site-specific characteristics of OHWM.

3.0 ASSESSMENT OF POTENTIAL IMPACTS OF PROPOSED DEVELOPMENT

Based on review of City of Loveland ESAR criteria, results of the Site Inventory have determined that potentially "environmentally sensitive areas" occur within the study area, specifically associated with Houts Reservoir and fringe wetland habitat. Per the Site Inventory, these elements include:

- Potentially jurisdictional wetlands along the shoreline of the reservoir
- Wildlife habitat areas associated with the open water and emergent wetlands
- Houts Reservoir and the shoreline which is identified as a Natural Area (Site #1) in the City of Loveland Natural Areas Sites Report (2008)
- Physical linkages to other natural areas or open spaces (i.e., offsite fringe wetlands of Houts Reservoir)
- Soils having a high water table (within the emergent wetland habitats)
- Operating high water line (as defined in the 2014 Parks & Recreation Master Plan (Appendix E)

As depicted on the Site Inventory Map (**Figure 3**) environmentally sensitive areas occur within Houts Reservoir and its associated fringe wetland habitat which is identified as natural area Site #1 with an Overall Habitat Rating value of "5" (between 1-low and 10-high) in the City of Loveland Natural Areas Sites Report (2008). Based on the results of this 2018 ESAR, the current Overall Habitat Rating value as identified by the City is likely appropriate for Houts reservoir as the emergent wetland and open water does provide a variety of important wildlife habitat components for waterfowl, local songbirds, raptors, amphibians, reptiles and small mammals. Based on the findings of this 2018 ESAR, we see no need to alter or revise the Overall Habitat Rating value of "5" as documented in the City 2008 Report. While the emergent

wetland habitat does provide wildlife habitat and shoreline function, it is somewhat limited in species and structural diversity which does provide a potential for enhancement to improve the overall habitat rating.

ERC has not reviewed a specific development plan for the study area. Per the City of Loveland ESAR criteria and 2014 Master Plan:

- Any future development should avoid impacts to environmentally sensitive areas, specifically the wetland as depicted on the Site Inventory Map (**Figure 3**).
- For lake edges that have natural areas rated "5" and below, development should be setback 75 feet in order to protect water quality by minimizing the impacts of sediment input.
- No additional buffer areas are required for potentially environmentally sensitive areas however should be considered as part of protection measures, mitigation, and enhancement (refer to **Section 4.0**).

4.0 RECOMMENDATION: PROTECTION MEASURES, MITIGATION, AND ENHANCEMENT

Houts Reservoir and the adjacent fringe wetland habitat is considered an "environmentally sensitive area". The 1999 Report states that wetlands in Area 4 extended nearly 400 feet from the reservoir edge, recommending a 300 foot setback from the reservoir edge. With this 300 foot setback, upwards of 100 feet of the wetland would not have a protective buffer. Therefore, ERC has proposed a new setback that would encompass the entire wetland habitat as currently delineated while also providing shoreline protection consistent with the surrounding established 75-setback around all of Houts Reservoir. A description of the recommended setback based on current conditions is provided as follows.

According to Appendix E: Guidelines for Protection of Environmentally Sensitive Areas, for lake edges that have natural areas with an Overall Habitat Rating value of 5 and below, development should be setback 75-feet (from the operating high water line) in order to protect water quality by minimizing the impacts of sediment input. A naturally vegetated buffer zone of this width can usually catch and retain sediment containing metals and toxic substances that have been carried over land from developed areas. This recommended 75-foot setback is consist with other established setbacks around the entire Houts Reservoir, specifically in Areas 2 and 3 (to the southwest) and Area 5 (to the east).

In addition to the recommended 75-foot setback, ERC recommends an additional 25-foot setback from the delineated fringe wetland habitat. While this additional 25-foot setback is not a regulation, it has been recommended herein as a voluntary added protection measure. The wetland fringe is considered an environmentally sensitive area and therefore should be further protected from potential future development. By including a 25-foot setback from the wetland edge as well as a 75-foot shoreline setback, a maximum combined recommended development setback which varies from 75 feet to 160 feet from the operating high water line can be established which meets the objectives for protecting environmentally sensitive areas while allowing for reasonable site development. An existing trail is located within a portion of the 75-foot setback. Per the 2014 Master Plan, an easement should be considered for the trail to provide a link between neighborhoods, parks, and other trails.

Mitigation measures should also be employed for construction activities such as erosion and sediment control and proper stormwater management. Human disturbance from the development should be minimized within the recommended buffer zones by discouraging pedestrian and pet use off-trail.

As identified in the City of Loveland Natural Areas Sites (2008), Houts Reservoir is listed as a high potential for enhancement. The overall quality of existing vegetation within the wetland and the recommended buffer zone is somewhat degraded with regards to species richness and diversity. Non-native and/or weedy species are prevalent throughout the study area. The buffer zone and wetland provides an opportunity for enhancement through native plantings to increase species and structural diversity which in-turn would improve wildlife habitat value. Native plantings within the buffer zone should be considered as part of future proposed development plans. Wetland buffers can vary in size based on factors such as adjacent land use, ownership, topography, wetland area and ecological functions. Width, length and vegetation composition of buffer areas are key features that enhance many functions essential to establishing and maintaining healthy wetlands. Generally speaking, buffers that are wider, longer and more densely vegetated with herbaceous, shrub and tree layers provide more benefits than buffers that are narrower, shorter and sparsely vegetated with only herbaceous species (City of Boulder 2007).

Potentially jurisdictional wetland habitat is located within the study area and has been formally delineated as part of this 2018 ESAR. Formal verification from the USACE has not been obtained for the delineation, but may be appropriate for future project planning. No disturbances should occur within delineated wetland habitats without formal review under Section 404 of the Clean Water Act (CWA) and prior authorization from the USACE. Further, a 25-foot setback should be maintained from the boundary of the potentially jurisdictional wetland habitat and a 75-foot setback should be maintained from the operating high water line/OHWM of Houts Reservoir. Refer to the Site Inventory Map (**Figure 3**) for the recommended buffer zone set-backs.

5.0 SUMMARY

ERC has prepared this 2018 ESAR in compliance with the City of Loveland Environmentally Sensitive Areas Report criteria for the Houts Reservoir "Area 4". This 2018 ESAR is intended as a screening to identify environmentally sensitive areas within the study area and the vicinity. The following provides a summary of findings specific to the study area and the vicinity of the study area.

1. **Mature stands of vegetation** – An abandoned tree farm within the western portion of the study area contains sparse overstory saplings that are either dead or in very poor condition. Because the trees were planted with the intent of being sold commercially and are currently in deteriorated condition, they have not been considered mature stands of vegetation and should not be considered natural features. Refer to **Figure 3**.
2. **Jurisdictional (USACE) or non-jurisdictional wetlands** – The eastern portion of the study area comprises potentially jurisdictional POW and PEM wetland habitat associated with Houts Reservoir. According to the Loveland ESAR, wetland habitats are considered environmentally sensitive areas. A specific development plan has not been reviewed for the study area. No disturbances should occur within delineated wetland habitats without formal review under

Section 404 of the Clean Water Act (CWA) and prior authorization from the USACE. Although the City of Loveland does not specifically require a setback from environmentally sensitive areas, such as wetlands, a 25-foot buffer is recommended from the boundary of the potentially jurisdictional aquatic resource habitat and a 75-foot setback should be maintained from the operating high water line/OHWM of Houts Reservoir. Refer to **Figure 3** and **Appendix A**.

1. **Wildlife habitat areas and corridors** – No wildlife migration corridors are mapped by the CPW within the study area or within the vicinity of the study area (CPW 2017). Generally, there are features within the study area that provide a variety of habitat components for waterfowl, local songbirds, raptors, amphibians, reptiles and small mammals; however, the majority of habitat within the study area comprises upland herbaceous grassland and cultivated cropland which is somewhat degraded with regards to wildlife use and is limited in use by current land use activities, community composition and habitat fragmentation. Within the study area, the herbaceous wetland vegetation community provides a variety of important wildlife habitat values therefore a 25-foot buffer is recommended from the vegetated wetland and a 75-foot setback should be maintained from the operating high water line/OHWM of Houts Reservoir. Refer to **Figure 3**.
2. **Natural Areas identified in the City of Loveland Natural Areas Site Report (2008)** – The eastern portion of the study area and immediate vicinity are located within/adjoining Houts Reservoir which is identified as a City of Loveland natural area. Houts Reservoir has been given an Overall Habitat Rating value of "5" in the City of Loveland Natural Areas Sites Report (2008). Based on the results of this 2018 ESAR, the current Overall Habitat Rating value is likely appropriate for the Houts reservoir natural area. According to Appendix E: Guidelines for Protection of Environmentally Sensitive Areas, for lake edges that have natural areas rated "5" and below, development should be setback 75 feet in order to protect water quality by minimizing the impacts of sediment input. This recommended buffer is considered appropriate for the shoreline habitat within the study area. Refer to **Figure 3**.
3. **Physical linkages to other natural areas or open spaces** – Wetland/open water habitat associated with Houts Reservoir continues outside of the study area to the northeast and southeast therefore is considered a physical linkage to other natural areas such as downstream wetlands. Refer to **Figure 3**.
4. **Existing drainage patterns and floodway and fringe boundaries** – There is no mapped FEMA floodway within the study area or vicinity (City of Loveland 2017).
5. **Irrigation canals, ditches, and watercourses** – A recently constructed upland swale occurs within the study area. This swale appears to be a man-made stormwater feature; however, does not appear to convey flows at this time therefore has not been considered a natural feature.
6. **Existing slopes over 20%** - The study area does not contain any existing slopes over 20% (NRCS 2017). Refer to **Figure 3.**
7. **Soils having a high water table or being highly erodible** – The NRCS soil survey identifies two soil types within the study area, outside of the open water, and includes Ulm clay loam, 0 to 3 percent

slopes and Nunn clay loam, wet, 1 to 3 percent slopes. The two mapped soil types are not classified highly erodible (NRCS 2017). Hydric soils do exist within the PEM wetland fringe of Houts Reservoir.

8. **Land formerly used for landfill operations or hazardous industrial use** – Based on previous environmental reports (Cedar Creek Associates, Inc. 1999), review of available Google Earth imagery (1999-2017) and historic topographic mapping (1905-1985) (USGS 2017c) the study area does not appear to have been formerly used for landfill operations or hazardous industrial use.
9. **Fault areas, aquifer discharge areas** – The study area is not located in a fault area (USGS 2017a) or aquifer discharge area (USGS 2017b).
10. **Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))** – The operating high water line/OHWM of Houts Reservoir occurs within the study area and has been mapped by ERC. Refer to **Figure 3** and **Appendix A.**
11. **Stream corridors or estuaries** – There are no stream corridors or estuaries located within the study area or vicinity. Refer to **Figure 3.**
12. **Land incapable of meeting percolation requirements –** The study area does not contain land incapable of meeting percolation requirements (NRCS 2017).

Recommendations:

- Any future development should avoid impacts to environmentally sensitive areas, specifically the wetland and buffer zone as depicted on the Site Inventory Map (**Figure 3**).
- For lake edges that have natural areas rated "5" and below, development should be setback 75 feet in order to protect water quality by minimizing the impacts of sediment input.
- This recommended 75-foot setback (for shoreline protection) is consistent with other established setbacks around the entire Houts Reservoir, specifically in Areas 2 and 3 (to the southwest) and Area 5 (to the east).
- In addition to the recommended 75-foot setback (for shoreline protection), ERC recommends an additional 25-foot setback from the delineated fringe wetland habitat. This would establish a maximum combined recommended development setback which varies from 75 feet to 160 feet from the operating high water line.
- The buffer zone and wetland provides an opportunity for enhancement through native plantings to increase species and structural diversity which in-turn would improve wildlife habitat value. Consider native plantings within the buffer zone as part of future proposed development plans.

This report has been prepared by:

ECOLOGICAL RESOURCE CONSULTANTS, INC.

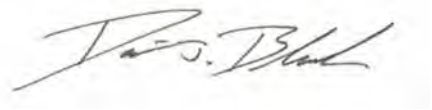


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Reviewed and approved by:



David J. Blauch, V.P., Senior Ecologist (PWS # 2130)

Table 1. Site Inventory Elements and Loveland ESAR Assessment Results.

Site Inventory Elements	Assessment Results
Mature stands of vegetation	Refer to Section 2.1, Figure 3. An abandoned tree farm within the western portion of the study area contains sparse overstory saplings that are either dead or in very poor condition. Because the trees were planted with the intent of being sold commercially and are currently in deteriorated condition, they have not been considered mature stands of vegetation and should not be considered natural features.
Jurisdictional (USACE) or non-jurisdictional wetlands	Refer to Section 2.2, Figure 3. The study area contains potentially jurisdictional palustrine emergent wetland (PEM) and palustrine open water (POW) habitats associated with Houts Reservoir.
Wildlife habitat areas and corridors	Refer to Section 2.3, Figure 3. No wildlife migration corridors are mapped by the CPW within the study area or within the vicinity of the study area (CPW 2017). Generally, there are features within the study area that provide a variety of habitat components for waterfowl, local songbirds, raptors, amphibians, reptiles and small mammals; however, the majority of habitat within the study area comprises upland herbaceous grassland and cultivated cropland which is somewhat degraded with regards to wildlife use and is limited in use by current land use activities, community composition and habitat fragmentation. Within the study area, the herbaceous wetland vegetation community and open water of Houts Reservoir provide a variety of important wildlife habitat values.
Natural Areas identified in the City of Loveland Natural Areas Sites Report (2008)	Refer to Section 2.4, Figure 3. The eastern portion of the study area and immediate vicinity are located within/adjoining Houts Reservoir which is identified as a City of Loveland natural area (City of Loveland 2008). Houts Reservoir has been given an overall rating of "5" in the City of Loveland Natural Areas Sites Report (2008).
Physical linkages to other natural areas or open spaces	Figure 3. Wetland/open water habitat associated with Houts Reservoir continues outside of the study area to the northeast and southeast therefore is considered a physical linkage to other natural areas such as downstream wetlands.
Existing drainage patterns and floodway and flood fringe boundaries	There is no mapped FEMA floodway within the study area or vicinity (City of Loveland 2017).
Irrigation canals, ditches, and watercourses	A recently constructed upland swale occurs within the study area. This swale appears to be a man-made stormwater feature; however, does not appear to convey flows at this time therefore has not been considered a natural feature.
Existing slopes over 20%*	The study area does not contain any existing slopes over 20% (NRCS 2017).
Soils having a high water table or being highly erodible*	Figure 3. The NRCS soil survey identifies two soil types within the study area, outside of the open water, and includes Ulm clay loam, 0 to 3 percent slopes and Nunn clay loam, wet, 1 to 3 percent slopes. The two mapped soil types are not classified highly erodible (NRCS 2017). Hydric soils do exist within the PEM wetland fringe of Houts Reservoir.
Land formerly used for landfill operations or hazardous industrial use*	Based on previous environmental reports (Cedar Creek Associates, Inc. 1999), review of available Google Earth imagery (1999-2017) and historic topographic mapping (1905-1985) (USGS 2017c) the study area does not appear to have been formerly used for landfill operations or hazardous industrial use.
Fault areas, aquifer discharge areas*	The study area is not located in a fault area (USGS 2017a) or aquifer discharge area (USGS 2017b).
Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))	Refer to Section 2.5, Figure 3. The operating high water line of Houts Reservoir occurs within the study area. The boundary was delineated based on site-specific characteristics of OHWM.
Stream corridors or estuaries	Figure 3. There are no stream corridors or estuaries located within the study area or vicinity.
Land incapable of meeting percolation requirements*	The study area does not contain land incapable of meeting percolation requirements (NRCS 2017).

*Literature based review. ERC has not completed detailed site specific analysis for this Site Inventory.



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ERC # 175-1604

Legend

- Study Area
- Tree Farm

Upland Vegetation Communities

- Cultivated Cropland
- Upland Herbaceous Grassland

Aquatic Resource Delineation (ERC 2017)

- Operating High Water Line
- Delineated Aquatic Resource Boundary

Potentially Jurisdictional Waters of the US/ Natural Area City of Loveland (2008) (Approx)

- Delineated PEM & POW Habitat

Recommended Development Set-Back

- 25' Natural Area Buffer
- 75' Operating High Water Line Buffer
- Maximum Combined Buffer 75' & 25'

City of Loveland GIS

- GLIC Parcel

FIGURE 3. SITE INVENTORY MAP

HOUTS RESERVOIR "AREA 4"
LARIMER COUNTY, COLORADO

Date: February 6, 2018

1 inch = 150 feet

0 150 300 Feet

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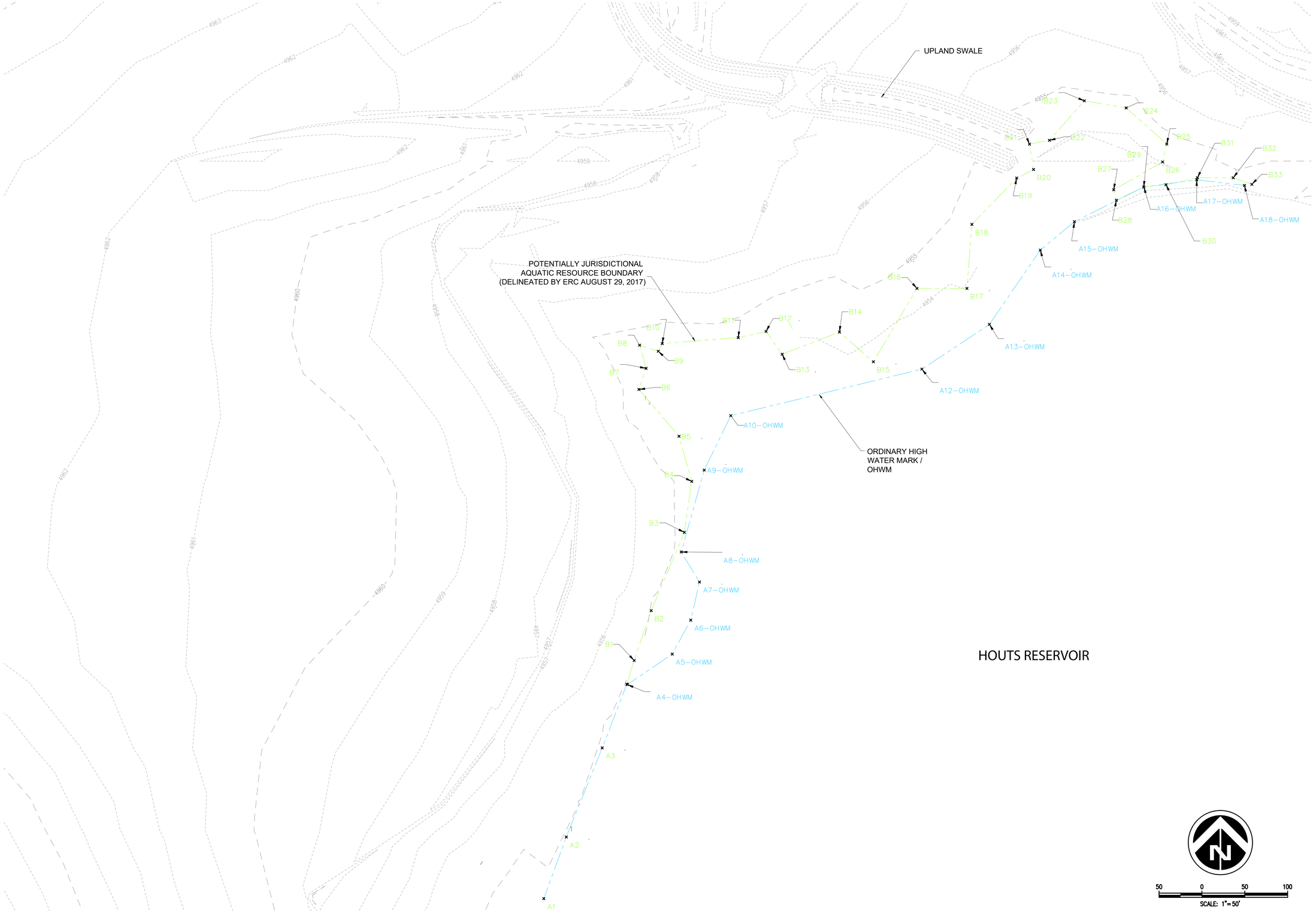
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APPENDIX A



T:_JOBS\WOHNNEY\MILLENNIUM GDP\WETLANDS MAP\LAKES AT WETLAND MAP 9-15-17.DWG, Plotted By:BRETT WOOLARD, 9/22/2017 4:14 PM

Date	Description
	DOCUMENT AMENDMENTS

THE LAKES AT CENTERRA NORTH

AQUATIC RESOURCE DEIINEATION

CWC CONSULTING GROUP
CIVIL ENGINEERING - LAND SURVEYING - CONSTRUCTION SERVICES
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LONE TREE, COLORADO 80124
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Project Number:	130-00040
Designed By:	KP
Drawn By:	BAW
Reviewed By:	KP/JN
Date:	8-29-17
Sheet Number:	1

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ENVIRONMENTALLY SENSITIVE AREAS REPORT

FOR

PFIEFF PROPERTY

LARIMER COUNTY, COLORADO

APRIL 17, 2017

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ERC Project #175-1604

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2.3 WILDLIFE HABITAT AREAS AND CORRIDORS 9
2.4 NATURAL AREAS IDENTIFIED IN THE CITY OF LOVELAND NATURAL AREAS SITES REPORT (2008) 10
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1.0 INTRODUCTION

Ecological Resource Consultants, Inc. (ERC) has prepared this Environmentally Sensitive Areas Report for the Pfieff Property (study area). This report was prepared on behalf of PFLVD, LLC. This assessment was conducted to identify natural features and/or environmentally sensitive areas which may occur on or within the vicinity of the study area. This report has been prepared to specifically address elements outlined in the *City of Loveland's Current Planning Division – Environmentally Sensitive Areas Report* document (updated June 2016) (herein Loveland ESAR). The requirement for this information is in accordance with the following policies and codes: The Loveland Colorado 2005 Comprehensive Plan (Section 3.2), the 2014 Parks and Recreation Master Plan (Appendix E) and the Loveland Municipal Code (Chapters 18.41 and 16.20). Specifically, this report addresses the following items:

1) Study Area
2) Site Inventory
    - Mature stands of vegetation
    - Jurisdictional (USACE) or non-jurisdictional wetlands
    - Wildlife habitat areas and corridors
    - Natural Areas identified in the City of Loveland Natural Areas Sites Report (2008)
    - Physical linkages to other natural areas or open spaces
    - Existing drainage patterns and floodway and flood fringe boundaries
    - Irrigation canals, ditches, and watercourses
    - Existing slopes over 20%
    - Soils having a high water table or being highly erodible
    - Land formerly used for landfill operations or hazardous industrial use
    - Fault areas, aquifer recharge or discharge areas
    - Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))
    - Stream corridors or estuaries
    - Land incapable of meeting percolation requirements
3) Assessment of Potential Impacts of the Proposed Development; and
4) Recommendations for Protection Measures, Mitigation and Enhancement.

ERC previously completed environmental studies within the study area including an Aquatic Resource Delineation, State and Federal Threatened and Endangered Species Screening, and a Phase 1 Environmental Site Assessment (ESA). Reports were issued in December 2016 and January 2017 and the results are referenced herein.

2.0 STUDY AREA

According to the Loveland ESAR the study area must include all land within the proposed development boundary plus adjacent land identified as natural areas or wetlands or as other significant natural features

included in the definition of "environmentally sensitive areas" that are likely to be affected by the proposed development. The study area and location are described as follows.

The study area is located on the west side of North Boyd Lake Avenue approximately 0.3 miles south of the intersection with East Eisenhower Boulevard in the City of Loveland, Larimer County, Colorado in the *Big Thompson* watershed (HUC 10190006). More specifically, the study area is located in **Section 17, Township 5 North, Range 68 West**, in Larimer County (**latitude 40.402981° north, longitude -105.021308° west**). From the intersection of I-25 and East Eisenhower Boulevard, the study area can be accessed by heading west for approximately 1.5 miles on East Eisenhower Boulevard, then south on North Boyd Lake Avenue for approximately 0.3 miles. The study area is located on the west side of North Boyd Lake Avenue and comprises a farm with a residential home, several farm storage buildings/structures, and agricultural fields. Refer to **Figure 1** and **Figure 2** for a location map and US Geological Survey (USGS) topographic map of the study area.

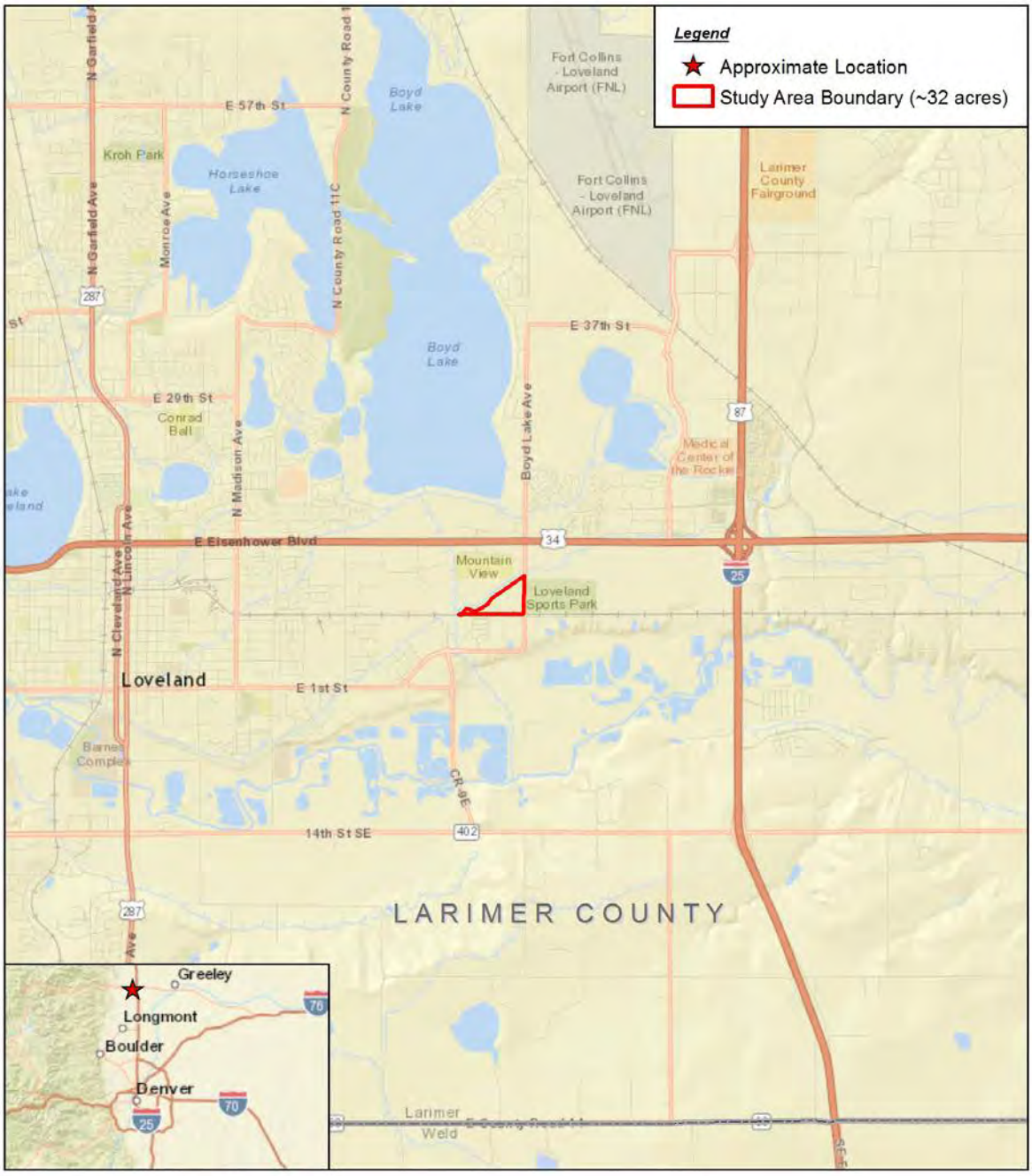
A man-made irrigation ditch known as Farmer's Ditch is located approximately 50 feet north of the study area boundary. Because no impacts are proposed within this ditch or outside of the identified study area boundary, this report has not considered the ditch a significant natural area or "environmentally sensitive area" that is likely to be affected by the proposed development. In addition, there are no mapped natural areas that adjoin and/or are located in the immediate vicinity of the study area. The vicinity of the study area is predominantly agricultural land exhibiting similar characteristics and land use as the study area. Refer to **Figure 3** for a map of the Study Area.

The following section provides a summary of elements evaluated for the City of Loveland ESAR requirements, as outlined below in **Table 1**. Based on the Loveland ESAR assessment results, the Site Inventory Map is provided as **Figure 3**.

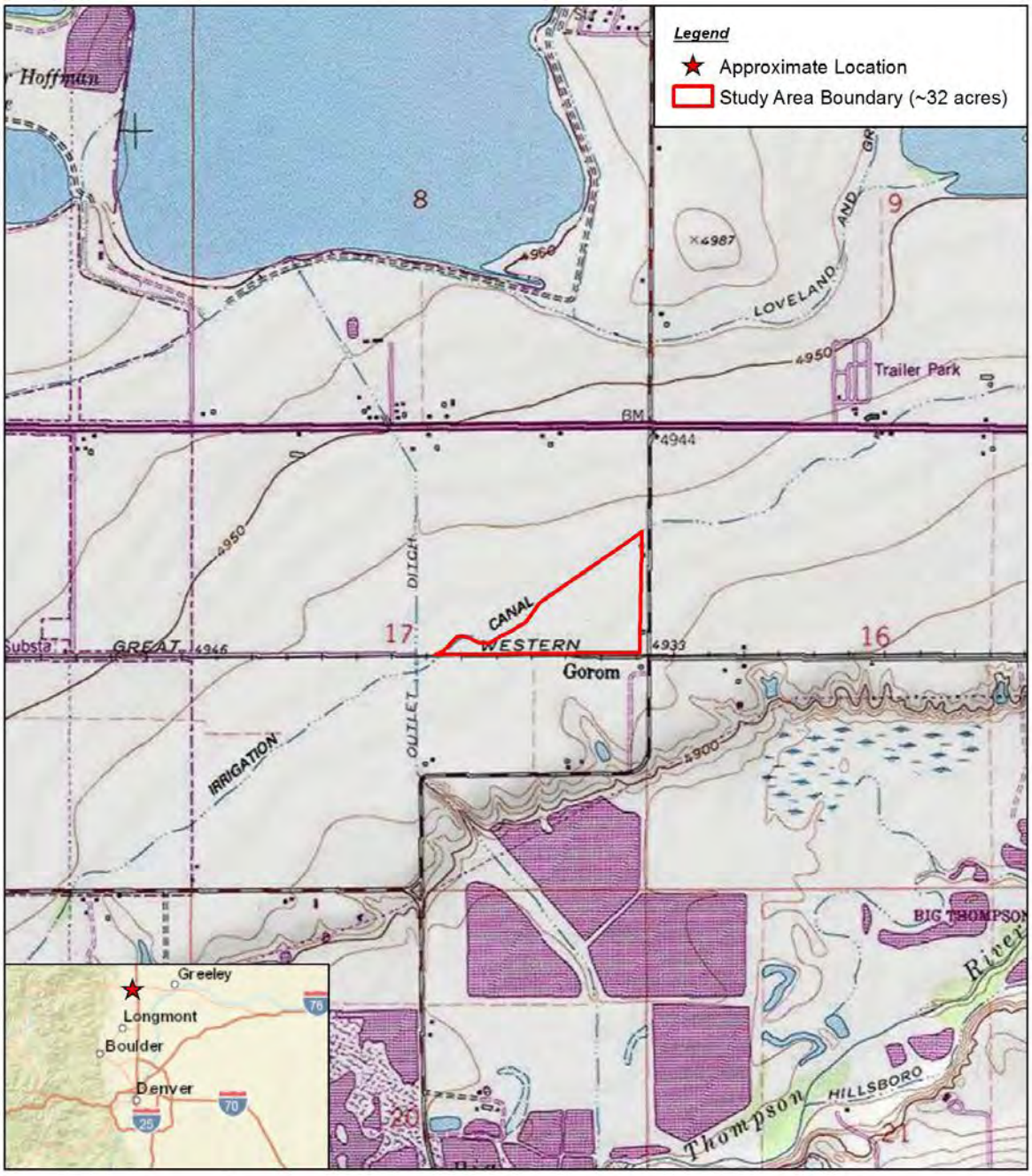
Table 1. Site Inventory Elements and Loveland ESAR Assessment Results.

Site Inventory Elements	Assessment Results
Mature stands of vegetation	**Refer to Section 2.1, Figure 3.**
Jurisdictional (USACE) or non-jurisdictional wetlands	**Refer to Section 2.2** The study area does not contain any jurisdictional or non-jurisdictional wetlands.
Wildlife habitat areas and corridors	**Refer to Section 2.3** Habitat within the study area is somewhat degraded and of lower ecological value from a wildlife perspective due to historic and current land use for agricultural production. No wildlife migration corridors are mapped by the CPW within the study area or within the vicinity of the study area (CPW 2016).
Natural Areas identified in the City of Loveland Natural Areas Sites Report (2008)	**Refer to Section 2.4** The study area and immediate vicinity are not located within any of the mapped natural areas (City of Loveland 2008)

Site Inventory Elements	Assessment Results
Physical linkages to other natural areas or open spaces	**Refer to Section 2.5, Figure 3.** Farmer's Ditch, located outside the study area to the north, may be considered a physical linkage to other natural areas such as downstream wetlands. However, no disturbances are proposed to Farmer's Ditch.
Existing drainage patterns and floodway and flood fringe boundaries	There is no mapped FEMA floodway within the study area or vicinity (City of Loveland 2017).
Irrigation canals, ditches, and watercourses	**Figure 3.** The study area does not contain any canals, ditches or watercourses. Farmer's Ditch, a man-made irrigation ditch, is located outside the study area to the north. No disturbances are proposed to Farmer's Ditch.
Existing slopes over 20%	**Figure 3.** The study area does not contain any existing slopes over 20% (NRCS 2017).
Soils having a high water table or being highly erodible	**Figure 3.** The study area does not contain any soils having a high water table or being highly erodible (NRCS 2017).
Land formerly used for landfill operations or hazardous industrial use	Per the Phase I ESA (ERC 2016) the study area does not appear to have been formerly used for landfill operations or hazardous industrial use.
Fault areas, aquifer discharge areas	The study area is not located in a fault area (USGS 2017a) or aquifer discharge area (USGS 2017b).
Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))	No lakes or ditches exist within the study area therefore no operating high water line occurs within the study area. Farmer's Ditch, a man-made irrigation ditch, is located outside the study area to the north. No disturbances are proposed to Farmer's Ditch and a 50 foot buffer is located between the ditch and the study area boundary.
Stream corridors or estuaries	**Figure 3.** There are no stream corridors or estuaries located within the study area or vicinity.
Land incapable of meeting percolation requirements	The study area does not contain land incapable of meeting percolation requirements (NRCS 2017).



Prepared By: ERC *5672 Juhls Drive* *Boulder, CO 80301* *(303) 679-4820* *ERC #: 175-1604*	**FIGURE 1.** **LOCATION MAP** **PFIEFF PROPERTY** **LARIMER COUNTY, COLORADO**	0 0.5 1 Miles *ENVIRONMENTALLY SENSITIVE AREAS REPORT APRIL 2017*



Prepared By:

ERC

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ERC #: 175-1604

FIGURE 2.
USGS TOPOGRAPHIC MAP

PFIEFF PROPERTY
LARIMER COUNTY, COLORADO

ENVIRONMETALLY SENSITIVE AREAS REPORT APRIL 2017

2.1 MATURE STANDS OF VEGETATION

Vegetation within the study area is comprised predominantly of agricultural crops consisting of alfalfa (*Medicago sativa*) for agricultural production of hay. This vegetation community is regularly harvested and would not qualify as a mature stand of vegetation. The fallow edges of the agricultural fields are vegetated mostly with non-native grasses and ruderal herbaceous vegetation which would also not qualify as mature. Around the residential home in the northeast corner of the study area there are few eastern cottonwood (*Populus deltoides*) and Norway spruce (*Picea abies*) trees that would potentially qualify as a mature stand. In addition, there are few Siberian elm (*Ulmus pumila*) and Russian olive (*Elaeagnus angustifolia*) trees within the northeast portion of the study area; however, these non-native species are undesirable and provide little value to the environment and natural areas. Therefore, these species have not been included as a mature stand on the Site Inventory Map provided as **Figure 3.**

- The mature trees (eastern cottonwood and Norway spruce) located in the northeast corner of the study area may be considered environmentally sensitive areas (Refer to **Figure 3**) by the City of Loveland.
- The vicinity of the study area exhibits similar land use and vegetative cover, and has been determined to not contain any mature stands of vegetation.

2.2 JURISDICTIONAL (USACE) OR NON-JURISDICTIONAL WETLANDS

ERC performed a formal onsite aquatic resource delineation within the study area on December 5, 2016 to identify potential aquatic resources within the study area. A report was issued dated December 23, 2016 summarizing the results (ERC 2016a). The report has not been submitted and/or verified by the US Army Corps of Engineers (USACE) at this time. The aquatic resource delineation was conducted following the methodology enumerated in the *1987 Corps of Engineers Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0) (herein referred to as "Supplement") (Environmental Laboratory 1987, USACE 2010).*

The aquatic resource delineation identified approximately 32 acres of cultivated cropland upland vegetation within the study area. The wetland delineation field work did not identify any potential waters of the US and/or wetland habitat within the study area (Environmental Laboratory 1987, USACE 2010). A summary of the habitat within the study area is summarized as follows.

Cultivated Cropland Vegetation Community

The cultivated cropland vegetation community within the study area includes land that is currently used for the agricultural production of hay which appears to be irrigated. This area appears to be somewhat degraded due to the historic and current land use for agricultural production, which makes it difficult to identify the natural vegetation community that once occupied the area. The study area is relatively consistent in elevation, slightly sloping downward to the south. The vegetation community across the study area is very similar. The cultivated, central portion of the study area comprises approximately 70% vegetative cover dominated by recently mowed alfalfa (*Medicago sativa*) intermixed with small percentages of common dandelion (*Taraxacum officinale*) and non-native grass species. The perimeter of the study area can be characterized as fallow land comprising approximately 100% vegetative cover

dominated by smooth brome (*Bromus inermis*), Mexican fireweed (*Bassia scoparia*), and prickly lettuce (*Latuca serriola*), intermixed with smaller percentages of non-native grasses and ruderal herbaceous species. Few tree/shrub species occur within the study area, mainly along the northern and western boundaries, and in the northeast corner near the home and farm buildings/structures and include Russian olive, Siberian elm, Norway spruce, and eastern cottonwood.

The upland habitats across the study area are dominated by FAC-UPL species with dry, light colored clay loam soils. In general, the cultivated cropland habitat across the study area did not meet the criteria for wetland based on lack of all three required parameters including hydrophytic vegetation, hydric soils, and/or wetland hydrology.

A small (20 foot x 10 foot), isolated, marginal area dominated by reed canary grass (*Phalaris arundinacea*) (FACW) and Indian-hemp (*Apocynum cannabinum*) (FAC) hydrophytic vegetation is located in a topographic depression at the southwest corner of the study area. This topographic depression likely receives seasonal surface water runoff from irrigation/precipitation that is sufficient to support a dominance of hydrophytic vegetation. This was the only area exhibiting a dominance of hydrophytic vegetation within the study area. This area was determined to be upland based on lack of hydric soil indicators and absence of wetland hydrology.

An irrigation ditch, identified on USGS topographic mapping as Farmer's Ditch, occurs offsite and parallel to the northwestern boundary of the study area. The irrigation ditch is not within the study area boundary and therefore has not been included as an aquatic resource. There is an approximate 50 foot buffer between the study area and the southeast boundary of Farmer's Ditch. Farmer's Ditch appears to be man-made and constructed wholly in uplands for irrigation purposes. The ditch was dry and contained no surface water at the time of the delineation.

- The study area encompasses entirely upland habitat, no aquatic resources exist within the study area. Therefore the enclosed Site Inventory Map (**Figure 3**) does not depict any jurisdictional or non-jurisdictional wetlands.

Refer to **Photos 1-4** below for characteristics of the study area.



Photo 1. View southwest at a concave depression dominated by reed canary grass and Indian-hemp. This area was mapped as upland due to lack of hydric soils and wetland hydrology.



Photo 2. View southeast at an upland fallow area near the northeast portion of the study area.



Photo 3. View west across the cultivated cropland (upland) portion of the study area dominated by alfalfa. This photo is representative of a large portion of the study area.

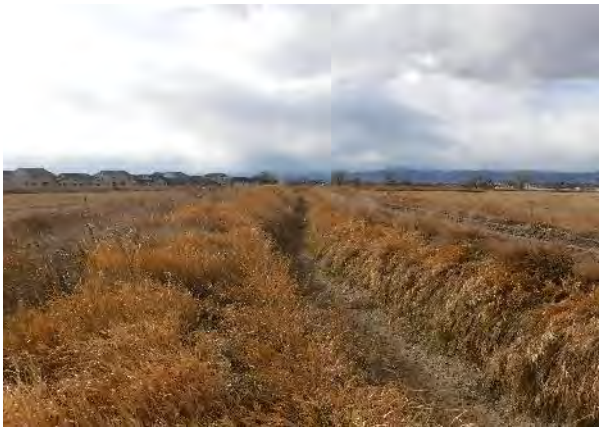


Photo 4. An overview looking southwest along the northwestern boundary of the study area. An offsite irrigation ditch (Farmer's Ditch) can be seen at the right of the photo (not within study area boundary). The upland fallow area on the left of the photo is representative of the perimeter of the study area.

2.3 WILDLIFE HABITAT AREAS AND CORRIDORS

ERC completed a Threatened and Endangered Species Screening Report for the study area dated December 23, 2016 (ERC 2016b). The results of the screening report concluded that wildlife habitat within the study area was degraded due to historic land use for agriculture, no federal or state listed threatened and endangered species and/or habitat or was present within the study area, and no wildlife migration corridors and/or environmentally sensitive wildlife habitat exists within the study area (CPW 2016). A brief summary of the 2016 ERC Threatened and Endangered Species Screening Report for the study area is provided as follows.

Wildlife utilizes the general landscape in a multitude of ways and uses a variety of habitats as areas of permanent inhabitance, seasonal inhabitance, breeding grounds, migratory routes, for foraging purposes, or as temporary shelter. Potential wildlife habitat includes lands characterized as Cultivated Cropland. Degraded agricultural land/ruderal herbaceous vegetation which is dominated by crop vegetation and/or non-native or weedy species is not typically considered of high ecological value to wildlife, but this habitat type has beneficial values to certain wildlife species. These areas at a minimum are considered "open space" providing limited foraging and hunting grounds, refuge and limited areas for nesting.

Historic and current land use associated with agricultural practices have restricted the development of any significant natural vegetation communities within the study area, which limits the overall quality of potential wildlife habitat. The cultivated cropland habitat which is present across the study area has largely replaced the native shortgrass prairie habitat which would have been present in this region. Herbaceous non-native species or ruderal native species which permeate the vegetation communities generally do not provide quality habitat for most wildlife. In general, agriculture practices have altered the structure, function, community composition, and habitat value of land within the study area. Habitat within the study area exhibits few overstory canopy trees, few midstory shrubs, and within the fallow perimeter, a moderate herbaceous understory cover. Overstory canopy trees and midstory shrubs, situated near an agricultural landscape, can provide potential roosting and nesting habitat for visiting and residential raptors and smaller migratory birds. This area can provide a variety of wildlife habitat features such as cover, forage and nesting habitat, and acts as a movement corridor for various mammals, raptors, and migratory birds. Some local wildlife species that may use this habitat within the study area includes coyote (*Canis latrans*), red fox (*Vulpes vulpes*), rabbit (*Lepus sp*.), cottontail (*Sylvilagus sp.*), raccoon (*Procyon lotor*), black tailed prairie dog (*Cynomys ludovicianus*), white-tailed deer (*Odocoileus virginianus*), mule deer (*Odocoileus hemionus*), deer mouse (*Peromyscus maniculatus*), meadow vole (*Microtus pennsylvanicus*), red-winged blackbird (*Agelaius phoeniceus*), mourning dove (*Zenaida macroura*), killdeer (*Charadrius vociferous*), western meadowlark (*Sturnella neglecta*), barn owl (*Tyto alba*), hawks (*Buteo sp*.), and osprey (*Pandion haliaetus*).

The following provides key items identified as part of the Threatened and Endangered Species Screening Report:

- One primary vegetation community exists within the study area and is comprised of Cultivated Cropland. Historic and current land use for agricultural production has led to degradation and limited the development of native vegetation community.
- Generally, there are features within the study area and the surrounding area that provide general habitat for local songbirds, raptors, and small to mid-size mammals. However, the majority of the

habitat within the study area is classified as Cultivated Cropland which is somewhat degraded from a wildlife perspective by historic and current land use practices.

- Based upon literature review and field evaluation of the study area, ERC has determined that some migratory birds likely utilize the study area. These birds are protected under the MBTA, and killing or possession of these birds is prohibited. Generally, the active nesting season for most migratory birds in this region of Colorado occurs between April 1 and August 31. Construction activities that may occur within the study area that remove vegetation during the active nesting season should first ensure that active nests are not disturbed.
- Raptor nest sites are further protected by the CPW. The CPW has established recommended buffer zones and seasonal activity restrictions for a variety of Colorado raptors. While no active nests were observed and no CPW mapped buffer zones are located within the study area (CPW 2016), raptors could potentially establish nesting in the vicinity of the study area. Future land use changes should ensure that no active raptor nest sites have established generally (depending on species) within a ½ mile of the study area.
- No federally listed threatened and endangered species and/or habitat protected under the ESA were identified within the study area. The vegetation communities and features within the study area were investigated as potential habitat for federally listed species. Potential threatened and endangered species habitat was found to lack one or more habitat components critical for the federally listed species likely to occur in the area. Furthermore, connectivity to known populations is limited due to geographic, hydrologic, and other habitat constraints. No individuals or habitat for federally listed threatened and endangered species would likely be impacted by any future development.
- Any future project which may be water related or determined to be a water depletion to the South Platte River Basin may potentially be considered an adverse effect to water depletion species. The specific details of a future project must be reviewed to determine water depletion status and compliance with the ESA.
- No State listed threatened or endangered species and/or habitat protected under CPW under Colorado Statute 33 were identified within the study area. The vegetation communities within the study area were investigated as potential habitat for state listed species. Potential threatened and endangered species habitat was found to lack one or more habitat components critical for the state listed species likely to occur in the area. Furthermore, connectivity to known populations was limited due to geographic, hydrologic, and other habitat constraints. No other individuals or habitat for state listed threatened and endangered species would likely be impacted by any future development.

2.4 NATURAL AREAS IDENTIFIED IN THE CITY OF LOVELAND NATURAL AREAS SITES REPORT (2008)

The City of Loveland along with several consultants issued a report in July 2008 titled *In the Nature of Things: City of Loveland Natural Areas Sites* (City of Loveland 2008) that identifies natural areas in and around Loveland. Natural areas are defined as undeveloped lands containing potential natural values such as wildlife habitat, plant diversity, and wetlands. ERC reviewed the report and associated mapping to determine if the study area or the vicinity is located within or adjacent to any of these designated natural areas. The results are summarized below.

- The study area and immediate vicinity are not located within any of the mapped natural areas (City of Loveland 2008).

- The closest mapped natural area is Site 14 – Uplands/Wetlands E. of CR 9E, located approximately 0.25 miles south of the study area. Site 14 contains a diversity of grasses and forbs. It also contains several large trees which, in combination with adjacent grass/forb areas, create a good hunting area for raptors. Some of the forested areas contain a dense shrub understory which provides good overall songbird habitat and cover habitat for mammals. The wetlands on site consist, primarily, of a cattail drainage. Although the monoculture of cattails is rated low in regard to wildlife habitat, cattail stands have moderate to high potential for water quality improvement. This site contains a diversity of plant species as well as structural diversity that is not found in surrounding agricultural lands or adjacent sites. Consequently, the site likely functions in part as a wildlife movement corridor (City of Loveland 2008).
- The study area is separated from Site 14 by a railroad ROW, roadways, fences, and residential development, limiting wildlife movement corridors between the study area and Site 14.
- Site 14 is not located within the vicinity of the study area therefore is not depicted on the Site Inventory Map (**Figure 3**).

2.5 PHYSICAL LINKAGES TO OTHER NATURAL AREAS OR OPEN SPACES

No significant natural areas or open spaces are located within the study area or adjoining the study area. Farmer's Ditch, a man-made irrigation ditch, is located outside the study area to the north. Farmer's ditch may be considered a physical linkage to other natural areas such as downstream wetlands therefore is depicted on the Site Inventory Map (**Figure 3**). No disturbances are proposed to Farmer's Ditch. Therefore, any physical linkages to other natural areas or open spaces will not be impacted by proposed development within the study area.

3.0 ASSESSMENT OF POTENTIAL IMPACTS OF PROPOSED DEVELOPMENT

No specific development plan has been reviewed by ERC as part of this report. Based on review of City of Loveland ESAR criteria the limited amount of mature trees within the northeast portion of the study area could potentially qualify as a mature stand of vegetation. This is the only feature within the study area that may be considered an "environmentally sensitive area" per Loveland ESAR. The nearby Farmer's Ditch may also qualify as an "environmentally sensitive area" however, the Ditch is located outside of the study area and no disturbances are expected to occur outside of the study area as part of the proposed development. The location of the stand of mature trees and Farmer's Ditch are depicted in **Figure 3**. No other "environmentally sensitive areas" occur within the study area or within the vicinity of the study area.

4.0 RECOMMENDATION: PROTECTION MEASURES, MITIGATION, AND ENHANCEMENT

Mature trees exist within the study area and may be considered "environmentally sensitive areas". Removal of these trees for future development should be avoided to the maximum extent practicable to maintain natural characteristics and reduce adverse environmental effects from future development in the area. All landscaping associated with the proposed development should be designed to utilize native species of trees, shrubs, and herbaceous vegetation.

No impacts are proposed to Farmer's Ditch as it is located outside of the study area. A 50 foot ROW exists between the ditch and the study area boundary which will not be developed and would serve as a buffer along this feature. Therefore any future development should not impact ditch. No mitigation measures or enhancements are proposed for impacts to "environmentally sensitive areas" at this time, as no "environmentally sensitive areas" are anticipated to be impacted by the proposed development.

No wetlands, streams, or specific wildlife habitat is located within the study area. Therefore, no specific clearances from the CPW and/or US Army Corps of Engineers Section 404 permit are required for the proposed development.

5.0 SUMMARY

ERC has prepared this report in compliance with the City of Loveland Environmentally Sensitive Areas Report criteria for the Pfieff Property. This report is intended as a screening to identify environmentally sensitive areas within the study area and the vicinity. The following provides a summary of findings specific to the study area and the vicinity of the study area.

1. **Mature stands of vegetation** – There are few eastern cottonwood and Norway spruce trees located in the northeast corner of the study area that could be considered an environmentally sensitive are by the City of Loveland. Removal of these trees for future development should be avoided to the maximum extent practicable to maintain natural characteristics and reduce adverse environmental effects from future development in the area.

2. **Jurisdictional (USACE) or non-jurisdictional wetlands** – The study area does not contain any jurisdictional or non-jurisdictional wetlands. A US Army Corps of Engineers Section 404 permit is not required for proposed development within the study area.

3. **Wildlife habitat areas and corridors** – Habitat within the study area is somewhat degraded and of lower ecological value from a wildlife perspective due to historic and current land use for agricultural production. No wildlife migration corridors are mapped by the CPW within the study area or within the vicinity of the study area (CPW 2016). No federally listed threatened and endangered species and/or habitat protected under the ESA were identified within the study area. No State listed threatened or endangered species and/or habitat protected under CPW under Colorado Statute 33 were identified within the study area (ERC 2016b). No specific clearances from the USFWS and/or CPW are required for proposed development within the study area.

4. **Natural Areas identified in the City of Loveland Natural Areas Site Report (2008)** – The study area and immediate vicinity are not located within any of the mapped natural areas (City of Loveland 2008). Site 14 is the closest mapped natural area, located 0.25 miles south of the study area. Site 14 and the study area are separated by a variety of features that limit wildlife movement corridors between Site 14 and the study area.

5. **Physical linkages to other natural areas or open spaces** – Farmer's Ditch, located outside the study area to the north, may be considered a physical linkage to other natural areas such as downstream wetlands. However, no disturbances are proposed to Farmer's Ditch. Refer to **Figure 3**.

6. **Existing drainage patterns and floodway and fringe boundaries** – There is no mapped FEMA floodway within the study area or vicinity (City of Loveland 2017).

7. **Irrigation canals, ditches, and watercourses** – The study area does not contain any canals, ditches, or watercourses. Farmer's Ditch, a man-made irrigation ditch, is located outside the study area to the north. No disturbances are proposed to Farmer's Ditch. Refer to **Figure 3**.

8. **Existing slopes over 20%** - The study area does not contain any existing slopes over 20% (NRCS 2017). Refer to **Figure 3.**

9. **Soils having a high water table or being highly erodible** – The study area does not contain any soils having a high water table or being highly erodible (NRCS 2017). Refer to **Figure 3.**

10. **Land formerly used for landfill operations or hazardous industrial use** – Per the Phase 1 ESA (ERC 2016) the study area does not appear to have been formerly used for landfill operations or hazardous industrial use.

11. **Fault areas, aquifer discharge areas** – The study area is not located in a fault area (USGS 2017a) or aquifer discharge area (USGS 2017b).

12. **Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))** – No lakes or ditches exist within the study area therefore no operating high water line occurs within the study area. Farmer's Ditch, a man-made irrigation ditch, is located outside the study area to the north. No disturbances are proposed to Farmer's Ditch and a 50 foot buffer is located between the ditch and the study area boundary.

13. **Stream corridors or estuaries** – There are no stream corridors or estuaries located within the study area or vicinity. Refer to **Figure 3.**

14. **Land incapable of meeting percolation requirements –** The study area does not contain land incapable of meeting percolation requirements (NRCS 2017).

This report has been prepared by:

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Reviewed and approved by:

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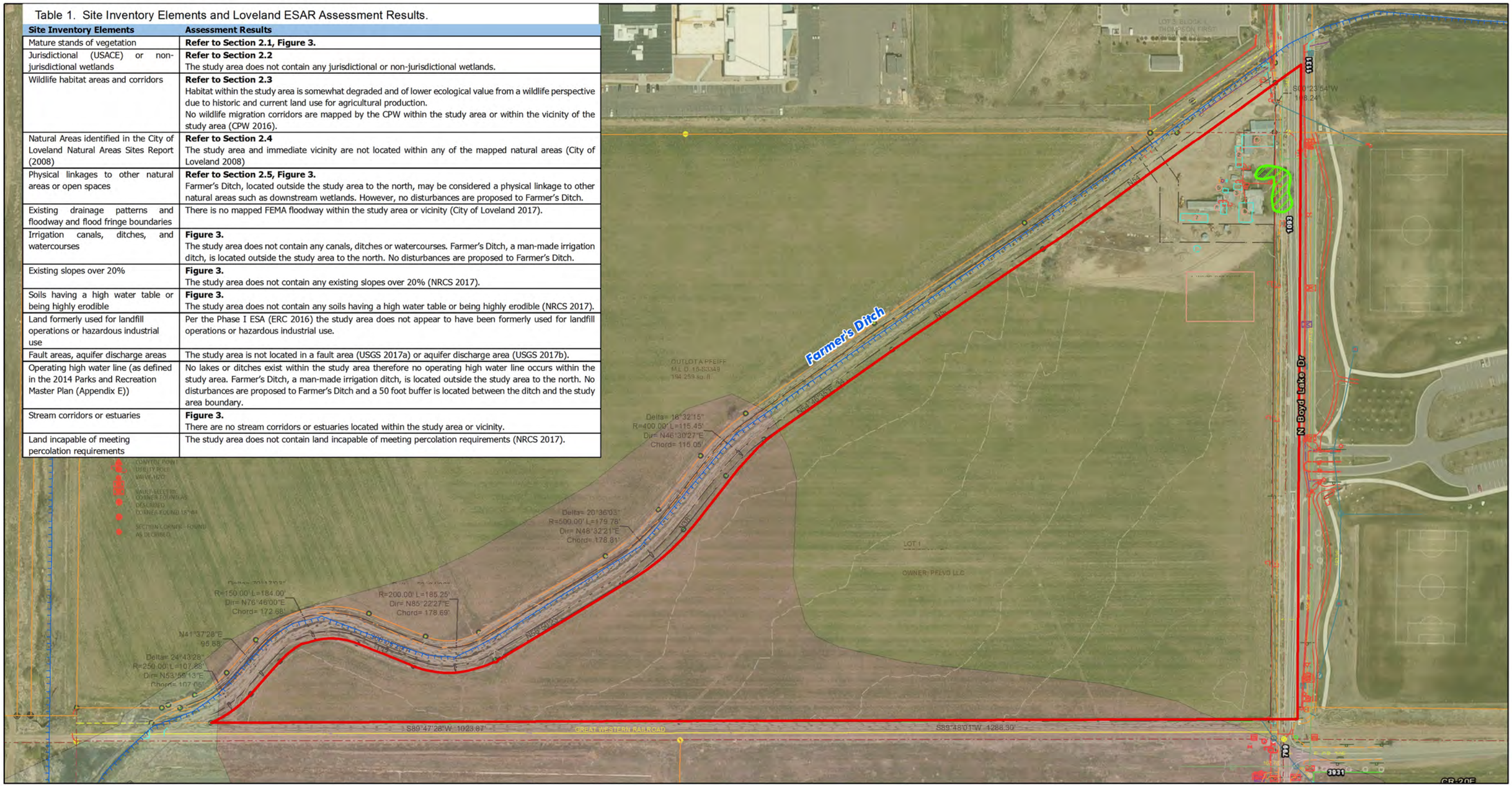
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Table 1. Site Inventory Elements and Loveland ESAR Assessment Results.

Site Inventory Elements	Assessment Results
Mature stands of vegetation	**Refer to Section 2.1, Figure 3.**
Jurisdictional (USACE) or non-jurisdictional wetlands	**Refer to Section 2.2** The study area does not contain any jurisdictional or non-jurisdictional wetlands.
Wildlife habitat areas and corridors	**Refer to Section 2.3** Habitat within the study area is somewhat degraded and of lower ecological value from a wildlife perspective due to historic and current land use for agricultural production. No wildlife migration corridors are mapped by the CPW within the study area or within the vicinity of the study area (CPW 2016).
Natural Areas identified in the City of Loveland Natural Areas Sites Report (2008)	**Refer to Section 2.4** The study area and immediate vicinity are not located within any of the mapped natural areas (City of Loveland 2008)
Physical linkages to other natural areas or open spaces	**Refer to Section 2.5, Figure 3.** Farmer's Ditch, located outside the study area to the north, may be considered a physical linkage to other natural areas such as downstream wetlands. However, no disturbances are proposed to Farmer's Ditch.
Existing drainage patterns and floodway and flood fringe boundaries	There is no mapped FEMA floodway within the study area or vicinity (City of Loveland 2017).
Irrigation canals, ditches, and watercourses	**Figure 3.** The study area does not contain any canals, ditches or watercourses. Farmer's Ditch, a man-made irrigation ditch, is located outside the study area to the north. No disturbances are proposed to Farmer's Ditch.
Existing slopes over 20%	**Figure 3.** The study area does not contain any existing slopes over 20% (NRCS 2017).
Soils having a high water table or being highly erodible	**Figure 3.** The study area does not contain any soils having a high water table or being highly erodible (NRCS 2017).
Land formerly used for landfill operations or hazardous industrial use	Per the Phase I ESA (ERC 2016) the study area does not appear to have been formerly used for landfill operations or hazardous industrial use.
Fault areas, aquifer discharge areas	The study area is not located in a fault area (USGS 2017a) or aquifer discharge area (USGS 2017b).
Operating high water line (as defined in the 2014 Parks and Recreation Master Plan (Appendix E))	No lakes or ditches exist within the study area therefore no operating high water line occurs within the study area. Farmer's Ditch, a man-made irrigation ditch, is located outside the study area to the north. No disturbances are proposed to Farmer's Ditch and a 50 foot buffer is located between the ditch and the study area boundary.
Stream corridors or estuaries	**Figure 3.** There are no stream corridors or estuaries located within the study area or vicinity.
Land incapable of meeting percolation requirements	The study area does not contain land incapable of meeting percolation requirements (NRCS 2017).



Prepared By:

ERC

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ERC # 175-1604

Legend

- Study Area
- Irrigation Ditch
- Mature Trees

Soil Types (NRCS 2017)

- Nunn clay loam, 0 to 1 percent slopes
- Nunn clay loam, 1 to 3 percent slopes

FIGURE 3. SITE INVENTORY MAP

PFIEFF PROPERTY
LARIMER COUNTY, COLORADO

1 inch = 200 feet

0 200 400 Feet

LIST OF APPENDICES

Appendix A ..... BUFFERYARDS

Appendix B .....SPECIAL IMPROVEMENT DISTRICT MAP

Appendix C .....PLANNED SIGN PROGRAMS

Appendix D ..... GDP AMENDMENT FORMS

Appendix E .....TIMELINES

APPENDIX A

BUFFERYARDS

The following is an excerpt from the City of Loveland Site Development Performance Standards and Guidelines.

SECTION 4.04 BUFFERYARDS

4.04.01 BUFFERYARD PERFORMANCE STANDARDS

A. Bufferyards shall be constructed to mitigate problems associated with traffic, noise, vibration, odor, glare, dust, smoke, pollution, water vapor, conflicting land uses and/or density, height, mass, layout of adjacent uses, loss of privacy, unsightly views, or other potential negative effects of development. Buffering may be achieved by altering setbacks, using landscaping, building a fence and/or a berm, alteration of building location, fenestration, and/or mass, or a combination of the above techniques. Development and redevelopment may be awarded density bonuses when bufferyard guidelines are exceeded.

B. Bufferyards shall be located on the outer perimeter of a lot or parcel, extending to the lot or parcel boundary line. Bufferyards shall not be located on any portion of an existing or dedicated public or private street or right-of-way, except as may be allowed by the Chief Planner.

C. When fences or walls are located in the same frontage with required landscaping or in a required landscape bufferyard, the fence or wall should be incorporated into the overall design in a manner that emphasizes the visual attractiveness of the landscape. A fence or wall located in a required landscape bufferyard shall not significantly obscure or hide the landscape as seen from the street or other adjacent area used by the public.

4.04.02 BUFFERYARD NORMATIVE GUIDELINES

A. Tables I and II should be used to determine bufferyard dimensions and plant material specifications. Table I should be used to determine the type (A, B, C, D, E, EX, or N.A.) of bufferyard required between districts or uses. Once the type of bufferyard is obtained, Table II outlines plant material specifications for alternative widths of bufferyards. Each property line should be analyzed separately to determine the type of bufferyard required.

B. Example

For example, assume a neighborhood commercial convenience store is to be developed on the corner of a state highway and a collector street. Another neighborhood commercial use is located on one adjacent lot, and a multifamily development is located on the adjacent lot to the rear. The bufferyard requirement is formulated as follows:

Look in Table I. The bufferyard types are:

Between the convenience store and multifamily = B.
Between the convenience store and state highway = C.
Between the convenience store and the collector = B.
Between the convenience store and the adjacent commercial = NA.

Now look at Table II. This outlines each bufferyard type. Each bufferyard type allows for flexibility in design in that the wider the bufferyard, the fewer the number of plant materials are suggested in the

design guideline. The numbers of plant materials listed are for each 100 feet of bufferyard.

Take for example bufferyard Type B, which would, in a "normative" situation, be the bufferyard to the applied between the collector and the mut-ifamily development in the above example. If fifteen (15) foot-wide buffers were designed in these areas, the number of plant materials would be 2 canopy trees, 2 flowering trees or large shrubs, 5 shrubs, and 1 evergreen tree for each 100 linear feet of bufferyard.

As a second alternative, a twenty-five foot bufferyard could be designed within the parameters of a B Type buffer. In this case the number of plant materials could be reduced by .80 for each 100 linear feet of bufferyard.

If a masonry wall is built within a ten (10) foot bufferyard, the number of plant materials could be reduced by 50 percent (.50). Thus if the wall were to be built, there would be one canopy tree, 1 flowering tree or large shrub, 2.5 shrubs, and .5 evergreen trees to be placed for each 100 feet of the Type B bufferyard.

As you can see, a variety of bufferyards could be designed from a single bufferyard type.

C. Those conflicting uses classified as "EX" may warrant bufferyards which are more stringent than a standard "E" type bufferyard. For example, buffering an industrial batch plant or gravel mine from a less intensive use. For conflicting uses classified as "EX", the City may specify a bufferyard which is more stringent, in terms of width and landscaping, than the standard "E" type bufferyard if one or more of the following criteria holds true:

1. *If the E type bufferyard does not sufficiently mitigate noise, glare, fumes, smoke, dust, unsightly views, and vibration within the site;*

2. *If the large scale of the project, both in terms of mass or height, indicate the need for a wide landscaped bufferyard;*

3. *If an existing sensitive use, including, but not limited to, schools, churches, dwelling units, hospitals, group care facilities, are located adjacent to the use to be developed.*

D. The bufferyard specifications may be reduced or eliminated by the City if all of the following criteria hold true:

1. The development or redevelopment complements the adjacent, conflicting use in terms of mass, height, color, use, access, landscaping, parking, and exterior facade materials;

2. The development or redevelopment mitigates substantially all negative external effects, including, but not limited to, noise, dust, smoke, unsightly views, vibration and fumes on site.

Table II.

STANDARD SPECIFICATION	***WIDTH OF BUFFER***	***PLANT MULTI-PLIER***	***6' MASONRY WALL PLANT MULTIPLIER***	***3' BERM PLANT MULTIPLIER***
BUFFER YARD				
TYPE: A	*10' width =*	*1.25*		
1 Canopy Tree	*15' width =*	*1.00*		
1 Flowering Tree or Large Shrub	*20' width =*	*0.90*	*0.50*	*0.75*
3 Shrubs	*25' width =*	*0.80*		
0 Evergreen/Conifer				
TYPE: B	*10' width =*	*1.25*		
2 Canopy Trees	*15' width =*	*1.00*		
2 Flowering Trees or Large Shrubs	*20' width =*	*0.90*	*0.50*	*0.75*
5 Shrubs	*25' width =*	*0.80*		
1 Evergreen/Conifer	*30' width =*	*0.70*		
TYPE: C	*10' width =*	*1.25*		
3 Canopy Trees	*15' width =*	*1.00*		
2 Flowering Trees or Large Shrubs	*20' width =*	*0.90*		
15 Shrubs	*25' width =*	*0.80*	*0.65*	*0.80*
3 Evergreens/Conifers	*30' width =*	*0.70*		
	35' width =	*0.60*		
	40' width =	*0.50*		
TYPE: D	*15' width =*	*1.25*		
*4 Canopy Trees**	*20' width =*	*1.00*		
*4 Flowering Trees or Large Shrubs**	*25' width =*	*0.90*		
*25 Shrubs**	*30' width =*	*0.80*	*0.75*	*0.85*
*3 Evergreens/Conifers**	*35' width =*	*0.70*		
	40' width =	*0.60*		
	45' width =	*0.50*		
TYPE: E	*20' width =*	*1.25*		
5 Canopy Trees	*25' width =*	*1.00*		
6 Understory Trees	*30' width =*	*0.90*		
30 Shrubs	*35' width =*	*0.80*	*NA*	*NA*
4 Evergreens/Conifers	*40' width =*	*0.70*		
	45' width =	*0.60*		
	50' width =	*0.50*		
TYPE: F	*10' width =*	*1.25*		
3 Canopy Trees	*15' width =*	*1.00*		
3 Evergreen Trees	*20' width =*	*0.90*	*NA*	*NA*
5 Large Evergreen Shrubs	*25' width =*	*0.80*		
5 Large Flowering Shrubs	*30' width =*	*0.70*		
20 Small to Medium Shrubs				

*** See Table III on the following page for bufferyard requirements between railroads and residential uses.**

Buffer yard requirement = (Standard Specification) x (Multiplier)
Minimum width of buffer with masonry wall = 10'
Buffer yard Type "EX" see Section 4.04.C
Buffer yard Type "C" may be modified for curbside landscaping to meet the intent of Section 4.05.04
ALL PLANT QUANTITIES ARE PER 100 LINEAR FEET, less the distance required for vehicle access to the property
The plant multiplier shall not be used to reduce the number of canopy trees on state highways or arterial streets.

RAILROAD BUFFERYARD NORMATIVE GUIDELINES

The following bufferyard standards apply to residential developments adjacent to railroad tracks within Parcels A and D of the Millennium GDP. Non-residential projects shall comply with the City of Loveland bufferyard requirements outlined in the previous pages, as amended from time to time.

Table III.
Bufferyard Requirements Between Railroads and Residential Uses

STANDARD SPECIFICATION	*WIDTH OF BUFFER*	*PLANT MULTIPLIER*	*6' MASONRY WALL PLANT MULTIPLIER*	*4' BERM PLANT MULTIPLIER*
RAILROAD BUFFER YARD (TYPE: D) *4 Canopy Trees* *4 Flowering Trees or Large Shrubs* *25 Shrubs* *3 Evergreens/Conifers*	*60' min width =* *100' width =*	*.50* *.40*	*0.75*	*0.85*

60’ Railroad Bufferyard – Minimum Requirements:

- Provision of 4’ Berm along with the required landscaping, as indicated above;
- A 6’-3” tall wood screen fence shall be installed along either the railroad right-of-way or along the lot lines nearest to the railroad right-of-way.

100’ Railroad Bufferyard – Minimum Requirements:

- Required landscaping, as indicated above;
- Mitigating elements, such as berms or fences, are not required in areas where a 100’ setback is provided.

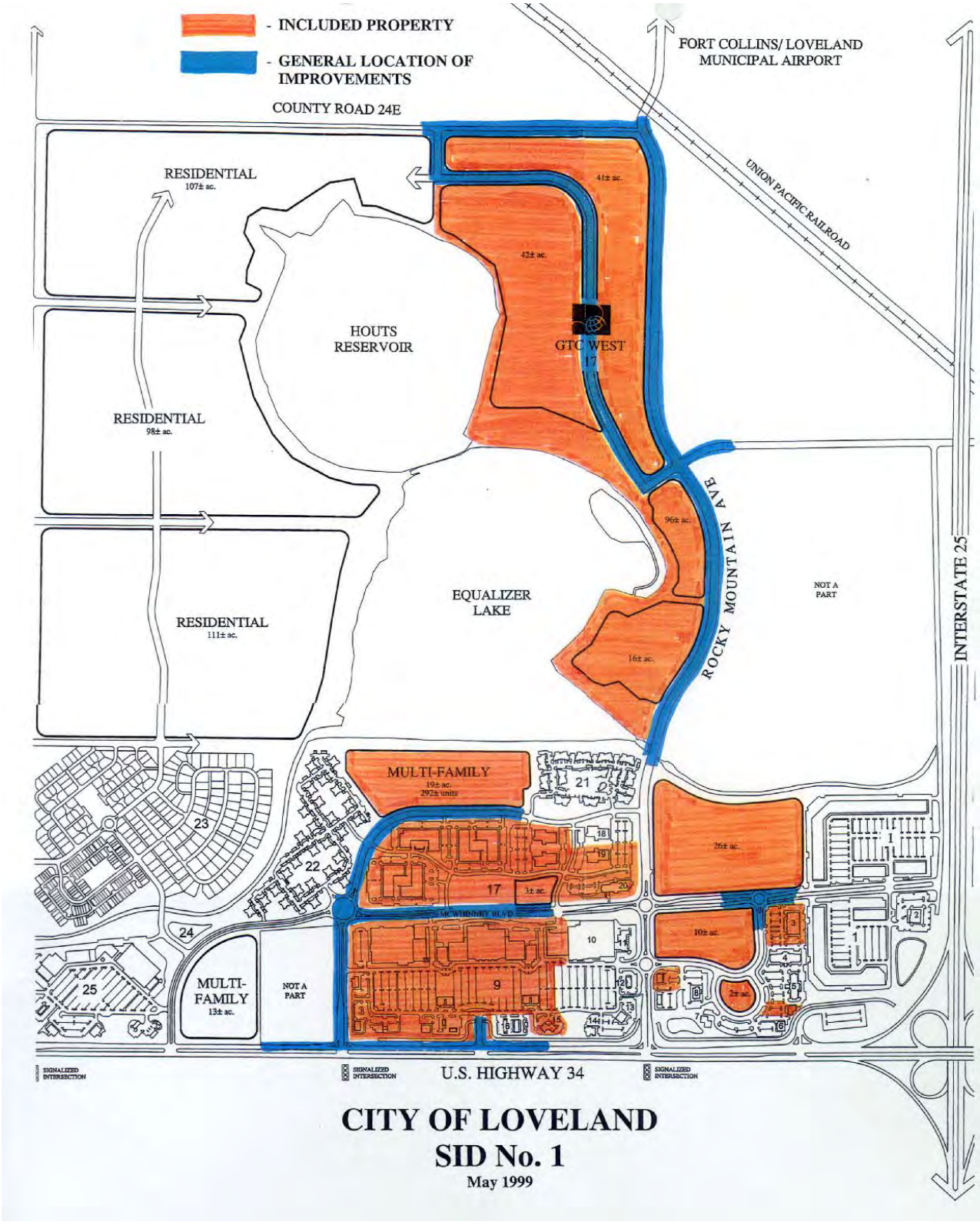
General Notes:
-Bufferyard width is measured from the Railroad Right-Of-Way line to the nearest point on each residential structure.
-Residential lots may extend into the railroad bufferyard, provided that buildings meet the required setbacks.
-Buffer yard requirement = (Standard Specification) x (Multiplier(s))

ALL PLANT QUANTITIES ARE PER 100 LINEAR FEET.

APPENDIX B

SPECIAL IMPROVEMENT DISTRICT MAP

Appendix B


- INCLUDED PROPERTY
- GENERAL LOCATION OF IMPROVEMENTS
FORT COLLINS/ LOVELAND MUNICIPAL AIRPORT
COUNTY ROAD 24E
UNION PACIFIC RAILROAD
RESIDENTIAL
107± ac.
41± ac.
42± ac.
HOUTS RESERVOIR
GTC WEST
17
RESIDENTIAL
98± ac.
96± ac.
ROCKY MOUNTAIN AVE
EQUALIZER LAKE
NOT A PART
INTERSTATE 25
RESIDENTIAL
111± ac.
16± ac.
MULTI-FAMILY
19± ac.
292± units
21
23
22
17
3± ac.
18
19
20
26± ac.
1
MCWHINNEY BLVD
24
10
10± ac.
25
MULTI-FAMILY
13± ac.
NOT A PART
9
2± ac.
SIGNALIZED INTERSECTION
SIGNALIZED INTERSECTION
U.S. HIGHWAY 34
SIGNALIZED INTERSECTION
CITY OF LOVELAND
SID No. 1
May 1999

APPENDIX C

PLANNED SIGN PROGRAMS

APPENDIX D

GDP AMENDMENT FORMS

MILLENNIUM GDP
AMENDMENT HISTORY

FIRST AMENDMENT (footer date 5-04-01)

The First Amendment creates a new Sub-Parcel C3 within GDP Parcel C to allow mixed land use.

Chapters revised:

Chapter 4 — PARCEL C RESIDENTIAL MIXED-USE NEIGHBORHOODS
Chapter 11 —Map 6 of 10

SECOND AMENDMENT (footer date 3-19-03)

The Second Amendment includes minor revisions to the design standards of the Millennium GDP and the regulatory procedures. The Chapters revised:

Chapter 1— Overall Narrative
Chapter 6 — Non-Residential Site Planning Criteria
Chapter 7 — Access, Circulation and Parking
Chapter 8 —Non-Residential Architecture
Chapter 10 — Residential
Chapter 12 — Regulatory Procedures
Chapter 13 — Definitions

THIRD AMENDMENT (footer date 5-2-03)

The Third Amendment includes minor revisions to the design standards of the Millennium GDP. The Chapters revised:

Chapter 4 — Parcel C Residential Mixed- Use Neighborhoods
Chapter 9 — Residential Mixed — Use Neighborhoods

FOURTH AMENDMENT (footer date 12-12-03)

The Fourth Amendment includes minor revisions to the design standards of the Millennium GDP. The Chapters revised include:

Chapter 2 — Parcel A Global Technology Center East
Chapter 11— Maps 2 of 10 and 4 of 10
Chapter 14 — Environmentally Sensitive Area Report

FIFTH MAJOR AMENDMENT AND RESTATEMENT (July 11, 2006)

This major amendment adds Parcels and revises zoning for several parcels within the Millennium Addition PUD. The major amendment is known as the Millennium Consolidation.

- Amendment to the Comprehensive Master Plan Land Use Plan Map dated January 20, 2006 Resolution No R-03-2006
- Ordinance No 5094 Savanna Addition and Amended and Restated Annexation and Development Agreement Rec #2006-0051705
- Ordinance No 5095 Approving Savanna Addition and the Millennium Addition 5th Amendment and Restatement effective July 11, 2006 Rec # 2006-0051707
- Agreement Regarding Environmental Fees Rec#2006-0051710

MILLENNIUM GDP MINOR AMENDMENTS TO THE MILLENNIUM ADDITION PUD 5TH MAJOR AMENDMENT AND RESTATEMENT

- FIRST AMENDMENT — MINOR (footer date August 23, 2006)
  The First Amendment adds the Planned Sign Program for Twin Peaks First Subdivision (Lots 1-5, Block 1) also known as Medical Center of the Rockies. Revised Sections include:
  Chapter15 — Appendix C

- SECOND AMENDMENT — MINOR (footer date November 6, 2006)
  The Second Amendment revises Section 14 to add the Natural Area 99 revised rating and associated acceptable uses. Revised sections include:
  Chapter 14 — Natural Area 99 Rating and Use
  Appendix A — City of Loveland Guidance
  Appendix B — Previous Studies
  Appendix C — Site Evaluation

- THIRD AMENDMENT — MINOR (footer date, February 2007)
  The Third Amendment adds the Planned Sign Program for Van de Water Parcel B.(Kohls side)
  Chapter 15 — Appendix C

- FOURTH AMENDMENT —5.4 MINOR (footer date 12-4-06)
  The Fourth Amendment includes minor revisions and technical revisions to the design standards of the Millennium GDP and the regulatory procedures. The chapters revised include:
  Chapter 1— Overall Narrative
  Chapter 6 — Non-Residential Site Planning Criteria
  Chapter 11— GDP Maps
  Chapter 12 — Regulatory Procedures
  Chapter 15 — Appendix D — Amendment History Form

SIXTH MAJOR AMENDMENT — (footer date June 6, 2007)

This major amendment allows residential uses in Parcel A with the provisions noted in each revised section.

The 6th Major Amendment updated the following sections (footer dates June 6, 2007):

Chapter 1— Overall Narrative
Chapter 2 — Parcel A
Chapter 11 — Maps (4 of 9 footer date March 8, 2007)
Chapter 12 — Regulatory Procedures
Chapter 13 — Terms and Definitions

MILLENNIUM GDP - MINOR AMENDMENTS TO THE MILLENNIUM ADDITION PUD 6TH MAJOR AMENDMENT

- FIRST AMENDMENT — 6.1 MINOR (footer date MAY 17, 2007)
  Amendment 6.1 adds the Planned Sign Program for the Chapungu Sculpture Park.
  The chapter revised includes:
  Chapter15 — Appendix C

- SECOND AMENDMENT — 6.2 MINOR (footer date JUNE 28, 2007)
  Amendment 6.2 adds the revised Planned Sign Program for Twin Peaks First Subdivision (Lots 1-5, Block 1) also known as Medical Center of the Rockies. This replaces the August 23, 2006 version.
  The revised sections include:
  Chapter15 — Appendix C

- THIRD AMENDMENT — 6.3 MINOR (footer date JUNE 06, 2008)
  Amendment 6.3 adds the revised sections known as the "Clean Up Doc" Amendment, involving minor grammatical and clarification changes as outlined below.

  Description of the Amendment: Sections 2, 3, 11 (Maps 1, 5 and 6), 12 and 13 of the Millennium General Development Plan, copies of which are attached, shall be amended as described below.

  1.) Section 2, Parcel A: Amendments to update street names, descriptions of existing water and sewer facilities, references to City-adopted plans and engineering deposit amounts; amendment to clarify School District condition. Please see Sections 2.3.1, 2.3.2, 2.4.1, 2.4.2 and 2.4.3, and Special Condition No. 17.

  2.) Section 3, Parcel B: Amendments to update street names, existing land uses and descriptions of existing water and sewer facilities, and to correct a capitalization error. Please see Sections 3.2.1, 3.2.3, 3.3.1 and 3.4.1, and Special Condition No. 43.

  3.) Section 11, Maps 1, 5 and 6: Update the amendment history on Map 1; clarification of Critical Zone **use restrictions and definition of "schools" on Maps 5 and 6.**

  4.) Section 12, Regulatory Procedures: Amendments to change composition of the Centerra Design Review Committee (see Section 12.1.2); amendments to require notice of neighborhood meetings, hearings and appeals consistent with Municipal Code (see Sections 12.3.3.A.2(c), 12.3.3.B.5, 12.3.4.A.6, 12.3.7.A and B, 12.4.1.C, 12.4.2, 12.4.3.A and B, 12.4.4 and 12.5.2.B); amendments to implement amendments to C.R.S. §24-65.5-101 et seq. (see Sections 12.3.4.A.1, 12.3.7.A and 12.3.8; and notice requirements for certain Major Amendments (see Section 12.5.1.B).

  5.) Section 13, Definitions: Amend Note 2 and remove all italicization.

SEVENTH MAJOR AMENDMENT — (footer date July 15, 2008)

This Major Amendment is known as the Grange Annexation. The rh Major Amendment updated the following sections (footer dates July 15, 2008)

Chapter 1— Overall Narrative
Chapter 2 — Parcel A
Chapter 3 — Parcel B
Chapter 4 — Parcel C
Chapter 11 — Maps
Chapter 13 — Terms and Definitions
Chapter 14 — ESAR

- Amendment to the Loveland Comprehensive Master Plan Land to change the Land Use for the Grange Addition Central Parcel from E-Employment to CAC-Community Activity Center effective June 24, 2018 Resolution No R-70-2008
- Amendment to the Loveland Comprehensive Plan to change the Land Use for the Grange Addition East Parcel from E-Employment to HDR — High Density Residential and LDR-Low Density Residential, effective June 24, 2008 Resolution #R-71-2008
- Findings of Fact Re Annexation of the Grange Addition, effective June 24, 2008 Resolution R#722008
- Ordinance No 5333, Approving the Grange Addition and the First Amendment to the Amended and Restated Annexation and Development Agreement for the Millennium General Development Plan, effective July 15, 2008 — re-recorded with attachment October 3, 2008 at Rec #2008-0062870
- Grange Addition Annexation Map recorded September 23, 2008 Rec # 2008-0060417 — Added 294.291 Acres
- Ordinance No 5334, Approving zoning for the Grange Addition and the Millennium Addition — 7th Amendment effective July 15, 2008, recorded September 23, 2008 Rec #2008-0060420
- First Amendment to the Amended and Restated Annexation and Development Agreement for the Millennium General Development Plan effective July 15, 2008 recorded September 23, 2008 Rec # 2008-0060421 Vested Property Rights effective July 19, 2008 (Same Vesting Term)
- First Amendment to the Agreement Regarding Environmental Fees dated June 24, 2008 and recorded September 23, 2008 Rec # 2008-0060422, Resolution R#73-2008

MILLENNIUM GDP - MINOR AMENDMENTS TO THE MILLENNIUM ADDITION PUD 7TH MAJOR AMENDMENT

- FIRST AMENDMENT — 7.1 MINOR (footer date October 16, 2008)
  Description of the Amendment: Sections 1, 3, 4 and 11 (Maps 1 through 10) of the Millennium General Development Plan, copies of which are attached, shall be amended as described below.

  1.) Section 1, Overall Narrative: Amendments to reduce total acreage. Please see Section 1.1.1.

  2.) Section 1, Appendix 1-1 General Conditions, Transportation 27.5 — Modify number of total daily trip ends.

  3.) Section 3, Parcel B: Amendments to reduce Parcel B acreage and removal of duplicate language. Please see Sections 3.1 and 3.2.1.

  4.) Section 4, Parcel C: Amendments to reduce Parcel C acreage and maximum non-residential sf in Parcels C-3 and C-4 and update a road name. Please see Sections 4.1 and 4.2.2, and Special Condition No. 29.

5.) Section 11, Maps 1 through 10: Update the amendment history on Map 1; revise Parcel B and C boundaries on Maps 1 —3, 5, 6 and 10; correct acreage of Parcels A-1 and A-6 and total acreage of Parcel A on Map 4; revise acreage of Parcel B-3 and total acreage of Parcel B and correct single asterisk note on Map 5; revise acreage of Parcel C-4 and total acreage of Parcel C acreage and maximum non-residential sf on Map 6; update footer date on all maps.

- SECOND AMENDMENT — 7.2 MINOR (footer date)

  Section 15, Appendix C shall be amended to revise the Motorplex Centerra Planned Sign program dated June 13, 2006. The revisions specifically include the addition of A Marketing Sign Program, Sign Type MK. The purpose of the Marketing Sign Program is to give the dealers at the Motorplex additional tools and more flexibility to market the Motorplex District and their individual dealerships. The Revised Motorplex Centerra Planned Sign Program has been approved by the Centerra Design Review Committee (DRC) per DRC Decision Letter dated December 17, 2008.

  The following items are included for review and reference regarding the Minor Amendment:

  1.) Revised Motorplex Centerra Planned Sign Program, proposed revisions highlighted in yellow.
      a. Addition of Sign Type MK including:
         i. Flag Display on I-25 Display Pads,
         ii. Light Pole Banner Display on internal Motorplex Streets,
         iii. Dealer Parking Lot Banner Display,
         iv. On-Lot Temporary manufacturer Banner Display Site, and
         v. On-Vehicle Displays.
  2.) Revised Motorplex Centerra Planned Sign Program, clean version.
  3.) Copy of Centerra Design Review Committee approval letter dated December 17, 2008.

EIGHTH MAJOR AMENDMENT — (footer date May 19, 2009)

This Major Amendment revises the distribution of residential units amount the GDP Parcels. The 8th Major Amendment updated the following sections (footer dates May 19, 2009)

Chapter 1— Overall Narrative
Chapter 2 — Parcel A
Chapter 3 — Parcel B
Chapter 4 — Parcel C
Chapter 5 — Parcel D
Chapter 9 — Residential Mixed-Use Neighborhoods
Chapter 10- Residential
Chapter 11 — Maps

- Second Amendment to the Amended and Restated Annexation and Development Agreement for the Millennium General Development Plan effective May 19, 2009 recorded June 3, 2009 Rec # 20090035948; Vested Property Rights effective May 20, 2009
- Ordinance No. 5417 approving the Millennium Addition — 8th Amendment and the Second Amendment to the Amended and Restated Annexation and Development Agreement for the Millennium General Development Plan, effective May 19, 2009 and recorded July 15, 2009 Rec # 20090048321 (New 20 Year Vesting Period)
- Second Amendment to the Agreement Regarding Environmental Fees dated June 3, 2009 and recorded June 8, 2009 Rec # 2009-0037286, Resolution R#34-2009

MILLENNIUM GDP - MINOR AMENDMENTS TO THE MILLENNIUM ADDITION PUD 8TH MAJOR AMENDMENT

- FIRST AMENDMENT — 8.1 MINOR (footer date May 20, 2009)
  Description of the Amendment: Sections 9 and 10 of the Millennium General Development Plan shall be amended as described below.
  1.) Section 9, Table 9-1 Residential Maximum Height for Buildings and Structures for Multi-Family Dwellings in a Mixed Use-Neighborhood increased from 40 feet to 60 feet.
  2.) Section 9.7.2, Residential Multi Family Dwellings in Mixed-Use Neighborhoods Minimum Off-Street Parking requirements modified.
  3.) Section 10, Table 10-1 Residential Maximum Height for Buildings and Structures for Multi-Family Dwellings increased from 40 feet to 60 feet.
  4.) Section 10.13 Parking Ratios for Multi-Family Dwellings modified.

- SECOND AMENDMENT — 8.2 MINOR (footer date December 18, 2009)
  Description of the Amendment: Revised Centerra Planned Sign Program, Section 15 - Appendix C of the Millennium General Development Plan, Centerra Planned Sign Program, shall be amended as described below. The Revised Centerra Planned Sign Program has been approved by the Centerra Design Review Committee (DRC) per DRC Decision Letter dated December 18, 2009.
  1.) Page 1 of 12 — Addition of "Construction Fence Signs (Temporary) - page 8.1" to the list of sign types addressed in the document and correction of the page numbers for the other sign types.
  2.) Page 8.1 of 12 — Addition of Construction Fence Sign Criteria

- THIRD AMENDMENT — 8.3 MINOR (footer date February 8, 2010)
  Description of the Amendment: Revised Centerra Planned Sign Program, Section 15 - Appendix C of the Millennium General Development Plan, Centerra Planned Sign Program, shall be amended as described below.
  1.) Page 1 of 17 — Addition of Multi- Family Residential Marketing Pillar Sign (Temporary) to the list of sign types addressed in the document and corrected the page numbers listed under "Applicability" for the other sign types.
  2.) Pages 8 and 9 — Project I.D. and Real Estate Sign (Temporary) criteria modified to include three new sign options with newly proposed materials.
  3.) Pages 10 and 11— Community Vehicular Directional Sign (Temporary) criteria modified to include two new sign options with newly proposed materials.
  4.) Page 12 — Newly proposed sign type, Multi-Family Residential Marketing Pillar Signs with specific criteria to new sign.

- FOURTH AMENDMENT — 8.4 MINOR (footer date June 24, 2010)
  Section 15 - Appendix C of the Millennium General Development Plan shall be amended to include a copy of the Lake Vista Planned Sign Program.

  Description of the Amendment: The Lake Vista Planned Sign Program details signage to be installed within the 303 Unit Multi-family Project. Sign types include a Project Identification Sign, Pedestrian and Vehicular Directional Signs, Address Signs, Parking Signs and various signs for the amenities such as the Welcome Center, Mail Kiosk and Community Garden. The Lake Vista Planned Sign Program has been approved by the Centerra Design Review Committee (DRC) per DRC Decision Letter July 6, 2010.

- FIFTH AMENDMENT — 8.5 MINOR (footer date March 1, 2011)
  Section 15 - Appendix C of the Millennium General Development Plan shall be amended to include the REVISED Van de Water Parcel B Planned Sign Program.

  The Van de Water Parcel B Planned Sign Program has been revised to include a new type of sign material that is allowed for Tenant Identity Signs (individual pan channel exposed neon letters with bronze exterior returns; see page 5 for details). The REVISED Van de Water Parcel B Planned Sign Program has been approved by the Millennium Design Review Committee (DRC) per DRC Decision Letter February 28, 2011.

- SIXTH AMENDMENT — 8.6 MINOR (footer date June 1, 2011)
  REVISED Section 10 — Eliminate 10.16.F criteria that applied only to Subparcel D-6 which required recessing the garage on least 67% of Single Family Attached Dwellings (SFAD) and Single Family Detached Dwellings (SFDD) on Lots with less than 65 feet of frontage. The following section instates a similar standard for all Subparcels which are zoned for residential uses where 67% of SFAD and SFDD shall have a recessed garage where the building elevation facing a public street is 55 feet wide or less.

  New Planned Sign Program for Section 15 - Appendix C
  The Greens at Van de Water Planned Sign Program is being added to Section 15 Planned Sign Programs Section. The Greens at Van de Water Planned Sign Program has been approved by the Millennium Design Review Committee (DRC) per DRC Decision Letter May 20, 2011.

The following items are included for review and reference regarding the Minor Amendment:
1.) REVISED Section 10 (Red-lined Version and Clean Version)
2.) The Greens at Van de Water Planned Sign Program dated April 5, 2011.
   a. Copy of the Millennium Design Review Committee approval letter dated May 20, 2011.

NINTH MAJOR AMENDMENT — (Footer/Effective Date May 29, 2012)
The major amendment adds definitions for light and heavy manufacturing and specifies location allowances for each use, adjusts non-residential site planning criteria for shadow/shading analysis and context diagrams, modifies public hearing requirement criteria for development proposals, and divides sub-parcel A-2 into two distinct sub-parcels on the east side of I-25.
The following sections have been revised:
Chapter 1— Overall Narrative
Chapter 2 — Parcel A
Chapter 6- Non Residential Site Planning Criteria
Chapter 7 — Access, Circulation, and Parking
Chapter 11 — Maps, Map 4 of 10
Chapter 12 — Regulatory Procedures
Chapter 13 — Terms and Definitions

MILLENNIUM GDP - MINOR AMENDMENTS TO THE MILLENNIUM ADDITION PUD 9TH MAJOR AMENDMENT

- FIRST AMENDMENT — 9.1 MINOR (footer date July 5, 2012)
  Description of the Amendment: The following sections include changes submitted as part of Minor Amendment 9.1:
  1.) Section 1 — Clean up the accessory uses and outdoor storage language.
  2.) Section 12 — Clarification on notice for the neighborhood meeting so the intent is clear that it is to be the same as for the public hearings.
  3.) Section 13 — Clarification that sign permits and site development plans are also to be considered development projects and as such subject to DRC review.
  4.) Map 6 of 10 — In a prior major amendment we eliminated Sub Parcel C3 and made it a part of Sub Parcel Cl. Footnote 4 still had a reference to C3 so we needed to correct the description of this area as part of Cl.
- SECOND AMENDMENT — 9.2 MINOR (footer date January 2013)
  Description of the Amendment: The following sections include changes submitted as part of Minor Amendment 9.2:
  1.) Section 9 — Clarify language regarding garages.
  2.) Section 10 — Clarify language regarding garages.
  3.) Section 15 Appendix C — Update Planned Sign Programs to allow Grand Opening banners to be displayed for 30 days.
- FIRST TECHNICAL CORRECTION — 9.a (footer date January 2013)
  Description of the Technical Correction(s): The following sections include changes submitted as part of TECHNICAL CORRECTION 9.a:
  1.) Section 3 and Section 4 — The Third Amendment Regarding Environmental Fees (High Plains Environmental Center) was approved by Loveland City Council on January 15, 2013. The Third Amendment extends the term of the Agreement through December 31, 2040 and clarifies the process for allocating, reporting and accounting for monies for "Open Space Purposes" and "HPEC

Purposes" under the Agreement. The proposed modifications to Section 3 and 4 of the Millennium GDP include making the term of the Environmental Fees consistent with the amended agreement.

- THIRD AMENDMENT — 9.3 MINOR (footer date December 1, 2013)
  Description of the Amendment: The proposed Millennium General Development Plan Minor Amendment 9.3 (Footer date December 1, 2013) includes amending Section 15 Appendix C — Centerra Planned Sign Program

  Revise criteria of the approved Multi-Family Residential Marketing Pillar Signs (MFRMP) in the following way:
  1.) Modify the Name of the Sign Type (Remove "Multi-Family")
  2.) Residential Marketing Pillar (RMP) Signs --Sign Type will be allowed for all Residential Developments in Centerra
  3.) Add Single-Family Attached and Single-Family Detached Residential Development Flag Poles for Builder Model Home Complexes

- FOURTH AMENDMENT — 9.4 MINOR (footer date June 15, 2014)
  Description of the Amendment: The proposed Millennium General Development Plan Minor Amendment 9.4 (Footer date June 15, 2014) includes amending Section 2 — Parcel A

  Modify Appendix 2-1 Special Conditions for Parcel A

  1.) Add a new Special Condition under "Planning" as Special Condition No. 17 with detailed criteria for a roof mounted flag pole for retail uses occupying a minimum of 75,000 SF.
  2.) Re-Number subsequent Special Conditions after the new Special Condition No. 17.

  The Sections referenced above will be reprinted with approval of this amendment request. A complete copy of the amendment is filed with the City of Loveland Planning Department. A copy of this "Sign-off Sheet" shall be included in **Appendix `D' in Section 15 of the Millennium GDP**.

- FIFTH AMENDMENT — 9.5 MINOR (footer date June 30, 2014)
  Description of the Amendment: The proposed Millennium General Development Plan Minor Amendment 9.5 (Footer date June 30, 2014) includes amending Section 9 — Residential Mixed Use Neighborhoods and Section 10 — Residential.

  Add new SECTION for Encroachments Permitted Into the Minimum Setbacks. See New Section 9.7 and New Section 10.13.

  1.) Add specific language that clarifies what is allowed as encroachments into the minimum setbacks for residential units.
  2.) Renumber subsequent sections following the new sections in Section 9 and Section 10.

  The Sections referenced above will be reprinted with approval of this amendment request. A complete copy of the amendment is filed with the City of Loveland Planning Department. A copy of this "Sign-off Sheet" shall be included in **Appendix `D' in Section 15 of the Millennium GDP**.

  Note: A technical correction was also required for Minor Amendment 9.5 to correct the section reference under the definition for "SETBACKS" in Section 13-DEFINITIONS to include the two new sections 9.7 and 10.13 as noted above.

- SIXTH AMENDMENT — 9.6 MINOR (footer date December 2014)
  Description of the Amendment: The proposed Millennium General Development Plan Minor Amendment 9.6 (Footer date December 2014) includes amending Section 15 — Appendix C: Planned Sign Programs.

  Add New Millennium East Sixth Subdivision Planned Sign Program

  1.) This planned sign program applies to signs within the **Millennium East Sixth Subdivision Regional Commercial Center**. Detailed sign criteria is included for site signage and tenant signage including those proposed for Bass Pro Shops. (For the purpose of this sign program, perimeter streets shall be considered US Highway 34, Centerra Parkway, and Sky Pond Drive.)

- SEVENTH AMENDMENT — 9.7 MINOR (footer date November 3, 2015)
  Description of the Amendment: The proposed Millennium General Development Plan Minor Amendment 9.7 (Footer date November 3, 2015) includes updating language as it relates to Mixed-Use Village Centers and adding a section for performance standards as detailed below:

  1.) Modify Section 12.3.3 A. 2. (b) to clarify the criteria to determine what Development Projects are required to go through the Public Review process as it relates to Mixed-Use Projects.
  2.) Addition of Performance Standards for the Mixed-Use Village Center, Section 16.
  3.) Modify Table 6-1 Minimum Setbacks Residential, adding language in the Notes to differentiate between Single Family Attached buildings with two dwellings and Single Family Attached with three or more dwellings as it relates to Side and Back Property Line Minimum Setbacks.

- EIGHTH AMENDMENT — 9.8 MINOR (footer date July 19, 2016)
  Description of the Amendment: The proposed Millennium General Development Plan Minor Amendment 9.8 (Footer date July 19, 2016) includes:

  1.) The first part of the amendment is to modify Section 13 Definition for "Single Family Attached Dwelling" to increase the number of attached units that may be constructed in a group to range from two to six units. This modification increases the number by 1, originally stated as attached in groups of two to five units.
  2.) The second part of the amendment includes a new definition in Section 13 for "Small Lot Cottage". The "Small Lot Cottage". This new dwelling type shall comply with the performance standards for "Single Family Attached Dwelling".

- NINTH AMENDMENT — 9.9 MINOR (footer date February 1, 2017)
  Description of the Amendment: The proposed Millennium General Development Plan Minor Amendment 9.9 (Footer date February 1, 2017) includes:

  1.) Modify Section 9.8 — "Standards for Specific Immediate Neighborhood Housing Types" for Single Family Detached lots less than 65' in width:

  9.8D3- Homes with two car garages — the garage doors shall not comprise more than 47% (was 40%) of one of the ground floor elevations facing a public street. Garages fronting on alleys (both public and private) are exempt from this condition.

  AND
  9.8D5
  ~~*Home elevations that face a public street with a second story living area constructed above the garage and the front façade of the living area is on the same vertical plane as the garage below it shall use an architectural roof element to separate the garage from the second floor.*~~

Two story facades with garage doors fronting on a public street shall be articulated using one of the following design features:

a) Incorporate a roof feature or trellis above the garage door to visually separate the garage from the story above.
b) Step back the face of the wall on the story above the garage door to vary the massing.
c) Incorporate a projecting box bay window above the garage door to add articulation.
d) Other similar design elements as approved by the DRC and the Director.

2.) Add Criteria in Section 10.15 "Facades" for Single Family Detached Dwellings less than 39' wide as follows:
10.15.B Single family detached dwellings less than 39' feet in width having two story facades with garage doors fronting on public streets shall be articulated using one of the following design treatments:

1. *Incorporate a roof feature or trellis above the garage door to visually separate the garage from the story above it.*
2. *Step back the face of the wall on the story above the garage to vary the massing.*
3. *Incorporate a projecting box bay window above the garage door to add articulation.*
4. *Other similar design elements as approved by the DRC and the City.*

3.) Modify Section 10.17 "Garages":

10.17.E On Single Family Detached lots less than 65' in width the following criteria shall apply:

10.17.E.3 Homes with two car garages — the garage doors shall not comprise more than 47% (was 40%) of one of the ground floor elevations facing a public street. Garages fronting on alleys are exempt from this condition.

4.) Modify Sections 9.7 AND 10.13 to add the following option under ENCROACHMENTS PERMITTED INTO THE MINIMUM SETBACKS *"One-story detached accessory structures used as a tool and storage sheds, playhouses and similar uses, (provided that floor area does not exceed 80 square feet) shall be allowed to encroach in a REAR YARD SETBACK so long as the accessory structure is a minimum of 5' from the rear property line and does not encroach in the minimum side yard setback. "*

- <u>TENTH AMENDMENT — 9.10 MINOR (footer date May 15, 2017)</u>
Description of the Amendment: The Millennium General Development Plan Minor Amendment 9.10 (Footer date May 15, 2017 includes the following:

1.) The first part of the amendment revises the boundary between Millennium GDP Parcels Cl and C4 so that it follows the future Kendall Parkway alignment on Map 6 of 10 in Section 11-Maps:

2.) The second part of the amendment modifies the density and lot size restrictions along Boyd Lake Avenue in portions of Parcel Cl for Single Family Detached Dwellings within 300 feet of the existing centerline of Boyd Lake Avenue adjacent to the existing Boyd Lake Shores Subdivision as follows;

a.) Section 9, Table 9-1 adjust the maximum density from 2 to 2.5 units per acre, and

b.) Section 4, Section 4.2.2 modify the minimum size of lots to 5,500 square feet from 6,000 square feet.

- ELEVENTH AMENDMENT — 9.11 MINOR (footer date February 6, 2018)
  Description of the Amendment: The Millennium General Development Plan Minor Amendment 9.11 (Footer date February 6, 2018 includes the following):

  1.) The amendment adds the Environmentally Sensitive Areas Report for Houts Reservoir "Area 4" Larimer County, Colorado dated February 6, 2018 to Section 14 of the Millennium General Development Plan. The report includes the following:

    a.) A 75' buffer from the Operating High Water Mark.
    b.) An additional 25' buffer from the wetland boundary.

  These two buffers combined produced a variable "Maximum Combined Recommended Development Setback" ranging from 75' to 160' from the operating high-water mark that encompassed all wetlands in the area.

  The Environmentally Sensitive Areas Report for Houts Reservoir "Area 4" supersedes the recommendations from the Environmentally Sensitive Areas and Wetland Report by Cedar Creek Associates, Inc dated January 1999 for "Area 4" of the Central Portion.

TENTH MAJOR AMENDMENT

- Ordinance No. 6168 ORDINANCE AMENDING SECTION 18.04.060 OF THE LOVELAND MUNICIPAL CODE, THE SAME RELATING TO ZONING REGULATIONS FOR A PORTION OF TRACT A OF THE SAVANNA SECOND SUBDIVISION, CITY OF LOVELAND LARIMER COUNTY, COLORADO — Rezoning from Millennium to I, Rec No. 20180022953, 2/28/2018
- Ordinance No. 6187 ORDINANCE AMENDING SECTION 18.04.060 OF THE LOVELAND MUNICIPAL CODE, THE SAME RELATING TO ZONING REGULATIONS FOR PORTIONS OF TRACTS A AND D AND PORTIONS OF OUTLOTS B AND C OF THE SAVANNA SECOND SUBDIVISION, CITY OF LOVELAND, LARIMER COUNTY, COLORADO - Rezoning from I to Millennium PUD, Rec No. 20180013675, dated 3/8/2018
- Ordinance No. 6188 ORDINANCE APPROVING THE ANNEXATION OF CERTAIN TERRITORY TO THE CITY OF LOVELAND, COLORADO, TO BE KNOW AND DESIGNATED AS "PFEIFF ADDITION" TO THE CITY OF LOVELAND Rec No. 20180013673 dated 3/8/2018
- Ordinance No. 6189 ORDINANCE AMENDING SECTION 18.04.060 OF THE LOVELAND MUNICIPAL CODE, THE SAME RELATING TO ZONING REGULATIONS FOR "PFEIFF ADDITION", CITY OF LOVELAND Rec No. 20180013674, 3/8/2018
- Ordinance No. 6190 approving the Amended General Development Plan for the Millennium Addition — 10th Amendment, Granting Certain Exceptions from the Loveland Municipal Code and Approving the Third Amendment to the Amended and Restated Annexation and Development Agreement for the Millennium General Development Plan, effective April 13, 2018 and recorded Rec # 20180022018 (Updated Vesting Period)
    - Section 1, Background Information was updated with current acreage numbers
    - Section 1, Reference to the City of Loveland Comprehensive Master Plan was updated to "Master Plan" and in Section 13 the Definition was amended to "Master Plan" means the City's master plan for the physical development of the City entitle CREATE LOVELAND adopted on July 19, 2016 by Resolution No R-65-2016, and all amendments thereto.
    - Section 1, Revisions to Special Condition 35, Acquisition of Easements/Rights-or Way
    - Section 3, Revised total acres for the B Parcel, New Special Condition for Parcel B-3 Replat required for development of Tract D of the Savanna Second Subdivision
    - Section 4, Total Parcel Acreage updated, Existing Land Use Information Updated to include residential.
    - Section 4, New Special Condition under Planning for Parcel C-4, Replat required for development for Tract A of the Savanna Second Subdivision
    - Section 5, Total Parcel Acreage updated due to the Pfeiff Addition (Parcel D-10), Increase in the Number of allowed residential units, New ESAR referenced for Parcel D-10
    - Section 5, Several Existing Special Conditions updated to include applicability to D-10 and New Special Condition added under Transportation and Water/Sewer specifically for Parcel D-10
    - Section 11, Updated all Maps to reflect revised boundaries of parcels due to the rezoning.
    - Section 12, Reference to the City of Loveland Comprehensive Master Plan was updated to "Master Plan" and in Section 13 the Definition was amended to "Master Plan" means the City's master plan for the physical development of the City entitle

CREATE LOVELAND adopted on July 19, 2016 by Resolution No R-65-2016, and all amendments thereto.

- Section 14 ESAR for Parcel D-10 Added

- Resolution #R-18-2018 Fourth Amendment to the Agreement Regarding Environmental Fees approved by City Council on February 20, 2018, Rec. No. 20180016485 dated 3/22/2108

MILLENNIUM GDP - MINOR AMENDMENTS TO THE MILLENNIUM ADDITION PUD 10TH MAJOR AMENDMENT

- FIRST AMENDMENT — 10.1 MINOR (footer date April 11, 2018)
  Description of the Amendment: The Millennium General Development Plan Minor Amendment 10.1 (Footer date April 11, 2018 includes the following):

  1.) The amendment revises the definition for Senior Housing of a Non-Residential Nature in Section 13 of the Millennium General Development Plan. The revision includes the following:

  a) Eliminates Independent Living Communities from the list of examples for Senior Housing of a Non-Residential Nature definition.

  b) Eliminates the statement "may not include a kitchen" from the definition.

- SECOND AMENDMENT — 10.2 (FOOTER DATE November 6, 2019)
  Description of the Amendment: The Millennium General Development Plan Minor Amendment 10.2 (Footer date November 6, 2019 includes the following):

  1.) The amendment modifies Map 4 of 10 in Section 11 of the Millennium General Development Plan as follows:

  a) Modify the boundary between Sub-parcels A2 and A3 to align with Centerra Parkway. This would decrease the size of Sub-parcel A3 and increase the size of Sub-parcel A2 (50 acres respectively). Shift 215 of the approved residential units from Sub-parcel A3 to Subparcel A2 while maintaining the same number of Maximum dwelling units overall for Parcel A.

  b) The maximum number of residential units allowed in the new Sub-parcel A2 and Sub-parcels A5, A6, A7 and A8 shall be reviewed in aggregate rather than Sub-parcel by Sub-parcel. The total maximum allowable number of residential units in Parcel A will remain 3,781 dwelling units per General Note #1 on Map 4 of 10.

ELEVENTH MAJOR AMENDMENT

Description of the Amendment: The Millennium General Development Plan Major Amendment 11 (Footer date February 2025 includes the following):

1.) Section 1 –
  a) Adjusts the maximum number of residential units permitted in the Millennium GDP to 10,382.
  b) Single-family detached dwellings are allowable uses in mixed use village centers.

3.) Section 3 – Increases the maximum number of residential units permitted in Parcel B from 1,080 to 3,357.

4.) Section 11 –
  a) b) Map 5 – Increases the maximum number of residential units permitted in Parcel B from 1,080 to 3,357.

6.) Section 15 – Includes Major Amendment 11 in Appendix D (Amendment History).

MILLENNIUM GDP - MINOR AMENDMENTS TO THE MILLENNIUM ADDITION PUD 11TH MAJOR AMENDMENT

- FIRST AMENDMENT – 11.1 (FOOTER DATE May 2025)
  Amendment 11.1 includes various changes. Sections revised:
  - *Section 1* – Clarifies that oil and gas facilities and plugged and abandoned wells are allowable uses in the Millennium GDP.
  - *Section 3* – Includes the environmental fees applicable to Subparcel B-13.
  - *Sections 6, 9 and 10* – Include oil and gas setbacks for residential and nonresidential uses.
  - *Section 11* – Updates the vested rights reference to conform with current UDC requirements and removes the residential hatching on Map 5.
  - *Section 13* – Includes a definition for oil and gas facilities, plugged and abandoned wells, and a reference to Section 16 for performance standards.
  - *Section 15* – Includes Minor Amendment 11.1 in Appendix D (Amendment History).
  - *Section 16* – Specifies standards for MUVCs.

- SECOND AMENDMENT – 11.2 (FOOTER DATE February 2026)
  Amendment 11.2 includes various changes. Sections revised:
  - *Section 8* – Replaces an outdated reference to Type 1 zoning permit with a reference to the UDC.
  - Section *12* – Defines what constitutes a conflict or inconsistency between the GDP, the UDC, and the Municipal Code, and how such conflicts should be handled.
  - *Section 12* – Clarifies the role of the Centerra DRC and documents the role of the City DRC Appointee.
  - *Section 12* – Clarifies the review process for deviations from performance standards set forth in the GDP, and the City and Centerra DRC's role in approving the deviation.
  - *Section 12* – Clarifies the appeal process for administrative decisions.
  - *Section 13* – Where necessary or convenient to support or illuminate the substantive revisions, new definitions have been added.
  - *Section 15* – Includes Minor Amendment 11.2 in Appendix D (Amendment History).
  - *Section 15* – Adds the review timelines as an appendix.
  - *Section 15* – Change the font color from gray to black on the amendment sign-off sheet.

- THIRD AMENDMENT – 11.3 (FOOTER DATE February 2026)

Amendment 11.3 creates a specific planned sign program for temporary signage for Subparcel B-13. Sections revised:

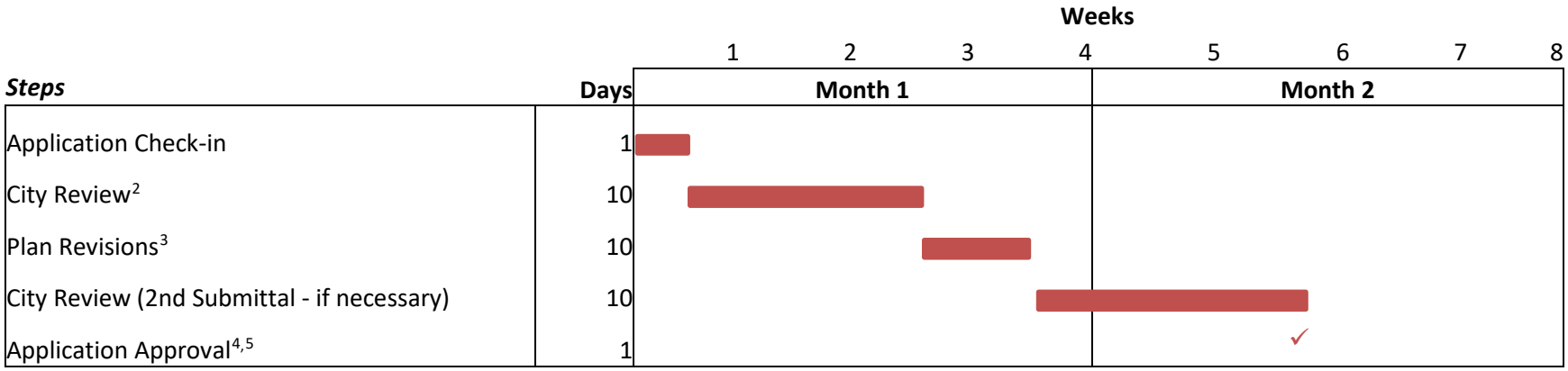
  - *Section 15* – Includes a specific planned sign program for temporary signage at Subparcel B-13.
  - *Section 15* – Includes Minor Amendment 11.3 in Appendix D (Amendment History).

APPENDIX E

TIMELINES

Building Permit Review Processes[1]

SF Residential Building Permit = 32 Business Days or approximately 45 calendar Days



Steps	Days
Application Check-in	1
City Review[2]	10
Plan Revisions[3]	10
City Review (2nd Submittal - if necessary)	10
Application Approval[4,5]	1
Total	**32**

[1] *Building Permit review turnarounds do not shorten with subsequent reviews as other applications do.*

[2] *Includes Master Permit review timeline for single family, Duplex, or other attached single family dwellings.*

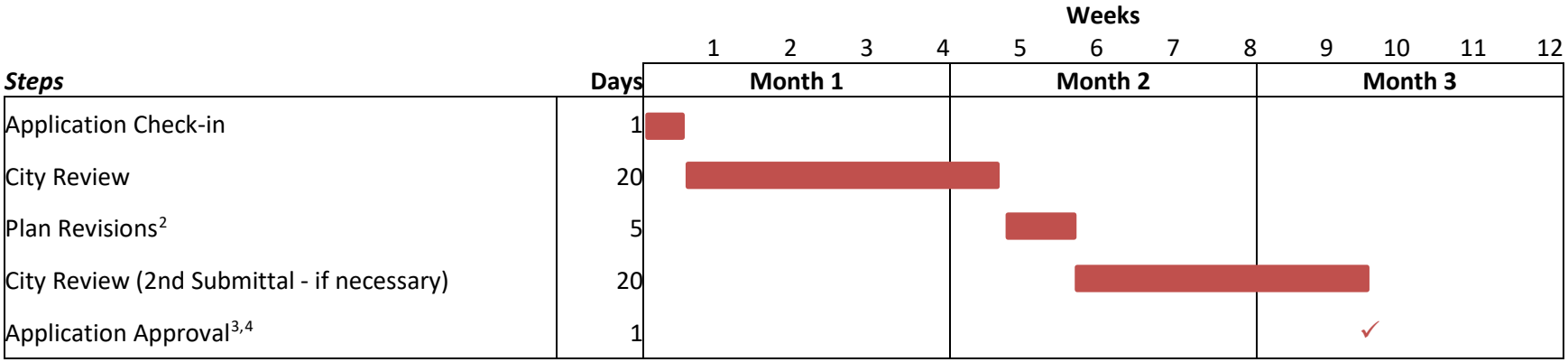
[3] *Plan revisions are the responsibility of the Applicant. The City estimates a 1 week turn-around that is dependent on the Applicant completing their revisions.*

[4] *Applications are not guaranteed approval after the 2nd Submittal and may require subsequent reviews.*

[5] *Section 12.3.6 of the GDP outlines the Review Timelines administration criteria. Applicants of development projects are encouraged to review this criterion.*

Building Permit Review Processes[1]

Commercial and MF Building Permit = 47 Business Days or approximately 65 calendar Days



[1] *Building Permit reviews may run concurrently with a development application, as applicable. Building Permit review turnarounds do not shorten with subsequent reviews as other applications do.*

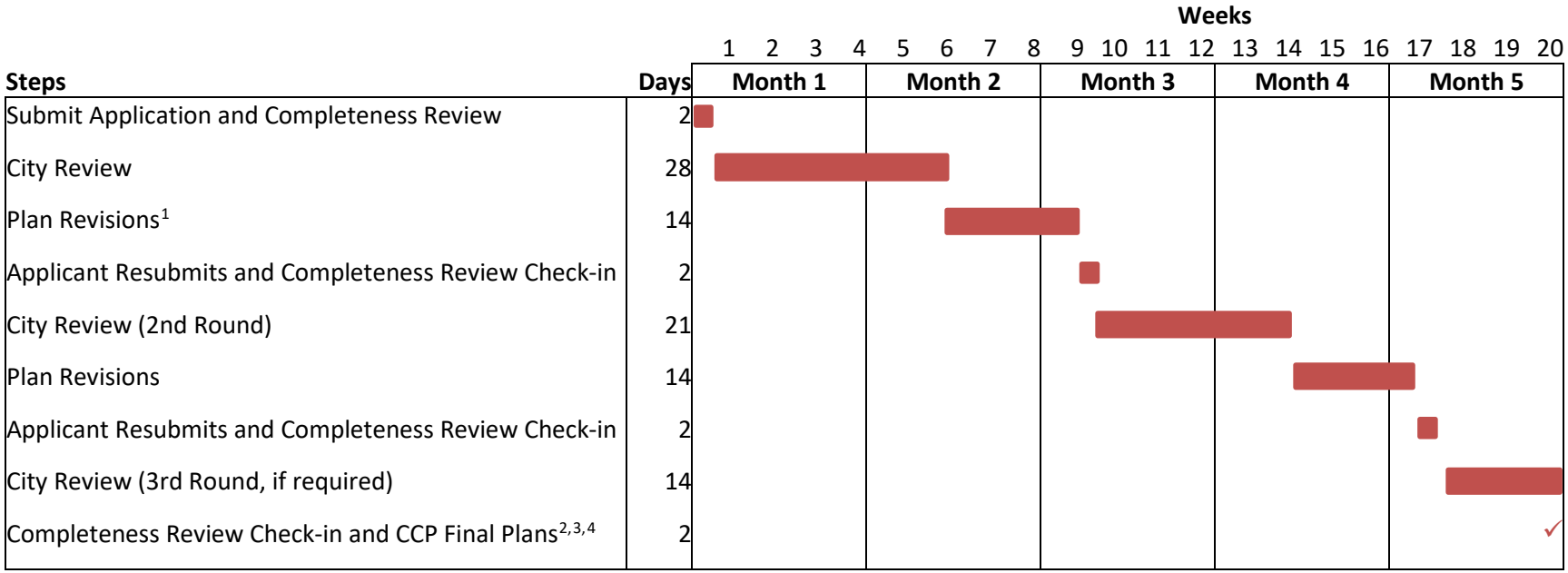
[2] *Plan revisions are the responsibility of the Applicant. The City estimates a 1 week turn-around that is dependent on the Applicant completing their revisions.*

[3] *Applications are not guaranteed approval after the 2nd Submittal and may require subsequent reviews.*

[4] *Section 12.3.6 of the GDP outlines the Review Timelines administration criteria. Applicants of development projects are encouraged to review this criterion.*

CCP Review Processes

Civil Construction Plans (CCP) - No Plat = 99 Business Days or approximately 137 calendar Days



Steps	Days
Submit Application and Completeness Review	2
City Review	28
Plan Revisions[1]	14
Applicant Resubmits and Completeness Review Check-in	2
City Review (2nd Round)	21
Plan Revisions	14
Applicant Resubmits and Completeness Review Check-in	2
City Review (3rd Round, if required)	14
Completeness Review Check-in and CCP Final Plans[2,3,4]	2
Total	**99**

[1] *Plan revisions are the responsibility of the Applicant. The City estimates a 1 week turn-around that is dependent on the Applicant completing their revisions.*

[2] *Approval requires submittal of signed plans; Building Permits issued, after approval or recording, as applicable, of plans.*

[3] *As applicable, executing and recording final documents by the City shall occur within 14 Days of receipt in accordance with Section 12.3.3.F of the GDP.*

[4] *Section 12.3.6 of the GDP outlines the Review Timelines administration criteria. Applicants of development projects are encouraged to review this criterion.*

Subdivision Development Agreement (SDA)

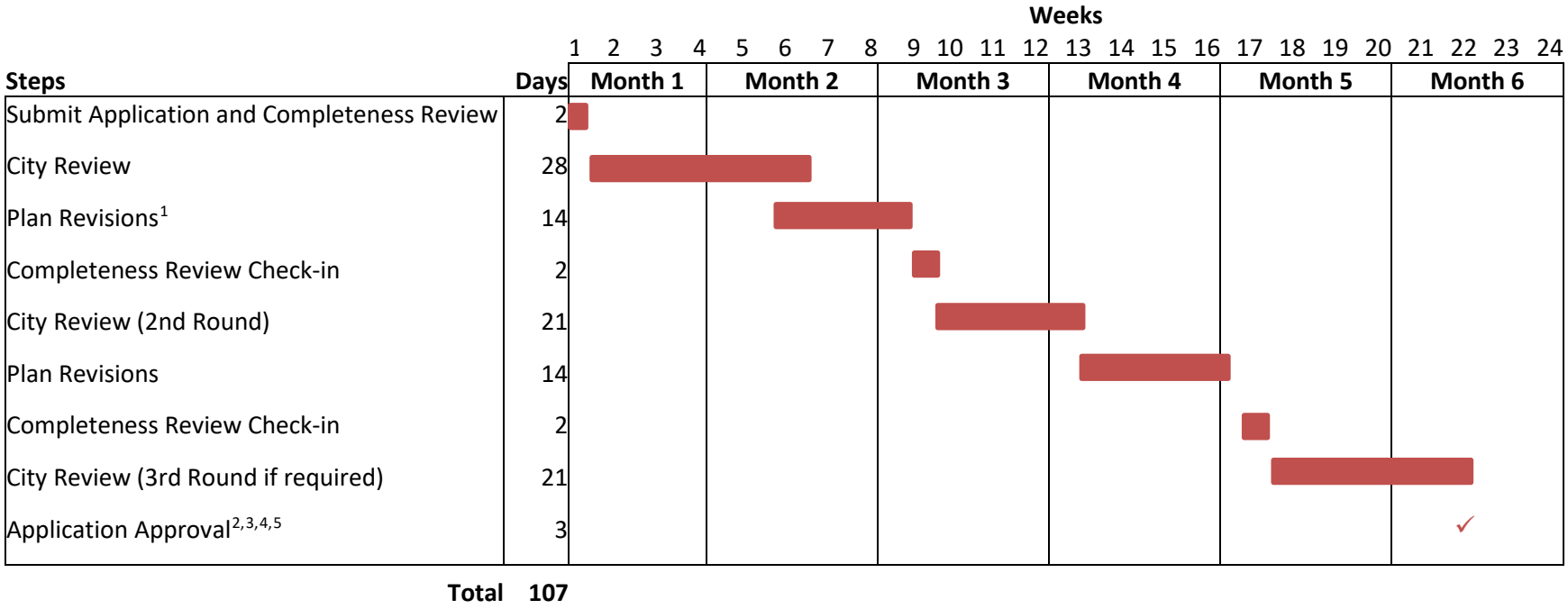
30 Business Days or approximately 42 calendar Days

Steps	Days	Weeks 1 2 3 4 — Month 1	5 6 7 8 — Month 2	9 10 11 12 — Month 3	13 14 15 16 — Month 4	17 18 19 20 — Month 5
SDA Sent to Applicant with 2nd Round Review Comments	1					
Applicant Review and Redline of SDA	14					
City Review of Applicant Comments	14					
Application Approval[1]	1					✓
Total	**30**					

[1] As applicable, executing and recording final documents by the City shall occur within 14 Days of receipt in accordance with Section 12.3.3.F of the GDP.

Administrative Subdivision Review Processes

GDP Sketch Plat and Final Plat, combined GDP Sketch Plat and Final Plat, Minor Subdivision = 107 Business Days or approximately 149 calendar Days



[1] *Plan revisions are the responsibility of the Applicant. The City estimates a 1 week turn-around that is dependent on the Applicant completing their revisions.*

[2] *Includes 3-Day Appeal Period and public noticing.*

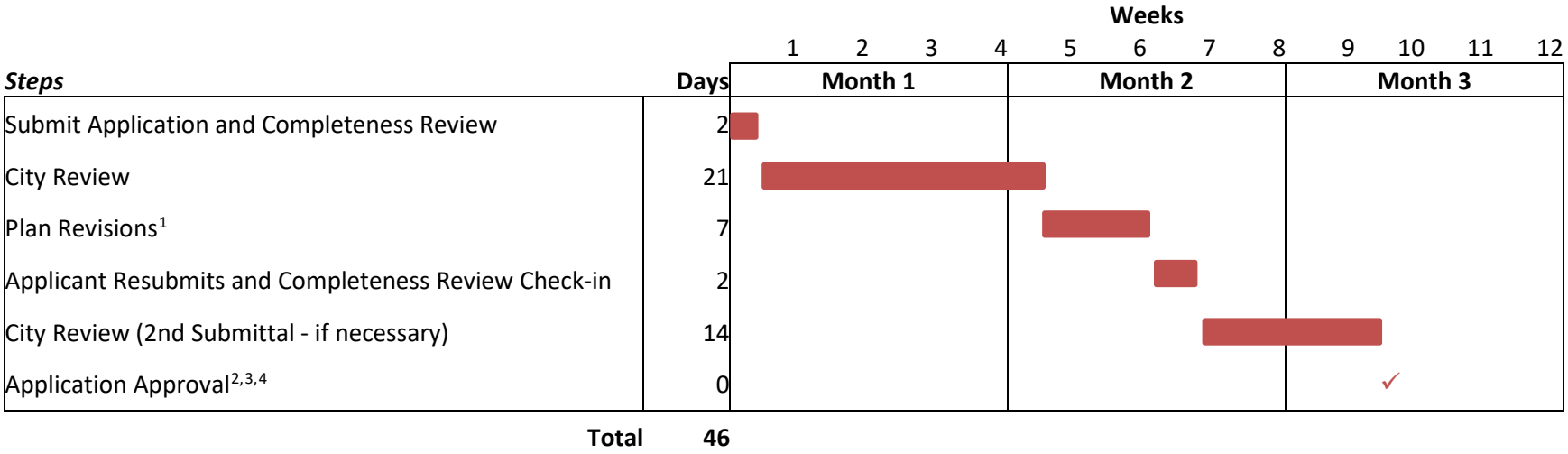
[3] *Appeal procedures do not have a definitive timeframe.*

[4] *As applicable, executing and recording final documents by the City shall occur within 14 Days of receipt in accordance with Section 12.3.3.F of the GDP.*

[5] *Section 12.3.6 of the GDP outlines the Review Timelines administration criteria. Applicants of development projects are encouraged to review this criterion.*

Administrative Review Processes

Boundary Line Adjustment, Lot Merger, Site Development Plan = 46 Business Days or approximately 64 calendar Days



Steps	**Days**
Submit Application and Completeness Review	2
City Review	21
Plan Revisions[1]	7
Applicant Resubmits and Completeness Review Check-in	2
City Review (2nd Submittal - if necessary)	14
Application Approval[2,3,4]	0
Total	**46**

[1] *Plan revisions are the responsibility of the Applicant. The City estimates a 1 week turn-around that is dependent on the Applicant completing their revisions.*

[2] *Permits requiring a subdivision or platting process will be issued after recording of the signed plans.*

[3] *As applicable, executing and recording final documents by the City shall occur within 14 Days of receipt in accordance with Section 12.3.3.F of the GDP.*

[4] *Section 12.3.6 of the GDP outlines the Review Timelines administration criteria. Applicants of development projects are encouraged to review this criterion.*

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SECTION 16
MIXED USE VILLAGE CENTER

16.1 PURPOSE

The purpose of this section is to provide comprehensive standards for the development of a Mixed Use Village Center ("MUVC") within the GDP.

16.1.1 Overview

The Mixed Use Village Center is a compact walkable community. A variety of residential and nonresidential land uses may be mixed both horizontally and vertically. Streetscapes and gathering places have a strong pedestrian focus.

16.1.2 Goals

The goals of a MUVC are to:

- Create an urban style framework to attractively and vibrantly integrate commercial, employment and residential uses.
- Focus on the pedestrian experience.
- Serve as the village center or "heart" for the largely suburban surrounding community.
- Create desirable amenities for attracting primary employers.

16.2 APPLICABILITY

Design Standards included in this Section 16 apply to all areas designated in the GDP as MUVC and only to those areas. Design Standards included in Sections 6, 7, 8, 9 and 10 apply to MUVC Areas only to the extent specified in Section 16. The mixed use expression of MUVCs is not reinforced by some of the Millennium GDP-wide standards and not appropriate to apply to a MUVC.

If Subparcel B-13 or any portion thereof is not developed as a MUVC, any permitted uses listed on Map 5 in Section 11 and further described in Section 1.3 of this GDP will be permitted on Subparcel B-13.

16.3 LAND USE

Providing a variety of land uses within a comfortable walking distance promotes pedestrianism, discourages the use of the automobile and supports the use of other modes of transportation. The result is a community that is more human scale and has a more active and inviting street life.

16.3.1 Permitted Uses

Permitted uses within a MUVC are listed on Maps 4-7 in Section 11 and further described in Section 1.3.5 of this GDP.

16.3.2 Mix of Uses

A mix of uses may be provided vertically by buildings which are occupied by multiple uses or it may also be provided horizontally by locating single use buildings occupied by differing uses within the same area.

16.3.3 Density of Development

Maximum densities for residential uses are typically calculated in units per acre while non-residential densities are expressed in floor area ratios (FAR).

As is the case in the rest of the GDP, no FAR density caps are set for an MUVC with non-residential uses and no caps of units per acre are set for an MUVC with Residential Uses.

16.4 EVOLUTION AND DENSIFICATION IN PHASES

16.4.1 Densities

The MUVC is a long term development project. A strategic phasing of improvements is critical to its success. The ultimate densities proposed for the MUVC may require structured parking. If structured parking is not included in the initial development phase then it is intended that the MUVC will include interim surface parking approaches with later infill of structured parking garages and/or occupied buildings.

16.4.2 Context Diagram

With the submittal of an application for a subdivision plat for the first phase of the MUVC, a Context

Diagram will be required depicting the following for the proposed build out:

1. Boundary of the MUVC.
2. Proposed land uses.
3. Block pattern.
4. Open space areas.
5. Linkages (pedestrian and vehicular) to immediately adjacent areas.
6. Important views and vistas.
7. Environmentally Sensitive Areas (as identified in this GDP).
8. Vision statement including imagery boards.
9. Street cross sections

16.5 MIXED USE VILLAGE CENTER PLANNING PRINCIPLES

This Section of the GDP is intended to facilitate the creation of a distinct MUVC within the context of the greater community by complementing existing development in the Millennium GDP while establishing its own unique traditions, environment and character. The MUVC is comprised of a mix of land uses designed to serve a diverse population. It includes good pedestrian orientation and connectivity, the accommodation of multiple modes of travel, and the physical and functional integration of uses through careful site layout and the design of buildings, streets and urban open space amenities. Planning principles to be used in the design of the MUVC are described in the following sections.

16.5.1 Block Patterns

Development in the MUVC shall be arranged in a pattern of interconnecting streets and blocks, while maintaining respect for the natural landscape, topography, views and surrounding development patterns. The framework for each MUVC shall be a well-defined pattern of walkable blocks and intersecting streets. The grid, modified grid or network of streets and blocks will provide safe, efficient, and convenient vehicular access and circulation patterns and promote a pedestrian friendly environment.

Sight lines within the MUVC shall be carefully considered, terminating axial views on architectural massing features, important natural features, sculptural icons, mountain vistas, and similar elements.

Blocks shall be of a comfortable length to promote pedestrian travel, generally between 200 and 600 feet in length unless otherwise approved by the DRC and the City. Primary parking facilities for uses within the MUVC will generally be provided as on street parking along the local streets and in parking lots or garages immediately adjacent to the use or on nearby blocks.

Block size and geometry may vary to accommodate natural features, topography, surrounding development patterns, etc. Blocks may also be combined to provide a site for a larger user.

16.5.2 Pedestrian Orientation

The single most important element in the physical and functional integration of mixed use development is the pedestrian orientation. The overall layout of a MUVC is built around a vibrant pedestrian realm that includes the pedestrian-friendly improvements necessary to generate a high level of pedestrian activity. The framework for a pedestrian- oriented layout has four main components:

A. A block structure that reflects a walkable arrangement and positioning of uses;
B. A streetscape that includes street trees and appropriate site furniture;
C. Building placement, orientation, and design to enhance and activate the pedestrian environment and streetscape; and
D. A street network to define the block edges, create continuous pedestrian connections, and integrate pedestrian travel with other modes of transportation.

16.6 STREET DESIGN

Access and connectivity are keys to developing a viable MUVC. Access points must be safe for vehicles, bicycles and pedestrians. The MUVC must also maintain direct connectivity and safe access to

surrounding developments and destinations. A well-defined and logical layout of streets is vital to meeting these circulation goals.

Streets within the MUVC may be public, private, or a combination of the two.

US 34 is the sole perimeter roadway within Subparcel B-13 and the standards in Section 16.6.5 shall apply to US 34.

16.6.1 Street Standards

The character of the street will be defined through criteria for dimensional characteristics, streetscaping standards, and the fronting of building facades for each MUVC. Different MUVC's within the GDP may require different and unique approaches to street design. The criteria and detailed cross sections for MUVC streets shall be submitted as part of the Context Diagram for each MUVC as described in Section 16.4.2

For purposes of this GDP the term "street" shall include local streets (whether public or private) but shall NOT include service drives, alleys, driveways or drive lanes within parking facilities.

Regular and frequent programmed events and activities within the public spaces of the MUVC are necessary to provide a rich community life. It is anticipated that street closures within the MUVC will be needed to facilitate the success of these events. If the streets are public, the City will cooperate to facilitate the approval of the temporary closures.

Certain streets within the MUVC may want to activate the pedestrian experience with enhanced elements such as streetlight pole banners and hanging baskets, "Tivoli" or similar light strands and banners suspended above the street, and/or other such amenities. The City will cooperate to facilitate the approval of the installation of these elements. Maintenance of all such elements will be the responsibility of an owners' association and/or metropolitan district. Any such enhanced elements must meet the Fire Department vertical clearance requirements for Fire Access Roads.

16.6.2 Street Policies

Streets within MUVCs may be privately owned and maintained by parties other than the city. Streets within MUVCs shall, in general, conform to the Millennium GDP Standards and Specifications or as approved by the city.

A TIS for public roads or accesses onto public streets, including internal traffic elements that impact public roads, shall be submitted to the city. All other internal private roads and traffic calming measures shall be waived from the requirements for the TIS.

Traffic calming measures may be implemented within MUVCs as needed and as approved by the city. These may include, but are not limited to, mini-roundabouts or traffic circles, street narrowing, slower posted speed limits, and intersection bulb-outs. Private internal roundabouts may be considered "mini-roundabouts" and treated as traffic calming devices.

16.6.3 Emergency and Utility Access

The standards for emergency and utility access set forth in Section 7.9 shall apply in MUVCs unless otherwise approved by the Fire District.

16.6.4 Site Triangles

The standards for sight triangles set forth in Section 7.13 shall apply in MUVCs with the following exception.

In MUVCs, travel speeds will be restricted by the dense, urban nature of these developments. Modified sight triangles may be appropriate to respond to these conditions in order to achieve an active, animated streetscape, concentrations of outdoor uses, and an overall density of a use that is consistent with the intent of the MUVC. The Millennium DRC and the city are authorized to approve modifications to standard sight triangle criteria defined by the Millennium GDP Standards and Specifications as amended.

16.6.5 Perimeter Roadways

The interface between MUVC's and the surrounding areas is a critical juncture. MUVCs should exhibit their own culture and feel and they should transition well into the remainder of the community. Therefore, special attention should be given to the design of the edge where a MUVC adjoins the bordering public streets and where the primary access points enter the MUVC.

The following standards apply to perimeter roadways and public access parkways.

A. Shall be designed per the Millennium GDP Standards and Specifications unless otherwise approved by the city.
B. Landscaping along perimeter roadways should be an extension or transition of the landscape concepts established or planned along the abutting public street. There should be a seamless connection across the property line to visually integrate the landscaping within the adjoining street right of way and the on-site landscaping at the perimeter of the MUVC

Any parking lot adjacent to a perimeter roadway of the MUVC shall be screened as detailed in Section 6.17. Street lighting typical within the GDP (which may differ from the city standard) will be used for public perimeter roadways.

16.7 SHARED COMMON AREAS

An attractive public realm is a fundamental ingredient in the success of a MUVC. Open air and semi-enclosed public gathering spaces can act as central organizing elements in a MUVC. They can also help to shape the relationship between different uses and provide focal points and anchors for pedestrian activity. On-site amenities can create a strong image and unique character for a MUVC, making it a special place for the community.

Shared Common Areas create an inviting image for customers, residents, visitors and employees, enhance the pedestrian environment and streetscape, and offer attractive spaces for people to gather, interact, rest, shop and eat, and contribute to the character of the MUVC. They can serve as venues for planned activities and be available for casual interactions and people watching when no events are scheduled.

A minimum of one Shared Common Area must be provided within the MUVC for every 650,000 square feet of non-residential uses and may include a plaza, village green or park lawn. These shall be developed according to the following standards.

16.7.1 Plazas

A plaza is an accessible Shared Common Area that is predominantly paved. Specialty pavement such as brick pavers, colored or textured concrete, interlocking pavers, flagstone, and other similar high quality materials are encouraged to be the dominant pavement material. Plazas are ideal gathering spaces for medium-sized groups with high intensity activities. Plazas shall be a minimum of one third acre in size unless otherwise approved by the DRC and the City.
(See Figures 16.7 a-c).



Figure 16.7a Plazas



Figure 16.7b Plazas



Figure 16.7c Plazas

16.7.2 Village Greens

A village green is an accessible Shared Common Area that uses a combination of paved areas, landscaped areas and turf. Specialty pavement is encouraged. Village greens are ideal gathering spaces for large or medium sized groups with moderate to high intensity activities. Village Greens shall be a minimum of one half acre in size unless otherwise approved by the DRC and the City. (See Figures 16.7 d-g).



Figure 16.7d – Village Greens



Figure 16.7e – Village Greens



Figure 16.7f – Village Greens



Figure 16.7g – Village Greens

16.7.3 Park Lawns

A park lawn is an accessible Shared Common Area that is predominately landscaped areas and turf. Paved areas are typically limited to the perimeter of the space to facilitate access. The use of specialty pavement is encouraged, but not necessary. Park lawns are ideal as informal gathering spaces and casual recreation. Typically, they are used by individuals or small groups of people for low intensity leisure activities. Park Lawns shall be a minimum of one half acre in size unless otherwise approved by the DRC and the City.

(See figures 16.7 h-j).



Figure 16.7h – Park Lawns



Figure 16.7i – Park Lawns



Figure 16.7j – Park Lawns

16.7.4 Shared Common Area Pedestrian Amenities

Shared Common Areas shall be designed to incorporate a rich assortment of amenities for shoppers, residents, visitors, and employees. The package of amenities should relate to the function of the open space. For example, a plaza designed as a children's play area should include play equipment, benches and shade for observers, trash receptacles and recycling containers, and potentially a drinking fountain or water feature.

Each Shared Common Area shall have a focal element such as a pavilion, clock tower, fountain, specimen tree, sculpture or similar. In some cases, the focal element may be a dominant architectural feature which

is part of a signature building framing or occupying a portion of the Shared Common Area. To serve as the focal element, the feature must be visible and easily recognizable as a landmark for the public open space. It may be framed by a view corridor, placed on a high point, or visually related to major circulation routes in the area.

At a minimum, Shared Common Areas shall also incorporate the following amenities:

- Places to sit – either benches, movable tables and chairs, or seat walls.
- Trash receptacles and recycling containers
- Specialty pedestrian-scale lighting.
- Seasonal color such as annual flowers, hanging baskets of potted plants, banners, seasonal decorations or lighting.
- Appropriate landscape plantings.
- Bicycle racks.

16.8 OPEN SPACE REQUIREMENTS

16.8.1 Private Open Space

Private Open Space requirements are listed in Table 6-3 of this GDP.

16.8.1 Allowable Private Open Space Elements

Open space elements that may be included for the purpose of calculating Open Space in the MUVC include:

A. Pedestrian plazas and entry courts, patios, outdoor gathering spaces;
B. Pedestrian/transit facilities where they represent a bus stop area (smaller than 500 square feet);
C. Sidewalks, trails, seating areas, fountains, pools, and information/exhibit kiosks;
D. Passive and active recreation areas;
E. Environmentally Sensitive Areas and associated buffers;
F. Detention areas, drainages, wetland water quality areas, ponds and irrigation ditches;
G. Landscaped areas planted with living plant material. Landscape materials shall be planted at a density that will cover 75% of a mulch bed within a 3-year period;
H. Turf areas;
I. Other similar uses as approved by the Millennium DRC and the City.

16.9 LANDSCAPING

Landscaping along streets within the MUVC shall consist of street tree plantings in raised planters, landscape beds, or within tree grates. Street trees should be planted with a maximum spacing of 30' along each side of the street unless building entries, utilities, driveways, intersections or other similar conditions create the need for something different. A consistent look will be achieved with species selection but large monocultures will be avoided to reduce the impact of disease and pests.

Landscaping within plazas, village greens and park lawns must be designed to complement and enhance the functionality and experience of the space and surrounding area.

The following sections regarding landscaping from the GDP will also apply:

A. Section 6.11.4 I-25 Setback Treatment
B. Section 6.13 Landscaping – introductory section only
C. Section 6.13.1 – Landscape Design and Materials
D. Section 6.13.4 – Retaining Walls
E. Section 6.13.5 – Ownership and Maintenance
F. Section 6.14 – Existing Vegetation
G. Section 6.15 – Irrigation
H. Section 6.16 – Internal Parking Lot Landscaping except that interim parking lots are exempt from this criteria.

Only the sections listed above from Section 6 of this GDP shall apply. Those not listed do not apply to a MUVC.

16.10 BUFFERYARDS

Per Section 6.8.3 of this GDP, bufferyards are not required in a MUVC except along adjacent Perimeter Roadways.

16.11 LIGHTING

The MUVC may include a decorative fixture style for use along the streets within the MUVC that is different from the Millennium GDP's standard street light. Any such fixture must be approved by the Millennium DRC and the city.

Lighting criteria for MUVC's is listed in Section 6.28 of this GDP.

16.12 BUILDING STANDARDS

To a large extent, the ambiance of the MUVC's will be defined by the variety and quality of architecture the buildings exhibit. The architectural character should be authentic and timeless with visual variety and richness. It could be comprised of traditional and contemporary architectural expressions orchestrated in a pleasing, cohesive and complementary composition. The following criteria applies to both non-residential and residential uses.

16.12.1 Architectural Characteristics

The block pattern of the MUVC provides a framework for flexibility of uses and variety in architecture. A mix of multiple storied residential and employment buildings and parking structures may be built over time in a range of architectural styles. The varied styles should blend together to create a pleasing composition. Overall cohesiveness for the pedestrian will emanate from the design of the streetscape including paving material and patterns, street furniture, lighting, landscaping and signage.

Architectural continuity, including exterior building materials and colors, around the building is critical. The ground floor of buildings along MUVC streets should be articulated to exhibit sufficient variation in color, texture, form and materials to create interest. Even though continuous storefronts and active retail uses are not required or expected throughout the MUVC, the façades should still be appropriately modulated and designed. Opportunities for ground floor transparency is desirable and encouraged. Parking garages at ground level, surface parking lots and service areas may be located along the street frontages. Plain, blank, featureless facades facing streets are not allowed. Upper stories of facades within the MUVC may be detailed to a lesser level but still complimentary in appearance to the ground floor if the building is an occupied structure. If the building is a parking garage, upper stories may be more simplistic in their design but will still be architecturally compatible through color, materials, etc.

16.12.2 Parking Structures

Dominant architectural or structural elements that form the façade of a parking garage that faces a street shall appear to be horizontal (not sloping with ramps internal to the structure) unless otherwise approved by the Millennium DRC and the city. Parked cars must be screened from view from streets by the facade of the parking garage. Parking garage facades should complement and blend with the architecture of the adjacent buildings.

Vehicular entrances to parking garages should be appropriately signed from the street. The design of the parking garage should orient the major vertical circulation toward logical pedestrian access points to occupied buildings and pedestrian passageways. Lighting on open air top decks shall have internally located poles. Light poles are not allowed on perimeter walls.

Figure 16.11a-d depicts facades of parking structures that are acceptable within the MUVC.



Figure 16.11a - Parking Structures: Where possible, screen with canopy and/or evergreen trees.



Figure 16.11b – Parking Structures: Simple, clean lines with a horizontal dominant design.



Figure 16.11c – Parking Structures: Enhanced corner stair tower and/or corner elements. Balanced pattern of horizontal and vertical panels.



Figure 16.11d – Parking Structures: Vertical column façade approach.

16.12.3 Applicability of Other GDP Criteria

The architectural standards listed Section 8 from this GDP shall apply to buildings (excluding parking structures) within the MUVC:

A. Section 8.4 Building Materials;
B. Section 8.5.4 Facades;
C. Section 8.5.5 Awnings;
D. Section 8.6 Base Treatments except that contemporary style architecture is exempt from this requirement.
E. Section 8.7 Roof and Top Treatments except that parking structures are exempt from this requirement.
F. Section 8.9 Encroachments;
G. Section 8.10 Building Massing/Scale
H. Section 8.12 Temporary Uses/Structures.

Only the sections listed above from Section 8 of this GDP shall apply. Those not listed do not apply to buildings in the MUVC. Sections 9 and 10 of this GDP shall not apply to residential uses in the MUVC.

16.12.4 Primary Building Entries

Primary building entries within the MUVC shall be clearly defined, providing greater visual and textural interest than the surrounding building wall. Textural, color and massing changes should provide visual interest and promote a “human scale” at the building entries.

Architectural treatments that can be used to achieve the desired articulation of building entries include design elements that create a change in plane and design elements that create a change in appearance. At least one treatment of each type shall be employed at each primary building entry. Acceptable treatments for each type include:

Change in Plane:

- Canopies or overhangs.
- Recesses or projections.
- Arcades or porticos.
- Arches.
- Other features as approved by the Millennium DRC and the city.

Change in Appearance:

- Color change.
- Texture change.
- Material change.
- Architectural details such as tile work, moldings, columns and other similar features.
- Other features as approved by the Millennium DRC and the city.

16.12.5 Roof Top Decks and Gardens

Roof top decks and gardens may be provided on buildings within the MUVC.

These shared and/or private areas can provide dramatic gathering spaces for special events and leisure or recreational activities. Roof top decks and gardens should be designed to be safe, functional and attractive to users.

Roof top space may be used for restaurants, bars, hospitality event function areas, pools and spas, gardens/green roofs or other similar purposes. All roof top decks and gardens must be approved by the Millennium DRC and the city.

16.12.6 Setbacks

Setbacks are listed in Table 6-1 of this GDP.

Setbacks do not apply to street furniture and character elements including planter walls, stoops, steps, café seating, fencing, driveways and alleys, sidewalks, Signs, bay windows, architectural elements, eaves, chimney's, flues and ventilation ducts, utility lines & other similar items. These elements may be located adjacent to the building façade and within the setback area with a minimum through walkway area width of 5'.

16.12.7 Building Heights

Maximum building heights for buildings are specified in Table 6-2 of this GDP; provided that Commercial uses and mixed use uses in a MUVC are allowed a maximum Building Height of 85'. Multi-Family Residential Uses are allowed a maximum Building Height of 70'. Single Family Attached Dwellings and Single Family Detached Dwellings are allowed a maximum Building Height of 45'. Mechanical penthouses, lightning protection, equipment screening, and similar appurtenances may extend above the roof of the highest floor by up to 16'.

16.12.8 Public Transit Facilities

Public transit facilities provide an additional transportation choice for shoppers, residents, visitors, and employees in the MUVC. Public transit facilities should be designed and operated to maximize the convenience of the transit rider to the extent practicable.

16.12.9 Service Areas

Any service area, loading dock, generators, trash containers and similar items must be enclosed and fully screened with building walls that match or are stylistically compatible with the architectural style of the remainder of the building. Minimum screen wall height shall be at least as tall as the objects being screened. Roofs on service areas are encouraged, but not required. Access to the service areas shall be provided via high quality, solid metal roll up or swinging doors (or equal) that blend with or match the surrounding building wall. No open service areas are allowed.

Service doors and emergency exits shall be designed to coordinate with the surrounding building wall, and be as inconspicuous as practicable.

16.12.10 Mechanical Equipment, Utilities, and Communication Devices Screening

All mechanical equipment, utilities, and communication devices, whether mounted on the roof, ground, or building walls, must be fully screened from view from the ground floor of adjoining properties, streets, and open space areas. Screening materials must be high quality and durable. Wood is not allowed as a screening material.

Screening devices must be at least as tall as the equipment they are intended to screen and designed to match the associated building. They cannot appear to be "tacked-on" or added as an afterthought. All such screens shall be approved by the Millennium DRC and the city.

16.12.11 Vending Machine, Automatic Teller Machine, Cart Storage, Newspaper/Magazine Machine Screening

Vending machines, automatic teller machines, newspaper/magazine machines, shopping carts, and other similar devices must be enclosed in alcoves of the main building or screened by solid walls that match the architectural style and materials of the main building. The alcove or screen must be sufficient to block open views of these devices from the street and public open space areas. If a freestanding screen wall is used, it must be constructed of high quality and durable materials.

Wood is not allowed as a screening material. Screening devices must be designed to match the associated building. The Millennium DRC and the city shall approve all such screening solutions. Cart corrals in parking lots shall only be allowed for grocery stores or as specifically approved by the Millennium DRC and the city.

16.12.12 Permanent Retail Sales, Food and Beverage Sales, Information and Customer Service Kiosks

Small permanent structures of unique architectural character to provide places for retail sales, food and beverage sales, information and customer service help animate the streetscape and public realms (parks, plazas, village greens and sidewalks). Inclusion of these types of structures is strongly encouraged within the MUVC. Plans must be included with the Site Development Plan submittal to be reviewed and approved by the Millennium DRC and the city or submitted separately at a later time.

16.12.13 Temporary Retail Sales, Food and Beverage Sales, Information and Customer Service Facilities and Mobile Vendors

Festivals, events, farmers markets and other such activities are critical to the vibrant community life of the MUVC. These events will take place within the public rights-of-way as noted earlier in Section 16.6.1 and/or on public or private properties outside the public rights-of-way and will include a range of temporary facilities and mobile vendors. Temporary uses within the MUVC must obtain the appropriate city permits for special events and mobile vending in the public right-of-way. Temporary uses located on private property shall be exempt from Title 18 of the Municipal Code and shall be governed by the DRC.

16.13 MUVC PARKING STANDARDS

Parking poses one of the most difficult challenges for the design of MUVCs. Surface parking requirements can make it the largest user of land in a mixed use center, with significant impacts on overall layout, image, and marketability. Balancing these impacts is the need to very strategically phase in the construction of structured parking due to its huge financial cost. Throughout the life of the MUVC parking quantities, access, placement, and design must successfully work for the users of the center including drivers, pedestrians, and riders of alternative transportation modes.

16.13.1 Parking Dimensions

The standards for parking dimensions set forth in Section 7.15 and 7.15.1 shall apply in MUVCs. Parking dimensions for structured parking shall be approved as part of the overall design of the individual garage buildings.

16.13.2 Compact Car Parking

The standards for compact car parking set forth in Section 7.16 shall apply in MUVCs.

16.13.3 Parking Ratios

Shared parking arrangements are strongly encouraged in MUVCs. The mixed use nature of these environments is ideal for successful shared parking programs. The parking ratios detailed below shall serve as the baseline condition from which shared parking opportunities should be developed. The standards for parking ratios set forth in Sections 7.17 and 10.14 shall apply in MUVCs as the base standards for non-residential and multi-family residential uses respectively.

16.13.4 On-Street Parking

In the MUVC, on-street parking is strongly encouraged and shall be used towards satisfying minimum parking requirements for both residential and non-residential development.

16.13.5 Parking Reductions

MUVCs have the potential to reduce parking demand through a variety of techniques. The fine-grained mixed use nature of the development should reduce standard vehicle trip generation rates when compared to conventional suburban development. In addition, shared parking arrangements, and access to alternative modes of transportation should further reduce parking demand. Parking reductions from the base standards are encouraged. Proposals for these reductions shall be prepared by specialized parking professionals and submitted at the Site Development Plan stage for approval by the Millennium DRC and the city.

16.13.6 Motorcycle Parking

The standards for motorcycle parking set forth in Section 7.19 shall apply in MUVCs.

16.13.7 Interim Parking Lots

Interim surface parking lots are common due to the phased development process for MUVCs. A balance is needed between making prudent choices for the cost of parking lot landscaping in temporary lots and the aesthetic considerations of reduced landscaping. A reduced structural pavement section for interim parking lots may be approved by the Millennium DRC and the city. Interim parking lots shall be maintained by the developer or owner of the property.

A. Interim Parking Lots Approved for 12 Months or Less

Temporary parking lots required to stage existing parking needs during construction may be paved with all-weather material and do not require any landscape.

B. Interim Parking Lots Approved for Up To 5 Years

- Full perimeter landscaping shall be required for interim parking lots approved for up to 5 years old.
- Interim parking lots may be in place for up to 5 years. The typically required end islands and interior islands may be omitted. Lighting shall be installed to provide the required minimum lighting levels per Section 6.28.4. If the interim lot is not removed or redeveloped within 5 years, an extension of the interim use must be approved by the Millennium DRC and the City, or the lot must be modified to meet the intent of the landscaping standards set forth in Section 6.13 as approved by the Millennium DRC and the City. When applying for an extension of the interim use of a parking area the applicant must demonstrate progress toward replacing the lot with permanent uses such as a building, parking structure or public open space. Acceptable methods for demonstrating progress include providing a proposed construction schedule, evidence of an application for a building permit, or other similar documentation.

16.13.8 Handicapped Access /Parking/ Signs

The standards for handicapped access/ parking/signs set forth in Section 7.25 shall apply in MUVCs.

16.13.9 Bicycle Parking

The standards for bicycle parking set forth in Section 7.26 shall apply in MUVCs. Shared bicycle parking arrangements are possible and shall be approved by the Millennium DRC and the city.

16.14 SIGNAGE

The Site Development Plan for the first phase of each MUVC may include a Planned Sign Program or a Planned Sign Program may be submitted separately at a later time. The submittal shall including placement area, dimensions, illumination, specifications, materials and colors of each sign type (wall, free standing, directional, temporary, etc.) All signage within a MUVC must comply with the provisions of the applicable Planned Sign Program.

16.15 DETENTION, DRAINAGE AND UTILITIES

16.15.1 Detention and Drainage

It is desirable to develop an overall Regional Drainage and Detention Master Plan for the MUVC district. Urban solutions not typical to the Millennium GDP Standards and Specifications may be appropriate in the more dense areas and will be reviewed and approved administratively by the city.

16.15.2 Utilities

Urban solutions not typical to the Millennium GDP Standards and Specifications may be appropriate in the mixed use areas and will be reviewed and approved administratively by the city. Options may include below grade electric vaults, water and gas meter centralized service areas, reduced widths for easements and other similar items.